Low-voltage Products

Himel International Catalogue

Himel

The Right Choice!

The Rightt Choice!






Applicable. Available. Accountable.

Himel

The Right Choice!

Himel
The Right Choice!

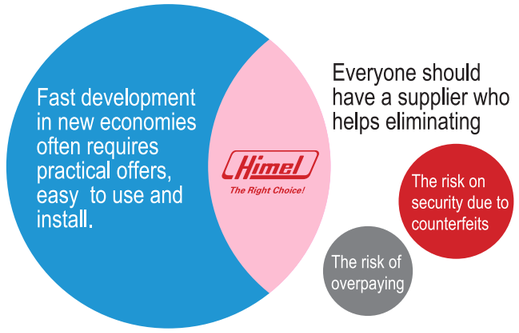
What Himel is..

Himel is an international Joint Venture whose products are manufactured in China by Delixi Electric.

Himel products are dedicated to the economical LV segment outside China and comply with international standards.

Himel products are available through a network of selected commercial offices, distributors or local agents.

Our Vision



Any Project can be successfully realized!!!

Our Mission and Values

We deliver the right choice for common usage.

We implement long term partnership with distributors being ….

Accountable — We react quickly to customers'needs

+

Available — Our products are always where they are needed

+

Applicable — Our products meet practical needs

Targeted Customers

Delixi Electric JV

DELIXI ELECTRIC

- ★A unique Sino-French JV
- ★1000,000+ MCB poles/day
- ★3 factories, top laboratory
- ★Highest quality control A to Z

R&D 2015 Contribution to Sales

Motivated team of 200 people
New R&D center in Shanghai, to recruit best talents
2 laboratories to support our developments
Action plans to improve Quality, cost and also product time to market: our 3 top priorities
Innovation: Increase of Patent target 10% per year
Full renewable of core offer , MCBs, MCCBs, Contactors and relays
Collaboration with International Industry leader in offer to enhance R&D capability along with project collaborations

Targeted Market Segments

Small / medium seize projects

Social housing

Building

Industry

Infrastructure

Our Differenciation

- **Famous International brand**
- **Controlled quality**
- **Constant innovation**
- **Reliable long - term partners**

KEMA KEUR cac S PG

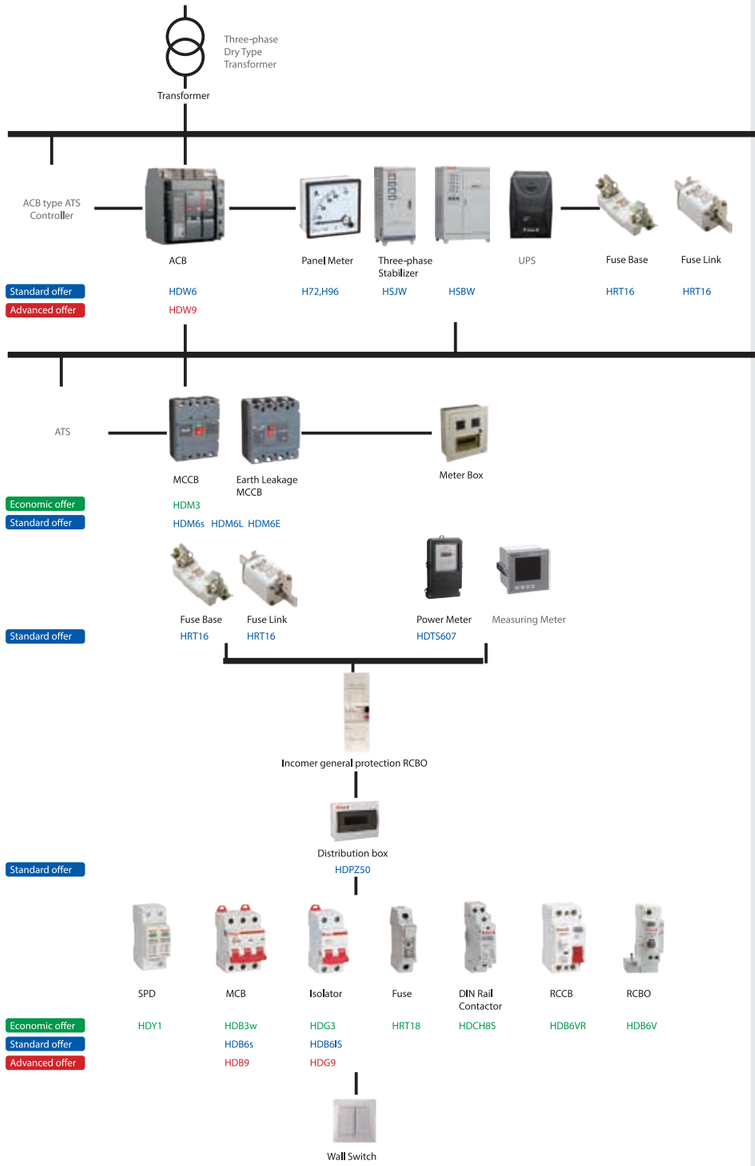
A Reliable Company Serving You with Reliable Product

TSE CE

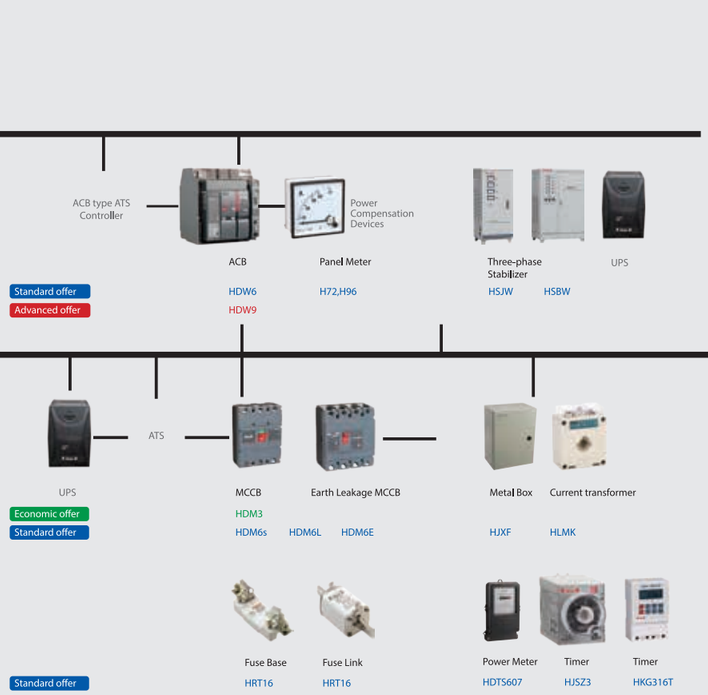
Himel Product Range

The Right Choice!

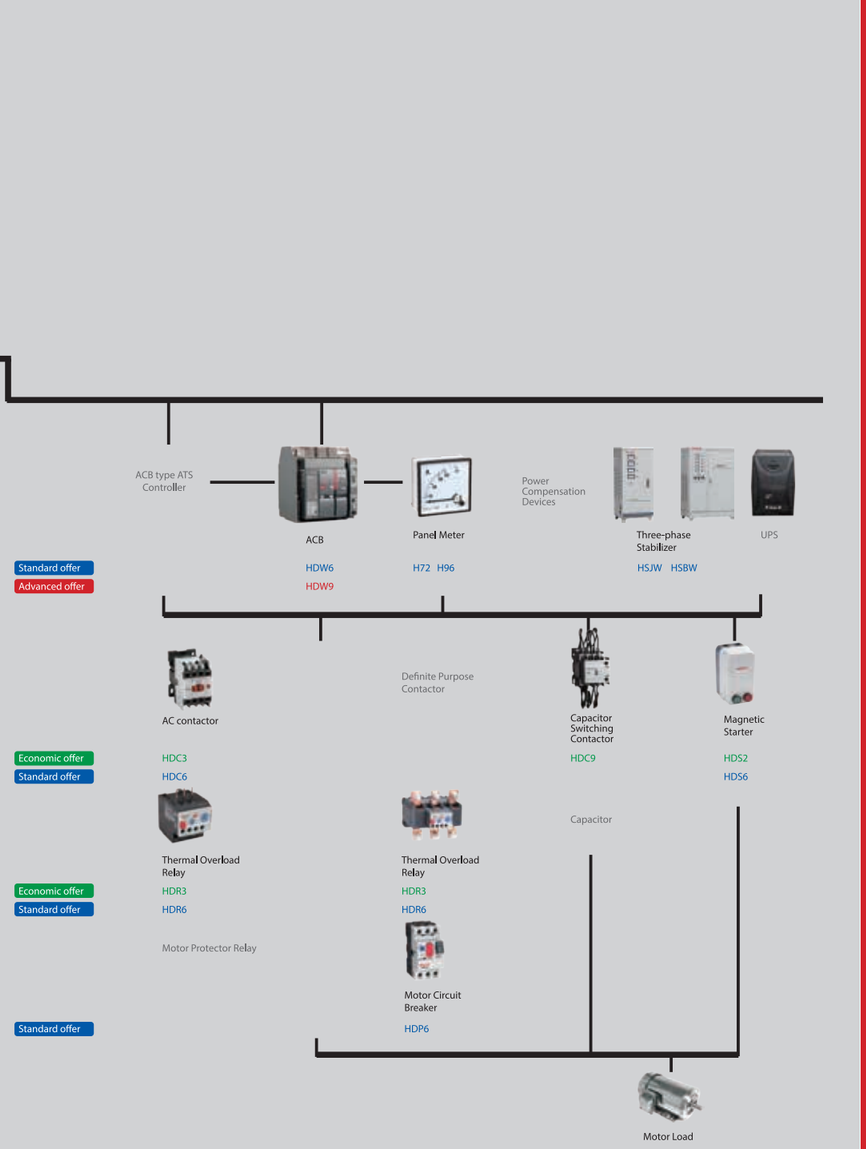
Building and residential



Energy Management



Industry control



Applicable *Available* *Accountable*

3SERIES

MORE VALUE FOR PRICE!

- Smarter Design
- Greater Performance
- Wider Application

Himel

The Right Choice!

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Final Distribution

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Molded Case Circuit Breaker Product Overview

Molded Case Circuit Breaker

HDM3 002

Current: 10~1250A
Breaking Capacity: S, L, F, M, N,T

HDM6s 064

Current: 16-800A
Breaking Capacity: L, S, M,T

HDM6E 087

Current: 250~800A
Breaking Capacity: M

HDM3L 103

Current: 125~630A
Breaking Capacity: S,F,N

HDM6L 135

Current: 40-630A
Breaking Capacity: L, M

HDM3 Molded Case Circuit Breaker

Product selection

3SERIES
MORE VALUE FOR PRICE!

Material code: M363S6333102FR
Material description: HDM3-63S/33102 63A Fixed at rear

Product	Framesize	Breaking Capacity	Rated Current	Poles	Tripping Type	Product accessories	Protection Type	Operation Type	Product Inner Acc	Installation Type
HDM3	63: 63A	S	10:10A	3: 3 Poles	2: Mag	xx:No accessories	Default: Power Distribution	Default:Toggle	Default: MX/MN AC400V	Default: Fixed Front
	100: 100A	L	...	A: 4 Poles A type	3: Mag-therm	08: Alarm	2: Motor Protection	P: MCH	A: MX/MN AC230V	FR: Fixed Rear
	160: 160A	F	1250:1250A	(The N phase is		10: Shunt		Z:Turning Toggle	B: MX DC24V	PF: Plug-in Front
	250: 250A	M		directly connected		20: Auxiliary			C: MX AC230V MN AC230V	PR: Plug-in Back
	400: 400A	N		with a wire, and		30: Undervoltage			D: MX AC400V MN AC230V	D: Draw-out
	630: 630A	T		without contacts.		40: Shunt+auxiliary			E: MX DC24V MN AC230V	
	800: 800A			It's always		50: Shunt+undervoltage			F: MX AC230V MN AC400V	
	1250: 1250A			closed.)		60:Two groups of auxiliary			G: MX AC400V MN AC400V	
				B: 4 Poles B type		70: Undervoltage+auxiliary			H: MX DC24V MN AC400V	
				(The N phase is		18: Shunt+alarm			I: MX DC110V	
				equipped with		28: Auxiliary+alarm			J: MX DC220V	
				contacts, but		38: Undervoltage+alarm			K: MX DC110V MN AC230V	
				without magnetic		48: Shunt+auxiliary alarm			L: MX DC110V MN AC400V	
				protection		68: Auxiliary+auxiliary alarm			M: MX DC220V MN AC230V	
				or thermal		78: Undervoltage+auxiliary			N: MX DC220V MN AC400V	
				protection. It		alarm				
				closes earlier and						
				opens later than						
				the other 3 poles.)						

Remark:
1. Shunt/auxiliary/alarm contacts are classified into terminals and standard configured leadsTwo types for Shunt/auxiliary/alarm contacts: ternimals and configured leads (standard offer)
2. Standard configuration of connection mode: fixed front connection
3. Standard configuration of conventional products: phase partition and mounting screw (without wiring copper bar)
4. As customized models, DC110V and DC220V shall be described specially

HDM3 Molded Case Circuit Breaker

Product selection

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Selection of accessories
HDM3-100 H1

Name	Current frame	Breaking Capacity	Product Inner Acc	Voltage Type	Installation Position	Poles
HDM3	100	FN	AL1	A2	L	3P
	63:63A	S	AL1:Alarm (with wire)	MX shunt:	L:Left	3P:3P
	100:100A	L	AL2:Alarm (with terminal)	A2:AC230V	R:Right	4P:4P
	160:160A	F	MX1:Shunt release (with wire)	A3:AC400V		
	250:250A	M	MX2:Shunt release (with terminal)	D1:DC110V		
	400:400A	N	OF11K1B:Auxiliary contact left(with wire)	D2:DC24V		
	630:630A	T	OF11K2B:Auxiliary contact left(with terminal)	D3:DC220V		
	800:800A		MN:Undervoltage release	MN under-		
	1250:1250A		C3:Expanding terminal 3P(3pcs)	voltage:		
			C4:Expanding terminal 4P(4pcs)	A2:AC230V		
			IB3:Interphase clapboard 3P(2pcs)	A3:AC400V		
			IB4:Interphase clapboard 4P(3pcs)			
			OFAL1:Auxiliary contact&Alarm (with wire)			
			OFAL2:Auxiliary contact&Alarm (with terminal)			
			CD1:AC Elecyric operating mechanism			
			CD2:DC Elecyric operating mechanism			

Remark:
1. The extension terminal is all called accessory plate or wiring copper bus
2. AL/MX/OF is equipped with terminal or lead
3. 100AF and the accessories of type S breaker and F/N breaker are different and shall be distinguished
4. MX shunt voltage type: AC230V、AC400V、DC24V、DC110V、DC220V
5. MN under-voltage type: AC230V、AC400V
6. Shunt: installed on the right
Under-voltage: installed on the left
Auxiliary, alarm and auxiliary alarm: optional on left or right

HDM3 Molded Case Circuit Breaker

Product Features

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Product Features

Standard
·IEC 60947-2

Pollution Degree
HDM3 products operate in the environment (industrial environment) with pollution class 3 defined in IEC/EN 60947-1 and IEC/EN 60947-2 standards.

Wet and heat resistance
Dry and cold
Dry and heat
Wet and heat

Environment temperature
· HDM3 series can work for a long time under normal environment and operating temperature between -5℃ and 40℃.

· Refer to the temperature derating factor table or contact us if the operating ambient temperature exceeds 40℃ (motor protection exceeds 60℃).
· Storage temperature ranges between -20℃ and 70℃.

Altitude
· Altitude at normal installation site does not exceed 2000m.
· If the altitude exceeds 2000m, the changes in the dielectric strength and the air temperature drop must be considered. Refer to the altitude derating factor table or contact us.

Humidity
The following conditions must be met during normal operation:
· The relative humidity of atmosphere does not exceed 50% if the ambient air temperature is +40℃. The product can be used at a high relative humidity if the temperature is low.
· The monthly average relative humidity at the wettest month is 90%.
· The impact of the condensation generated on the product surface on the product property shall be considered.

Reliable contact indication with isolating function
HDM3 moulded case circuit breaker complies with the isolation defined in IEC standard 60947-2
· The isolated location corresponds to O (OFF)
· The operating handle can indicate “OFF" only when the contact is really open
· he rotation handle or electric operating mechanism will not change the reliability of the contact indication system. Through the test, the isolating function must guarantee:

· Mechanical reliability of contact indication system
· No leakage current
· There is a certain overvoltage resistance capacity between the input and output terminals.

Protection class
· IP protection class of circuit breaker body: IP20
· Circuit breaker installed in the switch cabinet:
circuit breaker with a toggle handle IP40
circuit breaker with an electric operating mechanism IP40

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Technical parameters

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Technical parameters

Shell frame current		HDM3-63				HDM3-100					
Rated voltage Ue(V)		400/415				400/415/690					
Rated insulation voltage Ui(V)		690				800					
Rated impulse withstand voltage Uimp(KV)		6				8					
Rated current In(A)		10--63				10--100					
Number of poles Pole (3P,4P-A/B)		3/4				3/4				3	
		L	S	M	F	L	S	M	F	T	N
Rated ultimate short circuit breaking capacity Icu kA	50/60HZ AC 400/415V	18	25	30	50	18	25	26	35	30	50
Rated operating short circuit breaking capacity Ics kA)	50/60HZ AC 400/415V	18	18	30	30	18	18	26	26	30	30
Mechanical life	Mechanical with maintenance	20000				20000					
	Mechanical without maintenance	10000				10000					
Electrical life	AC 400/415V	4000				4000					
Protection type	Power distribution protection	■				■					
	Motor protection	■				■					
Tripping ways	Thermal magnetic tripping	■				■					
	Single magnetic tripping	■				■					
Installation mode	Fixed front connection	■				■					
	Fixed rear connection	■				■					
	Plug-in front connection	■				■					
	Plug-in rear connection	■				■					
	Withdrawable	-				-					
Product accessories	Undervoltage release	■				■					
	Shunt release	■				■					
	Alarm contact	■				■					
	Auxiliary contacts (one open and one closed)	■				■					
	Auxiliary contacts (two open and two closed)	■				■					
	Extension terminal	■				■					
	AC/DC general electrically operated	■				■					
	Round direct manually operated	■				■					
	Square direct manually operated	■				■					
	Round extended manually operated	■				■					
	Square extended manually operated	■				■					
	Phase partition	■				■					
Independent accessory installation		■				■					
Isolating function		■				■					
Use class		Class A				Class A					
Certification		TUV CE				TUV CE		KEMA CE			
Dimensions–Fixedfrontconnection W*H*D	3P(mm)	75*130*68				75*130*68		92*150*93.5			
	4P (mm)	100*130*68				100*130*68		122*150*93.5			
Weight	Fixed 3/4P [kg]	0.78/0.98				0.78/0.98		1.28/1.63			

HDM3 Molded Case Circuit Breaker

Technical parameters

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Technical parameters

HDM3-160						HDM3-250						HDM3-400					
400/415/690						400/415/690						400/415/690					
800						800						800					
8						8						8					
100--160						100--250						200--400					
3/4						3/4						3/4					
L	S	M	F	T	N	L	S	M	F	T	N	L	S	M	F	T	N
21	35	30	50	36	60	21	35	30	50	36	60	21	35	30	50	39	70
21	21	30	30	36	36	21	21	30	30	36	36	21	21	30	30	39	39
20000						20000						20000					
10000						10000						5000					
4000						4000						2000					
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■						■						■					
Class A						Class A						Class A					
KEMA CE						KEMA CE						KEMA CE					
107*165*76		107*165*88				107*165*76		107*165*88				150*257*107.5					
142*165*76		142*165*88				142*165*76		142*165*88				198*257*107.5					
1.53/2.03		1.53/2.03				1.53/2.03		1.53/2.03				4.60/5.05					

HDM3 Molded Case Circuit Breaker

Technical parameters

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Shell frame current		HDM3-630						HDM3-800				HDM3-1250
Rated voltage Ue(V)		400/415/690						400/690				400
Rated insulation voltage Ui(V)		800						800				800
Rated impulse withstand voltage Uimp(KV)		8						8				8
Rated current In(A)		400/500/630						630--800				800--1250
Number of poles Pole (3P,4P-A/B)		3/4						3/4				3
		L	S	M	F	T	N	L	S	M	F	N
Rated ultimate short circuit breaking capacity Icu(KA)	50/60HZ AC 400/415V	21	35	30	50	39	70	25	50	40	70	85
Rated operating short circuit breaking capacity Ics(KA)	50/60HZ AC 400/415V	21	21	30	30	39	39	25	25	40	40	45
Mechanical life	Mechanical with maintenance	10000						2500				2500
	Mechanical without maintenance	5000						1250				1250
Electrical life	AC 400/415V	2000						500				500
Protection type	Power distribution protection	■						■				■
	Motor protection	■						-				-
Tripping ways	Thermal magnetic tripping	■						■				■
	Single magnetic tripping	■						■				■
Installation mode	Fixed front connection	■						■				■
	Fixed rear connection	■						■				-
	Plug-in front connection	■						■				-
	Plug-in rear connection	■						-				-
	Withdrawable	■						■				-
Product accessories	Undervoltage release	■						■				■
	Shunt release	■						■				■
	Alarm contact	■						■				■
	Auxiliary contacts (one open and one closed)	■										■
	Auxiliary contacts (two open and two closed)	■						■				■
	Extension terminal	■						■				■
	AC/DC general electrically operated	■						■				-
	Round direct manually operated	■						■				-
	Square direct manually operated	■						■				-
	Round extended manually operated	■						■				-
	Square extended manually operated	■						■				-
	Phase partition	■						■				■
Independent accessory Installation		■						-				-
Isolating Function		■						■				■
Use class		Class A						Class A				Class A
Certification		KEMA CE						TUV, CE				-
Dimensions–Fixed front connection	3P(mm)	150*257*107.5						210*280*100				210*406*190
W*H*D	4P (mm)	198*257*107.5						280*280*100				-
Weight	Fixed 3/4P [kg]	5.10/6.24						7.34/9.68				18.98

Remark:
For HDM3-63/100, the rated current under 40 A, the protection function works at least at 400A; for the others, 10/12In.
For 100A, F/N type, the rated current starts with 40A.
The 4 Poles product with N phase is classified into type A and type B.
Type A: The N phase is directly connected with a wire, but without magnetic protection or thermal protection. It's always closed.
Type B: The N phase is installed with contacts, but without magnetic protection or thermal protection. It closes earlier and opens later than the other 3 poles.

HDM3 Molded Case Circuit Breaker

Distribution Protection

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Low-voltage distribution protection

Fixed thermomagnetic release
HDM3 63-1250A

Rated current（A） at 40℃ In		10	16	20	25	32	40	50	63	80	100	125	140	160	180	200	225	250	315	350	400	500	630	700	800	1000	1250
Circuit breaker	63	■	■	■	■	■	■	■	■																		
	100	■	■	■	■	■	■	■	■	■	■																
	160										■	■	■	■													
	250										■	■	■	■	■	■	■	■									
	400															■	■	■	■	■	■						
	630																				■	■	■				
	800																						■	■	■		
	1250																								■	■	■
Overload protection: thermal protection (Ir)																											
Tripping current value (A)		Fixed (1.3In)																									
Short circuit current protection(magnetic protection)																											
Tripping current value (A)		Fixed (10In)																									

Protection
The circuit breaker equipped with TM thermomagnetic release is mainly for protection of the cable, which is on the power distribution system for transformer power supply.

Overload protection: thermal protection (Ir)
The overload protection function provides inverse time limit curve on the basis of bimetal. If the limit is exceeded, the deformation of the bimetal can lead in the tripping of the circuit breaker operating mechanism.

Short circuit protection: magnetic protection (Ii)
Magnetic protection achieves short circuit protection through a magnetic trip device. The circuit breaker will trip instantaneously
Short circuit protection Ii non-adjustable

HDM3 Motor protection

Motor feeder circuit functions
The motor feeder circuit comprises a set of devices for motor protection and control and feeder circuit self-protection.

Isolation
The energized conductors and upper-end distribution system are isolated, so that the maintenance personnel can maintain the motor feeder circuit without risk. The function is achieved by the motor protection circuit breaker and shall be provided with the reliable indicator of the contact indicating position

Power on/off
Manually, automatically or remotely control the motor (ON/OFF) and consider the overload at startup and the service life. The function is realiezed by the contactor. The contactor will be closed when the coil of the contactor is electrified. The upper power and the motor circuit will be connected through the circuit breaker.

Basic protection
• Short circuit protection:
Detect and break the large short circuit current as soon as possible to avoid damage to the equipment. The function is achieved by the circuit breaker with magnetic protection or with electronic trip unit.
• Overload protection:
Detect the overload current and turn off the motor before the insulation is damaged due to temperature rise of the motor and conductor. The function can be achieved by a thermomagnetic protection circuit breaker or an independent thermal relay.
• Phase imbalance or open-phase protection:
Phase imbalance or open phase will trigger temperature rise and braking torque, which may lead to premature aging of the motor. These effects are particularly prominent during startup, and thus the protection shall be very fast.

The motor feeder circuit protection parameters depend on:
• Application (driven equipment type, operation safety and operation frequency, etc.)
• Load or application continuity grade
• Applicable life and property protection standards

Required electrical functions:
• Power on/off, generally at a high withstand current level
• Applicable for the overload and short circuit protection of motor
• Additionally special protection

The motor feeder circuit must comply with the requirements
• Coordination between feeder circuit components
• Tripping class of thermal relay
• Use class of contactor
• Insulation coordination

Overload: I < 10*In
Causes:
• Electrical fault caused by power distribution system abnormalities (such as open phase, overvoltage or undervoltage)
• Mechanical problems caused by operation mistake (such as excessive torque) or motor damage (such as bearing vibration) will result in long startup time.

Impedance short circuit: 10*In < I < 50*In
Such short circuit is generally caused by motor winding insulation deterioration or power cable damage.

Short circuit: I > 50*In
Such faults are relatively few and generally caused by connection error during maintenance.

HDM3 Molded Case Circuit Breaker
Motor protection

Low-voltage Distribution

Motor feeder solutions

The standard IEC 60947 defines three types of component combinations to protect the motor feeder circuit.
• **Three components**
Magnetic protection circuit breaker + contactor + thermal relay

• **Two components**
Circuit breaker with overload and short circuit protection + contactor

• **One component**
Circuit breaker with overload and short circuit protection + contactor integrated in a solution

Equipment coordination

The components in the motor feeder circuit shall cooperate with each other. IEC60947-4-1 standard defines three types of coordination according to the equipment operating conditions and the short circuit detection standard.

Type 1 coordination
No life or property limited
Contactor or thermal relay may be damaged
Repair and replacement may be required before continuing.

Type 2 coordination
No life or property risks
Damage or adjustment is not allowed. The risks of adhesive contacts can be accepted, but shall be easily separated and isolated after accidents The motor feeder may continue to use without repair or replacement of components
Quick check is enough before back into use

3 Perfect coordination
The equipment constituting the motor feeder circuit shall not have the risk of damage or contacts welding. The motor feeder may continue to use
without repair or replacement of components
In this type of coordination, an integrated equipment provides the solution.

Contactor use type

For a given motor feeder program, the use class determines the contactor resistance capacity on operating frequency and life. Selection based on the operation conditions of the application may be because of excessive protection of contactor and circuit breaker. IEC60947 standard defines the following use classes of the contactor

Contactor use class	Load type	Control function	Typical application
AC-1	Non-inductive	Electrify	Heating and power distribution
AC-2	Slip ring motor	Start Turn off the motor during operation Countercurrent braking Inching	Drawbench
AC-3	Squirrel-cage motor	Start Turn off the motor during operation	
AC-4		Start Turn off the motor duringoperation Regenerative braking Anti-phase braking Inching	Printing press, drawbench

- Common coordination table of circuit breaker and contactor with the use class of AC-3

- This class covers the squirrel-cage asynchronous motor, which the most common situation (accounting for 85%) The contactor can connect the starting current and cut off the rated current at 1/6 nominal voltage. The current shall be cut off without any obstacles and difficulties.HDM3 circuit breaker – contactor coordination table applies to the contactors with AC-3 use class, which can guarantee type 2 coordination.

- Use class AC-4 may require enlarging the specifications.

- The use class covers the squirrel-cage asynchronous motors which can operate under regenerative braking or inching (frequent start). The contactor can start and cut off the current under the system voltage. Due to these difficulties, the specifications of the contactors and the protection circuit breakers corresponding to class AC-3 shall be enlarged.

HDM3 Molded Case Circuit Breaker
Motor protection
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Motor feeder circiut characteristics and solutions

Trip level of thermal protection equipment

The motor feeder circuit includes the thermal protection contained in the circuit breaker. The protected trip level shall be in line with the motor start level. The starting time of the motor ranges from several seconds (no-load starting) to tens of seconds (high-inertia load) according to the specific applications. IEC60947-4-1 standard defines the following trip levels as the settings of thermal protection current Ir.

Thermal relay trip level as settings of Ir				
Level	1.05Ir	1.2Ir	1.5Ir	7.2Ir
5	t > 2h	t < 2h	t < 2mn	2s < t < 5s
10	t > 2h	t < 2h	t < 4mn	4s < t < 10s
20	t > 2h	t < 2h	t < 8mn	6s < t < 20s
30	t > 2h	t < 2h	t < 12mn	9s < t < 30s

Current of squirrel-cage motor in full load conditions

Standard value with the unit of HP (horsepower)

Rated operating power	Rated operational current In(A)						
hp	110-120V	200V	208V	220-240V	380-415V	440-480V	550-600V
1/2	4.4	2.5	2.4	2.2	1.3	1.1	0.9
3/4	6.4	3.7	3.5	3.2	1.8	1.6	1.3
1	8.4	4.8	4.6	4.2	2.3	2.1	1.7
1 1/2	12	6.9	6.6	6	3.3	3	2.4
2	13.6	7.8	7.5	6.8	4.3	3.4	2.7
3	19.2	11	10.6	9.6	6.1	4.8	3.9
5	30.4	17.5	16.7	15.2	9.7	7.6	6.1
7 1/2	44	25.3	24.2	22	14	11	9
10	56	32.2	30.8	28	18	14	11
15	84	48.3	46.2	42	27	21	17
20	108	62.1	59.4	54	34	27	22
25	136	78.2	74.8	68	44	34	27
30	160	92	88	80	51	40	32
40	208	120	114	104	66	52	41
50	260	150	143	130	83	65	52
60	-	177	169	154	103	77	62
75	-	221	211	192	128	96	77
100	-	285	273	248	165	124	99
125	-	359	343	312	208	156	125
150	-	414	396	360	240	180	144
200	-	552	528	480	320	240	192
250	-	-	-	604	403	302	242
300	-	-	-	722	482	361	289

Note: 1 hp=0.7457 W

Motor feeder circiut characteristics and solutions

Startup parameters of asynchronous motor
The main parameters (meeting 90% applications) of the direct startup of the three-phase asynchronous motors are shown as follows
Ir: Rated current

Startup parameters of asynchronous motor
Current of the motor under rated full load conditions (such as about 100Arms at voltage and 55kW power) 400V
Id Starting current
Current at motor startup. Depending on the specific applications, the starting time td is 5-30s and the average starting current is 7.2In (such as RMS current of 720A at 10s). These values determine the trip level and all other required “long start” protective
equipment.
I"d Peak starting current
Transient current between the first two half-wave periods after the system is powered:10-15ms Average of 14In (such as peak 1840A)

By selecting appropriate thermal relay trip level, the protection settings must be able to effectively protect the motor and allow passing the peak starting current.

HDM3 Molded Case Circuit Breaker
Motor protection

Low-voltage Distribution

HDM3 motor feeder circuit soutions

HDM3 motor protection series
HDM3 trip unit can be used to constitute the two equipments motor feeder circuit solutions.

Three-element solution
A HDM3 circuit breaker with magnetic protection (3200)
A HDC6 contactor
A HDR6 thermal relay
Two-element solution
A HDM3 circuit breaker with magnetic protection (3300)
A HDC6 contactor

Three-element solution section table

U=220/240V

Motor P(kw)	I(A) 220V	I(A) 240V	In maximum (A)	Circuit breaker type	Rated current	Irm (A)	Contactor type	Thermal relay type	Irth (A)
1.1	5	4.5	6	HDM3-32XX2	10	82	HDC6-0911	HDR6-18 5-7A	4/6
1.5	6.5	6	8	HDM3-32XX2	16	113	HDC6-0911	HDR6-18 6.3~9A	5.5/8
2.2	9	8	10	HDM3-32XX2	16	138	HDC6-1211	HDR6-18 9~12A	7/10
3	12	11	12.5	HDM3-32XX2	16	163	HDC6-1811	HDR6-18 11~15A	9/13
4	15	14	18	HDM3-32XX2	25	250	HDC6-1811	HDR6-18 14~18A	12/18
5.5	21	19	25	HDM3-32XX2	25	325	HDC6-2511	HDR6-32 23~32A	17/25
6.3	24	22	25	HDM3-32XX2	25	325	HDC6-2511	HDR6-32 23~32A	17/25
7.3	28	25	32	HDM3-32XX2	50	450	HDC6-3211	HDR6-32 23~32A	23/32
10	36	33	40	HDM3-32XX2	50	550	HDC6-4011	HDR6-95 37~50A	30/40
11	39	36	40	HDM3-32XX2	50	550	HDC6-4011	HDR6-95 37~50A	30/40
15	52	48	63	HDM3-32XX2	100	700	HDC6-6511	HDR6-95 55~70A	48/65
18.5	63	59	63	HDM3-32XX2	100	900	HDC6-6511	HDR6-95 55~70A	48/65
22	75	70	80	HDM3-32XX2	100	1100	HDC6-8011	HDR6-95 80~95A	63/80
30	100	95	100	HDM3-32XX2	160	1300	HDC6-115	HDR6-185 90~115A	60/100
37	125	115	150	HDM3-32XX2	160	1950	HDC6-150	HDR6-185 130~160A	90/150
45	150	140	150	HDM3-32XX2	160	1950	HDC6-150	HDR6-185 130~160A	90/150
55	180	170	185 220	HDM3-32XX2	200 320	2420 2880	HDC6-225	HDR6-630 180~250A	132/220
75	250	235	265	HDM3-32XX2	320	3500	HDC6-265	HDR6-630 230~320A	200/330
90	300	270	320	HDM3-32XX2	320	4160	HDC6-330	HDR6-630 290~400A	200/330

HDM3 Molded Case Circuit Breaker

Motor protection

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HDM3 motor feeder circuit soutions

Three-element solution section table

U=380/415V

Motor P(kw)	I(A) 220V	I(A) 240V	In maximum (A)	Circuit breaker type	Rated current	Irm (A)	Contactor type	Thermal relay type	Irth (A)
2.2	5.3	4.8	6	HDM3-32XX2	10	82	HDC6-0911	HDR6-18 5-7A	4/6
3	7	6.5	8	HDM3-32XX2	16	113	HDC6-0911	HDR6-18 6.3~9A	5.5/8
4	9	8.2	10	HDM3-32XX2	16	138	HDC6-1211	HDR6-18 9~12A	7/10
5.5	12	11	12.5	HDM3-32XX2	16	163	HDC6-1811	HDR6-18 11~15A	9/13
7.5	16	14	18	HDM3-32XX2	25	250	HDC6-1811	HDR6-18 14~18A	12/18
10	21	19	25	HDM3-32XX2	25	325	HDC6-2511	HDR6-32 23~32A	17/25
11	23	21	25	HDM3-32XX2	25	325	HDC6-2511	HDR6-32 23~32A	17/25
15	30	28	32	HDM3-32XX2	50	450	HDC6-3211	HDR6-32 23~32A	23/32
18.5	37	34	40	HDM3-32XX2	50	550	HDC6-4011	HDR6-95 37~50A	30/40
22	43	40	50	HDM3-32XX2	50	650	HDC6-4011	HDR6-95 37~50A	37/50
30	59	55	63	HDM3-32XX2	100	900	HDC6-6511	HDR6-95 55~70A	48/65
37	72	66	80	HDM3-32XX2	100	1100	HDC6-6511	HDR6-95 80~95A	63/80
45	85	80	100	HDM3-32XX2	100	1300	HDC6-8011	HDR6-185 90~115A	60/100
55	105	100	115	HDM3-32XX2	160	1500	HDC6-115	HDR6-185 90~115A	90/150
75	140	135	150	HDM3-32XX2	160	1950	HDC6-150	HDR6-185 130~160A	90/150
90	170	160	185	HDM3-32XX2	200	2420	HDC6-150	HDR6-630 180~250A	132/220
110	210	200	220	HDM3-32XX2	250 320	2860 2880	HDC6-225	HDR6-630 180~250A	132/220
132	250	230	265	HDM3-32XX2	320	3500	HDC6-265	HDR6-630 230~320A	200/330
160	300	270	320	HDM3-32XX2	320	4160	HDC6-330	HDR6-630 290~400A	200/330

HDM3 Molded Case Circuit Breaker

Motor protection

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HDM3 motor feeder circuit soutions

Two-element solution section table

U=220/240V

Motor P(kw)	I(A) 220V	I(A) 240V	In maximum (A)	Circuit breaker type	Rated current	Irm(A)	Contactor type	Irth (A)
1.1	5	4.5	6	HDM3-32XX2	10	82	HDC6-0911	4/6
1.5	6.5	6	8	HDM3-32XX2	16	113	HDC6-0911	5.5/8
2.2	9	8	10	HDM3-32XX2	16	138	HDC6-1211	7/10
3	12	11	12.5	HDM3-32XX2	16	163	HDC6-1811	9/13
4	15	14	18	HDM3-32XX2	25	250	HDC6-1811	12/18
5.5	21	19	25	HDM3-32XX2	25	325	HDC6-2511	17/25
6.3	24	22	25	HDM3-32XX2	25	325	HDC6-2511	17/25
7.3	28	25	32	HDM3-32XX2	50	450	HDC6-3211	23/32
10	36	33	40	HDM3-32XX2	50	550	HDC6-4011	30/40
11	39	36	40	HDM3-32XX2	50	550	HDC6-4011	30/40
15	52	48	63	HDM3-32XX2	100	700	HDC6-6511	48/65
18.5	63	59	63	HDM3-32XX2	100	900	HDC6-6511	48/65
22	75	70	80	HDM3-32XX2	100	1100	HDC6-8011	63/80
30	100	95	100	HDM3-32XX2	160	1300	HDC6-115	60/100
37	125	115	150	HDM3-32XX2	160	1950	HDC6-150	90/150
45	150	140	150	HDM3-32XX2	160	1950	HDC6-150	90/150
55	180	170	185 220	HDM3-32XX2	200 320	2420 2880	HDC6-225	132/220
75	250	235	265	HDM3-32XX2	320	3500	HDC6-265	200/330
90	300	270	320	HDM3-32XX2	320	4160	HDC6-330	200/330

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Motor protection

HDM3 motor feeder circuit solutions

Two-element solution section table

U=380/415V

Motor P(kw)	I(A) 220V	I(A) 240V	In maximum (A)	Circuit breaker type	Rated current	Irm(A)	Contactor type	Irth (A)
2.2	5.3	4.8	6	HDM3-32XX2	10	82	HDC6-0911	4/6
3	7	6.5	8	HDM3-32XX2	16	113	HDC6-0911	5.5/8
4	9	8.2	10	HDM3-32XX2	16	138	HDC6-1211	7/10
5.5	12	11	12.5	HDM3-32XX2	16	163	HDC6-1811	9/13
7.5	16	14	18	HDM3-32XX2	25	250	HDC6-1811	12/18
10	21	19	25	HDM3-32XX2	25	325	HDC6-2511	17/25
11	23	21	25	HDM3-32XX2	25	325	HDC6-2511	17/25
15	30	28	32	HDM3-32XX2	50	450	HDC6-3211	23/32
18.5	37	34	40	HDM3-32XX2	50	550	HDC6-4011	30/40
22	43	40	50	HDM3-32XX2	50	650	HDC6-5011	37/50
30	59	55	63	HDM3-32XX2	100	900	HDC6-6511	48/65
37	72	66	80	HDM3-32XX2	100	1100	HDC6-8011	63/80
45	85	80	100	HDM3-32XX2	100	1300	HDC6-115	60/100
55	105	100	115	HDM3-32XX2	160	1500	HDC6-115	90/150
75	140	135	150	HDM3-32XX2	160	1950	HDC6-150	90/150
90	170	160	185	HDM3-32XX2	200	2420	HDC6-185	132/220
110	210	200	220	HDM3-32XX2	250 320	2860 2880	HDC6-225	132/220
132	250	230	265	HDM3-32XX2	320	3500	HDC6-265	200/330
160	300	270	320	HDM3-32XX2	320	4160	HDC6-330	200/330

HDM3 Molded Case Circuit Breaker

Operating conditions

Operating conditions

Altitude derating

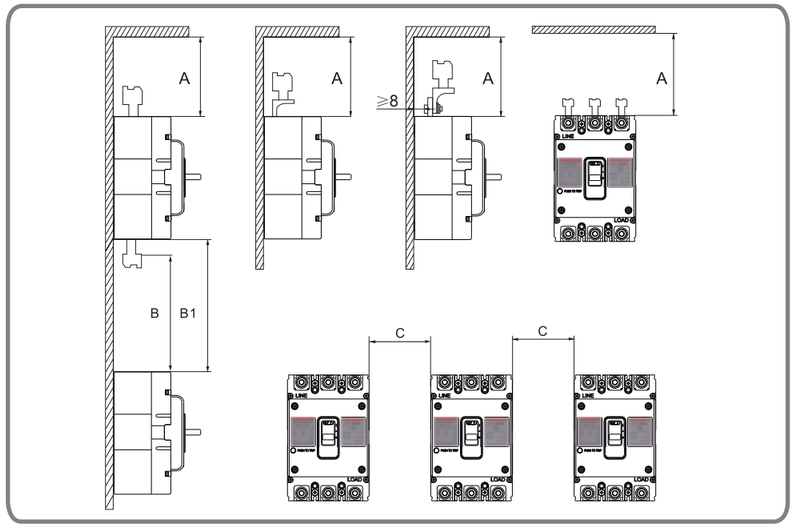
The circuit breaker features will not be affected if the altitude is below 2000m. The air insulation ability and cooling capacity shall be considered if the altitude is above 2000m.

Impact of altitude on the release performance

Altitude	2000m	3000m	4000m	5000m
Maximum working voltage (V)	415	350	310	270
Rated heat value at 40℃ (A)	In	0.96In	0.93In	0.9In
Average insulation voltage (V)	800	700	600	500
Dielectric strength (V)	3000	2500	2100	1800

Safety clearance

Safety clearance (Works for whole series)



Safety clearance

Circuit breaker model	A (mm)	B (mm)	B1 (mm)	C (mm)
63A 100A 160A 250A	60	60	Bare cable length +B	30
400A 630A 800A 1250A	110	110		70

HDM3 Molded Case Circuit Breaker

Operating conditions

Operating conditions

Altitude deratingTemperature affect characteristics

Impact of high temperature on the release performance(high-temperature degrading characteristics)

The overload protection ability will be changed slightly when the temperature exceeds 40℃. In the tripping curve chart, Ir , the setting value of the circuit breaker must be corrected according to the following factors

Circuit breaker mode	Environment temperature ℃				
	40	45	50	55	60
HDM3-63/100M/F/T/N	1	0.96	0.89	0.83	0.75
HDM3-100F/N	1	0.96	0.89	0.83	0.75
HDM3-160A/250A	1	0.92	0.85	0.79	0.71
HDM3-400A/630A	1	0.94	0.87	0.81	0.73
HDM3-800A	1	0.95	0.88	0.82	0.74
HDM3-1250A	1	0.95	0.88	0.82	0.74

Total power consumption of three poles

Circuit breaker mode	Rated current	Front connection (standard configuration)	Rear connection	Plug-in connection	Withdrawable connection
HDM3-63/100L/S	63/100/125	24/26/28	27/29/31	28/29/32	-
HDM3-100M/F/T/N	100	40	50	50	-
HDM3-160A/250A	160/250	60/63	87/90	87/90	-
HDM3-400A/630A	400/630	115/180	120/190	125/200	128/205
HDM3-800A	800	200	230	290	300
HDM3-1250A	1250	250	-	-	-

HDM3 Molded Case Circuit Breaker

installation mode

HDM3 installation mode

HDM3 circuit breakers have three installation modes, i.e. fixed, plug-in and withdrawable.

F	P	W
Fixed	**Plug-in**	**Withdrawable**
>Same upper and lower terminals > It can be directly connected to the busbar or connected to the cables with the extensive terminals > Fixed rear terminal: facilitate the installation and connection of the product after the panel >The circuit breaker has 7 HDM3-63/100L/S HDM3-100M/F/T/N HDM3-160L/S, HDM3-250S/L HDM3-160M/F/T/N,HDM3 M/F/T/N HDM3-400/630 HDM3-800	>The plug-in structure is achieved by adding "plug-in suite" on the fixed circuit breaker > Pull out or rapidly change the circuit breaker without contacting the loading and outing lines and the installation base >The plug-in base can be pre-installed to facilitate increase of circuit breakers later >It can isolate the power cable when it is installed with baseplate >The circuit breaker can be pulled out when loosening the upper and lower set screws.	>The withdrawable structure is to install two side plates respectively on the base and the circuit breaker. Similar to the plug-in configuration, the withdrawable circuit breaker has all advantages of the plug-in circuit breaker and is very easy to operate.The withdrawable type is similar to the plug-in type, with all the advantages of it, and easily operating. >The withdrawable circuit breaker has three positions: -Connected: the power supply circuit is connected -Testing: the power supply circuit is connected and the circuit breaker can be operated to check the auxiliary circuit -Disconneted: the circuit breaker can be removed from the base

	FF	FR	PF	PR	WD
	Fixed front	Fixed rear	Plug-in frontPlug-inrear	Plug-in rear	Withdrawable
HDM3-63	■	■	■	■	
HDM3-100	■	■	■	■	
HDM3-160	■	■	■	■	
HDM3-250	■	■	■	■	
HDM3-400	■	■	■	■	
HDM3-630	■	■	■	■	■
HDM3-800	■	■	■		■
HDM3-1250	■				■

HDM3 Molded Case Circuit Breaker

Accessories

HDM3 accessories

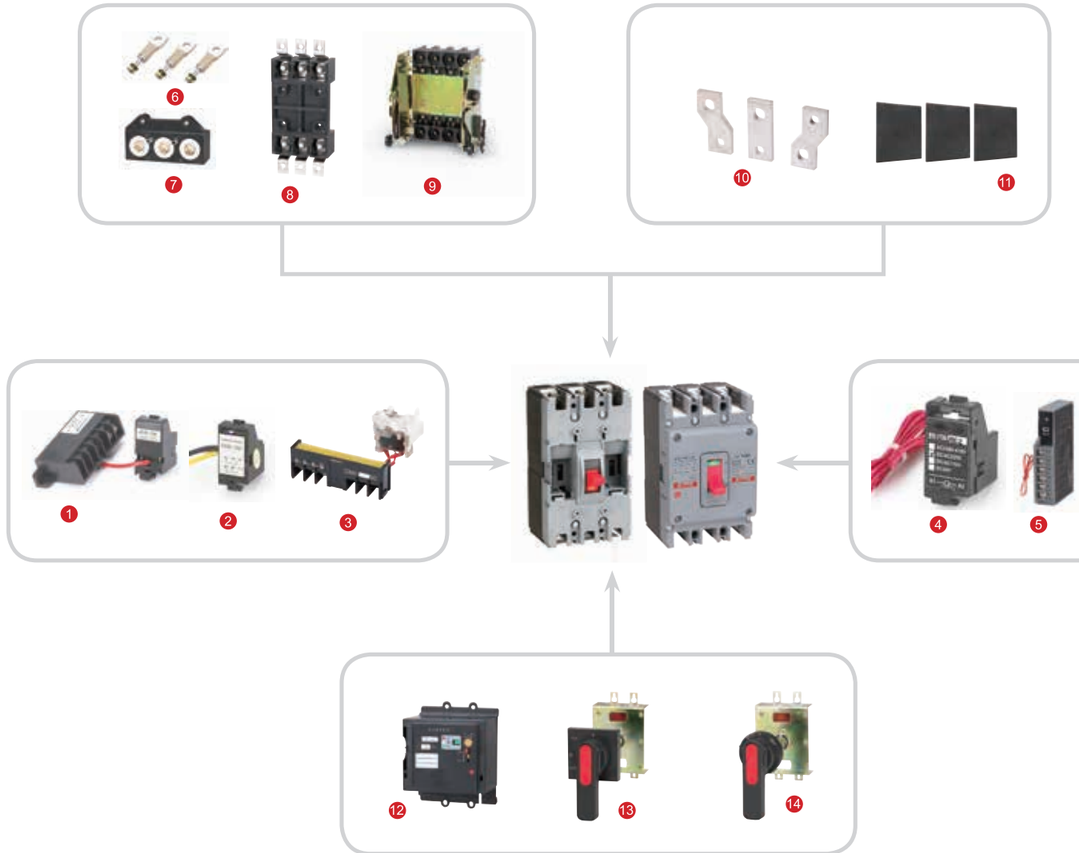
HDM3- List of accessories

Electrical accessories: shunt release, undervoltage release, auxiliary contact, alarm contact, auxiliary alarm integrated release and leakage alarm module

Mechanical accessories: interphase barriers, extension terminal, manual operating mechanism and electric operating mechanism

Mechanical accessories: interphase barriers, extension terminal, manual operating mechanism and electric operating mechanism

Overview of Acc



1	Undervoltage release	6	Fixed rear connection	11	interphase barriers
2	Auxiliary contact	7	Plug-in rear connection	12	Electric operating mechanism
3	Alarm contact	8	Plug-in front connection	13	Square handle operating mechanism
4	Shunt release	9	Withdrawable connection	14	Round handle operating mechanism
5	Leakage alarm module	10	Extension terminal		

HDM3 Molded Case Circuit Breaker

Mechanical accessories

HDM3 Mechanical accessories

Interphase barriers

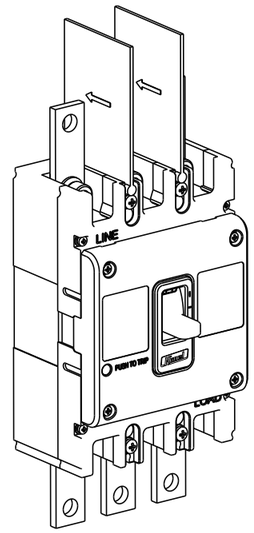
The interphase barriers can enhance the insulating performances of the conductors between the phases .They can be installed from the front slot even after the switch is installed.

Standard offer 2pcs (3P) or 3pcs (4P) interphase barriers

Extension terminals

The extension terminal is connected to the standard terminal
of the circuit breaker, so as to provide many other wiring schemes in the limited space:
>Direct extension terminal
>Extension terminal with inter-electrode distance

The busbar and extension terminal can be connected to the inlet or outlet terminal of the circuit breaker.



HDM3 Molded Case Circuit Breaker

Mechanical accessories

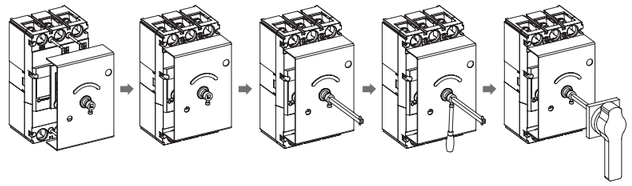
HDM3 Mechanical accessories

Handle operating mechanism
The circuit breaker can be operated by the rotation of the handle and the ergonomically designed rotation handle makes the operation of the circuit breaker more flexible.

2 types of rotation handle operating mechanisms:
>Direct rotation handle (round handle operating mechanism and square handle operating mechanism)
">Extended rotation handle (round extending handle operating mechanism and square extended handle operating mechanism)

User visualization information/settings:
> 3 position indications: OFF, ON and TRIP
>The circuit breaker cannot be switched on when the door is open
>The door cannot be opened when the circuit breaker is switched on
>The axial length of the extended handle can be adjusted according to the distance from the back of the circuit breaker to the door.

Schematic Diagram of Handle Operating Mechanism
Installation



1. Align to the installation direction of the mechanism
2. Tighten the mounting screws
3. Install the lengthened screw
4. Fix the screw
5. Install the lengthened handle

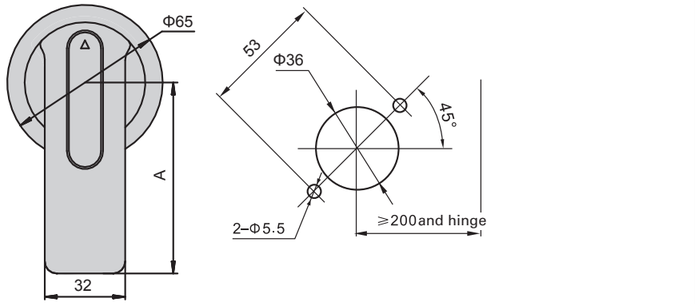
HDM3 Molded Case Circuit Breaker

Mechanical accessories

HDM3 Mechanical accessories

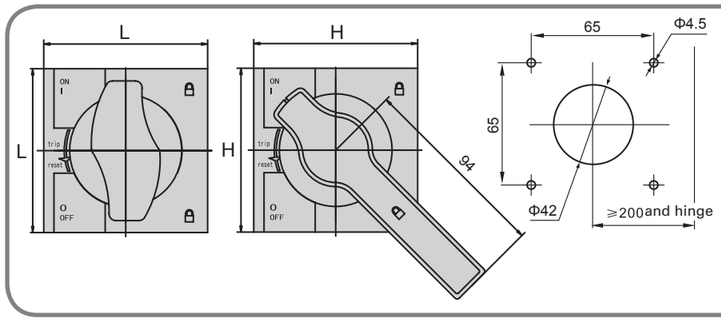
Round handle operating mechanism

Circuit breaker mode	A	Remark
HDM3-63/100L/S	65	Size AA 65 or 95 optional, default to 65
HDM3-100M/F/T/N	65	
HDM3-160/250A	65	
HDM3-400/630A	65	
HDM3-800A	95	Size AA 95 or 125 optional, default yo 95



Square handle operating mechanism

Circuit breaker mode	L	H
HDM3-63/100L/S	80	80
HDM3-100M/F/T/N	80	80
HDM3-160/250A	80	80
HDM3-400/630A	94	94
HDM3-800A	94	94



HDM3 Molded Case Circuit Breaker

Mechanical accessories

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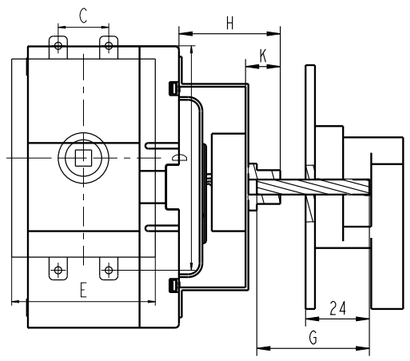
HDM3 Mechanical accessories

Square handle operating mechanism

Circuit breaker mode	C	D	E	H	K
HDM3-63/100L/S	25	111	71	51	20
HDM3-100M/F/T/N	30	129	82	57	20
HDM3-160/250A	35	143	100	40	20
HDM3-400/630A	44	215	140	78	20
HDM3-800A	70	243	-	76	20



HDM3 Molded Case Circuit Breaker

Mechanical accessories

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Electrical accessories

Auxiliary contact and alarm contact

Auxiliary contact

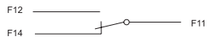
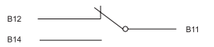
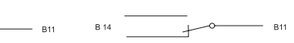
An accessory connected in the auxiliary circuit of the switching device to indicate the circuit breaker status of ON or OFF or Trip

Alarm contact:

An accessory used to indicate the circuit breaker status of ON or OFF or Trip. When the alarm contact indicates that the circuit breaker is at Trip status, there are the following five possibilities:

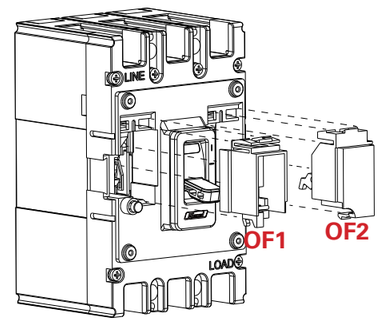
- Overload or short circuit fault
- Residual current fault
- Manual test button trip
- Shunt release action
- Line fault and undervoltage release action

Electrical wiring diagram

Accessory name	ON	OFF/TRIP
Auxiliary		
Accessory name	ON	OFF/TRIP
Alarm		

Electrical parameters of auxiliary alarm contact			
Conventional Thermal Current		3A	
Thermal Current Use class (IEC/EN 60947-2)		AC 15	DC13
Working electricity 50Hz	AC 400V	0.3A	
electricty 50HZ	DC 220V		0.15A

Installation diagram of auxiliary contact



Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Mechanical accessories

Electrical accessories

Shunt release

>The shunt release shall reliably trip the circuit breaker at the voltage between 70% and 110% of the rated control power voltage U

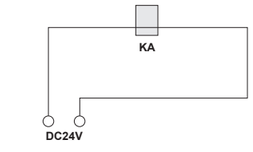
>The circuit breaker shall be reset on the spot after tripping through the shunt release.

	Shunt coil power consumption(W)		
	AC400V	AC230V	DC24V
HDM3-63/100L/S	91.6	76.1	91.2
HDM3-100M/F/T/N	96.8	73	91.2
HDM3-160/250	112	68.6	85.3
HDM3-400	67	62.3	100
HDM3-630	68	58.2	100
HDM3-800	163	153	120
HDM3-1250	183	175	140

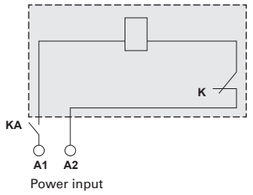
When the rated control voltage of the shunt release is DC24V, the maximum length of the copper wire shall meet the following requirements:

Wire area / Rated control power voltage Uc (DC24V)	1.5mm2	2.5mm2
100% Uc	150mm	250mm
85% Uc	100mm	160mm

If not meeting the requirements above, it is recommended to use the figure below to design the shunt release control loop:



KA: DC24V intermediate relay with the contact current capacity of 1A



Power input

HDM3 Molded Case Circuit Breaker

Mechanical accessories

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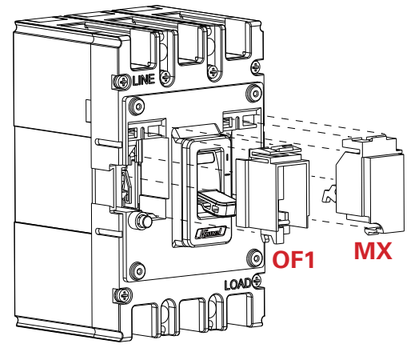
Electrical accessories

MX installation diagram:



Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Mechanical accessories

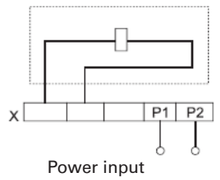
Electrical accessories

Undervoltage release

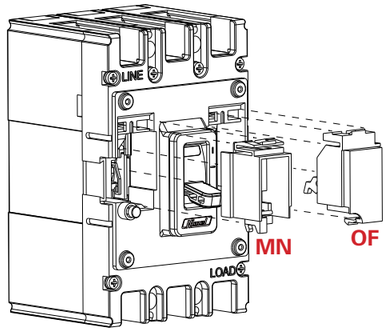
- The undervoltage release shall reliably trip the circuit breaker at the voltage between 35% and 70% of the rated operational voltage;
- The undervoltage release shall ensure that the circuit breaker can be switched on at the voltage between 85% and 110% of the rated operational voltage;
- The undervoltage release shall prevent the circuit breaker from switching on when voltage is below 35%of the rated operational voltagethe

	Undervoltage coil power consumption(W)	
	AC400V	AC230V
HDM3-63/100L/S	4	3.1
HDM3-100M/F/T/N	3.9	3.2
HDM3-160/250	4.3	3.3
HDM3-400	3.6	2.5
HDM3-630	3.4	2.5
HDM3-800	2	1.6
HDM3-1250	2	1.6

Electric wiring diagram of undervoltage release
Wiring diagram
Note: X- terminal block
Note: In the dashed box,
it is the wiring diagram of accessories in the circuitbreaker.



Installation diagram of undervoltage release:



HDM3 Molded Case Circuit Breaker

Mechanical accessories

Electrical accessories

Leakage alarm module (leakage MCCB accessory)

- Leakage with no tripping function. It can be applied in the situation when the leakage reaches the alarm limit but the system power interruption will not work.
- The alarm function of this acc is realized by the LED's light. When there's red light, it indicates that the leakage in the system exceeds the calibrated value. In this situation, normally open contacts turns into normally closed , and normally closed contacts turn into normally open.

Electric operating mechanism

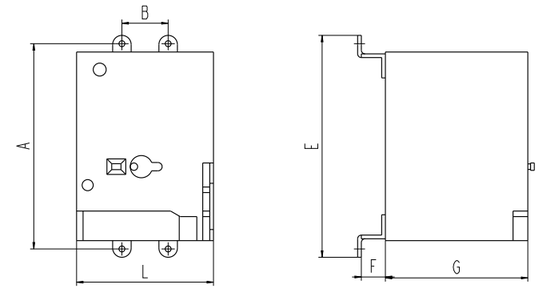
- Apply to remote electric connection, disconnection and re-trip of the circuit breaker and the automation control occasions.
- Rated voltage of electric operating mechanism: AC400V,AC230V,DC220V
- Operating voltage range of electric operating mechanism: 85%-110% Ue

- There are two types of electric operating mechanisms:
  -CD1 AC electric operating mechanism
  -CD2CD2 General electric operating mechanism for AC and DC

- CD2 electric operating voltage and tolerance range:
  - CD2:63A-250A:Operating frequency ≤180times/hour and actuation ; time ≤ greater than 0.7S
  - CD2:400A-800A:Operating frequency of ≤ 60times/hour; actuation time ≤ 1S
- The voltage tolerance range is 184~253VAC/187~242VDC when the rated control power voltage is 230VAC/220VDC.
  -The voltage tolerance range is 320~440VAC when the rated control power voltage is 400VAC.
  -The voltage tolerance range is 184~253VAC when the rated control power voltage is 230VAC (CD1-1250).
  - As for different operating forces of the circuit breaker, the switch with relatively small force can be normal.

>Parameters and installation dimensions of CD2 AC/DC electric operating mechanism

Circuit breaker mode	A	B	E	F	G	L
HDM3-63/100L/S	111	25	120	13	77	74
HDM3-100M/F/T/N	129	30	140	14	80	90
HDM3-160/250A	126	35	140	17	80	90
HDM3-400/630A	215	44	232	27	115	130
HDM3-800A	243	70	-	31	115	-



Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Mechanical accessories

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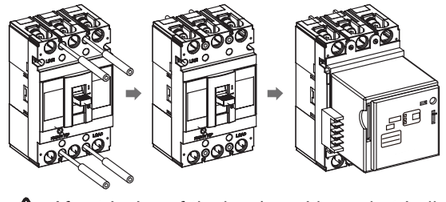
Electrical accessories

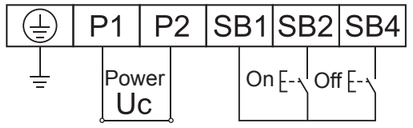
Installation drawing of CD2 electric operating mechanism



After tripping of the breaker with an electrically operated mechanism, the electrically operated mechanism must be opened first before closed.

Electric wiring diagram of CD2 electric operating mechanism

AC230V、AC400V and DC220V



HDM3 Molded Case Circuit Breaker

Electric accessories

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HDM3 Installation sites of HDM3 electric accessories

□ Alarm contact ■ Auxiliary contact ● Shunt release ○ Undervoltage release

Electromagnetic type	Compound	Accessory name	HDM3-63/100L/S	HDM3-100M/F/T/N	HDM3-160/250	HDM3-400/630	HDM3-800	HDM3-1250
208	308	Alarm code	□	□	□	□	□	
210	310	Shunt release	●	●	●	●	●	●
220	320	Auxiliary contact	■	■	■	■	■	■
230	330	Undervoltage release	○	○	○	○	○	○
240	340	Shunt+ auxiliary	■ ●	■ ●	■ ●	■ ●	● ■	■ ●
250	350	Shunt+ undervoltage	○ ●	○ ●	○ ●	○ ●	○ ●	○ ●
260	360	Two groups of auxiliary contacts	■ ■	■ ■	■ ■	■ ■	■■	■■
270	270	Auxiliary+ undervoltage	○ ■	○ ■	○ ■	○ ■	○ ■	○ ■
218	318	Shunt + alarm	□ ●	□ ●	□ ●	□ ●	□ ●	
228	328	Auxiliary+ alarm	□■	□■	□■	□■	□■	
238	338	Undervoltage+ alarm	○ □	○ □	○ □	○ □	○□	
248	348	Shunt +auxiliary+alarm	□■ ●	□■ ●	□■ ●	□■ ●	□■ ●	
268	368	Two groups of auxiliary+alarm	□■ ■	□■ ■	□■ ■	□■ ■	□■ ■	
278	378	Auxiliary +undervoltage+ alarm	○ □■	○ □■	○ □■	○ □■		

Note: 200 refers to the circuit breaker body only with a magnetic release; 300 refers to the circuit breaker body with thermal trip and electromagnetic trip.

HDM3 Molded Case Circuit Breaker

Installation dimensions-Front

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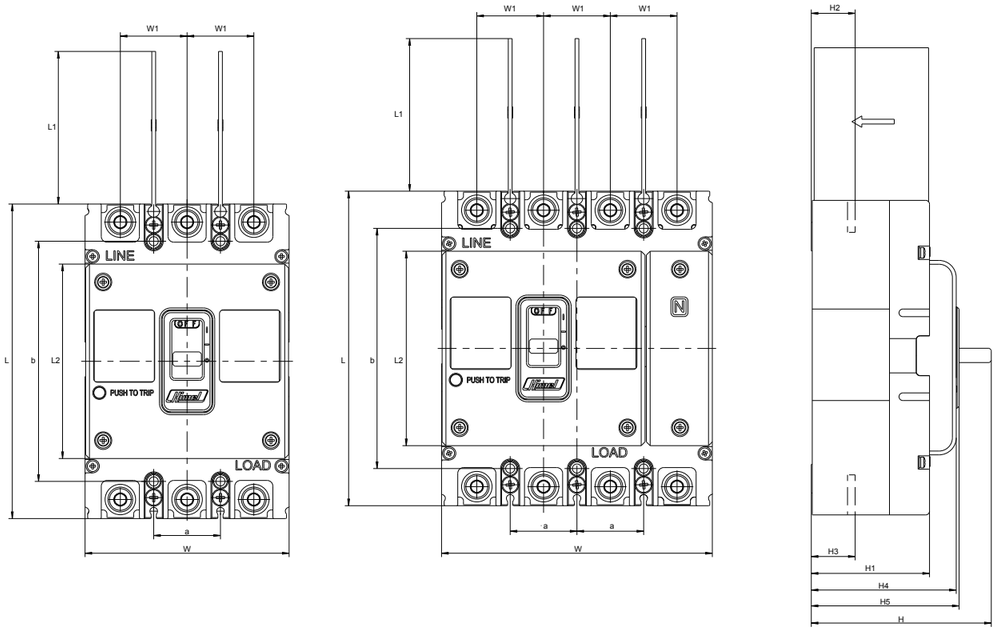
Installation dimensions

Fixed front installation dimensions



Shell frame	Number of poles	Overall dimension											Installation dimension	
		L	L1	L2	W	W1	H	H1	H2	H3	H4	H5	a	b
63/100L/S	3P	130	50	83	75	25	81.5	54	24	24	68	70.5	25	111
	4P				100									
100M/F/T/N	3P	150	50	96	92	30	111.5	81	28.5	28	93.5	95.5	30	129
	4P				122									
160/250S	3P	165	80	102	107	35	94.5	62	23	23	76	77.5	35	126
	4P				142									
160/250FN	3P	165	80	102	107	35	112.5	80	23	23	94	95.5	35	126
	4P				142									
400	3P	257	104.5	150	150	48	145.9	96.2	36	36.5	107.5	112.5	44	215
	4P				198									
630	3P	257	104.5	150	150	48	145.9	96.2	38	39	107.5	112.5	44	215
	4P				198									
800	3P	280	104.5	102	210	70	146.5	97.5	32.5	35.5	100	114	70	243
	4P				280									
1250	3P	406	104	97.2	210	70	197.5	134	58	60	140	158.5	70	376

HDM3 Molded Case Circuit Breaker

Installation dimensions-Front

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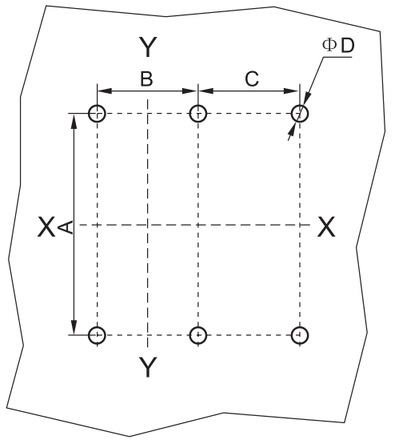
Installation dimensions

Fixed front installation hole dimensions



Note: X-X and Y-Y is the center of the three-pole breaker

Shell frame	Number of poles	A	B	C	D
83/100L/S	3P	111	25	/	4.5
	4P			25	
100M/F/T/N	3P	129	30	/	5
	4P			30	
160/250	3P	126	35	/	5.5
	4P			35	
400/630	3P	215	44	/	6.5
	4P			/	
800	3P	243	70	/	7.5
	4P			70	
1250	3P	376	70	/	10.5

Low-voltage Distribution

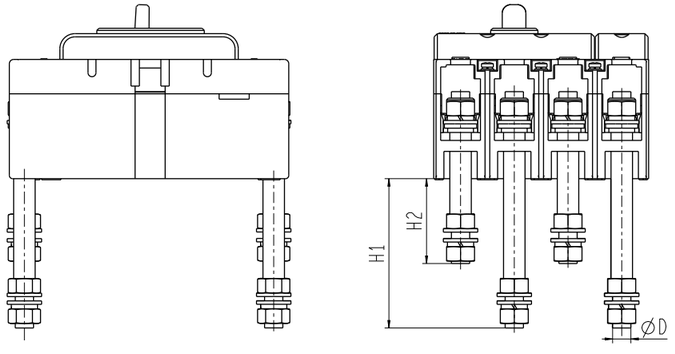
HDM3 Molded Case Circuit Breaker

Installation dimensions-Rear

Installation dimensions-Rear

Fixed rear installation dimensions

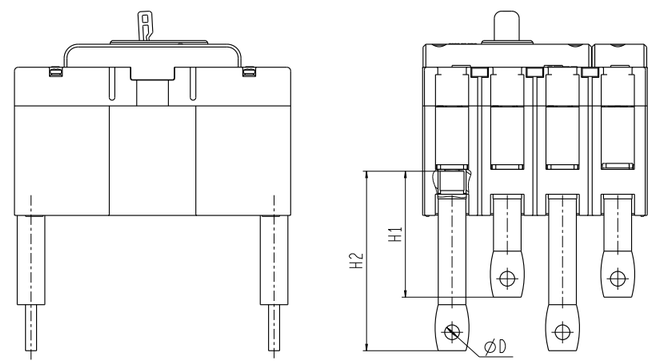
Circuit breaker mode	H1	H2	D
HDM3-63/100L/S	87	56	8
HDM3-100M/F/T/N	97	55	8
HDM3-160	120	90	10
HDM3-250	120	90	10



HDM3 63-250 Installation dimension drawing

Installation dimensions

Circuit breaker mode	H1	H2	D
HDM3-400	92.5	128.5	12.5
HDM3-630	92.5	128.5	12.5
HDM3-800	75	125	13



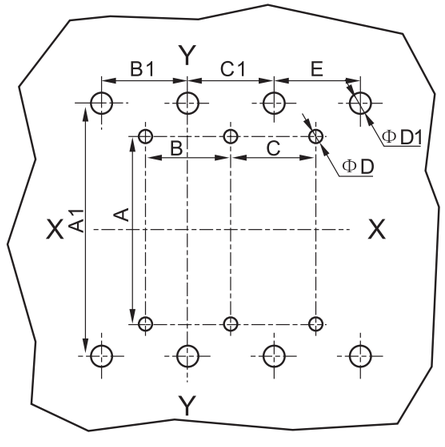
HDM3 400-800 Installation dimension drawing

HDM3 Molded Case Circuit Breaker

Installation dimensions-Rear

Installation dimensions-Rear

Fixed rear installation hole dimensions



Note: X-X and Y-Y is the center of the three-pole breaker

Shell frame	Number of poles	A	B	C	D	A1	B1	C1	E	D
63/100L/S	3P	111	25	-	4.5	116	25	25	-	12
	4P			25					25	
100M/F/T/N	3P	129	30	-	5	132	30	30	-	12
	4P			30					30	
160/250	3P	126	35	-	5.5	145	35	35	-	15
	4P			35					35	
400/630	3P	215	44	-	6.5	225	48	48	-	18
	4P			-					48	
800	3P	243	70	-	7.5	243	70	70	-	27
	4P			70					70	

Low-voltage Distribution

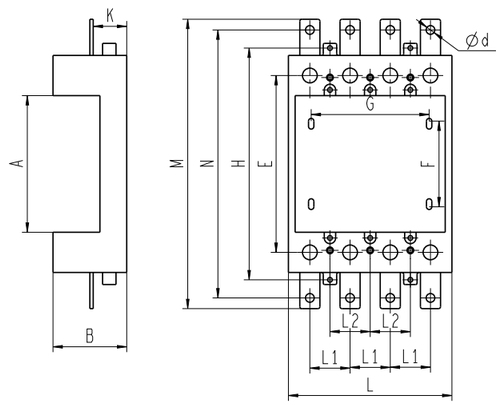
HDM3 Molded Case Circuit Breaker

Installation dimensions-Plug in

Installation dimensions-Plug in

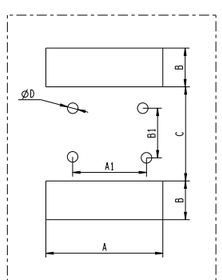
Plug-in front installation dimensions
Installation dimensions

Circuit breaker mode	A	B	E	F	G	H	L	L1	L2	M	N	K	d
63/100L/S	92	51.5	116	60	76	146	100	25	25	190	174	22.5	6.5
100M/F/T/N	102	55	132	60	90	173	122	30	30	216	200	25	6.5
160/250A	109.5	72	145	74.5	105	190	140	35	35	243	222	37	8.5
400/630A	170	80	225	145	88/132	-	152/200	48	44	385	355	56	12



Plug-in front hot position drawing

Circuit breaker mode	Number of poles	A	A1	B	B1	C	D
63/100L/S	3	75	51	22	60	92	4.5
	4	100	76				
100M/F/T/N	3	92	60	30	60	102	4.5
	4	122	90				
160/250	3	109	70	40	74.5	104	6
	4	144	105				
400/630	3	152	88	54	145	170	8.5
	4	200	132				



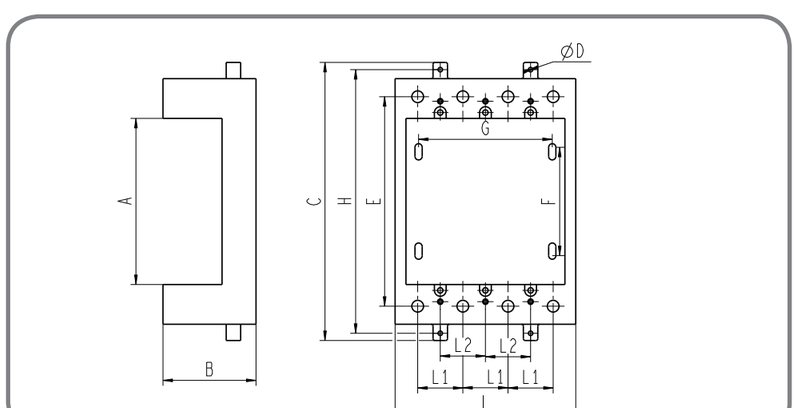
HDM3 Molded Case Circuit Breaker

Installation dimensions-Plug in

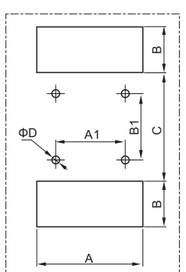
Installation dimensions-Plug in

Plug-in rear installation dimensions
Installation dimensions

Circuit breaker mode	A	B	C	D	E	F	G	H	L	L1	L2
63/100L/S	92	51.5	154	2.5	116	60	76	146	100	25	50
100M/F/T/N	102	55	180	3.5	132	60	90	173	122	30	60
160/250A	109.5	72	200	4	145	74.5	105	190	140	35	35
400/630A	170	80	-	-	225	145	88/132	-	152/200	48	44
800A	155	87	-	-	243	143	90/160	-	210/280	70	70/140



Circuit breaker mode	Number of poles	A	A1	B	B1	C	D
63/100L/S	3	75	51	22	60	92	4.5
	4	100	76				
100M/F/T/N	3	92	60	30	60	102	4.5
	4	122	90				
160/250	3	109	70	40	74.5	104	6
	4	144	105				
400/630	3	152	88	54	145	170	8.5
	4	200	132				
800	3	210	90	62	143	155	11
	4	280	160				



Plug-in rear installation hole pattern

HDM3 Molded Case Circuit Breaker

Trip curve

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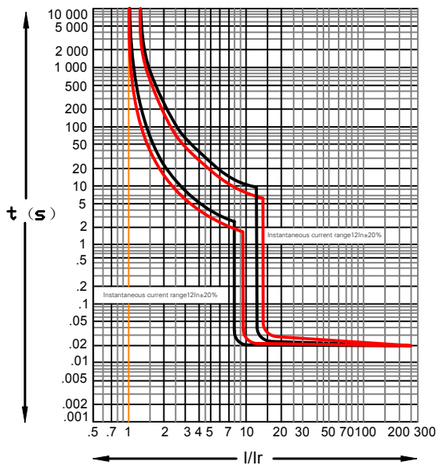
HDM3 series Trip curve

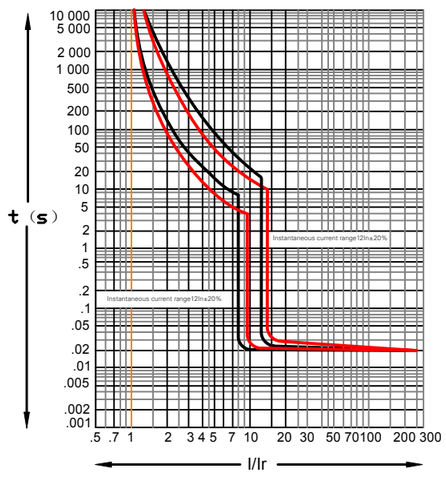
HDM3-100M/F/T/N

HDM3-100M/F/T/N 40A-100A Black line: power distribution protection , red line: motor protection;



HDM3-160/250

Black line: power distribution protection , red line: motor protection;



HDM3 Molded Case Circuit Breaker

Trip curve

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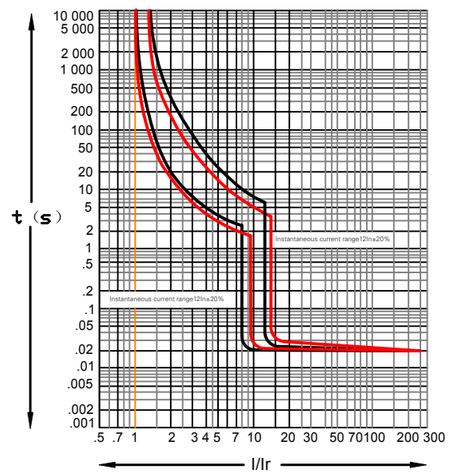
HDM3 series Trip curve

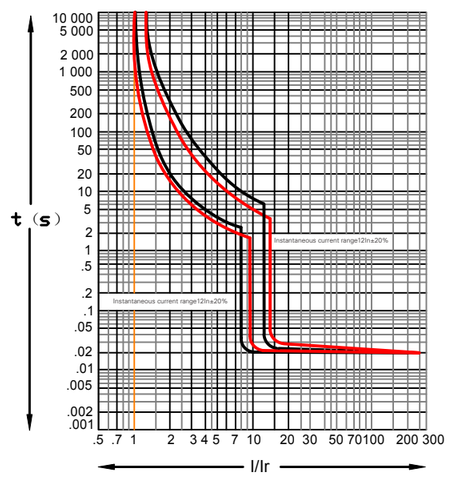
HDM3-400

Black line: power distribution protection , red line: motor protection;



HDM3-630

Black line: power distribution protection , red line: motor protection;



Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Trip curve

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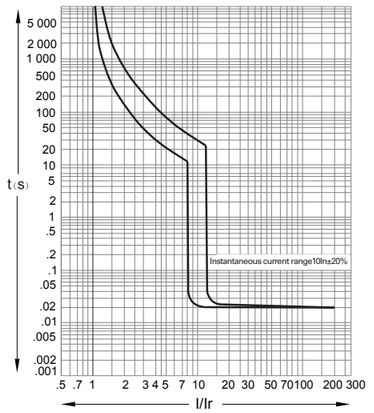
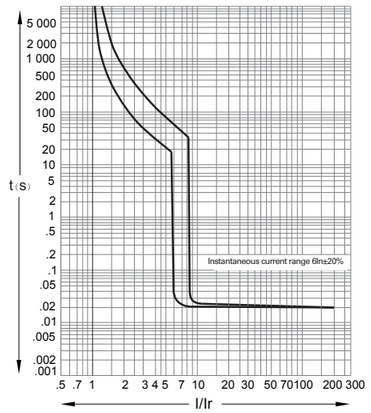
HDM3 series Trip curve

HDM3-800A

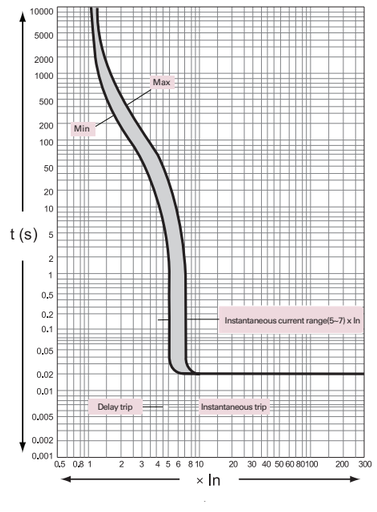
HDM3-800A 630A
For power distribution



HDM3-800A 700A~800A
For power distribution



HDM3-1250A



HDM3 Molded Case Circuit Breaker

Repaire and maintenance

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HDM3 Repaire and maintenance

Operated and debug HDM3

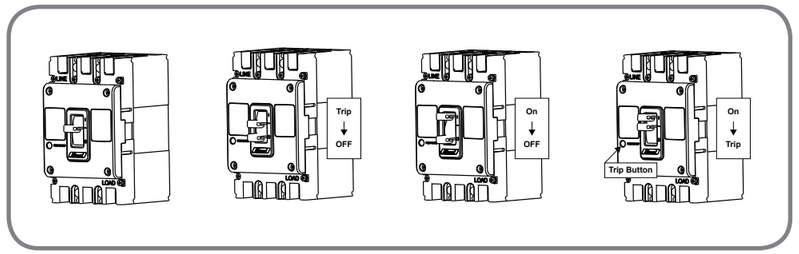
First, check the circuit breaker handle status

1.The normal status of delivered products is at “trip”

2. Press the handle to the “OFF" position

3. Close the breaker and push the toggle to ON position.

4.Tap the test button and the breaker handle returns to “Trip” position.



Repaire and maintenance

·The repair and maintenance shall be implemented by qualified persons

·The superior power supply must be cut off to ensure that the incoming terminals are electrically neutral

·Conduct maintenance and protection once a year under normal operating conditions with the maintenance content as follows:

Type	Item	Content
Moulded case circuit breaker	Appearance	No dust or condensation .Clean is needed if there’ s any.
		No damage
		Non-discoloring shell and connectors
	Flash barrier	Insert the flash barrier in place according to the instructions
	Connector connection	Tighten without looseness according to the Rated Torque Chart
	Handle on/off operation	Operation shall be flexible
	Trip button	The handle indicates trip after the trip of the product
	Insulation test	Conduct a test according to the product test requirements On the first page of User Manuel
Circuit breaker with accessories	With undervoltage release	The circuit breaker shall be disconnected reliably and the handle indicates trip if the undervoltage release is powered off
	With undervoltage release	The circuit breaker shall be disconnected reliably and the handle indicates trip if the release is provided with rated voltage
	With auxiliary contact	The switching signal of the auxiliary contact shall be normal when the circuit breaker is connected and then disconnected
	With alarm contact	The switching signal of the alarm contact shall not function when the circuit breaker is closed and then tripped by pressing the trip button.

HDM3 Molded Case Circuit Breaker

Appendix

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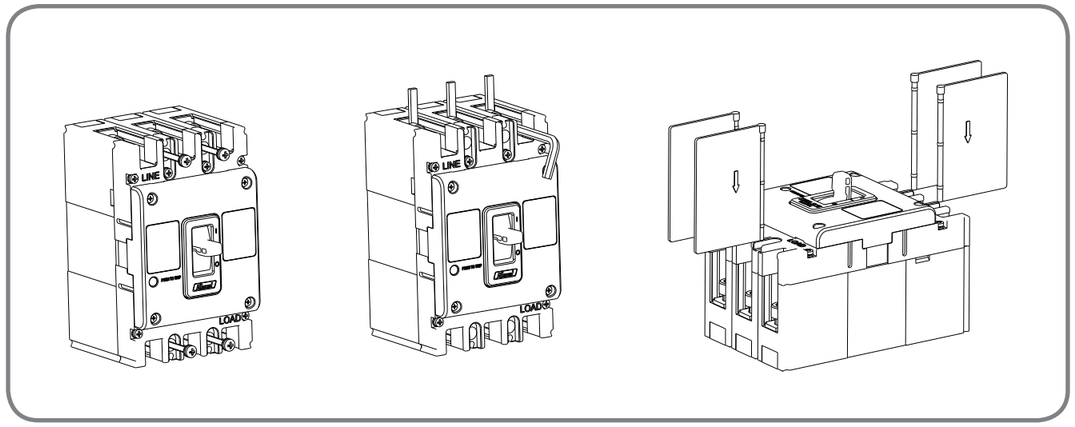
Appendix Torque table and connecting conductor



Torque table

Shell frame	Hexagon	Torque force N.m
63/100	M8	9.5-10.5
160/250	M8	9.5-10.5
400/630	M10	19.5-20.5
800/1250	M12	29.5-30.5

Connecting conductor mm

Rated current A	10	16/20	25	32	40/50	63	80	100	125	140	160	180/200/225	250	315	400	500	600	700/800	1000	1250
Conductor cross-section mm	1.5	3	4	6	10	16	25	35	50	50	70	95	120	185	240	2*150	2*185	2*240	2*500	2*500

Material order number

HDM3 Fixed front connection Power distribution protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-63L	10	18	18	HDM363L1033XX	HDM363L10A3XX	HDM363L10B3XX
	16	18	18	HDM363L1633XX	HDM363L16A3XX	HDM363L16B3XX
	20	18	18	HDM363L2033XX	HDM363L20A3XX	HDM363L20B3XX
	25	18	18	HDM363L2533XX	HDM363L25A3XX	HDM363L25B3XX
	32	18	18	HDM363L3233XX	HDM363L32A3XX	HDM363L32B3XX
	40	18	18	HDM363L4033XX	HDM363L40A3XX	HDM363L40B3XX
	50	18	18	HDM363L5033XX	HDM363L50A3XX	HDM363L50B3XX
	63	18	18	HDM363L6333XX	HDM363L63A3XX	HDM363L63B3XX
HDM3-63S	10	25	18	HDM363S1033XX	HDM363S10A3XX	HDM363S10B3XX
	16	25	18	HDM363S1633XX	HDM363S16A3XX	HDM363S16B3XX
	20	25	18	HDM363S2033XX	HDM363S20A3XX	HDM363S20B3XX
	25	25	18	HDM363S2533XX	HDM363S25A3XX	HDM363S25B3XX
	32	25	18	HDM363S3233XX	HDM363S32A3XX	HDM363S32B3XX
	40	25	18	HDM363S4033XX	HDM363S40A3XX	HDM363S40B3XX
	50	25	18	HDM363S5033XX	HDM363S50A3XX	HDM363S50B3XX
	63	25	18	HDM363S6333XX	HDM363S63A3XX	HDM363S63B3XX
HDM3-63M	10	30	30	HDM363M1033XX	HDM363M10A3XX	HDM363M10B3XX
	16	30	30	HDM363M1633XX	HDM363M16A3XX	HDM363M16B3XX
	20	30	30	HDM363M2033XX	HDM363M20A3XX	HDM363M20B3XX
	25	30	30	HDM363M2533XX	HDM363M25A3XX	HDM363M25B3XX
	32	30	30	HDM363M3233XX	HDM363M32A3XX	HDM363M32B3XX
	40	30	30	HDM363M4033XX	HDM363M40A3XX	HDM363M40B3XX
	50	30	30	HDM363M5033XX	HDM363M50A3XX	HDM363M50B3XX
	63	30	30	HDM363M6333XX	HDM363M63A3XX	HDM363M63B3XX
HDM3-63F	10	50	30	HDM363F1033XX	HDM363F10A3XX	HDM363F10B3XX
	16	50	30	HDM363F1633XX	HDM363F16A3XX	HDM363F16B3XX
	20	50	30	HDM363F2033XX	HDM363F20A3XX	HDM363F20B3XX
	25	50	30	HDM363F2533XX	HDM363F25A3XX	HDM363F25B3XX
	32	50	30	HDM363F3233XX	HDM363F32A3XX	HDM363F32B3XX
	40	50	30	HDM363F4033XX	HDM363F40A3XX	HDM363F40B3XX
	50	50	30	HDM363F5033XX	HDM363F50A3XX	HDM363F50B3XX
	63	50	30	HDM363F6333XX	HDM363F63A3XX	HDM363F63B3XX
HDM3-100L	10	18	18	HDM3100L1033XX	HDM3100L10A3XX	HDM3100L10B3XX
	16	18	18	HDM3100L1633XX	HDM3100L16A3XX	HDM3100L16B3XX
	20	18	18	HDM3100L2033XX	HDM3100L20A3XX	HDM3100L20B3XX
	25	18	18	HDM3100L2533XX	HDM3100L25A3XX	HDM3100L25B3XX
	32	18	18	HDM3100L3233XX	HDM3100L32A3XX	HDM3100L32B3XX
	40	18	18	HDM3100L4033XX	HDM3100L40A3XX	HDM3100L40B3XX
	50	18	18	HDM3100L5033XX	HDM3100L50A3XX	HDM3100L50B3XX
	63	18	18	HDM3100L6333XX	HDM3100L63A3XX	HDM3100L63B3XX
	80	18	18	HDM3100L8033XX	HDM3100L80A3XX	HDM3100L80B3XX
	100	18	18	HDM3100L10033XX	HDM3100L100A3XX	HDM3100L100B3XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-100S	10	25	18	HDM3100S1033XX	HDM3100S10A3XX	HDM3100S10B3XX
	16	25	18	HDM3100S1633XX	HDM3100S16A3XX	HDM3100S16B3XX
	20	25	18	HDM3100S2033XX	HDM3100S20A3XX	HDM3100S20B3XX
	25	25	18	HDM3100S2533XX	HDM3100S25A3XX	HDM3100S25B3XX
	32	25	18	HDM3100S3233XX	HDM3100S32A3XX	HDM3100S32B3XX
	40	25	18	HDM3100S4033XX	HDM3100S40A3XX	HDM3100S40B3XX
	50	25	18	HDM3100S5033XX	HDM3100S50A3XX	HDM3100S50B3XX
	63	25	18	HDM3100S6333XX	HDM3100S63A3XX	HDM3100S63B3XX
	80	25	18	HDM3100S8033XX	HDM3100S80A3XX	HDM3100S80B3XX
	100	25	18	HDM3100S10033XX	HDM3100S100A3XX	HDM3100S100B3XX
HDM3-100M	40	26	26	HDM3100M4033XX	HDM3100M40A3XX	HDM3100M40B3XX
	50	26	26	HDM3100M5033XX	HDM3100M50A3XX	HDM3100M50B3XX
	63	26	26	HDM3100M6333XX	HDM3100M63A3XX	HDM3100M63B3XX
	80	26	26	HDM3100M8033XX	HDM3100M80A3XX	HDM3100M80B3XX
	100	26	26	HDM3100M10033XX	HDM3100M100A3XX	HDM3100M100B3XX
HDM3-100F	40	35	26	HDM3100F4033XX	HDM3100F40A3XX	HDM3100F40B3XX
	50	35	26	HDM3100F5033XX	HDM3100F50A3XX	HDM3100F50B3XX
	63	35	26	HDM3100F6333XX	HDM3100F63A3XX	HDM3100F63B3XX
	80	35	26	HDM3100F8033XX	HDM3100F80A3XX	HDM3100F80B3XX
	100	35	26	HDM3100F10033XX	HDM3100F100A3XX	HDM3100F100B3XX
HDM3-100T	40	30	30	HDM3100T4033XX	HDM3100T40A3XX	HDM3100T40B3XX
	50	30	30	HDM3100T5033XX	HDM3100T50A3XX	HDM3100T50B3XX
	63	30	30	HDM3100T6333XX	HDM3100T63A3XX	HDM3100T63B3XX
	80	30	30	HDM3100T8033XX	HDM3100T80A3XX	HDM3100T80B3XX
	100	30	30	HDM3100T10033XX	HDM3100T100A3XX	HDM3100T100B3XX
HDM3-100N	40	50	30	HDM3100N4033XX	HDM3100N40A3XX	HDM3100N40B3XX
	50	50	30	HDM3100N5033XX	HDM3100N50A3XX	HDM3100N50B3XX
	63	50	30	HDM3100N6333XX	HDM3100N63A3XX	HDM3100N63B3XX
	80	50	30	HDM3100N8033XX	HDM3100N80A3XX	HDM3100N80B3XX
	100	50	30	HDM3100N10033XX	HDM3100N100A3XX	HDM3100N100B3XX
HDM3-160L	100	21	21	HDM3160L10033XX	HDM3160L100A3XX	HDM3160L100B3XX
	125	21	21	HDM3160L12533XX	HDM3160L125A3XX	HDM3160L125B3XX
	140	21	21	HDM3160L14033XX	HDM3160L140A3XX	HDM3160L140B3XX
	160	21	21	HDM3160L16033XX	HDM3160L160A3XX	HDM3160L160B3XX
HDM3-160S	100	35	21	HDM3160S10033XX	HDM3160S100A3XX	HDM3160S100B3XX
	125	35	21	HDM3160S12533XX	HDM3160S125A3XX	HDM3160S125B3XX
	140	35	21	HDM3160S14033XX	HDM3160S140A3XX	HDM3160S140B3XX
	160	35	21	HDM3160S16033XX	HDM3160S160A3XX	HDM3160S160B3XX
HDM3-160M	100	30	30	HDM3160M16033XX	HDM3160M160A3XX	HDM3160M100B3XX
	125	30	30	HDM3160M10033XX	HDM3160M100A3XX	HDM3160M125B3XX
	140	30	30	HDM3160M12533XX	HDM3160M125A3XX	HDM3160M140B3XX
	160	30	30	HDM3160M14033XX	HDM3160M140A3XX	HDM3160M160B3XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-160F	100	50	30	HDM3160F10033XX	HDM3160N16033XX	HDM3160F100B3XX
	125	50	30	HDM3160F12533XX	HDM3160F125A3XX	HDM3160F125B3XX
	140	50	30	HDM3160F14033XX	HDM3160F140A3XX	HDM3160F140B3XX
	160	50	30	HDM3160F16033XX	HDM3160F160A3XX	HDM3160F160B3XX
HDM3-160T	100	36	36	HDM3160T10033XX	HDM3160T100A3XX	HDM3160T100B3XX
	125	36	36	HDM3160T12533XX	HDM3160T125A3XX	HDM3160T125B3XX
	140	36	36	HDM3160T14033XX	HDM3160T140A3XX	HDM3160T140B3XX
	160	36	36	HDM3160T16033XX	HDM3160T160A3XX	HDM3160T160B3XX
HDM3-160N	100	60	36	HDM3160N10033XX	HDM3160N100A3XX	HDM3160N100B3XX
	125	60	36	HDM3160N12533XX	HDM3160N125A3XX	HDM3160N125B3XX
	140	60	36	HDM3160N14033XX	HDM3160N140A3XX	HDM3160N140B3XX
	160	60	36	HDM3160N16033XX	HDM3160N160A3XX	HDM3160N160B3XX
HDM3-250L	100	21	21	HDM3250L10033XX	HDM3250L100A3XX	HDM3250L100B3XX
	125	21	21	HDM3250L12533XX	HDM3250L125A3XX	HDM3250L125B3XX
	140	21	21	HDM3250L14033XX	HDM3250L140A3XX	HDM3250L140B3XX
	160	21	21	HDM3250L16033XX	HDM3250L160A3XX	HDM3250L160B3XX
	180	21	21	HDM3250L18033XX	HDM3250L180A3XX	HDM3250L180B3XX
	200	21	21	HDM3250L20033XX	HDM3250L200A3XX	HDM3250L200B3XX
	225	21	21	HDM3250L22533XX	HDM3250L225A3XX	HDM3250L225B3XX
	250	21	21	HDM3250L25033XX	HDM3250L250A3XX	HDM3250L250B3XX
HDM3-250S	100	35	21	HDM3250S10033XX	HDM3250S100A3XX	HDM3250S100B3XX
	125	35	21	HDM3250S12533XX	HDM3250S125A3XX	HDM3250S125B3XX
	140	35	21	HDM3250S14033XX	HDM3250S140A3XX	HDM3250S140B3XX
	160	35	21	HDM3250S16033XX	HDM3250S160A3XX	HDM3250S160B3XX
	180	35	21	HDM3250S18033XX	HDM3250S180A3XX	HDM3250S180B3XX
	200	35	21	HDM3250S20033XX	HDM3250S200A3XX	HDM3250S200B3XX
	225	35	21	HDM3250S22533XX	HDM3250S225A3XX	HDM3250S225B3XX
	250	35	21	HDM3250S25033XX	HDM3250S250A3XX	HDM3250S250B3XX
HDM3-250M	100	30	30	HDM3250M10033XX	HDM3250M100A3XX	HDM3250M100B3XX
	125	30	30	HDM3250M12533XX	HDM3250M125A3XX	HDM3250M125B3XX
	140	30	30	HDM3250M14033XX	HDM3250M140A3XX	HDM3250M140B3XX
	160	30	30	HDM3250M16033XX	HDM3250M160A3XX	HDM3250M160B3XX
	180	30	30	HDM3250M18033XX	HDM3250M180A3XX	HDM3250M180B3XX
	200	30	30	HDM3250M20033XX	HDM3250M200A3XX	HDM3250M200B3XX
	225	30	30	HDM3250M22533XX	HDM3250M225A3XX	HDM3250M225B3XX
	250	30	30	HDM3250M25033XX	HDM3250M250A3XX	HDM3250M250B3XX
HDM3-250F	100	50	30	HDM3250F10033XX	HDM3250F100A3XX	HDM3250F100B3XX
	125	50	30	HDM3250F12533XX	HDM3250F125A3XX	HDM3250F125B3XX
	140	50	30	HDM3250F14033XX	HDM3250F140A3XX	HDM3250F140B3XX
	160	50	30	HDM3250F16033XX	HDM3250F160A3XX	HDM3250F160B3XX
	180	50	30	HDM3250F18033XX	HDM3250F180A3XX	HDM3250F180B3XX
	200	50	30	HDM3250F20033XX	HDM3250F200A3XX	HDM3250F200B3XX
	225	50	30	HDM3250F22533XX	HDM3250F225A3XX	HDM3250F225B3XX
	250	50	30	HDM3250F25033XX	HDM3250F250A3XX	HDM3250F250B3XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-250T	100	36	36	HDM3250T10033XX	HDM3250T100A3XX	HDM3250T100B3XX
	125	36	36	HDM3250T12533XX	HDM3250T125A3XX	HDM3250T125B3XX
	140	36	36	HDM3250T14033XX	HDM3250T140A3XX	HDM3250T140B3XX
	160	36	36	HDM3250T16033XX	HDM3250T160A3XX	HDM3250T160B3XX
	180	36	36	HDM3250T18033XX	HDM3250T180A3XX	HDM3250T180B3XX
	200	36	36	HDM3250T20033XX	HDM3250T200A3XX	HDM3250T200B3XX
	225	36	36	HDM3250T22533XX	HDM3250T225A3XX	HDM3250T225B3XX
	250	36	36	HDM3250T25033XX	HDM3250T250A3XX	HDM3250T250B3XX
HDM3-250N	100	60	36	HDM3250N10033XX	HDM3250N100A3XX	HDM3250N100B3XX
	125	60	36	HDM3250N12533XX	HDM3250N125A3XX	HDM3250N125B3XX
	140	60	36	HDM3250N14033XX	HDM3250N140A3XX	HDM3250N140B3XX
	160	60	36	HDM3250N16033XX	HDM3250N160A3XX	HDM3250N160B3XX
	180	60	36	HDM3250N18033XX	HDM3250N180A3XX	HDM3250N180B3XX
	200	60	36	HDM3250N20033XX	HDM3250N200A3XX	HDM3250N200B3XX
	225	60	36	HDM3250N22533XX	HDM3250N225A3XX	HDM3250N225B3XX
	250	60	36	HDM3250N25033XX	HDM3250N250A3XX	HDM3250N250B3XX
HDM3-400L	200	21	21	HDM3400L20033XX	HDM3400L200A3XX	HDM3400L200B3XX
	225	21	21	HDM3400L22533XX	HDM3400L225A3XX	HDM3400L225B3XX
	250	21	21	HDM3400L25033XX	HDM3400L250A3XX	HDM3400L250B3XX
	315	21	21	HDM3400L31533XX	HDM3400L315A3XX	HDM3400L315B3XX
	350	21	21	HDM3400L35033XX	HDM3400L350A3XX	HDM3400L350B3XX
	400	21	21	HDM3400L40033XX	HDM3400L400A3XX	HDM3400L400B3XX
HDM3-400S	200	35	21	HDM3400S20033XX	HDM3400S200A3XX	HDM3400S200B3XX
	225	35	21	HDM3400S22533XX	HDM3400S225A3XX	HDM3400S225B3XX
	250	35	21	HDM3400S25033XX	HDM3400S250A3XX	HDM3400S250B3XX
	315	35	21	HDM3400S31533XX	HDM3400S315A3XX	HDM3400S315B3XX
	350	35	21	HDM3400S35033XX	HDM3400S350A3XX	HDM3400S350B3XX
	400	35	21	HDM3400S40033XX	HDM3400S400A3XX	HDM3400S400B3XX
HDM3-400M	200	30	30	HDM3400M20033XX	HDM3400M200A3XX	HDM3400M200B3XX
	225	30	30	HDM3400M22533XX	HDM3400M225A3XX	HDM3400M225B3XX
	250	30	30	HDM3400M25033XX	HDM3400M250A3XX	HDM3400M250B3XX
	315	30	30	HDM3400M31533XX	HDM3400M315A3XX	HDM3400M315B3XX
	350	30	30	HDM3400M35033XX	HDM3400M350A3XX	HDM3400M350B3XX
	400	30	30	HDM3400M40033XX	HDM3400M400A3XX	HDM3400M400B3XX
HDM3-400F	200	50	30	HDM3400F20033XX	HDM3400F200A3XX	HDM3400F200B3XX
	225	50	30	HDM3400F22533XX	HDM3400F225A3XX	HDM3400F225B3XX
	250	50	30	HDM3400F25033XX	HDM3400F250A3XX	HDM3400F250B3XX
	315	50	30	HDM3400F31533XX	HDM3400F315A3XX	HDM3400F315B3XX
	350	50	30	HDM3400F35033XX	HDM3400F350A3XX	HDM3400F350B3XX
	400	50	30	HDM3400F40033XX	HDM3400F400A3XX	HDM3400F400B3XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-400T	200	39	39	HDM3400T20033XX	HDM3400T200A3XX	HDM3400T200B3XX
	225	39	39	HDM3400T22533XX	HDM3400T225A3XX	HDM3400T225B3XX
	250	39	39	HDM3400T25033XX	HDM3400T250A3XX	HDM3400T250B3XX
	315	39	39	HDM3400T31533XX	HDM3400T315A3XX	HDM3400T315B3XX
	350	39	39	HDM3400T35033XX	HDM3400T350A3XX	HDM3400T350B3XX
	400	39	39	HDM3400T40033XX	HDM3400T400A3XX	HDM3400T400B3XX
HDM3-400N	200	70	39	HDM3400N20033XX	HDM3400N200A3XX	HDM3400N200B3XX
	225	70	39	HDM3400N22533XX	HDM3400N225A3XX	HDM3400N225B3XX
	250	70	39	HDM3400N25033XX	HDM3400N250A3XX	HDM3400N250B3XX
	315	70	39	HDM3400N31533XX	HDM3400N315A3XX	HDM3400N315B3XX
	350	70	39	HDM3400N35033XX	HDM3400N350A3XX	HDM3400N350B3XX
	400	70	39	HDM3400N40033XX	HDM3400N400A3XX	HDM3400N400B3XX
HDM3-630L	400	21	21	HDM3630L40033XX	HDM3630L400A3XX	HDM3630L400B3XX
	500	21	21	HDM3630L50033XX	HDM3630L500A3XX	HDM3630L500B3XX
	630	21	21	HDM3630L63033XX	HDM3630L630A3XX	HDM3630L630B3XX
HDM3-630S	400	35	21	HDM3630S40033XX	HDM3630S400A3XX	HDM3630S400B3XX
	500	35	21	HDM3630S50033XX	HDM3630S500A3XX	HDM3630S500B3XX
	630	35	21	HDM3630S63033XX	HDM3630S630A3XX	HDM3630S630B3XX
HDM3-630M	400	30	30	HDM3630M40033XX	HDM3630M400A3XX	HDM3630M400B3XX
	500	30	30	HDM3630M50033XX	HDM3630M500A3XX	HDM3630M500B3XX
	630	30	30	HDM3630M63033XX	HDM3630M630A3XX	HDM3630M630B3XX
HDM3-630F	400	50	30	HDM3630F40033XX	HDM3630F400A3XX	HDM3630F400B3XX
	500	50	30	HDM3630F50033XX	HDM3630F500A3XX	HDM3630F500B3XX
	630	50	30	HDM3630F63033XX	HDM3630F630A3XX	HDM3630F630B3XX
HDM3-630T	400	39	39	HDM3630T40033XX	HDM3630T400A3XX	HDM3630T400B3XX
	500	39	39	HDM3630T50033XX	HDM3630T500A3XX	HDM3630T500B3XX
	630	39	39	HDM3630T63033XX	HDM3630T630A3XX	HDM3630T630B3XX
HDM3-630N	400	70	39	HDM3630N40033XX	HDM3630N400A3XX	HDM3630N400B3XX
	500	70	39	HDM3630N50033XX	HDM3630N500A3XX	HDM3630N500B3XX
	630	70	39	HDM3630N63033XX	HDM3630N630A3XX	HDM3630N630B3XX
HDM3-800L	630	25	25	HDM3800L63033XX	HDM3800L630A3XX	HDM3800L630B3XX
	700	25	25	HDM3800L70033XX	HDM3800L700A3XX	HDM3800L700B3XX
	800	25	25	HDM3800L80033XX	HDM3800L800A3XX	HDM3800L800B3XX
HDM3-800S	630	50	25	HDM3800S63033XX	HDM3800S630A3XX	HDM3800S630B3XX
	700	50	25	HDM3800S70033XX	HDM3800S700A3XX	HDM3800S700B3XX
	800	50	25	HDM3800S80033XX	HDM3800S800A3XX	HDM3800S800B3XX
HDM3-800M	630	40	40	HDM3800M63033XX	HDM3800M630A3XX	HDM3800M630B3XX
	700	40	40	HDM3800M70033XX	HDM3800M700A3XX	HDM3800M700B3XX
	800	40	40	HDM3800M80033XX	HDM3800M800A3XX	HDM3800M800B3XX
HDM3-800F	630	70	40	HDM3800F63033XX	HDM3800F630A3XX	HDM3800F630B3XX
	700	70	40	HDM3800F70033XX	HDM3800F700A3XX	HDM3800F700B3XX
	800	70	40	HDM3800F80033XX	HDM3800F800A3XX	HDM3800F800B3XX
HDM3-1250N	800	85	45	HDM31250N80033XX		
	1000	85	45	HDM31250N100033XX		
	1250	85	45	HDM31250N125033XX		

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-63L	10	18	18	HDM363L1032XX	HDM363L10A2XX	HDM363L10B2XX
	16	18	18	HDM363L1632XX	HDM363L16A2XX	HDM363L16B2XX
	20	18	18	HDM363L2032XX	HDM363L20A2XX	HDM363L20B2XX
	25	18	18	HDM363L2532XX	HDM363L25A2XX	HDM363L25B2XX
	32	18	18	HDM363L3232XX	HDM363L32A2XX	HDM363L32B2XX
	40	18	18	HDM363L4032XX	HDM363L40A2XX	HDM363L40B2XX
	50	18	18	HDM363L5032XX	HDM363L50A2XX	HDM363L50B2XX
	63	18	18	HDM363L6332XX	HDM363L63A2XX	HDM363L63B2XX
HDM3-63S	10	25	18	HDM363S1032XX	HDM363S10A2XX	HDM363S10B2XX
	16	25	18	HDM363S1632XX	HDM363S16A2XX	HDM363S16B2XX
	20	25	18	HDM363S2032XX	HDM363S20A2XX	HDM363S20B2XX
	25	25	18	HDM363S2532XX	HDM363S25A2XX	HDM363S25B2XX
	32	25	18	HDM363S3232XX	HDM363S32A2XX	HDM363S32B2XX
	40	25	18	HDM363S4032XX	HDM363S40A2XX	HDM363S40B2XX
	50	25	18	HDM363S5032XX	HDM363S50A2XX	HDM363S50B2XX
	63	25	18	HDM363S6332XX	HDM363S63A2XX	HDM363S63B2XX
HDM3-63M	10	30	30	HDM363M1032XX	HDM363M10A2XX	HDM363M10B2XX
	16	30	30	HDM363M1632XX	HDM363M16A2XX	HDM363M16B2XX
	20	30	30	HDM363M2032XX	HDM363M20A2XX	HDM363M20B2XX
	25	30	30	HDM363M2532XX	HDM363M25A2XX	HDM363M25B2XX
	32	30	30	HDM363M3232XX	HDM363M32A2XX	HDM363M32B2XX
	40	30	30	HDM363M4032XX	HDM363M40A2XX	HDM363M40B2XX
	50	30	30	HDM363M5032XX	HDM363M50A2XX	HDM363M50B2XX
	63	30	30	HDM363M6332XX	HDM363M63A2XX	HDM363M63B2XX
HDM3-63F	10	50	30	HDM363F1032XX	HDM363F10A2XX	HDM363F10B2XX
	16	50	30	HDM363F1632XX	HDM363F16A2XX	HDM363F16B2XX
	20	50	30	HDM363F2032XX	HDM363F20A2XX	HDM363F20B2XX
	25	50	30	HDM363F2532XX	HDM363F25A2XX	HDM363F25B2XX
	32	50	30	HDM363F3232XX	HDM363F32A2XX	HDM363F32B2XX
	40	50	30	HDM363F4032XX	HDM363F40A2XX	HDM363F40B2XX
	50	50	30	HDM363F5032XX	HDM363F50A2XX	HDM363F50B2XX
	63	50	30	HDM363F6332XX	HDM363F63A2XX	HDM363F63B2XX
HDM3-100L	10	18	18	HDM3100L1032XX	HDM3100L10A2XX	HDM3100L10B2XX
	16	18	18	HDM3100L1632XX	HDM3100L16A2XX	HDM3100L16B2XX
	20	18	18	HDM3100L2032XX	HDM3100L20A2XX	HDM3100L20B2XX
	25	18	18	HDM3100L2532XX	HDM3100L25A2XX	HDM3100L25B2XX
	32	18	18	HDM3100L3232XX	HDM3100L32A2XX	HDM3100L32B2XX
	40	18	18	HDM3100L4032XX	HDM3100L40A2XX	HDM3100L40B2XX
	50	18	18	HDM3100L5032XX	HDM3100L50A2XX	HDM3100L50B2XX
	63	18	18	HDM3100L6332XX	HDM3100L63A2XX	HDM3100L63B2XX
	80	18	18	HDM3100L8032XX	HDM3100L80A2XX	HDM3100L80B2XX
	100	18	18	HDM3100L10032XX	HDM3100L100A2XX	HDM3100L100B2XX

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-100S	10	25	18	HDM3100S1032XX	HDM3100S10A2XX	HDM3100S10B2XX
	16	25	18	HDM3100S1632XX	HDM3100S16A2XX	HDM3100S16B2XX
	20	25	18	HDM3100S2032XX	HDM3100S20A2XX	HDM3100S20B2XX
	25	25	18	HDM3100S2532XX	HDM3100S25A2XX	HDM3100S25B2XX
	32	25	18	HDM3100S3232XX	HDM3100S32A2XX	HDM3100S32B2XX
	40	25	18	HDM3100S4032XX	HDM3100S40A2XX	HDM3100S40B2XX
	50	25	18	HDM3100S5032XX	HDM3100S50A2XX	HDM3100S50B2XX
	63	25	18	HDM3100S6332XX	HDM3100S63A2XX	HDM3100S63B2XX
	80	25	18	HDM3100S8032XX	HDM3100S80A2XX	HDM3100S80B2XX
	100	25	18	HDM3100S10032XX	HDM3100S100A2XX	HDM3100S100B2XX
HDM3-100M	40	26	26	HDM3100M4032XX	HDM3100M40A2XX	HDM3100M40B2XX
	50	26	26	HDM3100M5032XX	HDM3100M50A2XX	HDM3100M50B2XX
	63	26	26	HDM3100M6332XX	HDM3100M63A2XX	HDM3100M63B2XX
	80	26	26	HDM3100M8032XX	HDM3100M80A2XX	HDM3100M80B2XX
	100	26	26	HDM3100M10032XX	HDM3100M100A2XX	HDM3100M100B2XX
HDM3-100F	40	35	26	HDM3100F4032XX	HDM3100F40A2XX	HDM3100F40B2XX
	50	35	26	HDM3100F5032XX	HDM3100F50A2XX	HDM3100F50B2XX
	63	35	26	HDM3100F6332XX	HDM3100F63A2XX	HDM3100F63B2XX
	80	35	26	HDM3100F8032XX	HDM3100F80A2XX	HDM3100F80B2XX
	100	35	26	HDM3100F10032XX	HDM3100F100A2XX	HDM3100F100B2XX
HDM3-100T	40	30	30	HDM3100T4032XX	HDM3100T40A2XX	HDM3100T40B2XX
	50	30	30	HDM3100T5032XX	HDM3100T50A2XX	HDM3100T50B2XX
	63	30	30	HDM3100T6332XX	HDM3100T63A2XX	HDM3100T63B2XX
	80	30	30	HDM3100T8032XX	HDM3100T80A2XX	HDM3100T80B2XX
	100	30	30	HDM3100T10032XX	HDM3100T100A2XX	HDM3100T100B2XX
HDM3-100N	40	50	30	HDM3100N4032XX	HDM3100N40A2XX	HDM3100N40B2XX
	50	50	30	HDM3100N5032XX	HDM3100N50A2XX	HDM3100N50B2XX
	63	50	30	HDM3100N6332XX	HDM3100N63A2XX	HDM3100N63B2XX
	80	50	30	HDM3100N8032XX	HDM3100N80A2XX	HDM3100N80B2XX
	100	50	30	HDM3100N10032XX	HDM3100N100A2XX	HDM3100N100B2XX
HDM3-160L	100	21	21	HDM3160L10032XX	HDM3160L100A2XX	HDM3160L100B2XX
	125	21	21	HDM3160L12532XX	HDM3160L125A2XX	HDM3160L125B2XX
	140	21	21	HDM3160L14032XX	HDM3160L140A2XX	HDM3160L140B2XX
	160	21	21	HDM3160L16032XX	HDM3160L160A2XX	HDM3160L160B2XX
HDM3-160S	100	35	21	HDM3160S10032XX	HDM3160S100A2XX	HDM3160S100B2XX
	125	35	21	HDM3160S12532XX	HDM3160S125A2XX	HDM3160S125B2XX
	140	35	21	HDM3160S14032XX	HDM3160S140A2XX	HDM3160S140B2XX
	160	35	21	HDM3160S16032XX	HDM3160S160A2XX	HDM3160S160B2XX
HDM3-160M	100	30	30	HDM3160M16032XX	HDM3160M160A2XX	HDM3160M100B2XX
	125	30	30	HDM3160M10032XX	HDM3160M100A2XX	HDM3160M125B2XX
	140	30	30	HDM3160M12532XX	HDM3160M125A2XX	HDM3160M140B2XX
	160	30	30	HDM3160M14032XX	HDM3160M140A2XX	HDM3160M160B2XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-160F	100	50	30	HDM3160F10032XX	HDM3160F100A2XX	HDM3160F100B2XX
	125	50	30	HDM3160F12532XX	HDM3160F125A2XX	HDM3160F125B2XX
	140	50	30	HDM3160F14032XX	HDM3160F140A2XX	HDM3160F140B2XX
	160	50	30	HDM3160F16032XX	HDM3160F160A2XX	HDM3160F160B2XX
HDM3-160T	100	36	36	HDM3160T10032XX	HDM3160T100A2XX	HDM3160T100B2XX
	125	36	36	HDM3160T12532XX	HDM3160T125A2XX	HDM3160T125B2XX
	140	36	36	HDM3160T14032XX	HDM3160T140A2XX	HDM3160T140B2XX
	160	36	36	HDM3160T16032XX	HDM3160T160A2XX	HDM3160T160B2XX
HDM3-160N	100	60	36	HDM3160N12532XX	HDM3160N100A2XX	HDM3160N100B2XX
	125	60	36	HDM3160N14032XX	HDM3160N125A2XX	HDM3160N125B2XX
	140	60	36	HDM3160N16032XX	HDM3160N140A2XX	HDM3160N140B2XX
	160	60	36	HDM3160N10032XX	HDM3160N160A2XX	HDM3160N160B2XX
HDM3-250L	100	21	21	HDM3250L10032XX	HDM3250L100A2XX	HDM3250L100B2XX
	125	21	21	HDM3250L12532XX	HDM3250L125A2XX	HDM3250L125B2XX
	140	21	21	HDM3250L14032XX	HDM3250L140A2XX	HDM3250L140B2XX
	160	21	21	HDM3250L16032XX	HDM3250L160A2XX	HDM3250L160B2XX
	180	21	21	HDM3250L18032XX	HDM3250L180A2XX	HDM3250L180B2XX
	200	21	21	HDM3250L20032XX	HDM3250L200A2XX	HDM3250L200B2XX
	225	21	21	HDM3250L22532XX	HDM3250L225A2XX	HDM3250L225B2XX
	250	21	21	HDM3250L25032XX	HDM3250L250A2XX	HDM3250L250B2XX
HDM3-250S	100	35	21	HDM3250S10032XX	HDM3250S100A2XX	HDM3250S100B2XX
	125	35	21	HDM3250S12532XX	HDM3250S125A2XX	HDM3250S125B2XX
	140	35	21	HDM3250S14032XX	HDM3250S140A2XX	HDM3250S140B2XX
	160	35	21	HDM3250S16032XX	HDM3250S160A2XX	HDM3250S160B2XX
	180	35	21	HDM3250S18032XX	HDM3250S180A2XX	HDM3250S180B2XX
	200	35	21	HDM3250S20032XX	HDM3250S200A2XX	HDM3250S200B2XX
	225	35	21	HDM3250S22532XX	HDM3250S225A2XX	HDM3250S225B2XX
	250	35	21	HDM3250S25032XX	HDM3250S250A2XX	HDM3250S250B2XX
HDM3-250M	100	30	30	HDM3250M10032XX	HDM3250M100A2XX	HDM3250M100B2XX
	125	30	30	HDM3250M12532XX	HDM3250M125A2XX	HDM3250M125B2XX
	140	30	30	HDM3250M14032XX	HDM3250M140A2XX	HDM3250M140B2XX
	160	30	30	HDM3250M16032XX	HDM3250M160A2XX	HDM3250M160B2XX
	180	30	30	HDM3250M18032XX	HDM3250M180A2XX	HDM3250M180B2XX
	200	30	30	HDM3250M20032XX	HDM3250M200A2XX	HDM3250M200B2XX
	225	30	30	HDM3250M22532XX	HDM3250M225A2XX	HDM3250M225B2XX
	250	30	30	HDM3250M25032XX	HDM3250M250A2XX	HDM3250M250B2XX
HDM3-250F	100	50	30	HDM3250F10032XX	HDM3250F100A2XX	HDM3250F100B2XX
	125	50	30	HDM3250F12532XX	HDM3250F125A2XX	HDM3250F125B2XX
	140	50	30	HDM3250F14032XX	HDM3250F140A2XX	HDM3250F140B2XX
	160	50	30	HDM3250F16032XX	HDM3250F160A2XX	HDM3250F160B2XX
	180	50	30	HDM3250F18032XX	HDM3250F180A2XX	HDM3250F180B2XX
	200	50	30	HDM3250F20032XX	HDM3250F200A2XX	HDM3250F200B2XX
	225	50	30	HDM3250F22532XX	HDM3250F225A2XX	HDM3250F225B2XX
	250	50	30	HDM3250F25032XX	HDM3250F250A2XX	HDM3250F250B2XX

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-250T	100	36	36	HDM3250T10032XX	HDM3250T100A2XX	HDM3250T100B2XX
	125	36	36	HDM3250T12532XX	HDM3250T125A2XX	HDM3250T125B2XX
	140	36	36	HDM3250T14032XX	HDM3250T140A2XX	HDM3250T140B2XX
	160	36	36	HDM3250T16032XX	HDM3250T160A2XX	HDM3250T160B2XX
	180	36	36	HDM3250T18032XX	HDM3250T180A2XX	HDM3250T180B2XX
	200	36	36	HDM3250T20032XX	HDM3250T200A2XX	HDM3250T200B2XX
	225	36	36	HDM3250T22532XX	HDM3250T225A2XX	HDM3250T225B2XX
	250	36	36	HDM3250T25032XX	HDM3250T250A2XX	HDM3250T250B2XX
HDM3-250N	100	60	36	HDM3250N10032XX	HDM3250N100A2XX	HDM3250N100B2XX
	125	60	36	HDM3250N12532XX	HDM3250N125A2XX	HDM3250N125B2XX
	140	60	36	HDM3250N14032XX	HDM3250N140A2XX	HDM3250N140B2XX
	160	60	36	HDM3250N16032XX	HDM3250N160A2XX	HDM3250N160B2XX
	180	60	36	HDM3250N18032XX	HDM3250N180A2XX	HDM3250N180B2XX
	200	60	36	HDM3250N20032XX	HDM3250N200A2XX	HDM3250N200B2XX
	225	60	36	HDM3250N22532XX	HDM3250N225A2XX	HDM3250N225B2XX
	250	60	36	HDM3250N25032XX	HDM3250N250A2XX	HDM3250N250B2XX
HDM3-400L	200	21	21	HDM3400L20032XX	HDM3400L200A2XX	HDM3400L200B2XX
	225	21	21	HDM3400L22532XX	HDM3400L225A2XX	HDM3400L225B2XX
	250	21	21	HDM3400L25032XX	HDM3400L250A2XX	HDM3400L250B2XX
	315	21	21	HDM3400L31532XX	HDM3400L315A2XX	HDM3400L315B2XX
	350	21	21	HDM3400L35032XX	HDM3400L350A2XX	HDM3400L350B2XX
	400	21	21	HDM3400L40032XX	HDM3400L400A2XX	HDM3400L400B2XX
HDM3-400S	200	35	21	HDM3400S20032XX	HDM3400S200A2XX	HDM3400S200B2XX
	225	35	21	HDM3400S22532XX	HDM3400S225A2XX	HDM3400S225B2XX
	250	35	21	HDM3400S25032XX	HDM3400S250A2XX	HDM3400S250B2XX
	315	35	21	HDM3400S31532XX	HDM3400S315A2XX	HDM3400S315B2XX
	350	35	21	HDM3400S35032XX	HDM3400S350A2XX	HDM3400S350B2XX
	400	35	21	HDM3400S40032XX	HDM3400S400A2XX	HDM3400S400B2XX
HDM3-400M	200	30	30	HDM3400M20032XX	HDM3400M200A2XX	HDM3400M200B2XX
	225	30	30	HDM3400M22532XX	HDM3400M225A2XX	HDM3400M225B2XX
	250	30	30	HDM3400M25032XX	HDM3400M250A2XX	HDM3400M250B2XX
	315	30	30	HDM3400M31532XX	HDM3400M315A2XX	HDM3400M315B2XX
	350	30	30	HDM3400M35032XX	HDM3400M350A2XX	HDM3400M350B2XX
	400	30	30	HDM3400M40032XX	HDM3400M400A2XX	HDM3400M400B2XX
HDM3-400F	200	50	30	HDM3400F20032XX	HDM3400F200A2XX	HDM3400F200B2XX
	225	50	30	HDM3400F22532XX	HDM3400F225A2XX	HDM3400F225B2XX
	250	50	30	HDM3400F25032XX	HDM3400F250A2XX	HDM3400F250B2XX
	315	50	30	HDM3400F31532XX	HDM3400F315A2XX	HDM3400F315B2XX
	350	50	30	HDM3400F35032XX	HDM3400F350A2XX	HDM3400F350B2XX
	400	50	30	HDM3400F40032XX	HDM3400F400A2XX	HDM3400F400B2XX

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Power distribution protection Magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-400T	200	39	39	HDM3400T20032XX	HDM3400T200A2XX	HDM3400T200B2XX
	225	39	39	HDM3400T22532XX	HDM3400T225A2XX	HDM3400T225B2XX
	250	39	39	HDM3400T25032XX	HDM3400T250A2XX	HDM3400T250B2XX
	315	39	39	HDM3400T31532XX	HDM3400T315A2XX	HDM3400T315B2XX
	350	39	39	HDM3400T35032XX	HDM3400T350A2XX	HDM3400T350B2XX
	400	39	39	HDM3400T40032XX	HDM3400T400A2XX	HDM3400T400B2XX
HDM3-400N	200	70	39	HDM3400N20032XX	HDM3400N200A2XX	HDM3400N200B2XX
	225	70	39	HDM3400N22532XX	HDM3400N225A2XX	HDM3400N225B2XX
	250	70	39	HDM3400N25032XX	HDM3400N250A2XX	HDM3400N250B2XX
	315	70	39	HDM3400N31532XX	HDM3400N315A2XX	HDM3400N315B2XX
	350	70	39	HDM3400N35032XX	HDM3400N350A2XX	HDM3400N350B2XX
	400	70	39	HDM3400N40032XX	HDM3400N400A2XX	HDM3400N400B2XX
HDM3-630L	400	21	21	HDM3630L40032XX	HDM3630L400A2XX	HDM3630L400B2XX
	500	21	21	HDM3630L50032XX	HDM3630L500A2XX	HDM3630L500B2XX
	630	21	21	HDM3630L63032XX	HDM3630L630A2XX	HDM3630L630B2XX
HDM3-630S	400	35	21	HDM3630S40032XX	HDM3630S400A2XX	HDM3630S400B2XX
	500	35	21	HDM3630S50032XX	HDM3630S500A2XX	HDM3630S500B2XX
	630	35	21	HDM3630S63032XX	HDM3630S630A2XX	HDM3630S630B2XX
HDM3-630M	400	30	30	HDM3630M40032XX	HDM3630M400A2XX	HDM3630M400B2XX
	500	30	30	HDM3630M50032XX	HDM3630M500A2XX	HDM3630M500B2XX
	630	30	30	HDM3630M63032XX	HDM3630M630A2XX	HDM3630M630B2XX
HDM3-630F	400	50	30	HDM3630F40032XX	HDM3630F400A2XX	HDM3630F400B2XX
	500	50	30	HDM3630F50032XX	HDM3630F500A2XX	HDM3630F500B2XX
	630	50	30	HDM3630F63032XX	HDM3630F630A2XX	HDM3630F630B2XX
HDM3-630T	400	39	39	HDM3630T40032XX	HDM3630T400A2XX	HDM3630T400B2XX
	500	39	39	HDM3630T50032XX	HDM3630T500A2XX	HDM3630T500B2XX
	630	39	39	HDM3630T63032XX	HDM3630T630A2XX	HDM3630T630B2XX
HDM3-630N	400	70	39	HDM3630N40032XX	HDM3630N400A2XX	HDM3630N400B2XX
	500	70	39	HDM3630N50032XX	HDM3630N500A2XX	HDM3630N500B2XX
	630	70	39	HDM3630N63032XX	HDM3630N630A2XX	HDM3630N630B2XX
HDM3-800L	630	25	25	HDM3800L63032XX	HDM3800L630A2XX	HDM3800L630B2XX
	700	25	25	HDM3800L70032XX	HDM3800L700A2XX	HDM3800L700B2XX
	800	25	25	HDM3800L80032XX	HDM3800L800A2XX	HDM3800L800B2XX
HDM3-800S	630	50	25	HDM3800S63032XX	HDM3800S630A2XX	HDM3800S630B2XX
	700	50	25	HDM3800S70032XX	HDM3800S700A2XX	HDM3800S700B2XX
	800	50	25	HDM3800S80032XX	HDM3800S800A2XX	HDM3800S800B2XX
HDM3-800M	630	40	40	HDM3800M63032XX	HDM3800M630A2XX	HDM3800M630B2XX
	700	40	40	HDM3800M70032XX	HDM3800M700A2XX	HDM3800M700B2XX
	800	40	40	HDM3800M80032XX	HDM3800M800A2XX	HDM3800M800B2XX
HDM3-800F	630	70	40	HDM3800F63032XX	HDM3800F630A2XX	HDM3800F630B2XX
	700	70	40	HDM3800F70032XX	HDM3800F700A2XX	HDM3800F700B2XX
	800	70	40	HDM3800F80032XX	HDM3800F800A2XX	HDM3800F800B2XX
HDM3-1250N	800	85	45	HDM31250N80032XX		
	1000	85	45	HDM31250N100032XX		
	1250	85	45	HDM31250N125032XX		

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-63L	10	18	18	HDM363L1032XX2	HDM363L10A2XX2	HDM363L10B2XX2
	16	18	18	HDM363L1632XX2	HDM363L16A2XX2	HDM363L16B2XX2
	20	18	18	HDM363L2032XX2	HDM363L20A2XX2	HDM363L20B2XX2
	25	18	18	HDM363L2532XX2	HDM363L25A2XX2	HDM363L25B2XX2
	32	18	18	HDM363L3232XX2	HDM363L32A2XX2	HDM363L32B2XX2
	40	18	18	HDM363L4032XX2	HDM363L40A2XX2	HDM363L40B2XX2
	50	18	18	HDM363L5032XX2	HDM363L50A2XX2	HDM363L50B2XX2
	63	18	18	HDM363L6332XX2	HDM363L63A2XX2	HDM363L63B2XX2
HDM3-63S	10	25	18	HDM363S1032XX2	HDM363S10A2XX2	HDM363S10B2XX2
	16	25	18	HDM363S1632XX2	HDM363S16A2XX2	HDM363S16B2XX2
	20	25	18	HDM363S2032XX2	HDM363S20A2XX2	HDM363S20B2XX2
	25	25	18	HDM363S2532XX2	HDM363S25A2XX2	HDM363S25B2XX2
	32	25	18	HDM363S3232XX2	HDM363S32A2XX2	HDM363S32B2XX2
	40	25	18	HDM363S4032XX2	HDM363S40A2XX2	HDM363S40B2XX2
	50	25	18	HDM363S5032XX2	HDM363S50A2XX2	HDM363S50B2XX2
	63	25	18	HDM363S6332XX2	HDM363S63A2XX2	HDM363S63B2XX2
HDM3-63M	10	30	30	HDM363M1032XX2	HDM363M10A2XX2	HDM363M10B2XX2
	16	30	30	HDM363M1632XX2	HDM363M16A2XX2	HDM363M16B2XX2
	20	30	30	HDM363M2032XX2	HDM363M20A2XX2	HDM363M20B2XX2
	25	30	30	HDM363M2532XX2	HDM363M25A2XX2	HDM363M25B2XX2
	32	30	30	HDM363M3232XX2	HDM363M32A2XX2	HDM363M32B2XX2
	40	30	30	HDM363M4032XX2	HDM363M40A2XX2	HDM363M40B2XX2
	50	30	30	HDM363M5032XX2	HDM363M50A2XX2	HDM363M50B2XX2
	63	30	30	HDM363M6332XX2	HDM363M63A2XX2	HDM363M63B2XX2
HDM3-63F	10	50	30	HDM363F1032XX2	HDM363F10A2XX2	HDM363F10B2XX2
	16	50	30	HDM363F1632XX2	HDM363F16A2XX2	HDM363F16B2XX2
	20	50	30	HDM363F2032XX2	HDM363F20A2XX2	HDM363F20B2XX2
	25	50	30	HDM363F2532XX2	HDM363F25A2XX2	HDM363F25B2XX2
	32	50	30	HDM363F3232XX2	HDM363F32A2XX2	HDM363F32B2XX2
	40	50	30	HDM363F4032XX2	HDM363F40A2XX2	HDM363F40B2XX2
	50	50	30	HDM363F5032XX2	HDM363F50A2XX2	HDM363F50B2XX2
	63	50	30	HDM363F6332XX2	HDM363F63A2XX2	HDM363F63B2XX2
HDM3-100L	10	18	18	HDM3100L1032XX2	HDM3100L10A2XX2	HDM3100L10B2XX2
	16	18	18	HDM3100L1632XX2	HDM3100L16A2XX2	HDM3100L16B2XX2
	20	18	18	HDM3100L2032XX2	HDM3100L20A2XX2	HDM3100L20B2XX2
	25	18	18	HDM3100L2532XX2	HDM3100L25A2XX2	HDM3100L25B2XX2
	32	18	18	HDM3100L3232XX2	HDM3100L32A2XX2	HDM3100L32B2XX2
	40	18	18	HDM3100L4032XX2	HDM3100L40A2XX2	HDM3100L40B2XX2
	50	18	18	HDM3100L5032XX2	HDM3100L50A2XX2	HDM3100L50B2XX2
	63	18	18	HDM3100L6332XX2	HDM3100L63A2XX2	HDM3100L63B2XX2
	80	18	18	HDM3100L8032XX2	HDM3100L80A2XX2	HDM3100L80B2XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-100S	10	18	18	HDM3100S1032XX2	HDM3100S10A2XX2	HDM3100S10B2XX2
	16	18	18	HDM3100S1632XX2	HDM3100S16A2XX2	HDM3100S16B2XX2
	20	18	18	HDM3100S2032XX2	HDM3100S20A2XX2	HDM3100S20B2XX2
	25	18	18	HDM3100S2532XX2	HDM3100S25A2XX2	HDM3100S25B2XX2
	32	18	18	HDM3100S3232XX2	HDM3100S32A2XX2	HDM3100S32B2XX2
	40	18	18	HDM3100S4032XX2	HDM3100S40A2XX2	HDM3100S40B2XX2
	50	18	18	HDM3100S5032XX2	HDM3100S50A2XX2	HDM3100S50B2XX2
	63	18	18	HDM3100S6332XX2	HDM3100S63A2XX2	HDM3100S63B2XX2
	80	18	18	HDM3100S8032XX2	HDM3100S80A2XX2	HDM3100S80B2XX2
	100	18	18	HDM3100S10032XX2	HDM3100S100A2XX2	HDM3100S100B2XX2
HDM3-100M	40	26	26	HDM3100M4032XX2	HDM3100M40A2XX2	HDM3100M40B2XX2
	50	26	26	HDM3100M5032XX2	HDM3100M50A2XX2	HDM3100M50B2XX2
	63	26	26	HDM3100M6332XX2	HDM3100M63A2XX2	HDM3100M63B2XX2
	80	26	26	HDM3100M8032XX2	HDM3100M80A2XX2	HDM3100M80B2XX2
	100	26	26	HDM3100M10032XX2	HDM3100M100A2XX2	HDM3100M100B2XX2
HDM3-100F	40	35	26	HDM3100F4032XX2	HDM3100F40A2XX2	HDM3100F40B2XX2
	50	35	26	HDM3100F5032XX2	HDM3100F50A2XX2	HDM3100F50B2XX2
	63	35	26	HDM3100F6332XX2	HDM3100F63A2XX2	HDM3100F63B2XX2
	80	35	26	HDM3100F8032XX2	HDM3100F80A2XX2	HDM3100F80B2XX2
	100	35	26	HDM3100F10032XX2	HDM3100F100A2XX2	HDM3100F100B2XX2
HDM3-100T	40	30	30	HDM3100T4032XX2	HDM3100T40A2XX2	HDM3100T40B2XX2
	50	30	30	HDM3100T5032XX2	HDM3100T50A2XX2	HDM3100T50B2XX2
	63	30	30	HDM3100T6332XX2	HDM3100T63A2XX2	HDM3100T63B2XX2
	80	30	30	HDM3100T8032XX2	HDM3100T80A2XX2	HDM3100T80B2XX2
	100	30	30	HDM3100T10032XX2	HDM3100T100A2XX2	HDM3100T100B2XX2
HDM3-100N	40	50	30	HDM3100N4032XX2	HDM3100N40A2XX2	HDM3100N40B2XX2
	50	50	30	HDM3100N5032XX2	HDM3100N50A2XX2	HDM3100N50B2XX2
	63	50	30	HDM3100N6332XX2	HDM3100N63A2XX2	HDM3100N63B2XX2
	80	50	30	HDM3100N8032XX2	HDM3100N80A2XX2	HDM3100N80B2XX2
	100	50	30	HDM3100N10032XX2	HDM3100N100A2XX2	HDM3100N100B2XX2
HDM3-160L	100	21	21	HDM3160L10032XX2	HDM3160L100A2XX2	HDM3160L100B2XX2
	125	21	21	HDM3160L12532XX2	HDM3160L125A2XX2	HDM3160L125B2XX2
	140	21	21	HDM3160L14032XX2	HDM3160L140A2XX2	HDM3160L140B2XX2
	160	21	21	HDM3160L16032XX2	HDM3160L160A2XX2	HDM3160L160B2XX2
HDM3-160S	100	35	21	HDM3160S10032XX2	HDM3160S100A2XX2	HDM3160S100B2XX2
	125	35	21	HDM3160S12532XX2	HDM3160S125A2XX2	HDM3160S125B2XX2
	140	35	21	HDM3160S14032XX2	HDM3160S140A2XX2	HDM3160S140B2XX2
	160	35	21	HDM3160S16032XX2	HDM3160S160A2XX2	HDM3160S160B2XX2
HDM3-160M	100	30	30	HDM3160M10032XX2	HDM3160M100A2XX2	HDM3160M100B2XX2
	125	30	30	HDM3160M12532XX2	HDM3160M125A2XX2	HDM3160M125B2XX2
	140	30	30	HDM3160M14032XX2	HDM3160M140A2XX2	HDM3160M140B2XX2
	160	30	30	HDM3160M16032XX2	HDM3160M160A2XX2	HDM3160M160B2XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-160F	100	50	30	HDM3160F10032XX2	HDM3160F100A2XX2	HDM3160F100B2XX2
	125	50	30	HDM3160F12532XX2	HDM3160F125A2XX2	HDM3160F125B2XX2
	140	50	30	HDM3160F14032XX2	HDM3160F140A2XX2	HDM3160F140B2XX2
	160	50	30	HDM3160F16032XX2	HDM3160F160A2XX2	HDM3160F160B2XX2
HDM3-160T	100	36	36	HDM3160T10032XX2	HDM3160T100A2XX2	HDM3160T100B2XX2
	125	36	36	HDM3160T12532XX2	HDM3160T125A2XX2	HDM3160T125B2XX2
	140	36	36	HDM3160T14032XX2	HDM3160T140A2XX2	HDM3160T140B2XX2
	160	36	36	HDM3160T16032XX2	HDM3160T160A2XX2	HDM3160T160B2XX2
HDM3-160N	100	60	36	HDM3160N10032XX2	HDM3160N100A2XX2	HDM3160N100B2XX2
	125	60	36	HDM3160N12532XX2	HDM3160N125A2XX2	HDM3160N125B2XX2
	140	60	36	HDM3160N14032XX2	HDM3160N140A2XX2	HDM3160N140B2XX2
	160	60	36	HDM3160N16032XX2	HDM3160N160A2XX2	HDM3160N160B2XX2
HDM3-250L	100	21	21	HDM3250L10032XX2	HDM3250L100A2XX2	HDM3250L100B2XX2
	125	21	21	HDM3250L12532XX2	HDM3250L125A2XX2	HDM3250L125B2XX2
	140	21	21	HDM3250L14032XX2	HDM3250L140A2XX2	HDM3250L140B2XX2
	160	21	21	HDM3250L16032XX2	HDM3250L160A2XX2	HDM3250L160B2XX2
	180	21	21	HDM3250L18032XX2	HDM3250L180A2XX2	HDM3250L180B2XX2
	200	21	21	HDM3250L20032XX2	HDM3250L200A2XX2	HDM3250L200B2XX2
	225	21	21	HDM3250L22532XX2	HDM3250L225A2XX2	HDM3250L225B2XX2
	250	21	21	HDM3250L25032XX2	HDM3250L250A2XX2	HDM3250L250B2XX2
HDM3-250S	100	35	21	HDM3250S10032XX2	HDM3250S100A2XX2	HDM3250S100B2XX2
	125	35	21	HDM3250S12532XX2	HDM3250S125A2XX2	HDM3250S125B2XX2
	140	35	21	HDM3250S14032XX2	HDM3250S140A2XX2	HDM3250S140B2XX2
	160	35	21	HDM3250S16032XX2	HDM3250S160A2XX2	HDM3250S160B2XX2
	180	35	21	HDM3250S18032XX2	HDM3250S180A2XX2	HDM3250S180B2XX2
	200	35	21	HDM3250S20032XX2	HDM3250S200A2XX2	HDM3250S200B2XX2
	225	35	21	HDM3250S22532XX2	HDM3250S225A2XX2	HDM3250S225B2XX2
	250	35	21	HDM3250S25032XX2	HDM3250S250A2XX2	HDM3250S250B2XX2
HDM3-250M	100	30	30	HDM3250M10032XX2	HDM3250M100A2XX2	HDM3250M100B2XX2
	125	30	30	HDM3250M12532XX2	HDM3250M125A2XX2	HDM3250M125B2XX2
	140	30	30	HDM3250M14032XX2	HDM3250M140A2XX2	HDM3250M140B2XX2
	160	30	30	HDM3250M16032XX2	HDM3250M160A2XX2	HDM3250M160B2XX2
	180	30	30	HDM3250M18032XX2	HDM3250M180A2XX2	HDM3250M180B2XX2
	200	30	30	HDM3250M20032XX2	HDM3250M200A2XX2	HDM3250M200B2XX2
	225	30	30	HDM3250M22532XX2	HDM3250M225A2XX2	HDM3250M225B2XX2
	250	30	30	HDM3250M25032XX2	HDM3250M250A2XX2	HDM3250M250B2XX2
HDM3-250F	100	50	30	HDM3250F10032XX2	HDM3250F100A2XX2	HDM3250F100B2XX2
	125	50	30	HDM3250F12532XX2	HDM3250F125A2XX2	HDM3250F125B2XX2
	140	50	30	HDM3250F14032XX2	HDM3250F140A2XX2	HDM3250F140B2XX2
	160	50	30	HDM3250F16032XX2	HDM3250F160A2XX2	HDM3250F160B2XX2
	180	50	30	HDM3250F18032XX2	HDM3250F180A2XX2	HDM3250F180B2XX2
	200	50	30	HDM3250F20032XX2	HDM3250F200A2XX2	HDM3250F200B2XX2
	225	50	30	HDM3250F22532XX2	HDM3250F225A2XX2	HDM3250F225B2XX2
	250	50	30	HDM3250F25032XX2	HDM3250F250A2XX2	HDM3250F250B2XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-250T	100	36	36	HDM3250T10032XX2	HDM3250T100A2XX2	HDM3250T100B2XX2
	125	36	36	HDM3250T12532XX2	HDM3250T125A2XX2	HDM3250T125B2XX2
	140	36	36	HDM3250T14032XX2	HDM3250T140A2XX2	HDM3250T140B2XX2
	160	36	36	HDM3250T16032XX2	HDM3250T160A2XX2	HDM3250T160B2XX2
	180	36	36	HDM3250T18032XX2	HDM3250T180A2XX2	HDM3250T180B2XX2
	200	36	36	HDM3250T20032XX2	HDM3250T200A2XX2	HDM3250T200B2XX2
	225	36	36	HDM3250T22532XX2	HDM3250T225A2XX2	HDM3250T225B2XX2
	250	36	36	HDM3250T25032XX2	HDM3250T250A2XX2	HDM3250T250B2XX2
HDM3-250N	100	60	36	HDM3250N10032XX2	HDM3250N100A2XX2	HDM3250N100B2XX2
	125	60	36	HDM3250N12532XX2	HDM3250N125A2XX2	HDM3250N125B2XX2
	140	60	36	HDM3250N14032XX2	HDM3250N140A2XX2	HDM3250N140B2XX2
	160	60	36	HDM3250N16032XX2	HDM3250N160A2XX2	HDM3250N160B2XX2
	180	60	36	HDM3250N18032XX2	HDM3250N180A2XX2	HDM3250N180B2XX2
	200	60	36	HDM3250N20032XX2	HDM3250N200A2XX2	HDM3250N200B2XX2
	225	60	36	HDM3250N22532XX2	HDM3250N225A2XX2	HDM3250N225B2XX2
	250	60	36	HDM3250N25032XX2	HDM3250N250A2XX2	HDM3250N250B2XX2
HDM3-400L	200	21	21	HDM3400L20032XX2	HDM3400L200A2XX2	HDM3400L200B2XX2
	225	21	21	HDM3400L22532XX2	HDM3400L225A2XX2	HDM3400L225B2XX2
	250	21	21	HDM3400L25032XX2	HDM3400L250A2XX2	HDM3400L250B2XX2
	315	21	21	HDM3400L31532XX2	HDM3400L315A2XX2	HDM3400L315B2XX2
	350	21	21	HDM3400L35032XX2	HDM3400L350A2XX2	HDM3400L350B2XX2
	400	21	21	HDM3400L40032XX2	HDM3400L400A2XX2	HDM3400L400B2XX2
HDM3-400S	200	35	21	HDM3400S20032XX2	HDM3400S200A2XX2	HDM3400S200B2XX2
	225	35	21	HDM3400S22532XX2	HDM3400S225A2XX2	HDM3400S225B2XX2
	250	35	21	HDM3400S25032XX2	HDM3400S250A2XX2	HDM3400S250B2XX2
	315	35	21	HDM3400S31532XX2	HDM3400S315A2XX2	HDM3400S315B2XX2
	350	35	21	HDM3400S35032XX2	HDM3400S350A2XX2	HDM3400S350B2XX2
	400	35	21	HDM3400S40032XX2	HDM3400S400A2XX2	HDM3400S400B2XX2
HDM3-400M	200	30	30	HDM3400M20032XX2	HDM3400M200A2XX2	HDM3400M200B2XX2
	225	30	30	HDM3400M22532XX2	HDM3400M225A2XX2	HDM3400M225B2XX2
	250	30	30	HDM3400M25032XX2	HDM3400M250A2XX2	HDM3400M250B2XX2
	315	30	30	HDM3400M31532XX2	HDM3400M315A2XX2	HDM3400M315B2XX2
	350	30	30	HDM3400M35032XX2	HDM3400M350A2XX2	HDM3400M350B2XX2
	400	30	30	HDM3400M40032XX2	HDM3400M400A2XX2	HDM3400M400B2XX2
HDM3-400F	200	50	30	HDM3400F20032XX2	HDM3400F200A2XX2	HDM3400F200B2XX2
	225	50	30	HDM3400F22532XX2	HDM3400F225A2XX2	HDM3400F225B2XX2
	250	50	30	HDM3400F25032XX2	HDM3400F250A2XX2	HDM3400F250B2XX2
	315	50	30	HDM3400F31532XX2	HDM3400F315A2XX2	HDM3400F315B2XX2
	350	50	30	HDM3400F35032XX2	HDM3400F350A2XX2	HDM3400F350B2XX2
	400	50	30	HDM3400F40032XX2	HDM3400F400A2XX2	HDM3400F400B2XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-400T	200	39	39	HDM3400T20032XX2	HDM3400T200A2XX2	HDM3400T200B2XX2
	225	39	39	HDM3400T22532XX2	HDM3400T225A2XX2	HDM3400T225B2XX2
	250	39	39	HDM3400T25032XX2	HDM3400T250A2XX2	HDM3400T250B2XX2
	315	39	39	HDM3400T31532XX2	HDM3400T315A2XX2	HDM3400T315B2XX2
	350	39	39	HDM3400T35032XX2	HDM3400T350A2XX2	HDM3400T350B2XX2
	400	39	39	HDM3400T40032XX2	HDM3400T400A2XX2	HDM3400T400B2XX2
HDM3-400N	200	70	39	HDM3400N20032XX2	HDM3400N200A2XX2	HDM3400N200B2XX2
	225	70	39	HDM3400N22532XX2	HDM3400N225A2XX2	HDM3400N225B2XX2
	250	70	39	HDM3400N25032XX2	HDM3400N250A2XX2	HDM3400N250B2XX2
	315	70	39	HDM3400N31532XX2	HDM3400N315A2XX2	HDM3400N315B2XX2
	350	70	39	HDM3400N35032XX2	HDM3400N350A2XX2	HDM3400N350B2XX2
	400	70	39	HDM3400N40032XX2	HDM3400N400A2XX2	HDM3400N400B2XX2
HDM3-630L	400	21	21	HDM3630L40032XX2	HDM3630L400A2XX2	HDM3630L400B2XX2
	500	21	21	HDM3630L50032XX2	HDM3630L500A2XX2	HDM3630L500B2XX2
	630	21	21	HDM3630L63032XX2	HDM3630L630A2XX2	HDM3630L630B2XX2
HDM3-630S	400	35	21	HDM3630S40032XX2	HDM3630S400A2XX2	HDM3630S400B2XX2
	500	35	21	HDM3630S50032XX2	HDM3630S500A2XX2	HDM3630S500B2XX2
	630	35	21	HDM3630S63032XX2	HDM3630S630A2XX2	HDM3630S630B2XX2
HDM3-630M	400	30	30	HDM3630M40032XX2	HDM3630M400A2XX2	HDM3630M400B2XX2
	500	30	30	HDM3630M50032XX2	HDM3630M500A2XX2	HDM3630M500B2XX2
	630	30	30	HDM3630M63032XX2	HDM3630M630A2XX2	HDM3630M630B2XX2
HDM3-630F	400	50	30	HDM3630F40032XX2	HDM3630F400A2XX2	HDM3630F400B2XX2
	500	50	30	HDM3630F50032XX2	HDM3630F500A2XX2	HDM3630F500B2XX2
	630	50	30	HDM3630F63032XX2	HDM3630F630A2XX2	HDM3630F630B2XX2
HDM3-630T	400	39	39	HDM3630T40032XX2	HDM3630T400A2XX2	HDM3630T400B2XX2
	500	39	39	HDM3630T50032XX2	HDM3630T500A2XX2	HDM3630T500B2XX2
	630	39	39	HDM3630T63032XX2	HDM3630T630A2XX2	HDM3630T630B2XX2
HDM3-630N	400	70	39	HDM3630N40032XX2	HDM3630N400A2XX2	HDM3630N400B2XX2
	500	70	39	HDM3630N50032XX2	HDM3630N500A2XX2	HDM3630N500B2XX2
	630	70	39	HDM3630N63032XX2	HDM3630N630A2XX2	HDM3630N630B2XX2

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-63L	10	18	18	HDM363L1033XX2	HDM363L10A3XX2	HDM363L10B3XX2
	16	18	18	HDM363L1633XX2	HDM363L16A3XX2	HDM363L16B3XX2
	20	18	18	HDM363L2033XX2	HDM363L20A3XX2	HDM363L20B3XX2
	25	18	18	HDM363L2533XX2	HDM363L25A3XX2	HDM363L25B3XX2
	32	18	18	HDM363L3233XX2	HDM363L32A3XX2	HDM363L32B3XX2
	40	18	18	HDM363L4033XX2	HDM363L40A3XX2	HDM363L40B3XX2
	50	18	18	HDM363L5033XX2	HDM363L50A3XX2	HDM363L50B3XX2
	63	18	18	HDM363L6333XX2	HDM363L63A3XX2	HDM363L63B3XX2
HDM3-63S	10	25	18	HDM363S1033XX2	HDM363S10A3XX2	HDM363S10B3XX2
	16	25	18	HDM363S1633XX2	HDM363S16A3XX2	HDM363S16B3XX2
	20	25	18	HDM363S2033XX2	HDM363S20A3XX2	HDM363S20B3XX2
	25	25	18	HDM363S2533XX2	HDM363S25A3XX2	HDM363S25B3XX2
	32	25	18	HDM363S3233XX2	HDM363S32A3XX2	HDM363S32B3XX2
	40	25	18	HDM363S4033XX2	HDM363S40A3XX2	HDM363S40B3XX2
	50	25	18	HDM363S5033XX2	HDM363S50A3XX2	HDM363S50B3XX2
	63	25	18	HDM363S6333XX2	HDM363S63A3XX2	HDM363S63B3XX2
HDM3-63M	10	30	30	HDM363M1033XX2	HDM363M10A3XX2	HDM363M10B3XX2
	16	30	30	HDM363M1633XX2	HDM363M16A3XX2	HDM363M16B3XX2
	20	30	30	HDM363M2033XX2	HDM363M20A3XX2	HDM363M20B3XX2
	25	30	30	HDM363M2533XX2	HDM363M25A3XX2	HDM363M25B3XX2
	32	30	30	HDM363M3233XX2	HDM363M32A3XX2	HDM363M32B3XX2
	40	30	30	HDM363M4033XX2	HDM363M40A3XX2	HDM363M40B3XX2
	50	30	30	HDM363M5033XX2	HDM363M50A3XX2	HDM363M50B3XX2
	63	30	30	HDM363M6333XX2	HDM363M63A3XX2	HDM363M63B3XX2
HDM3-63F	10	50	30	HDM363F1033XX2	HDM363F10A3XX2	HDM363F10B3XX2
	16	50	30	HDM363F1633XX2	HDM363F16A3XX2	HDM363F16B3XX2
	20	50	30	HDM363F2033XX2	HDM363F20A3XX2	HDM363F20B3XX2
	25	50	30	HDM363F2533XX2	HDM363F25A3XX2	HDM363F25B3XX2
	32	50	30	HDM363F3233XX2	HDM363F32A3XX2	HDM363F32B3XX2
	40	50	30	HDM363F4033XX2	HDM363F40A3XX2	HDM363F40B3XX2
	50	50	30	HDM363F5033XX2	HDM363F50A3XX2	HDM363F50B3XX2
	63	50	30	HDM363F6333XX2	HDM363F63A3XX2	HDM363F63B3XX2
HDM3-100L	10	18	18	HDM3100L1033XX2	HDM3100L10A3XX2	HDM3100L10B3XX2
	16	18	18	HDM3100L1633XX2	HDM3100L16A3XX2	HDM3100L16B3XX2
	20	18	18	HDM3100L2033XX2	HDM3100L20A3XX2	HDM3100L20B3XX2
	25	18	18	HDM3100L2533XX2	HDM3100L25A3XX2	HDM3100L25B3XX2
	32	18	18	HDM3100L3233XX2	HDM3100L32A3XX2	HDM3100L32B3XX2
	40	18	18	HDM3100L4033XX2	HDM3100L40A3XX2	HDM3100L40B3XX2
	50	18	18	HDM3100L5033XX2	HDM3100L50A3XX2	HDM3100L50B3XX2
	63	18	18	HDM3100L6333XX2	HDM3100L63A3XX2	HDM3100L63B3XX2
	80	18	18	HDM3100L8033XX2	HDM3100L80A3XX2	HDM3100L80B3XX2
	100	18	18	HDM3100L10033XX2	HDM3100L100A3XX2	HDM3100L100B3XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-100S	10	25	18	HDM3100S1033XX2	HDM3100S10A3XX2	HDM3100S10B3XX2
	16	25	18	HDM3100S1633XX2	HDM3100S16A3XX2	HDM3100S16B3XX2
	20	25	18	HDM3100S2033XX2	HDM3100S20A3XX2	HDM3100S20B3XX2
	25	25	18	HDM3100S2533XX2	HDM3100S25A3XX2	HDM3100S25B3XX2
	32	25	18	HDM3100S3233XX2	HDM3100S32A3XX2	HDM3100S32B3XX2
	40	25	18	HDM3100S4033XX2	HDM3100S40A3XX2	HDM3100S40B3XX2
	50	25	18	HDM3100S5033XX2	HDM3100S50A3XX2	HDM3100S50B3XX2
	63	25	18	HDM3100S6333XX2	HDM3100S63A3XX2	HDM3100S63B3XX2
	80	25	18	HDM3100S8033XX2	HDM3100S80A3XX2	HDM3100S80B3XX2
	100	25	18	HDM3100S10033XX2	HDM3100S100A3XX2	HDM3100S100B3XX2
HDM3-100M	40	26	26	HDM3100M4033XX2	HDM3100M40A3XX2	HDM3100M40B3XX2
	50	26	26	HDM3100M5033XX2	HDM3100M50A3XX2	HDM3100M50B3XX2
	63	26	26	HDM3100M6333XX2	HDM3100M63A3XX2	HDM3100M63B3XX2
	80	26	26	HDM3100M8033XX2	HDM3100M80A3XX2	HDM3100M80B3XX2
	100	26	26	HDM3100M10033XX2	HDM3100M100A3XX2	HDM3100M100B3XX2
HDM3-100F	40	35	26	HDM3100F4033XX2	HDM3100F40A3XX2	HDM3100F40B3XX2
	50	35	26	HDM3100F5033XX2	HDM3100F50A3XX2	HDM3100F50B3XX2
	63	35	26	HDM3100F6333XX2	HDM3100F63A3XX2	HDM3100F63B3XX2
	80	35	26	HDM3100F8033XX2	HDM3100F80A3XX2	HDM3100F80B3XX2
	100	35	26	HDM3100F10033XX2	HDM3100F100A3XX2	HDM3100F100B3XX2
HDM3-100T	40	30	30	HDM3100T4033XX2	HDM3100T40A3XX2	HDM3100T40B3XX2
	50	30	30	HDM3100T5033XX2	HDM3100T50A3XX2	HDM3100T50B3XX2
	63	30	30	HDM3100T6333XX2	HDM3100T63A3XX2	HDM3100T63B3XX2
	80	30	30	HDM3100T8033XX2	HDM3100T80A3XX2	HDM3100T80B3XX2
	100	30	30	HDM3100T10033XX2	HDM3100T100A3XX2	HDM3100T100B3XX2
HDM3-100N	40	50	30	HDM3100N4033XX2	HDM3100N40A3XX2	HDM3100N40B3XX2
	50	50	30	HDM3100N5033XX2	HDM3100N50A3XX2	HDM3100N50B3XX2
	63	50	30	HDM3100N6333XX2	HDM3100N63A3XX2	HDM3100N63B3XX2
	80	50	30	HDM3100N8033XX2	HDM3100N80A3XX2	HDM3100N80B3XX2
	100	50	30	HDM3100N10033XX2	HDM3100N100A3XX2	HDM3100N100B3XX2
HDM3-160L	100	21	21	HDM3160L10033XX2	HDM3160L100A3XX2	HDM3160L100B3XX2
	125	21	21	HDM3160L12533XX2	HDM3160L125A3XX2	HDM3160L125B3XX2
	140	21	21	HDM3160L14033XX2	HDM3160L140A3XX2	HDM3160L140B3XX2
	160	21	21	HDM3160L16033XX2	HDM3160L160A3XX2	HDM3160L160B3XX2
HDM3-160S	100	35	21	HDM3160S10033XX2	HDM3160S100A3XX2	HDM3160S100B3XX2
	125	35	21	HDM3160S12533XX2	HDM3160S125A3XX2	HDM3160S125B3XX2
	140	35	21	HDM3160S14033XX2	HDM3160S140A3XX2	HDM3160S140B3XX2
	160	35	21	HDM3160S16033XX2	HDM3160S160A3XX2	HDM3160S160B3XX2
HDM3-160M	100	30	30	HDM3160M10033XX2	HDM3160M100A3XX2	HDM3160M100B3XX2
	125	30	30	HDM3160M12533XX2	HDM3160M125A3XX2	HDM3160M125B3XX2
	140	30	30	HDM3160M14033XX2	HDM3160M140A3XX2	HDM3160M140B3XX2
	160	30	30	HDM3160M16033XX2	HDM3160M160A3XX2	HDM3160M160B3XX2

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-160F	100	50	30	HDM3160F10033XX2	HDM3160F100A3XX2	HDM3160F100B3XX2
	125	50	30	HDM3160F12533XX2	HDM3160F125A3XX2	HDM3160F125B3XX2
	140	50	30	HDM3160F14033XX2	HDM3160F140A3XX2	HDM3160F140B3XX2
	160	50	30	HDM3160F16033XX2	HDM3160F160A3XX2	HDM3160F160B3XX2
HDM3-160T	100	36	36	HDM3160T10033XX2	HDM3160T100A3XX2	HDM3160T100B3XX2
	125	36	36	HDM3160T12533XX2	HDM3160T125A3XX2	HDM3160T125B3XX2
	140	36	36	HDM3160T14033XX2	HDM3160T140A3XX2	HDM3160T140B3XX2
	160	36	36	HDM3160T16033XX2	HDM3160T160A3XX2	HDM3160T160B3XX2
HDM3-160N	100	60	36	HDM3160N10033XX2	HDM3160N100A3XX2	HDM3160N100B3XX2
	125	60	36	HDM3160N12533XX2	HDM3160N125A3XX2	HDM3160N125B3XX2
	140	60	36	HDM3160N14033XX2	HDM3160N140A3XX2	HDM3160N140B3XX2
	160	60	36	HDM3160N16033XX2	HDM3160N160A3XX2	HDM3160N160B3XX2
HDM3-250L	100	21	21	HDM3250L10033XX2	HDM3250L100A3XX2	HDM3250L100B3XX2
	125	21	21	HDM3250L12533XX2	HDM3250L125A3XX2	HDM3250L125B3XX2
	140	21	21	HDM3250L14033XX2	HDM3250L140A3XX2	HDM3250L140B3XX2
	160	21	21	HDM3250L16033XX2	HDM3250L160A3XX2	HDM3250L160B3XX2
	180	21	21	HDM3250L18033XX2	HDM3250L180A3XX2	HDM3250L180B3XX2
	200	21	21	HDM3250L20033XX2	HDM3250L200A3XX2	HDM3250L200B3XX2
	225	21	21	HDM3250L22533XX2	HDM3250L225A3XX2	HDM3250L225B3XX2
	250	21	21	HDM3250L25033XX2	HDM3250L250A3XX2	HDM3250L250B3XX2
HDM3-250S	100	35	21	HDM3250S10033XX2	HDM3250S100A3XX2	HDM3250S100B3XX2
	125	35	21	HDM3250S12533XX2	HDM3250S125A3XX2	HDM3250S125B3XX2
	140	35	21	HDM3250S14033XX2	HDM3250S140A3XX2	HDM3250S140B3XX2
	160	35	21	HDM3250S16033XX2	HDM3250S160A3XX2	HDM3250S160B3XX2
	180	35	21	HDM3250S18033XX2	HDM3250S180A3XX2	HDM3250S180B3XX2
	200	35	21	HDM3250S20033XX2	HDM3250S200A3XX2	HDM3250S200B3XX2
	225	35	21	HDM3250S22533XX2	HDM3250S225A3XX2	HDM3250S225B3XX2
	250	35	21	HDM3250S25033XX2	HDM3250S250A3XX2	HDM3250S250B3XX2
HDM3-250M	100	30	30	HDM3250M10033XX2	HDM3250M100A3XX2	HDM3250M100B3XX2
	125	30	30	HDM3250M12533XX2	HDM3250M125A3XX2	HDM3250M125B3XX2
	140	30	30	HDM3250M14033XX2	HDM3250M140A3XX2	HDM3250M140B3XX2
	160	30	30	HDM3250M16033XX2	HDM3250M160A3XX2	HDM3250M160B3XX2
	180	30	30	HDM3250M18033XX2	HDM3250M180A3XX2	HDM3250M180B3XX2
	200	30	30	HDM3250M20033XX2	HDM3250M200A3XX2	HDM3250M200B3XX2
	225	30	30	HDM3250M22533XX2	HDM3250M225A3XX2	HDM3250M225B3XX2
	250	30	30	HDM3250M25033XX2	HDM3250M250A3XX2	HDM3250M250B3XX2
HDM3-250F	100	50	30	HDM3250F10033XX2	HDM3250F100A3XX2	HDM3250F100B3XX2
	125	50	30	HDM3250F12533XX2	HDM3250F125A3XX2	HDM3250F125B3XX2
	140	50	30	HDM3250F14033XX2	HDM3250F140A3XX2	HDM3250F140B3XX2
	160	50	30	HDM3250F16033XX2	HDM3250F160A3XX2	HDM3250F160B3XX2
	180	50	30	HDM3250F18033XX2	HDM3250F180A3XX2	HDM3250F180B3XX2
	200	50	30	HDM3250F20033XX2	HDM3250F200A3XX2	HDM3250F200B3XX2
	225	50	30	HDM3250F22533XX2	HDM3250F225A3XX2	HDM3250F225B3XX2
	250	50	30	HDM3250F25033XX2	HDM3250F250A3XX2	HDM3250F250B3XX2

HDM3 Molded Case Circuit Breaker

Reference

3SERIES MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-250T	100	36	36	HDM3250T10033XX2	HDM3250T100A3XX2	HDM3250T100B3XX2
	125	36	36	HDM3250T12533XX2	HDM3250T125A3XX2	HDM3250T125B3XX2
	140	36	36	HDM3250T14033XX2	HDM3250T140A3XX2	HDM3250T140B3XX2
	160	36	36	HDM3250T16033XX2	HDM3250T160A3XX2	HDM3250T160B3XX2
	180	36	36	HDM3250T18033XX2	HDM3250T180A3XX2	HDM3250T180B3XX2
	200	36	36	HDM3250T20033XX2	HDM3250T200A3XX2	HDM3250T200B3XX2
	225	36	36	HDM3250T22533XX2	HDM3250T225A3XX2	HDM3250T225B3XX2
	250	36	36	HDM3250T25033XX2	HDM3250T250A3XX2	HDM3250T250B3XX2
HDM3-250N	100	60	36	HDM3250N10033XX2	HDM3250N100A3XX2	HDM3250N100B3XX2
	125	60	36	HDM3250N12533XX2	HDM3250N125A3XX2	HDM3250N125B3XX2
	140	60	36	HDM3250N14033XX2	HDM3250N140A3XX2	HDM3250N140B3XX2
	160	60	36	HDM3250N16033XX2	HDM3250N160A3XX2	HDM3250N160B3XX2
	180	60	36	HDM3250N18033XX2	HDM3250N180A3XX2	HDM3250N180B3XX2
	200	60	36	HDM3250N20033XX2	HDM3250N200A3XX2	HDM3250N200B3XX2
	225	60	36	HDM3250N22533XX2	HDM3250N225A3XX2	HDM3250N225B3XX2
	250	60	36	HDM3250N25033XX2	HDM3250N250A3XX2	HDM3250N250B3XX2
HDM3-400L	200	21	21	HDM3400L20033XX2	HDM3400L200A3XX2	HDM3400L200B3XX2
	225	21	21	HDM3400L22533XX2	HDM3400L225A3XX2	HDM3400L225B3XX2
	250	21	21	HDM3400L25033XX2	HDM3400L250A3XX2	HDM3400L250B3XX2
	315	21	21	HDM3400L31533XX2	HDM3400L315A3XX2	HDM3400L315B3XX2
	350	21	21	HDM3400L35033XX2	HDM3400L350A3XX2	HDM3400L350B3XX2
	400	21	21	HDM3400L40033XX2	HDM3400L400A3XX2	HDM3400L400B3XX2
HDM3-400S	200	35	21	HDM3400S20033XX2	HDM3400S200A3XX2	HDM3400S200B3XX2
	225	35	21	HDM3400S22533XX2	HDM3400S225A3XX2	HDM3400S225B3XX2
	250	35	21	HDM3400S25033XX2	HDM3400S250A3XX2	HDM3400S250B3XX2
	315	35	21	HDM3400S31533XX2	HDM3400S315A3XX2	HDM3400S315B3XX2
	350	35	21	HDM3400S35033XX2	HDM3400S350A3XX2	HDM3400S350B3XX2
	400	35	21	HDM3400S40033XX2	HDM3400S400A3XX2	HDM3400S400B3XX2
HDM3-400M	200	30	30	HDM3400M20033XX2	HDM3400M200A3XX2	HDM3400M200B3XX2
	225	30	30	HDM3400M22533XX2	HDM3400M225A3XX2	HDM3400M225B3XX2
	250	30	30	HDM3400M25033XX2	HDM3400M250A3XX2	HDM3400M250B3XX2
	315	30	30	HDM3400M31533XX2	HDM3400M315A3XX2	HDM3400M315B3XX2
	350	30	30	HDM3400M35033XX2	HDM3400M350A3XX2	HDM3400M350B3XX2
	400	30	30	HDM3400M40033XX2	HDM3400M400A3XX2	HDM3400M400B3XX2
HDM3-400F	200	50	30	HDM3400F20033XX2	HDM3400F200A3XX2	HDM3400F200B3XX2
	225	50	30	HDM3400F22533XX2	HDM3400F225A3XX2	HDM3400F225B3XX2
	250	50	30	HDM3400F25033XX2	HDM3400F250A3XX2	HDM3400F250B3XX2
	315	50	30	HDM3400F31533XX2	HDM3400F315A3XX2	HDM3400F315B3XX2
	350	50	30	HDM3400F35033XX2	HDM3400F350A3XX2	HDM3400F350B3XX2
	400	50	30	HDM3400F40033XX2	HDM3400F400A3XX2	HDM3400F400B3XX2

Low-voltage Distribution

HDM3 Molded Case Circuit Breaker

Reference

3SERIES
MORE VALUE FOR PRICE!

Material order number

HDM3 Fixed front connection Motor protection Thermal magnetic tripping

Product Specification	In(A)	Icu(KA)	Ics(KA)	Order Reference	Order Reference	Order Reference
				Fixed front 3 pole	Fixed front 4-pole A type	Fixed front 4-pole B type
HDM3-400T	200	39	39	HDM3400T20033XX2	HDM3400T200A3XX2	HDM3400T200B3XX2
	225	39	39	HDM3400T22533XX2	HDM3400T225A3XX2	HDM3400T225B3XX2
	250	39	39	HDM3400T25033XX2	HDM3400T250A3XX2	HDM3400T250B3XX2
	315	39	39	HDM3400T31533XX2	HDM3400T315A3XX2	HDM3400T315B3XX2
	350	39	39	HDM3400T35033XX2	HDM3400T350A3XX2	HDM3400T350B3XX2
	400	39	39	HDM3400T40033XX2	HDM3400T400A3XX2	HDM3400T400B3XX2
HDM3-400N	200	70	39	HDM3400N20033XX2	HDM3400N200A3XX2	HDM3400N200B3XX2
	225	70	39	HDM3400N22533XX2	HDM3400N225A3XX2	HDM3400N225B3XX2
	250	70	39	HDM3400N25033XX2	HDM3400N250A3XX2	HDM3400N250B3XX2
	315	70	39	HDM3400N31533XX2	HDM3400N315A3XX2	HDM3400N315B3XX2
	350	70	39	HDM3400N35033XX2	HDM3400N350A3XX2	HDM3400N350B3XX2
	400	70	39	HDM3400N40033XX2	HDM3400N400A3XX2	HDM3400N400B3XX2
HDM3-630L	400	21	21	HDM3630L40033XX2	HDM3630L400A3XX2	HDM3630L400B3XX2
	500	21	21	HDM3630L50033XX2	HDM3630L500A3XX2	HDM3630L500B3XX2
	630	21	21	HDM3630L63033XX2	HDM3630L630A3XX2	HDM3630L630B3XX2
HDM3-630S	400	35	21	HDM3630S40033XX2	HDM3630S400A3XX2	HDM3630S400B3XX2
	500	35	21	HDM3630S50033XX2	HDM3630S500A3XX2	HDM3630S500B3XX2
	630	35	21	HDM3630S63033XX2	HDM3630S630A3XX2	HDM3630S630B3XX2
HDM3-630M	400	30	30	HDM3630M40033XX2	HDM3630M400A3XX2	HDM3630M400B3XX2
	500	30	30	HDM3630M50033XX2	HDM3630M500A3XX2	HDM3630M500B3XX2
	630	30	30	HDM3630M63033XX2	HDM3630M630A3XX2	HDM3630M630B3XX2
HDM3-630F	400	50	30	HDM3630F40033XX2	HDM3630F400A3XX2	HDM3630F400B3XX2
	500	50	30	HDM3630F50033XX2	HDM3630F500A3XX2	HDM3630F500B3XX2
	630	50	30	HDM3630F63033XX2	HDM3630F630A3XX2	HDM3630F630B3XX2
HDM3-630T	400	39	39	HDM3630T40033XX2	HDM3630T400A3XX2	HDM3630T400B3XX2
	500	39	39	HDM3630T50033XX2	HDM3630T500A3XX2	HDM3630T500B3XX2
	630	39	39	HDM3630T63033XX2	HDM3630T630A3XX2	HDM3630T630B3XX2
HDM3-630N	400	70	39	HDM3630N40033XX2	HDM3630N400A3XX2	HDM3630N400B3XX2
	500	70	39	HDM3630N50033XX2	HDM3630N500A3XX2	HDM3630N500B3XX2
	630	70	39	HDM3630N63033XX2	HDM3630N630A3XX2	HDM3630N630B3XX2

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Order Information

Type	Pole	In A	Fixed Thermal Magnetic				Thermo-adjustable	
			L-type	S-Type	M-type	T-Type	M-type	T-Type
HDM6s-63 	3	10	HDM6s063L0103XXXF	HDM6s063S0103XXXF	HDM6s063M0103XXXF	HDM6s063T0103XXXF	-	-
		16	HDM6s063L0163XXXF	HDM6s063S0163XXXF	HDM6s063M0163XXXF	HDM6s063T0163XXXF	-	-
		20	HDM6s063L0203XXXF	HDM6s063S0203XXXF	HDM6s063M0203XXXF	HDM6s063T0203XXXF	-	-
		25	HDM6s063L0253XXXF	HDM6s063S0253XXXF	HDM6s063M0253XXXF	HDM6s063T0253XXXF	-	-
		32	HDM6s063L0323XXXF	HDM6s063S0323XXXF	HDM6s063M0323XXXF	HDM6s063T0323XXXF	-	-
		40	HDM6s063L0403XXXF	HDM6s063S0403XXXF	HDM6s063M0403XXXF	HDM6s063T0403XXXF	-	-
		50	HDM6s063L0503XXXF	HDM6s063S0503XXXF	HDM6s063M0503XXXF	HDM6s063T0503XXXF	-	-
		63	HDM6s063L0633XXXF	HDM6s063S0633XXXF	HDM6s063M0633XXXF	HDM6s063T0633XXXF	-	-
	4	10	-	-	HDM6s063M0104XXXF	HDM6s063T0104XXXF	-	-
		16	-	-	HDM6s063M0164XXXF	HDM6s063T0164XXXF	-	-
		20	-	-	HDM6s063M0204XXXF	HDM6s063T0204XXXF	-	-
		25	-	-	HDM6s063M0254XXXF	HDM6s063T0254XXXF	-	-
		32	-	-	HDM6s063M0324XXXF	HDM6s063T0324XXXF	-	-
		40	-	-	HDM6s063M0404XXXF	HDM6s063T0404XXXF	-	-
		50	-	-	HDM6s063M0504XXXF	HDM6s063T0504XXXF	-	-
		63	-	-	HDM6s063M0634XXXF	HDM6s063T0634XXXF	-	-
HDM6s-100 	3	16	HDM6s100L0163XXXF	HDM6s100S0163XXXF	-	-	HDM6s100M0163XXX3	HDM6s100T0163XXX3
		20	HDM6s100L0203XXXF	HDM6s100S0203XXXF	-	-	-	-
		25	HDM6s100L0253XXXF	HDM6s100S0253XXXF	-	-	HDM6s100M0253XXX3	HDM6s100T0253XXX3
		32	HDM6s100L0323XXXF	HDM6s100S0323XXXF	-	-	-	-
		40	HDM6s100L0403XXXF	HDM6s100S0403XXXF	-	-	HDM6s100M0403XXX3	HDM6s100T0403XXX3
		50	HDM6s100L0503XXXF	HDM6s100S0503XXXF	-	-	-	-
		63	HDM6s100L0633XXXF	HDM6s100S0633XXXF	-	-	HDM6s100M0633XXX3	HDM6s100T0633XXX3
		80	HDM6s100L0803XXXF	HDM6s100S0803XXXF	-	-	-	-
		100	HDM6s100L1003XXXF	HDM6s100S1003XXXF	-	-	HDM6s100M1003XXX3	HDM6s100T1003XXX3
	4	16	-	-	-	-	HDM6s100M0164XXX3	HDM6s100T0164XXX3
		25	-	-	-	-	HDM6s100M0254XXX3	HDM6s100T0254XXX3
		40	-	-	-	-	HDM6s100M0404XXX3	HDM6s100T0404XXX3
		63	-	-	-	-	HDM6s100M0634XXX3	HDM6s100T0634XXX3
		100	-	-	-	-	HDM6s100M1004XXX3	HDM6s100T1004XXX3
HDM6s-250 	3	100	HDM6s250L1003XXXF	HDM6s250S1003XXXF	-	-	-	-
		125	HDM6s250L1253XXXF	HDM6s250S1253XXXF	-	-	HDM6s250M1253XXX3	HDM6s250T1253XXX3
		160	HDM6s250L1603XXXF	HDM6s250S1603XXXF	-	-	HDM6s250M1603XXX3	HDM6s250T1603XXX3
		180	HDM6s250L1803XXXF	HDM6s250S1803XXXF	-	-	-	-
		200	HDM6s250L2003XXXF	HDM6s250S2003XXXF	-	-	HDM6s250M2003XXX3	HDM6s250T2003XXX3
		225	HDM6s250L2253XXXF	HDM6s250S2253XXXF	-	-	-	-
		250	HDM6s250L2503XXXF	HDM6s250S2503XXXF	-	-	HDM6s250M2503XXX3	HDM6s250T2503XXX3
	4	125	-	-	-	-	HDM6s250M1254XXX3	HDM6s250T1254XXX3
		160	-	-	-	-	HDM6s250M1604XXX3	HDM6s250T1604XXX3
		200	-	-	-	-	HDM6s250M2004XXX3	HDM6s250T2004XXX3
		250	-	-	-	-	HDM6s250M2504XXX3	HDM6s250T2504XXX3

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Order Information

Type	Pole	In A	Fixed Thermal Magnetic				Thermo-adjustable	
			L-type	S-Type	M-type	T-Type	M-type	T-Type
HDM6s-400 	3	200	HDM6s400L2003XXXF	HDM6s400S2003XXXF	-	-	-	-
		225	HDM6s400L2253XXXF	HDM6s400S2253XXXF	-	-	-	-
		250	HDM6s400L2503XXXF	HDM6s400S2503XXXF	-	-	HDM6s400M2503XXX3	HDM6s400T2503XXX3
		315	HDM6s400L3153XXXF	HDM6s400S3153XXXF	-	-	-	-
		350	HDM6s400L3503XXXF	HDM6s400S3503XXXF	-	-	-	-
		400	HDM6s400L4003XXXF	HDM6s400S4003XXXF	-	-	HDM6s400M4003XXX3	HDM6s400T4003XXX3
	4	200	HDM6s400L2004XXXF	HDM6s400S2004XXXF	-	-	-	-
		225	HDM6s400L2254XXXF	HDM6s400S2254XXXF	-	-	-	-
		250	HDM6s400L2504XXXF	HDM6s400S2504XXXF	-	-	HDM6s400M2504XXX3	HDM6s400T2504XXX3
		315	HDM6s400L3154XXXF	HDM6s400S3154XXXF	-	-	-	-
		350	HDM6s400L3504XXXF	HDM6s400S3504XXXF	-	-	-	-
		400	HDM6s400L4004XXXF	HDM6s400S4004XXXF	-	-	HDM6s400M4004XXX3	HDM6s400T4004XXX3
HDM6s-630 	3	400	HDM6s630L4003XXXF	HDM6s630S4003XXXF	-	-	-	-
		500	HDM6s630L5003XXXF	HDM6s630S5003XXXF	-	-	HDM6s630M5003XXX3	HDM6s630T5003XXX3
		630	HDM6s630L6303XXXF	HDM6s630S6303XXXF	-	-	HDM6s630M6303XXX3	HDM6s630T6303XXX3
	4	400	HDM6s630L4004XXXF	HDM6s630S4004XXXF	-	-	-	-
		500	HDM6s630L5004XXXF	HDM6s630S5004XXXF	-	-	HDM6s630M5004XXX3	HDM6s630T5004XXX3
		630	HDM6s630L6304XXXF	HDM6s630S6304XXXF	-	-	HDM6s630M6304XXX3	HDM6s630T6304XXX3
HDM6s-800 	3	400	HDM6s800L4003XXXF	HDM6s800S4003XXXF	HDM6s800M4003XXXF	HDM6s800T4003XXXF	-	-
		500	HDM6s800L5003XXXF	HDM6s800S5003XXXF	HDM6s800M5003XXXF	HDM6s800T5003XXXF	-	-
		630	HDM6s800L6303XXXF	HDM6s800S6303XXXF	HDM6s800M6303XXXF	HDM6s800T6303XXXF	-	-
		700	HDM6s800L7003XXXF	HDM6s800S7003XXXF	HDM6s800M7003XXXF	HDM6s800T7003XXXF	-	-
		800	HDM6s800L8003XXXF	HDM6s800S8003XXXF	HDM6s800M8003XXXF	HDM6s800T8003XXXF	-	-
	4	400	HDM6s800L4004XXXF	HDM6s800S4004XXXF	HDM6s800M4004XXXF	HDM6s800T4004XXXF	-	-
		500	HDM6s800L5004XXXF	HDM6s800S5004XXXF	HDM6s800M5004XXXF	HDM6s800T5004XXXF	-	-
		630	HDM6s800L6304XXXF	HDM6s800S6304XXXF	HDM6s800M6304XXXF	HDM6s800T6304XXXF	-	-
		700	HDM6s800L7004XXXF	HDM6s800S7004XXXF	HDM6s800M7004XXXF	HDM6s800T7004XXXF	-	-
		800	HDM6s800L8004XXXF	HDM6s800S8004XXXF	HDM6s800M8004XXXF	HDM6s800T8004XXXF	-	-

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Technical Data

Fixed Thermal Magnetic															
Basic Information (IEC/EN60947-2)															
Frame Size	AF	63						100				250			
Number of Poles		3P				4P		3P		4P		3P		4P	
Breaking Capacity Level		L	S	M	T	M	T	L	S	L	S	L	S	L	S
Rated Ultimate Shot-circuit Breaking Capacity Icu (kA rms)		25	18	50	30	50	30	35	26	35	26	35	26	35	26
Rated Service Shot-circuit Breaking Capacity Icu (kA rms)		75%	100%	50%	100%	50%	100%	75%	100%	75%	100%	75%	100%	75%	100%
Mechanical Durability	On-off Cycle	8500						8500				7000			
Electrical Durability	On-off Cycle	1500						1500				1000			
Tripping Unit															
Rated Current (A)	In	10/16/20/25/32/40/50/63						16/20/25/32/40/50/63/80/100		-		100/125/160/180/200/225/250		-	
Accessory															
Indication Accessories															
OF		■						■				■			
SD		■						■				■			
Control Accessories															
MX (AC400, 230V, DC220V)		■						■				■			
MN (AC400, 230V)		■				-		■				■			
Extended Rotary Handle (Round and Square)		■						■				■			
AC Motor Mechanism (AC400, 230V)		■						■				■			
Mechanical Interlock		■				-		■		-		■		-	
Mounting & Connection															
Fixed, Front Connection		■						■				■			
Fixed, Rear Connection		■						■				■			
Plug-in, Rear Connection		■				-		■				■			
Plug-in, Front Connection		-						■				■			
Drawer-out, Rear Connection		-						-				-			
Connection															
Spreader		■						■				■			
Protection															
Phase Barrier		■						■				■			
Installation Information		See Page 75						See Page 76				See Page 77			

' ■ ' with this option
' - ' without this option

Low-voltage Distribution

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Technical Data

Fixed Thermal Magnetic																	
Basic Information (IEC/EN60947-2)																	
Frame Size	AF	400				630				800							
Number of Poles		3P		4P		3P		4P		3P				4P			
Breaking Capacity Level		L	S	L	S	L	S	L	S	L	S	M	T	L	S	M	T
Rated Ultimate Shot-circuit Breaking Capacity Icu (kA rms)		50	25	50	25	50	25	50	25	50	25	70	40	50	25	70	40
Rated Service Shot-circuit Breaking Capacity Icu (kA rms)		50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%
Mechanical Durability	On-off Cycle	4000				4000				2500							
Electrical Durability	On-off Cycle	1000				1000				500							
Tripping Unit																	
Rated Current (A)	In	200/225/250/315/350/400				400/500/630				400/500/630/700/800							
Accessory																	
Indication Accessories																	
OF		■				■				■							
SD		■				■				■							
Control Accessories																	
MX (AC400, 230V, DC220V)		■				■				■							
MN (AC400, 230V)		■				■				■							
Extended Rotary Handle (Round and Square)		■				■				■							
AC Motor Mechanism (AC400, 230V)		■				■				■							
Mechanical Interlock		■	-			■				■	-						
Mounting & Connection																	
Fixed, Front Connection		■				■				■							
Fixed, Rear Connection		■				■				■							
Plug-in, Rear Connection		■				■				■							
Plug-in, Front Connection		-				-				-							
Drawer-out, Rear Connection		■				■				■							
Connection																	
Spreader		■				■				■							
Protection																	
Phase Barrier		■				■				■							
Installation Information		See Page 78				See Page 79				See Page 80							

' ■ ' with this option
' - ' without this option

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Technical Data

Thermal-adjustable																	
Basic Information (IEC/EN60947-2)																	
Frame Size	AF	100				250				400				630			
Number of Poles		3P		4P		3P		4P		3P		4P		3P		4P	
Breaking Capacity Level		M	T	M	T	M	T	M	T	M	T	M	T	M	T	M	T
Rated Ultimate Short-circuit Breaking Capacity Ics (kA rms)		50	30	50	30	50	30	50	30	70	40	70	40	70	40	70	40
Rated Service Short-circuit Breaking Capacity Ics (kA rms)		50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%	50%	100%
Mechanical Durability	On-off Cycle	800				7000				4000				4000			
Electrical Durability	On-off Cycle	1500				1000				1000				1000			
Tripping Unit																	
Rated Current (A)	In	16/25/40/63/100				125/160/200/250				250/400				500/630			
Thermo-adjustable Setting (Ir)	In	0.8/0.9/1.0In				0.8/0.9/1.0In				0.8/0.9/1.0In				0.8/0.9/1.0In			
Accessory																	
Indication Accessories																	
OF		■				■				■				■			
SD		■				■				■				■			
Control Accessories																	
MX (AC400, 230V, DC220V)		■				■				■				■			
MN (AC400, 230V)		■	-			■				■				■			
Extended Rotary Handle (Round and Square)		■				■				■				■			
AC Motor Mechanism (AC400, 230V)		■				■				■				■			
Mechanical Interlock		■	-			■	-			■	-			■			
Mounting & Connection																	
Fixed, Front Connection		■				■				■				■			
Fixed, Rear Connection		■				■				■				■			
Plug-in, Rear Connection		■	-			■				■				■			
Plug-in, Front Connection		-				■				-				-			
Drawer-out, Rear Connection		-				-				■				■			
Connection																	
Spreader		■				■				■				■			
Protection																	
Phase Barrier		■				■				■				■			
Installation Information		See Page 76				See Page 77				See Page 78				See Page 79			

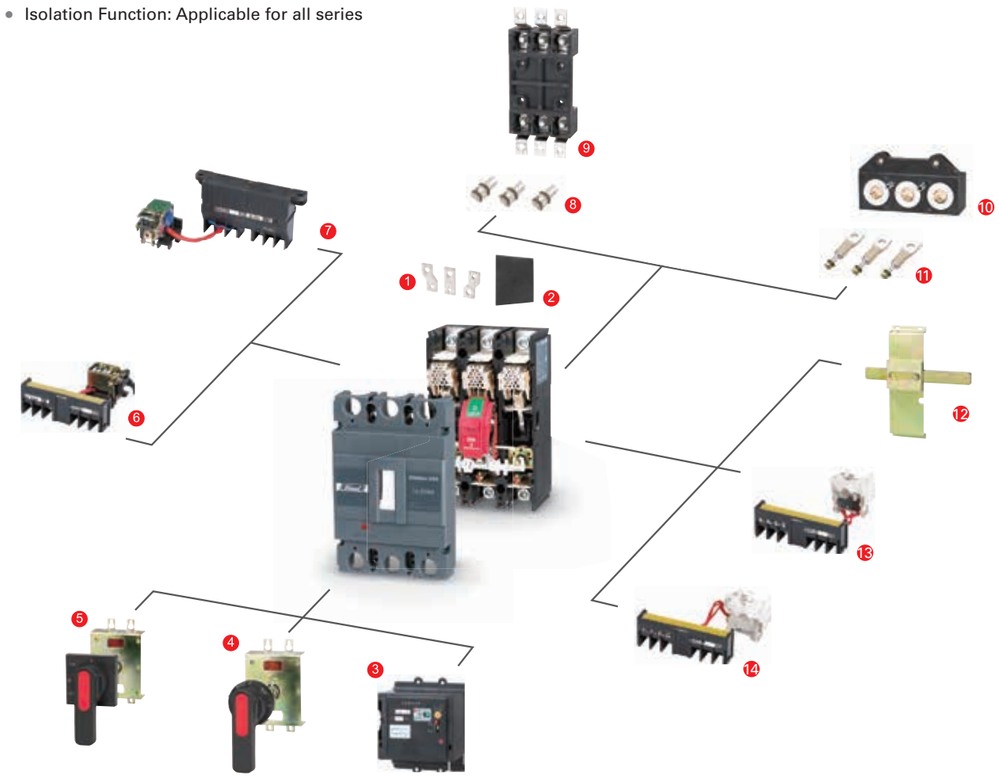
' ■ ' with this option
' - ' without this option

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Basic Technical Data

- Rated Insulation Voltage Ui: AC 800V (Frame 63AF: AC 690V)
- Rated Impulse Withstand Voltage Uimp: 8KV (Frame 63AF: 6KV)
- Rated Working Voltage Ue: AC 415V (Frame 63AF: AC 400)
- Rated Working Frequency: 50Hz/60Hz
- Utilization Category: A
- Isolation Function: Applicable for all series



Complete Functions and Accessories

1 Spreader	6 MX	11 Fixed Rear Connection
2 Phase Barrier	7 MN	12 Mechanical Interlock
3 AC Motor Mechanism	8 Plug-in Connecting Terminal	13 SD
4 Round Extended Rotary Handle	9 Plug-in Front Connection	14 OF
5 Square Extended Rotary Handle	10 Plug-in Rear Connection	

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Complete Functions

Optional Tripping Unit Functions

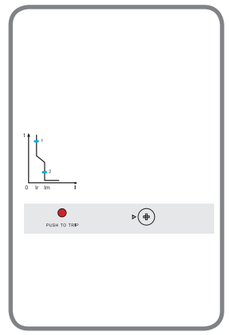
The tripping unit is the intelligent part of the molded case circuit breaker HDM6s Thermal Magnetic Tripping Unit is divided into 2 types, that is, Fixed Rating and Thermal-adjustable Tripping Unit

Fixed Thermal Magnetic Tripping Unit

Used for overload and short-circuit protection

Thermal-adjustable, Fixed-magnetic Tripping Unit

Used for overload and short-circuit protection
Adjustable overload current
Change the relation between the overload current and the rated current by adjusting the grades of the knobs (0.8-0.9-1.0In, three grades are available to be adjusted). Even so the current of instantaneous protection movement shall still take the rated current as the base number



Question: The customer requires 250AF, 200A current MCCB, and considering the product expansion in the future, is required to select the circuit breaker with an overload adjustable feature. So which product should the customer choose, how much is it for overload tripping release current (Ir1) and instantaneous tripping release current (Ii)?

Answer: HDM6s, 250AF, M-Type Breaking Capacity, Rated Current 250A, and switch the knob in the grade of 0.8
So, Ir1=250A * 0.8=200A, Ii=250 * 10=2500A

HDM6s All Series of Products Featuring Isolation Function

The circuit breaker with isolation function meets the standard of IEC 60947-2
The operating handle does not indicate 'OFF' position until the contact has been opened
The Isolation Function Protection includes:

- Mechanical reliability of the contact indication system
- No leakage current
- Over-voltage Withstand Capacity between outlet and inlet terminals

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

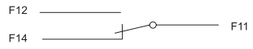
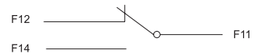
Complete Accessories of HDM6s Series

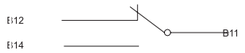
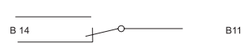
Indicating Accessories

Auxiliary Contact (OF):
It is used to indicate the two positions of circuit breaker: not tripping(ON/OFF) and tripping. With the 5 reasons, the SD may indicate circuit breaker in tripping position.

Alarm Switch (SD):
It is used to indicate the two positions of circuit breaker: not tripping (ON/OFF) and tripping. With these 5 reasons, the SD may indicate circuit breaker in tripping position.

- Overload or short-circuit fault
- Residual earth-leakage fault
- Artificial Testing Release
- Shunt Trip Release
- Line Fault and Under-voltage Release Tripping

Accessory Name	Switch-on/off	Tripping
OF		

Accessory Name	Switch-on/off	Tripping
SD		

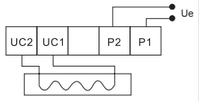
Electrical Parameter of OF & SD			
Rated Thermal Current (A)		3A	
Utilization Category		AC15	DC13
Working Current 50Hz/60Hz	AC400V	0.3A	–
	DC220V	–	0.15A

Control Accessories

Under-voltage Release (MN)
Tripping threshold between 0.35 and 0.7 times the rated voltage; when it is at 85%-110% of rated working voltage, Under-voltage Release shall ensure the circuit breaker to switch-on; when the rated working voltage is less than 35%, Under-voltage Release shall prevent switch-on of the circuit breaker

Applicable Type of Circuit Breaker	Power Consumption of Under-voltage Coil (W)	
	AC400V	AC230V
HDM6s63	4	3.1
HDM6s100	3.9	3.2
HDM6s250	4.3	3.3
HDM6s400	3.6	2.5
HDM6s630	3.4	2.5
HDM6s800	2	1.6

Undervoltage Release Wiring



HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Complete Accessories of HDM6 Series

Shunt Release (MX)
When the working voltage is between 70%-110% Us, the shunt release will reliably trip the circuit breaker.

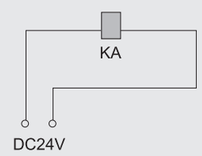
Applicable Type of Circuit Breaker	Power Consumption of Under-voltage Coil (W)			
	AC400V	AC230V	DC220V	DC24V
HDM6s63	91.6	76.1	90.7	91.2
HDM6s100	96.8	73	90.7	91.2
HDM6s250	112	68.6	90.7	85.3
HDM6s400	67	62.3	94.4	100
HDM6s630	68	58.2	94.4	100
HDM6s800	163	153	94.4	120

When the rated control supply voltage of the shunt release is DC24V, the maximum length of the copper conductor shall satisfy the following requirements:

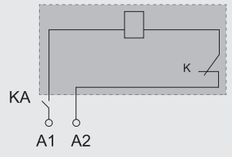
Control Supply Voltage (Us) (DC24V) \ Conductor Area Rated	1.5mm²	2.5mm²
100% Us	150m	250m
85% Us	100m	160m

When the requirements above cannot be met, it is recommended to adopt the following chart to design control loop of the shunt release.

Schematic Diagram of Shunt-trip Release in dotted-line box



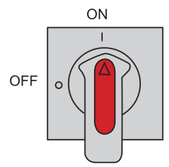
KA: DC24V Intermediate Relay, and the current capacity of the electric shock is 1A.

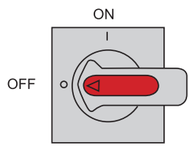


Power Input
The voltage specification of the power input 50Hz, AC230V, 400V

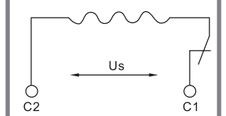
Extended Rotary Handle

- Function: indication of the three positions of switch-on, switch-off and trip
- Residual earth-leakage fault. The circuit breaker cannot switch-on when the switch board door is open
- The door cannot be opened if the circuit breaker is ON
- An extension shaft that can be adjusted to the distance between the back of circuit breaker and door, the specific distance refers to the dimensions at the rear and the installation part
- The OFF-Position of the circuit breaker can hang 1-3 locks with the diameter of 5mm





Shunt Release Wiring



Low-voltage Distribution

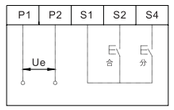
HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Complete Accessories of HDM6s Series

AC Motor Mechanism

Provide on-site and remote distance control circuit breaker to implement switch-on and switch-off



Mechanical Interlock

Prevent simultaneous switch-on of two sets of the circuit breakers

Phase Barriers

The phase barriers are used to reinforce isolation of connection points in installation with busbars whether insulated or not. We can easily install the phase barrier through the phase slot of this product Both the inlet and outlet line of HDM6s has phase barrier.

Connecting Accessories

Fixed, Rear Connection

Easy to install and connect the products in the Rear Connection

Plug-in

The wiring type is divided into plug-in Rear Connection and plug-in Front Connection

The plug-in connection for the products is easy for maintenance and replacement, but plug-in and plug-out cannot be done with the electricity.

Drawer-out Rear Connection

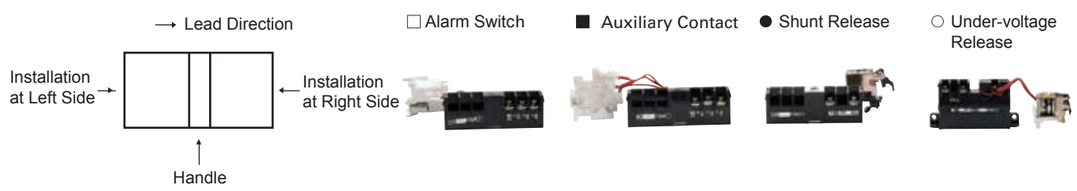
The drawer-out products can be easily maintained and replaced Visual connection and break-up.

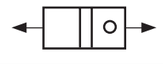
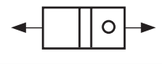
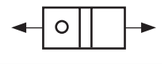
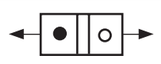
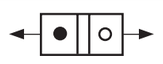
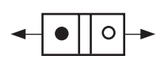
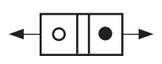
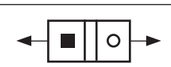
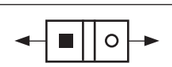
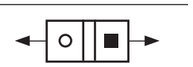
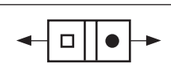
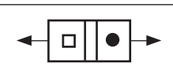
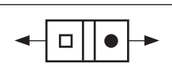
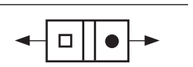
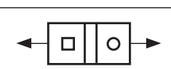
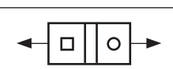
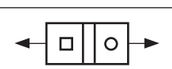
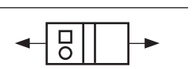
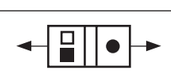
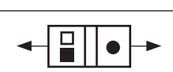
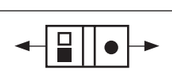
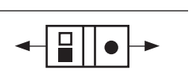
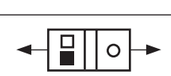
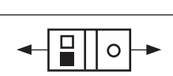
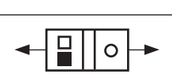
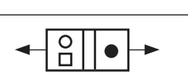
HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Installation Location of Accessories Accessories of HDM6s Series

Installation Method for Tripping Release and Accessories Code



Name of Accessory	Product Type			
	HDM6s63/100/250	HDM6s400	HDM6s630	HDM6s800
Alarm Switch				
Shunt Release				
Auxiliary Contact				
Under-voltage Release				
Auxiliary Contact Shunt Release				
Shunt Release Under-voltage Release				
Auxiliary Contact Undervoltage Release				
Shunt-trip Release Alarm Switch				
Under-voltage Release Alarm Switch				
Shunt Release Auxiliary Contact Alarm Switch				
Auxiliary Contact Under-voltage Release Alarm Switch				

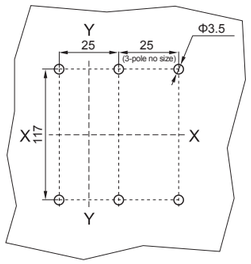
Low-voltage Distribution

HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

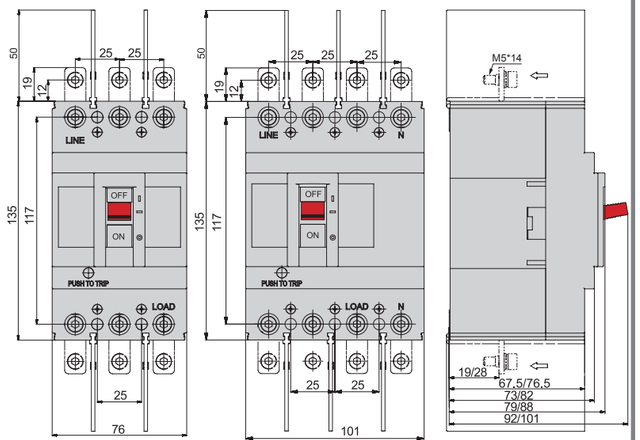
HDM6s63 Installation Dimension

- Chart of Fixed Front Connection Installation Hole

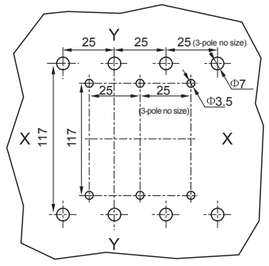


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

- Installation Dimension of Fixed Front Connection

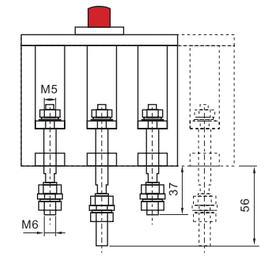


- Chart of Fixed Rear Connection Installation Hole

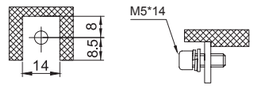


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

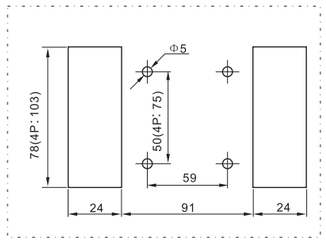
- Fixed Rear Connection Wiring



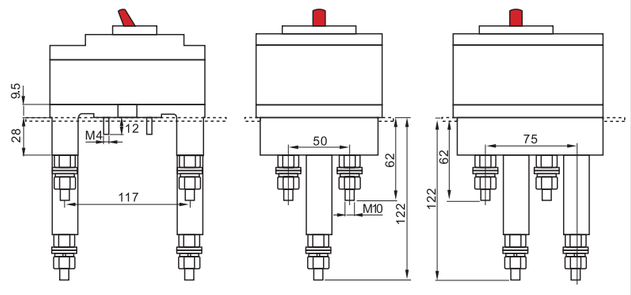
- Chart of Terminal Connection Installation Hole



- Chart of Plug-in Rear Connection Installation Hole



- Plug-in Rear Connection Wiring

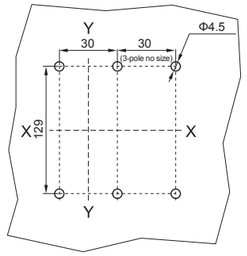


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

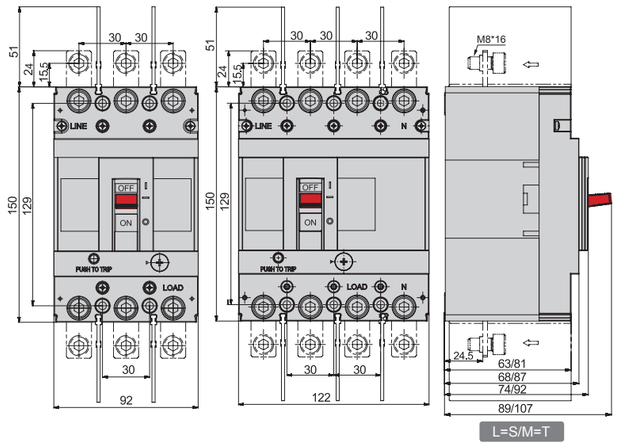
HDM6s100 Installation Dimension

- Chart of Fixed Front Connection Installation Hole

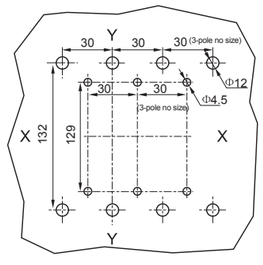


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

- Installation Dimension of Fixed Front Connection

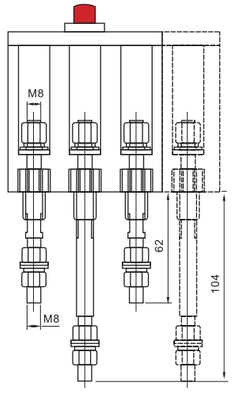


- Chart of Fixed Rear Connection Installation Hole

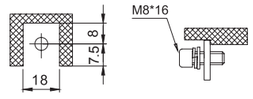


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

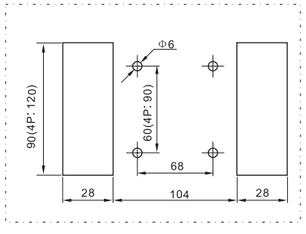
- Fixed Rear Connection Wiring



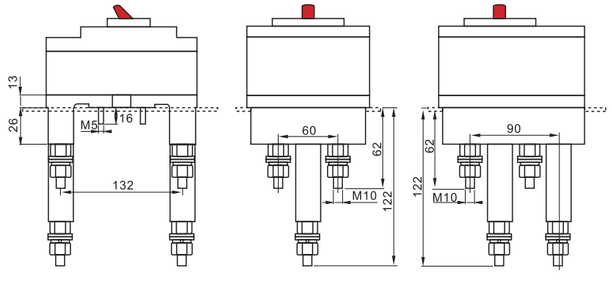
- Chart of Terminal Connection Installation Hole



- Chart of Plug-in Rear Connection Installation Hole



- Plug-in Rear Connection Wiring

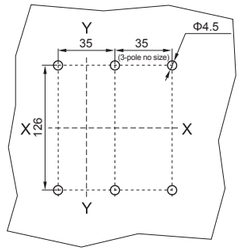


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

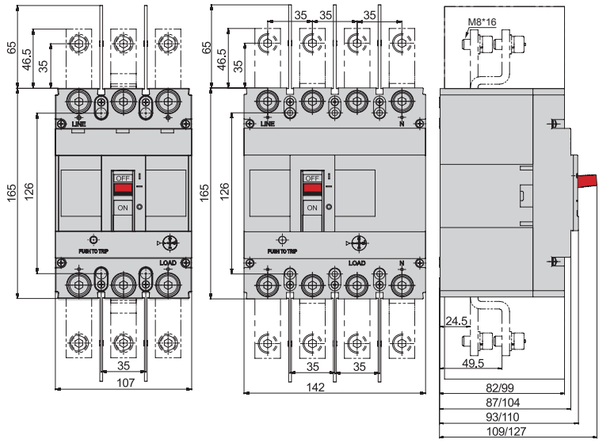
HDM6s250 Installation Dimension

● Chart of Fixed Front Connection Installation Hole

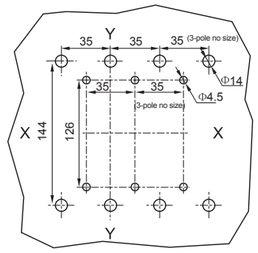


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

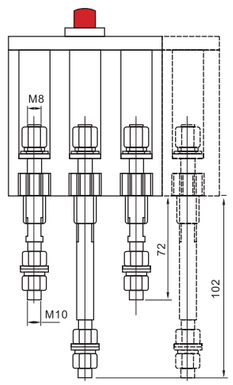


● Chart of Fixed Rear Connection Installation Hole

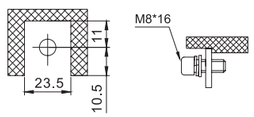


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

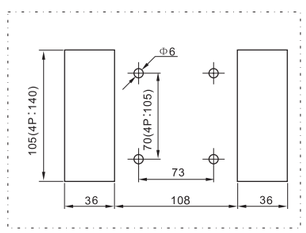
● Fixed Rear Connection Wiring



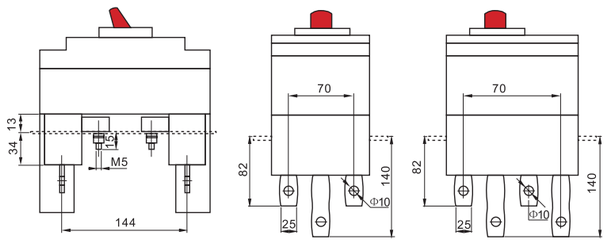
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

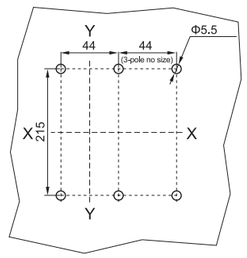


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

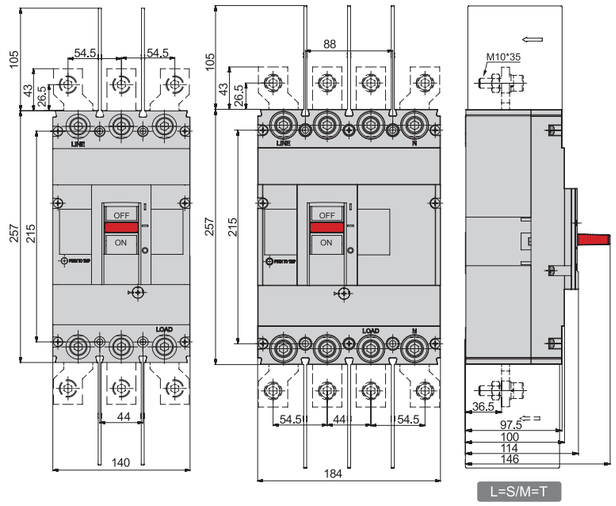
HDM6s400 Installation Dimension

● Chart of Fixed Front Connection Installation Hole

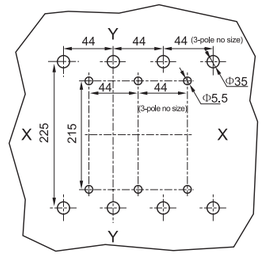


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

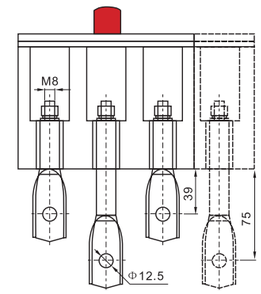


● Chart of Fixed Rear Connection Installation Hole

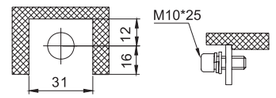


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

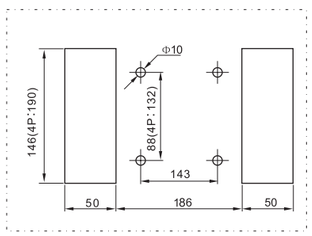
● Fixed Rear Connection Wiring



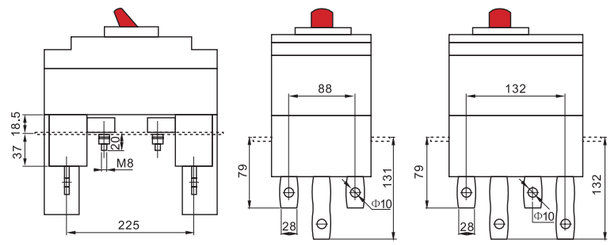
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

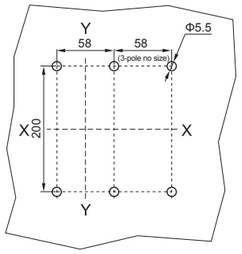


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

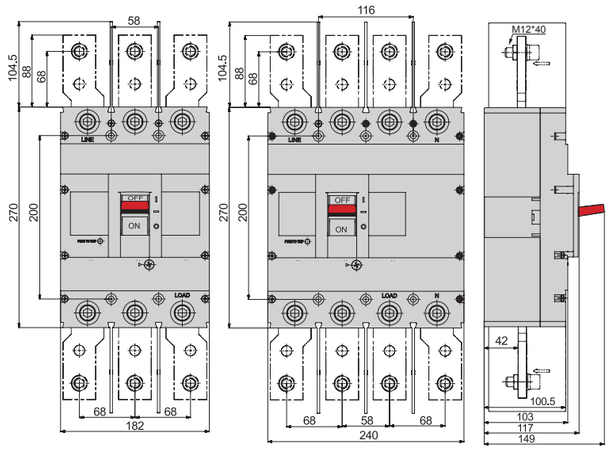
HDM6s630 Installation Dimension

● Chart of Fixed Front Connection Installation Hole

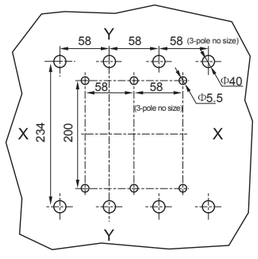


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

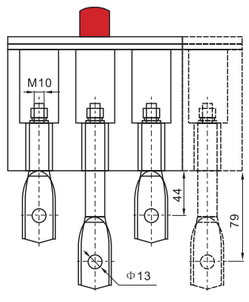


● Chart of Fixed Rear Connection Installation Hole

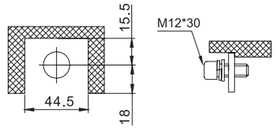


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

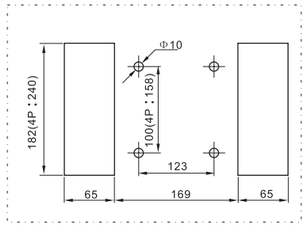
● Fixed Rear Connection Wiring



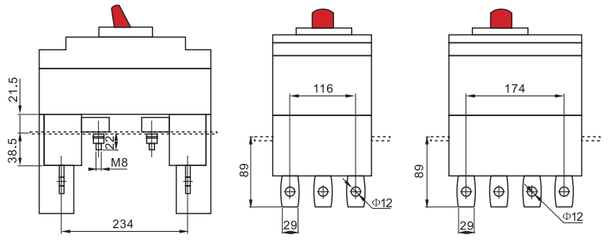
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

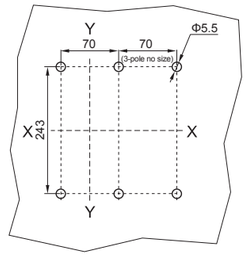


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

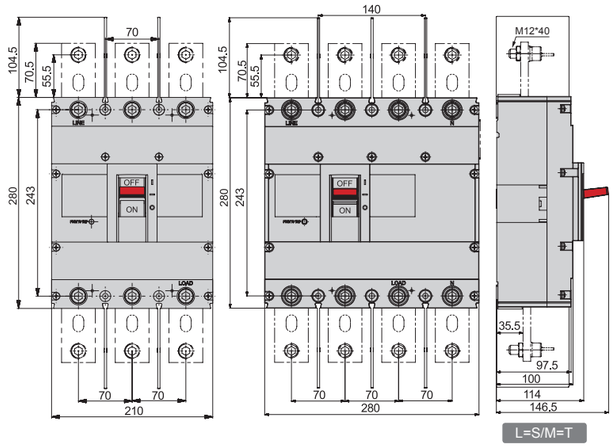
HDM6s800 Installation Dimension

● Chart of Fixed Front Connection Installation Hole

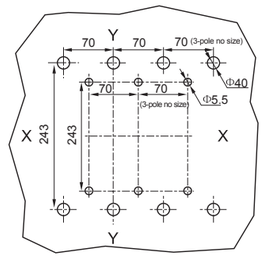


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

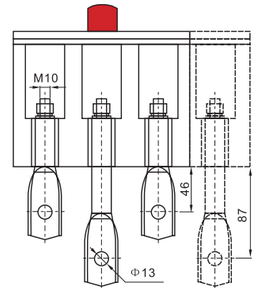


● Chart of Fixed Rear Connection Installation Hole

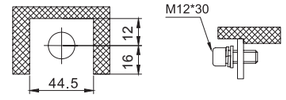


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

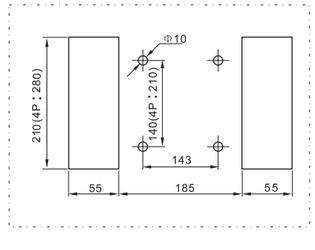
● Fixed Rear Connection Wiring



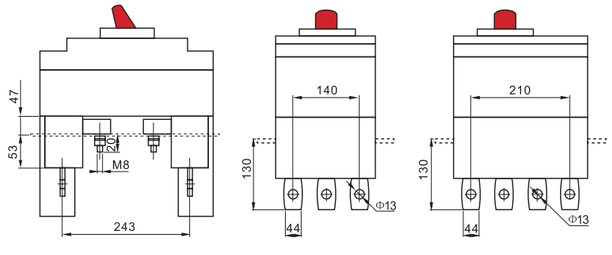
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring



HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

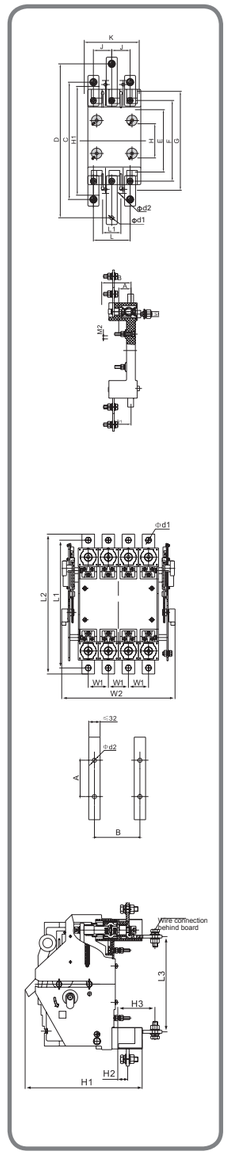
Plug-in Front Connection Installation Dimension (HDM6s100 and HDM6s250)

Equipped with Circuit Breaker	Pole No.	Appearance and Installation Dimension (mm)								
		A	B	B1	C	D	E	F	G	H
HDM6s100	3P	20	48	39	195	252	102	132	162	56
	4P	20	48	39	195	252	102	132	162	56
HDM6s250	3P	23	53	42	204	304	108	144	180	54
	4P	23	53	42	204	304	108	144	180	54

Equipped with Circuit Breaker	Pole No.	Appearance and Installation Dimension (mm)								
		H1	J	K	L	L1	M1	M2	Φd1	d2
HDM6s100	3P	178	30	90	60	30	M8	M5	Φ6.5	M5
	4P	178	30	120	90	60	M8	M5	Φ6.5	M5
HDM6s250	3P	196	35	107	70	35	M8	M5	Φ8.5	M5
	4P	196	35	142	105	70	M8	M5	Φ8.5	M5

Plug-in Front Connection Installation Dimension (HDM6s100 and HDM6s250)

Equipped with Circuit Breaker	Pole No.	Appearance Dimension (mm)									Installation Dimension		
		L1	L2	L3	H1	H2	H3	W1	W2	Φd1	A	B	Φd2
HDM6s400	3P	311	340	205	253	17.5	77	44	211	Φ11	88	141	Φ6.5
	4P	311	340	205	253	17.5	77	44	255	Φ11	132	141	Φ6.5
HDM6s630	3P	341	381	211	282	17.5	92	58	253	Φ13	116	140	Φ6.5
	4P	341	381	211	282	17.5	92	58	311	Φ13	174	140	Φ6.5
HDM6s800	3P	367	410	241	238	26	73	70	289	Φ13	140	131	Φ6.5
	4P	367	410	241	238	26	73	70	359	Φ13	210	131	Φ6.5



HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

HDM6s 63A-800A Fixed and Plug-in Circuit Breaker Connection Hole-opening Dimension

Type of Circuit Breaker	Pole No.	Exposure of Front Cover and Pull-out Handle			Exposure of Pull-out Handle Only		
		W1	L1	L11	W2	L2	L21
HDM6s63	3P	76	77	38.5	29	53	27
	4P	101	77	38.5	29	53	27
HDM6s100	3P	92	88	42	35	60	30
	4P	122	88	42	35	60	30
HDM6s250	3P	107	102	51	35	60	30
	4P	142	102	51	35	60	30
HDM6s400	3P	140	180	90	61	102	53
	4P	184	180	90	61	102	53
HDM6s630	3P	182	180	90	65	102	53
	4P	240	180	90	65	102	53
HDM6s800	3P	210	200	100	65	102	51
	4P	280	200	100	65	102	51

Safety Distance

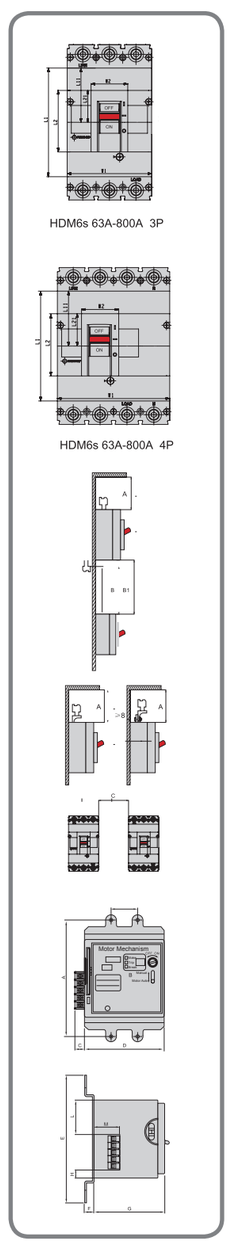
Type of Circuit Breaker	A (mm)	B (mm)	B1 (mm)	C (mm)
HDM6s63	60	60		30
HDM6s100	60	60		30
HDM6s250	60	60	Length of Exposed	30
HDM6s400	110	110	Conductor + B	70
HDM6s630	110	110		70
HDM6s800	110	110		70

Remark: The distance between the products must meet the requirements of C distance even if products have accessories

Installation Dimension

AC Motor Mechanism

Type of Circuit Breaker	A	B	C	D	E	F	G	H	L	M
HDM6s63	117	25	11	76	128	2	80	8.5	38.5	28.5
HDM6s100	129	30	11	90	144	14	80	8.5	38.5	28.5
HDM6s250	126	35	11	104	138	13	80	8.5	38.5	28.5
HDM6s400	215	44	11	140	232	22	112	12	97.5	28.5
HDM6s630	200	58	11	140	216	17	112	12	97.5	28.5
HDM6s800	243	70	11	150	260	16	112	12	97.5	28.5

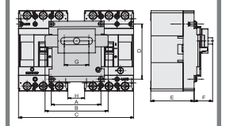


HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

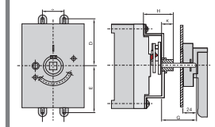
HDM6s 63-800 Frame (3P) Mechanical Interlock Dimension

Type of Circuit Breaker	Breaking Capacity Level	A	B	C	D	E	F	G	H
HDM6s63	L, S	80	116.5	181	100	67.5	38	35.5	29
	M,T	80	116.5	181	100	76.5	38	35.5	29
HDM6s100	L, S	90	117	212	103	62.5	38	47	28
	M,T	90	117	212	103	81	38	47	28
HDM6s250	L, S	99	136	241	143	91.5	38	46	27
	M,T	99	136	241	143	99	38	46	27
HDM6s400	L/S/M/T	40	190	309.5	215	97.5	43	57	29.5
HDM6s630	L/S/M/T	62	239	415.5	199.5	100	43	55	51.5
HDM6s800	L/S/M/T	51	241	459	243	97.5	45.5	55	39



HDM6s 63-800 Frame Extension Rotary Handle Base Dimension

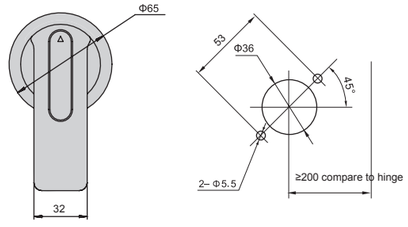
Type of Circuit Breaker	C	D	E	H	K
HDM6s63	25	50	50	52	20
HDM6s100	30	51.5	51.5	54	20
HDM6s250	35	71.5	71.5	56	20
HDM6s400	44	107.5	107.51	76	20
HDM6s630	58	100	1100	74	20
HDM6s800	70	121.5	121.5	76	20



Remark: The shortest distance of G connecting rod is 50mm, and ex-factory standard configuration is 150mm. Please contact the factory if special customization is required

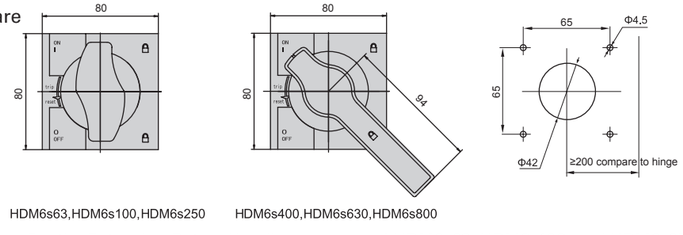
HDM6s 63-800 Frame Extension Rotary Handle

Round



HDM6s63, HDM6s100 and HDM6s250 is 65 or 95 for option, the default value is 65
HDM6s400, HDM6s630 and HDM6s800 is 95 or 125 for option, the default value is 95

Square



HDM6s63,HDM6s100,HDM6s250 HDM6s400,HDM6s630,HDM6s800

Remark: For the Extension Rotary Handle accessory of HDM6s63, HDM6s100, and HDM6s250, there are L & M two different types.

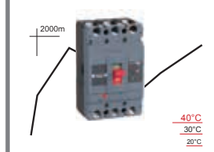
HDM6s Molded Case Circuit Breaker

Standard: IEC/EN 60947-2

Impact of High Temperature on Tripping Release Performance

When environmental temperature is over 40°C, small changes will impact overload protection properties. In tripping release time/current curve, the Ir setting value of the circuit breaker must be corrected as per the following factors:

Type of Circuit Breaker	Ambient Temperature °C				
	40	45	50	55	60
HDM6s63	1	0.94	0.88	0.80	0.72
HDM6s100	1	0.95	0.89	0.84	0.76
HDM6s250	1	0.95	0.91	0.87	0.82
HDM6s400	1	0.94	0.87	0.81	0.73
HDM6s630	1	0.93	0.88	0.83	0.76
HDM6s800	1	0.88	0.83	0.79	0.76



Impact of Altitude on Tripping Release Performance

No impact on the performance of the circuit breaker when the height is below 2000m.
When it is over 2000m, please refer to following factors of air insulation properties and cooling capability. The correction factors in the table below are applicable for the conditions of the height of installation over 2000m, the breaking capacity of the circuit breaker remains unchanged.

Altitude (m)	2000	3000	4000	5000
Max. Working Voltage (V)	415	350	310	270
30°C Thermal Rated Value (A)	In	0.96In	0.93In	0.9In
Average Isolation Voltage (V)	800	700	600	500
Dielectric Strength (V)	3000	2500	2100	1800

3-Pole (W) Total Power Loss

Type of Circuit Breaker	Power-up Current	Front Connection Wiring (Standard)	Rear Connection Wiring	Plug-in Wiring
HDM6s63	63A	26	29	29
HDM6s100	100A	40	50	50
HDM6s250	250A	63	90	90
HDM6s400	400A	103	110	130
HDM6s630	630A	160	190	220
HDM6s800	800A	200	230	290

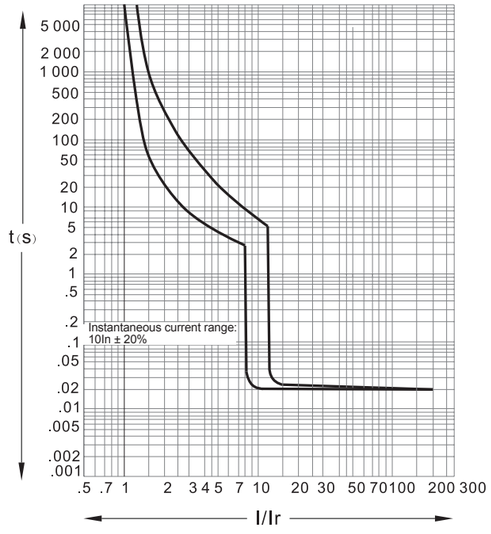
Low-voltage Distribution

HDM6s Molded Case Circuit Breaker

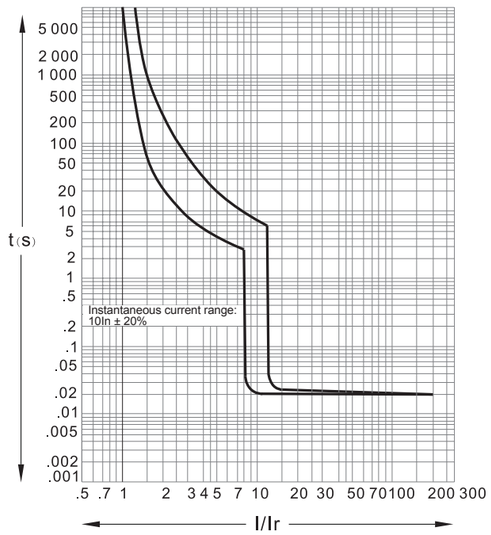
Standard: IEC/EN 60947-2

Tripping Release Curve

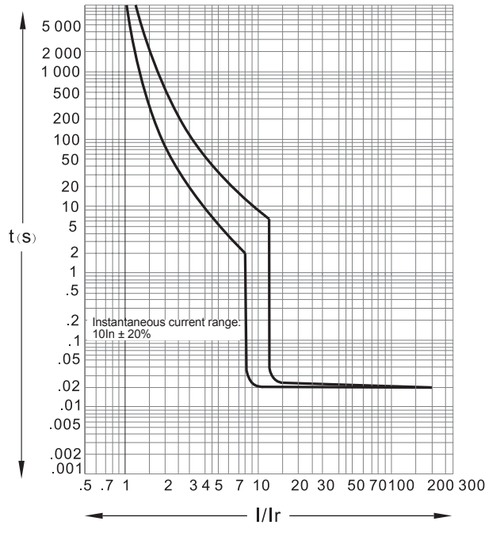
- HDM6s63 10A-63A, the black line is used for the distribution.



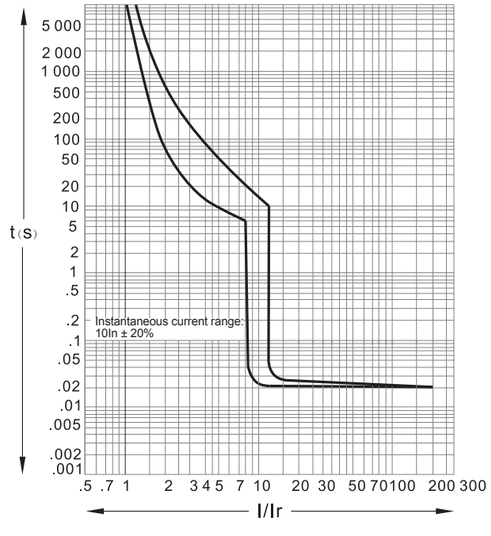
- HDM6s100 16A-50A, the black line is used for the distribution.



- HDM6s100 63A-100A, the black line is used for the distribution.



- HDM6s250 100A-250A, the black line is used for the distribution.

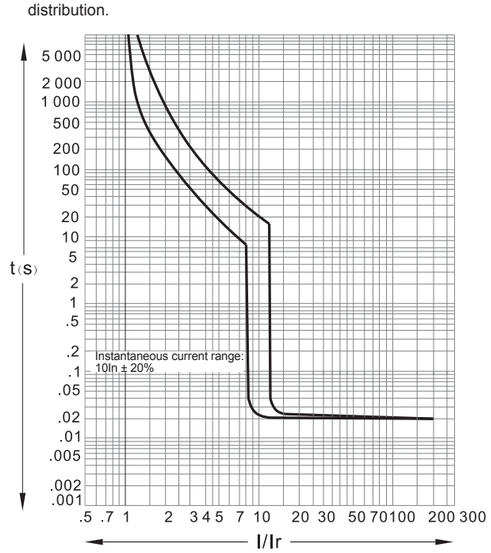


HDM6s Molded Case Circuit Breaker

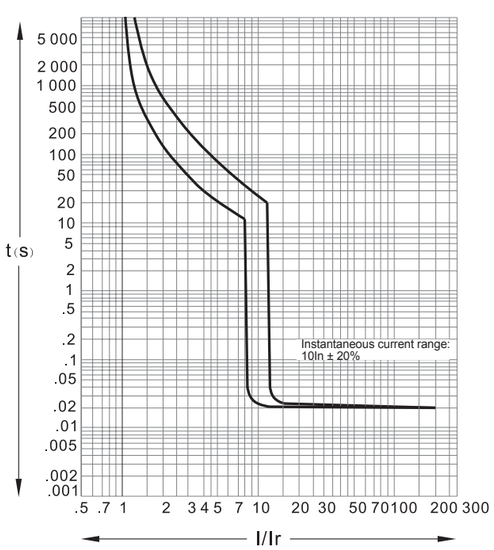
Standard: IEC/EN 60947-2

Tripping Release Curve

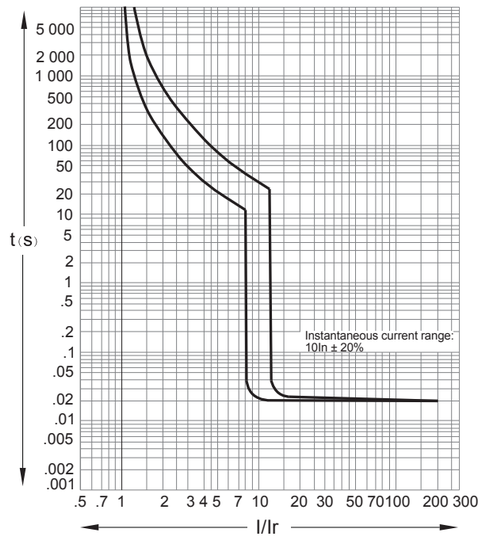
- HDM6s400 200A-400A, the black line is used for the power distribution.



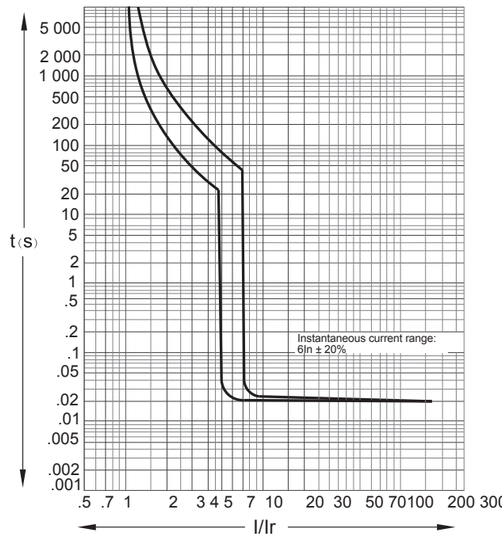
- HDM6s630 400A-630A is used for the power distribution.



- HDM6s800 400A-630A is used for the power distribution.



- HDM6s800 700A-800A is used for the power distribution.



Low-voltage Distribution

HDM6E Molded Case Circuit Breaker (Electronic)

Standard: IEC/EN 60947-2

Coding System

Name	Frame	B.C	Rated Current	Pole	Accesory	Voltage of Accesory	Installation Method
HDM6E	250	M	250	3P	10	1	5
	↓	↓	↓	↓	↓	↓	↓
	250:250AF	M:M type	250:250A	3:3P	XX: No Accessory	X:AC400V or No Accessory	F: fix-type in front of the board
				A:4P AType	10: MX		
	400:400AF		400:400A	N phase is not equipped with overcurrent trip component and N phase is always connected.The N phase does not open/close with the other 3 poles.	20:OF	N:AC400v	
			800:800A		30:MN		
				B:4P BType	60:OF+OF		
	800:800AF			N phase is not equipped with overcurrent trip component, and N phase opens/closes with other 3 poles. (N phase closes earlier, and opens later than the other 3 poles)	08:SD	D:DC24V	
					28:OF+SD		

Order Information

Type	Breaking Capacity	Rated Current	Polde	Refrence
HDM6E-250	M	250	3	HDM6E250M2503XXXF
	M	250	A	HDM6E250M2503AXXXF
	M	250	B	HDM6E250M250BXXXF
HDM6E-400	M	400	3	HDM6E400M4003XXXF
	M	400	A	HDM6E400M400AXXXF
	M	400	B	HDM6E400M400BXXXF
HDM6E-800	M	800	3	HDM6E800M8003XXXF
	M	800	A	HDM6E800M800AXXXF
	M	800	B	HDM6E800M800BXXXF

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Technical Data

Basic Information (IEC/EN60947-2)			
Frame Size AF	250	400	600
Number of Poles	3P,4P	3P,4P	3P,4P
Breaking Capacity Level	M	M	M
Rated Ultimate Shot-circuit Breaking Capacity Icu (kA rms)	50	70	70
Rated Service Shot-circuit Breaking Capacity Icu (kA rms)	30	40	40
Mechanical Durability On-off Cycle	7000	4000	2500
Electrical Durability On-off Cycle	1000	1000	500
Tripping Unit			
Rated Current (A) In			800
Accessory			
Indication Accessories			
OF	■	■	■
SD	■	■	■
Control Accessories			
MX (AC400, 230V, DC220V)	■	■	■
MN (AC400, 230V)	■	■	■
Extended Rotary Handle(Round and Square)	■	■	■
AC Motor Mechanism (AC400, 230V)	■	■	■
Mounting & Connection			
Fixed, Rear Connection	■	■	■
Plug-in, Rear Connection	■	■	■
Connection			
Spreader	■	■	■
Protection			
Phase Barrier	■	■	■
Installation Information	See page 95	See page 96	See page 97

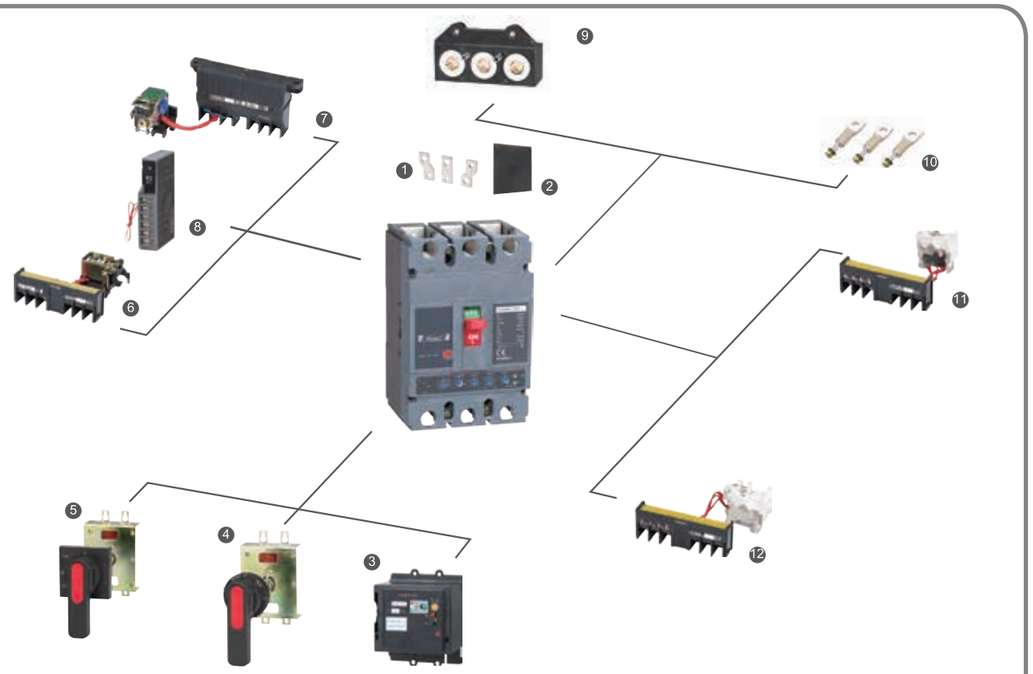
" ■ " with this option

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Basic Technical Data

- Rated Insulation Voltage Ui: AC 800V
- Rated Impulse Withstand Voltage Uimp: 8KV
- Rated Working Voltage Ue: AC 400V
- Rated Working Frequency: 50Hz
- Utilization Category: A



Complete Functions and Accessories

1	Spreader	6	MX	11	SD
2	Phase Barrier	7	MN	12	OF
3	AC Motor Mechanism	8	Leakage Module (Can't order separately)		
4	Round Extended Rotary Handle	9	Plug-in Front Connection		
5	Square Extended Rotary Handle	10	Fixed Rear Connection		

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Trip unit function

Flexible setting: offer three section protection function, including long delay, short-time delay, instantaneous protection, realize the action currents and action time adjustable, the user can set the trip module according to the load current requirements

Design patent: current transformer design, it can judge effectively even the current reaches a high value

Instantaneous trip design: trip the large short circuit current, and also improve the action reliability

Load monitoring: electronic tripping device configured load indicator lamp, can indicate the actual load status during operation accurately

Fault indication: when the hardware of electronic trip fault, the indication lit; during the normal operation, the indicator will flicker as a frequency of 50Hz, every 0.5 seconds for 1 bright

Intelligent controller funtion

Rated Current (A)	In	250	400/800
Overload Protection (long delay)			
Tripping Current(A)	Ir=In x	0.4/0.5/0.6/0.7/0.8/ 0.9/0.95/1	0.4/0.5/0.6/0.7/0.75/0.8/0.85/ 0.9/0.95/1
Delay Time(s)	Tr	0.5/1/2/4+OFF	0.5/1/2/4/8/12/16+OFF
Short-Circuit Protection (short delay)			
Tripping Current(A)	Isd=Ir x	2/2.5/3/3.5/4/5/6/7/8/10	2/2.5/3/3.5/4/5/6/7/8/10
Delay Time(s)	Tsd	0.1/0.2/0.3/0.4+0/0.1/ 0.2/0.3/0.4+OFF	0.1/0.2/0.3/0.4+0/0.1/ 0.2/0.3/0.4+OFF
Short-Circuit Protection (instantaneous)			
Tripping Current (A)	Ii=In x	2/4/6/8/10In+OFF	2/4/6/8/10/12In+OFF
N Phase Current Type		N,N/2,OFF(Unadjustable)	N,N/2,OFF

Basic Parameter Information

The 4-pole products with N phase are divided to four types.
Atype: N phase is not equipped with overcurrent trip component an N phase is always connected. The N phase does not open/close with the other 3 poles
B type: N phase is not equipped with overcurrent trip component, and N phase opens/closes with the other 3 poles (N phase closes first and then opens)

Isolation Function

HDM6E series product has isloation protection function. The operation handle can indicate "OFF" position only when the contact is really opened.

Low-voltage Distribution

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

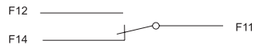
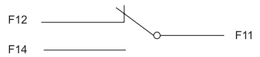
Compele Accessories of HDM6E Series

Indicating Accessories

Auxiliary Contact (OF):
Be connected in the auxiliary circuit of switch device and used for the accessories to indicate the position of the circuit breaker contacts.

Alarm Switch (SD):
Be used for the accessories under the state of on and off or trip of the indication circuit breaker for the following reasons:

- Overload or short-circuit fault
- Residual earth-leakage fault
- Artificial cial Testing Release
- Shunt Trip Release
- Line Fault and Under-voltage Release Tripping"

Accessory Name	Switch-on/off	Tripping
OF		

Accessory Name	Switch-on/off	Tripping
SD		

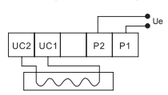
Electrical Parameter of OF & SD			
Rated Thermal Current (A)		3A	
Utilization Category		AC15	DC13
Working Current 50Hz/60Hz	AC400V	0.3A	–
	DC220V	–	0.15A

Control Accessories

Under-voltage Release (MN)
Tripping threshold between 0.35 and 0.7 times the rated voltage; when it is at 85%-110% of rated working voltage, Under-voltage Release shall ensure the circuit breaker to switch-on; when the rated working voltage is less than 35%, Under-voltage Release shall prevent switch-on of the circuit breaker.

Applicable Type of Circuit Breaker	Power Consumption of Under-voltage Coil(W)	
	AC400V	AC230V
HDM6E250	4.3	3.3
HDM6E400	3.6	2.5
HDM6E800	2	1.6

Undervoltage Release Wiring



HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Complete Accessories of HDM6 Series

Shunt Release (MX)
When the working voltage is between 70%-110% Us, the shunt release will reliably trip the circuit breaker.

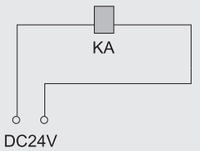
Applicable Type of Circuit Breaker	Power Consumption of Under-voltage Coil (W)		
	AC400V	AC230V	DC24V
HDM6E250	112	68.6	85.3
HDM6E400	67	62.3	100
HDM6E800	163	153	120

When the rated control supply voltage of the shunt release is DC24V, the maximum length of the copper conductor shall satisfy the following requirements:

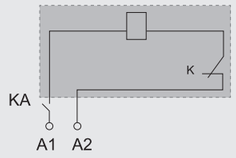
Control Supply Voltage Us (DC24V) \ Conductor Area Rated	1.5mm^2	2.5mm^2
100%Us	150m	250m
85%Us	100m	160m

When the requirements above cannot be met, it is recommended to adopt the following chart to design control loop of the shunt release.

Schematic Diagram of Shunt-trip Release in dotted –line box



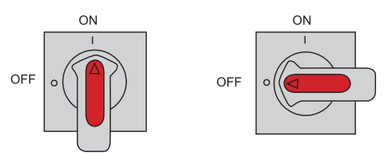
KA: it is DC24V Intermediate Relay, and the current capacity of the electric shock is 1A.



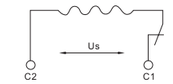
Power Input
The voltage specification of the power input
50Hz AC230V、400V

Extended Rotary Handle

- Function: indication of the three positions of switch-on, switch-off and trip
- Residual earth-leakage fault. The circuit breaker cannot switch-on when the switch board door is open
- The door cannot be opened if the circuit breaker is ON
- An extension shaft that can be adjusted to the distance between the back of circuit breaker and door, the specific distance refers to the dimensions at the rear and the installation part
- The OFF-Position of the circuit breaker can hang 1-3 locks with the diameter of 5mm



Shunt Release Wiring



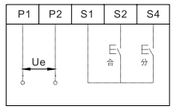
Low-voltage Distribution

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Complete Accessories of HDM6E Series

AC Motor Mechanism
Provide on-site and remote distance control circuit breaker to implement switch-on and switch-off



Phase Barriers
The phase barriers are used to reinforce isolation of connection points in installation with busbars whether insulated or not. We can easily install the phase barrier through the phase slot of this product
Both the inlet and outlet line of HDM6s has phase barrier.

Connecting Accessories

Fixed, Rear Connection
Easy to install and connect the products in the Rear Connection

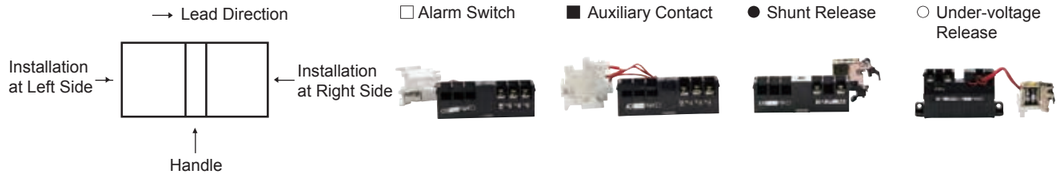
Plug-in Rear Connection
The plug-in connection for the products is easy for maintenance and replacement, but plug-in and plug-out cannot be done with the electricity

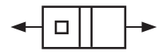
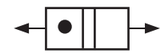
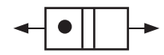
HDM6E Molded Case Circuit Breaker (Electronic)

Standard: IEC/EN 60947-2

Installation Location of Accessories

Installation Method for Tripping Release and Accessories Code



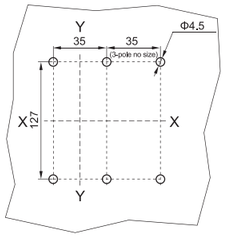
Name of Accessory	Product Type		
	HDM6E250	HDM6E400	HDM6s800
Alarm Switch			
Shunt Release			
Auxiliary Contact			
Undervoltage Release			
Two Group Auxiliary Contact			
Auxiliary Contact Alarm Switch			

HDM6E Molded Case Circuit Breaker (Electronic)

Standard: IEC/EN 60947-2

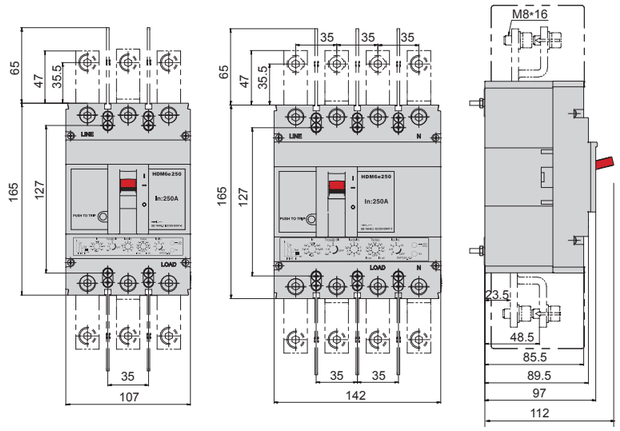
HDM6E 250AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

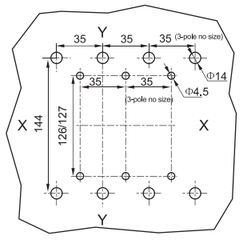


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

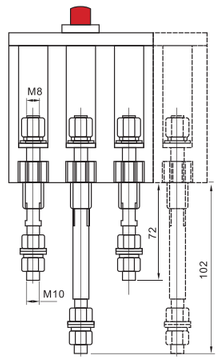


● Chart of Fixed Rear Connection Installation Hole

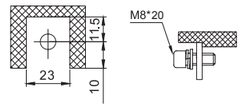


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

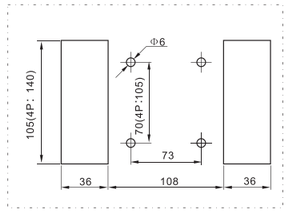
● Fixed Rear Connection Wiring



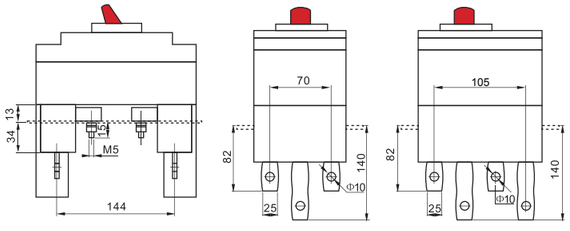
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

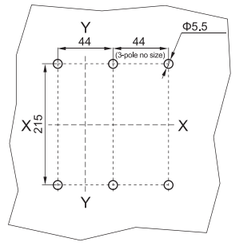


HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

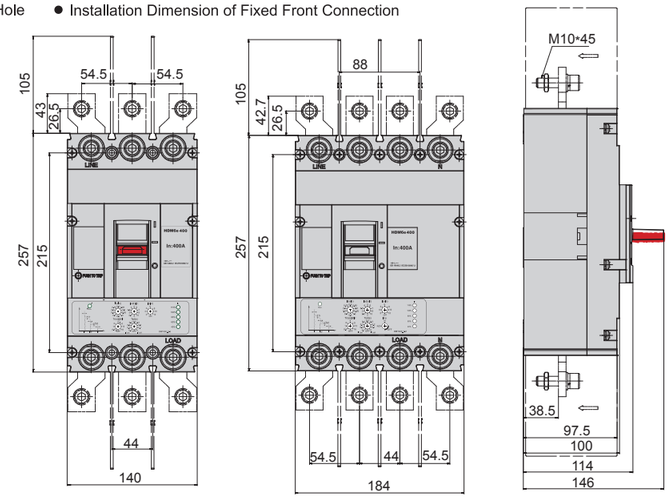
HDM6E 400AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

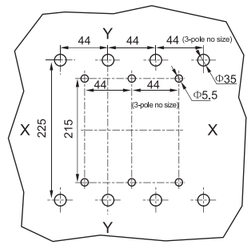


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

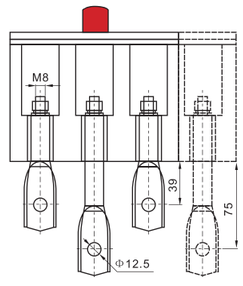


● Chart of Fixed Rear Connection Installation Hole

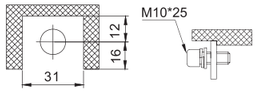


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

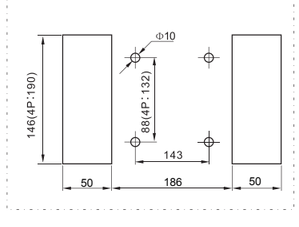
● Fixed Rear Connection Wiring



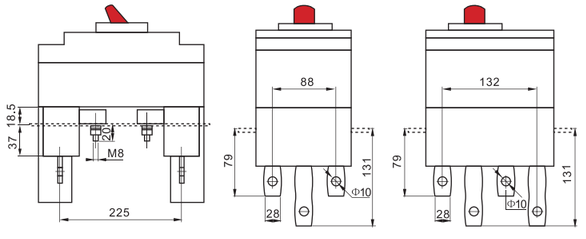
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

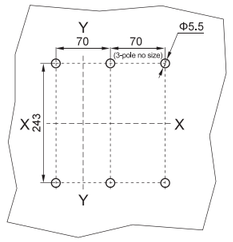


HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

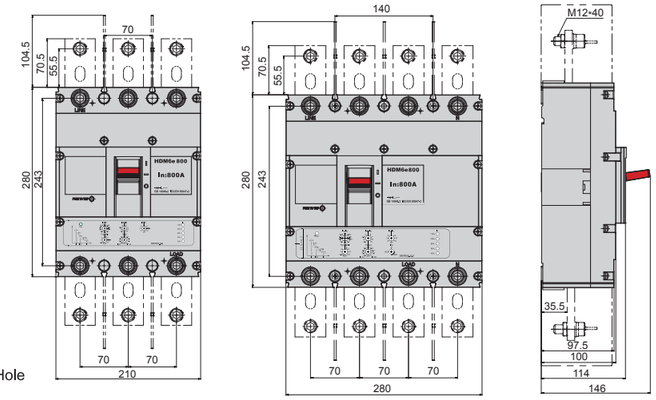
HDM6E 800AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

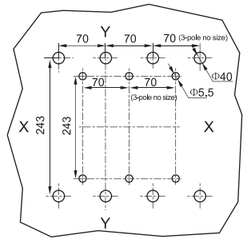


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

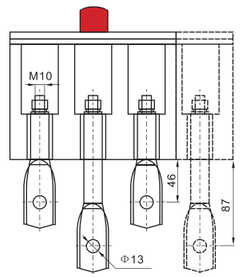


● Chart of Fixed Rear Connection Installation Hole

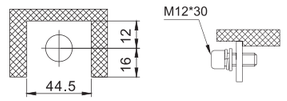


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

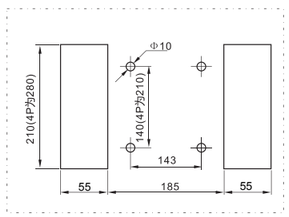
● Fixed Rear Connection Wiring



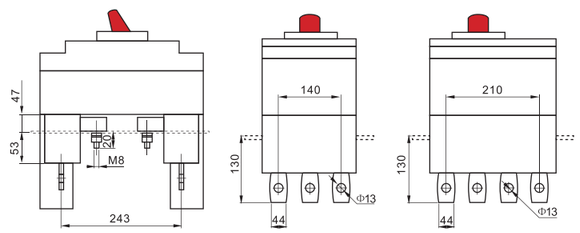
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring



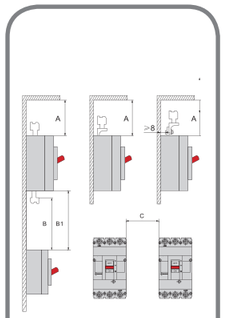
HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Safety Distance

Type of Circuit Breaker	A(mm)	B(mm)	B1(mm)	C(mm)
HDM6E250	60	60	Legnth of Exposed Conductor +B	30
HDM6E400	110	110		70
HDM6E800	110	110		70

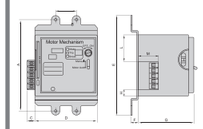
Remark: no matter whether the products have the accessories, the distance between the products must meet the requirements of C distance.



Installation Dimension

Motor Mechanism

Type of Circuit Breaker	A	B	C	D	E	F	G	H	L	M
HDM6E250AF	127	35	11	104	138	16	80	8.5	38.5	28.5
HDM6E400AF	215	44	11	140	232	22	112	12	97.5	28.5
HDM6E800AF	243	70	11	150	260	16	112	12	97.5	28.5

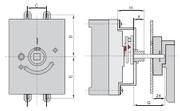


HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

HDM6E Extension Rotary Handle Base Dimension

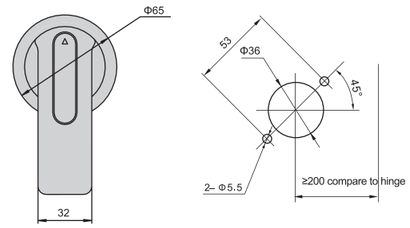
Type of Circuit Breaker	C	D	E	H	K
HDM6E250	35	71.5	71.5	56	20
HDM6E400	44	107.5	107.5	76	20
HDM6E800	70	121.5	121.5	76	20



Remark: the shortest distance of G connecting rod is 50mm and ex-factory standard configuration is 150mm, please contact the factory if the special customization is required

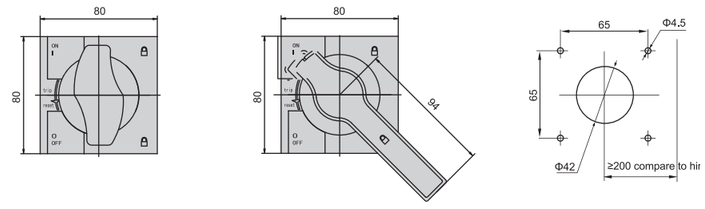
HDM6E Extension Rotary Handle

Round



HDM6E250 is 65 or 95 for option, the default value is 65.
HDM6E400,HDM6E800 is 95 or 125 for option, the default value is 95.

Square



HDM6E250AF HDM6E400/800AF

HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Impact of Altitude on Tripping Release Performance

No impact on the performance of the circuit breaker when the height is below 2000m.
When it is over 2000m, please refer to following factors of air insulation properties and cooling capability. The correction factors in the table below are applicable for the conditions of the height of installation over 2000m, the breaking capacity of the circuit breaker remains unchanged.

Altitude(m)	2000	3000	4000	5000
Max. Working Voltage(V)	415	350	310	270
30**°C** Thermal Rated Value(A)	In	0.96In	0.93In	0.96In
Average Isolation Voltage(V)	800	700	600	500
Dielectric Strength(V)	3000	2500	2100	1800

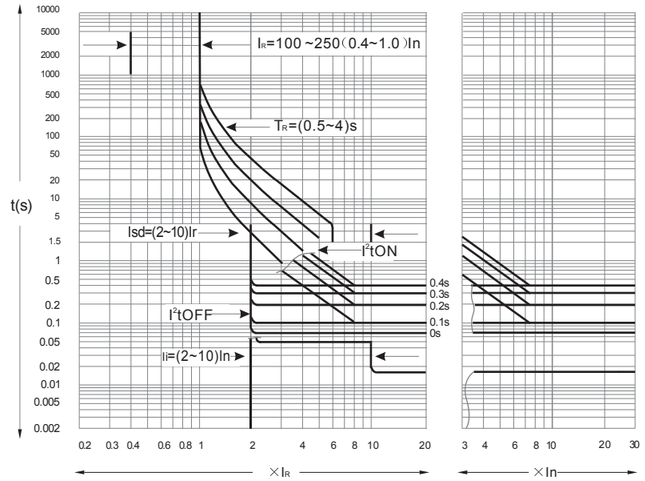
Low-voltage Distribution

HDM6E Molded Case Circuit Breaker (Electronic)

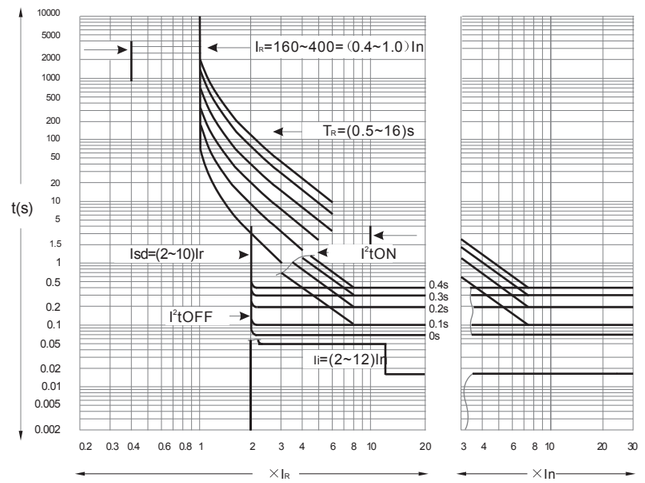
Standard IEC/EN 60947-2

Tripping Release Curve

HDM6E 250AF



HDM6E 400AF

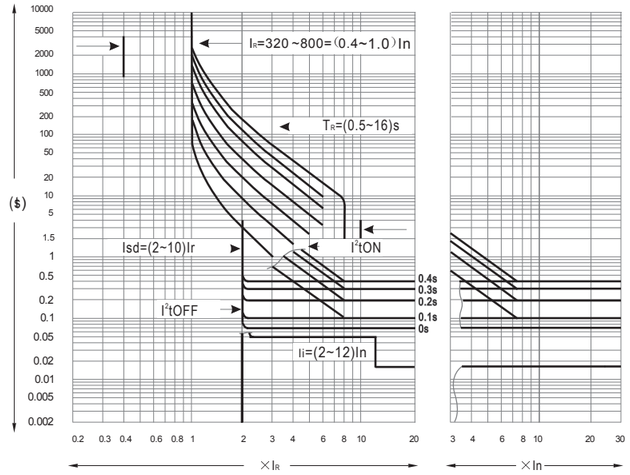


HDM6E Molded Case Circuit Breaker (Electronic)

Standard IEC/EN 60947-2

Tripping Release Curve

HDM6E 800AF



Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

3SERIES MORE VALUE FOR PRICE!

CE

Basic parameters

		HDM3L-125		HDM3L-160	
Rated voltage Ue(V)		400/415		400/415	
Rated current In(A)		16/20/25/32/40/50/63/80/100/125		100/125/140/160	
Rated insulation voltage Ui(V)		800		800	
Rated impulse withstand voltage Uimp (KV)		8		8	
Number of poles		3/4（A,B）		3/4（A,B）	
Rated residual operating current IΔn mA (three rating adjustable)	Non- delay type	KA：30mA,100mA,300mA		KA：30mA,100mA,300mA	
		KB：100mA,300mA,500mA		KB：100mA,300mA,500mA	
	Delay type	KB：100mA,300mA,500mA		KB：100mA,300mA,500mA	
Rated residual non-tripping current IΔno mA		50% IΔn		50% IΔn	
Non-delay type: breaking time		≤ 0.2		≤ 0.2	
Fixed delay: 2IΔn limit non-actuating time s		0.1/0.2/0.3/0.4/0.5/1		0.1/0.2/0.3/0.4/0.5/1	
Delay adjustable type: limit non-actuating time S under 2IΔn state		Y1：0.1/0.2/0.3s		Y1：0.1/0.2/0.3s	
		Y2：0.4/0.5/1s		Y2：0.4/0.5/1s	
Breaking capacity		S	F	S	F
Icu (415V) 50Hz/60Hz		35	50	35	50
Ics (415V) 50Hz/60Hz		21	30	21	30
Rated residual short-circuit making capacity IΔm(KA)		25% Icu		25% Icu	
Mechanical life with maintenance		40000		40000	
Mechanical life without maintenance		20000		20000	
Electrical life 400V		8000		8000	
Modular mounting of accessories		■		■	
Isolation function		■		■	
Protection type		Distribution protection		Distribution protection	
		Motor protection		Motor protection	
Tripping		Thermal magnetic tripping		Thermal magnetic tripping	
Wiring mode					
Fixed front connection		■		■	
Fixed rear connection		■		■	
Plug-in rear connection		■		■	
Dimension（mm）	3P	92x150x93.5		107*165*94	
	4P	122x150x93.5		142*165*94	
Product accessories					
Shunt release		■		■	
Alarm contact		■		■	
Auxiliary contacts (1NO1NC)		■		■	
Auxiliary contacts (2NO2NC)		■		■	
Leakage alarm tripping module		■		■	
Leakage alarm non-tripping module		■		■	
Extension terminal		■		■	
Electronic motor operating mechanism CD2		■		■	
Round handle operating mechanism		■		■	
Round extended-handle operating mechanism		■		■	
Square handle operating mechanism		■		■	
Square extended-handle operating mechanism		■		■	
Interphase barriers		■		■	
Certification		CE		CE	

Note: when the rated residual current In is at 30mA-100mA-300mA rating, the delay duration can only be chosen as non-delay mode

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

3SERIES MORE VALUE FOR PRICE!

CE

HDM3L-250		HDM3L-400		HDM3L-630	
400/415		400/415		400/415	
100/125/140/160/180/200/225/250		200/225/250/315/350/400		400/500/630	
800		800		800	
8		8		8	
3/4（A,B）		3/4（A,B）		3/4（A,B）	
KA：30mA,100mA,300mA		KB：100mA,300mA,500mA		KB：100mA,300mA,500mA	
KB：100mA,300mA,500mA		KC：300mA, 500mA, 1000mA		KC：300mA, 500mA, 1000mA	
KB：100mA,300mA,500mA		KB：100mA,300mA,500mA		KB：100mA,300mA,500mA	
		KC：300mA, 500mA, 1000mA		KC：300mA, 500mA, 1000mA	
50% IΔn		50% IΔn		50% IΔn	
≤ 0.2		≤ 0.2		≤ 0.2	
0.1/0.2/0.3/0.4/0.5/1		0.1/0.2/0.3/0.4/0.5/1		-	
Y1：0.1/0.2/0.3s		Y1：0.1/0.2/0.3s		0/0.2/0.5	
Y2：0.4/0.5/1s		Y2：0.4/0.5/1s		/	
S	F	S	F	S	F
35	50	50	70	50	70
21	30	30	42	30	40
25% Icu		25% Icu		25% Icu	
40000		20000		20000	
20000		10000		10000	
8000		7500		7500	
■		■		■	
■		■		■	
Distribution protection		Distribution protection		Distribution protection	
Motor protection		Motor protection		/	
Thermal magnetic tripping		Thermal magnetic tripping		Thermal magnetic tripping	
■		■		■	
■		■		■	
■		■		■	
107*165*94		150*257*107.5		210*280*111	
142*165*94		198*257*107.5		210*280*111	
■		■		■	
■		■		■	
■		/		/	
■		■		■	
■		■		■	
■		■		■	
■		■		■	
■		■		■	
■		■		■	
■		■		■	
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■		■		■	
■		■		■	
CE		CE		CE	

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

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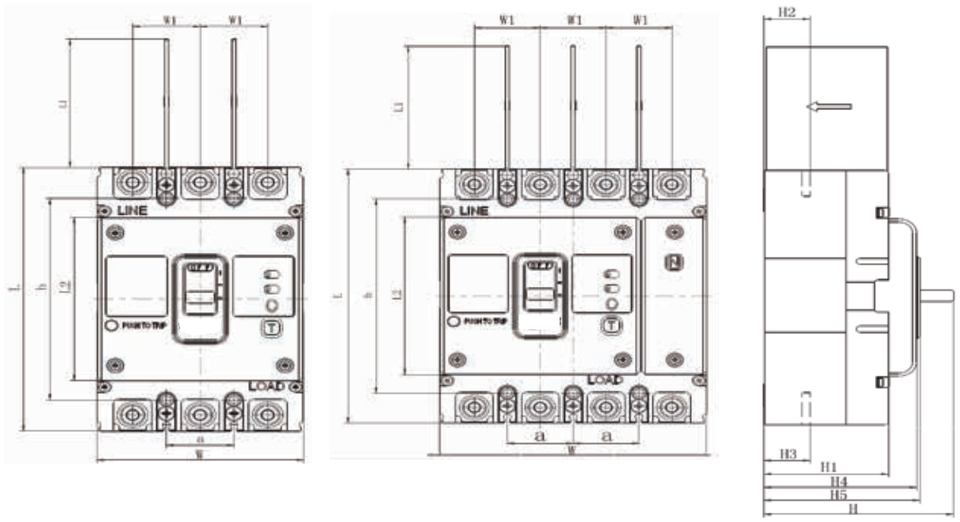
HDM3L Fixed front connection installation dimension



Frame	Number of poles	appearance dimension											Mounting dimension	
		L	L1	L2	W	W1	H	H1	H2	H3	H4	H5	a	b
125	3P	150	50	96	92	30	111.5	81	28.5	28	93.5	95.5	30	129
	4P				122									
160/250	3P	165	80	102	107	35	112.5	80	23	23	94	95.5	35	126
	4P				142									
400	3P	257	104.5	150	150	48	145.9	96.2	36	36/36.5	107.5	112.5	44	215
	4P				198									
630	3P	280	102	102	210	70	160	108	40.5	41.5	111	119	70	243
	4P				280									

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

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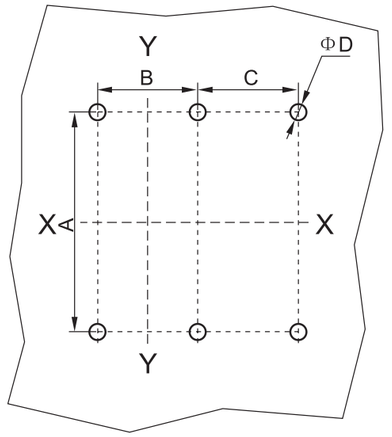
HDM3L Fixed front connection installation hole



Note: X-X, Y-Y is the center of the three-pole circuit breaker

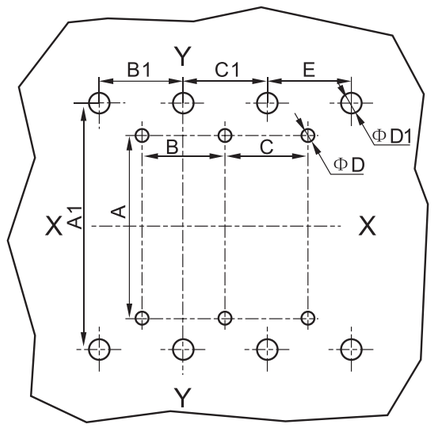
Frame	Number of poles	A	B	C	D
125	3P	129	30	-	5.0
	4P	129	30	30	5.0
160/250	3P	126	35	-	5.5
	4P	126	35	35	5.5
400	3P	215	44	-	6.5
	4P	215	44	-	6.5
630	3P	243	70	-	7.5
	4P	243	70	70	7.5

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

HDM3L Fixed rear connection installation hole



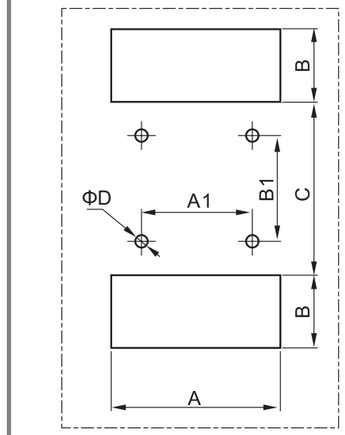
Note: X-X, Y-Y is the center of the three-pole circuit breakers

Frame	Number of poles	A	B	C	ΦD	A1	B1	C1	E	ΦD1
125	3P	129	30	-	5.0	132	30	30	-	15
	4P	129	30	30	5.0	132	30	30	30	15
160/250	3P	126	35	-	5.5	145	35	35	-	15
	4P	126	35	35	5.5	145	35	35	35	15
400	3P	215	44	-	6.5	225	48	48	-	32
	4P	215	44	-	6.5	225	48	48	48	32
630	3P	243	70	-	7.5	243	70	70	-	40
	4P	243	70	70	7.5	243	70	70	70	40

HDM3L Earth-Leakage Circuit Breaker

HDM3L Technical Parameters

HDM3L plug-in rear connection hole



Frame	Number of poles	A	A1	B	B1	C	ΦD
125	3P	92	60	30	60	102	4.5
	4P	122	90				
160/250	3P	109	70	40	74.5	104	6
	4P	144	105				
400	3P	152	88	54	145	170	8.5
	4P	200	132				
630	3P	212	140	62	143	185	11
	4P	282	210				

HDM3L plug-in front connection hole

*Refer to above chart of “plug-in rear connection hole

Frame	Number of poles	A	A1	B	B1	C	ΦD
125	3P	/	30	/	110	/	5
	4P						
160/250	3P	/	35	/	150	/	5
	4P						

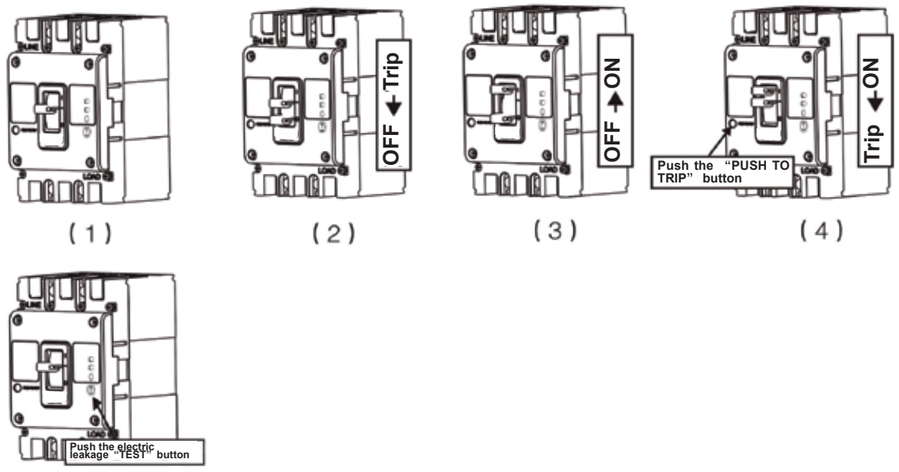
Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

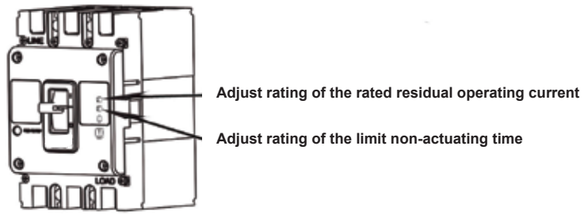
Debugging and maintenance

HDM3L Operation and debugging

Step 1. Check the handle state of the circuit breaker
1. Default position of the circuit breaker is at the “TRIP” position
2. Press the handle to the “OFF” position before tripping operation
3. Close the circuit breaker to the “ON” position
4. Upon pressing the “PUSH TO TRIP” button, the handle of the circuit breaker should return to the “tripping” position
5. The leakage test button needs to be pressed once every month, to check whether the leakage function of the product is valid



Step 2: Select the correct rating for the rated residual operating current and limit non-actuating time



Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

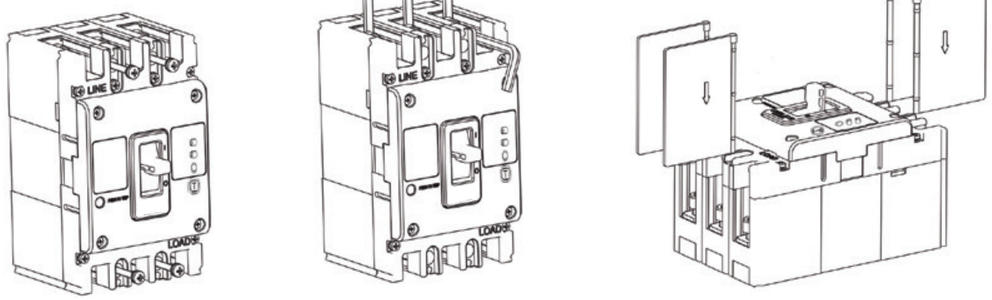
Debugging and maintenance

HDM3L Repair and maintenance

- The repair and maintenance must be operated by qualified persons;
- Superior power must be cut off to ensure the incoming terminals are electrically neutral (except for the testing items using the leakage testing button);
- Conduct maintenance and protection once a year under normal operating conditions with the maintenance content as follow:

Type	Item	Details
Leakage molded framecircuit breaker	Appearance	Free from dust, condensation, to be cleaned if necessary
		Free from damage
		No color degradation of the frame and the connecting terminal
	Flash barrier	Inserting the flash barrier in place according to the instructions
	Connector connection	Tighten without looseness according to the torque table
	Handle On/Off operation	Flexible in operations
	Trip button	After tripping, the handle directs to the tripping position
	Insulation test	Test according to the product testing requirements on the home page
	Test with the leakage testing button	With the leakage testing button pressed once every month, the circuit breaker should be normally opened and closed. Time to press the test button cannot be too long. If the product trip every month, do not press it repeatedly. Please contact the local dealer to resolve the problem.
Circuit breaker with accessories	With shunt release	The circuit breaker shall be disconnected reliably and the handle indicates trip if the release is provided with rated voltage
	With auxiliary contacts	The switching signal of the auxiliary contact shall be normal when the circuit breaker is connected and then disconnected.
	With alarm contacts	The switching signal of the alarm contact shall be normal when the circuit breaker is closed and then tripped by pressing the trip button.

HDM3L torque table and connecting conductors

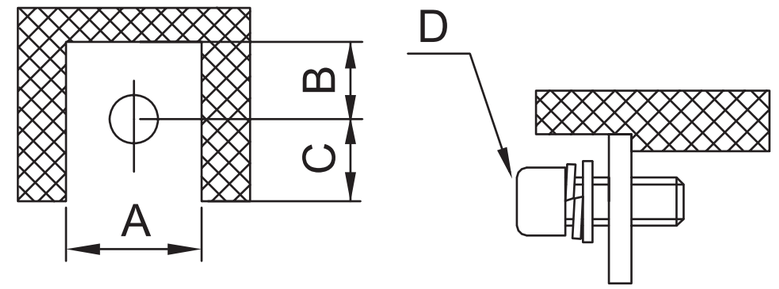


Torque and connecting conductor table

Frame	Hexagon	Torque force N.m
125	M8	9.5-10.5
160/250	M8	9.5-10.5
400	M10	19.5-20.5
630	M12	29.5-30.5

HDM3L Earth-Leakage Circuit Breaker
Appendix
3SERIES MORE VALUE FOR PRICE!
Low-voltage Distribution

Figure of HDM3L terminal board mounting holes (mm)



Note: 1. Circuit breakers of the following models are adaptable to DIN46235 connection lug.
2. In any case the connection capability beyond the data listed in the following table, expanding terminal accessories can be bought from the company.

Model	Maximum connecting capability of DIN46235	A	B	C	D
125	25mm^2	18	7.5	9	M8X16
160/250	70mm^2	25	12.5	9.5	M8X20
400	120mm^2	32	14	16	M10X25
630	-	44.5	12	16	M12X30

HDM3L Earth-Leakage Circuit Breaker

Appendix

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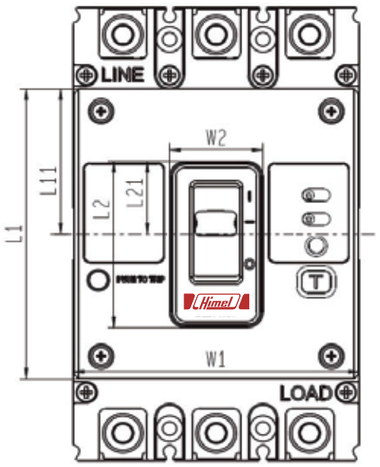
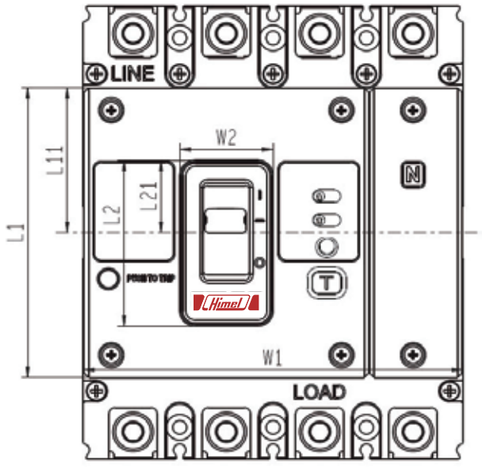
Hole dimension for HDM3L-125A~630A fixed or plug-in breaker panel (mm)



HDM3L-125A~630A 3P



HDM3L-125A~630A 4P

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Model	Number of poles	Show front cover and toggle handle			Only show toggle handle		
		W1	L1	L11	W2	L2	L21
125	3P	92	96	48	30	55	24
	4P	122	96	48	30	55	24
160/250	3P	107	102	51	26	54	27
	4P	142	102	51	26	54	27
400	3P	150	150	75	52.5	75.5	41
	4P	198	150	75	52.5	75.5	41
630	3P	210	102	61	65	102	51
	4P	280	102	61	65	102	51

HDM3L Earth-Leakage Circuit Breaker

Product selection

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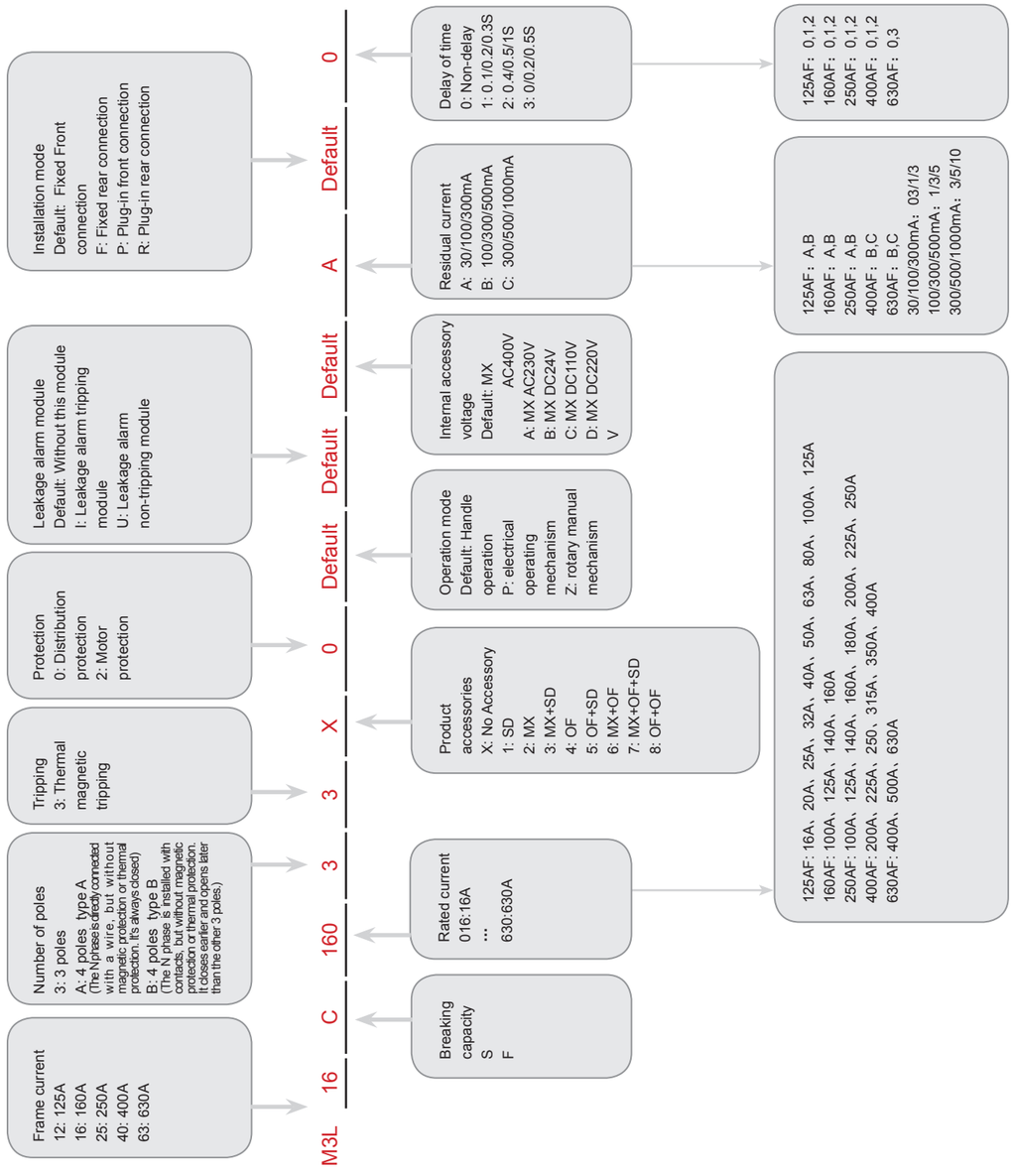
For example: M3L16C16033000A0 HDM3L-160C/3300 160A 03/1/3



Note: 1
1. Motor protection of 630A is not available;
2. Plug-in front connection is available for 400A & above
3. Delay duration: 0/0.2/0.5S for 630A is adjustable
4. Time-delay product is unavailable for 30/100/300mA;

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Accessory selection, HDM3L

HDM3L	Current frame	Breaking Capacity	Accessories	Voltage Type	Installation Position	Poles
	100	F	H1	A2	L	3P
	125:25A	S	AL1:Alarm (with wire)	MX shunt:	L:Left	3P:3P
	160:160A	F	AL2:Alarm (with terminal)	A2:AC230V	R:Right	4P:4P
	250:250A		MX1:Shunt release (with wire)	A3:AC400V		
	400:400A		MX2:Shunt release (with terminal)	D1:DC110V		
	630:630A		OF11K1B:Auxiliary contact left(with wire)	D2:DC24V		
			OF11K2B:Auxiliary contact left(with terminal)	D3:DC220V		
			C3:Expanding terminal 3P(3pcs)			
			C4:Expanding terminal 4P(4pcs)			
			IB3:Interphase clapboard 3P(2pcs)			
			IB4:Interphase clapboard 4P(3pcs)			
			OFAL1:Auxiliary contact&Alarm (with wire)			
			OFAL2:Auxiliary contact&Alarm (with terminal)			
			CD1:AC Elecyric operating mechanism			
			CD2:DC Elecyric operating mechanism			

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Material Order Number

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -125F	40	3P	30/100/300mA	Not Delay Time Type	HDM3L12F04033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F04033X0B0
				0.1/0.2/0.3s	HDM3L12F04033X0B1
				0.4/0.5/1s	HDM3L12F04033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12F040A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F040A3X0B0
				0.1/0.2/0.3s	HDM3L12F040A3X0B1
				0.4/0.5/1s	HDM3L12F040A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12F040B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F040B3X0B0
				0.1/0.2/0.3s	HDM3L12F040B3X0B1
				0.4/0.5/1s	HDM3L12F040B3X0B2
	50	3P	30/100/300mA	Not Delay Time Type	HDM3L12F05033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F05033X0B0
				0.1/0.2/0.3s	HDM3L12F05033X0B1
				0.4/0.5/1s	HDM3L12F05033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12F050A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F050A3X0B0
				0.1/0.2/0.3s	HDM3L12F050A3X0B1
				0.4/0.5/1s	HDM3L12F050A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12F050B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F050B3X0B0
				0.1/0.2/0.3s	HDM3L12F050B3X0B1
				0.4/0.5/1s	HDM3L12F050B3X0B2
	63	3P	30/100/300mA	Not Delay Time Type	HDM3L12F06333X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F06333X0B0
				0.1/0.2/0.3s	HDM3L12F06333X0B1
				0.4/0.5/1s	HDM3L12F06333X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12F063A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F063A3X0B0
				0.1/0.2/0.3s	HDM3L12F063A3X0B1
				0.4/0.5/1s	HDM3L12F063A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12F063B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F063B3X0B0
				0.1/0.2/0.3s	HDM3L12F063B3X0B1
				0.4/0.5/1s	HDM3L12F063B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Material Order Number

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -125F	80	3P	30/100/300mA	Not Delay Time Type	HDM3L12F08033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F08033X0B0
				0.1/0.2/0.3s	HDM3L12F08033X0B1
				0.4/0.5/1s	HDM3L12F08033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12F080A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F080A3X0B0
				0.1/0.2/0.3s	HDM3L12F080A3X0B1
				0.4/0.5/1s	HDM3L12F080A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12F080B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F080B3X0B0
				0.1/0.2/0.3s	HDM3L12F080B3X0B1
				0.4/0.5/1s	HDM3L12F080B3X0B2
	100	3P	30/100/300mA	Not Delay Time Type	HDM3L12F10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F10033X0B0
				0.1/0.2/0.3s	HDM3L12F10033X0B1
				0.4/0.5/1s	HDM3L12F10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12F100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F100A3X0B0
				0.1/0.2/0.3s	HDM3L12F100A3X0B1
				0.4/0.5/1s	HDM3L12F100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12F100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12F100B3X0B0
				0.1/0.2/0.3s	HDM3L12F100B3X0B1
				0.4/0.5/1s	HDM3L12F100B3X0B2
HDM3L -125S	40	3P	30/100/300mA	Not Delay Time Type	HDM3L12S04033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S04033X0B0
				0.1/0.2/0.3s	HDM3L12S04033X0B1
				0.4/0.5/1s	HDM3L12S04033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12S040A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S040A3X0B0
				0.1/0.2/0.3s	HDM3L12S040A3X0B1
				0.4/0.5/1s	HDM3L12S040A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12S040B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S040B3X0B0
				0.1/0.2/0.3s	HDM3L12S040B3X0B1
				0.4/0.5/1s	HDM3L12S040B3X0B2
				0.4/0.5/1s	HDM3L12S050B3X0B2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -125S	50	3P	30/100/300mA	Not Delay Time Type	HDM3L12S05033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S05033X0B0
				0.1/0.2/0.3s	HDM3L12S05033X0B1
				0.4/0.5/1s	HDM3L12S05033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12S050A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S050A3X0B0
				0.1/0.2/0.3s	HDM3L12S050A3X0B1
				0.4/0.5/1s	HDM3L12S050A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12S050B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S050B3X0B0
				0.1/0.2/0.3s	HDM3L12S050B3X0B1
				0.4/0.5/1s	HDM3L12S050B3X0B2
	63	3P	30/100/300mA	Not Delay Time Type	HDM3L12S06333X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S06333X0B0
				0.1/0.2/0.3s	HDM3L12S06333X0B1
				0.4/0.5/1s	HDM3L12S06333X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12S063A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S063A3X0B0
				0.1/0.2/0.3s	HDM3L12S063A3X0B1
				0.4/0.5/1s	HDM3L12S063A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12S063B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S063B3X0B0
				0.1/0.2/0.3s	HDM3L12S063B3X0B1
				0.4/0.5/1s	HDM3L12S063B3X0B2
	80	3P	30/100/300mA	Not Delay Time Type	HDM3L12S08033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S08033X0B0
				0.1/0.2/0.3s	HDM3L12S08033X0B1
				0.4/0.5/1s	HDM3L12S08033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12S080A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S080A3X0B0
				0.1/0.2/0.3s	HDM3L12S080A3X0B1
				0.4/0.5/1s	HDM3L12S080A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12S080B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S080B3X0B0
				0.1/0.2/0.3s	HDM3L12S080B3X0B1
				0.4/0.5/1s	HDM3L12S080B3X0B2
				0.4/0.5/1s	HDM3L12S100B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

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Accessory selection, HDM3L

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -125S	100	3P	30/100/300mA	Not Delay Time Type	HDM3L12S10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S10033X0B0
				0.1/0.2/0.3s	HDM3L12S10033X0B1
				0.4/0.5/1s	HDM3L12S10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L12S100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S100A3X0B0
				0.1/0.2/0.3s	HDM3L12S100A3X0B1
				0.4/0.5/1s	HDM3L12S100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L12S100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L12S100B3X0B0
				0.1/0.2/0.3s	HDM3L12S100B3X0B1
				0.4/0.5/1s	HDM3L12S100B3X0B2
HDM3L -160F	100	3P	30/100/300mA	Not Delay Time Type	HDM3L16F10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F10033X0B0
				0.1/0.2/0.3s	HDM3L16F10033X0B1
				0.4/0.5/1s	HDM3L16F10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16F100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F100A3X0B0
				0.1/0.2/0.3s	HDM3L16F100A3X0B1
				0.4/0.5/1s	HDM3L16F100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16F100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F100B3X0B0
				0.1/0.2/0.3s	HDM3L16F100B3X0B1
				0.4/0.5/1s	HDM3L16F100B3X0B2
	125	3P	30/100/300mA	Not Delay Time Type	HDM3L16F12533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F12533X0B0
				0.1/0.2/0.3s	HDM3L16F12533X0B1
				0.4/0.5/1s	HDM3L16F12533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16F125A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F125A3X0B0
				0.1/0.2/0.3s	HDM3L16F125A3X0B1
				0.4/0.5/1s	HDM3L16F125A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16F125B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F125B3X0B0
				0.1/0.2/0.3s	HDM3L16F125B3X0B1
				0.4/0.5/1s	HDM3L16F125B3X0B2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -160F	140	3P	30/100/300mA	Not Delay Time Type	HDM3L16F14033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F14033X0B0
				0.1/0.2/0.3s	HDM3L16F14033X0B1
				0.4/0.5/1s	HDM3L16F14033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16F140A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F140A3X0B0
				0.1/0.2/0.3s	HDM3L16F140A3X0B1
				0.4/0.5/1s	HDM3L16F140A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16F140B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F140B3X0B0
				0.1/0.2/0.3s	HDM3L16F140B3X0B1
				0.4/0.5/1s	HDM3L16F140B3X0B2
	160	3P	30/100/300mA	Not Delay Time Type	HDM3L16F16033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F16033X0B0
				0.1/0.2/0.3s	HDM3L16F16033X0B1
				0.4/0.5/1s	HDM3L16F16033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16F160A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F160A3X0B0
				0.1/0.2/0.3s	HDM3L16F160A3X0B1
				0.4/0.5/1s	HDM3L16F160A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16F160B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16F160B3X0B0
				0.1/0.2/0.3s	HDM3L16F160B3X0B1
				0.4/0.5/1s	HDM3L16F160B3X0B2
HDM3L -160S	100	3P	30/100/300mA	Not Delay Time Type	HDM3L16S10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S10033X0B0
				0.1/0.2/0.3s	HDM3L16S10033X0B1
				0.4/0.5/1s	HDM3L16S10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16S100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S100A3X0B0
				0.1/0.2/0.3s	HDM3L16S100A3X0B1
				0.4/0.5/1s	HDM3L16S100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16S100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S100B3X0B0
				0.1/0.2/0.3s	HDM3L16S100B3X0B1
				0.4/0.5/1s	HDM3L16S100B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -160S	125	3P	30/100/300mA	Not Delay Time Type	HDM3L16S12533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S12533X0B0
				0.1/0.2/0.3s	HDM3L16S12533X0B1
				0.4/0.5/1s	HDM3L16S12533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16S125A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S125A3X0B0
				0.1/0.2/0.3s	HDM3L16S125A3X0B1
				0.4/0.5/1s	HDM3L16S125A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16S125B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S125B3X0B0
				0.1/0.2/0.3s	HDM3L16S125B3X0B1
				0.4/0.5/1s	HDM3L16S125B3X0B2
	140	3P	30/100/300mA	Not Delay Time Type	HDM3L16S14033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S14033X0B0
				0.1/0.2/0.3s	HDM3L16S14033X0B1
				0.4/0.5/1s	HDM3L16S14033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16S140A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S140A3X0B0
				0.1/0.2/0.3s	HDM3L16S140A3X0B1
				0.4/0.5/1s	HDM3L16S140A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16S140B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S140B3X0B0
				0.1/0.2/0.3s	HDM3L16S140B3X0B1
				0.4/0.5/1s	HDM3L16S140B3X0B2
	160	3P	30/100/300mA	Not Delay Time Type	HDM3L16S16033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S16033X0B0
				0.1/0.2/0.3s	HDM3L16S16033X0B1
				0.4/0.5/1s	HDM3L16S16033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L16S160A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S160A3X0B0
				0.1/0.2/0.3s	HDM3L16S160A3X0B1
				0.4/0.5/1s	HDM3L16S160A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L16S160B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L16S160B3X0B0
				0.1/0.2/0.3s	HDM3L16S160B3X0B1
				0.4/0.5/1s	HDM3L16S160B3X0B2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -250F	100	3P	30/100/300mA	Not Delay Time Type	HDM3L25F10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F10033X0B0
				0.1/0.2/0.3s	HDM3L25F10033X0B1
				0.4/0.5/1s	HDM3L25F10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F100A3X0B0
				0.1/0.2/0.3s	HDM3L25F100A3X0B1
				0.4/0.5/1s	HDM3L25F100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F100B3X0B0
				0.1/0.2/0.3s	HDM3L25F100B3X0B1
				0.4/0.5/1s	HDM3L25F100B3X0B2
	125	3P	30/100/300mA	Not Delay Time Type	HDM3L25F12533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F12533X0B0
				0.1/0.2/0.3s	HDM3L25F12533X0B1
				0.4/0.5/1s	HDM3L25F12533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F125A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F125A3X0B0
				0.1/0.2/0.3s	HDM3L25F125A3X0B1
				0.4/0.5/1s	HDM3L25F125A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F125B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F125B3X0B0
				0.1/0.2/0.3s	HDM3L25F125B3X0B1
				0.4/0.5/1s	HDM3L25F125B3X0B2
	140	3P	30/100/300mA	Not Delay Time Type	HDM3L25F14033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F14033X0B0
				0.1/0.2/0.3s	HDM3L25F14033X0B1
				0.4/0.5/1s	HDM3L25F14033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F140A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F140A3X0B0
				0.1/0.2/0.3s	HDM3L25F140A3X0B1
				0.4/0.5/1s	HDM3L25F140A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F140B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F140B3X0B0
				0.1/0.2/0.3s	HDM3L25F140B3X0B1
				0.4/0.5/1s	HDM3L25F140B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -250F	180	3P	30/100/300mA	Not Delay Time Type	HDM3L25F18033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F18033X0B0
				0.1/0.2/0.3s	HDM3L25F18033X0B1
				0.4/0.5/1s	HDM3L25F18033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F180A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F180A3X0B0
				0.1/0.2/0.3s	HDM3L25F180A3X0B1
				0.4/0.5/1s	HDM3L25F180A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F180B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F180B3X0B0
				0.1/0.2/0.3s	HDM3L25F180B3X0B1
				0.4/0.5/1s	HDM3L25F180B3X0B2
	200	3P	30/100/300mA	Not Delay Time Type	HDM3L25F20033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F20033X0B0
				0.1/0.2/0.3s	HDM3L25F20033X0B1
				0.4/0.5/1s	HDM3L25F20033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F200A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F200A3X0B0
				0.1/0.2/0.3s	HDM3L25F200A3X0B1
				0.4/0.5/1s	HDM3L25F200A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F200B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F200B3X0B0
				0.1/0.2/0.3s	HDM3L25F200B3X0B1
				0.4/0.5/1s	HDM3L25F200B3X0B2
	225	3P	30/100/300mA	Not Delay Time Type	HDM3L25F22533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F22533X0B0
				0.1/0.2/0.3s	HDM3L25F22533X0B1
				0.4/0.5/1s	HDM3L25F22533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F225A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F225A3X0B0
				0.1/0.2/0.3s	HDM3L25F225A3X0B1
				0.4/0.5/1s	HDM3L25F225A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F225B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F225B3X0B0
				0.1/0.2/0.3s	HDM3L25F225B3X0B1
				0.4/0.5/1s	HDM3L25F225B3X0B2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -250F	250	3P	30/100/300mA	Not Delay Time Type	HDM3L25F25033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F25033X0B0
				0.1/0.2/0.3s	HDM3L25F25033X0B1
				0.4/0.5/1s	HDM3L25F25033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25F250A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F250A3X0B0
				0.1/0.2/0.3s	HDM3L25F250A3X0B1
				0.4/0.5/1s	HDM3L25F250A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25F250B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25F250B3X0B0
				0.1/0.2/0.3s	HDM3L25F250B3X0B1
				0.4/0.5/1s	HDM3L25F250B3X0B2
HDM3L -250S	100	3P	30/100/300mA	Not Delay Time Type	HDM3L25S10033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S10033X0B0
				0.1/0.2/0.3s	HDM3L25S10033X0B1
				0.4/0.5/1s	HDM3L25S10033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S100A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S100A3X0B0
				0.1/0.2/0.3s	HDM3L25S100A3X0B1
				0.4/0.5/1s	HDM3L25S100A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S100B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S100B3X0B0
				0.1/0.2/0.3s	HDM3L25S100B3X0B1
				0.4/0.5/1s	HDM3L25S100B3X0B2
	125	3P	30/100/300mA	Not Delay Time Type	HDM3L25S12533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S12533X0B0
				0.1/0.2/0.3s	HDM3L25S12533X0B1
				0.4/0.5/1s	HDM3L25S12533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S125A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S125A3X0B0
				0.1/0.2/0.3s	HDM3L25S125A3X0B1
				0.4/0.5/1s	HDM3L25S125A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S125B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S125B3X0B0
				0.1/0.2/0.3s	HDM3L25S125B3X0B1
				0.4/0.5/1s	HDM3L25S125B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -250S	140	3P	30/100/300mA	Not Delay Time Type	HDM3L25S14033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S14033X0B0
				0.1/0.2/0.3s	HDM3L25S14033X0B1
				0.4/0.5/1s	HDM3L25S14033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S140A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S140A3X0B0
				0.1/0.2/0.3s	HDM3L25S140A3X0B1
				0.4/0.5/1s	HDM3L25S140A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S140B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S140B3X0B0
				0.1/0.2/0.3s	HDM3L25S140B3X0B1
				0.4/0.5/1s	HDM3L25S140B3X0B2
	160	3P	30/100/300mA	Not Delay Time Type	HDM3L25S16033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S16033X0B0
				0.1/0.2/0.3s	HDM3L25S16033X0B1
				0.4/0.5/1s	HDM3L25S16033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S160A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S160A3X0B0
				0.1/0.2/0.3s	HDM3L25S160A3X0B1
				0.4/0.5/1s	HDM3L25S160A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S160B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S160B3X0B0
				0.1/0.2/0.3s	HDM3L25S160B3X0B1
				0.4/0.5/1s	HDM3L25S160B3X0B2
	180	3P	30/100/300mA	Not Delay Time Type	HDM3L25S18033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S18033X0B0
				0.1/0.2/0.3s	HDM3L25S18033X0B1
				0.4/0.5/1s	HDM3L25S18033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S180A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S180A3X0B0
				0.1/0.2/0.3s	HDM3L25S180A3X0B1
				0.4/0.5/1s	HDM3L25S180A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S180B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S180B3X0B0
				0.1/0.2/0.3s	HDM3L25S180B3X0B1
				0.4/0.5/1s	HDM3L25S180B3X0B2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -250S	200	3P	30/100/300mA	Not Delay Time Type	HDM3L25S20033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S20033X0B0
				0.1/0.2/0.3s	HDM3L25S20033X0B1
				0.4/0.5/1s	HDM3L25S20033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S200A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S200A3X0B0
				0.1/0.2/0.3s	HDM3L25S200A3X0B1
				0.4/0.5/1s	HDM3L25S200A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S200B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S200B3X0B0
				0.1/0.2/0.3s	HDM3L25S200B3X0B1
				0.4/0.5/1s	HDM3L25S200B3X0B2
	225	3P	30/100/300mA	Not Delay Time Type	HDM3L25S22533X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S22533X0B0
				0.1/0.2/0.3s	HDM3L25S22533X0B1
				0.4/0.5/1s	HDM3L25S22533X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S225A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S225A3X0B0
				0.1/0.2/0.3s	HDM3L25S225A3X0B1
				0.4/0.5/1s	HDM3L25S225A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S225B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S225B3X0B0
				0.1/0.2/0.3s	HDM3L25S225B3X0B1
				0.4/0.5/1s	HDM3L25S225B3X0B2
	250	3P	30/100/300mA	Not Delay Time Type	HDM3L25S25033X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S25033X0B0
				0.1/0.2/0.3s	HDM3L25S25033X0B1
				0.4/0.5/1s	HDM3L25S25033X0B2
		4P(A)	30/100/300mA	Not Delay Time Type	HDM3L25S250A3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S250A3X0B0
				0.1/0.2/0.3s	HDM3L25S250A3X0B1
				0.4/0.5/1s	HDM3L25S250A3X0B2
		4P(B)	30/100/300mA	Not Delay Time Type	HDM3L25S250B3X0A0
			100/300/500mA	Not Delay Time Type	HDM3L25S250B3X0B0
				0.1/0.2/0.3s	HDM3L25S250B3X0B1
				0.4/0.5/1s	HDM3L25S250B3X0B2

HDM3L Earth-Leakage Circuit Breaker

Product selection

3SERIES MORE VALUE FOR PRICE!

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -400S	200	3P	100/300/500mA	Not Delay Time Type	HDM3L40S20033X0B0
				0.1/0.2/0.3s	HDM3L40S20033X0B1
				0.4/0.5/1s	HDM3L40S20033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S20033X0C0
				0.1/0.2/0.3s	HDM3L40S20033X0C1
				0.4/0.5/1s	HDM3L40S20033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S200A3X0B0
				0.1/0.2/0.3s	HDM3L40S200A3X0B1
				0.4/0.5/1s	HDM3L40S200A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S200A3X0C0
				0.1/0.2/0.3s	HDM3L40S200A3X0C1
				0.4/0.5/1s	HDM3L40S200A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S200B3X0B0
				0.1/0.2/0.3s	HDM3L40S200B3X0B1
				0.4/0.5/1s	HDM3L40S200B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S200B3X0C0
				0.1/0.2/0.3s	HDM3L40S200B3X0C1
				0.4/0.5/1s	HDM3L40S200B3X0C2
	225	3P	100/300/500mA	Not Delay Time Type	HDM3L40S22533X0B0
				0.1/0.2/0.3s	HDM3L40S22533X0B1
				0.4/0.5/1s	HDM3L40S22533X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S22533X0C0
				0.1/0.2/0.3s	HDM3L40S22533X0C1
				0.4/0.5/1s	HDM3L40S22533X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S225A3X0B0
				0.1/0.2/0.3s	HDM3L40S225A3X0B1
				0.4/0.5/1s	HDM3L40S225A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S225A3X0C0
				0.1/0.2/0.3s	HDM3L40S225A3X0C1
				0.4/0.5/1s	HDM3L40S225A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S225B3X0B0
				0.1/0.2/0.3s	HDM3L40S225B3X0B1
				0.4/0.5/1s	HDM3L40S225B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S225B3X0C0
				0.1/0.2/0.3s	HDM3L40S225B3X0C1
				0.4/0.5/1s	HDM3L40S225B3X0C2

HDM3L Earth-Leakage Circuit Breaker

Product selection

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L -400S	250	3P	100/300/500mA	Not Delay Time Type	HDM3L40S25033X0B0
				0.1/0.2/0.3s	HDM3L40S25033X0B1
				0.4/0.5/1s	HDM3L40S25033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S25033X0C0
				0.1/0.2/0.3s	HDM3L40S25033X0C1
				0.4/0.5/1s	HDM3L40S25033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S250A3X0B0
				0.1/0.2/0.3s	HDM3L40S250A3X0B1
				0.4/0.5/1s	HDM3L40S250A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S250A3X0C0
				0.1/0.2/0.3s	HDM3L40S250A3X0C1
				0.4/0.5/1s	HDM3L40S250A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S250B3X0B0
				0.1/0.2/0.3s	HDM3L40S250B3X0B1
				0.4/0.5/1s	HDM3L40S250B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S250B3X0C0
				0.1/0.2/0.3s	HDM3L40S250B3X0C1
				0.4/0.5/1s	HDM3L40S250B3X0C2
	315	3P	100/300/500mA	Not Delay Time Type	HDM3L40S31533X0B0
				0.1/0.2/0.3s	HDM3L40S31533X0B1
				0.4/0.5/1s	HDM3L40S31533X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S31533X0C0
				0.1/0.2/0.3s	HDM3L40S31533X0C1
				0.4/0.5/1s	HDM3L40S31533X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S315A3X0B0
				0.1/0.2/0.3s	HDM3L40S315A3X0B1
				0.4/0.5/1s	HDM3L40S315A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S315A3X0C0
				0.1/0.2/0.3s	HDM3L40S315A3X0C1
				0.4/0.5/1s	HDM3L40S315A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S315B3X0B0
				0.1/0.2/0.3s	HDM3L40S315B3X0B1
				0.4/0.5/1s	HDM3L40S315B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S315B3X0C0
				0.1/0.2/0.3s	HDM3L40S315B3X0C1
				0.4/0.5/1s	HDM3L40S315B3X0C2

HDM3L Earth-Leakage Circuit Breaker

Product selection

Low-voltage Distribution

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L-250F	350	3P	100/300/500mA	Not Delay Time Type	HDM3L40S35033X0B0
				0.1/0.2/0.3s	HDM3L40S35033X0B1
				0.4/0.5/1s	HDM3L40S35033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S35033X0C0
				0.1/0.2/0.3s	HDM3L40S35033X0C1
				0.4/0.5/1s	HDM3L40S35033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S350A3X0B0
				0.1/0.2/0.3s	HDM3L40S350A3X0B1
				0.4/0.5/1s	HDM3L40S350A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S350A3X0C0
				0.1/0.2/0.3s	HDM3L40S350A3X0C1
				0.4/0.5/1s	HDM3L40S350A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S350B3X0B0
				0.1/0.2/0.3s	HDM3L40S350B3X0B1
				0.4/0.5/1s	HDM3L40S350B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S350B3X0C0
				0.1/0.2/0.3s	HDM3L40S350B3X0C1
				0.4/0.5/1s	HDM3L40S350B3X0C2
	400	3P	100/300/500mA	Not Delay Time Type	HDM3L40S40033X0B0
				0.1/0.2/0.3s	HDM3L40S40033X0B1
				0.4/0.5/1s	HDM3L40S40033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S40033X0C0
				0.1/0.2/0.3s	HDM3L40S40033X0C1
				0.4/0.5/1s	HDM3L40S40033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40S400A3X0B0
				0.1/0.2/0.3s	HDM3L40S400A3X0B1
				0.4/0.5/1s	HDM3L40S400A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S400A3X0C0
				0.1/0.2/0.3s	HDM3L40S400A3X0C1
				0.4/0.5/1s	HDM3L40S400A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40S400B3X0B0
				0.1/0.2/0.3s	HDM3L40S400B3X0B1
				0.4/0.5/1s	HDM3L40S400B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40S400B3X0C0
				0.1/0.2/0.3s	HDM3L40S400B3X0C1
				0.4/0.5/1s	HDM3L40S400B3X0C2

HDM3L Earth-Leakage Circuit Breaker

Product selection

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L-400F	200	3P	100/300/500mA	Not Delay Time Type	HDM3L40F20033X0B0
				0.1/0.2/0.3s	HDM3L40F20033X0B1
				0.4/0.5/1s	HDM3L40F20033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F20033X0C0
				0.1/0.2/0.3s	HDM3L40F20033X0C1
				0.4/0.5/1s	HDM3L40F20033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F200A3X0B0
				0.1/0.2/0.3s	HDM3L40F200A3X0B1
				0.4/0.5/1s	HDM3L40F200A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F200A3X0C0
				0.1/0.2/0.3s	HDM3L40F200A3X0C1
				0.4/0.5/1s	HDM3L40F200A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F200B3X0B0
				0.1/0.2/0.3s	HDM3L40F200B3X0B1
				0.4/0.5/1s	HDM3L40F200B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F200B3X0C0
				0.1/0.2/0.3s	HDM3L40F200B3X0C1
				0.4/0.5/1s	HDM3L40F200B3X0C2
	225	3P	100/300/500mA	Not Delay Time Type	HDM3L40F22533X0B0
				0.1/0.2/0.3s	HDM3L40F22533X0B1
				0.4/0.5/1s	HDM3L40F22533X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F22533X0C0
				0.1/0.2/0.3s	HDM3L40F22533X0C1
				0.4/0.5/1s	HDM3L40F22533X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F225A3X0B0
				0.1/0.2/0.3s	HDM3L40F225A3X0B1
				0.4/0.5/1s	HDM3L40F225A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F225A3X0C0
				0.1/0.2/0.3s	HDM3L40F225A3X0C1
				0.4/0.5/1s	HDM3L40F225A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F225B3X0B0
				0.1/0.2/0.3s	HDM3L40F225B3X0B1
				0.4/0.5/1s	HDM3L40F225B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F225B3X0C0
				0.1/0.2/0.3s	HDM3L40F225B3X0C1
				0.4/0.5/1s	HDM3L40F225B3X0C2

HDM3L Earth-Leakage Circuit Breaker

Product selection

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L-400F	250	3P	100/300/500mA	Not Delay Time Type	HDM3L40F25033X0B0
				0.1/0.2/0.3s	HDM3L40F25033X0B1
				0.4/0.5/1s	HDM3L40F25033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F25033X0C0
				0.1/0.2/0.3s	HDM3L40F25033X0C1
				0.4/0.5/1s	HDM3L40F25033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F250A3X0B0
				0.1/0.2/0.3s	HDM3L40F250A3X0B1
				0.4/0.5/1s	HDM3L40F250A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F250A3X0C0
				0.1/0.2/0.3s	HDM3L40F250A3X0C1
				0.4/0.5/1s	HDM3L40F250A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F250B3X0B0
				0.1/0.2/0.3s	HDM3L40F250B3X0B1
				0.4/0.5/1s	HDM3L40F250B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F250B3X0C0
				0.1/0.2/0.3s	HDM3L40F250B3X0C1
				0.4/0.5/1s	HDM3L40F250B3X0C2
	315	3P	100/300/500mA	Not Delay Time Type	HDM3L40F31533X0B0
				0.1/0.2/0.3s	HDM3L40F31533X0B1
				0.4/0.5/1s	HDM3L40F31533X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F31533X0C0
				0.1/0.2/0.3s	HDM3L40F31533X0C1
				0.4/0.5/1s	HDM3L40F31533X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F315A3X0B0
				0.1/0.2/0.3s	HDM3L40F315A3X0B1
				0.4/0.5/1s	HDM3L40F315A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F315A3X0C0
				0.1/0.2/0.3s	HDM3L40F315A3X0C1
				0.4/0.5/1s	HDM3L40F315A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F315B3X0B0
				0.1/0.2/0.3s	HDM3L40F315B3X0B1
				0.4/0.5/1s	HDM3L40F315B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F315B3X0C0
				0.1/0.2/0.3s	HDM3L40F315B3X0C1
				0.4/0.5/1s	HDM3L40F315B3X0C2

Low-voltage Distribution

HDM3L Earth-Leakage Circuit Breaker

Product selection

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L-400F	350	3P	100/300/500mA	Not Delay Time Type	HDM3L40F35033X0B0
				0.1/0.2/0.3s	HDM3L40F35033X0B1
				0.4/0.5/1s	HDM3L40F35033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F35033X0C0
				0.1/0.2/0.3s	HDM3L40F35033X0C1
				0.4/0.5/1s	HDM3L40F35033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F350A3X0B0
				0.1/0.2/0.3s	HDM3L40F350A3X0B1
				0.4/0.5/1s	HDM3L40F350A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F350A3X0C0
				0.1/0.2/0.3s	HDM3L40F350A3X0C1
				0.4/0.5/1s	HDM3L40F350A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F350B3X0B0
				0.1/0.2/0.3s	HDM3L40F350B3X0B1
				0.4/0.5/1s	HDM3L40F350B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F350B3X0C0
				0.1/0.2/0.3s	HDM3L40F350B3X0C1
				0.4/0.5/1s	HDM3L40F350B3X0C2
	400	3P	100/300/500mA	Not Delay Time Type	HDM3L40F40033X0B0
				0.1/0.2/0.3s	HDM3L40F40033X0B1
				0.4/0.5/1s	HDM3L40F40033X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F40033X0C0
				0.1/0.2/0.3s	HDM3L40F40033X0C1
				0.4/0.5/1s	HDM3L40F40033X0C2
		4P(A)	100/300/500mA	Not Delay Time Type	HDM3L40F400A3X0B0
				0.1/0.2/0.3s	HDM3L40F400A3X0B1
				0.4/0.5/1s	HDM3L40F400A3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F400A3X0C0
				0.1/0.2/0.3s	HDM3L40F400A3X0C1
				0.4/0.5/1s	HDM3L40F400A3X0C2
		4P(B)	100/300/500mA	Not Delay Time Type	HDM3L40F400B3X0B0
				0.1/0.2/0.3s	HDM3L40F400B3X0B1
				0.4/0.5/1s	HDM3L40F400B3X0B2
			300/500/1000mA	Not Delay Time Type	HDM3L40F400B3X0C0
				0.1/0.2/0.3s	HDM3L40F400B3X0C1
				0.4/0.5/1s	HDM3L40F400B3X0C2

HDM3L Earth-Leakage Circuit Breaker

Product selection

Low-voltage Distribution

Accessory selection, HDM3L

HDM3L Motor protection Thermal-magnetic tripping

Product Specification	In(A)	Poles	Residual Current	Delay Time	Order Reference
HDM3L-630S	400	3P	100/300/500mA	0/0.2/0.5s	HDM3L63S40033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S40033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63S400A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S400A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63S400B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S400B3X0C3
	500	3P	100/300/500mA	0/0.2/0.5s	HDM3L63S50033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S50033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63S500A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S500A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63S500B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S500B3X0C3
	630	3P	100/300/500mA	0/0.2/0.5s	HDM3L63S63033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S63033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63S630A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S630A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63S630B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63S630B3X0C3
HDM3L-630F	400	3P	100/300/500mA	0/0.2/0.5s	HDM3L63F40033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F40033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63F400A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F400A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63F400B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F400B3X0C3
	500	3P	100/300/500mA	0/0.2/0.5s	HDM3L63F50033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F50033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63F500A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F500A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63F500B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F500B3X0C3
	630	3P	100/300/500mA	0/0.2/0.5s	HDM3L63F63033X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F63033X0C3
		4P(A)	100/300/500mA	0/0.2/0.5s	HDM3L63F630A3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F630A3X0C3
		4P(B)	100/300/500mA	0/0.2/0.5s	HDM3L63F630B3X0B3
			300/500/1000mA	0/0.2/0.5s	HDM3L63F630B3X0C3

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Order Information

Type	Pole	In A	L-type	M-type
HDM6L-100	3	40	HDM6L100L403XX*F	HDM6L100M403XX*F
		50	HDM6L100L503XX*F	HDM6L100M503XX*F
		63	HDM6L100L633XX*F	HDM6L100M633XX*F
		80	HDM6L100L803XX*F	HDM6L100M803XX*F
		100	HDM6L100LI003XX*F	HDM6L100M1003XX*F
	4	40	HDM6L100L40XX*F	HDM6L100M40XX*F
		50	HDM6L100L50XX*F	HDM6L100M50XX*F
		63	HDM6L100L63XX*F	HDM6L100M63XX*F
		80	HDM6L100L80XX*F	HDM6L100M80XX*F
		100	HDM6L100LI00XX*F	HDM6L100M100XX*F
HDM6L-250	3	100	HDM6L250L1003XX*F	HDM6L250M1003XX*F
		125	HDM6L250L1253XX*F	HDM6L250M1253XX*F
		160	HDM6L250L1603XX*F	HDM6L250M1603XX*F
		180	HDM6L250L1803XX*F	HDM6L250M1803XX*F
		200	HDM6L250L2003XX*F	HDM6L250M2003XX*F
		225	HDM6L250L2253XX*F	HDM6L250M2253XX*F
		250	HDM6L250L2503XX*F	HDM6L250M2503XX*F
	4	100	HDM6L250L100XX*F	HDM6L250M100XX*F
		125	HDM6L250L125XX*F	HDM6L250M125XX*F
		160	HDM6L250L160XX*F	HDM6L250M160XX*F
		180	HDM6L250L180XX*F	HDM6L250M180XX*F
		200	HDM6L250L200XX*F	HDM6L250M200XX*F
		225	HDM6L250L225XX*F	HDM6L250M225XX*F
		250	HDM6L250L250XX*F	HDM6L250M250XX*F
HDM6L-400	3	200	HDM6L400L2003XX*F	HDM6L400M2003XX*F
		225	HDM6L400L2253XX*F	HDM6L400M2253XX*F
		250	HDM6L400L2503XX*F	HDM6L400M2503XX*F
		315	HDM6L400L3153XX*F	HDM6L400M3153XX*F
		350	HDM6L400L3503XX*F	HDM6L400M3503XX*F
		400	HDM6L400L4003XX*F	HDM6L400M4003XX*F
	4	200	HDM6L400L200XX*F	HDM6L400M200XX*F
		225	HDM6L400L225XX*F	HDM6L400M225XX*F
		250	HDM6L400L250XX*F	HDM6L400M250XX*F
		315	HDM6L400L315XX*F	HDM6L400M315XX*F
		350	HDM6L400L350XX*F	HDM6L400M350XX*F
		400	HDM6L400L400XX*F	HDM6L400M400XX*F
HDM6L-630	3	400	HDM6L630L4003XX*F	HDM6L630M4003XX*F
		500	HDM6L630L5003XX*F	HDM6L630M5003XX*F
		630	HDM6L630L6303XX*F	HDM6L630M6303XX*F
	4	400	HDM6L630L400XX*F	HDM6L630M400XX*F
		500	HDM6L630L500XX*F	HDM6L630M500XX*F
		630	HDM6L630L630XX*F	HDM6L630M630XX*F

Type
HDM6L-100

HDM6L-250

HDM6L-400

HDM6L-630

Note: * express residual current

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Technical Date

Thermal-adjustable																
Basic Information (IEC60947-2)																
Frame Size AF	100				250				400				630			
Number of Poles																
Breaking Capacity Level	L	M	L	M	L	M	L	M	L	M	L	M	L	M	L	M
Rated Ultimate Short-circuit Breaking Capacity Icu(kA rms)	35	50	35	50	35	50	35	50	50	70	50	70	50	70	50	70
Rated Service Short-circuit Breaking Capacity Ics(kA rms)	22	30	22	30	22	30	22	30	30	40	30	40	30	40	30	40
Mechanical Endurance	8500				7000				4000				4000			
Electrical Endurance On-0ff Cycle	1500				1000				1000				1000			
Tripping Unit																
Rated Current(A) In	40/50/63/80/100				100/125/160/180/200/225/250				200/225/250/315/350/400				400/500/630			
Accessory																
Indication Accessories																
OF	■				■				■				■			
SD	■				■				■				■			
Control Accessories																
MX(AC400,230V,DC220V)	■				■				■				■			
MN(AC400,230V)	■				■				■				■			
Extended Rotary Handle (Round and Square)	■				■				■				■			
AC Motor Mechanism (AC400,230V)	■				■				■				■			
Mounting & Connection																
Fixed, Rear Connection	■				■				■				■			
Plug-in, Rear Connection	■				■				■				■			
Connection																
Spreader	■				■				■				■			
Protection																
Phase Barrier	■				■				■				■			
Installation Information	See Page 143				See Page 144				See Page 145				See Page 146			

■ Indicates it has this option

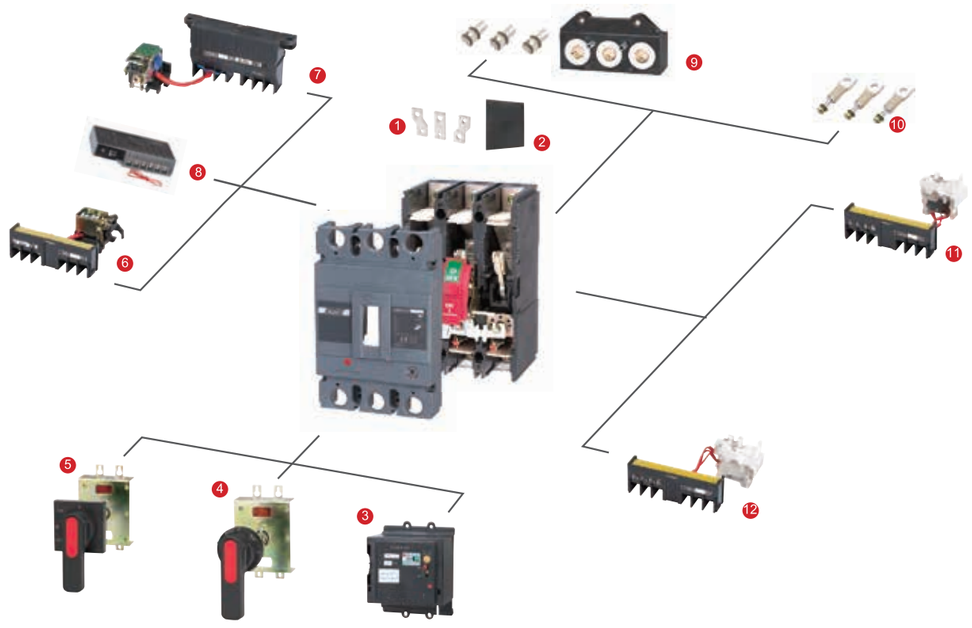
Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Basic Technical Data

- Rated Insulation Voltage Ui, AC 800V
- Rated Impulse Withstand Voltage Uimp, 8KV
- Rated Working Voltage Ue, AC 400V
- Rated Operational Frequency, 50Hz
- Utilization Category, A



Complete Functions and Accessories

1	Spreader	5	Square Exended Rotary Handle	9	Plug-in front Connection
2	Phase Barrier	6	MX	10	Plug-in Rear Connection
3	AC Motor Mechanism	7	MN	11	SD
4	Round Exended Rotary Handle	8	Leakage Module	12	OF

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Tripping Unit Function

Except the basic features of overload and short circuit protection, the HDM6L residual current circuit breaker can also provide indirect contact protection for people and prevent fire accident due to damaged insulation and defective grounding current. The circuit breaker can also provide additional functions if needed, including electricity leakage alert.

Versatile functions
The circuit breaker conforms to the latest IEC/EN standards, and adopts reliable 3-phase power supply technology. If one phase is missing, i.e. there is one phase loss, the circuit breaker can still provide reliable leakage protection. When the voltage drops to 85V due to a power supply failure, the circuit breaker can still provide reliable leakage protection. The breaker has a wide range of voltage input and the time delay function includes non-delay mode and 3-section delay mode which can be manually selected.

Easy operation
The testing button is easy and convenient to use. The micro-switch has a sensitive contact and long service life. The trip coil has excellent material and performance with remarkable trip indicating button, which provides a safe and reliable operation environment for the user.

Basic Parameter Information

The 4-pole products with N phase are divided into four types.
A type: N phase is not equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles.
B type: N phase is not equipped with overcurrent trip component and N phase opens/closes with the other 3 poles (N phase closes first and then opens).
C type: N phase is equipped with overcurrent trip component and N phase always opens/closes with the other 3 poles (N phase closes first and then opens).
D type: N phase is equipped with overcurrent trip component and N phase is always connected. The N phase does not open/close with the other 3 poles.

Electric Motor Protection

HDM6L residual current protection circuit breaker with plastic case can be used for electricity distribution protection, frame current under 400 and electric motor protection.

Isolation Function

HDM6L series product has an isolation protection function. The operation handle can indicate 'OFF' position only when the contact is fully opened.

Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Complete Accessories of HDM6L Series

Indicating Accessories

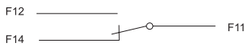
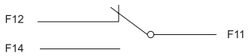
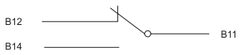
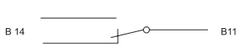
Auxiliary Contact (OF):

Be connected in the auxiliary circuit of switch device and used for the accessories to indicate the position of the circuit breaker contacts.

Alarm Switch (SD):

Be used for the accessories under the state of on and off or trip of the indication circuit breaker for the following reasons:

- Overload or short-circuit fault
- Residual earth-leakage fault
- Artificial Testing Release
- Shunt Trip Release
- Line Fault and Under-voltage Release Tripping

Accessory Name	Switch-on/off	Tripping
OF		
Accessory Name	Switch-on/off	Tripping
SD		

Electrical Parameter of OF & SD			
		3A	
Rated Thermal Current (A)		AC15	DC13
Utilization Category		0.3A	-
Working Current 50Hz	AC400V	-	0.15A
	DC220V		

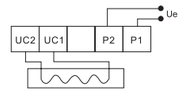
Control Accessories

Under-voltage Release (MN)

Tripping threshold between 0.35 and 0.7 times the rated voltage; when it is at 85%-110% of rated working voltage, Under-voltage Release shall ensure the circuit breaker switch-on; when the rated working voltage is less than 0.35 times, Under-voltage Release shall prevent switch-on of the Circuit breaker

Applicable Type of Circuit Breaker	Power Consumption of Under—voltage Coil (W)	
	AC400V	AC230V
HDM6L100	3.9	3.2
HDM6L250	4.3	3.3
HDM6L400	3.6	2.5
HDM6L630	2	1.6

Undervoltage Release Wiring



HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Complete Accessories of HDM6L Series

Shunt Release (MX)

When the working voltage is between 70%-110% Us, the shunt release will trip the circuit breaker.

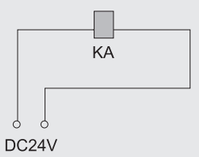
Applicable Type of Circuit Breaker	Power Consumption of Under—voltage Coil (W)		
	AC400V	AC230V	DC24V
HDM6L100	96.8	73	91.2
HDM6L250	112	68.6	85.3
HDM6L400	67	62.3	100
HDM6L630	163	153	120

When the rated control supply voltage of the shunt release is DC24V the maximum length of the copper conductor shall meet the following requirements:

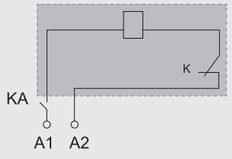
Control Supply Voltage (DC24V) \ Conductor Area Rated	1.5mm²	2.5mm²
100% Us	150m	250m
85% Us	100m	160m

When the requirements above cannot be met, it is recommended to adopt the following chart to design control loop of the shunt release.

Schematic diagram of Shunt Release in dotted-line box



KA: DC24V Intermediate Relay, and the current capacity of the electric shock is 1A

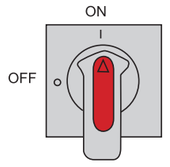


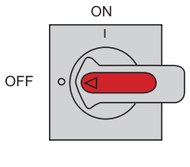
Power Input

The voltage specifiaction of the power input 50Hz 230V, 400V

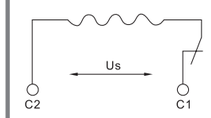
Extended Rotary Handle

- Function: Indication of the three positions of switch—switch On, switch Off and trip.
- The circuit breaker cannot be switched on when the switch board door is open.
- The door cannot be opened if the circuit breaker is On.
- An extension shaft can be adjusted to the distance between the back of circuit breaker and door. The specific distance refers to the dimensions at the rear and the installation part.
- The Off position of the circuit breaker can han9 1—3 locks with the diameter of 5mm.





Shunt Release Wiring



HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

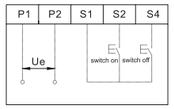
Complete Accessories of HDM6L Series

AC Motor Mechanism

Provide on-site and remote distance control circuit breaker to implement switch-on and switch-off.

Phase Barriers

The phase barriers are used to reinforce isolation of connection points in installation with bus-bars whether insulated or not. We can easily install the phase barrier through the phase slot of this product.
Both the inlet and outlet line of HDM6L has phase barrier.



Leakage Alarm module

(Alarm but Non Tripping Function: Alarm but non tripping in case of leakage reach the alarm limitation meanwhile still in energized state)
The module indicates alarm by means of luminous diode.
As luninous diode indicates red, it means system leakage exceed setting value,and at that time, normally open contact turn to normal close, normal closed contact trun to normal open.

Connection Accessories

Fixed, Rear Connection

It is easy to install and connect the products in the Rear Connection.

Plug-in Rear Connection

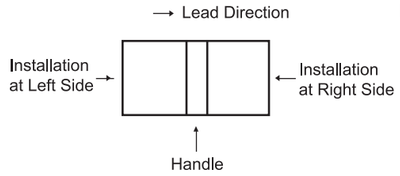
The plug-in connection for the product is simple for maintenance and replacement, but plug-in and plug-out cannot be done while the electricity is on.

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Installation Location of Accessories

Installation method for Tripping Release and Accessories Code



☐ Alarm Switch ■ Auxiliary Contact ● Shunt Release ○ Under-voltage Release

Name of Accessory	Produt Type		
	HDM6L100/250	HDM6L400	HDM6L630
Alarm Switch			
Shunt Release			
Auxiliary Contact			
Undervoltage Release			
Two Group Auxiliary Contact			
Auxiliary Contact Alarm Switch			

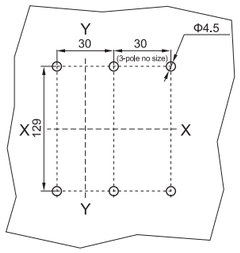
Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

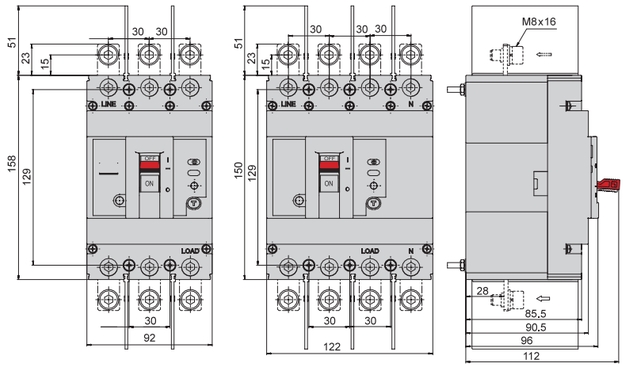
HDM6L 100AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

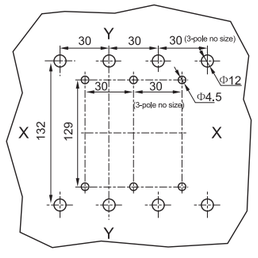


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

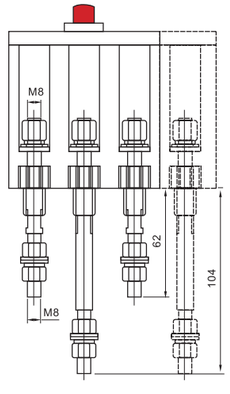


● Chart of Fixed Rear Connection Installation Hole

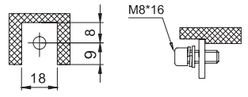


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

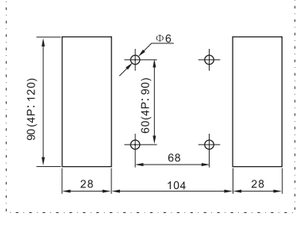
● Fixed Rear Connection Wiring



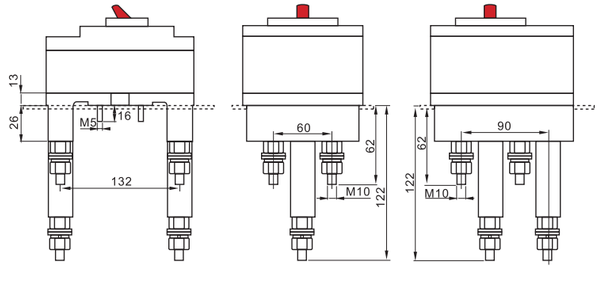
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

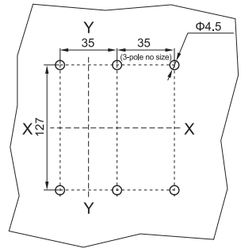


HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

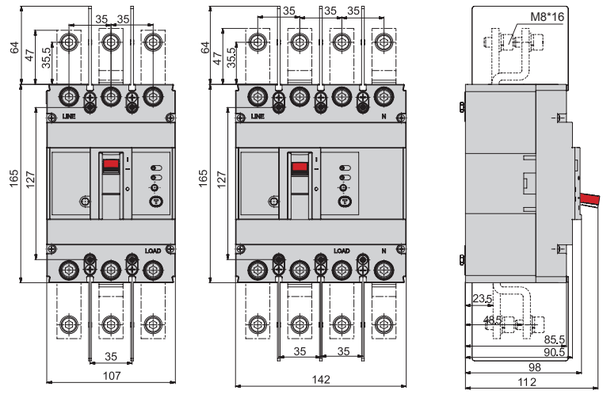
HDM6L 250AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

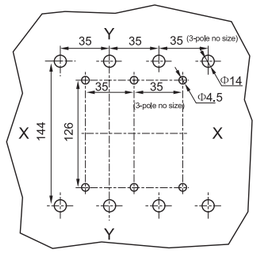


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

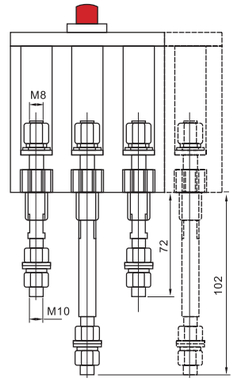


● Chart of Fixed Rear Connection Installation Hole

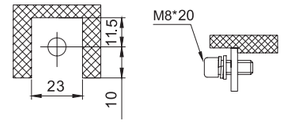


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

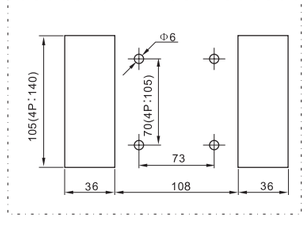
● Fixed Rear Connection Wiring



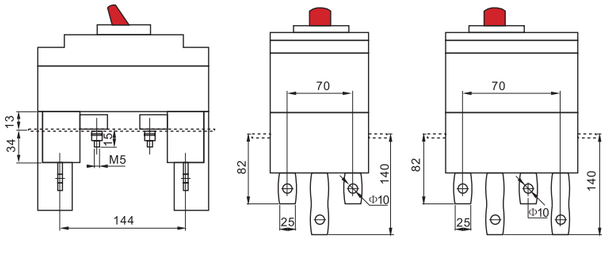
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring



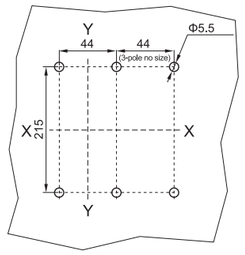
Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

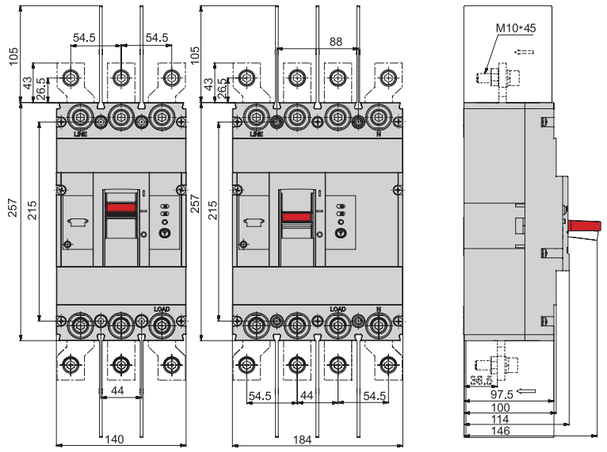
HDM6L 400AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

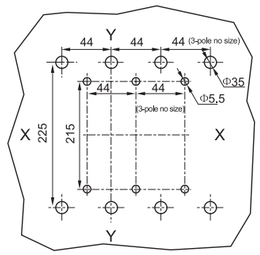


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

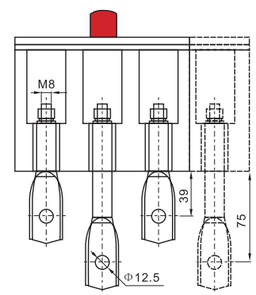


● Chart of Fixed Rear Connection Installation Hole

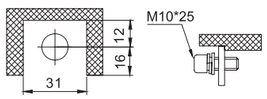


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

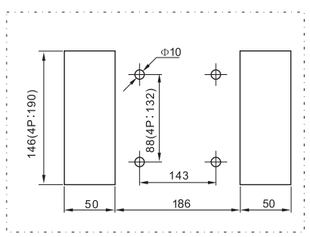
● Fixed Rear Connection Wiring



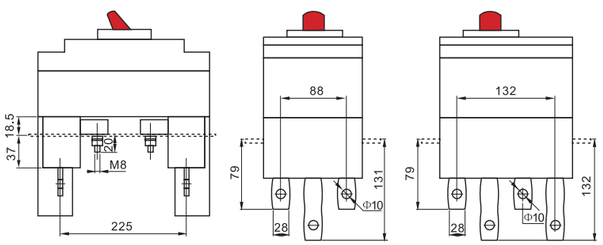
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring



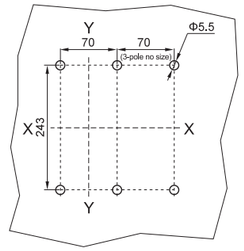
Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

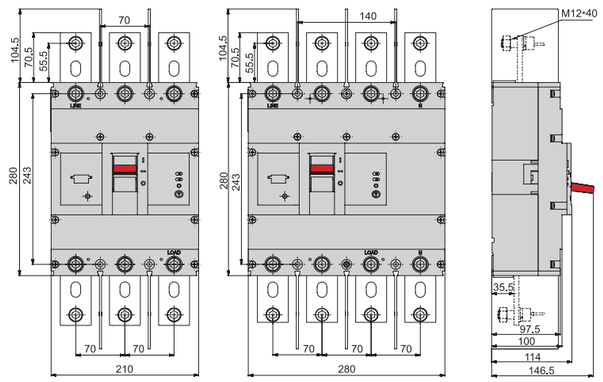
HDM6L 630AF Installation Dimension

● Chart of Fixed Front Connection Installation Hole

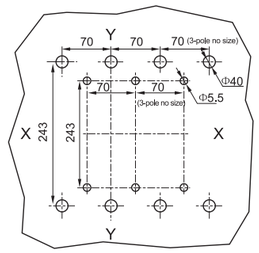


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

● Installation Dimension of Fixed Front Connection

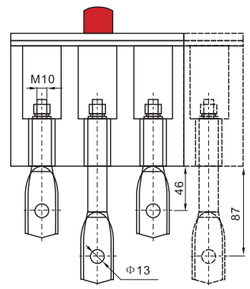


● Chart of Fixed Rear Connection Installation Hole

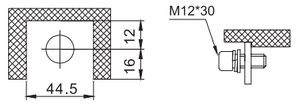


Remark: X-X, Y-Y is the center of 3-pole circuit breaker

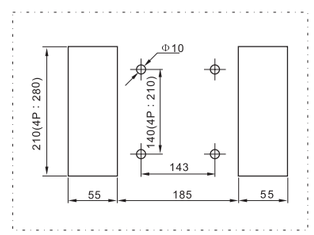
● Fixed Rear Connection Wiring



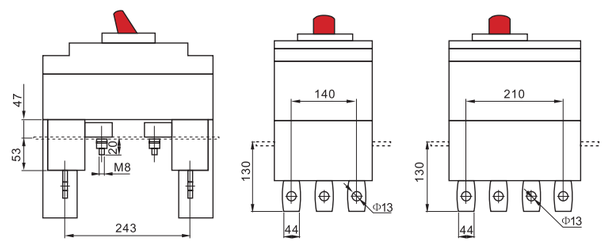
● Chart of Terminal Connection Installation Hole



● Chart of Plug-in Rear Connection Installation Hole



● Plug-in Rear Connection Wiring

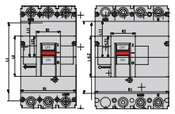


HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

HDM6L Earth—Leakage circuit Breaker connection Hole-opening Dimension

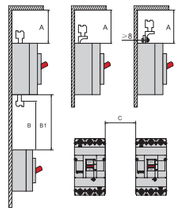
Type of Circuit Breaker	Pole No.	Exposure of Front Cover and Pull-out Handle			Exposure of Pull-out Handle Only		
		W1	L1	L11	W2	L2	L21
HDM6L100AF	3P	92	88	42	35	60	30
	4P	122	88	42	35	60	30
HDM6L250AF	3P	107	102	51	35	60	30
	4P	142	102	51	35	60	30
HDM6L400AF	3P	140	180	90	61	102	53
	4P	184	180	90	61	102	53
HDM6L630AF	3P	210	200	100	65	102	51
	4P	280	200	100	65	102	51



HDM6L100-630 3P HDM6L100-630 4P

Safety Distance

Type of Circuit Breaker	A(mm)	B(mm)	B1(mm)	C(mm)
HDM6L100AF	60	60	Length of Exposed Conductor +B	30
HDM6L250AF	60	60		30
HDM6L400AF	110	110		70
HDM6L630AF	110	110		70

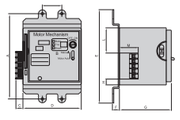


Remark: Whether the products have the accessories or not, the distance between the products must meet the requirements of C distance.

Installation Dimension

AC Motor Mechanism

Type of Circuit Breaker	A	B	C	D	E	F	G	H	L	M
HDM6L100AF	129	30	11	90	144	14	80	8.5	38.5	28.5
HDM6L250AF	126	35	11	104	138	13	80	8.5	38.5	28.5
HDM6L400AF	215	44	11	140	232	22	112	12	97.5	28.5
HDM6L630AF	243	70	11	150	260	16	112	12	97.5	28.5

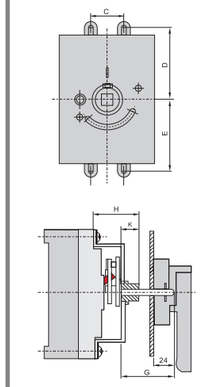


HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

HDM6L100—630 Frame Extension Rotary Handle Base Dimension

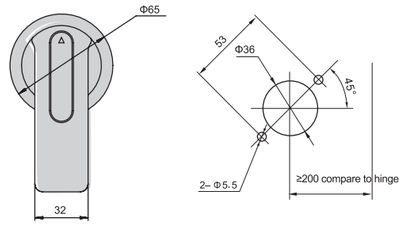
Type of Circuit Breaker	C	D	E	H	K
HDM6L100AF	30	51.5	51.5	54	20
HDM6L250AF	35	71.5	71.5	56	20
HDM6L400AF	44	107.5	107.5	76	20
HDM6L630AF	70	121.5	121.5	76	20



Remark: The shortest distance of G connecting rod is 50mm and ex-factory standard configuration is 150mm. Please contact the factory if special customization is required.

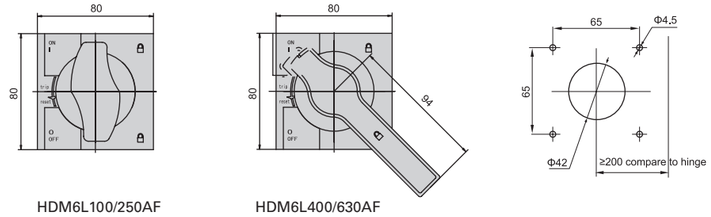
HDM6L100—630 Extension Rotary Handle

Round



HDM6L100 and HDM6L250 is 65 or 95 for option,the default value is 65
HDM6L400,HDM6L630 is 95 or 125 for option,the default value is 95

Square



HDM6L100/250AF HDM6L400/630AF

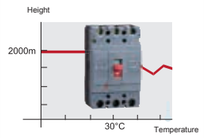
HDM6L Earth-Leakage Circuit Breaker

Standard: IEC/EN 60947-2

Impact of High Temperature on Tripping Release Performance

When the environmental temperature is over 40°C, small changes impact on overload protection properties, In tripping curve, the Ir setting value of the circuit breaker must be corrected as per the following factors:

Type of Circuit Breaker	Ambient Temperature				
	30	35	40	45	50
HDM6L100AF	1	0.97	0.95	0.92	0.89
HDM6L250AF	1	0.98	0.97	0.95	0.94
HDM6L400AF	1	0.98	0.95	0.93	0.91
HDM6L630AF	1	0.98	0.95	0.93	0.91



Impact of Altitude on Tipping Release Performance

There is no impact on the performance of the circuit breaker when the height is below 2000m, but when it is over 2000m, please refer to following factors as air insulation properties and cooling capability, the correction factors given in the table below are applicable for the conditions of the height. For installation over 2000m, the breaking capacity of the circuit breaker remains unchanged.

Altitude (m)	2000	3000	4000	5000
Max.Working Voltage (V)	415	350	310	270
30°C Thermal Rated Value (A)	In	0.96In	0.93In	0.96In
Average Isolation Voltage (V)	800	700	600	500
Dielectric Strength (V)	3000	2500	2100	1800

3-PoleTotal Power Loss (W)

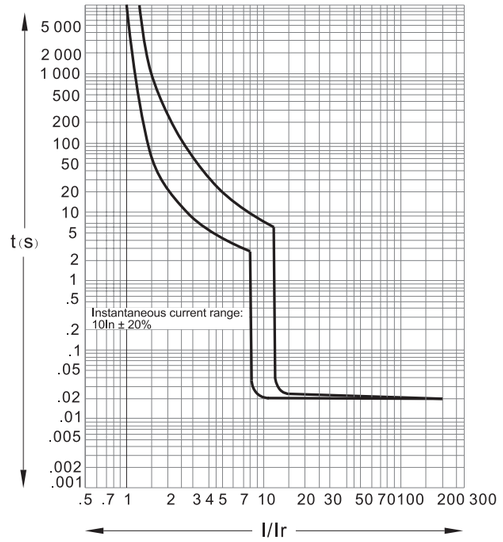
Type of Circuit Breaker	Power-up Current	Front Connectuion	Rear Connectuion Wiring	Plug-in Wiring
HDM6L100AF	100A	40	50	50
HDM6L250AF	250A	63	90	90
HDM6L400AF	400A	103	110	130
HDM6L630AF	800A	200	230	290

HDM6L Earth-Leakage Circuit Breaker

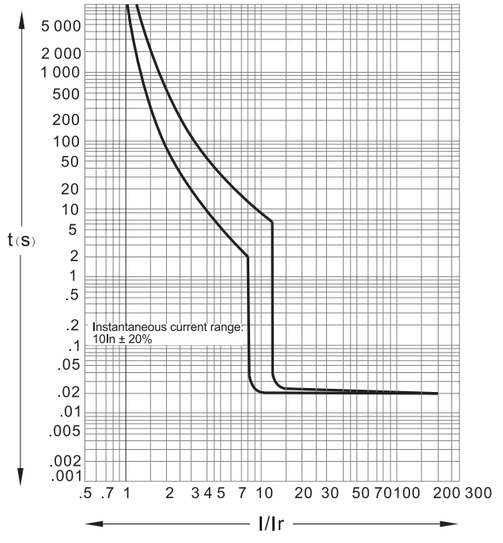
Standard: IEC/EN 60947-2

Tripping Curve

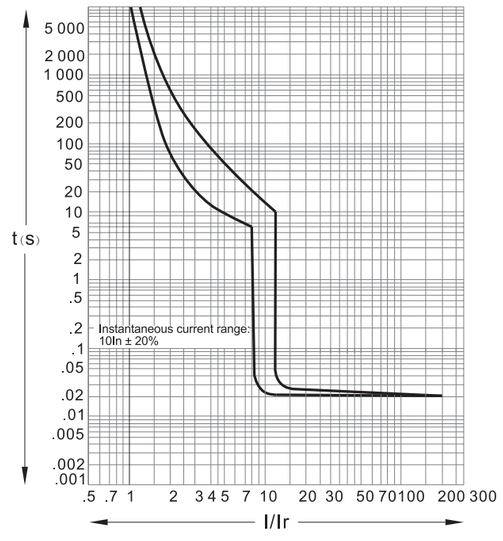
HDM6L-100 16A-50A, the black line is used for the distribution



HDM6L-100 63A-100A, the black line is used for the distribution



- HDM6L-250 100A-250A, the black line is used for the distribution



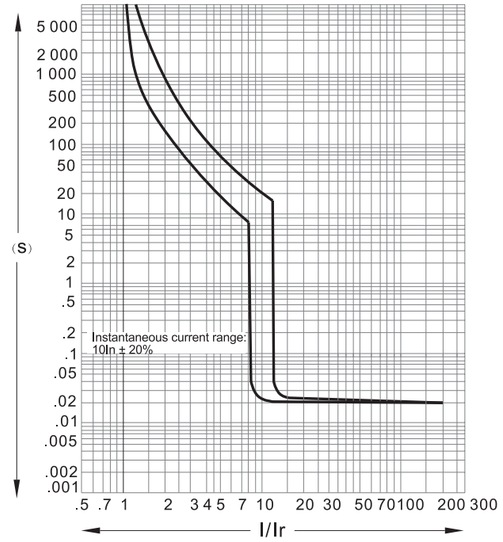
Low-voltage Distribution

HDM6L Earth-Leakage Circuit Breaker

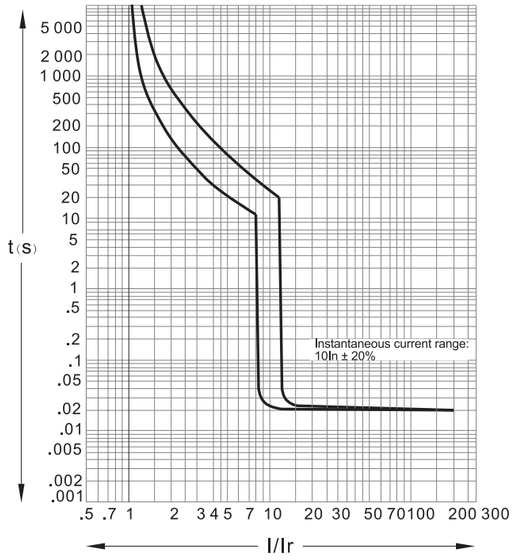
Standard: IEC/EN 60947-2

Tripping Curve

HDM6L-400 200A-400A, the black line shows the power distribution



- HDM6L-630 400A-630A shows the power distribution



Air Circuit Breaker Product Overview

Air Circuit Breaker

HDW6 153

Current: 200~6300A
Voltage: 400V

HDW9 175

Current: 630~6300A
Voltage: 400/415V, 690V

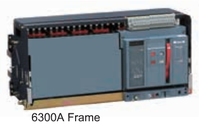
HDW6 Order Information

Selection of Breaker

Step 1

Select Current

1000A Frame 2000A Frame 3200A Frame



6300A Frame

1 Select frame

10:100A frame	
Icu	42
Ics	30
Icw (0.5s)	30
20:2000A frame	
Icu	80
Ics	50
Icw (1s)	50
32:3200A frame	
Icu	80
Ics	80
Icw (1s)	65
63:6300A frame	
Icu	120
Ics	100
Icw (1s)	85

2 Select current

02:	200A
04:	400A
06:	630A
08:	800A
10:	1000A
06:	630A
08:	800A
10:	1000A
12:	1250A
16:	1600A
20:	2000A
20:	2000A
25:	2500A
32:	3200A
40:	4000A
50:	5000A
63:	6300A (exclude 4P)

Doorframe and phase barrier are compliant

Production name	Frame	Rated current		
W6	10: 1000	02: 200A	12: 1250A	40: 4000A
	20: 2000	04: 400A	16: 1600A	50: 5000A
	32: 3200	06: 630A	20: 2000A	63: 6300A (Exclude 4P)
	63: 6300	08: 800A	25: 2500A	
			32:3200A	
	↓	↓		
W6 +	20	16		

↓

For example W620163DHDD54L

HDW6 Order Information

Selection of Breaker

Step 2

Select Form

FH: Fixed horizontal 4:4P

FH: Fixed horizontal 3:3P

DH: Drawout horizontal 3:3P

DH: Drawout horizontal 4:4P

1 Select installation way

FH: Fixed horizontal (1000AF-3200AF)	3:3P 4:4P
DH: Drawout horizontal (1000AF-6300AF)	3:3P 4:4P

Step 3

Select Control Loop

Motor mechanism (MCH)

Closing voltage release (XF)

Shunt release (MX)

Under-voltage release (MN)

Under-voltage delayed release (MNR)

Auxiliary contact

Pole	Installation method
3:3P	DH: Drawout horizonal (1000AF-6300AF)
4:4P	FH: Fixed horizonal (1000AF-3200AF)
↓	↓
3	DH

Motor mechanism (MCH) + Closing release (XF)
D : DC220V
N : AC230V
V : AC400V
5: Without MCH & XF
↓
D +

HDW6 Order Information

Selection of Breaker

Step 4

Select Intelligent Controller

1 Select Motor mechanism (MCH) Closing release (XF)

Motor mechanism (MCH) + Closing release (XF) (Must Option)
D: DC220V
N: AC230V
V: AC400V

2 Select Shunt release (MX) Under-voltage release

Shunt release (MX) (choose at least one of the Acc. from MX/MN/MNR)
D: DC220V
N: AC230V
V: AC400V
5: Without shunt release

Undervoltage release (MN/MNR)
N: AC230V
V: AC400V
P: With under-voltage delayed AC230V
T: With under-voltafge delayed AC400V
5: Without under-voltage release

3 Select Auxilary contact

Auxilary contact (Must Option)
4: Four open and four close (1000AF)
6: Five open and five close (2000-6300AF)

Shunt release (MX)	Under-voltage release	Auxilary contact
D: DC220V	N: AC230V	4: Four open and four close
N: AC230V	V: AC400V	6: Five open and five close
V: AC400V	P: With under-voltage delayed AC230V	
5: W/out shunt release	T: With under-voltafge delayed AC400V	
	5: Without under-voltage release	
↓	↓	↓
D +	5	4 +

1 Select intelligent controller

ECW-L: Basic protection

ECW-M: Standard protection

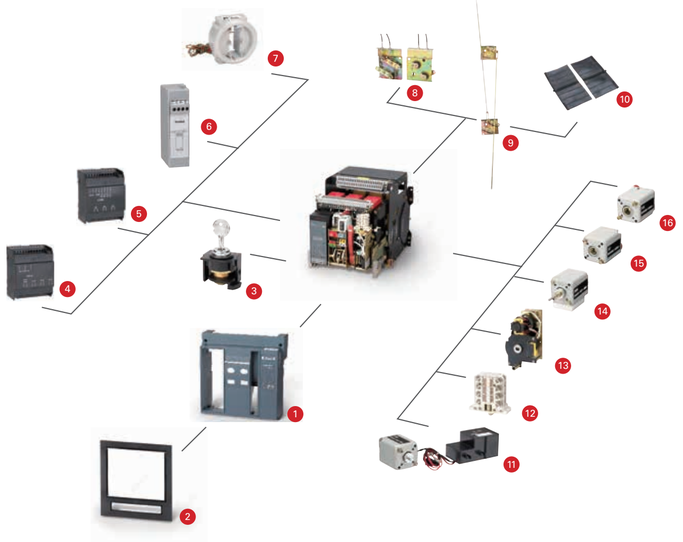
ECW-H: Advanced protection

ESW series intelligent controller
M: ECW-M
L: ECW-L
H: ECW-H
↓
L

HDW6 Order Information

Accessories

The Indicator Diagram of HDW6 Air Circuit breaker



1 Front Cover	5 Relay module	9 Connecting-rod type mechanical interlock	13 Motor mechanism
2 Door frame	6 DC power supply module	10 Phase barrier	14 Undervoltage release
3 Key lock	7 N-phase circumscribed transformer	11 Undervoltage delayed release	15 Closing release
4 Power supply module	8 Cable mechanical interlock	12 Auxiliary contact	16 Shunt release

HDW6 Order Information

Accessories order Information

Accessory code

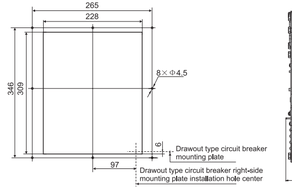
	Code	Accessory name	
• Control module accessory			
	HDW6AP	Power module	input AC230V/DC220V output DC24V 1000-6300AF
	HDW6DCP	DC Power module	input DC220V output DC24V 1000-6300AF
	HDW6R	Relay module	Capacity AC230V/DC24V input DC24V 1000-6300AF
•The accessory is for protection and measure			
N-phase circumscribed transformer	HDW6N1002	N-phase circumscribed transformer	(200A 1000AF)
	HDW6N1008	N-phase circumscribed transformer	(400A-800A 1000AF)
	HDW6N1010	N-phase circumscribed transformer	(1000A 1000AF)
	HDW6N2008	N-phase circumscribed transformer	(630A-800A 2000AF)
	HDW6N2020	N-phase circumscribed transformer	(1000A-2000A 2000AF)
	HDW6N3232	N-phase circumscribed transformer	(2000A-3200A 3200AF)
	HDW6N6363	N-phase circumscribed transformer	(4000A-6300A 6300AF)
• For lock function			
Buttoon lock	HDW6L3	Three locks and two keys	(2000-6300AF)
	HDW6L2	Two locks and one key	(2000-6300AF)
	HDW6L1	One lock and one key	(2000-6300AF)
• For power supply changeover			
Cable mechanical interlock	HDW6FL2	Fixed cable mechanical interlock (two)	
	HDW6FL3	Fixed cable mechanical interlock (three)	
	HDW6DL2	Drawout Cable mechanical interlock (two)	
	HDW6DL3	Drawout Cable mechanical interlock (three)	
Connecting-rod type mechanical interlock	HDW6FG2	Fixed connecting-rod type mechanical interlock (two)	
	HDW6FG3	Fixed connecting-rod type mechanical interlock (three)	
	HDW6FG2	Drawout connecting-rod type mechanical interlock (two)	
	HDW6DG3	Drawout connecting-rod type mechanical interlock (three)	

Radio Accessory Guide

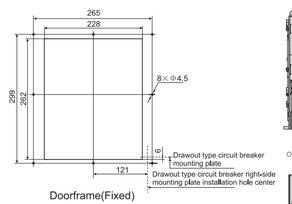
If you need more extended function, choose accessory by yourself.
Please see the appendix, order goods on the basis of accessory code.

HDW6 Overrall Dimensions

HDW6-1000



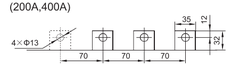
Doorframe(Drawout)



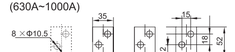
Doorframe(Fixed)

Busbar Dimension

○ Drawer-Out
(200A,400A)

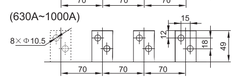


(630A~1000A)



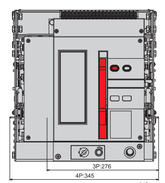
○ Fixed
(200A,400A)

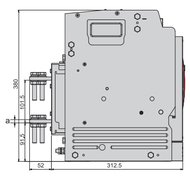
(630A~1000A)

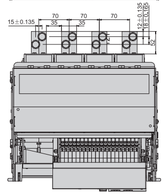


Volume

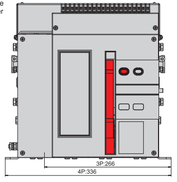
○ Drawout

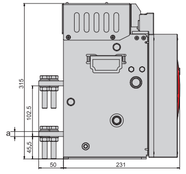


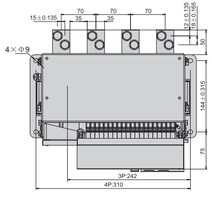




○ Fixed





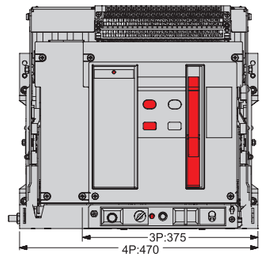


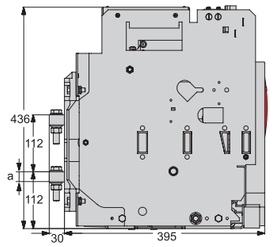
HDW6 Overall Dimensions

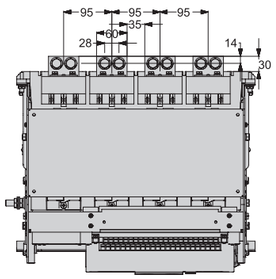
HDW6-2000

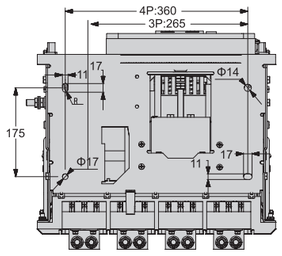
Volume

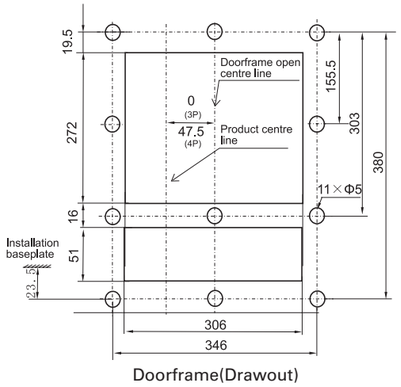
Drawout





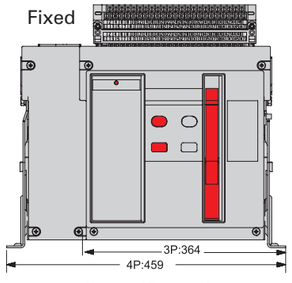


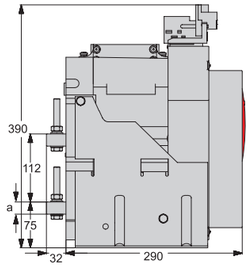


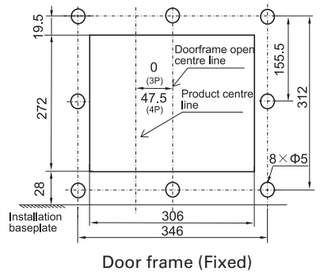


Doorframe(Drawout)

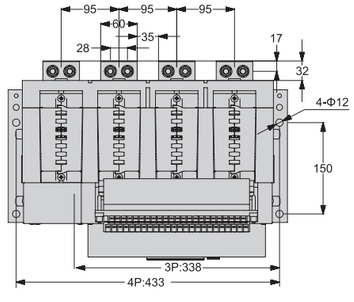
Fixed







Door frame (Fixed)



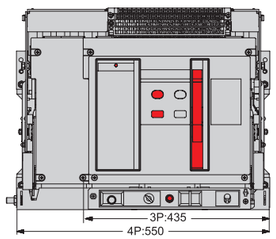
Low-voltage Distribution

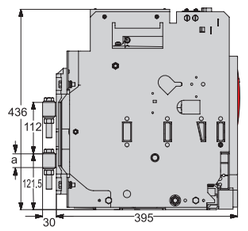
HDW6 Overall Dimensions

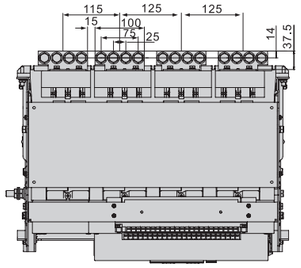
HDW6-3200

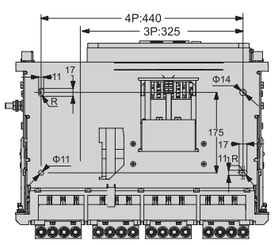
Volume

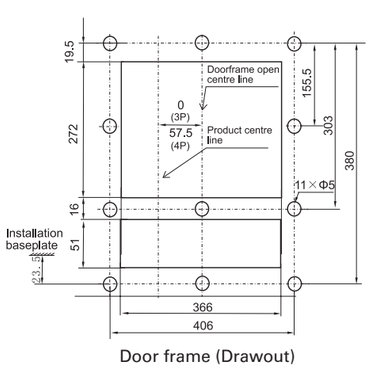
Drawout





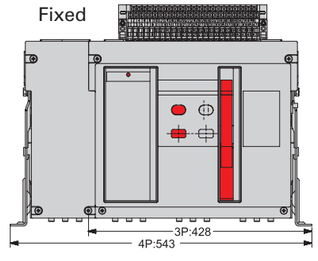


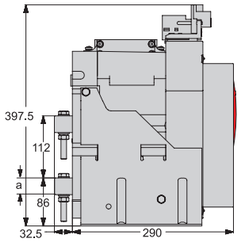


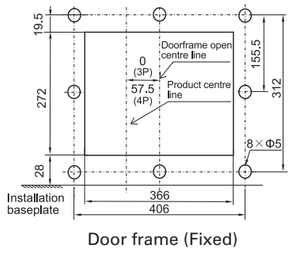


Door frame (Drawout)

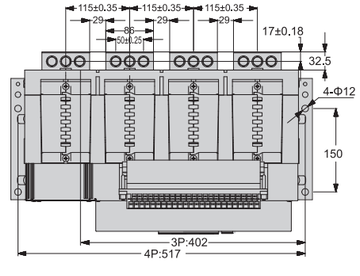
Fixed







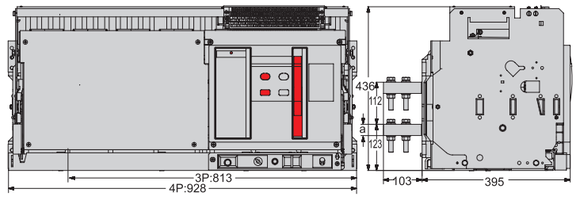
Door frame (Fixed)

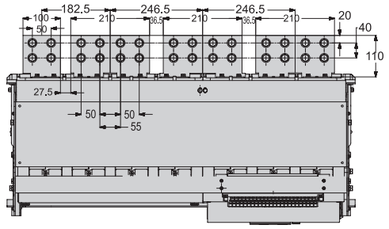


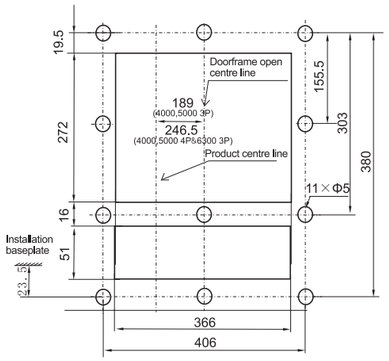
HDW6 Overall Dimensions

HDW6-6300

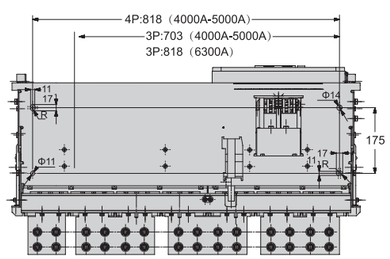
Volume

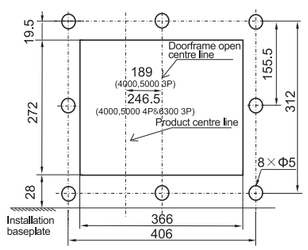






Doorframe(Drawout)





Door frame (Fixed)

HDW6 Technical Parameter

Technnical Parameter

Common characteristics		
Number of poles		3P, 4P
Rated insulation voltage Ui	V	800
Rated impulse withstand voltage Uimp	kV	8
Rated operational voltage Ue	V	400

Rated current				
In(A) \ In Frame (A)	1000	2000	3200	6300
200	■			
400	■			
630	■	■		
800	■	■		
1000	■	■		
1250		■		
1600		■		
2000		■	■	
2500			■	
3200			■	
4000				■
5000				■
6300				■

Breaking capacity				
Rated ultimate short circuit breaking capacity Icu (kA)	42	80	80	120
Rated service short circuit breaking capacity Ics (kA)	30	50	80	100
Rated Short-Time Withstand Current Icw (0.5s)	30			
Rated short circuit withstand current Icw (kA/1s)		50	65	85

Service life				
Mechanical Life with Maintenance	10000	10000	8000	5000
Mechanical Life without Maintenance	2500	2500	2500	2500
Electric Life with Maintenance	1000	1000	1000	800
Electric Life without Maintenance	500	500	500	500

HDW6 Technical Parameter

Intelligent controller

ECW-L

Function information		
Protection		Use
Long time delay	L	Protect cable, prevent ageing
Short time delay	S	Protect equipment, prevent impedance short circuit
Instantaneous	I	Protect equipment, prevent metallicity short circuit
Earthing	G	Prevent fire

ECW-L Protection characteristics	Setting range
Protection Characteristics for Overload Delay	
Action current I_R	0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0In+OFF
Delay time t_L	30s, 60s, 120s, 240s
Protection Characteristics for Short-Delay Short Circuit	
Action current Isd	3, 4, 5, 6, 7, 8, 10In+OFF
Action time t_S	0.2s, 0.4s
Protection Characteristics for Instantaneous Short Circuit	
Action current Ii	Setting range: (10, 11, 12, 14, 16, 18, 20) In+OFF; Remark: 1000AF 2000AF
	Setting range: (7, 8, 9, 10, 11, 12, 14) In+OFF; Remark: 3200AF 6300AF
Earthing protection	
Action current Ig	0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8In+OFF
Actuation time t_G	0.1s, 0.2s, 0.3s, 0.4s

HDW6 Technical Parameter

Intelligent controller

ECW-M

Function information		
Protection		Use
Long time delay	L	Protect cable, prevent ageing
Short time delay	S	Protect equipment, prevent impedance short circuit
Instantaneous	I	Protect equipment, prevent metallicity short circuit
Earthing	G	Prevent fire
Measure		
Current measurement		
Voltage measurement		
Miscellaneous function		
Pre-alarm		
Self-diagnosis function		
Fault log		
Test function		

ECW-M Protection characteristics	Setting range						
Protection Characteristics for Overload Delay							
Action current I_R	0.4~1.0In+OFF (>>100A)						
Delay time t_L	Fault current	Delay time					
	t_R	15	30	60	120	240	480
	$1.5xI_R$	15	30	60	120	240	480
	$2xI_R$	8.4	16.9	33.8	67.5	135	270
	$7.2xI_R$	0.65	1.3	2.6	5.2	10.4	20.8
	$t=(1.5/N)^2xt_R$ N=Fault current divided by the setting current I/I_R t=Delay Time of Failure Action t_R=Setting Value of Long-Delay Time						
Protection Characteristics for Short-Delay Short Circuit							
Action current Isd Action time t_S	(0.4~15)In+OFF Step setting 10kA below : ≤ 2A, 10kA above ≤ 10A Inverse time Limit I^2T						
	Fault current	Delay time					
		ts(s)	0.1	0.2	0.3	0.4	
	I^2T: OFF	Min.delay(ms)	60	160	255	340	
		Max.delay	140	240	345	460	
	I^2T:ON	Min.delay	60	160	255	340	
	$I>8I_R$	Max.delay	140	240	345	460	
	I^2T: ON	Inverse time limit delay	$t=(8I_R)^2/I^2xts$				
	$I\leq 8I_R$						
Protection Characteristics for Instantaneous Short Circuit							
	HDW6-1000	HDW6-2000	HDW6-3200	HDW6-6300			
Action current Ii	2.0In~20kA+OFF	2.0In~50kA+OFF	2.0In~75kA+OFF	2.0In~100kA+OFF			
Earthing Protection							
Action current I_g	0.2~1.0In+OFF						
Actuation time t_G	0.1s, 0.2s, 0.3s, 0.4s, OFF						

Low-voltage Distribution

HDW6 Technical Parameter

Intelligent controller

ECW-H

Function Information		
Protection		Use
Long time delay	L	Protect cable, prevent ageing
Short time delay	S	Protect equipment, prevent impedance short circuit
Instantaneous	I	Protect equipment, prevent metallicity short circuit
Earthing	G	Prevent fire
Measure		
Current measurement		
Voltage measurement		
Power measurement		
Harmonic wave measurement		
Miscellaneous function		
Pre-alarm		
Self-diagnosis function		
Fault log		
Test function		
Communication Function		

ECW-H Protection characteristics	
Parameter Name	Setting Range
Overload Long Time Delay	
Action current I_R	OFF+0.4~1.0In
Protection curve Type selection	SI: Standard inverse time limit VI: Rapid inverse time limit EI(G): Express inverse time limit(distribution) EI(M): Express inverse time limit(electromotor) HV: High-Pressure Welding Fuse Compatibility I2t: Universal inverse time limit protection
Setting delay time	C01~C16
Protection Characteristics for Short Delay	
Action Current of Inverse Time Limit Is	OFF+(0.4~15)In
Action Current of Fixed Time Limit Isd	OFF+(0.4~15)In
Delay Time of Fixed Time Limit tsd	0.1~0.4s

Instantaneous Protection Characteristics				
Action current Ii	HDW6-1000	HDW6-2000	HDW6-3200	HDW6-6300
	2.0In~20kA+OFF	2.0In~50kA+OFF	2.0In~75kA+OFF	2.0In~100kA+OFF

Earthing Protection Characteristics	
Action current Ig	OFF+(0.2~1.0)In
Inverse time limit shearing coefficient Cr	1.5~6, +OFF
Delay time tg	(0.1~0.4)s

Long-distance operation

Shunt Release

- Function introduction
- When the breaker is stored and under specified voltage, Shunt release can make the breaker break through long-distance remote control.

Accessory parameter	
Rated operational voltage V	AC230V AC400V DC220V
Operation voltage	(0.7-1.1)Us
Consumption	300VA(AC) 40W(DC)
Breaking time	<30ms

Under-voltage Release and Under-voltage Delay Release

- Function introduction
- The under-voltage release automatically opens a circuit breaker when voltage drops to a value ranging between 35% to 70% of the line voltage. After tripping the circuit breaker cannot be re-closed again when the voltage goes below 35% or until it returns to 85% of line voltage. Under-voltage relay release makes the breaker break in 1s-5s (adjustable)

Accessory parameter	
Rated operational voltage V	AC400V AC230V
Operational voltage	(0.35-0.7)Ue
Dependable closing voltage	(0.85-1.1)Ue
Unable closing voltage	≤0.35Ue
Consumption	12VA
Delay time	1s-5s

Closing Release

- Function introduction
- When the breaker is stored and under specified voltage, Shunt release can make the breaker close through long-distance remote control.

Accessory parameter	
Rated operational voltage V	AC230V AC400V DC220V
Operational voltage	(0.85-1.1)Us
Consumption	300VA(AC) 40W(DC)
Breaking time	<70ms

HDW6 Technical Parameter

Accessories

Motor Mechanism

Function introduction

- When the breaker is open with power supply, MCH can store energy for ACB automatically, thus the breaker can be opened and closed with the operation of MX, MN, XF. It can be manually stored when there is no power.

Accessory parameter	
Rated control power voltage V	AC230V AC400V DC220V
Action voltage	(0.85-1.1)Us
Consumption	150W (maxi.)
Energy storage time	<5s

Auxiliary Contact

Function introduction

- Used for keeping watch on the breaker's status, connecting position signal light and breaking indicator light

Accessory parameter				
Utilization category			AC-15	DC13
Auxiliary contact default type			5NO 5NC (4NO 4NC for 1000AF)	
Conventional thermal current Ith			6A	
Auxiliary contact's energized operational performance			Equal to circuit breaker operation performance	
Making & breaking capacity	Under normal conditions	I/Ie making	10	1
		I/Ie breaking	1	1
		U/Ue	1	1
		COS□rT0.95	0.3	6Pe
			10	1.1
			1.1	1.1
	Under abnormal conditions	U/Ue	0.3	6Pe
		I/Ie	10	10
		COS□rT0.95		
		Operation cycles		

HDW6 Technical Parameter

Accessories

Transformer

N-phase Circumscribed Transformer

- Function introduction
- The 3P+N earth connection is used to measure the current of the neutral phase

Note: 1. Only for 3P Breaker, and the Intelligent Controller should be 4P
2. Max connection distance is 2M
3. Customize according to the Intelligent Controller

Lock

Divide Release Lock

- Function introduction
- When the breaker is breaking, it can lock in
- It is divided into three types:
  - one lock and one key
  - two locks and one key
  - three locks and two keys

Low-voltage Distribution

HDW6 Technical Parameter

Accessories

Connection

Cable Mechanical Interlock

- Function introduction
- Can connect two or three breakers for linking

Note: Max horizonal installation distance is 2M

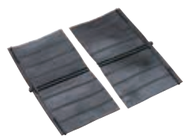
Connecting–rod Type Mechanical Interlock

- Function introduction
- It could connect two breakers to be linkage,one of the breakers is closing, the other is breaking

Note: Only for vertical installation, the max installation distance is 0.9M

Phase Barrier

- Function introduction
- It can increase creeping distance and prevent to engender electric arc when installed in the middle of the breaker busbar.



Intelligent Controller Accessory

DC Power Module

- Function introduction
- In the alternating current,supply auxiliary power supply for intelligent controllor
- Used for ST201 relay module or DC controllor power supply

HDW6 Technical Parameter

Accessories

Power Module

- Function introduction
- In direct current, supply auxiliary power supply for intelligent controller

Relay Module

- Function introduction
- Exporting signal element is used for failure warning or indication

Note: HDW6AP & HDW6R only for H Intelligent Controller and are used together as a set

Other accessories

Door frame

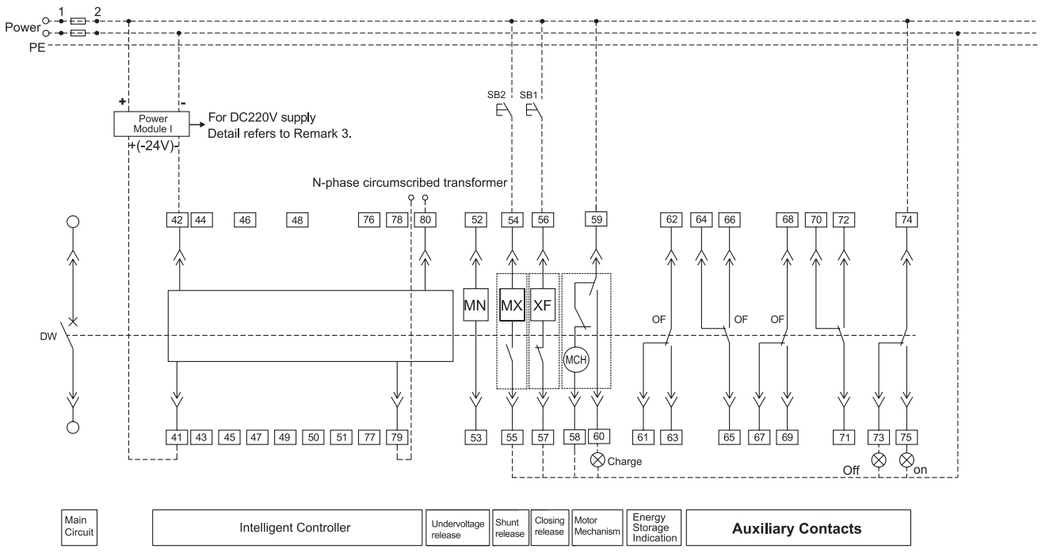
- Function introduction
- Install on the power distribution cabinet door, increase IP protection grade to IP40

Low-voltage Distribution

HDW6 Technical Parameter

Accessories

• L -Type and M-Type Intelligent Controller (1000AF)



Pin Function:
41# and 42#: auxiliary supply input terminal,
79#, 80#: input for circumscribed transformer

Components:
MN — Undervoltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contacts
MCH — Motor Mechanism
SB1 — Make Button
SB2 — Opening Button

Remarks 1: terminal 52# ~ 53# of MN undervoltage release connect to main circuit

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of different control supply. When auxilary contact OF is 4a4b, MX Shunt-trip Release and MN Closing Release shall be tandem connected with NO and NO auxiliary contacts in the factory

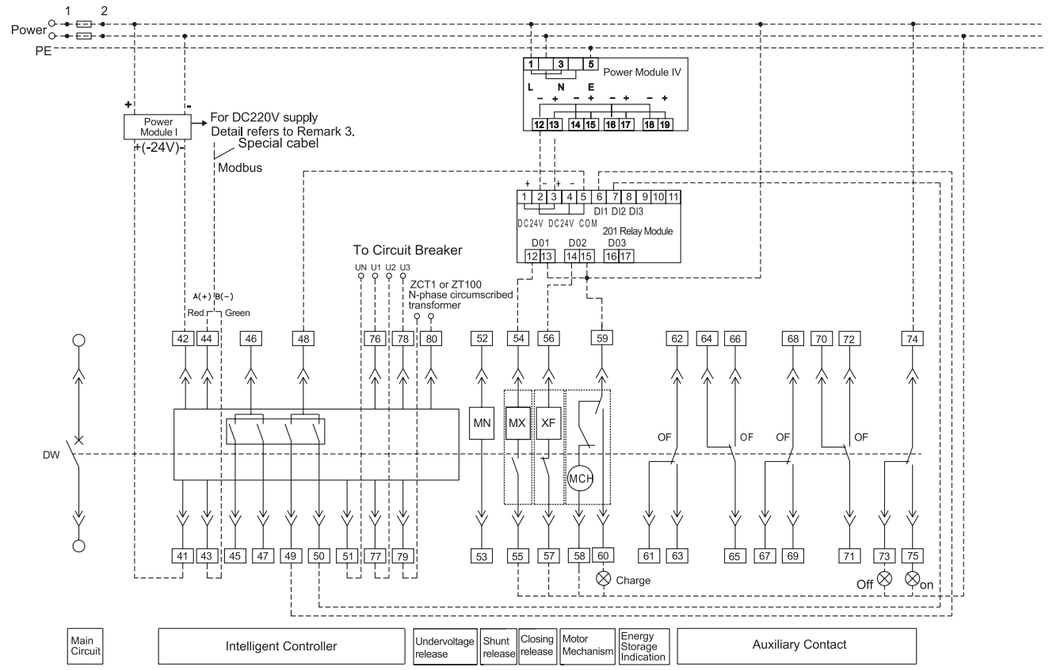
Remarks 3: Power Module 1 is DC Power Module. No DC power Module when the power is AC power supply. The input & output terminals cannot be connected reversely. (the draw-out type output terminal has been connected in the factory)

Remarks 4: The auxiliary contact is four-open and four-close; 79# and 80# are input terminals for circumscribed transformer, applied for (3P+N) T type earthing failure protection

HDW6 Technical Parameter

Accessories

• H-Type Intelligent Controller (1000AF)



Pin Function:
41# and 42#: Auxiliary supply input terminal
43# and 44#: Respective output communication wire of RS485B and RS485A
45#: Alarm signal output
46#: Signal contact output shared terminal 1
47#: Error tripping output
48#: Signal contact output shared terminal 1
49#: Communication remote control Shunt trip release output
50#: Communication remote control make output
51#: Neuter line voltage signal (N phase)
76#: Voltage signal A phase
77#: Voltage signal B phase
78#: Voltage signal C phase
79#,80#: Input of circumscribed transformer

Components:
MN — Under-voltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contact
MCH — Motor Mechanism
ZCT1 — Leakage transformer
ZT100 — Earthing transformer

Remarks 1: Terminal 52# ~ 53# of MN undervoltage release connect to main circuit

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of different control supply. When auxilary contact OF is 4a4b, MX shunt-trip Release and XF Closing release shall be tandem connected with NO and NO auxiliary contacts in the factory

Remarks 3: Power Module 1 is DC Power Module. No DC power Module when the power is AC power supply. The input & output terminals cannot be connected reversely. (the draw-out type output terminal has been connected in the factory)

Remarks 4: The auxiliary contact is four-open and four-close; 79# and 80# are input terminal for circumscribed transformer, applied for (3P+N) T type earthing failure protection. or connect ZCT1 or ZT100 (should order extra)

Remarks 5: Long-range control should add 201 relay module and power module IV the capacity of relay module is: AC230V, 10A; DC24V, 10A

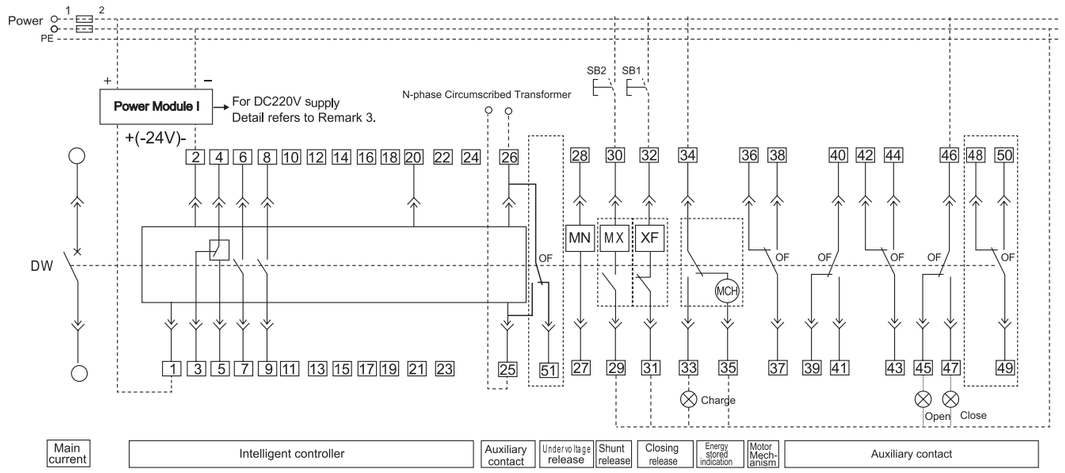
Remarks 6: Communication agreement is Modbus. If use Profibus or other arrangement, it will require an extra order
Power module IV and 201 relay module needs an extra order

Low-voltage Distribution

HDW6 Technical Parameter

Accessories

• L-Type and M-Type Intelligent Controller (2000-6300AF)



Pin Function:
1# and 2#: Auxiliary supply input terminal,
1# for positive terminal when being DC
3#, 4# and 5#: Contact output of tripping fault (4# refers to shared terminal)
Contact capacity: AC 380V, 16A
6#, 7#, 8# and 9#: Two groups of auxiliary terminals with circuit breaker status
Contact capacity: AC 380V, 16A

20#: PE wire, protection earthing wire
25# ~26#: Output for circumscribed transformer

Components:
MN — Undervoltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contacts
MCH — Motor Mechanism
SB1 — Make Button
SB2 — Opening Button

Remarks 1: Terminal 27# ~ 28# of MN undervoltage release connect to main circuit

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of control supply voltage. Auxilary contact OF is 5a5b, MX Shunt Release and XF Closing Release have been tandem connected with normal open and normal close auxiliary contacts in the factory

Remarks 3: Terminal 35# can not only be connected to the power supply directly (automatic pre-storing energy), but also to the power supply after adopting tandem connection with normal open button (manual pre-storing energy)

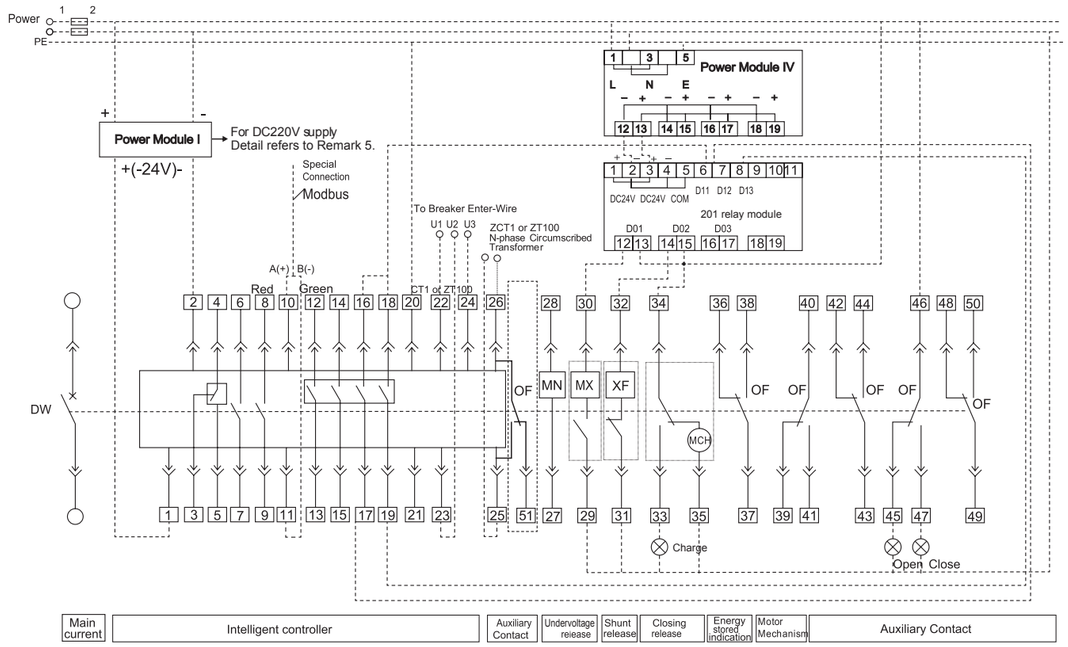
Remarks 4: Power Module 1 is DC Power Module. No DC power Module when the power is AC power supply. The input & output terminals cannot be connected reversely (the draw-out type output terminal has been connected in the factory)

Remarks 5: The auxiliary contact is five open and five close, 25# and 26# are circumscribed transformer, applied for (3P+N)T type earthing failure protection

HDW6 Technical Parameter

Accessories

• H-Type Intelligent Controller (2000-6300AF)



Pin Function:
1# and 2#: Auxiliary supply input terminal,
1# for positive terminal when being DC
3#, 4# and 5#: Contact output of tripping fault (4# refers to shared terminal)
Contact capacity: AC 380V, 16A
6#, 7#, 8# and 9#: Two groups of auxiliary terminals with circuit breaker status
Contact capacity: AC 380V, 16A
10# and 11#: Respective output wire of RS485A and RS485B communication
12#, 13#: Alarm signal output
14#, 15#: Error tripping signal output
16#, 17#: Communication remote control Shunt Release output
18#, 19#: Communication remote control make output
20#: PE Line, shielding earthing line.
21#: Neuter line voltage signal (N phase)
22#: Voltage signal A phase
23#: Voltage signal B phase
24#: Voltage signal C phase
25#, 26#: Input of circumscribed transformer

Components:
MN — Under-voltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contact
MCH — Motor Mechanism
ZCT1 — Leakage transformer
ZT100 — Earthing transformer

Remarks 1: Terminal 27#~28# of MN undervoltage release connect to main circuit

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of control supply voltage. Auxilary contact OF is 5a5b, MX Shunt Release and XF Closing Release have been tandem connected with normal open and normal close auxiliary contacts in the factory

Remarks 3: Terminal 35# can not only be connected to the power supply directly (automatic pre-storing energy), but also to the power supply after adopting tandem connection with normal open button (manual pre-storing energy)

Remarks 4: Power Module 1 is DC Power Module, and there is no such Module when the power is AC power supply. The input & output terminals cannot be connected reversely (the draw-out type output terminal has been connected in the factory)

Remarks 5: The auxiliary contact is five-open and five-close, 25# and 26# are circumscribed transformer, applied for (3P+N)T type earthing failure protection, or connect Z CT1 or ZT100 (extra order required)

Remarks 6: Long-range control should add 201 relay module and power module IV The capacity of relay module is: AC230V, 10A; DC24V, 10A.

Remarks 7: Communication agreement is Modbus. If use Profibus or other agreement, it requires an extra order. Power module IV and 201 relay module needs an extra order.

Low-voltage Distribution

HDW9 Functions and Characteristics

Overview
IEC/EN: 60947-2

Main Characteristics

- Frame(A): 1600N, 4000H1, 4000H2, 6300L
- In (A): 630 ~ 6300
- Ue (V): 400/415, 690
- Poles: 3P & 4P
- Type: Fixed type & draw-out type
- Certificates: CE KEMA
- Standards: IEC 60947-2

Intelligent Control Units

iTR336
Basic function: L, S, I & G protection

iTR336E
Basic protection function
Basic measurement function
Assistant function

iTR336H
Basic & advanced protection function
Multiple measurement function
Assistant function
Special function
Communication function

iTR336H-L
Basic & advanced protection function
Multiple measurement function
Assistant function
Special function
Communication function
Suitable for high and low temperature

Wiring Types

- Rear connection (horizontal & vertical)
- Front connection
- Mixed connection

Optional accessories
1. Spreaders
2. Vertical connection adapters
3. Cable lug adapters

Accessories

- Remote control: shunt release, closing release, opening release motor mechanism
- Indication contacts: ON/OFF indication contacts, ready to close contact, 3-position indication contacts, fault-trip indication contact, remote reset contact
- Locks: chassis padlock, opening keylock, door interlock, 3-position interlock
- Mechanical interlock: lever interlocks, cable interlocks
- Operation and protection: door frame, interphase barriers, safety shutters
- Accessories of the control unit: N-phase external CT, ground return CT, earth-leakage CT
- Power Module, Signal switch

HDW9 Functions and Characteristics

Overview
IEC/EN: 60947-2

Applications

HDW9 series air circuit breaker covers 630A to 6300A with the rated operation voltage AC400/415/690V, 50/60Hz. It is used in distribution circuit to protect the circuit and devices from overload, undervoltage, short-circuit and earth faults. It is widely used in power stations, factories, mining and modern constructions, especially in intelligent construction power distribution systems.

Operation Condition

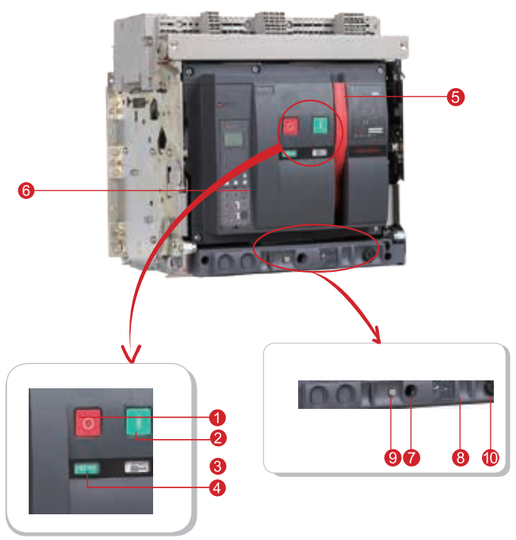
Ambient: -5°C~+40°C with average temperature ≤ +35°C, (1600N, 4000H1&H2)

For special models -40°C~+80°C may apply
The atmosphere relative humidity does not exceed 50% at maximum temperature of +40°C. Higher relative humidity is allowed under lower temperature (e.g. 90% at 20°C)
The condensation on the surface of the product due to temperature change must be considered

Altitude	≤ 2000m; special type is used for ≤ 4000m
EMC	Applies to Environment A
Pollution degree Installation condition	Pollution degree 3 Vertical with inclination with every direction not exceeding 5°C
Installation type	IV class for the main circuit of the circuit breaker, under-voltage release, elementary coil of power transformer III class for auxiliary circuit and control circuit
Transportation	Reverse placed and severe collision are forbidden

About the Panel

1. Opening button (O)
2. Closing button (I)
3. Energy storage status indicator
   - Charged, ready for closing: charged OK
   - Charged, not ready for closing: charged ~~OK~~
   - Discharged: discharged
4. Main contacts position indicator
   - O OFF Opening
   - ON Closing
5. Mechanical energy storage handle
6. Intelligent controller
7. Hand crank
8. 'Connected', 'testing', 'disconnected', position indicator
9. 'Connected', 'testing', 'disconnected, position indicator
10. Hand crank cabinet



Low-voltage Distribution

HDW9 Functions and Characteristics

Overview
IEC/EN: 60947-2

Technical Parameters

Circuit Breaker					
Common Parameters					
Pole		3,4			
Rated operational voltage Ue (V)		400/415, 690			
Rated insulation voltage Ui (V)		800/1000			
Rated impulse withstand voltage Uimp (kV)		8/12			
Rated Current					
In \ Frame Size (A)		1600N	4000H1	4000H2	6300L
630		•			
800		•			
1000		•			
1250		•			
1600		•	■	■	
2000			■	■	
2500			■	■	
3200			■	■	
4000			■	■	■
5000					■
6300					■
Breaking Capacity					
Icu(kA)	415V	50	65	100	120*1
	690V	35	65	75	
Ics(kA)	415V	50	65	100	100*1
	690V	35	65	75	
Icw(1s)(kA)	415V	42	65	85	85*1
	690V	35	65	75	
Service Life (one thousand times)					
Electrical Endurance (400V)		6	5	5	0.8
(690V)		4	3	3	
Mechanical Endurance:					
With maintenance		25	20	20	5
Without maintenance		12.5	10	10	2.5
Dimensions					
Size (mm) draw-out	3P	322x288x281	439x441x404	439x441x404	441.5x815x508*2
					441.5x930x508*3
	4P	322x358x281	439x556x404	439x556x404	441.5x930x508
Height x width x depth fixed	3P	301x276x200.5	352x422x306.5	352x422x306.5	
	4P	301x346x200.5	352x537x306.5	352x537x306.5	
Weight (kg) draw-out	3P	34	78	78	210
	4P	41	95	95	233
fixed	3P	14	42	42	
	4P	17	52	52	
Altitude					
The technical parameter will change when used for 2000m above sea level					
Dielectric resistance voltage (V)		3500	3150	2500	
Average isolation level (V)		1000	900	700	
Maximum utilisation voltage (V)		690	590	520	
Average thermal current 40°C		1XIn	0.99XIn	0.96XIn	

*1 400V
*2 Dimensions of 4000A and 5000A
*3 Dimension of 6300A


1600N


4000H1


4000H2

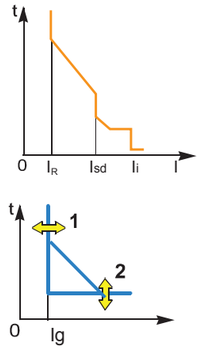

6300L

HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

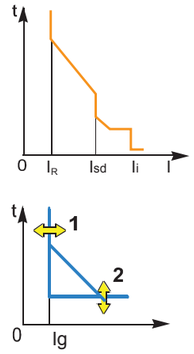
Overall View

iTR336



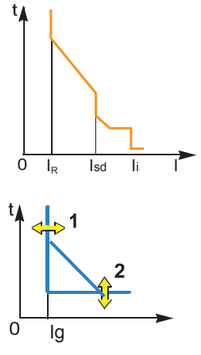
Basic Type
Protection:
Long time + short time + instantaneous + earth fault

iTR336E



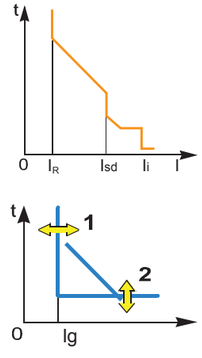
Standard Type
Protection:
Long time + short time + instantaneous + earth fault
LED lights indicate the status of 3 phases

iTR336H



Advanced Type
Protection:
Long time + short time + instantaneous + earth fault
Multiple protection, measurement, maintenance, communication functions.

iTR336H-L



High-low Temperature Type
Protection:
Long time + short time + instantaneous + earth fault
Multiple protection, measurement, maintenance, communication functions.
Available in extreme situations, between -40°C and 80°C

Low-voltage Distribution

HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

Function

	iTR336	iTR336E	iTR336H	iTR336H-L
				
Protection	Long time-L	Long time-L	Long time-L	Long time-L
	Short time-S	Short time-S	Short time-S	Short time-S
	Instantaneous-I	Instantaneous-I	Instantaneous-I	Instantaneous-I
	MCR	MCR	MCR	MCR
	Ground fault-G	Ground fault-G	Ground fault-G	Ground fault-G
			Under-voltage/alarm	Under-voltage/alarm
			Over-voltage/alarm	Over-voltage/alarm
			3-phase imbalance/alarm	3-phase imbalance/alarm
			Phase sequence/alarm	Phase sequence/alarm
			Under-frequency/alarm	Under-frequency/alarm
			Over-frequency/alarm	Over-frequency/alarm
			Inverse power protection/alarm	Inverse power protection/alarm
			Voltage harmonic alarm (THDu)	Voltage harmonic alarm (THDu)
			Current harmonic alarm (THDi)	Current harmonic alarm (THDi)
Measurement		Current	Current	Current
		Voltage	Voltage	Voltage
		Power	Power	Power
		Frequency	Frequency	Frequency
		Energy	Energy	Energy
			Harmonic	Harmonic
Auxiliary function	Test function	Pre-alarm	Pre-alarm	Pre-alarm
		Self-diagnose	Self-diagnose	Self-diagnose
		Fault history record	Fault history record	Fault history record
		Test function	Test function	Test function
			Load monitor	Load monitor
			ZSI	ZSI
				High to low temperature
Communication			Modbus	Modbus

HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

Overall View

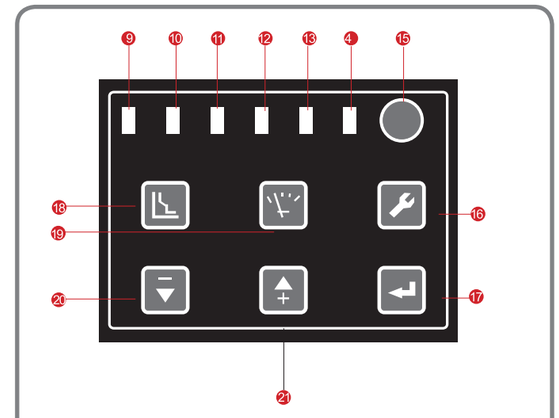
1. Top fix
2. LED indicator light
3. Data sheet
4. Adjusting knob
5. Bottom fixer
6. Terminal connector
7. CT connector
8. Magnetic flow/micro switch

Direction

9. Alarm LED
10. Long-time LED
11. Short/instantaneous LED
12. Leakage LED
13. Advanced protect LED
14. Communication
15. Reset

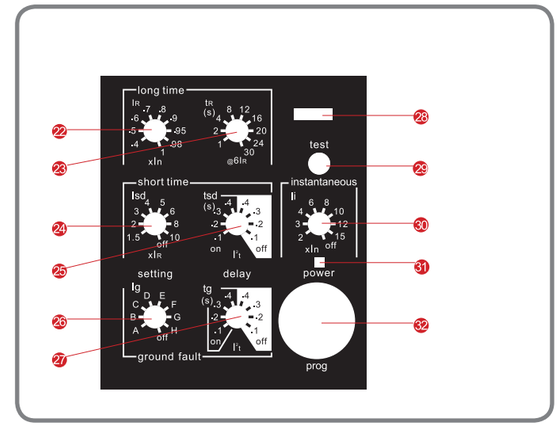
Navigator

16. System setting
17. Confirm
18. Protection interface/return
19. Measurement interface/return
20. Move down
21. Move up



Control Panel

22. Long time-current setting
23. Long time-time setting
24. Short time-current setting Isd
25. Short time-time setting tsd
26. Ground fault-current setting Ig
27. Ground fault-time setting tg
28. Padlock
29. Test, Instantaneous
30. Instantaneous current setting
31. Power
32. Test port



HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

Protection Characteristics

The intelligent control unit can provide inverse time delayed protection and fixed time delayed protection when the failure current is over inverse time delayed protection settings. Inverse time delayed protection curve meet the curve of I^2t.

1600N,4000H1,4000H2

Over-load Protect Characteristics

Tripping Characteristics

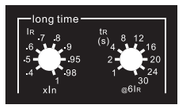
<1.05 I_R: >2h non-tripping
>1.2 I_R: <1h tripping
≥1.2 I_R: delay tripping

I_R setting range: 0.4In, 0.5In, 0.6In, 0.7In, 0.8In, 0.9In, 0.95In, 0.98In, 1.0In

Inverse Time Protection Tripping Characteristics I^2t: $t=(6/N)^2 * t_R$

Current	Tripping time								
1.5 I_R	16s	32s	64s	128s	192s	256s	320s	384s	480s
2 I_R	9s	18s	36s	72s	108s	144s	180s	216s	270s
6 I_R	1s	2s	4s	8s	12s	16s	20s	24s	30s

N: Failure current I/I_R
t: Failure tripping delayed time
t_R: Long delayed time setting
Tripping time range



Short-circuit Short Delay Protect Characteristics

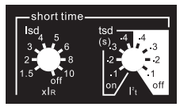
Tripping Characteristics

<0.9 Isd: >2h non-tripping
>1.1 Isd: <1h tripping
≥1.1 Isd: Delay tripping

I_{sd} setting range: 1.5 I_R , 2 I_R , 3 I_R, 4 I_R, 5 I_R, 6 I_R, 8 I_R, 10 I_R+OFF

Current	Tripping Time					
Isd<I≤8I_R	Inverse time		$I^2t=(8I_R)^2$ tsd			
		Setting time s	0.1, 0.2, 0.3, 0.4			
I>8I_R (I^2t ON) Isd<I≤10I_R (I^2t OFF)	Tripping time of fixed is the minimum time.	Setting time s	0.1	0.2	0.3	0.4
		Min. s	0.08	0.14	0.23	0.35
		Max. s	0.14	0.2	0.32	0.5

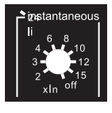
Isd: Short time delay current
I: Failure current
I_R: Long delay current
t: Tripping time
tsd: Short delay inverse time
Tripping time range



Short-circuit Instantaneous Protect Characteristics

Tripping Characteristics

<0.85Ii: Non-tripping
>1.15Ii: Tripping
Instantaneous current:2In, 3In, 4In, 6In, 8In, 10In, 12In, 15In+OFF
Tripping time range



HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

Ground Return Protect Characteristics

Tripping Characteristics

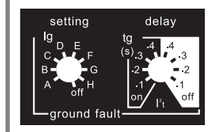
<0.9 Ig: Non-tripping
>1.1 Ig: Tripping
≥1.1 Ig: Delay tripping

Current	A	B	C	D	E	F	G	H	OFF
In≤1250	0.2In	0.3In	0.4In	0.5In	0.6In	0.8In	0.9In	In	
In>1250	500A	600A	700A	800A	900A	1000A	1100A	1200A	
tg(s)	Inverse time	Tripping Characteristics							

$$t = \frac{(Ig)^2}{I^2} \times tg$$

Tripping time of fixed is the minimum time	Setting time s	0.1, 0.2, 0.3, 0.4				
	Setting time s	0.1	0.2	0.3	0.4	
	Min. s	0.08	0.14	0.23	0.35	
	Max.s	0.14	0.2	0.32	0.5	

Ig: ground protection current. In>1250A, Ig=1200A. In≤ 1250A, Ig=In.
I: Fault current
T: Tripping delayed time
tg: Grounding inverse time
Tripping time range



Factory Default Settings

Curve	Long delay		Short delay		Inst.	Ground fault		Memory
I^2t	I_R	t_R	Isd	ts	Ii	Ig	tg	
	1In	30s	6In	0.2s	10In	G	0.4s	20min

Details refers to HDW9 Intelligent Control Unit User Manual-1600N, 4000H1 & H2

HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

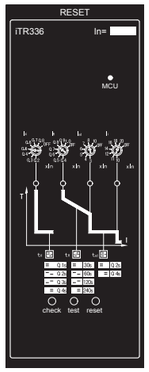
6300L

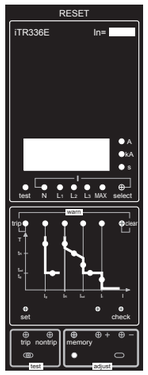
iTR336 Protect Characteristics	Setting Range
Over-load Protect Characteristics	
Tripping current I_R	(0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0) In+OFF
Delayed time setting t_R	30s, 60s, 120s, 240s
Short-circuit Short Delay Protect Characteristics	
Tripping current of fixed time Isd	(3, 4, 5, 6, 7, 8, 10) In+OFF
Delayed time of fixed time t_S	0.2s, 0.4s
Short-circuit Instantaneous Protect Characteristics	
Tripping current Ii	(7, 8, 9, 10, 11, 12, 14) In+OFF
Ground Return Protect Characteristics	
Tripping current Ig	(0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8) In+OFF
Delayed time t_g	0.1s, 0.2s, 0.3s, 0.4s

iTR336E Protect Characteristics	Setting Range						
Over-load Protect Characteristics							
Tripping current I_R	(0.4~1.0) In+OFF						
Delayed time setting t_R	Failure Current	Delay Time					
	t_R	15	30	60	120	240	480
	$1.5xI_R$	15	30	60	120	240	480
	$2xI_R$	8.4	16.9	33.8	67.5	135	270
	$7.2xI_R$	0.65	1.3	2.6	5.2	10.4	20.8
	t: $(1.5/N)^2xt_R$						
	N: Failure Current I/I_R						
	t: Delayed failure tripping time						
	t_R: Delayed tripping time						
Short-circuit Short Delay Protect Characteristics							
Tripping current of fixed time Isd	(0.4~15)In+OFF Step: below 10kA:≤2A; above 10kA: ≤ 10A						
Delayed time of fixed time t_S	I^2T						

Failure Current	Delay Time				
	ts (s)	0.1	0.2	0.3	0.4
I^2T: OFF	Min.delay (ms)	60	160	255	340
	Max.delay (ms)	140	240	345	460
I^2T:ON	Min.delay (ms)	60	160	255	340
$I>8I_R$	Max.delay (ms)	140	240	345	460
I^2T: ON	Inverse time	$t=(8I_R)^2/I^2xts$			
$I\leq 8I_R$					

Short-circuit Instantaneous Protect Characteristics	
Tripping current Ii	2.0In~100kA+OFF
Ground Return Protect Characteristics	
Tripping current Ig	(0.2~1.0) In+OFF
Delayed time tg	0.1s, 0.2s, 0.3s, 0.4s, OFF

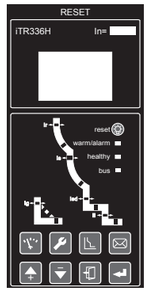




HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
IEC/EN: 60947-2

iTR336H Protect Characteristics	
Over-load Protect Characteristics	
Tripping current I_R	OFF+(0.4~1.0)In
Tripping curves	SI: Standard inverse time
Protection type	VI: Rapid Inverse Time
	EI(G): Express inverse time (distribution)
	EI(M): Express inverse time (electromotor)
	HV~High voltage fuse compatibility
	I^2t: Universal inverse time protection
Delayed time setting	C01~C16
Short-circuit Short Delay Protect Characteristics	
Tripping current of inverse time Is	OFF+0.4~15In
Tripping current of fixed time Isd	OFF+0.4~15In
Delayed time of fixed time tsd	0.1~0.4s
Short-circuit Instantaneous Protect Characteristics	
Tripping current Ii	2.0In~100kA+OFF
Ground Return Protect Characteristics	
Tripping current Ig	OFF+(0.2~1.0)In
Shearing coefficient of inverse time Cr	(1.5~6)+OFF
Delayed time tg	0.1~1s



Factory Default Settings

Controller	Curve	Long delay		Short delay			Inst.	Ground fault		Monitering Ic1, Ic2	Memory
		I_R	t_R	Isd		ts	Ii	Ig	tg		
iTR336											
iTR336E	I^2t	1In	60s	4In	/	0.2s	10In	0.8In	0.4s	1In	20min
iTR336H				6In	8In						

HDW9 Functions and Characteristics

iTR336 Series Intelligent Control Units
Accessories
IEC/EN: 60947-2

Remote Operation

Shunt Release MX

After the circuit breaker is closed, the shunt release can open the circuit breaker instantaneously under required power voltage. The operation can be made remotely.

- Rated control power voltage: AC220V/AC230V, AC380V/AC400V, DC220V
- Operating voltage: (0.7-1.1) Us
- Break time: 50±10ms (1600N,4000H1&H2)
  <30ms (6300L)

Closing Release XF

After the circuit breaker completes energy storage, the closing release can close the circuit breaker under required power voltage. The operation can be made remotely.

- Rated control power voltage: AC220V/AC230V, AC380V/AC400V, DC220V
- Operating voltage: (0.85-1.1) Us
- Closing time: 55±10ms(1600N)
  70±10ms(4000H1&H2,>3200A,80±10ms)
  <70ms (6300L)

Under-voltage Release MN

The under-voltage release can be divided into under-voltage release and under-voltage delayed release.
When the circuit breaker is closed, the voltage will drop to 70% to 35% of rated voltage and the circuit breaker can be opened.
The breaker can only be closed again when the power voltage of the under-voltage release returns to 85% of rated voltage.
Rated control power voltage: AC220V/AC230V, AC380V/AC400V

- Operating voltage: (0.35-0.7) Ue
- Reliable closing voltage: (0.85-1.1) Ue
- Voltage that can not be closed: ≤ 0.35Ue

Under-voltage Delayed Release MNR

The under-voltage delay release can open the circuit breaker after 0.5s, 0.9s, 1.5s, 3s (1600N,4000H1&H2),1s, 3s, 5s (6300L)

Electric Motor MCH

The motor mechanism can store energy for the circuit breaker automatically when it is power on and the circuit breaker is open. The electric motor can open or close the circuit breaker with the shunt release, under-voltage release and closing voltage release. When there is no power supply the handle can store energy for the circuit breaker.

- Rated control power voltage: AC220V/AC230V, AC380V/AC400V, DC220V
- Operating voltage: (0.85-1.1) Us
- Power consumption: 180W (1600N,4000H1&H2),150W (6300L)
- Energy storage time: <5s
- Utilization category: AC15, DC13

HDW9 Functions and Characteristics

Accessories
IEC/EN: 60947-2

Indication Contacts

ON/OFF Auxiliary Contacts OF

Default: 4NO+4NC 8NO+8NC for 4000AF and 5NO+5NC are also available. Auxiliary contacts can be used to indicate the status of the circuit breaker, e.g. connecting the status indicator of the circuit breaker.
Rated thermal current Ith: AC400V/AC380V 0.75A, AC230V 1.3A, DC220V 0.15A

Ready to Close Contact PF

Ready to close contact is composed of a mechanical indicating contact and a transferring contact. It can send closing signal and indicate:

- The circuit breaker is disconnected
- The energy is stored
- No continued opening command

AC12/DC12: AC380V/AC400V 3A, DC220V 0.15A

Connected (CE), Disconnected (CD), Testing (CT) Position Indication Contacts

Connected (CE), Disconnected (CD), Testing (CT) position indication contacts are installed on the chassis for indicating the position of the circuit breaker
Draw-out type only

Fault-trip Indication Contact (Additional) SWT2

When there is electrical malfunction, the contact provides a set of malfunction signal outputs

Remote Reset Contact Res

When there is electrical malfunction, after the circuit breaker is opening the contact can allow malfunction locking device of the circuit breaker to be remotely reset. This contact is not compatible with additional SWT fault-trip indication contact
Only for iTR336H, iTR336H-L

Keylocks and Interlocks

OFF Position Padlock

The padlock should be prepared by the client.
The rocker cannot be inserted after the padlock is locked or when the circuit breaker is at disconnected position.

OFF Position Keylock

The opening lock can lock the circuit at OFF position. The circuit breaker can only be closed when the lock is opened with a key and the key is not pulled out. The opening lock can be divided into 3 types:

- 1 lock and 1 key
- 2 locks and 1 key
- 3 locks and 2 keys

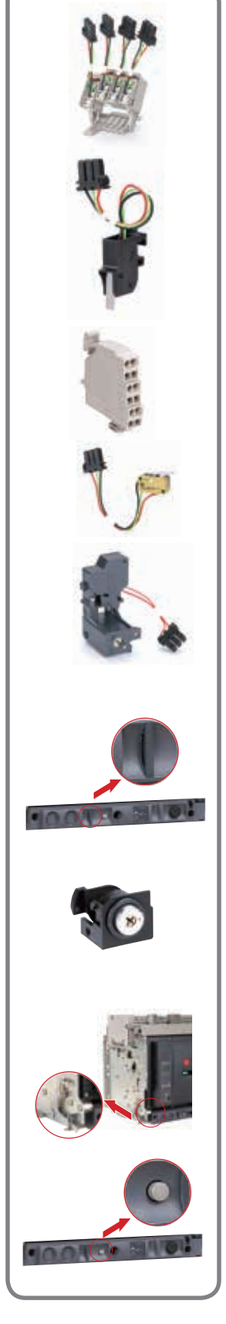
The latter 2 types are used in distribution system with two wirings and one contacting

Door Interlock

The interlock is installed at the side of draw-out type circuit breaker and linked with the door of the distribution cabinet. When the circuit breaker is at connection or test position, it ensures that the cabinet door cannot be opened. The cabinet door can be opened at disconnected position. It can prevent the circuit breaker from slipping and causing damage

3-position Interlock

For the draw-out type circuit breaker, the 'connection', 'test' and 'disconnected' position of the circuit breaker can be indicated by the indicator. The in/out button is locked at indicated by the indicator. The in/out button is locked at each position. Push to unlock



Low-voltage Distribution

HDW9 Functions and Characteristics

Accessories
IEC/EN: 60947-2

Mechanical Interlock

Lever Interlock and Cable Interlock

- Lever interlock is used for two circuit breakers installed vertically. Cable interlock is used for 2 or 3 circuit breakers installed vertically or horizontally
- The interlocks is used in distribution system with two wirings and one contacting
- The interlocks build mechanical links between 2 or 3 circuit breakers
- If one circuit breaker is closed, the linked circuit breaker will be opened

Operation Protection

Door Frame

- The door frame is installed on the door of the distribution cabinet, and can increase the protection degree to IP40
- Suitable for fix-type and draw-out type

Interphase Barriers

- The Interphase barriers are insulating plates installed in the middle of busbar to increase creepage distance and insulating ability
- The Interphase barriers are installed between the front and rear connecting terminals

Safety Shutters

The safety shutters is installed in draw-out type circuit breaker. When the circuit breaker is at test or disconnected position, the safety shutters can protect contact cables by preventing operators from touching live parts

Accessories of Control Unit

N-phase External Current Transformer

N-phase external current transformer is used to measure neutral phase current in 3P+N grounding system and it is installed on the grounding busbar by the client

Ground Return Current Transformer

- Ground return current transformer is used to measure the neutral phase current under grounding type of grounding current return. The current transformer can also provide protection for up and down grounding defects of the circuit breaker
- The grounding current transformer is only suitable for iTR336H and iTR336H-L controller

Earth-leakage Current Transformer

Earth-leakage current transformer is used for the grounding protection type of leakage protection
The Earth-leakage Current Transformer is suitable for iTR336H and iTR336H-L controller

Power Supply Module

- The power supply module can be used in AC220/AC230V, AC400V/AC415V, DC220V circuits and provide power supply for intelligent controller. And the output is DC24V
- The power supply module of HDW9-6300L is used in DC220V circuits and provides power supply for intelligent controller. Signal convert module works with power supply module

Signal Convert Module

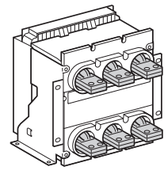
Signal convert module is used for communication function, e.g. zone selective interlock function. The iTR336H and iTR336H-L controller are equipped with this

HDW9 Functions and Characteristics

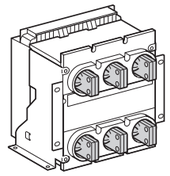
Connections
IEC/EN: 60947-2

Rear Connections

Horizontal

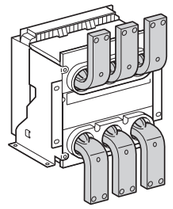


Vertical



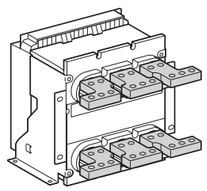
For 1600N, horizontal and vertical connection methods transforms by rotating the connection terminal 90 degree
For 4000H1 & H2, horizontal and vertical connection terminals are different, please remark when ordering
For 6300L, horizontal connection is the only method

Front Connections 630A~3200A

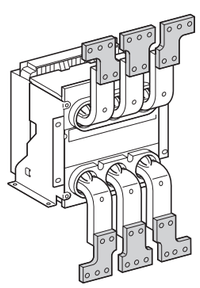


Spreaders (1600N only)

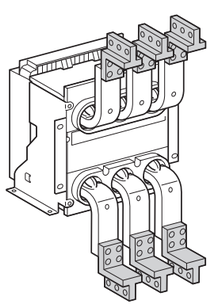
Horizontal Rear Connection with Spreaders



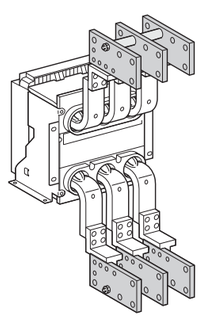
Front Connection with Spreaders



Vertical Adapters



Cable-lug Adapters

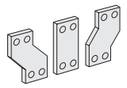
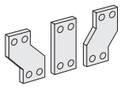
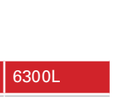


Low-voltage Distribution

HDW9 Functions and Characteristics

Connection
IEC/EN: 60947-2

Optional Connection Solutions

Type	1600N				4000H1~4000H2				6300L
	Draw-out Type		Fixed Type		Draw-out Type		Fixed Type		Draw-out
	Rear	Front	Rear	Front	Rear	Front	Rear	Front	Rear
Spreaders									
Vertical-connection Adapters									
Cable-lug Adapters									
Interphase Barriers *1			*1 		*2 		*2 		

*1 Interphase barriers must be used over 500V
*2 4000A horizontal rear connection is not included

HDW9 Functions and Characteristics

Coding System
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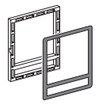
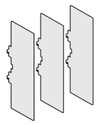
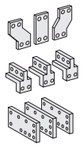
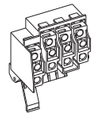
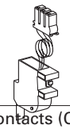
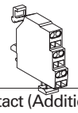
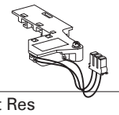
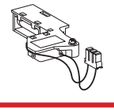
Accessory References

	Reference	Remarks
Intelligent Control Unit		
	HDW9TU0	iTR336
	HDW9TUE	iTR336E
	HDW9TUH	iTR336H
	HDW9TUHL	iTR336H-L (1600N,4000H1&H2)
Remote Operation		
Shunt Release MX	HDW9MX2A	AC230V (1600N,4000H1&H2)
	HDW9MX4A	AC400V (1600N,4000H1&H2)
	HDW9MX2D	DC220V (1600N,4000H1&H2)
	HDW9MX2A63	AC230V (6300L)
	HDW9MX4A63	AC400V (6300L)
	HDW9MX2D63	DC220V (6300L)
Closing Release XF	HDW9XF2A	AC230V (1600N,4000H1&H2)
	HDW9XF4A	AC400V (1600N,4000H1&H2)
	HDW9XF2D	DC220V (1600N,4000H1&H2)
	HDW9XF2A63	AC230V (6300L)
	HDW9XF4A63	AC400V (6300L)
	HDW9XF2D63	DC220V (6300L)
Under-voltage Release MN	HDW9MN2A	AC230V (1600N,4000H1&H2)
	HDW9MN4A	AC400V (1600N,4000H1&H2)
	HDW9MN2A63	AC230V (6300L)
	HDW9MN4A63	AC400V (6300L)
Under-voltage Delayed Release MNR	HDW9MNR2A	AC230V (1600N,4000H1&H2)
	HDW9MNR4A	AC400V (1600N,4000H1&H2)
	HDW9MNR2A63	AC230V (6300L)
	HDW9MNR4A63	AC400V (6300L)
MCH	HDW9MCH162A	AC230V (1600N)
	HDW9MCH164A	AC400V (1600N)
	HDW9MCH162D	DC220V (1600N)
	HDW9MCH402A	AC230V (4000H1&H2)
	HDW9MCH404A	AC400V (4000H1&H2)
	HDW9MCH402D	DC220V (4000H1&H2)
	HDW9MCH632A	AC230V (6300L)
	HDW9MCH634A	AC400V (6300L)
	HDW9MCH632D	DC230V (6300L)

Low-voltage Distribution

HDW9 Selection

Coding System
IEC/EN: 60947-2

Operation Protection		
Door Frame 	HDW916FCDP	1600N fixed type
	HDW916DCDP	1600N draw-out type
	HDW940FCDP	4000H1&H2 fixed type
	HDW940DCDP	4000H1&H2 draw-out type
	HDW963DCDP	6300L draw-out type
Interphase Barriers 	HDW916FEIP	1600N fixed type
	HDW916DEIP	1600N draw-out type
	HDW940FEIP	4000H1&H2 fixed type
	HDW940DEIP	4000H1&H2 draw-out type
	HDW963DEIP	6300L draw-out type
Connection Accessories		
	HDW9V3	1600N 3P vertical adapters
	HDW9V4	1600N 4P vertical adapters
	HDW9C3	1600N 3P cable-lug adapters
	HDW9C4	1600N 4P cable-lug adapters
	HDW9S3	1600N 3P spreaders
	HDW9S4	1600N 4P spreaders
Indication Contacts		
Auxiliary Contacts OF 	HDW9OF4416	4NO 4NC--1600N
	HDW9OF4440	4NO 4NC--4000H1&H2
	HDW9OF88	8NO 8NC--4000H1&H2
	HDW9OF12	12NO 12NC--4000H1&H2
	HDW9OF55	5NO 5NC--6300L
Ready to Close Contact PF 	HDW916PF	1600N
	HDW940PF	4000H1&H2
3-Position Indication Contacts (CE, CD, CT) 	HDW916EDT	1600N
	HDW940EDT	4000H1&H2
Fault-Trip Indication Contact (Additional) SWT2 	HDW916SWT2	1600N
	HDW940SWT2	4000H1&H2
Remote Reset Contact Res 	HDW916RES	1600N
	HDW940RES	4000H1&H2

HDW9 Functions and Characteristics

Coding System
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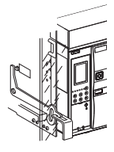
Accessories of the Control Unit		
N-Phase External Current Transformer 	HDW9N16	1600N
	HDW9N40	4000H1&H2
	HDW9N63	6300L
Ground Return Current Transformer 	HDW9G	
Earth-Leakage Current Transformer 	HDW9L	
Power Supply Module 	HDW92AP	AC230V
	HDW94AP	AC400V
	HDW92DP	DC220V
Signal Convert Module 	HDW9TR	
Keylock and Interlock		
Keylocks 	HDW916L1	1600N--1 lock 1 key
	HDW916L2	1600N--2 locks 1 key
	HDW916L3	1600N--3 locks 2 keys
	HDW940L1	4000H1&H2--1 lock 1 key
	HDW940L2	4000H1&H2--2 locks 1 key
	HDW940L3	4000H1&H2--3 locks 2 keys
	HDW963L1	6300L--1 lock 1 key
	HDW963L2	6300L--2 locks 1 key
	HDW963L3	6300L--3 locks 2 keys
Door Interlocks	HDW9DLL16	1600N fixed type--left
	HDW9DLR16	1600N draw-out type--right
	HDW9DLL40	4000H1&H2 fixed type--left
	HDW9DLR40	4000H1&H2 draw-out type--right
	HDW9DLL63	6300L draw-out type--left
Mechanical Interlock	HDW9DLR63	6300L draw-out type--right
Cable Interlocks		
Lever Interlocks 	HDW916FLL2	1600N fixed type--2 devices
	HDW916DLL2	1600N draw-out type--2 devices
	HDW940FLL2	4000H1&H2 fixed type--2 devices
	HDW940FLL3	4000H1&H2 fixed type--3 devices
	HDW940DLL2	4000H1&H2 draw-out type--2 devices
	HDW940DLL3	4000H1&H2 draw-out type--3 devices
	HDW963DLL2	6300L draw-out type--2 devic
	HDW963DLL3	6300L draw-out type--3 devices
	HDW916FGL2	1600N fixed type--2 devices
	HDW916DGL2	1600N draw-out type--2 devices
	HDW940FGL2	4000H1&H2 fixed type--2 devices
	HDW940DGL2	4000H1&H2 draw-out type--2 devices
	HDW963DGL2	6300L draw-out type--2 devices
	HDW963DGL3	6300L draw-out type--3 devices

HDW9 Functions and Characteristics

Coding System
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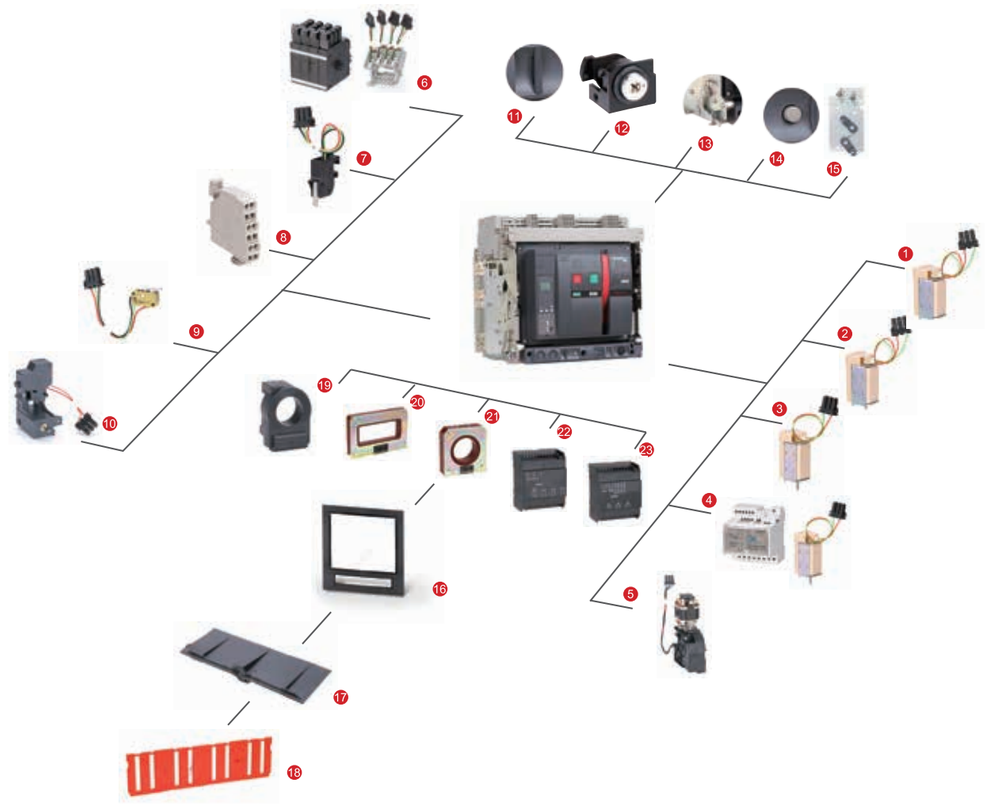
HDW9 Accessories Instruction



Remote Operation	Indication Contacts	Locks	Mechanical Interlock	Protection	Controller Accessories
1 Shunt release	6 Auxiliary contacts OF	11 OFF position padlock	15 Mechanical interlock	16 Door frame	19 N-phase external CT
2 Closing release	7 Ready to close contact	12 OFF position keylock		17 Interphase barriers	20 Ground return CT
3 Under-voltage release	8 3-position indication contacts(CE, CD, CT)	13 Door interlock		18 Safety shutter	21 Earth-leakage CT
4 Under-voltage delayed release	9 Fault -trip indication contact (SWT)	14 3-position interlock			22 Power supply module
5 Electric motor	10 Remote reset contact				23 Signal convert module

HDW9 Selection

Configuration

Configuration

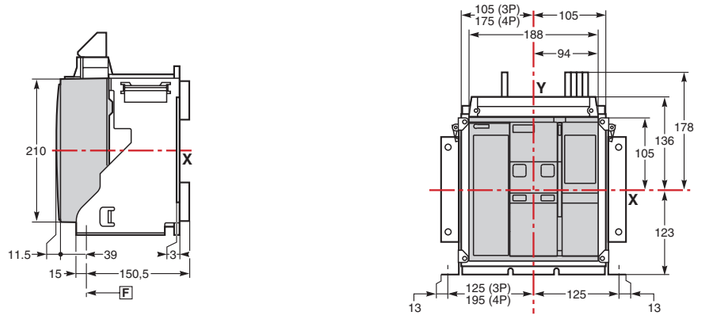
			1600N	4000H1	4000H2	6300L
Main Body						
Main body of circuit breaker			●	●	●	●
Components						
Intelligent control unit	iTR336		●	●	●	●
	iTR336E		●	●	●	●
	iTR336H		●	●	●	●
	iTR336H-L		●	●	●	●
Remote operation	Shunt release		●	●	●	●
	Closing release		●	●	●	●
	Electric motor		●	●	●	●
	Under-voltage release		●	●	●	●
	Under-voltage delayed release		●	●	●	●
Operation protection	Door frame		●	●	●	●
	Interphase barriers[1]		●	●	●	●
Wiring methods	Horizontal rear connection		●	●	●	●
	Horizontal rear connection with spreaders		●			
	Vertical rear connection		●	●	●	
	Front connection[2]		●	●	●	
	Front connection with spreaders		●			
	Front connection with vertical-connection adapters		●			
	Front connection with cable-lug adapters		●			
Indication contacts	Auxiliary contacts	4NO 4NC	●	●	●	
		5NO 5NC				●
		8NO 8NC		●	●	
		12NO 12NC		●	●	
	Ready to close contact		●	●	●	
	Fault-trip indication contact SWT2 (additional)		●	●	●	
	3-position indication contacts[3]		●	●	●	
	Remote reset contact[4, 5]		●	●	●	
Control unit accessories	N-phase external current transformer		●	●	●	●
	Ground return current transformer[4]		●	●	●	●
	Earth-leakage current transformer[4]		●	●	●	●
	Power supply module		●	●	●	●
	Signal convert module[4]		●	●	●	●
Locks	OFF position keylock		●	●	●	●
	Door interlock		●	●	●	●
Mechanical interlock	Cable interlock		●	●	●	●
	Lever interlock		●	●	●	●

[1] Details refers to **P189**
[2] Front connection is not available for 4000H1 & H2 4000A
[3] Only for draw-out type
[4] Only for iTR336H, iTR336H-L
[5] Not compatible with additional fault-trip indication contact (SWT2)

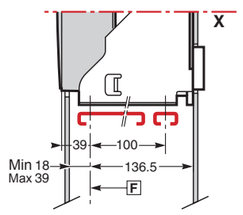
HDW9 Installation Dimensions

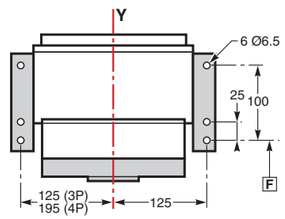
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

Dimensions

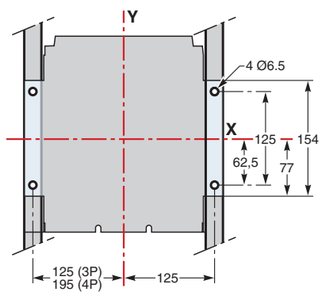


Horizontal installation on board or railway

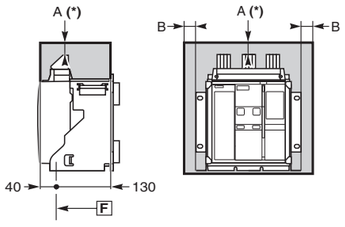




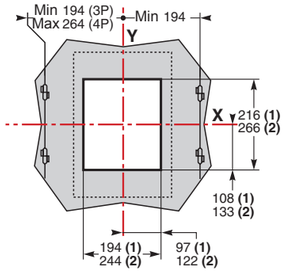
Vertical installation on back board or frame



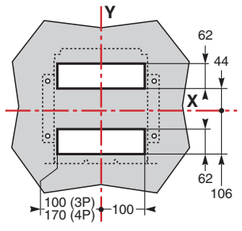
Safety clearances



Door frame



Rear panel holes dimensions



F: Base point

	Non-conductor	Metals	Electric conductor
A	0	0	100
B	0	0	60

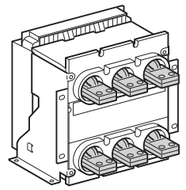
(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask
Removing the arc chutes needs 50mm safety clearance
Removing terminal blocks needs 20mm safety clearance

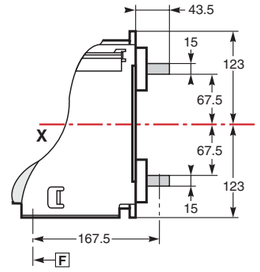
HDW9 Installation Dimensions

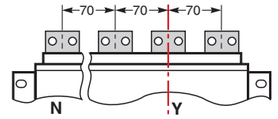
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

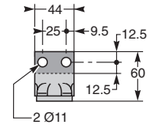
Connections

Horizontal rear connection

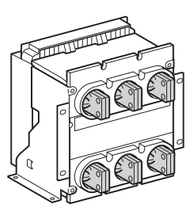


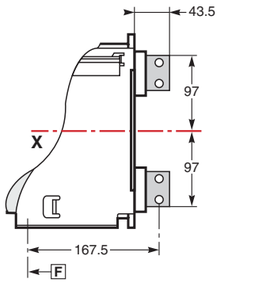


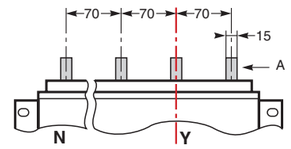


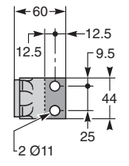


Vertical rear connection

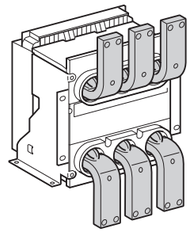


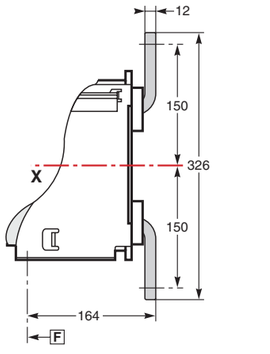


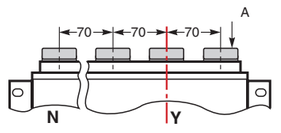


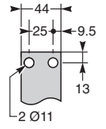


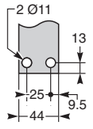
Front connection











Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

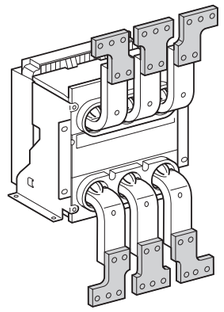
Low-voltage Distribution

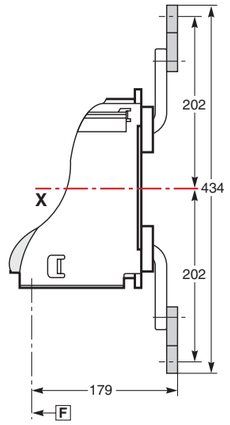
HDW9 Installation Dimensions

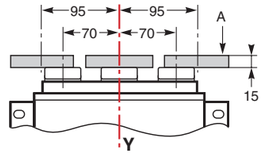
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

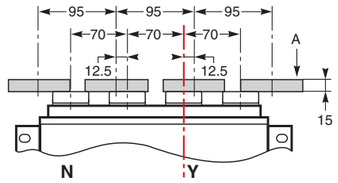
Connections

Front connection with spreaders

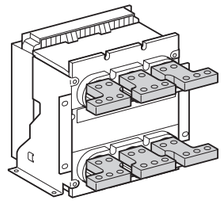


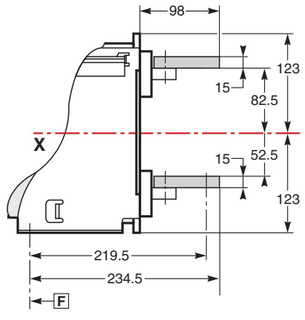


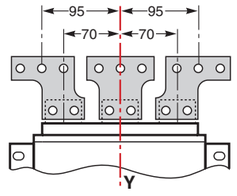


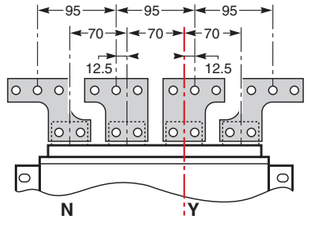


Rear connection with spreaders

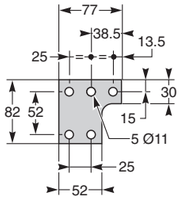




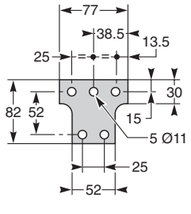




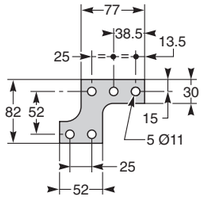
Middle left or right spreader for 4P



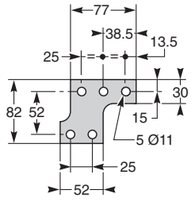
Middle spreader for 3P



Left or right spreader for 4P



Left or right spreader for 3P



F :Base point

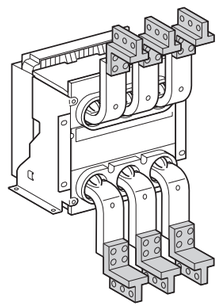
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask

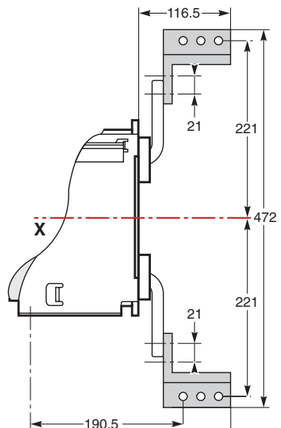
HDW9 Installation Dimensions

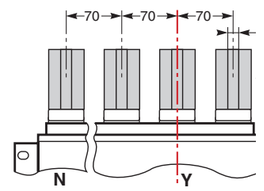
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

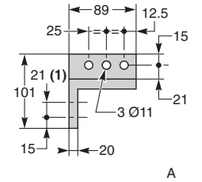
Connections

Front connection with vertical-connection adapters

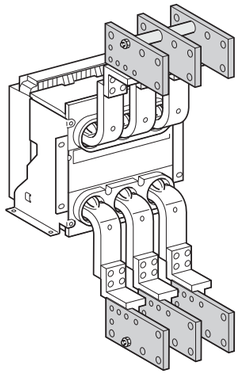


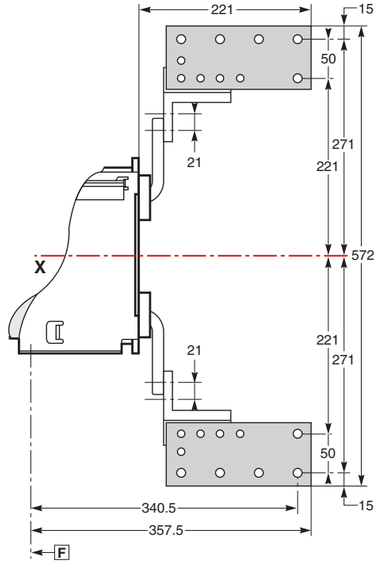


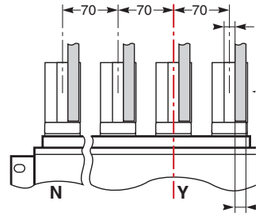


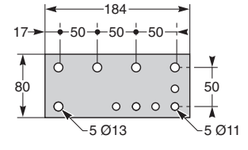


Front connection with vertical-connection adapters and cable-lug adaptersand cable-lug adapters









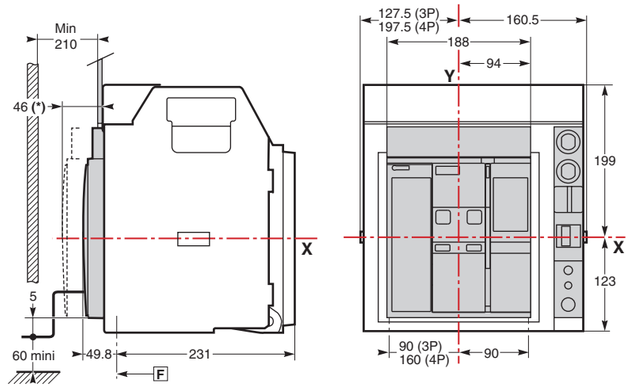
Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

Low-voltage Distribution

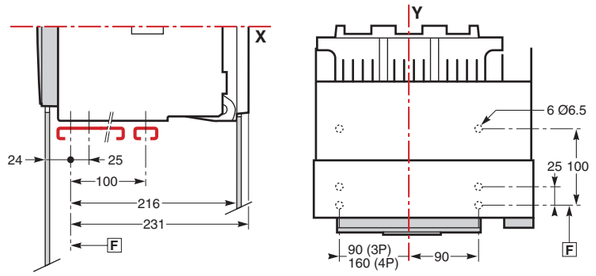
HDW9 Installation Dimensions

HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

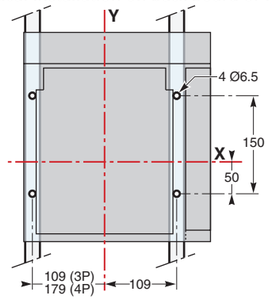
Dimensions



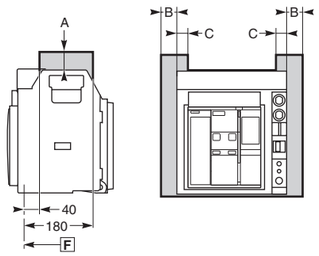
Horizontal installation on board or railway



Vertical installation on back board or frame

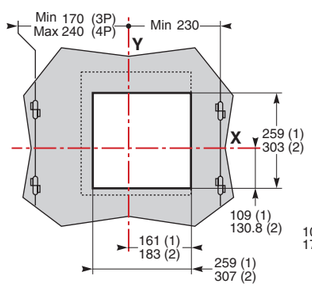


Safety clearances

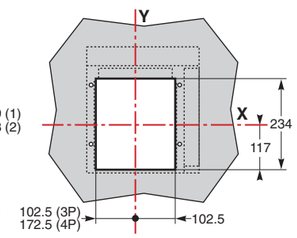


F :Base point

Door holes dimensions



Rear panel holes dimensions



	Non-conductor	Metals	Electric conductor
A	0	0	90
B	10	10	60
C	0	0	90

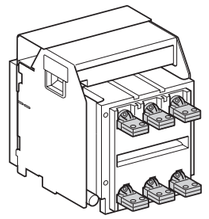
(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask

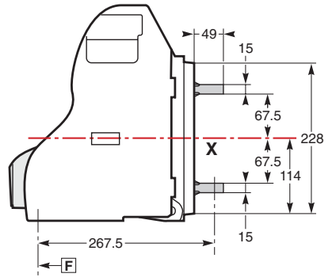
HDW9 Installation Dimensions

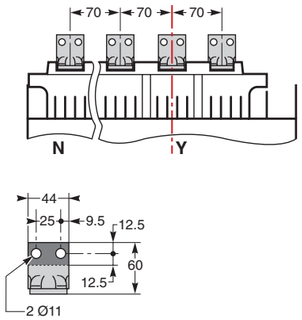
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

Connections

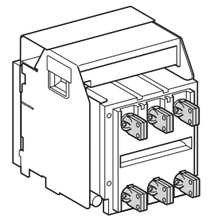
Horizontal rear connection

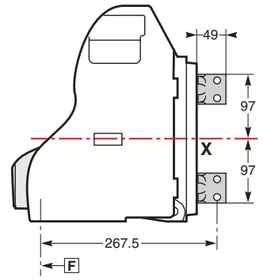


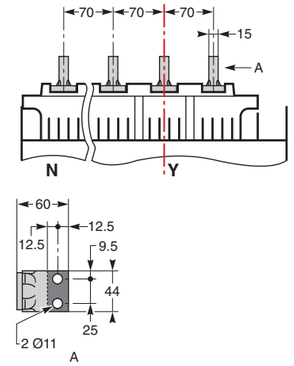




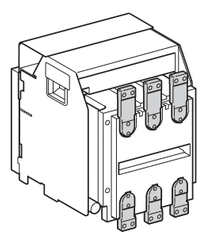
Vertical rear connection

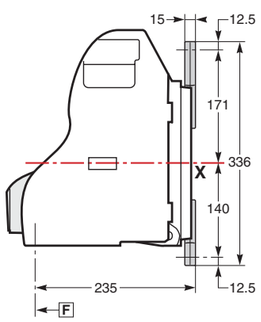


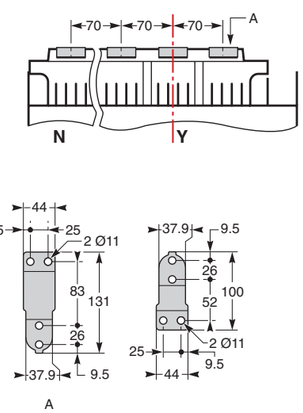




Front connection





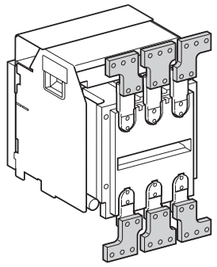


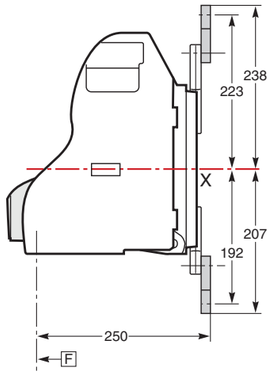
HDW9 Installation Dimensions

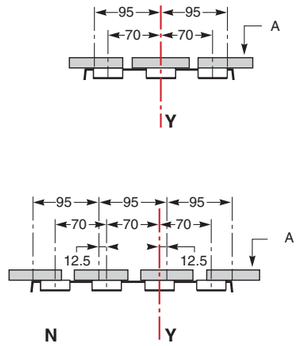
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

Dimensions

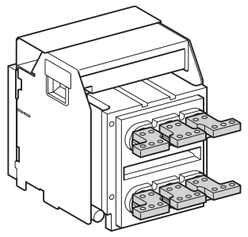
Front connection with spreaders

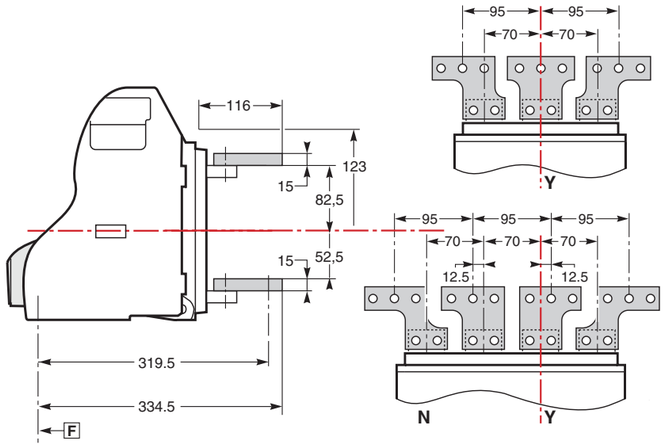




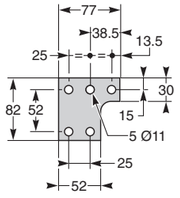


Rear connection with spreaders

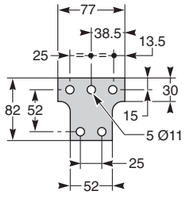




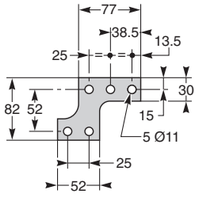
Middle left or right spreader for 4P



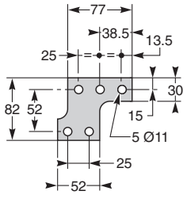
Middle spreader for 3P



Left or right spreader for 4P



Left or right spreader for 3P



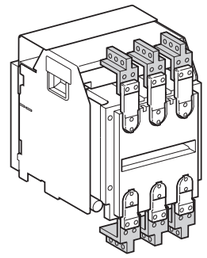
F : Base point
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask

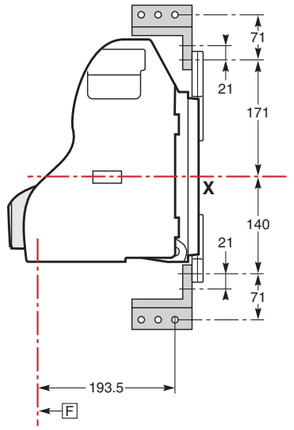
HDW9 Installation Dimensions

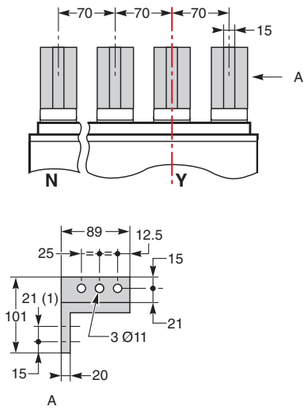
HDW9-1600N Fixed Type 3P & 4P
IEC/EN: 60947-2

Connections

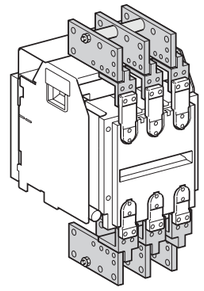
Front connection with vertical-connection adapters

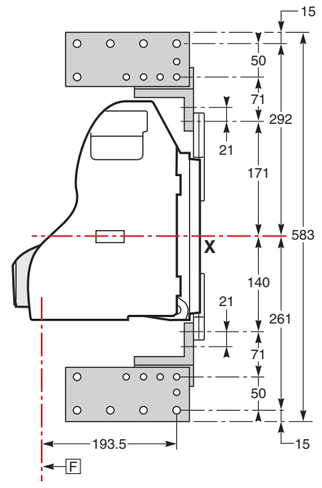


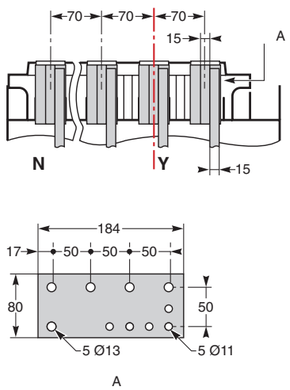




Front connection with vertical-connection adapters and cable-lug adapters







F : Base point
Remark: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

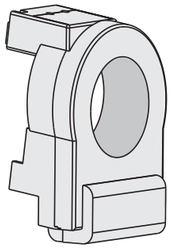
Low-voltage Distribution

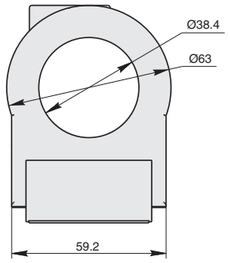
HDW9 Installation Dimensions

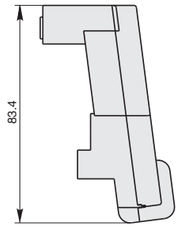
HDW9-1600N
IEC/EN: 60947-2

Dimensions of Extend Current Transformers

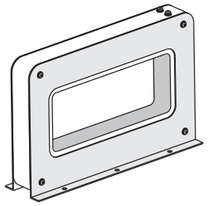
N-phase Extend Current Transformer

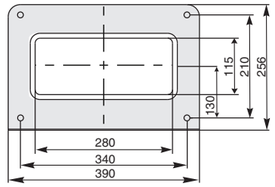


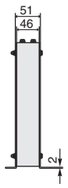




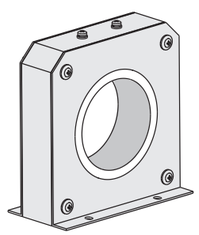
Earth-leakage Current Transformer

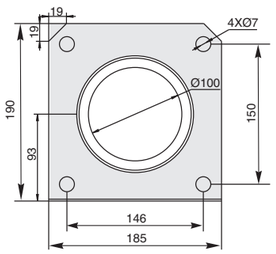


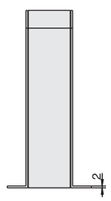


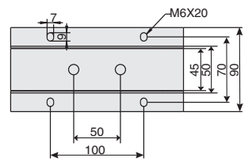


Ground Return Current Transformer





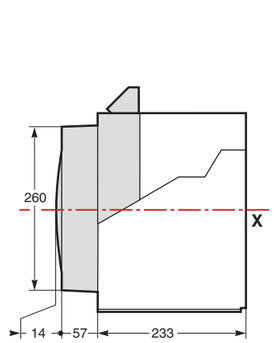


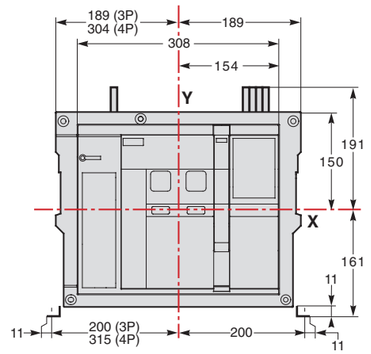


HDW9 Installation Dimensions

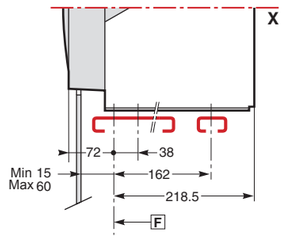
HDW9-4000H1 & H2 Fixed Type 3P & 4P 1600A~3200A
IEC/EN: 60947-2

Dimensions

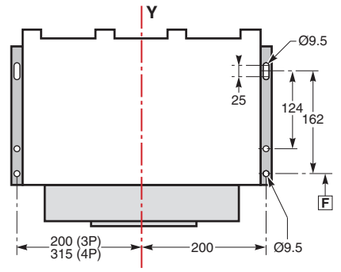




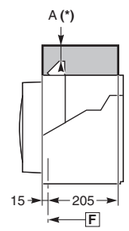
Horizontal installation on board or railway

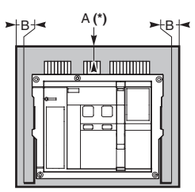


Vertical installation on back board or frame

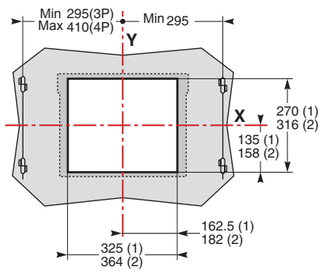


Safety clearances





Door holes dimensions



F : Base point

	Non-conductor	Metals	Electric conductor
A	0	0	100
B	0	0	60

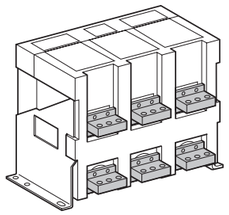
(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask
Removing the arc chutes needs 110mm safety clearance
Removing terminal blocks needs 20mm safety clearance

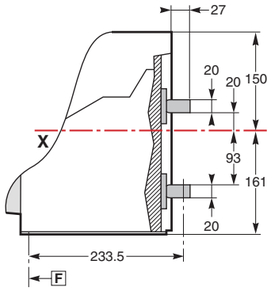
HDW9 Installation Dimensions

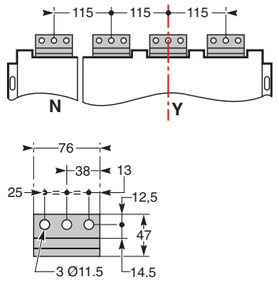
HDW9-4000H1 & H2 Fixed Type 3P & 4P 1600A~3200A
IEC/EN: 60947-2

Connections

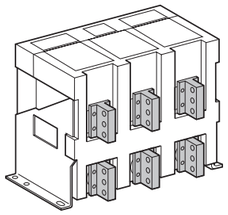
Horizontal rear connection

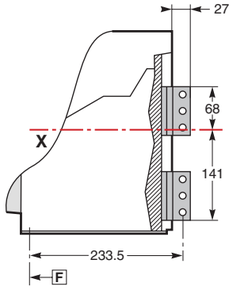


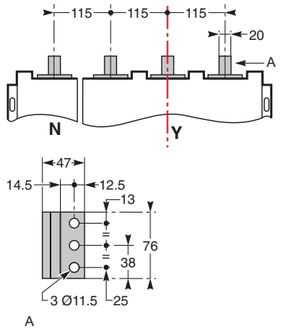




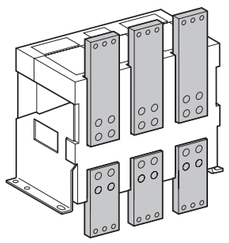
Vertical rear connection

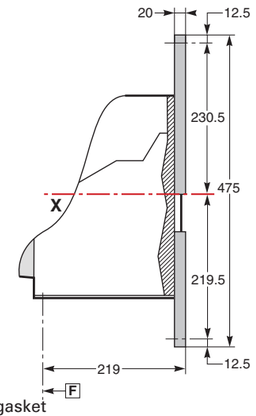


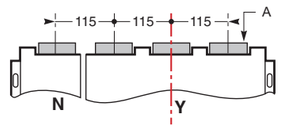


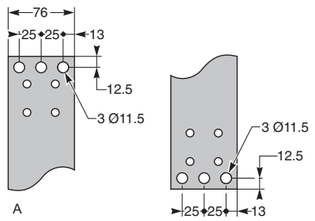


Front connection









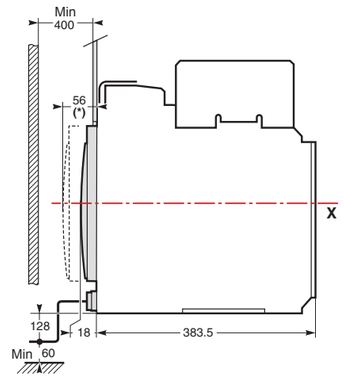
F : Base point

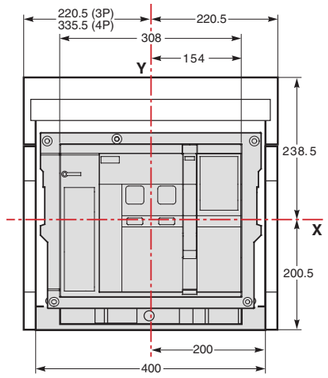
Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

HDW9 Installation Dimensions

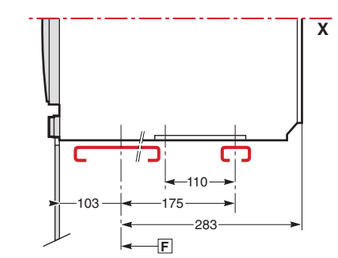
HDW9-4000H1 & H2 Draw-out Type 3P & 4P 1600A~3200A
IEC/EN: 60947-2

Dimensions

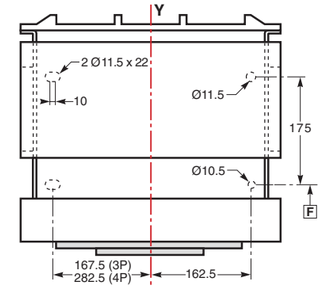




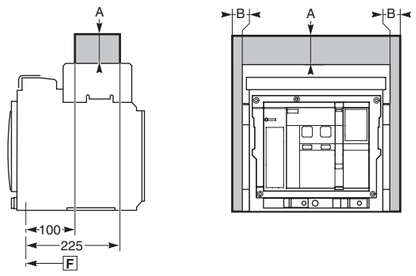
Horizontal installation on board or railway



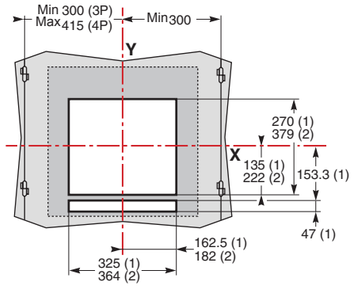
Vertical installation on back board or frame



Safety clearances



Door holes dimensions



F : Base point

	Non-conductor	Metals	Electric conductor
A	0	0	0
B	0	0	60

(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask.
Removing the arc chutes needs 110mm safety clearance
Removing terminal blocks needs 20mm safety clearance

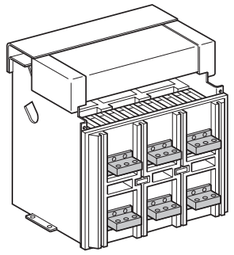
Low-voltage Distribution

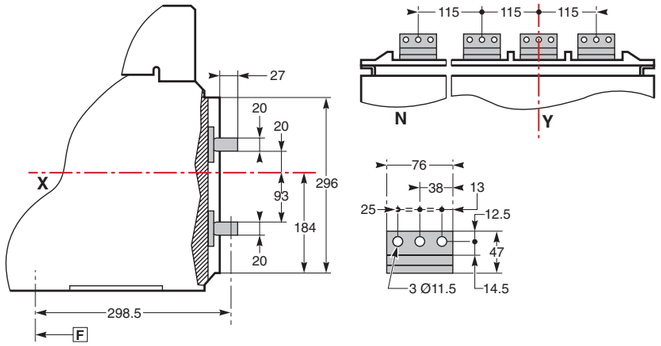
HDW9 Installation Dimensions

HDW9-4000H1 & H2 Fixed Type 3P & 4P 1600A~3200A
IEC/EN: 60947-2

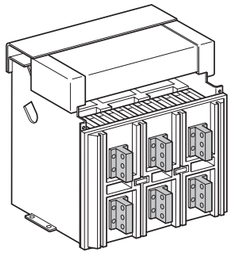
Connections

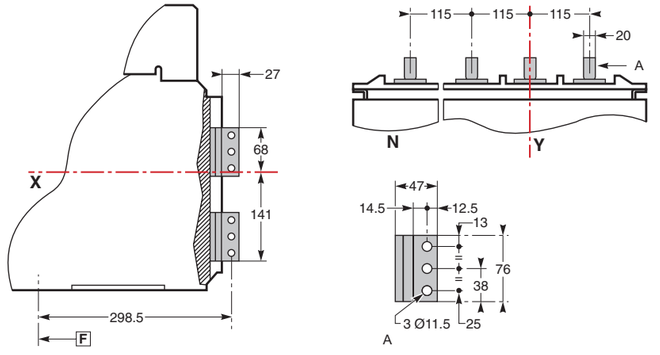
Horizontal rear connection



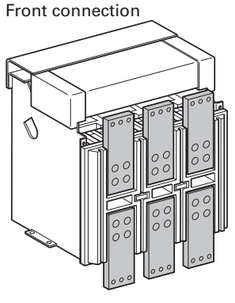


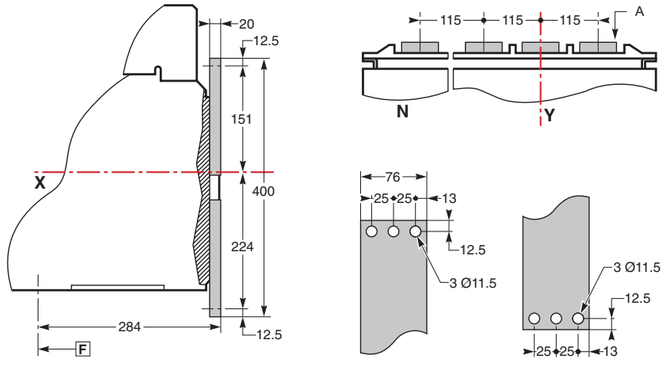
Vertical rear connection





Front connection





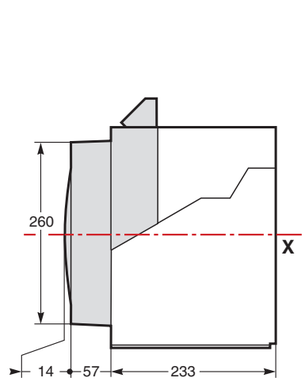
F : Base point

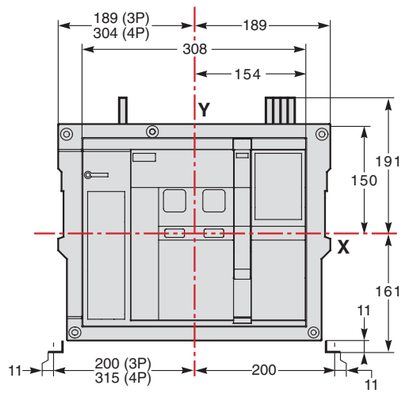
Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

HDW9 Installation Dimensions

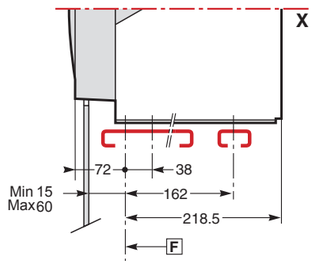
HDW9-4000H1 & H2 Fixed Type 3P & 4P 1600A~3200A
IEC/EN: 60947-2

Dimensions

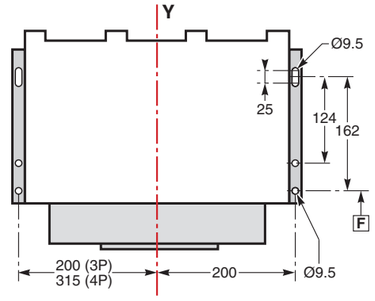




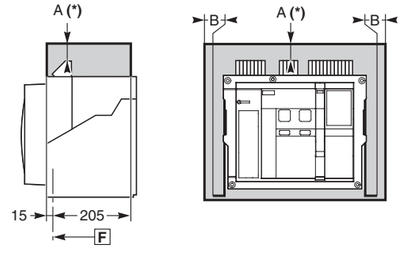
Horizontal installation on board or railway



Vertical installation on back board or frame

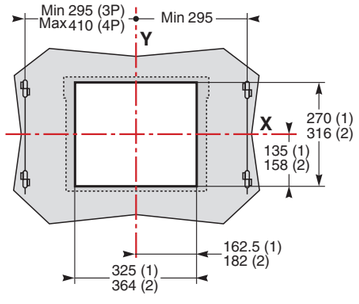


Safety clearances



F : Base point

Door holes dimensions



	Non-conductor	Metals	Electric conductor
A	0	0	100
B	0	0	60

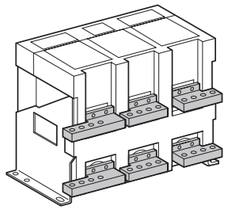
(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask
Removing the arc chutes needs 110mm safety clearance
Removing terminal blocks needs 20mm safety clearance

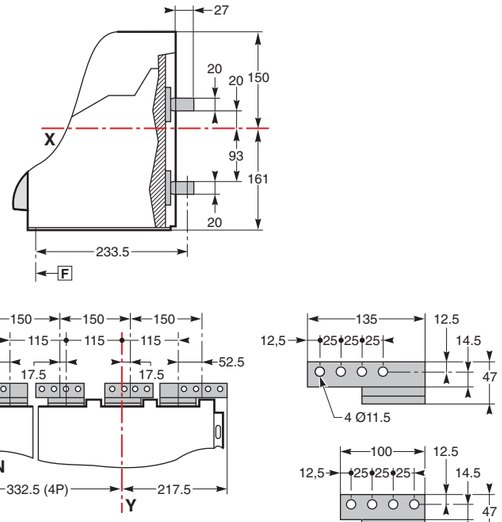
Low-voltage Distribution

HDW9 Installation Dimensions

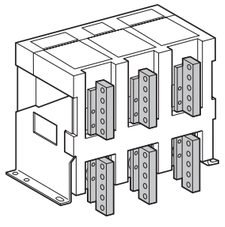
HDW9-4000H1 & H2 Fixed Type 3P & 4P 4000A
IEC/EN: 60947-2

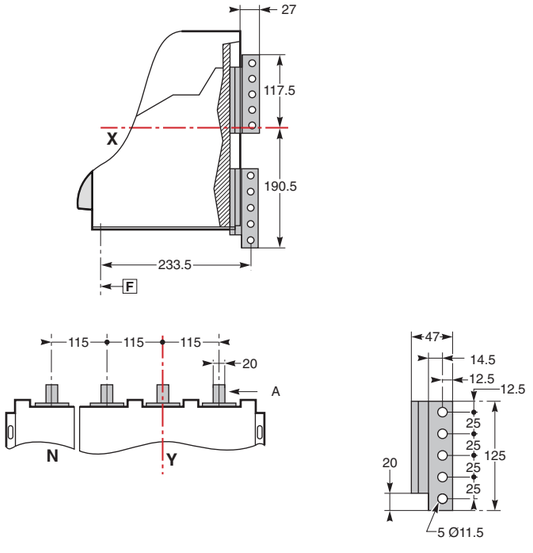
Connections





Vertical rear connection





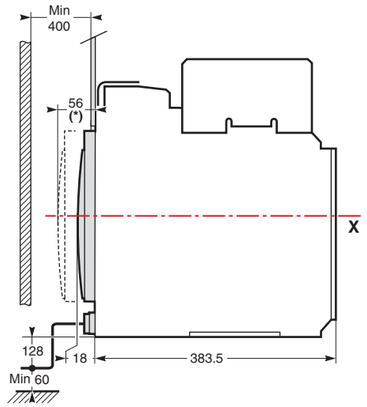
F : Base point

Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

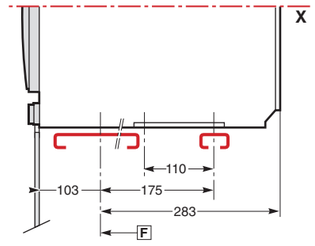
HDW9 Installation Dimensions

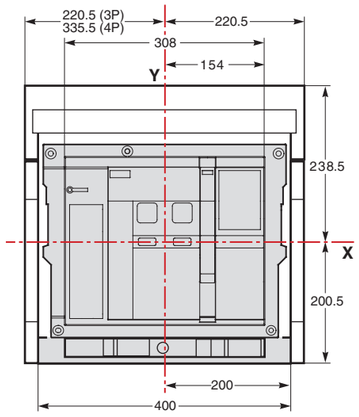
HDW9-4000H1 & H2 Fixed Type 3P & 4P 4000A
IEC/EN: 60947-2

Dimensions

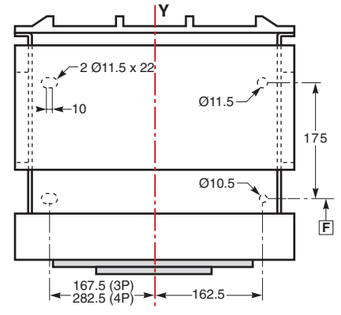


Horizontal installation on board or railway

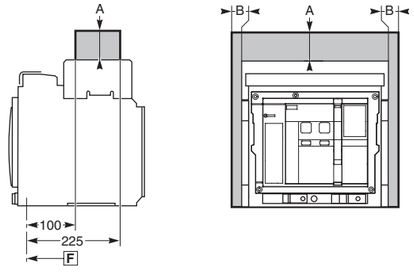




Vertical installation on back board or frame

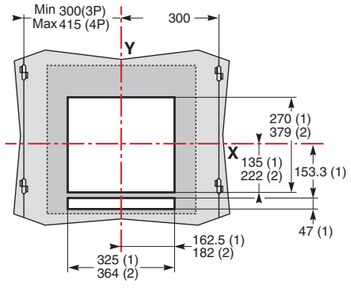


Safety clearances



F :Base point

Door holes dimensions



	Non-conductor	Metals	Electric conductor
A	0	0	0
B	0	0	60

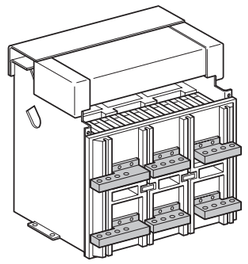
(1) Without door frame
(2) With door frame
Remark: X axis and Y axis are the symmetry axis of 3-pole breaker's mask
Removing the arc chutes needs 110mm safety clearance
Removing terminal blocks needs 20mm safety clearance

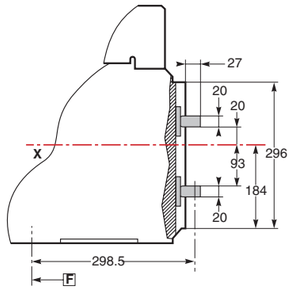
Low-voltage Distribution

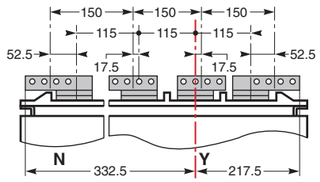
HDW9 Installation Dimensions

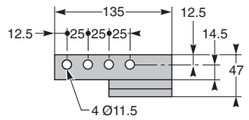
HDW9-4000H1 & H2 Fixed Type 3P & 4P 4000A
IEC/EN: 60947-2

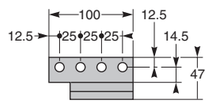
Connections



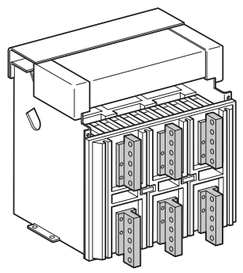


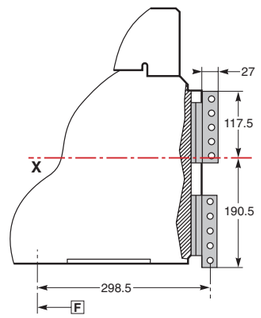


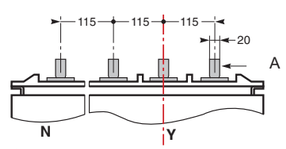


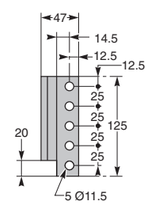


Vertical rear connection









F : Base point

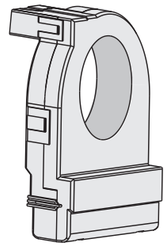
Remarks: Screws: M10 Class8.8
Fasten torque: 50Nm with gasket

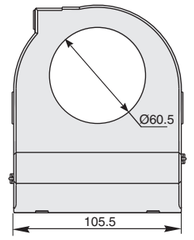
HDW9 Installation Dimensions

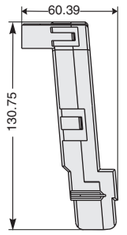
HDW9-4000H1 & H2
IEC/EN: 60947-2

Dimensions of Extend Current Transformers

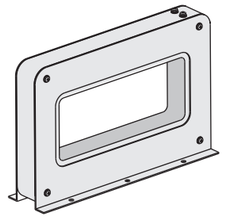
N-phase Extend Current Transformer

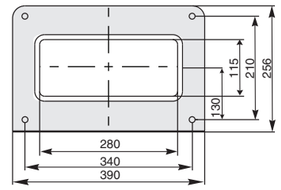


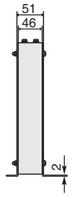




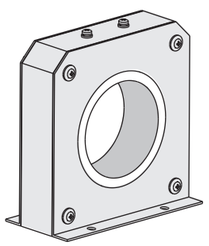
Earth-leakage Current Transformer

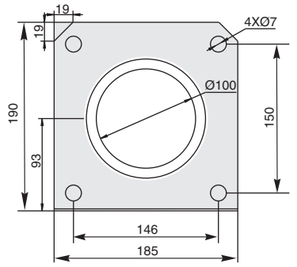


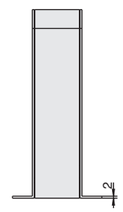


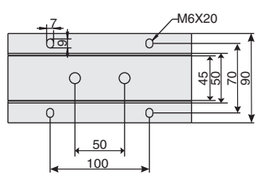


Ground Return Current Transformer







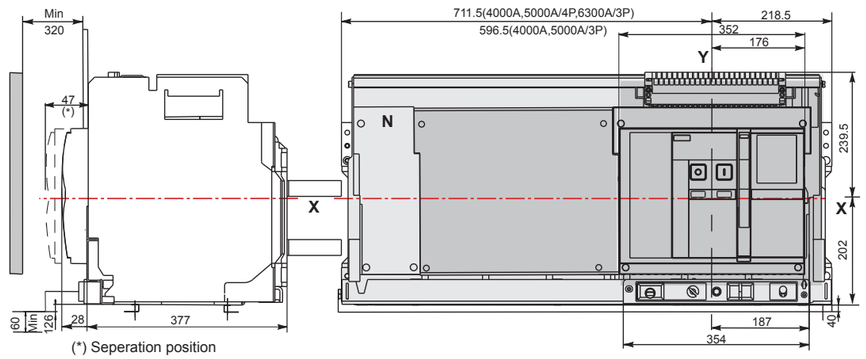


Low-voltage Distribution

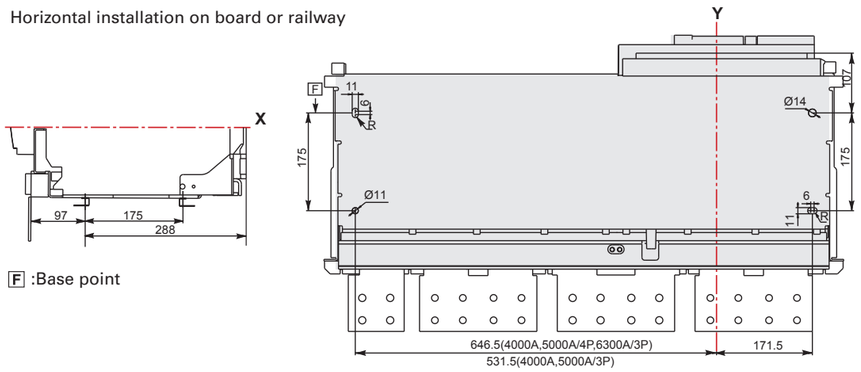
HDW9 Installation Dimensions

HDW9-4000H1 & H2 Fixed Type 3P & 4P 4000A
IEC/EN: 60947-2

Dimensions

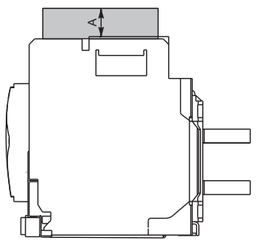


Horizontal installation on board or railway

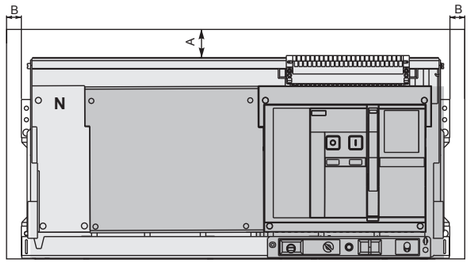


F :Base point

Safety clearances



Door holes dimensions



F : Base point

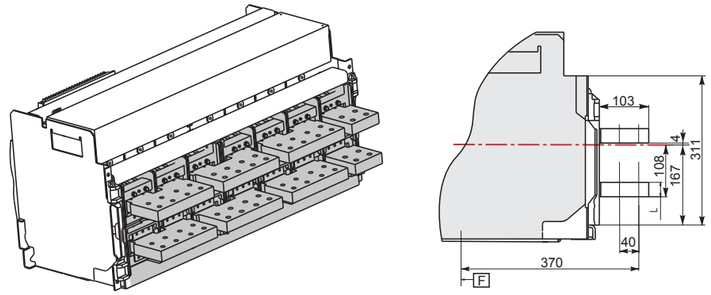
	Non-conductor	Metals	Electric conductor
A	0	0	0
B	0	0	60

HDW9 Installation Dimensions

HDW9-6300L Draw-out Type 3P & 4P
IEC/EN: 60947-2

Connections

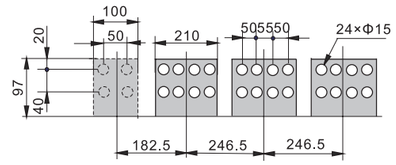
Horizontal rear connection



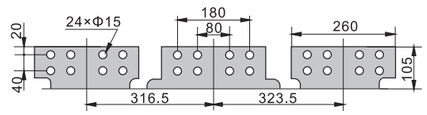
In(A)	L
4000A	20
5000A	30
6300A	30

Busbar dimensions

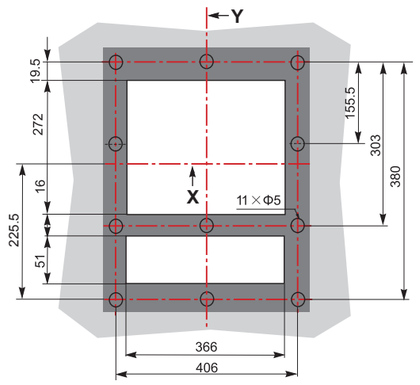
In=4000A、5000A



In=6300A



Rear panel holes dimensions



F :Base point

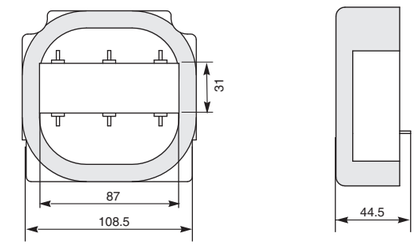
Remark: X axis and Y axis are the symmetry axis of breaker's mask

HDW9 Installation Dimensions

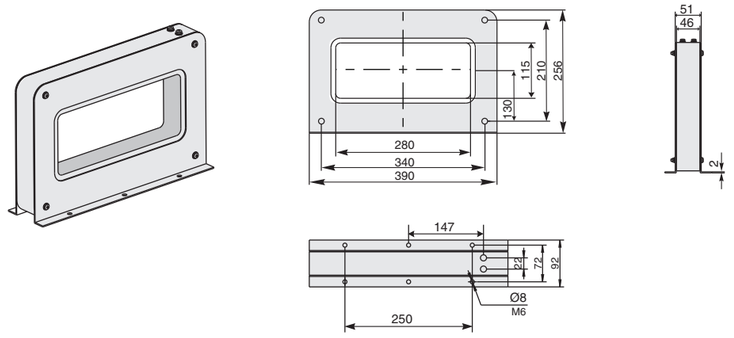
HDW9-6300L
IEC/EN: 60947-2

Dimensions of Extend Current Transformers

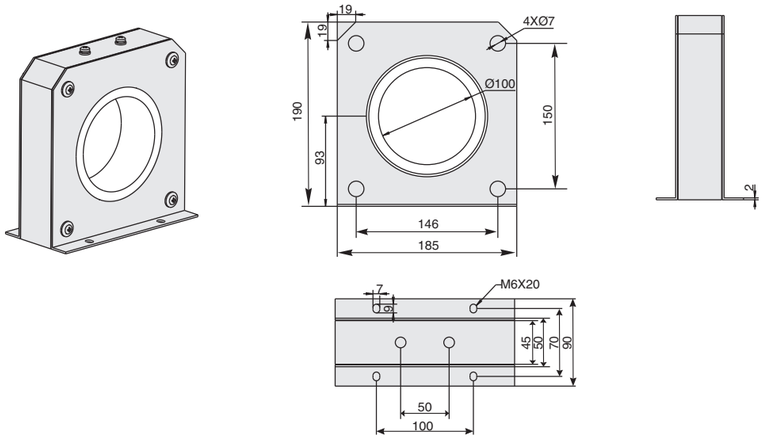
N-phase Extend Current Transformer



Earth-leakage Current Transformer



Ground Return Current Transformer

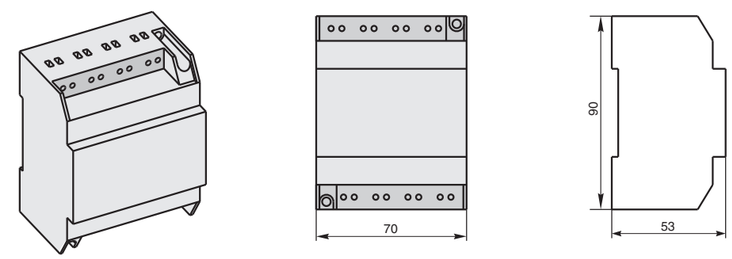


HDW9 Installation Dimensions

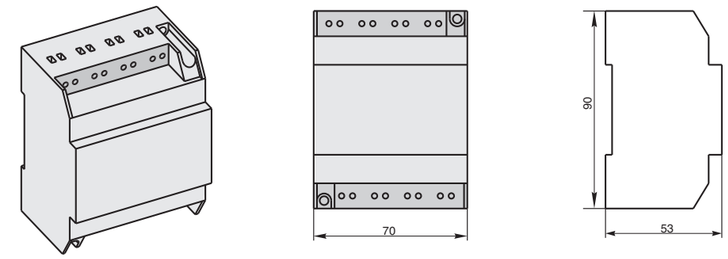
1600N, 4000H1, 4000H2, 6300L
IEC/EN: 60947-2

Dimensions of Power Supply Module and Signal Convert Module

Power Supply Module



Signal Convert Module



Busbar Dimensions

In(A)	Ti=40°C			Ti=50°C			Ti=60°C		
	Qty	Size (mm×mm)	Section (mm^2)	Qty	Size (mm×mm)	Section (mm^2)	Qty	Size (mm×mm)	Section (mm^2)
630	2	40×5	400	2	40×5	400	2	40×5	400
800	2	50×5	500	2	50×5	500	2	50×5	500
1000	2	60×5	600	3	50×5	750	3	60×5	900
1250	2	80×5	800	2	80×5	800	3	60×5	900
1600	2	100×5	1000	3	80×5	1200	3	80×5	1200
2000	3	100×5	1500	3	100×5	1500	3	100×5	1500
2500	4	100×5	2000	4	100×5	2000	4	100×5	2000
3200	3	100×10	3000	3	100×10	3000	4	100×10	4000
4000	5	100×10	5000	5	100×10	5000	6	100×10	6000
5000	5	120×10	6000	6	120×10	7200			
6300	6	120×10	7200	7	120×10	8400			

Remark: Ti stands for ambient temperature
The material of busbar is bare copper

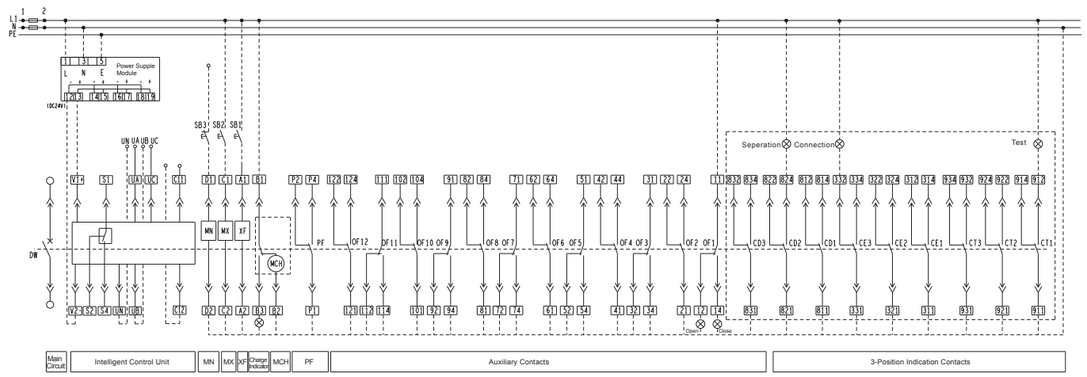
HDW9 Appendix

Electrical Schematic Diagram
IEC/EN: 60947-2

1600N, 4000H1, 4000H2

Electrical Schematic Diagram

iTR336, iTR336E



Note:

UM: Voltage test signal input
UN, UA, UB, UC stands for voltage signal form N, A, B, C.

Pow: Power input
Connect V1+, V2- to positive and negative poles on power supply module.

SWT: Fault-trip indication output
S1, S2, S4 are switch contacts, S1 is common port. Contact capacity: AC400V 5A

CT: External current transformer
C11, C12 are input port of CT

Remark 1: Intelligent control units work with power supply module. The input volatage of iAPU331 is AC220/230V;
The input voltage of iAPU332 is AC380/400V; The input volatage of iAPU332D is DC220V.

Remark 2: HDW9-1600N offers 4NO 4NC auxiliary contacts.HDW9-4000H1&H2 offer 4NO 4NC auxiliary contacts as standard.
8NO 8NC or 12NO 12NC offer as optional.

Remark 3: HDW9-1600N offers CT1, CD1 and CD2.

Remark 4: Voltage measure function only for iTR336E.

Remark 5: ZT100 and ZCT1 offer as optional. The CT port can connect with one kind of CT only.

Client Preparation
SB1-Closing button
SB2-Opening button
SB3-Emergency stop button

Component

MN-Under-voltage release	PF-Ready to close contact	CD1~CD3-Seperation position indication contacts
MX-Opening release	OF1~OF12-Auxillary contacts	CT1~CT3-Test position indication contacts
XF-Closing release	ZCT1-Earth-leakage CT	CE1~CE3-Connect position indication contacts
MCH-Electric motor	ZT100-Ground return CT	

Low-voltage Distribution

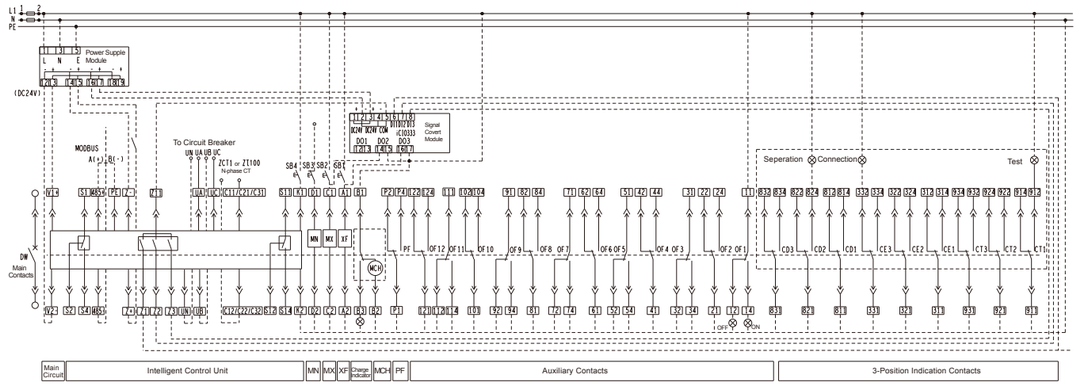
HDW9 Appendix

Electrical Schematic Diagram
IEC/EN: 60947-2

1600N, 4000H1, 4000H2

Electrical Schematic Diagram

iTR336H, iTR336H-L



Note:

UM: Voltage test signal input
UN, UA, UB, UC stand for voltage signal form N, A, B, C.

ZSI: Zone selective interlock
Z+, Z- are ZSI input port, AC24V .

Pow: Power input
Connect V1+, V2- to positive and negative poles on power supply module.

SWT: Fault-trip indication output
S1, S2, S4 are switch contacts, S1 is common port. Contact capacity: AC400V 5A

COM: Communication output
485+, 485- are communication output port; PE is protecting earth of the communication wire.

CT: External current transformer
C11, C12 are input port of CT
C21, C22 are input port of ZT100
C31, C32 are input port of ZCT1

Res: Remote reset
K1, K2 are the input port of remote reset.

SWT2: Fault-trip indication output 2
S11, S12, S14 are switch contacts, S11 is common port. Contact capacity: AC400V 5A

Client Preparation
SB1-Closing button
SB2-Opening button
SB3-Emergency stop button
SB4-Remote reset button

Component

MN-Under-voltage release	PF-Ready to close contact	CD1~CD3-Seperation position indication contacts	
MX-Opening release	OF1~OF12-Auxillary contacts	CT1~CT3-Test position indication contacts	
XF-Closing release	ZCT1-Earth-leakage CT	CE1~CE3-Connect position indication contacts	
MCH-Electric motor	ZT100-Ground return CT		

Remark 1: Intelligent control units work with power supply module. The input volatage of iAPU331 is AC220/230V;
The input voltage of iAPU332 is AC380/400V; The input volatage of iAPU332D is DC220V.

Remark 2: ZT100 and ZCT1 offer as optional. This CT port can connect with one kind of CT only.

Remark 3: For remote control, iCIO333 signal convert module is necessary. The contact capacity of the module is AC240V 10A, DC24V 10A.

Remark 4: HDW9-1600N offers 4NO 4NC auxiliary contacts.HDW9-4000H1&H2 offer 4NO 4NC auxiliary contacts as standard.
8NO 8NC or 12NO 12NC offer as optional.

Remark 5: Communication protocol is Modbus as standard. Profibus module and Devicenet module should order for additional.
Power supply module is necessary when communication module is used.

Remark 6: HDW9-1600N offers CT1, CD1 and CD2.

Remark 7: Res and SWT2 are optional parts, they are not compatible with each other.

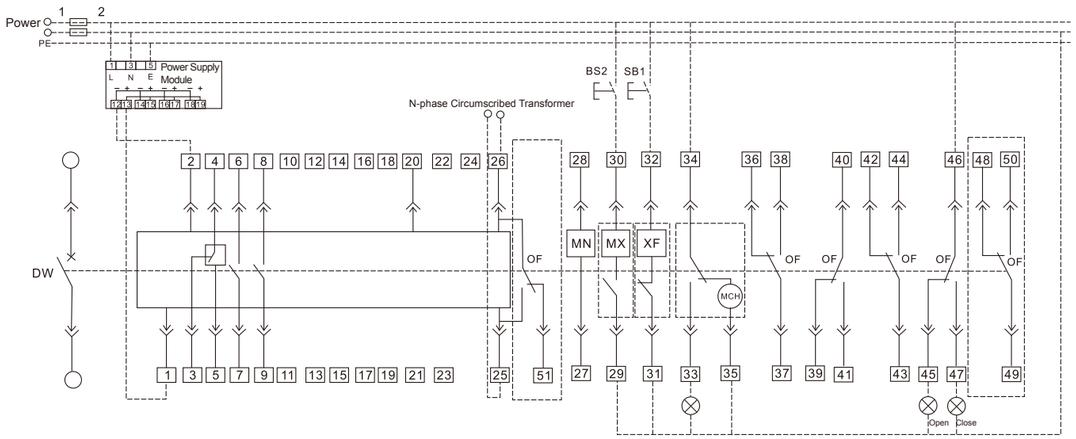
HDW9 Appendix

Electrical Schematic Diagram
IEC/EN: 60947-2

6300L

Electrical Schematic Diagram

iTR336, iTR336E



Pin Function:
1# and 2#: auxiliary supply input terminal,
1# for positive terminal when being DC
3#, 4# and 5#: contact output of tripping fault (4# refers to shared terminal);
contact capacity: AC 380V, 16A
6#, 7#, 8# and 9#: two groups of auxiliary terminals with circuit breaker status;
contact capacity: AC 380V, 16A
20#: PE wire, protection earthing wire
25# ~26#: output for circumscribed transformer

Components:
MN — Undervoltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contacts
MCH — Electric Motor
SB1 — Closing Button
SB2 — Opening Button

Remarks 1: terminal 27# ~ 28# of MN undervoltage release connect to main circuit

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of control supply voltage. Auxilary contact OF is 5a5b, MX shunt release and XF Closing Release have been tandem connected with normal open and normal close auxiliary contacts in the factory

Remarks 3: Terminal 35# cannot only be connected to the power supply directly (automatic pre-storing energy), but also to the power supply after adopting tandem connection with normal open button (manual pre-storing energy)

Remarks 4: Terminal 6# ~ 7# can output normal close contacts,if the users put forward.

Remarks 5: Power Module 1 is DC Power Module. No DC power module when the power is AC power supply. The input & output terminals cannot be connected reversely (the draw-out type output terminal has been connected in the factory)

Remarks 6: The auxiliary contact is 5NO 5NC, 25# and 26# are circumscribed transformer, applied for (3P+N)T type earthing failure protection.

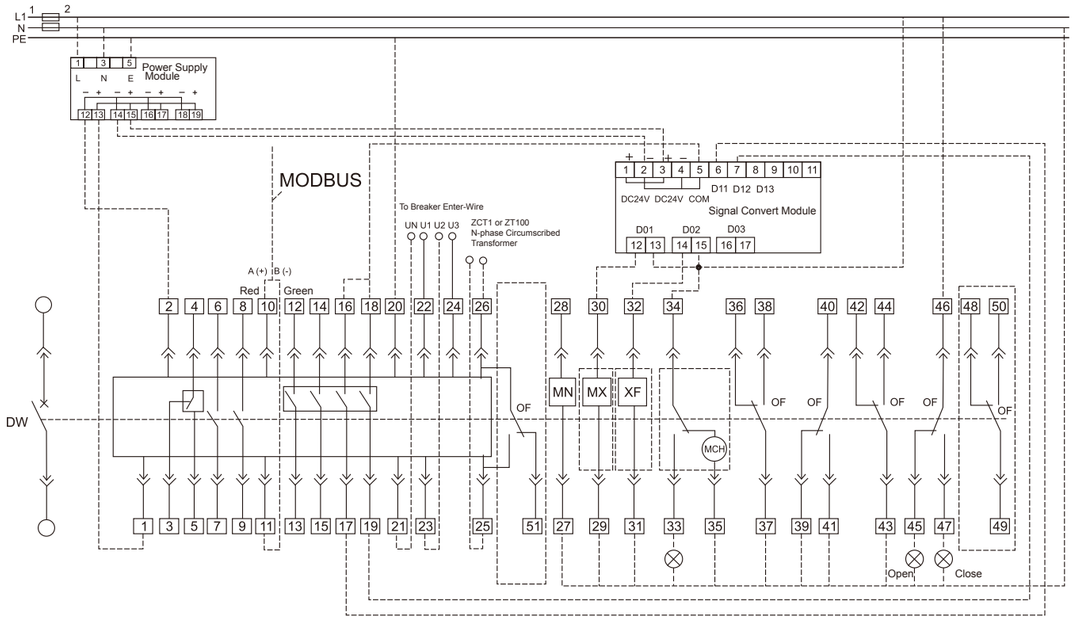
HDW9 Appendix

Electrical Schematic Diagram
IEC/EN: 60947-2

6300L

Electrical Schematic Diagram

iTR336H



Pin Function:
1# and 2#: auxiliary supply input terminal,
1# for positive terminal when being DC
3#, 4# and 5#: contact output of tripping fault (4# refers to shared terminal);
contact capacity: AC 380V, 16A
6#, 7#, 8# and 9#: two groups of auxiliary terminals with circuit breaker status;
contact capacity: AC 380V, 16A
10# and 11#: respective output wire of RS485A and RS485B communication
12#,13#: alarm signal output
14#,15#: error tripping signal output
16#,17#: communication remote control shunt release output
18#,19#: communication remote control make output
20#: PE Line, shielding earthing line.
21#: Neuter line voltage signal (N phase)
22#: voltage signal A phase
23#: voltage signal B phase
24#: voltage signal C phase
25#,26#: input of circumscribed transformer

Components:
MN — Under-voltage Release
MX — Shunt Release
XF — Closing Release
OF — Auxiliary Contact
MCH — Electric Motor
ZCT1 — Earth-leakage CT
ZT100 — Earthing Transformer

Remarks 1: terminal 27# ~ 28# of MN undervoltage release connect to main circuit.

Remarks 2: MN, MX, XF and MCH shall be connected with different powers beacuse of control supply voltage. Auxilary contact OF is 5NO5NC, MX Shunt-trip Release and XF Closing Release have been tandem connected with normal open and normal close auxiliary contacts in the factory.

Remarks 3: Terminal 35# can not only be connected to the power supply directly (automatic pre-storing energy), but also to the power supply after adopting tandem connection with normal open button (manual pre-storing energy).

Remarks 4: Terminal 6# ~ 7# can output normal close contacts, if the users put forward.

Remarks 5: iAPU332D is DC power supply module and there is no such module when the power is AC power supply. The input & output terminals cannot be connected reversely (the draw-out type output terminal has been connected in the factory).

Remarks 6: The auxiliary contact is five-open and five-close, 25# and 26# are circumscribed transformer, applied for (3P+N) T type earthing failure protection, or connect Z CT1 or ZT100 (extra order required).

Remarks 7: Long-range control should add signal module and power module capacity of signal module: AC230V, 10A; DC24V, 10A.

Remarks 8: Communication agreement is Modbus. If use Profibus or other arrangement, an additional order needs to be made. Power module and signal module also needs an additional order.

Low-voltage Distribution

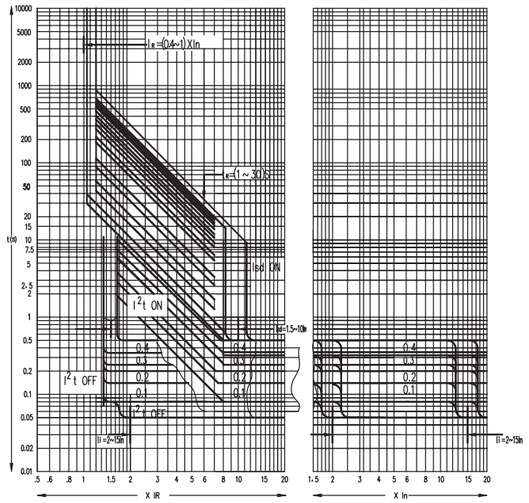
HDW9 Appendix

Electrical Schematic Diagram
IEC/EN: 60947-2

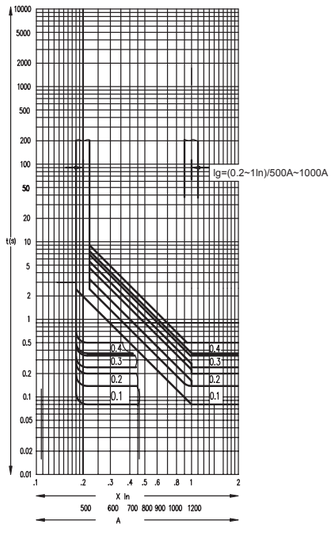
Tripping Curves

Normal Protections

1600N,4000H1&H2



Ground Return Protection



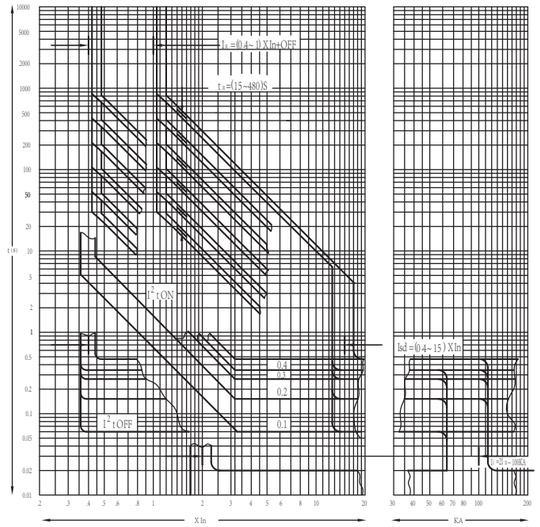
HDW9 Appendix

Tripping Curves
IEC/EN: 60947-2

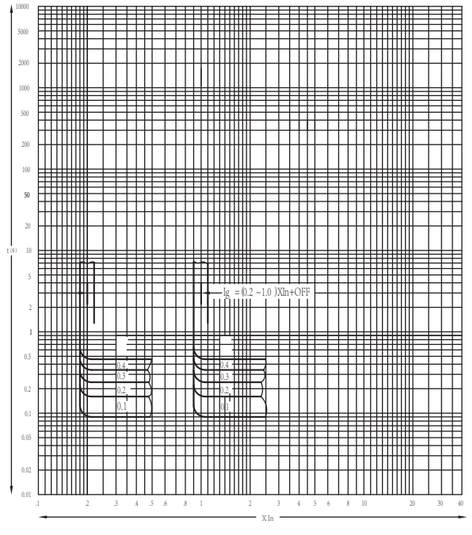
Tripping Curves

Normal Protections

6300L



Ground Return Protection



Miniature Circuit Breaker & Switch Disconnectors Product Overview

18mm MCB

HDB3w 224
In: 1-63A
Breaking Capacity: 3/4.5/6kA

HDB6s 236
In: 1-63A
Breaking Capacity: 4.5/6kA

HDB9 240
In: 1-63A
Breaking Capacity: 6/10kA

27mm MCB

HDB3w-125 245
In:63-125A
Breaking Capacity:6kA, 10kA

18mm 1P+N MCB

HDB3wP 251
In: 6-32A
Breaking Capacity: 4.5kA

HDB6p 255
In: 6-32A
Breaking Capacity: 4.5kA

HDB9p 257
In: 6-40A
Breaking Capacity:4.5/6kA

Switch Disconnectors

HDG3 259
In:20-125A

HDB6IS 263
In: 20-125A

HDG9 265
In: 20-100A

Accessories

MX+OF

SD

OF

HDB3w Miniature Circuit Breaker

Standard: IEC/EN60898-1

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RoHS CE

Function

HDB3w Miniature standard circuit breaker has the following features:

- Short circuit protection
- Overload protection
- Control
- Isolation

Main Features

Rated operating voltage (V)	1P: 240 AC 1P+N: 240 AC 2P, 3P, 3P+N, 4P: 415 AC
Rated current (A)	1-63
Rated frequency (Hz)	50/60
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P
Breaking capacity (kA)	3, 4.5, 6

Product Details Display

HDB3w Miniature Circuit Breaker

Standard: IEC/EN60898-1

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Functions and Features

Electrical Characteristics

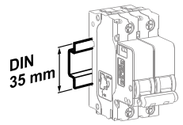
Nominal insulation voltage Ui		(V)	250 (phase-to-ground) 500 (phase-to-phase)
Maximum working voltage UBmax	1P, 1P+N	(V)	240/415 AC
	2P, 3P, 4P, 3P+N	(V)	415 AC
Rated short-circuit capacity Icn (IEC/EN60898)		(kA)	3, 4.5, 6
Rated impulse withstand voltage Uimp (1.2/50)		(kA)	4
Dielectric test voltage			2kV (50/60HZ,1min)
Over-voltage category			II
Isolating function			Available
Pollution class			2
Electric shock protection grade			II
Trip type:			Thermal magnetic trip
Thermal magnetic trip characteristics:	Type B curve (3In~5In)		●
	Type C curve (5In~10In)		●
	Type D curve (10In~14In)		●
Electrical and mechanical accessories			●

Mechanical Characteristics

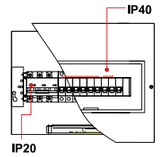
Handle	Red, pad printing indicating ON-OFF position
Mechanical endurance	Times 25,000
Electrical endurance	Times 6,000
Protection grade	Installed in distribution box IP40 Installed directly IP20
Mechanical shock resistance	30g, 3 shocks, lasting 11ms (No significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6) Wet heat resistance (IEC 60068-2) Wet heat °C/RH	No significant vibration or shock Category 2, 28 cycles Relative humidity 90%~96% at 55° C Relative humidity 95%~100% at 25° C
Rated ambient temperature	30° C
Operating ambient temperature (daily mean temperature)	-20° C~+60° C
Storage temperature	-40° C~+70° C

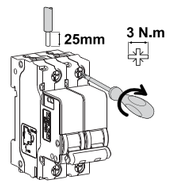
Installation Features

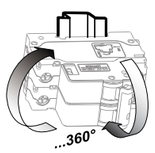
Terminal form	U terminal
Maximum wiring capacity (A)	Current ratings 1-63 25mm^2
Maximum ultimate torque (A)	Current ratings 1-63:3 N.m
Tool: Installation Wiring Type	Crosshead screwdriver or flathead screwdriver Installed on standard DIN guide rail (35mm) Top or bottom



Installed on 35mm standard guide rail







Flexible installation direction

Final Distribution

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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HDB3w Selection Guide

Product name	Breaking capacity	Number of poles	Trip type	Rated current	
HDB3w	N	1	C	6	
	A: 3kA	1: 1P	B: Type B	1: 1A	20: 20A
	L: 4.5kA	2: 2P	C: Type C	2: 2A	25: 25A
	N: 6kA	3: 3P	D: Type D	3: 3A	32: 32A
		4: 4P		4: 4A	40: 40A
		5: 1P+N		6: 6A	50: 50A
		6: 3P+N		10: 10A	63: 63A
				16: 16A	

HDB3wA Miniature standard circuit breaker	Type	Rated current	Trip type		
			B	C	D
3kA	1P	1	-	HDB3wA1C1	HDB3wA1D1
		2	-	HDB3wA1C2	HDB3wA1D2
		3	-	HDB3wA1C3	HDB3wA1D3
		4	-	HDB3wA1C4	HDB3wA1D4
		5	-	HDB3wA1C5	HDB3wA1D5
		6	HDB3wA1B6	HDB3wA1C6	HDB3wA1D6
		8	HDB3wA1B8	HDB3wA1C8	HDB3wA1D8
		10	HDB3wA1B10	HDB3wA1C10	HDB3wA1D10
		13	HDB3wA1B13	HDB3wA1C13	HDB3wA1D13
		16	HDB3wA1B16	HDB3wA1C16	HDB3wA1D16
		20	HDB3wA1B20	HDB3wA1C20	HDB3wA1D20
		25	HDB3wA1B25	HDB3wA1C25	HDB3wA1D25
		32	HDB3wA1B32	HDB3wA1C32	HDB3wA1D32
		40	HDB3wA1B40	HDB3wA1C40	HDB3wA1D40
		50	HDB3wA1B50	HDB3wA1C50	HDB3wA1D50
		63	HDB3wA1B63	HDB3wA1C63	HDB3wA1D63
3kA 	1P+N	10	HDB3wA5B10	HDB3wA5C10	HDB3wA5D10
		13	HDB3wA5B13	HDB3wA5C13	HDB3wA5D13
		16	HDB3wA5B16	HDB3wA5C16	HDB3wA5D16
		20	HDB3wA5B20	HDB3wA5C20	HDB3wA5D20
		25	HDB3wA5B25	HDB3wA5C25	HDB3wA5D25
		32	HDB3wA5B32	HDB3wA5C32	HDB3wA5D32
		40	HDB3wA5B40	HDB3wA5C40	HDB3wA5D40
		50	HDB3wA5B50	HDB3wA5C50	HDB3wA5D50
		63	HDB3wA5B63	HDB3wA5C63	HDB3wA5D63
3kA 	2P	1	-	HDB3wA2C1	HDB3wA2D1
		2	-	HDB3wA2C2	HDB3wA2D2
		3	-	HDB3wA2C3	HDB3wA2D3
		4	-	HDB3wA2C4	HDB3wA2D4
		5	-	HDB3wA2C5	HDB3wA2D5
		6	HDB3wA2B6	HDB3wA2C6	HDB3wA2D6
		8	HDB3wA2B8	HDB3wA2C8	HDB3wA2D8
		10	HDB3wA2B10	HDB3wA2C10	HDB3wA2D10
		13	HDB3wA2B13	HDB3wA2C13	HDB3wA2D13
		16	HDB3wA2B16	HDB3wA2C16	HDB3wA2D16
		20	HDB3wA2B20	HDB3wA2C20	HDB3wA2D20
		25	HDB3wA2B25	HDB3wA2C25	HDB3wA2D25
		32	HDB3wA2B32	HDB3wA2C32	HDB3wA2D32
		40	HDB3wA2B40	HDB3wA2C40	HDB3wA2D40
		50	HDB3wA2B50	HDB3wA2C50	HDB3wA2D50
		63	HDB3wA2B63	HDB3wA2C63	HDB3wA2D63

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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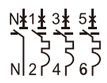
HDB3w Selection Guide

HDB3wA Miniature standard circuit breaker	Type	Rated current	Trip type B	C	D
3kA 	3P	1	-	HDB3wA3C1	HDB3wA3D1
		2	-	HDB3wA3C2	HDB3wA3D2
		3	-	HDB3wA3C3	HDB3wA3D3
		4	-	HDB3wA3C4	HDB3wA3D4
		5	-	HDB3wA3C5	HDB3wA3D5
		6	HDB3wA3B6	HDB3wA3C6	HDB3wA3D6
		8	HDB3wA3B8	HDB3wA3C8	HDB3wA3D8
		10	HDB3wA3B10	HDB3wA3C10	HDB3wA3D10
		13	HDB3wA3B13	HDB3wA3C13	HDB3wA3D13
		16	HDB3wA3B16	HDB3wA3C16	HDB3wA3D16
		20	HDB3wA3B20	HDB3wA3C20	HDB3wA3D20
		25	HDB3wA3B25	HDB3wA3C25	HDB3wA3D25
		32	HDB3wA3B32	HDB3wA3C32	HDB3wA3D32
		40	HDB3wA3B40	HDB3wA3C40	HDB3wA3D40
		50	HDB3wA3B50	HDB3wA3C50	HDB3wA3D50
		63	HDB3wA3B63	HDB3wA3C63	HDB3wA3D63
3kA 	3P+N	10	HDB3wA6B10	HDB3wA6C10	HDB3wA6D10
		13	HDB3wA6B13	HDB3wA6C13	HDB3wA6D13
		16	HDB3wA6B16	HDB3wA6C16	HDB3wA6D16
		20	HDB3wA6B20	HDB3wA6C20	HDB3wA6D20
		25	HDB3wA6B25	HDB3wA6C25	HDB3wA6D25
		32	HDB3wA6B32	HDB3wA6C32	HDB3wA6D32
		40	HDB3wA6B40	HDB3wA6C40	HDB3wA6D40
		50	HDB3wA6B50	HDB3wA6C50	HDB3wA6D50
		63	HDB3wA6B63	HDB3wA6C63	HDB3wA6D63
3kA 	4P	1	-	HDB3wA4C1	HDB3wA4D1
		2	-	HDB3wA4C2	HDB3wA4D2
		3	-	HDB3wA4C3	HDB3wA4D3
		4	-	HDB3wA4C4	HDB3wA4D4
		5	-	HDB3wA4C5	HDB3wA4D5
		6	HDB3wA4B6	HDB3wA4C6	HDB3wA4D6
		8	HDB3wA4B8	HDB3wA4C8	HDB3wA4D8
		10	HDB3wA4B10	HDB3wA4C10	HDB3wA4D10
		13	HDB3wA4B13	HDB3wA4C13	HDB3wA4D13
		16	HDB3wA4B16	HDB3wA4C16	HDB3wA4D16
		20	HDB3wA4B20	HDB3wA4C20	HDB3wA4D20
		25	HDB3wA4B25	HDB3wA4C25	HDB3wA4D25
		32	HDB3wA4B32	HDB3wA4C32	HDB3wA4D32
		40	HDB3wA4B40	HDB3wA4C40	HDB3wA4D40
		50	HDB3wA4B50	HDB3wA4C50	HDB3wA4D50
		63	HDB3wA4B63	HDB3wA4C63	HDB3wA4D63

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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HDB3w Selection Guide

HDB3wL Miniature standard circuit breaker	Type	Rated current	Trip type B	C	D
4.5kA 	1P	1	-	HDB3wL1C1	HDB3wL1D1
		2	-	HDB3wL1C2	HDB3wL1D2
		3	-	HDB3wL1C3	HDB3wL1D3
		4	-	HDB3wL1C4	HDB3wL1D4
		5	-	HDB3wL1C5	HDB3wL1D5
		6	HDB3wL1B6	HDB3wL1C6	HDB3wL1D6
		8	HDB3wL1B8	HDB3wL1C8	HDB3wL1D8
		10	HDB3wL1B10	HDB3wL1C10	HDB3wL1D10
		13	HDB3wL1B13	HDB3wL1C13	HDB3wL1D13
		16	HDB3wL1B16	HDB3wL1C16	HDB3wL1D16
		20	HDB3wL1B20	HDB3wL1C20	HDB3wL1D20
		25	HDB3wL1B25	HDB3wL1C25	HDB3wL1D25
		32	HDB3wL1B32	HDB3wL1C32	HDB3wL1D32
		40	HDB3wL1B40	HDB3wL1C40	HDB3wL1D40
		50	HDB3wL1B50	HDB3wL1C50	HDB3wL1D50
		63	HDB3wL1B63	HDB3wL1C63	HDB3wL1D63
4.5kA 	1P+N	10	HDB3wL5B10	HDB3wL5C10	HDB3wL5D10
		13	HDB3wL5B13	HDB3wL5C13	HDB3wL5D13
		16	HDB3wL5B16	HDB3wL5C16	HDB3wL5D16
		20	HDB3wL5B20	HDB3wL5C20	HDB3wL5D20
		25	HDB3wL5B25	HDB3wL5C25	HDB3wL5D25
		32	HDB3wL5B32	HDB3wL5C32	HDB3wL5D32
		40	HDB3wL5B40	HDB3wL5C40	HDB3wL5D40
		50	HDB3wL5B50	HDB3wL5C50	HDB3wL5D50
		63	HDB3wL5B63	HDB3wL5C63	HDB3wL5D63
4.5kA 	2P	1	-	HDB3wL2C1	HDB3wL2D1
		2	-	HDB3wL2C2	HDB3wL2D2
		3	-	HDB3wL2C3	HDB3wL2D3
		4	-	HDB3wL2C4	HDB3wL2D4
		5	-	HDB3wL2C5	HDB3wL2D5
		6	HDB3wL2B6	HDB3wL2C6	HDB3wL2D6
		8	HDB3wL2B8	HDB3wL2C8	HDB3wL2D8
		10	HDB3wL2B10	HDB3wL2C10	HDB3wL2D10
		13	HDB3wL2B13	HDB3wL2C13	HDB3wL2D13
		16	HDB3wL2B16	HDB3wL2C16	HDB3wL2D16
		20	HDB3wL2B20	HDB3wL2C20	HDB3wL2D20
		25	HDB3wL2B25	HDB3wL2C25	HDB3wL2D25
		32	HDB3wL2B32	HDB3wL2C32	HDB3wL2D32
		40	HDB3wL2B40	HDB3wL2C40	HDB3wL2D40
		50	HDB3wL2B50	HDB3wL2C50	HDB3wL2D50
		63	HDB3wL2B63	HDB3wL2C63	HDB3wL2D63

Final Distribution

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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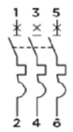
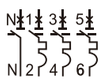
HDB3w Selection Guide

HDB3wL Miniature standard circuit breaker	Type	Rated current		Trip type	
			B	C	D
4.5kA 	3P	1	-	HDB3wL3C1	HDB3wL3D1
		2	-	HDB3wL3C2	HDB3wL3D2
		3	-	HDB3wL3C3	HDB3wL3D3
		4	-	HDB3wL3C4	HDB3wL3D4
		5	-	HDB3wL3C5	HDB3wL3D5
		6	HDB3wL3B6	HDB3wL3C6	HDB3wL3D6
		8	HDB3wL3B8	HDB3wL3C8	HDB3wL3D8
		10	HDB3wL3B10	HDB3wL3C10	HDB3wL3D10
		13	HDB3wL3B13	HDB3wL3C13	HDB3wL3D13
		16	HDB3wL3B16	HDB3wL3C16	HDB3wL3D16
		20	HDB3wL3B20	HDB3wL3C20	HDB3wL3D20
		25	HDB3wL3B25	HDB3wL3C25	HDB3wL3D25
		32	HDB3wL3B32	HDB3wL3C32	HDB3wL3D32
		40	HDB3wL3B40	HDB3wL3C40	HDB3wL3D40
		50	HDB3wL3B50	HDB3wL3C50	HDB3wL3D50
		63	HDB3wL3B63	HDB3wL3C63	HDB3wL3D63
4.5kA 	3P+N	10	HDB3wL6B10	HDB3wL6C10	HDB3wL6D10
		13	HDB3wL6B13	HDB3wL6C13	HDB3wL6D13
		16	HDB3wL6B16	HDB3wL6C16	HDB3wL6D16
		20	HDB3wL6B20	HDB3wL6C20	HDB3wL6D20
		25	HDB3wL6B25	HDB3wL6C25	HDB3wL6D25
		32	HDB3wL6B32	HDB3wL6C32	HDB3wL6D32
		40	HDB3wL6B40	HDB3wL6C40	HDB3wL6D40
		50	HDB3wL6B50	HDB3wL6C50	HDB3wL6D50
		63	HDB3wL6B63	HDB3wL6C63	HDB3wL6D63
4.5kA 	4P	1	-	HDB3wL4C1	HDB3wL4D1
		2	-	HDB3wL4C2	HDB3wL4D2
		3	-	HDB3wL4C3	HDB3wL4D3
		4	-	HDB3wL4C4	HDB3wL4D4
		5	-	HDB3wL4C5	HDB3wL4D5
		6	HDB3wL4B6	HDB3wL4C6	HDB3wL4D6
		8	HDB3wL4B8	HDB3wL4C8	HDB3wL4D8
		10	HDB3wL4B10	HDB3wL4C10	HDB3wL4D10
		13	HDB3wL4B13	HDB3wL4C13	HDB3wL4D13
		16	HDB3wL4B16	HDB3wL4C16	HDB3wL4D16
		20	HDB3wL4B20	HDB3wL4C20	HDB3wL4D20
		25	HDB3wL4B25	HDB3wL4C25	HDB3wL4D25
		32	HDB3wL4B32	HDB3wL4C32	HDB3wL4D32
		40	HDB3wL4B40	HDB3wL4C40	HDB3wL4D40
		50	HDB3wL4B50	HDB3wL4C50	HDB3wL4D50
		63	HDB3wL4B63	HDB3wL4C63	HDB3wL4D63

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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HDB3w Selection Guide

HDB3wN Miniature standard circuit breaker	Type	Rated current	Trip type		
			B	C	D
6kA 	1P	1	-	HDB3wN1C1	HDB3wN1D1
		2	-	HDB3wN1C2	HDB3wN1D2
		3	-	HDB3wN1C3	HDB3wN1D3
		4	-	HDB3wN1C4	HDB3wN1D4
		5	-	HDB3wN1C5	HDB3wN1D5
		6	HDB3wN1B6	HDB3wN1C6	HDB3wN1D6
		8	HDB3wN1B8	HDB3wN1C8	HDB3wN1D8
		10	HDB3wN1B10	HDB3wN1C10	HDB3wN1D10
		13	HDB3wN1B13	HDB3wN1C13	HDB3wN1D13
		16	HDB3wN1B16	HDB3wN1C16	HDB3wN1D16
		20	HDB3wN1B20	HDB3wN1C20	HDB3wN1D20
		25	HDB3wN1B25	HDB3wN1C25	HDB3wN1D25
		32	HDB3wN1B32	HDB3wN1C32	HDB3wN1D32
		40	HDB3wN1B40	HDB3wN1C40	HDB3wN1D40
		50	HDB3wN1B50	HDB3wN1C50	HDB3wN1D50
		63	HDB3wN1B63	HDB3wN1C63	HDB3wN1D63
6kA 	1P+N	10	HDB3wN5B10	HDB3wN5C10	HDB3wN5D10
		13	HDB3wN5B13	HDB3wN5C13	HDB3wN5D13
		16	HDB3wN5B16	HDB3wN5C16	HDB3wN5D16
		20	HDB3wN5B20	HDB3wN5C20	HDB3wN5D20
		25	HDB3wN5B25	HDB3wN5C25	HDB3wN5D25
		32	HDB3wN5B32	HDB3wN5C32	HDB3wN5D32
		40	HDB3wN5B40	HDB3wN5C40	HDB3wN5D40
		50	HDB3wN5B50	HDB3wN5C50	HDB3wN5D50
		63	HDB3wN5B63	HDB3wN5C63	HDB3wN5D63
6kA 	2P	1	-	HDB3wN2C1	HDB3wN2D1
		2	-	HDB3wN2C2	HDB3wN2D2
		3	-	HDB3wN2C3	HDB3wN2D3
		4	-	HDB3wN2C4	HDB3wN2D4
		5	-	HDB3wN2C5	HDB3wN2D5
		6	HDB3wN2B6	HDB3wN2C6	HDB3wN2D6
		8	HDB3wN2B8	HDB3wN2C8	HDB3wN2D8
		10	HDB3wN2B10	HDB3wN2C10	HDB3wN2D10
		13	HDB3wN2B13	HDB3wN2C13	HDB3wN2D13
		16	HDB3wN2B16	HDB3wN2C16	HDB3wN2D16
		20	HDB3wN2B20	HDB3wN2C20	HDB3wN2D20
		25	HDB3wN2B25	HDB3wN2C25	HDB3wN2D25
		32	HDB3wN2B32	HDB3wN2C32	HDB3wN2D32
		40	HDB3wN2B40	HDB3wN2C40	HDB3wN2D40
		50	HDB3wN2B50	HDB3wN2C50	HDB3wN2D50
		63	HDB3wN2B63	HDB3wN2C63	HDB3wN2D63

Final Distribution

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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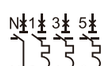
HDB3w Selection Guide

HDB3wN Miniature standard circuit breaker	Type	Rated current		Trip type	
			B	C	D
6kA 	3P	1	-	HDB3wN3C1	HDB3wN3D1
		2	-	HDB3wN3C2	HDB3wN3D2
		3	-	HDB3wN3C3	HDB3wN3D3
		4	-	HDB3wN3C4	HDB3wN3D4
		5	-	HDB3wN3C5	HDB3wN3D5
		6	HDB3wN3B6	HDB3wN3C6	HDB3wN3D6
		8	HDB3wN3B8	HDB3wN3C8	HDB3wN3D8
		10	HDB3wN3B10	HDB3wN3C10	HDB3wN3D10
		13	HDB3wN3B13	HDB3wN3C13	HDB3wN3D13
		16	HDB3wN3B16	HDB3wN3C16	HDB3wN3D16
		20	HDB3wN3B20	HDB3wN3C20	HDB3wN3D20
		25	HDB3wN3B25	HDB3wN3C25	HDB3wN3D25
		32	HDB3wN3B32	HDB3wN3C32	HDB3wN3D32
		40	HDB3wN3B40	HDB3wN3C40	HDB3wN3D40
		50	HDB3wN3B50	HDB3wN3C50	HDB3wN3D50
		63	HDB3wN3B63	HDB3wN3C63	HDB3wN3D63
6kA 	3P+N	10	HDB3wN6B10	HDB3wN6C10	HDB3wN6D10
		13	HDB3wN6B13	HDB3wN6C13	HDB3wN6D13
		16	HDB3wN6B16	HDB3wN6C16	HDB3wN6D16
		20	HDB3wN6B20	HDB3wN6C20	HDB3wN6D20
		25	HDB3wN6B25	HDB3wN6C25	HDB3wN6D25
		32	HDB3wN6B32	HDB3wN6C32	HDB3wN6D32
		40	HDB3wN6B40	HDB3wN6C40	HDB3wN6D40
		50	HDB3wN6B50	HDB3wN6C50	HDB3wN6D50
		63	HDB3wN6B63	HDB3wN6C63	HDB3wN6D63
6kA 	4P	1	-	HDB3wN4C1	HDB3wN4D1
		2	-	HDB3wN4C2	HDB3wN4D2
		3	-	HDB3wN4C3	HDB3wN4D3
		4	-	HDB3wN4C4	HDB3wN4D4
		5	-	HDB3wN4C5	HDB3wN4D5
		6	HDB3wN4B6	HDB3wN4C6	HDB3wN4D6
		8	HDB3wN4B8	HDB3wN4C8	HDB3wN4D8
		10	HDB3wN4B10	HDB3wN4C10	HDB3wN4D10
		13	HDB3wN4B13	HDB3wN4C13	HDB3wN4D13
		16	HDB3wN4B16	HDB3wN4C16	HDB3wN4D16
		20	HDB3wN4B20	HDB3wN4C20	HDB3wN4D20
		25	HDB3wN4B25	HDB3wN4C25	HDB3wN4D25
		32	HDB3wN4B32	HDB3wN4C32	HDB3wN4D32
		40	HDB3wN4B40	HDB3wN4C40	HDB3wN4D40
		50	HDB3wN4B50	HDB3wN4C50	HDB3wN4D50
		63	HDB3wN4B63	HDB3wN4C63	HDB3wN4D63

HDB3w Miniature Circuit breaker

Standard: IEC/EN60898-1

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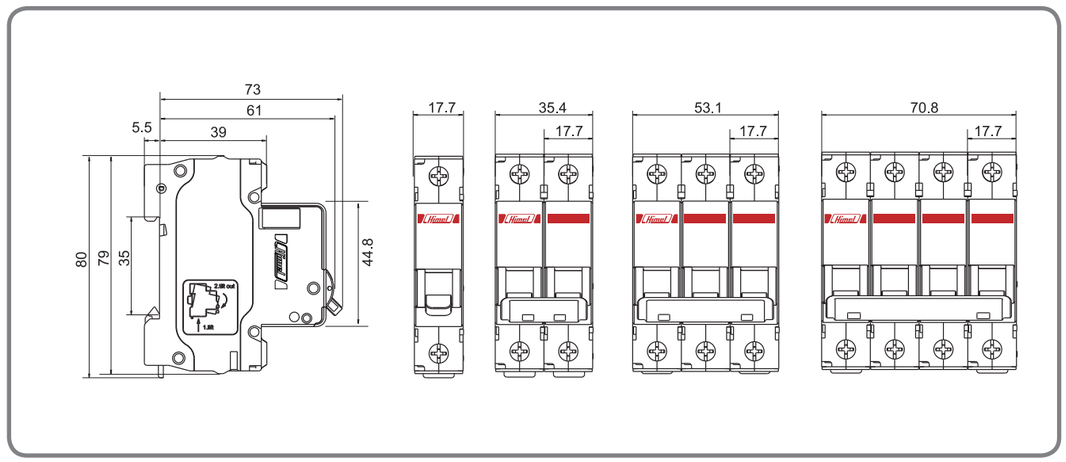
HDB3w Installation Dimension



Final Distribution

Trip Characteristic

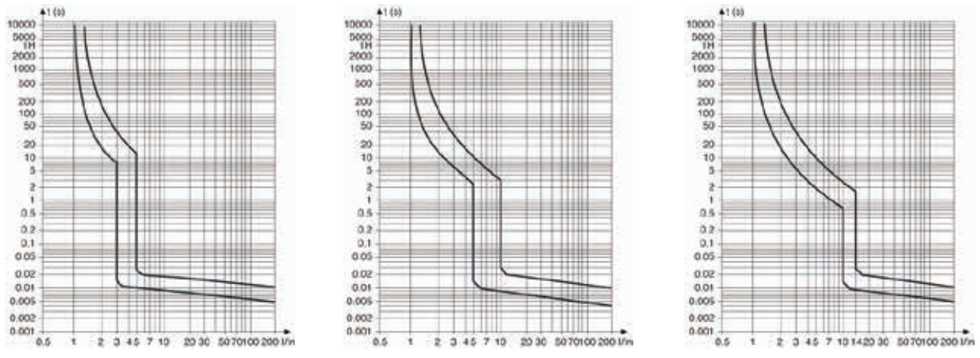
B features
The miniature circuit breaker with B tripping features meets IEC 60898 standard and applies to providing protection for the resistive load or the load without impulse current.

C features
The miniature circuit breaker with C trip features meets IEC60898 standard and applies to providing protection for the resistive load and the inductive load with lower impulse current

D features
The miniature circuit breaker with D trip features meets IEC60898 standard and applies to providing protection for the load with higher impulse current at circuit connection.

Tripping type	Compliance standard	Thermal trip characteristics				Electro-magnetic trip characteristics			
		Test current	Test time	Initial state	Expected result	AC test current	Test time	Initial state	Expected result
B	IEC60898	1.13In	1h	Cold state	Non tripping	3In	0.1s	Cold state	Non-tripping
		1.45In	1h	Heated state	Tripping	5In	0.1s		Tripping
C	IEC60898	1.13In	≥1h(≤ 63A) ≥ 2h(63A)	Cold state	Non tripping	10In	≥0.1s		Non-tripping
		1.45In	1h (≤ 63A) 2h (63A)	Heated state	Tripping	10In	0.1s		Tripping
D	IEC60898	1.13In	≥1h	Cold state	Non tripping	20In	≥0.1s		Non-tripping
		1.45In	1h	Heated state	Tripping		0.1s		Tripping

Tripping Curve



Temperature Correction Factor Table

Rated current	Rated current correction value A								
A	-20	-10	0	10	20	30	40	50	60
1	1.22	1.18	1.15	1.1	1.05	1	0.94	0.9	0.84
2	2.43	2.31	2.25	2.17	2.06	2	1.93	1.85	1.63
3	3.68	3.57	3.43	3.29	3.18	3	2.82	2.63	2.57
4	4.89	4.75	4.67	4.48	4.24	4	3.98	3.52	3.25
5	6.21	5.98	5.83	5.77	5.42	5	4.85	4.57	4.19
6	7.33	7.05	6.84	6.62	6.3	6	5.64	5.42	5.06
8	9.78	9.44	9.15	8.51	7.98	8	7.1	6.92	6.75
10	12.25	11.87	11.64	11.15	10.62	10	9.3	8.96	8.48
13	15.78	15.34	14.83	14.22	13.75	13	12.1	11.75	10.93
16	19.49	18.72	18.06	17.98	16.96	16	15.04	14.42	13.47
20	24.35	23.68	22.82	22.47	21.2	20	18.8	17.85	16.78
25	30.52	29.61	28.78	28.09	26.5	25	23.25	22.52	21.02
32	38.96	37.68	36.62	35.96	33.92	32	30.08	28.81	26.84
40	48.85	47.13	46.32	45.8	42.8	40	36.8	36.21	33.5
50	61.58	59.52	57.35	55.04	52.59	50	46	44.25	42.36
63	76.86	74.25	71.18	69.13	67.41	63	58.59	56.83	52.93

HDB3w Miniature Circuit breaker

HDB3w Miniature Circuit breaker

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Derating Table for Using in High Altitude Area

- IEC60947.2 standard stipulates the relationship between the altitude and the dielectric property. The altitude below 2,000m does not have significant impact on the properties of the circuit breaker.
- When the altitude is higher than 2,000m, the air cooling, dielectric property falling and other conditions must be considered, so the manufacturer shall discuss with the user on the working conditions or conduct special design
- The following table provides the correct value made for the rated current when the breaking capacity remains unchanged at the altitude above 2,000m.

Altitude (m)	2000	3000	4000
Dielectric strength	2500	2200	1950
Maximum working voltage (V)	440	440	440
Rated current	In	0.96In	0.93In

HDB6s 18mm Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B, C and D curves
Breaking Capacity: 4500/6000A

Function

HDB6s miniature circuit breakers combine the following functions:
- Protection of circuits against overload currents
- Protection of circuits against short-circuit currents
- Control
- Isolation

Order Information

Type	Breaking Capacity (kA)	Rating (A)	Width	Reference		
				B curve	C curve	D curve
1P	4.5/6	1	2	HDB6sN1B1	HDB6sN1C1	HDB6sL1D1
1		2	2	HDB6sN1B2	HDB6sN1C2	HDB6sL1D2
2		3	2	HDB6sN1B3	HDB6sN1C3	HDB6sL1D3
		4	2	HDB6sN1B4	HDB6sN1C4	HDB6sL1D4
		5	2	HDB6sN1B5	HDB6sN1C5	HDB6sL1D5
		6	2	HDB6sN1B6	HDB6sN1C6	HDB6sL1D6
		8	2	HDB6sN1B8	HDB6sN1C8	HDB6sL1D8
		10	2	HDB6sN1B10	HDB6sN1C10	HDB6sL1D10
		13	2	HDB6sN1B13	HDB6sN1C13	HDB6sL1D13
		16	2	HDB6sN1B16	HDB6sN1C16	HDB6sL1D16
		20	2	HDB6sN1B20	HDB6sN1C20	HDB6sL1D20
		25	2	HDB6sN1B25	HDB6sN1C25	HDB6sL1D25
		32	2	HDB6sN1B32	HDB6sN1C32	HDB6sL1D32
		40	2	HDB6sN1B40	HDB6sN1C40	HDB6sL1D40
		50	2	HDB6sL1B50	HDB6sL1C50	HDB6sL1D50
		63	2	HDB6sL1B63	HDB6sL1C63	HDB6sL1D63
2P	4.5/6	1	4	HDB6sN2B1	HDB6sN2C1	HDB6sL2D1
1 3		2	4	HDB6sN2B2	HDB6sN2C2	HDB6sL2D2
2 4		3	4	HDB6sN2B3	HDB6sN2C3	HDB6sL2D3
		4	4	HDB6sN2B4	HDB6sN2C4	HDB6sL2D4
		5	4	HDB6sN2B5	HDB6sN2C5	HDB6sL2D5
		6	4	HDB6sN2B6	HDB6sN2C6	HDB6sL2D6
		8	4	HDB6sN2B8	HDB6sN2C8	HDB6sL2D8
		10	4	HDB6sN2B10	HDB6sN2C10	HDB6sL2D10
		13	4	HDB6sN2B13	HDB6sN2C13	HDB6sL2D13
		16	4	HDB6sN2B16	HDB6sN2C16	HDB6sL2D16
		20	4	HDB6sN2B20	HDB6sN2C20	HDB6sL2D20
		25	4	HDB6sN2B25	HDB6sN2C25	HDB6sL2D25
		32	4	HDB6sN2B32	HDB6sN2C32	HDB6sL2D32
		40	4	HDB6sN2B40	HDB6sN2C40	HDB6sL2D40
		50	4	HDB6sL2B50	HDB6sL2C50	HDB6sL2D50
		63	4	HDB6sL2B63	HDB6sL2C63	HDB6sL2D63

Note: Width refers to multiple of 9mm

Final Distribution

HDB6s Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B, C and D curves
Breaking Capacity: 4500 /6000A

Order Information

Type	Breaking Capacity (kA)	Rating (A)	Width	Reference		
				B curve	C curve	D curve
3P	4.5/6	1	6	HDB6sN3B1	HDB6sN3C1	HDB6sL3D1
1 3 5 / 2 4 6		2	6	HDB6sN3B2	HDB6sN3C2	HDB6sL3D2
		3	6	HDB6sN3B3	HDB6sN3C3	HDB6sL3D3
		4	6	HDB6sN3B4	HDB6sN3C4	HDB6sL3D4
		5	6	HDB6sN3B5	HDB6sN3C5	HDB6sL3D5
		6	6	HDB6sN3B6	HDB6sN3C6	HDB6sL3D6
		8	6	HDB6sN3B8	HDB6sN3C8	HDB6sL3D8
		10	6	HDB6sN3B10	HDB6sN3C10	HDB6sL3D10
		13	6	HDB6sN3B13	HDB6sN3C13	HDB6sL3D13
		16	6	HDB6sN3B16	HDB6sN3C16	HDB6sL3D16
		20	6	HDB6sN3B20	HDB6sN3C20	HDB6sL3D20
		25	6	HDB6sN3B25	HDB6sN3C25	HDB6sL3D25
		32	6	HDB6sN3B32	HDB6sN3C32	HDB6sL3D32
		40	6	HDB6sN3B40	HDB6sN3C40	HDB6sL3D40
		50	6	HDB6sL3B50	HDB6sL3C50	HDB6sL3D50
		63	6	HDB6sL3B63	HDB6sL3C63	HDB6sL3D63
4P	4.5/6	1	8	HDB6sN4B1	HDB6sN4C1	HDB6sL4D1
1 3 5 7 / 2 4 6 8		2	8	HDB6sN4B2	HDB6sN4C2	HDB6sL4D2
		3	8	HDB6sN4B3	HDB6sN4C3	HDB6sL4D3
		4	8	HDB6sN4B4	HDB6sN4C4	HDB6sL4D4
		5	8	HDB6sN4B5	HDB6sN4C5	HDB6sL4D5
		6	8	HDB6sN4B6	HDB6sN4C6	HDB6sL4D6
		8	8	HDB6sN4B8	HDB6sN4C8	HDB6sL4D8
		10	8	HDB6sN4B10	HDB6sN4C10	HDB6sL4D10
		13	8	HDB6sN4B13	HDB6sN4C13	HDB6sL4D13
		16	8	HDB6sN4B16	HDB6sN4C16	HDB6sL4D16
		20	8	HDB6sN4B20	HDB6sN4C20	HDB6sL4D20
		25	8	HDB6sN4B25	HDB6sN4C25	HDB6sL4D25
		32	8	HDB6sN4B32	HDB6sN4C32	HDB6sL4D32
		40	8	HDB6sN4B40	HDB6sN4C40	HDB6sL4D40
		50	8	HDB6sL4B50	HDB6sL4C50	HDB6sL4D50
		63	8	HDB6sL4B63	HDB6sL4C63	HDB6sL4D63

Note: Width refers to multiple of 9mm

HDB6s Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B, C and D curves
Breaking Capacity: 4500/6000A

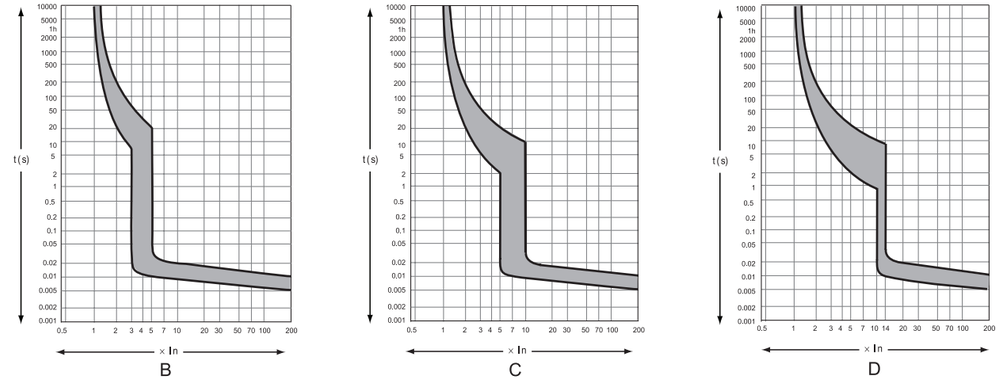
Technical Data

MCB	HDB6s 18mm Circuit Breaker				
Electrical Features	Standard: IEC/EN 60898-1 Certification: KEMA CB CE RoHS Poles: 1-4P Rated Current In(A): 1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63 Rated Voltage Ue: 230/400V AC Insulation Voltage Ui: 500V				
	Breaking Capacity Icn				
	Rate current(A)	Breaking capacity Icn (kA)	Type	Poles	Voltage (V)
	1-40	6	B,C	1P 2P, 3P, 4P	230/400 400
	50,63	4.5	B,C	1P 2P, 3P, 4P	230/400 400
	1-63	4.5	D	1P 2P, 3P, 4P	230/400 400
	Tripping Curve (see following tripping curve pictures)				
	B Curve: The magnetic release operates between 3 and 5 In C Curve: The magnetic release operates between 5 and 10 In D Curve: The magnetic release operates between 10 and 14 In				
Mechanical Features	Electrical Durability: 4000 times Mechanical Durability: 10000 times Protection Degree: 2 Tropicalization: Treatment 2 Ambient Temperature: -5°C~+40°C				
Connection	Up to 25mm^2 cables				
Installation	Rated Current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)	
	1-63	M5	2.5	4.5	
Mounting	35mm Din-rail				
Accessories	Contact Accessory: OF Fault-indicating Accessories: SD Shunt-trip Release: MX+OF				

HDB6s Miniature Circuit Breaker

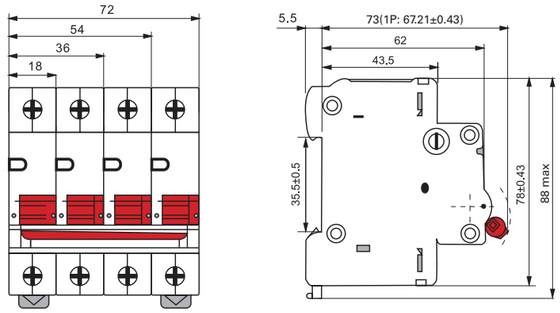
Standard: IEC/EN 60898-1
Trip Curve: B, C and D curves
Breaking Capacity: 4500 /6000A

Tripping Curves



Overall Dimensions

Unit: mm



HDB9 18mm Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B,C and D curves
Breaking Capacity: 6000/10000A

Function

HDB9 miniature circuit breakers combine the following functions:

- Protection of circuits against overload currents
- Protection of circuits against short-circuit currents
- Control
- Isolation

Order Information

Type	Breaking Capacity (kA)	Rating (A)	Width	Reference		
				B curve	C curve	D curve
1P	6	1	2		HDB9N631C1	HDB9N631D1
		2	2		HDB9N631C2	HDB9N631D2
		4	2		HDB9N631C4	HDB9N631D4
		6	2	HDB9N631B6	HDB9N631C6	HDB9N631D6
		10	2	HDB9N631B10	HDB9N631C10	HDB9N631D10
		16	2	HDB9N631B16	HDB9N631C16	HDB9N631D16
		20	2	HDB9N631B20	HDB9N631C20	HDB9N631D20
		25	2	HDB9N631B25	HDB9N631C25	HDB9N631D25
		32	2	HDB9N631B32	HDB9N631C32	HDB9N631D32
		40	2	HDB9N631B40	HDB9N631C40	HDB9N631D40
		50	2	HDB9N631B50	HDB9N631C50	HDB9N631D50
		63	2	HDB9N631B63	HDB9N631C63	HDB9N631D63
	10	1	2		HDB9H631C1	HDB9H631D1
		2	2		HDB9H631C2	HDB9H631D2
		4	2		HDB9H631C4	HDB9H631D4
		6	2	HDB9H631B6	HDB9H631C6	HDB9H631D6
		10	2	HDB9H631B10	HDB9H631C10	HDB9H631D10
		16	2	HDB9H631B16	HDB9H631C16	HDB9H631D16
		20	2	HDB9H631B20	HDB9H631C20	HDB9H631D20
		25	2	HDB9H631B25	HDB9H631C25	HDB9H631D25
		32	2	HDB9H631B32	HDB9H631C32	HDB9H631D32
		40	2	HDB9H631B40	HDB9H631C40	HDB9H631D40
		50	2	HDB9H631B50	HDB9H631C50	HDB9H631D50
		63	2	HDB9H631B63	HDB9H631C63	HDB9H631D63

Note: Width refers to multiple of 9mm

HDB9 18mm Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B,C and D curves
Breaking Capacity: 6000/10000A

Order Information

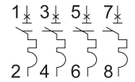
Type	Breaking Capacity (kA)	Rating (A)	Width	Reference		
				B curve	C curve	D curve
2P	6	1	4		HDB9N632C1	HDB9N632D1
		2	4		HDB9N632C2	HDB9N632D2
		4	4		HDB9N632C4	HDB9N632D4
		6	4	HDB9N632B6	HDB9N632C6	HDB9N632D6
		10	4	HDB9N632B10	HDB9N632C10	HDB9N632D10
		16	4	HDB9N632B16	HDB9N632C16	HDB9N632D16
		20	4	HDB9N632B20	HDB9N632C20	HDB9N632D20
		25	4	HDB9N632B25	HDB9N632C25	HDB9N632D25
		32	4	HDB9N632B32	HDB9N632C32	HDB9N632D32
		40	4	HDB9N632B40	HDB9N632C40	HDB9N632D40
		50	4	HDB9N632B50	HDB9N632C50	HDB9N632D50
		63	4	HDB9N632B63	HDB9N632C63	HDB9N632D63
	10	1	4		HDB9H632C1	HDB9H632D1
		2	4		HDB9H632C2	HDB9H632D2
		4	4		HDB9H632C4	HDB9H632D4
		6	4	HDB9H632B6	HDB9H632C6	HDB9H632D6
		10	4	HDB9H632B10	HDB9H632C10	HDB9H632D10
		16	4	HDB9H632B16	HDB9H632C16	HDB9H632D16
		20	4	HDB9H632B20	HDB9H632C20	HDB9H632D20
		25	4	HDB9H632B25	HDB9H632C25	HDB9H632D25
		32	4	HDB9H632B32	HDB9H632C32	HDB9H632D32
		40	4	HDB9H632B40	HDB9H632C40	HDB9H632D40
		50	4	HDB9H632B50	HDB9H632C50	HDB9H632D50
		63	4	HDB9H632B63	HDB9H632C63	HDB9H632D63
3P	6	1	6		HDB9N633C1	HDB9N633D1
		2	6		HDB9N633C2	HDB9N633D2
		4	6		HDB9N633C4	HDB9N633D4
		6	6	HDB9N633B6	HDB9N633C6	HDB9N633D6
		10	6	HDB9N633B10	HDB9N633C10	HDB9N633D10
		16	6	HDB9N633B16	HDB9N633C16	HDB9N633D16
		20	6	HDB9N633B20	HDB9N633C20	HDB9N633D20
		25	6	HDB9N633B25	HDB9N633C25	HDB9N633D25
		32	6	HDB9N633B32	HDB9N633C32	HDB9N633D32
		40	6	HDB9N633B40	HDB9N633C40	HDB9N633D40
		50	6	HDB9N633B50	HDB9N633C50	HDB9N633D50
		63	6	HDB9N633B63	HDB9N633C63	HDB9N633D63

Note: Width refers to multiple of 9mm

HDB9 18mm Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B,C and D curves
Breaking Capacity: 6000/10000A

Order Information

Type	Breaking Capacity (kA)	Rating (A)	Width	Reference		
				B curve	C curve	D curve
	10	1	6		HDB9H633C1	HDB9H633D1
		2	6		HDB9H633C2	HDB9H633D2
		4	6		HDB9H633C4	HDB9H633D4
		6	6	HDB9H633B6	HDB9H633C6	HDB9H633D6
		10	6	HDB9H633B10	HDB9H633C10	HDB9H633D10
		16	6	HDB9H633B16	HDB9H633C16	HDB9H633D16
		20	6	HDB9H633B20	HDB9H633C20	HDB9H633D20
		25	6	HDB9H633B25	HDB9H633C25	HDB9H633D25
		32	6	HDB9H633B32	HDB9H633C32	HDB9H633D32
		40	6	HDB9H633B40	HDB9H633C40	HDB9H633D40
		50	6	HDB9H633B50	HDB9H633C50	HDB9H633D50
		63	6	HDB9H633B63	HDB9H633C63	HDB9H633D63
4P	6	1	8		HDB9N634C1	HDB9N634D1
		2	8		HDB9N634C2	HDB9N634D2
		4	8		HDB9N634C4	HDB9N634D4
		6	8	HDB9N634B6	HDB9N634C6	HDB9N634D6
		10	8	HDB9N634B10	HDB9N634C10	HDB9N634D10
		16	8	HDB9N634B16	HDB9N634C16	HDB9N634D16
		20	8	HDB9N634B20	HDB9N634C20	HDB9N634D20
		25	8	HDB9N634B25	HDB9N634C25	HDB9N634D25
		32	8	HDB9N634B32	HDB9N634C32	HDB9N634D32
		40	8	HDB9N634B40	HDB9N634C40	HDB9N634D40
		50	8	HDB9N634B50	HDB9N634C50	HDB9N634D50
		63	8	HDB9N634B63	HDB9N634C63	HDB9N634D63
	10	1	8		HDB9H634C1	HDB9H634D1
		2	8		HDB9H634C2	HDB9H634D2
		4	8		HDB9H634C4	HDB9H634D4
		6	8	HDB9H634B6	HDB9H634C6	HDB9H634D6
		10	8	HDB9H634B10	HDB9H634C10	HDB9H634D10
		16	8	HDB9H634B16	HDB9H634C16	HDB9H634D16
		20	8	HDB9H634B20	HDB9H634C20	HDB9H634D20
		25	8	HDB9H634B25	HDB9H634C25	HDB9H634D25
		32	8	HDB9H634B32	HDB9H634C32	HDB9H634D32
		40	8	HDB9H634B40	HDB9H634C40	HDB9H634D40
		50	8	HDB9H634B50	HDB9H634C50	HDB9H634D50
		63	8	HDB9H634B63	HDB9H634C63	HDB9H634D63

Note: Width refers to multiple of 9 mm.

HDB9 18mm Miniature Circuit Breaker

Standard: IEC/EN 60898-1
Trip Curve: B,C and D curves
Breaking Capacity: 6000/10000A

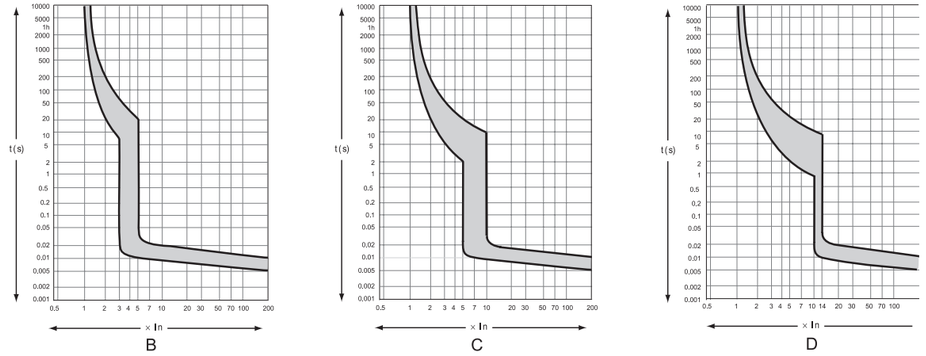
Technical Data

MCB	HDB9 18mm Circuit Breaker				
Electrical Features	Standard	IEC/EN 60898-1			
	Certification	KEMA CB CE RoHS			
	Poles	1-4P			
	Rated Current In	1, 2, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63 A			
	Rated Voltage Ue	230/400V AC			
	Insulation Voltage Ui	500V			
	Breaking Capacity Icn				
	Rate current(A)	Breaking capacity Icn (kA)	Type	Poles	Voltage (V)
	1-63	6	B,C,D	1P 2P, 3P, 4P	230/400 400
	1-63	10	B,C,D	1P 2P, 3P, 4P	230/400 400
	Tripping Curve (see following tripping curve pictures)				
	B Curve: the magnetic release operates between 3 and 5 In C Curve: the magnetic release operates between 5 and 10 In D Curve: the magnetic release operates between 10 and 14 In				
Mechanical Features	Electrical Durability	10000 times			
	Mechanical Durability	20000 times			
	Protection Degree	2			
	Ambient Temperature	-30°C ~ +70°C			
Connection	1-32A	Up to 25mm^2 cables	40-63	Up to 35mm^2 cables	
Installation	Rated Current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)	
	1-32	M5	2.0	2.5	
	40-63	M6.5	3.5	2.5	
Mounting	35mm Din-rail				
Accessories	Contact Accessory	OF			
	Fault-indicating Accessories	SD			
	Shunt -trip release	MX+OF			

HDB9 18mm Miniature Circuit Breaker

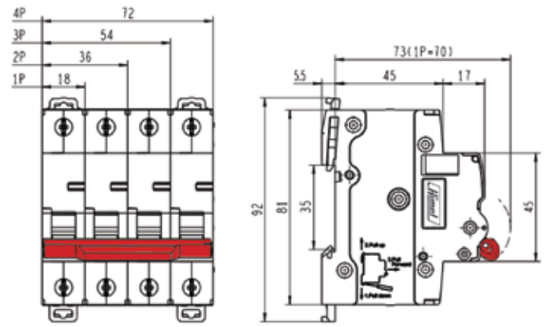
Standard: IEC/EN 60898-1
Trip Curve: B,C and D curves
Breaking Capacity: 6000/10000A

Tripping Curve



Overall Dimensions

Unit: mm



Accessories

Final Distribution

HDB3w-125 Molded Case Circuit Breaker

Functions and Features
IEC60947-2

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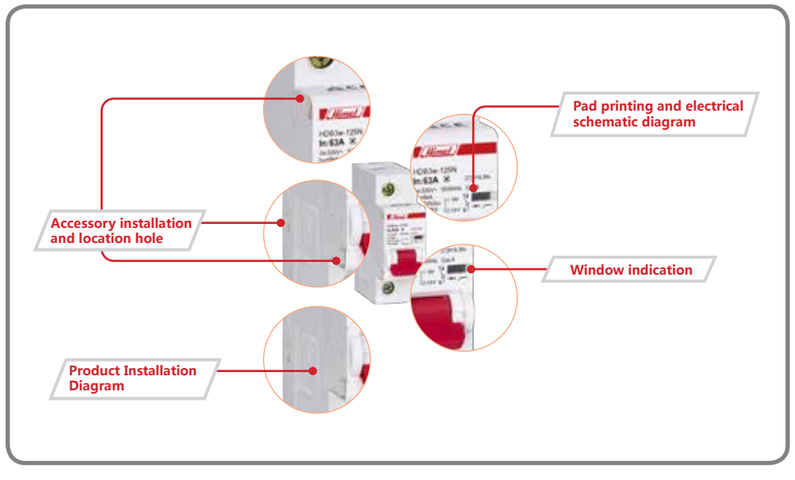
HDB3w-125 Molded Case Circuit Breaker has The Following Features

- Short circuit protection
- Overload protection
- Isolating function

Main Features

Rated operating voltage (V)	1P: 230/400AC
	2P,3P,4P: 400 AC
Rated current (A)	63-125
Rated frequency (Hz)	50/60
Poles	1P,2P,3P,4P
Breaking capacity (kA)	6，10

Product Details Display



HDB3w-125 Molded Case Circuit Breaker

Functions and Features
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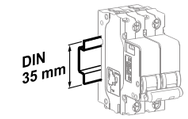
Electrical Characteristics

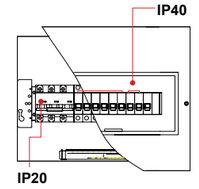
Rated insulation voltage Ui	（V）	250 (phase-to-ground) / 500 (phase-to-phase)
Maximum working voltage U_{Bmax}	1P+N （V）	230/400 AC
	2P,3P,4P	
Rated short-circuit capacity Icn (IEC/EN60898)	（KA）	6，10
Rated impulse withstand voltage (1.2/50)	（KA）	4
Dielectric test voltage		2kV (50/60Hz60 1 minute)
Isolating function		Available
Pollution class		2
Tripping type		Thermal magnetic tripping
Thermal magnetic trip characteristics	C curve (Ii=8.5In)	■
	D curve (Ii=12In)	■
Electrical and mechanical accessories		■

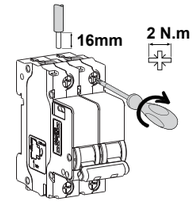
Mechanical characteristics

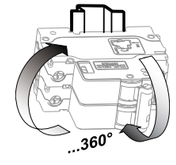
Handle		Red, pad printing indicating ON-OFF position
Mechanical life	Times	8500 times (In≤ 100A) 7000 times (In > 100A)
Electrical life	Times	3000 times (In≤ 100A) 2500 times (In > 100A)
Protection rating	Installed in distribution box	IP40
	Installed directly	IP20
Mechanical shock resistance		30g, 3 shocks, last for 11ms (Places with no significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6)		Places with no significant vibration or shock
Damp and hot resistance (IEC 60068-2)	Damp and hot ℃ /RH	Category 2, 28 cycles Relative humidity 90%~96% at 55℃ Relative humidity 90%~100% at 25℃
Reference ambient temperature	℃	30℃
Operating ambient temperature (daily mean temperature≤ +35℃)	℃	-20℃ ~+60℃
Storage temperature	℃	-40℃ ~+70℃



Installed on 35mm standard guide rail







Flexible installation direction

Final Distribution

HDB3w-125 Molded Case Circuit Breaker

Functions and Features
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Installation features

Terminal type		U Terminals
Maximum wiring capacity	（A）	Current ratings 63-125:50mm^2
Maximum ultimate torque	（A）	Current ratings 63-125:3.5N.m
Tools		Cross head screwdriver or flathead screwdriver
Installation		Installed on standard DIN guide rail (35mm)
Line incoming mode		Top or bottom incoming

HDB3w-125 Molded Case Circuit Breaker

Functions and Features
IEC60947-2

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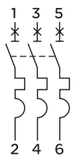
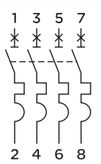
HDB3w-125 Molded Case Circuit Breaker

Product name	Breaking capacity	Poles	Trip type	Rated current
HDB3w-125	N	1	C	63
	↓	↓	↓	↓
	N:6kA H:10kA	1: 1P 2: 2P 3: 3P 4: 4P	C: C D: D	63: 63A 80: 80A 100: 100A 125: 125A

HDB3w-125 molded case circuit breaker	Type	Rated current	Trip type	
			C	D
6kA	1P 	63	HDB3w125N1C63	HDB3w125N1D63
		80	HDB3w125N1C80	HDB3w125N1D80
		100	HDB3w125N1C100	HDB3w125N1D100
		125	HDB3w125N1C125	HDB3w125N1D125
	2P 	63	HDB3w125N2C63	HDB3w125N2D63
		80	HDB3w125N2C80	HDB3w125N2D80
		100	HDB3w125N2C100	HDB3w125N2D100
		125	HDB3w125N2C125	HDB3w125N2D125
	3P 	63	HDB3w125N3C63	HDB3w125N3D63
		80	HDB3w125N3C80	HDB3w125N3D80
		100	HDB3w125N3C100	HDB3w125N3D100
		125	HDB3W125N3C125	HDB3W125N3D125
	4P 	63	HDB3w125N4C63	HDB3w125N4D63
		80	HDB3w125N4C80	HDB3w125N4D80
		100	HDB3w125N4C100	HDB3w125N4D100
		125	HDB3w125N4C125	HDB3w125N4D125

HDB3w-125 Molded Case Circuit Breaker

Functions and Features
IEC60947-2

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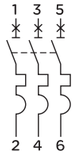
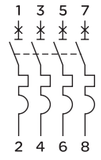
HDB3w-125 Molded Case Circuit Breaker

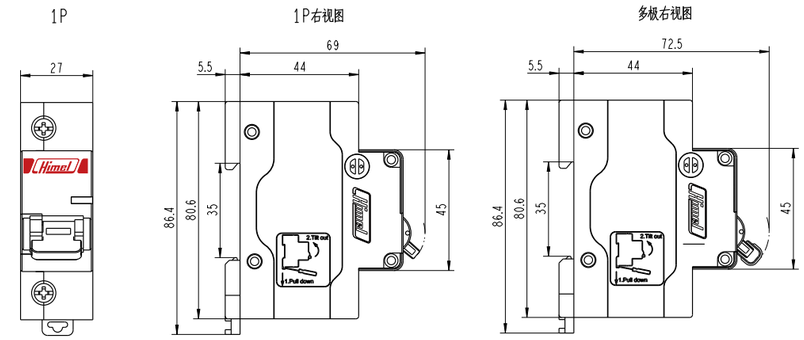
HDB3w-125 molded case circuit breaker	Type	Rated current	Trip type	
			C	D
10kA	1P 	63	HDB3w125H1C63	HDB3w125H1D63
		80	HDB3w125H1C80	HDB3w125H1D80
		100	HDB3w125H1C100	HDB3w125H1D100
		125	HDB3w125H1C125	HDB3w125H1D125
	2P 	63	HDB3w125H2C63	HDB3w125H2D63
		80	HDB3w125H2C80	HDB3w125H2D80
		100	HDB3w125H2C100	HDB3w125H2D100
		125	HDB3w125H2C125	HDB3w125H2D125
	3P 	63	HDB3w125H3C63	HDB3w125H3D63
		80	HDB3w125H3C80	HDB3w125H3D80
		100	HDB3w125H3C100	HDB3w125H3D100
		125	HDB3W125H3C125	HDB3W125H3D125
	4P 	63	HDB3w125H4C63	HDB3w125H4D63
		80	HDB3w125H4C80	HDB3w125H4D80
		100	HDB3w125H4C100	HDB3w125H4D100
		125	HDB3w125H4C125	HDB3w125H4D125

HDB3w-125 Molded Case Circuit Breaker

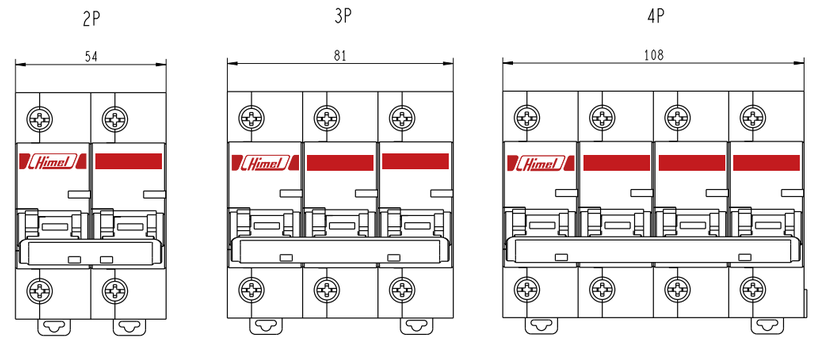
Functions and Features
IEC60947-2

3SERIES MORE VALUE FOR PRICE!

HDB3w-125 Molded Case Circuit Breaker



HDB3w-125 Molded Case Circuit Breaker



Final Distribution

HDB3wP Phase Line + Neutral Line Circuit Breaker

Functions and Features
IEC/EN60898-1

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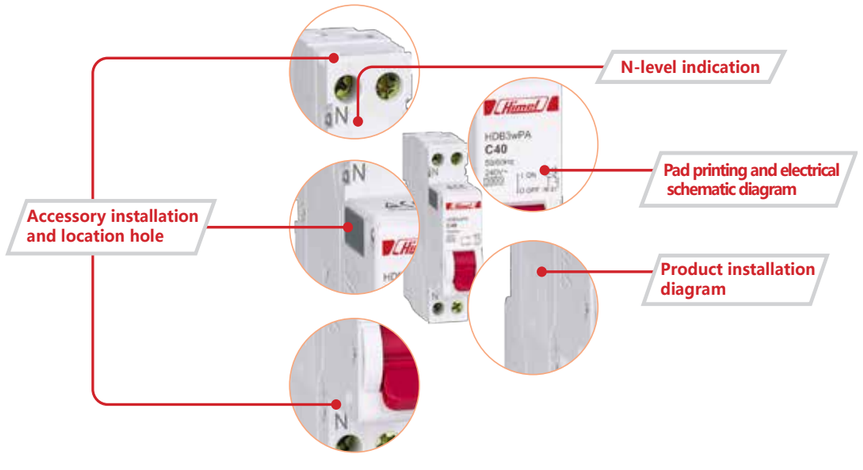
HDB3wP Technical Parameters

- Short circuit protection
- Overload protection
- Isolating function

Main Features

Rated operating voltage (V)	1P+N: 240 AC
Rated current (A)	6-40
Rated frequency (Hz)	50/60
Poles	1P+N
Breaking capacity (kA)	3,4.5

Product Details Display



HDB3wP Phase Line + Neutral Line Circuit Breaker

Functions and Features
IEC/EN60898-1

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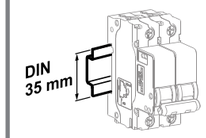
Electrical Characteristics

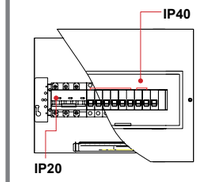
Rated insulation voltage Ui		（V）	250 (phase-to-ground) / 500 (phase-to-phase)
Maximum working voltage U_{Bmax}	1P+N	（V）	240AC
Rated short-circuit capacity Icn (IEC/EN60898)		（kA）	3,4.5
Rated impulse withstand voltage (1.2/50)		（KV）	4
Dielectric test voltage			2kV (50/60HZ, 1 minute)
Use category			A
Isolating function			Available
Pollution class			2
Tripping type			Thermal magnetic tripping
Thermal magnetic trip characteristics	C curve (5In~10In)		■
	D curve (10In~14In)		■
Electrical and mechanical accessories	■		■

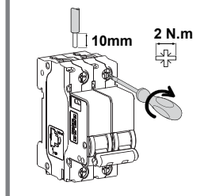
Mechanical Characteristics

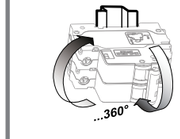
Handle		Red, pad printing indicating ON-OFF position
Mechanical life	Times	15000
Electrical life	Times	10000
Protection rating	Installed in distribution box	IP40
	Installed directly	IP20
Mechanical shock resistance		30g, 3 shocks, last for 11ms (Places with no significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6)		(Places with no significant vibration or shock)
Damp and hot resistance (IEC 60068-2)	Damp and hot ℃ /RH	Category 2, 28 cycles Relative humidity 90%~96% at 55 ℃ Relative humidity 90%~100% at 25 ℃
Reference ambient temperature	℃	30 ℃
Operating ambient temperature (daily mean temperature≦ +35℃)	℃	-20 ℃ ~+60 ℃
Storage temperature	℃	-40 ℃ ~+70 ℃



Installed on 35mm standard guide rail







Flexible installation direction

HDB3wP Phase Line + Neutral Line Circuit Breaker

Functions and Features
IEC/EN60898-1

3SERIES MORE VALUE FOR PRICE!

Installation Features

Terminal type		U Terminals
Maximum wiring capacity	（A）	Current ratings 6-40:16mm^2
Maximum ultimate torque	（A）	Current ratings 6-40:2 N.m
Tools		Cross head screwdriver or flathead screwdriver
Installation		Installed on standard DIN guide rail (35mm)
Line incoming mode		Top or bottom incoming

HDB3wP Phase Line + Neutral Line Circuit Breaker

Functions and Features
IEC/EN60898-1

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HDB3wP Phase Line + Neutral Line Circuit Breaker

Product name	Breaking capacity	Trip type	Rated current
HDB3wP	N	C	6
	↓		↓
	A:3kA N:4.5kA	C: C D: D	6: 6A 25: 25A 10: 10A 32: 32A 16: 16A 40: 40A 20: 20A

HDB3wP phase line + neutral line circuit breaker	Type	Rated current	Trip type	
			C	D
3kA	1P+N	6	HDB3WPAC6	HDB3WPAD6
		10	HDB3WPAC10	HDB3WPAD10
		16	HDB3WPAC16	HDB3WPAD16
		20	HDB3WPAC20	HDB3WPAD20
		25	HDB3WPAC25	HDB3WPAD25
		32	HDB3WPAC32	HDB3WPAD32
		40	HDB3WPAC40	HDB3WPAD40
4.5kA	1P+N	6	HDB3WPNC6	HDB3WPND6
		10	HDB3WPNC10	HDB3WPND10
		16	HDB3WPNC16	HDB3WPND16
		20	HDB3WPNC20	HDB3WPND20
		25	HDB3WPNC25	HDB3WPND25
		32	HDB3WPNC32	HDB3WPND32
		40	HDB3WPNC40	HDB3WPND40

HDB6p Phase-neutral Circuit Breaker

Standard: IEC 60898-1
Trip Curve: C curve
Breaking Capacity: 4500A

Function

HDB6p phase-neutral circuit breakers combine the following functions:

- Protection of circuits against overload currents
- Protection of circuits against short-circuit currents
- Control

Order Information

Type	Rating (A)	Width (in mode of 9mm)	Reference C curve
1P+N 	6	2	HDB6pC6
	10	2	HDB6pC10
	16	2	HDB6pC16
	20	2	HDB6pC20
	25	2	HDB6pC25
	32	2	HDB6pC32

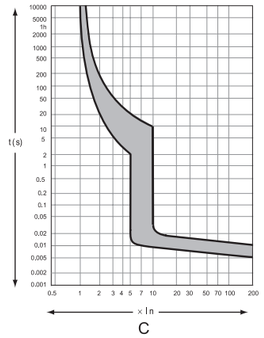
Technical Data

MCB	HDB6p Phase-neutral Circuit Breaker			
Electrical Features	Standard	IEC/EN 60898-1		
	Certification	CB, CE SEMKO, RoHS		
	Poles	1P+N		
	Rated Current In (A)	6,10,16,20,25,32		
	Rated Voltage Ue	230V AC		
	Insulation Voltage Ui	500V		
	Breaking Capacity Icn	4500A		
	Tripping Curve (see following tripping curve pictures)			
	C Curve: The magnetic release operates between 5 and 10 In			
Mechanical Features	Electrical Durability	4000 times		
	Mechanical Durability	16000 times		
	Protection Degree	2		
	Tropicalization	Treatment 2		
	Ambient Temperature	-5°C ~ +40°C		
Connection	Up to 10mm^2 cables			
Installation	Rated current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	6-32	M4	1.2	1.5
Mounting	35mm Din-rail			

HDB6p Phase-neutral Circuit Breaker
Standard: IEC/EN 60898-1
Trip Curve: C curve
Breaking Capacity: 4500A

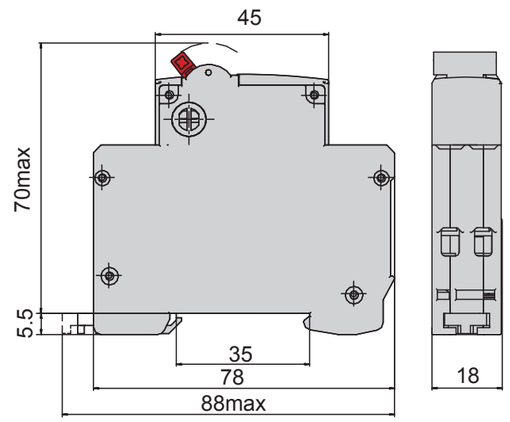
Tripping Curve

HDB6p Phase-neutral Circuit Breaker



Overall Dimensions

Unit: mm



HDB9P Phase-neutral Circuit Breaker

Standard: IEC/EN 60898-1
Tripping Curve: C Curve
Breaking Capacity: 4500A, 6000A

Function

HDB9P Phase-neutral Circuit Breaker combines the following functions:

- Protection of circuits agaist overload currents
- Protection against short-circuit currents
- Control
- Isolation

Order Information

Type	Rating (A)	Breaking Capacity (kA)	Width (in mode.of 9mm)	Reference
				C curve
1P+N	6	4.5	2	HDB9Pa40C6
	10	4.5	2	HDB9Pa40C10
	16	4.5	2	HDB9Pa40C16
	20	4.5	2	HDB9Pa40C20
	25	4.5	2	HDB9Pa40C25
	32	4.5	2	HDB9Pa40C32
	40	4.5	2	HDB9Pa40C40
	6	6	2	HDB9PN40C6
	10	6	2	HDB9PN40C10
	16	6	2	HDB9PN40C16
	20	6	2	HDB9PN40C20
	25	6	2	HDB9PN40C25
	32	6	2	HDB9PN40C32
	40	6	2	HDB9PN40C40

Note: Width refers to multiple of 9 mm.

Technical Data

MCB	HDB9P Phase-neutral Circuit Breaker					
Electrical Features	Standard	IEC/EN 60898-1				
	Certification	CB,CE,TUV, RoHS				
	Poles	1P+N				
	Rated Current In(A)	6, 10, 16, 20, 25, 32, 40				
	Rated Voltage Ue	240V AC				
	Insulation Voltage Ui	500V				
	Breaking Capacity	4500A, 6000A				
	Tripping Curve (see following tripping curve picture)					
	C Curve: the magnetic release operates between 5 and 10 In					
Rated Current, A	6	10	16,20	25	32	40
Cross-sectional area of conductor mm^2	1	1.5	2.5	4	6	10

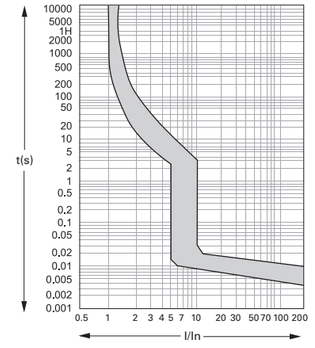
HDB9P Phase-neutral Circuit Breaker

Standard: IEC/EN 60898-1
Tripping Curve: C Curve
Breaking Capacity: 4500A, 6000A

Technical Data

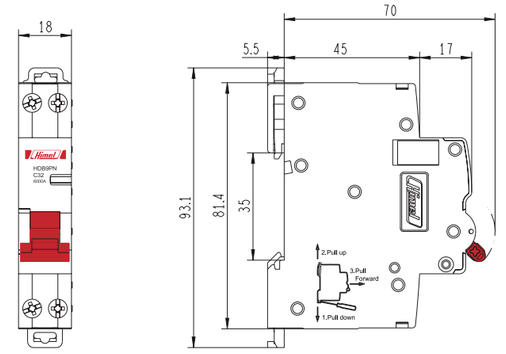
MCB	HDB9P Phase-neutral Circuit Breaker			
Electrical Features	Electrical Durability	10000 times		
	Mechanical Durability	20000 times		
	Protection Degree	IP20		
	Tropicalization	Treatment 2		
	Ambient Temperature	-25℃~ +70℃		
Connection	6 - 40A,Up to 10mm^2 cables			
Installation	Rated Current (A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	6-40	M4	2.0	3.0
Mounting	35mm Din-Rail			

Tripping Curve



C Curve

Overall Dimensions



Accessories

HDG3 Isolating Switch

Functions and Feature
IEC60947-3

3SERIES
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HDG3 molded case residual current operated circuit breaker has the following features

- Isolation
- Mixed load of on-off resistance and inductance

Main Features

Rated current	20,25,32,40,63,80,100,125
Rated operating voltage	230/400V AC
Isolating function	The handle is provided with indication strip code to ensure complete breaking
Mechanical life	8500 times
Electrical life	Use category: AC-22A cos =0.8
	3000 times
Impulse withstand voltage	4kV
Use category	AC-22A
Rated short-time withstand current	20Ie, 1 second
Environment	Operating ambient temperature: -20℃ ~ 60℃
	Damp and hot resistance: 2 (Relative humidity 95% at 55℃)
Wiring	Tunnel terminal
	For wire of 50 mm2 and below
Installation	Modular structure allows convenient installation on DIN standard guide rail
	Rated torque: 3.5 Nm

HDG3 Isolating Switch

Functions and Features
IEC60947-3

3SERIES
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HDG3 Isolating switch

Product name	Poles	Rated current
HDG3	1	20
	↓	↓
	1: 1P	20: 20A
	2: 2P	25: 25A
	3: 3P	32: 32A
	4: 4P	40: 40A
		63: 63A
		80:80A
		100: 100A
		125: 125A

Final Distribution

HDG3 Isolating Switch

Functions and Feature
IEC60947-3

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HDG3 Isolating switch

HDG3 Isolating switch	Type	Rated current	Reference
	1P	20	HDG3120
		25	HDG3125
		32	HDG3132
		40	HDG3140
		63	HDG3163
		80	HDG3180
		100	HDG31100
		125	HDG31125
	2P	20	HDG3220
		25	HDG3225
		32	HDG3232
		40	HDG3240
		63	HDG3263
		80	HDG3280
		100	HDG32100
		125	HDG32125
	3P	20	HDG3320
		25	HDG3325
		32	HDG3332
		40	HDG3340
		63	HDG3363
		80	HDG3380
		100	HDG33100
		125	HDG33125
	4P	20	HDG3420
		25	HDG3425
		32	HDG3432
		40	HDG3440
		63	HDG3463
		80	HDG3480
		100	HDG34100
		125	HDG34125

Final Distribution

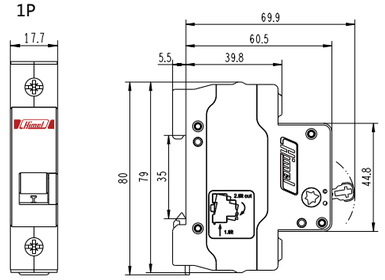
HDG3 Isolating Switch

Functions and Features
IEC60947-3

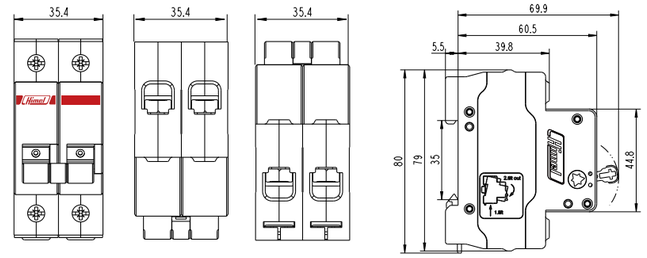
3SERIES MORE VALUE FOR PRICE!

HDG3 Isolating Switch

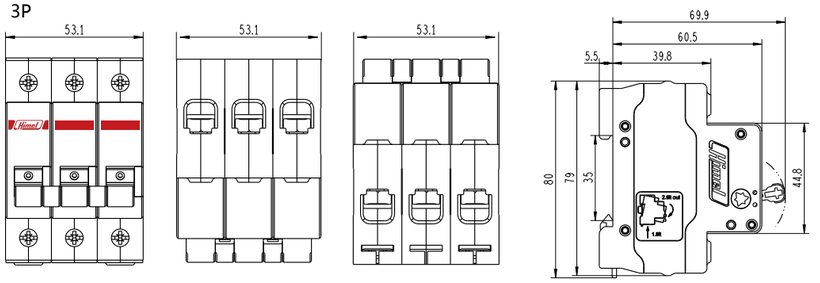
1P



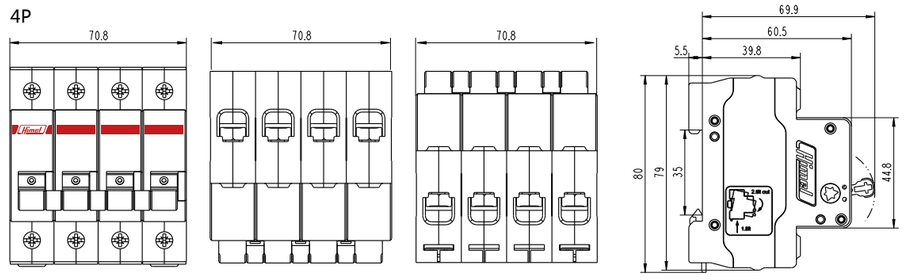
2P



3P



4P



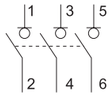
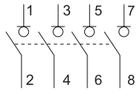
HDB6IS Switch Disconnector

Standard: IEC/EN 60947-3

Function

HDB6IS switch disconnectors combine the following functions:
- Making and breaking normal load circuits
- Isolation

Order Information

Type	Rating (A)	Width (in mod. of 9mm)	Reference
1P 	20	2	HDB6IS120
	32	2	HDB6IS132
	63	2	HDB6IS163
	100	2	HDB6IS1100
	125	2	HDB6IS1125
2P 	20	4	HDB6IS220
	32	4	HDB6IS232
	63	4	HDB6IS263
	100	4	HDB6IS2100
	125	4	HDB6IS2125
3P 	20	6	HDB6IS320
	32	6	HDB6IS332
	63	6	HDB6IS363
	100	6	HDB6IS3100
	125	6	HDB6IS3125
4P 	20	8	HDB6IS420
	32	8	HDB6IS432
	63	8	HDB6IS463
	100	8	HDB6IS4100
	125	8	HDB6IS4125

HDB6IS Switch Disconnector

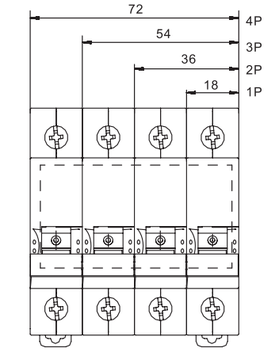
Standard: IEC/EN 60947-3

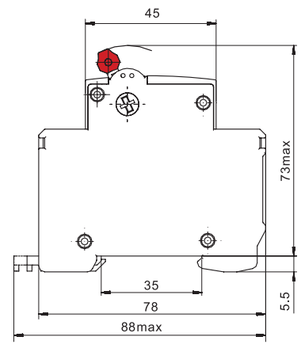
Technical Data

Switch Disconnector	HDB6IS Switch Disconnector			
Electrical Features	Standard	IEC/EN 60947-3		
	Certification	CB, CE SEMKO, RoHS		
	Poles	1-4P		
	Rated Current In	20, 32, 63, 100, 125A		
	Rated Voltage Ue	230V/400V AC		
	Insulation Voltage Ui	500V		
	Short-time Withstand Capacity for 1s	12 Ie		
Mechanical Features	Electrical Durability	1500 times		
	Mechanical Durability	8500 times		
	Protection Degree	2		
	Ambient Temperature	-5°C~+40°C		
	Tropicalization	Treatment 2		
Connection	Up to 50mm^2 cables			
Installation	Rated current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	20-125	M7	4	5.5
Mounting	35mm Din-rail			

Overall Dimensions

Unit: mm





HDG9 Switch Disconnector

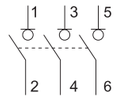
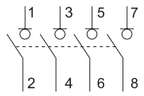
Standard: IEC/EN 60947-3

Function

HDG9 switch disconnectors combine the following functions:

- Making and breaking normal load circuits
- Isolation

Order Information

Type	Rating (A)	Width (in mod. of 9mm)	Reference
1P 	32	2	HDG9125132
	63	2	HDG9125163
	100	2	HDG91251100
	125	2	HDG91251125
2P 	32	4	HDG9125232
	63	4	HDG9125263
	100	4	HDG91252100
	125	4	HDG91252125
3P 	32	6	HDG9125332
	63	6	HDG9125363
	100	6	HDG91253100
	125	6	HDG91253125
4P 	32	8	HDG9125432
	63	8	HDG9125463
	100	8	HDG91254100
	125	8	HDG91254125

HDG9 Switch Disconnector

Standard: IEC/EN 60947-3

Technical Data

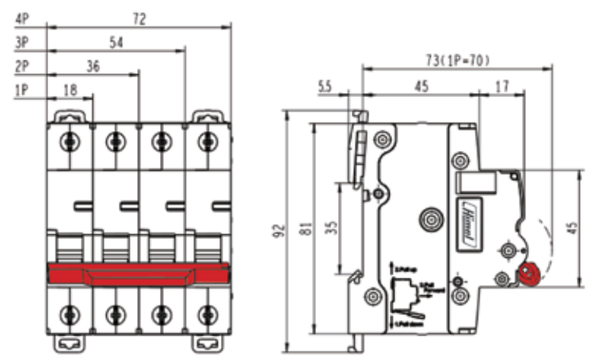
Switch Disconnector		HDB5 Switch Disconnector
Electrical Features	Standard	IEC/EN 60947-3
	Certification	CB,CE,TUV, RoHS
	Poles	I-4P
	Rated Current In	32,63,100,125A
	Rated Voltage Ue	230/400VAC
	Insulation Voltage Ui	500V
	Short-time Withstand Capacity for 1s	20 Ie
Mechanical Features	Electrical Durability	Using Type: AC22 cosφ 0.6 32A: 30000 times 63A: 20000 times 100A: 10000 times 125A: 2500 times
	Mechanical Durability	5000 times
	Protection Degree	2
	Ambient Temperature	-30°C~+70°C
	Tropicalization	Treatment 2
Connection		Up to 50mm² cables

Installation	Rated Current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	32-125	M6.5	3.5	3.5

Mounting	35mm Din-rail

Overall Dimensions

Unit: mm



Residual Current Devices Overview

18mm RCBO

HDB3wLE 268

Sensitivity:
30,50,100,200,300mA
In: 6~63A
Breaking Capacity: 6kA
Poles: 1P+N, 2P, 3P, 3P+N, 4P

HDB9LE 279

Sensitivity:
30,100,300mA
In: 6-63A
Breaking Capacity: 6kA
Poles: 1P+N, 2P, 3P, 3P+N, 4P

27mm RCBO

HDB3wLE-125 282

Sensitivity:
30,50,75,100,300mA
Breaking Capacity: 10kA
Poles: 1P+N, 2P, 3P, 3P+N, 4P

Add-on RCD

HDB6v 289

Sensitivity:
30,100,300mA
In: V32A, V63A
Poles: 1P+N, 2P, 3P, 3P+N, 4P

HDB3wPLE 293

Sensitivity: 30mA
In: 6-40A
Breaking Capacity:
3kA,4.5kA

Phase-neutral RCBO

HDB6pLE 297

Sensitivity: 30mA
In: 6-40A
Breaking Capacity: 4.5kA
Poles: 1P+N

HDB9PLE 299

Sensitivity: 30mA
In: 6-40A
Breaking Capacity: 4.5/6kA
Poles: 1P+N

RCCB

HDB6VR 301

Sensitivity: 30, 100, 300mA
In: 10-100A
Poles: 2P, 4P

RCBO

Incomer general protection RCBO 303

Sensitivity: 300mA
In: 20-60A
Poles: 1Ph+ N, 3Ph+N

HDB3wLE Residual Current Operated Circuit Breaker

3SERIES MORE VALUE FOR PRICE!

Standard: IEC61009-1

Function

HDB3wLE Residual Current Operated Circuit Breaker has the following features:

- Short circuit protection
- Overload protection
- Isolating function
- Earthleakage protection function
- Residual Current Operated Circuit Breaker vervoltage protection function

Main Features

Rated operating voltage V	1P+N, 2P: 230AC 3P, 3P+N, 4P 400 AC
Rated current A	6-63
Rated frequency Hz	50/60
Number of poles	1P+N, 2P, 3P, 3P+N, 4P
Breaking capacity kA	6
Rated residual operating current mA	30, 50, 75, 100, 300
Over-voltage protection function	280±5% AC (for products only) 1P+N, 2P, C

HDB3wLE Residual Current Operated Circuit Breaker

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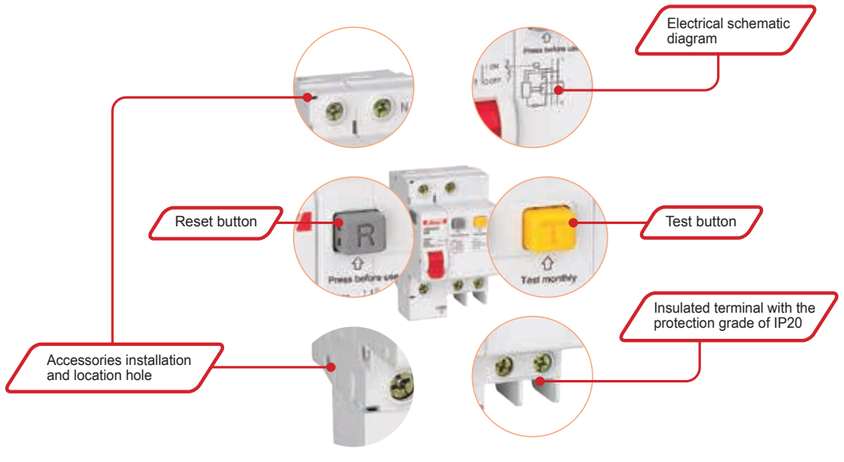
Standard: IEC61009-1

Product Details Display



HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

Functions and Features

Electrical Characteristics

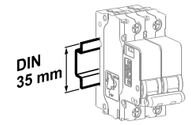
Nominal insulation voltage Ui		(V)	250 (phase-to-ground) 500 (phase-to-phase)
Maximum working voltage UBmax	1P+N, 2P	(V)	230 AC
	3P, 3P+N, 4P	(V)	400 AC
Rated short-circuit capacity Icn (IEC/EN60898)		(kA)	6
Rated impulse withstand voltage Uimp (1.2/50)		(kA)	4
Dielectric test voltage			2kV (50/60HZ, 1min)
Isolating function			Available
Pollution class			2
Electric shock protection grade			II
Trip type:			Thermal magnetic trip
Thermal magnetic trip characteristics:	Type B curve (3In~5In)		●
	Type C curve (5In~10In)		●
	Type D curve (10In~14In)		●
Electrical and mechanical accessories			●

Mechanical Characteristics

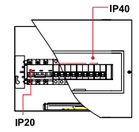
Trip indication button	With the residual current indication, when the ‘Reset button’ pumps, it indicates the residual tripping.	
Manual control	Two reset modes are allowed for the handle	
	Overcurrent fault	The circuit breaker and the residual current action device reset simultaneously
	Leakage fault	The residual current action device resets before the circuit breaker resets
Handle		Red, pad printing indicating ON-OFF position
Mechanical endurance	Times 25,000	
Electrical endurance	Times 6,000	
Protection grade	Installed in distribution box IP40 Installed directly IP20	
Mechanical shock resistance (No significant vibration or shock)	30g, 3 shocks, lasting 11ms	
Anti-vibration (IEC/EN 60068-2-6)	No significant vibration or shock	
Wet heat resistance (IEC 60068-2)	Category 2, 28 cycles Relative humidity 90%~96% at 55° C Relative humidity 95%~100% at 25° C	
Rated ambient temperature	30° C	
Operating ambient temperature (daily mean temperature ≤ +35° C)	-20° C~+60° C	
Storage temperature	-40° C~+70° C	

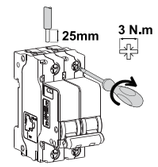
Installation Features

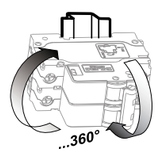
Terminal form	U terminal
Maximum wiring capacity A	Current ratings 6-32:16mm^2 Current ratings 40-63:25mm^2
Maximum ultimate torque A	Current ratings 6-32:2.5 N.m Current ratings 40-63:3 N.m
Tool	Crosshead screwdriver or flathead screwdriver
Installation	Installed on standard DIN guide rail (35mm)
Line incoming mode	Incoming at the top and bottom



Installed on 35mm standard guide rail







Flexible installation direction

HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N N 6kA	1 1: 1P+N 2: 2P 3: 3P 6: 3P+N 5: 4P	C C:Type D:Type	6 6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	 Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	G Default: No over-voltage protection G: Over-voltage protection

HDB3wLE Residual current operated circuit breaker	Type	Rated current	Trip type	
			C	
	1P+N	6	HDB3wLEN1C6	HDB3wLEN1C6R50
		10	HDB3wLEN1C10	HDB3wLEN1C10R50
		16	HDB3wLEN1C16	HDB3wLEN1C16R50
		20	HDB3wLEN1C20	HDB3wLEN1C20R50
		25	HDB3wLEN1C25	HDB3wLEN1C25R50
		32	HDB3wLEN1C32	HDB3wLEN1C32R50
		40	HDB3wLEN1C40	HDB3wLEN1C40R50
		50	HDB3wLEN1C50	HDB3wLEN1C50R50
		63	HDB3wLEN1C63	HDB3wLEN1C63R50
	2P	6	HDB3wLEN2C6	HDB3wLEN2C6R50
		10	HDB3wLEN2C10	HDB3wLEN2C10R50
		16	HDB3wLEN2C16	HDB3wLEN2C16R50
		20	HDB3wLEN2C20	HDB3wLEN2C20R50
		25	HDB3wLEN2C25	HDB3wLEN2C25R50
		32	HDB3wLEN2C32	HDB3wLEN2C32R50
		40	HDB3wLEN2C40	HDB3wLEN2C40R50
		50	HDB3wLEN2C50	HDB3wLEN2C50R50
		63	HDB3wLEN2C63	HDB3wLEN2C63R50

HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N N 6kA	1 1: 1P+N 2: 2P 3: 3P 6: 3P+N 5: 4P	C C:Type D:Type	6 6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	 Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	G Default: No over-voltage protection G: Over-voltage protection

Trip type				
C			D	
HDB3wLEN1C6R75	HDB3wLEN1C6R100	HDB3wLEN1C6R300	HDB3wLEN1D6	HDB3wLEN1D6R50
HDB3wLEN1C10R75	HDB3wLEN1C10R100	HDB3wLEN1C10R300	HDB3wLEN1D10	HDB3wLEN1D10R50
HDB3wLEN1C16R75	HDB3wLEN1C16R100	HDB3wLEN1C16R300	HDB3wLEN1D16	HDB3wLEN1D16R50
HDB3wLEN1C20R75	HDB3wLEN1C20R100	HDB3wLEN1C20R300	HDB3wLEN1D20	HDB3wLEN1D20R50
HDB3wLEN1C25R75	HDB3wLEN1C25R100	HDB3wLEN1C25R300	HDB3wLEN1D25	HDB3wLEN1D25R50
HDB3wLEN1C32R75	HDB3wLEN1C32R100	HDB3wLEN1C32R300	HDB3wLEN1D32	HDB3wLEN1D32R50
HDB3wLEN1C40R75	HDB3wLEN1C40R100	HDB3wLEN1C40R300	HDB3wLEN1D40	HDB3wLEN1D40R50
HDB3wLEN1C50R75	HDB3wLEN1C50R100	HDB3wLEN1C50R300	HDB3wLEN1D50	HDB3wLEN1D50R50
HDB3wLEN1C63R75	HDB3wLEN1C63R100	HDB3wLEN1C63R300	HDB3wLEN1D63	HDB3wLEN1D63R50
HDB3wLEN2C6R75	HDB3wLEN2C6R100	HDB3wLEN2C6R300	HDB3wLEN2D6	HDB3wLEN2D6R50
HDB3wLEN2C10R75	HDB3wLEN2C10R100	HDB3wLEN2C10R300	HDB3wLEN2D10	HDB3wLEN2D10R50
HDB3wLEN2C16R75	HDB3wLEN2C16R100	HDB3wLEN2C16R300	HDB3wLEN2D16	HDB3wLEN2D16R50
HDB3wLEN2C20R75	HDB3wLEN2C20R100	HDB3wLEN2C20R300	HDB3wLEN2D20	HDB3wLEN2D20R50
HDB3wLEN2C25R75	HDB3wLEN2C25R100	HDB3wLEN2C25R300	HDB3wLEN2D25	HDB3wLEN2D25R50
HDB3wLEN2C32R75	HDB3wLEN2C32R100	HDB3wLEN2C32R300	HDB3wLEN2D32	HDB3wLEN2D32R50
HDB3wLEN2C40R75	HDB3wLEN2C40R100	HDB3wLEN2C40R300	HDB3wLEN2D40	HDB3wLEN2D40R50
HDB3wLEN2C50R75	HDB3wLEN2C50R100	HDB3wLEN2C50R300	HDB3wLEN2D50	HDB3wLEN2D50R50
HDB3wLEN2C63R75	HDB3wLEN2C63R100	HDB3wLEN2C63R300	HDB3wLEN2D63	HDB3wLEN2D63R50

HDB3wLE Residual Current Operated Circuit Breaker

3SERIES MORE VALUE FOR PRICE!

Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Number of poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE	N N 6kA	1 1: 1P+N 2: 2P 3: 3P 6: 3P+N 5: 4P	C C:Type D:Type	6 6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A 50: 50A 63: 63A	 Default:30mA R50 50mA R75: 75mA R100: 100mA R300: 300mA	G Default: No over-voltage protection G: Over-voltage protection

Trip type			Over voltage
D			
HDB3wLEN1D6R75	HDB3wLEN1D6R100	HDB3wLEN1D6R300	
HDB3wLEN1D10R75	HDB3wLEN1D10R100	HDB3wLEN1D10R300	HDB3wLEN1C10G
HDB3wLEN1D16R75	HDB3wLEN1D16R100	HDB3wLEN1D16R300	HDB3wLEN1C16G
HDB3wLEN1D20R75	HDB3wLEN1D20R100	HDB3wLEN1D20R300	HDB3wLEN1C20G
HDB3wLEN1D25R75	HDB3wLEN1D25R100	HDB3wLEN1D25R300	HDB3wLEN1C25G
HDB3wLEN1D32R75	HDB3wLEN1D32R100	HDB3wLEN1D32R300	HDB3wLEN1C32G
HDB3wLEN1D40R75	HDB3wLEN1D40R100	HDB3wLEN1D40R300	HDB3wLEN1C40G
HDB3wLEN1D50R75	HDB3wLEN1D50R100	HDB3wLEN1D50R300	HDB3wLEN1C50G
HDB3wLEN1D63R75	HDB3wLEN1D63R100	HDB3wLEN1D63R300	HDB3wLEN1C63G
HDB3wLEN2D6R75	HDB3wLEN2D6R100	HDB3wLEN2D6R300	
HDB3wLEN2D10R75	HDB3wLEN2D10R100	HDB3wLEN2D10R300	HDB3wLEN2C10G
HDB3wLEN2D16R75	HDB3wLEN2D16R100	HDB3wLEN2D16R300	HDB3wLEN2C16G
HDB3wLEN2D20R75	HDB3wLEN2D20R100	HDB3wLEN2D20R300	HDB3wLEN2C20G
HDB3wLEN2D25R75	HDB3wLEN2D25R100	HDB3wLEN2D25R300	HDB3wLEN2C25G
HDB3wLEN2D32R75	HDB3wLEN2D32R100	HDB3wLEN2D32R300	HDB3wLEN2C32G
HDB3wLEN2D40R75	HDB3wLEN2D40R100	HDB3wLEN2D40R300	HDB3wLEN2C40G
HDB3wLEN2D50R75	HDB3wLEN2D50R100	HDB3wLEN2D50R300	HDB3wLEN2C50G
HDB3wLEN2D63R75	HDB3wLEN2D63R100	HDB3wLEN2D63R300	HDB3wLEN2C63G

HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

HDB3wLE Residual current operated circuit breaker	Type	Rated current	Trip type	
			C	
	3P	6	HDB3wLEN3C6	HDB3wLEN3C6R50
		10	HDB3wLEN3C10	HDB3wLEN3C10R50
		16	HDB3wLEN3C16	HDB3wLEN3C16R50
		20	HDB3wLEN3C20	HDB3wLEN3C20R50
		25	HDB3wLEN3C25	HDB3wLEN3C25R50
		32	HDB3wLEN3C32	HDB3wLEN3C32R50
		40	HDB3wLEN3C40	HDB3wLEN3C40R50
		50	HDB3wLEN3C50	HDB3wLEN3C50R50
		63	HDB3wLEN3C63	HDB3wLEN3C63R50
	3P+N	6	HDB3wLEN6C6	HDB3wLEN6C6R50
		10	HDB3wLEN6C10	HDB3wLEN6C10R50
		16	HDB3wLEN6C16	HDB3wLEN6C16R50
		20	HDB3wLEN6C20	HDB3wLEN6C20R50
		25	HDB3wLEN6C25	HDB3wLEN6C25R50
		32	HDB3wLEN6C32	HDB3wLEN6C32R50
		40	HDB3wLEN6C40	HDB3wLEN6C40R50
		50	HDB3wLEN6C50	HDB3wLEN6C50R50
		63	HDB3wLEN6C63	HDB3wLEN6C63R50
	4P	6	HDB3wLEN4C6	HDB3wLEN4C6R50
		10	HDB3wLEN4C10	HDB3wLEN4C10R50
		16	HDB3wLEN4C16	HDB3wLEN4C16R50
		20	HDB3wLEN4C20	HDB3wLEN4C20R50
		25	HDB3wLEN4C25	HDB3wLEN4C25R50
		32	HDB3wLEN4C32	HDB3wLEN4C32R50
		40	HDB3wLEN4C40	HDB3wLEN4C40R50
		50	HDB3wLEN4C50	HDB3wLEN4C50R50
		63	HDB3wLEN4C63	HDB3wLEN4C63R50

HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

Trip type				
C			D	
HDB3wLEN3C6R75	HDB3wLEN3C6R100	HDB3wLEN3C6R300	HDB3wLEN3D6	HDB3wLEN3D6R50
HDB3wLEN3C10R75	HDB3wLEN3C10R100	HDB3wLEN3C10R300	HDB3wLEN3D10	HDB3wLEN3D10R50
HDB3wLEN3C16R75	HDB3wLEN3C16R100	HDB3wLEN3C16R300	HDB3wLEN3D16	HDB3wLEN3D16R50
HDB3wLEN3C20R75	HDB3wLEN3C20R100	HDB3wLEN3C20R300	HDB3wLEN3D20	HDB3wLEN3D20R50
HDB3wLEN3C25R75	HDB3wLEN3C25R100	HDB3wLEN3C25R300	HDB3wLEN3D25	HDB3wLEN3D25R50
HDB3wLEN3C32R75	HDB3wLEN3C32R100	HDB3wLEN3C32R300	HDB3wLEN3D32	HDB3wLEN3D32R50
HDB3wLEN3C40R75	HDB3wLEN3C40R100	HDB3wLEN3C40R300	HDB3wLEN3D40	HDB3wLEN3D40R50
HDB3wLEN3C50R75	HDB3wLEN3C50R100	HDB3wLEN3C50R300	HDB3wLEN3D50	HDB3wLEN3D50R50
HDB3wLEN3C63R75	HDB3wLEN3C63R100	HDB3wLEN3C63R300	HDB3wLEN3D63	HDB3wLEN3D63R50
HDB3wLEN6C6R75	HDB3wLEN6C6R100	HDB3wLEN6C6R300	HDB3wLEN6D6	HDB3wLEN6D6R50
HDB3wLEN6C10R75	HDB3wLEN6C10R100	HDB3wLEN6C10R300	HDB3wLEN6D10	HDB3wLEN6D10R50
HDB3wLEN6C16R75	HDB3wLEN6C16R100	HDB3wLEN6C16R300	HDB3wLEN6D16	HDB3wLEN6D16R50
HDB3wLEN6C20R75	HDB3wLEN6C20R100	HDB3wLEN6C20R300	HDB3wLEN6D20	HDB3wLEN6D20R50
HDB3wLEN6C25R75	HDB3wLEN6C25R100	HDB3wLEN6C25R300	HDB3wLEN6D25	HDB3wLEN6D25R50
HDB3wLEN6C32R75	HDB3wLEN6C32R100	HDB3wLEN6C32R300	HDB3wLEN6D32	HDB3wLEN6D32R50
HDB3wLEN6C40R75	HDB3wLEN6C40R100	HDB3wLEN6C40R300	HDB3wLEN6D40	HDB3wLEN6D40R50
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HDB3wLEN6C63R75	HDB3wLEN6C63R100	HDB3wLEN6C63R300	HDB3wLEN6D63	HDB3wLEN6D63R50
HDB3wLEN4C6R75	HDB3wLEN4C6R100	HDB3wLEN4C6R300	HDB3wLEN4D6	HDB3wLEN4D6R50
HDB3wLEN4C10R75	HDB3wLEN4C10R100	HDB3wLEN4C10R300	HDB3wLEN4D10	HDB3wLEN4D10R50
HDB3wLEN4C16R75	HDB3wLEN4C16R100	HDB3wLEN4C16R300	HDB3wLEN4D16	HDB3wLEN4D16R50
HDB3wLEN4C20R75	HDB3wLEN4C20R100	HDB3wLEN4C20R300	HDB3wLEN4D20	HDB3wLEN4D20R50
HDB3wLEN4C25R75	HDB3wLEN4C25R100	HDB3wLEN4C25R300	HDB3wLEN4D25	HDB3wLEN4D25R50
HDB3wLEN4C32R75	HDB3wLEN4C32R100	HDB3wLEN4C32R300	HDB3wLEN4D32	HDB3wLEN4D32R50
HDB3wLEN4C40R75	HDB3wLEN4C40R100	HDB3wLEN4C40R300	HDB3wLEN4D40	HDB3wLEN4D40R50
HDB3wLEN4C50R75	HDB3wLEN4C50R100	HDB3wLEN4C50R300	HDB3wLEN4D50	HDB3wLEN4D50R50
HDB3wLEN4C63R75	HDB3wLEN4C63R100	HDB3wLEN4C63R300	HDB3wLEN4D63	HDB3wLEN4D63R50

HDB3wLE Residual Current Operated Circuit Breaker

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Standard: IEC61009-1

HDB3wLE Residual Current Operated Circuit Breaker

Trip type			Over voltage
D			
HDB3wLEN3D6R75	HDB3wLEN3D6R100	HDB3wLEN3D6R300	
HDB3wLEN3D10R75	HDB3wLEN3D10R100	HDB3wLEN3D10R300	
HDB3wLEN3D16R75	HDB3wLEN3D16R100	HDB3wLEN3D16R300	
HDB3wLEN3D20R75	HDB3wLEN3D20R100	HDB3wLEN3D20R300	
HDB3wLEN3D25R75	HDB3wLEN3D25R100	HDB3wLEN3D25R300	
HDB3wLEN3D32R75	HDB3wLEN3D32R100	HDB3wLEN3D32R300	
HDB3wLEN3D40R75	HDB3wLEN3D40R100	HDB3wLEN3D40R300	
HDB3wLEN3D50R75	HDB3wLEN3D50R100	HDB3wLEN3D50R300	
HDB3wLEN3D63R75	HDB3wLEN3D63R100	HDB3wLEN3D63R300	
HDB3wLEN6D6R75	HDB3wLEN6D6R100	HDB3wLEN6D6R300	
HDB3wLEN6D10R75	HDB3wLEN6D10R100	HDB3wLEN6D10R300	
HDB3wLEN6D16R75	HDB3wLEN6D16R100	HDB3wLEN6D16R300	
HDB3wLEN6D20R75	HDB3wLEN6D20R100	HDB3wLEN6D20R300	
HDB3wLEN6D25R75	HDB3wLEN6D25R100	HDB3wLEN6D25R300	
HDB3wLEN6D32R75	HDB3wLEN6D32R100	HDB3wLEN6D32R300	
HDB3wLEN6D40R75	HDB3wLEN6D40R100	HDB3wLEN6D40R300	
HDB3wLEN6D50R75	HDB3wLEN6D50R100	HDB3wLEN6D50R300	
HDB3wLEN6D63R75	HDB3wLEN6D63R100	HDB3wLEN6D63R300	
HDB3wLEN4D6R75	HDB3wLEN4D6R100	HDB3wLEN4D6R300	
HDB3wLEN4D10R75	HDB3wLEN4D10R100	HDB3wLEN4D10R300	
HDB3wLEN4D16R75	HDB3wLEN4D16R100	HDB3wLEN4D16R300	
HDB3wLEN4D20R75	HDB3wLEN4D20R100	HDB3wLEN4D20R300	
HDB3wLEN4D25R75	HDB3wLEN4D25R100	HDB3wLEN4D25R300	
HDB3wLEN4D32R75	HDB3wLEN4D32R100	HDB3wLEN4D32R300	
HDB3wLEN4D40R75	HDB3wLEN4D40R100	HDB3wLEN4D40R300	
HDB3wLEN4D50R75	HDB3wLEN4D50R100	HDB3wLEN4D50R300	
HDB3wLEN4D63R75	HDB3wLEN4D63R100	HDB3wLEN4D63R300	

Final Distribution

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

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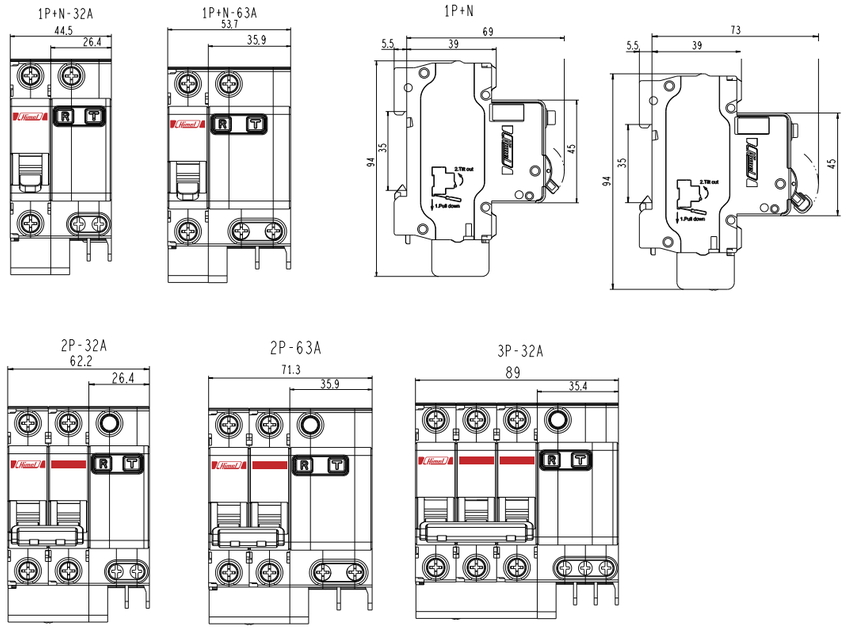
HDB3wLE Installation Dimension



Final Distribution

HDB3wLE Residual Current Operated Circuit Breaker

Standard: IEC61009-1

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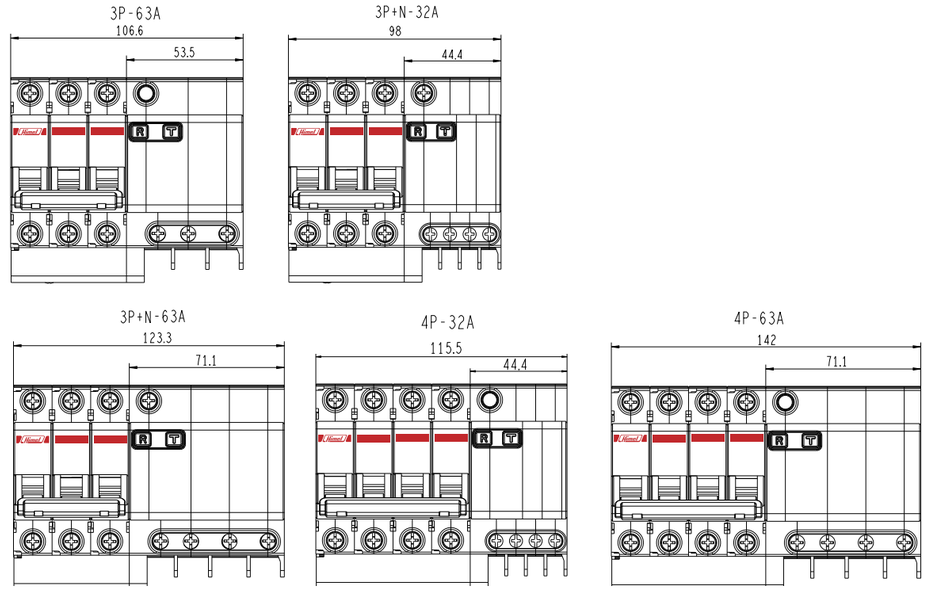
HDB3wLE Residual Current Operated Circuit Breaker



HDB9LE Residual Current Operated Circuit Breaker

Standard: IEC 61009-1
Electronic type: AC
Breaking Capacity: 6000A
Sensitivity: 30mA 100mA 300mA

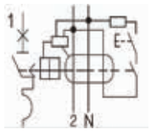
Function

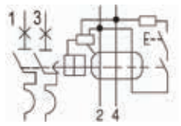
HDB9LE electronic type residual current operated circuit breakers combine the following functions:

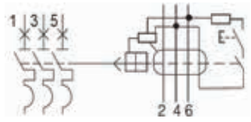
- Overload Protection
- Protection against short-circuit current
- Protection against indirect currents
- Additional protection for users against direct contacts (30mA)
- Protection for electrical installations against insulation faults (fire hazard, etc)
- Isolation

Order Information

Pole	Voltage (V)	Breaking Capacity	Sensitivity (mA)	Frame Size	Rated Current (A)	Reference C curve
1P+N	230	6kA	30	32	6	HDB9LEN321C6S
					10	HDB9LEN321C10S
					16	HDB9LEN321C16S
					20	HDB9LEN321C20S
					25	HDB9LEN321C25S
					32	HDB9LEN321C32S
				63	40	HDB9LEN631C40S
					50	HDB9LEN631C50S
					63	HDB9LEN631C63S
2P	230	6kA	30	32	6	HDB9LEN322C6S
					10	HDB9LEN322C10S
					16	HDB9LEN322C16S
					20	HDB9LEN322C20S
					25	HDB9LEN322C25S
					32	HDB9LEN322C32S
				63	40	HDB9LEN632C40S
					50	HDB9LEN632C50S
					63	HDB9LEN632C63S
3P	400	6kA	30	32	6	HDB9LEN323C6S
					10	HDB9LEN323C10S
					16	HDB9LEN323C16S
					20	HDB9LEN323C20S
					25	HDB9LEN323C25S
					32	HDB9LEN323C32S
				63	40	HDB9LEN633C40S
					50	HDB9LEN633C50S
					63	HDB9LEN633C63S
3P+N	400	6kA	30	32	6	HDB9LEN326C6S
					10	HDB9LEN326C10S
					16	HDB9LEN326C16S
					20	HDB9LEN326C20S
					25	HDB9LEN326C25S
					32	HDB9LEN326C32S
				63	40	HDB9LEN636C40S
					50	HDB9LEN636C50S
					63	HDB9LEN636C63S



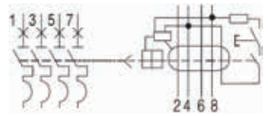




HDB9LE Residual Current Operated Circuit Breaker

Standard: IEC 61009-1
Electronic type: AC
Breaking Capacity: 6000A
Sensitivity: 30mA 100mA 300mA

Pole	Voltage (V)	Breaking Capacity	Sensitivity (mA)	Frame Size	Rated Current (A)	Reference C curve
4P	400	6kA	30	32	6	HDB9LEN324C6S
					10	HDB9LEN324C10S
					16	HDB9LEN324C16S
					20	HDB9LEN324C20S
					25	HDB9LEN324C25S
					32	HDB9LEN324C32S
				63	40	HDB9LEN634C40S
					50	HDB9LEN634C50S
					63	HDB9LEN634C63S



Technical Data

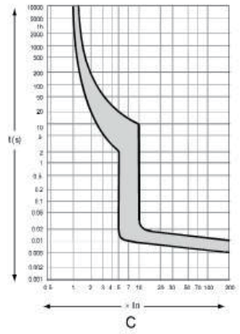
RCBO	HDB9LE Residual Current Operated Circuit Breaker	
Electrical Features	Standard	IEC61009-1
	Electronic Type	AC
	Poles	1P+N, 2P, 3P, 3P+N, 4P
	Rated Current In	6,10,16,20,25,32, 40, 50, 63A
	Rated Voltage Ue	230V AC for 1P+N/2P, 400V AC for 3P/3P+N/4P
	Insulation Voltage Ui	500V
	Breaking Capacity	6kA
	Sensitivity	30mA, 100mA, 300mA
	Tripping Curve (see following tripping curve picture)	
	C Curve: The magnetic release operates between 5 and 10 In	
Mechanical Features	Electrical Durability	2000 times
	Mechanical Durability	2000 times
	Protection Degree	2
	Tropicalization	Treatment 2
	Ambient Temperature	-5°C~+40°C
Connection	6-40A, Up to 25mm^2 cables, 50-63A, Up to 36mm^2 cables	
Installation	Rated current(A)	Screw / Rated Torque (Nm) / Limiting Torque (Nm)
	6-32	M4 / 2.0 / 3.0
	40-60	M6 / 2.5 / 4.5
Mounting	35mm Din-rail	
Accessories	Contact Accessory:	OF
	Fault-indicating Accessory:	SD
	Shunt-Trip Release:	MX+OF

Final Distribution

HDB9LE Residual Current Operated Circuit Breaker

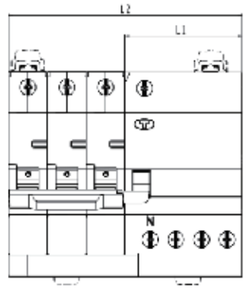
Standard: IEC 61009-1
Electronic type: AC
Breaking Capacity: 6000A
Sensitivity: 30mA 100mA 300mA

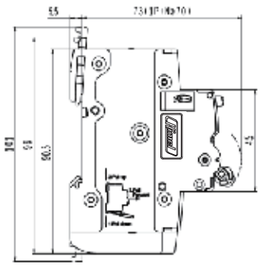
Tripping Curve



Overall Dimensions

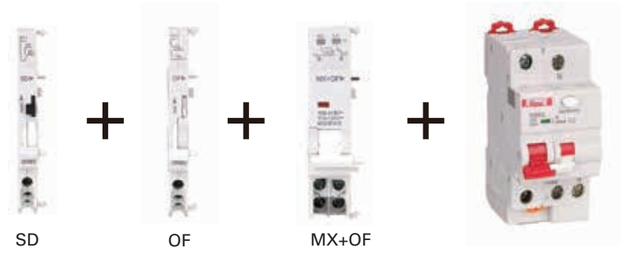
■ HDB9LE





	L1(mm)	L2(mm)
1P+N 32A	27	45
2P+N 63A	36	54
2P 32A	27	63
2P 63A	36	72
3P 32A	54	108
3P 63A	63	117
3P+N 32A	54	108
3P+N 63A	63	117
4P 32A	54	126
4P 63A	63	135

Accessories



HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Functions and Features
IEC60947-2

3SERIES
MORE VALUE FOR PRICE!

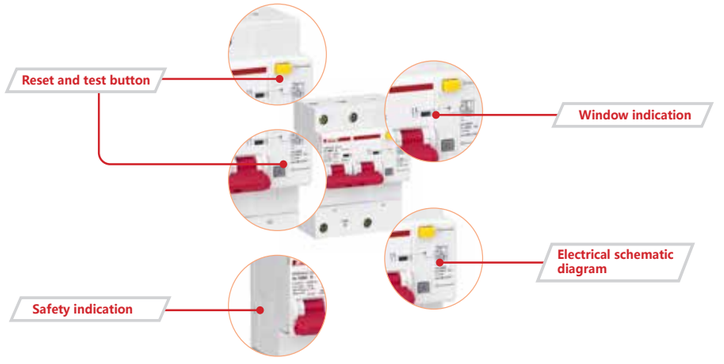
HDB3wLE-125 molded case residual current operated circuit breaker has the following features

- Short circuit protection
- Overload protection
- Isolating function
- Leakage protection function
- Overvoltage protection function

Main Features

Rated operating voltage (V)	1P+N,2P: 230AC
	3P,3P+N,4P: 400AC
Rated current (A)	63-125
Rated frequency (Hz)	50/60
Poles	1P+N,2P,3P,3P+N,4P
Breaking capacity (kA)	10
Rated residual operating current (mA)	30,50,75,100,300
Overvoltage protection function (V)	280±5% AC (1P+N,2P 30mA products with over-voltage protection function)

Product Details Display



HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

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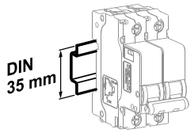
Functions and Features
IEC60947-2

Electrical Characteristics

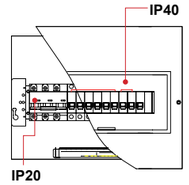
Rated insulation voltage Ui		（V）	250 (phase-to-ground) / 500 (phase-to-phase)
Maximum working voltage U_{Bmax}	1P+N,2P	（V）	230 AC
	3P,3P+N,4P	（V）	400 AC
Rated short-circuit capacity Icn (IEC/EN60898)		（KA）	10
Rated impulse withstand voltage Uimp (1.2/50)		（KA）	4
Dielectric test voltage			2kV (50/60HZ, 1 minute)
Isolating function			Available
Pollution class			2
Tripping type			Thermal magnetic tripping
Thermal magnetic trip characteristics	C curve (Ii=8.5In)		●
	D curve (Ii=12In)		●
Electrical and mechanical accessories			●

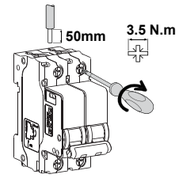
Mechanical Characteristics

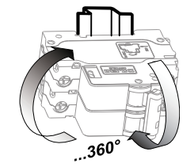
Tripping indication			Residual current action tripping indication is available on HDB3wLE-100. Upspring of the reset button indicates leakage trip
Manual control	Over-current fault		The circuit breaker and the residual current action device reset simultaneously
	Leakage fault		The residual current operated device resets before the circuit breaker resets
Handle			Red, pad printing indicating ON-OFF position
Mechanical life		Times	8500
Electrical life		Times	3000
Protection rating	Installed in distribution box		IP40
	Installed directly		IP20
Mechanical shock resistance			30g, 3 shocks, last for 11ms (Places with no significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6)			Places with no significant vibration or shock
Damp and hot resistance (IEC 60068-2)	Damp and hot	℃ /RH	Category 2, 28 cycles Relative humidity 90%~96% at 55℃ Relative humidity 90%~100% at 25℃
Reference ambient temperature		℃	30℃
Operating ambient temperature (daily mean temperature ≤ +35℃)		℃	-20℃ ~+60℃
Storage temperature		℃	-40℃ ~+70℃



Installed on 35mm standard guide rail







Flexible installation direction

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

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Functions and Features
IEC60947-2

HDB3wLE-125 molded case residual current operated circuit breaker has the following features

Installation Features

Terminal type		U Terminals
Maximum wiring capacity	（A）	Current ratings 63-125: 50mm2
Maximum ultimate torque	（A）	Current ratings 63-125:3.5N.m
Tools		Cross head screwdriver or flathead screwdriver
Installation		Installed on standard DIN guide rail (35mm)
Line incoming mode		Top incoming

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Product name	Poles	Trip type	Rated current	Residual current	Other functions
HDB3wLE-125	1	C	63		G
	↓	↓	↓	↓	↓
	1: 1P+N 2: 2P 3: 3P 6: 3P+N 4: 4P	C: C D: D	63: 63A 80: 80A 100: 100A 125:125A	Default: 30mA R50: 50mA R75: 75mA R100: 100mA R300: 300mA	Default: No over-voltage protection G: Overvoltage protection

Note: Only specifications marked with asterisk symbol have over-voltage function.

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Functions and Features
IEC60947-2

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HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

HDB3wLE-125 molded case residual current operated circuit breaker	Type	Rated current	Trip type		
			C	D	
	1P+N	63	HDB3wLE1251C63	HDB3wLE1251D63	HDB3wLE1251D63Y
		80	HDB3wLE1251C80	HDB3wLE1251D80	HDB3wLE1251D80Y
		100	HDB3wLE1251C100	HDB3wLE1251D100	HDB3wLE1251D100Y
		125	HDB3wLE1251C125	HDB3wLE1251D125	HDB3wLE1251D125Y
	2P	63	HDB3wLE1252C63	HDB3wLE1252D63	HDB3wLE1252D63Y
		80	HDB3wLE1252C80	HDB3wLE1252D80	HDB3wLE1252D80Y
		100	HDB3wLE1252C100	HDB3wLE1252D100	HDB3wLE1252D100Y
		125	HDB3wLE1252C125	HDB3wLE1252D125	HDB3wLE1252D125Y
	3P	63	HDB3wLE1253C63	HDB3wLE1253D63	HDB3wLE1253D63Y
		80	HDB3wLE1253C80	HDB3wLE1253D80	HDB3wLE1253D80Y
		100	HDB3wLE1253C100	HDB3wLE1253D100	HDB3wLE1253D100Y
		125	HDB3wLE1253C125	HDB3wLE1253D125	HDB3wLE1253D125Y
	3P+N	63	HDB3wLE1256C63	HDB3wLE1256D63	HDB3wLE1256D63Y
		80	HDB3wLE1256C80	HDB3wLE1256D80	HDB3wLE1256D80Y
		100	HDB3wLE1256C100	HDB3wLE1256D100	HDB3wLE1256D100Y
		125	HDB3wLE1256C125	HDB3wLE1256D125	HDB3wLE1256D125Y
	4P	63	HDB3wLE1254C63	HDB3wLE1254D63	HDB3wLE1254D63Y
		80	HDB3wLE1254C80	HDB3wLE1254D80	HDB3wLE1254D80Y
		100	HDB3wLE1254C100	HDB3wLE1254D100	HDB3wLE1254D100Y
		125	HDB3wLE1254C125	HDB3wLE1254D125	HDB3wLE1254D125Y

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Functions and Features
IEC60947-2

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Trip type			
D			Over voltage
HDB3wLE1251D63T	HDB3wLE1251D63W	HDB3wLE1251D63Q	HDB3wLE1251D63G
HDB3wLE1251D80T	HDB3wLE1251D80W	HDB3wLE1251D80Q	HDB3wLE1251D80G
HDB3wLE1251D100T	HDB3wLE1251D100W	HDB3wLE1251D100Q	HDB3wLE1251D100G
HDB3wLE1251D125T	HDB3wLE1251D125W	HDB3wLE1251D125Q	HDB3wLE1251D125G
HDB3wLE1252D63T	HDB3wLE1252D63W	HDB3wLE1252D63Q	HDB3wLE1252D63G
HDB3wLE1252D80T	HDB3wLE1252D80W	HDB3wLE1252D80Q	HDB3wLE1252D80G
HDB3wLE1252D100T	HDB3wLE1252D100W	HDB3wLE1252D100Q	HDB3wLE1252D100G
HDB3wLE1252D125T	HDB3wLE1252D125W	HDB3wLE1252D125Q	HDB3wLE1252D125G
HDB3wLE1253D63T	HDB3wLE1253D63W	HDB3wLE1253D63Q	
HDB3wLE1253D80T	HDB3wLE1253D80W	HDB3wLE1253D80Q	
HDB3wLE1253D100T	HDB3wLE1253D100W	HDB3wLE1253D100Q	
HDB3wLE1253D125T	HDB3wLE1253D125W	HDB3wLE1253D125Q	
HDB3wLE1256D63T	HDB3wLE1256D63W	HDB3wLE1256D63Q	
HDB3wLE1256D80T	HDB3wLE1256D80W	HDB3wLE1256D80Q	
HDB3wLE1256D100T	HDB3wLE1256D100W	HDB3wLE1256D100Q	
HDB3wLE1256D125T	HDB3wLE1256D125W	HDB3wLE1256D125Q	
HDB3wLE1254D63T	HDB3wLE1254D63W	HDB3wLE1254D63Q	
HDB3wLE1254D80T	HDB3wLE1254D80W	HDB3wLE1254D80Q	
HDB3wLE1254D100T	HDB3wLE1254D100W	HDB3wLE1254D100Q	
HDB3wLE1254D125T	HDB3wLE1254D125W	HDB3wLE1254D125Q	

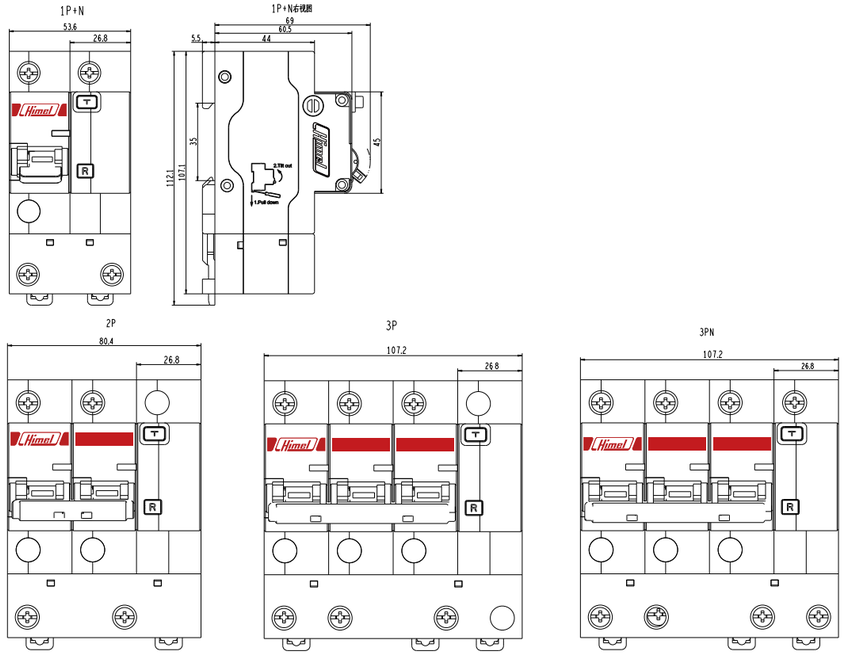
Final Distribution

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Functions and Features
IEC60947-2

3SERIES MORE VALUE FOR PRICE!

HDB3wLE-125 molded case residual current operated circuit breaker

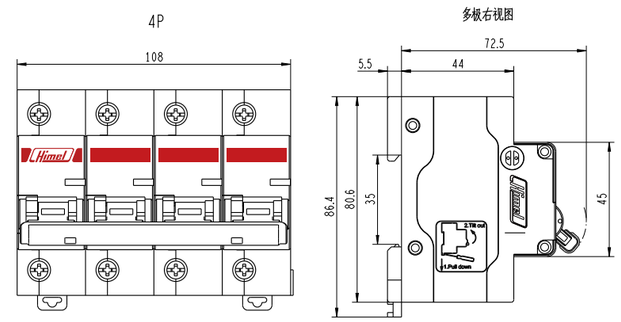


HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker

Functions and Features
IEC60947-2

3SERIES MORE VALUE FOR PRICE!

HDB3wLE-125 Molded Case Residual Current Operated Circuit Breaker



Final Distribution

HDB6v Residual Current Protection Module

Standard: IEC 61009-1
Electronic type: AC
Sensitivity: 30, 100, 300mA

Function

HDB6v must be combined with HDB6s act as a residual current breaker with the following functions:

- Protection of persons against indirect contacting
- Supplementary protection of persons against direct contacting
- Prevention of electric-caused fire
- Over-voltage protection by products marked 'G'

Order Information

Frame	Type	Voltage (V)	Sensitivity (mA)	Width	Reference
V32	1P+N	230	30	5	HDB6v321N
			100	5	HDB6v321NR100
			300	5	HDB6v321NR300
	2P	230	30	7	HDB6v322P
			100	7	HDB6v322PR100
			300	7	HDB6v322PR300
	3P	400	30	10	HDB6v323P
			100	10	HDB6v323PR100
			300	10	HDB6v323PR300
	3P+N	400	30	11	HDB6v323N
			100	11	HDB6v323NR100
			300	11	HDB6v323NR300
	4P	400	30	13	HDB6v324P
			100	13	HDB6v324PR100
			300	13	HDB6v324PR300
V63	1P+N	230	30	6	HDB6v631N
			100	6	HDB6v631NR100
			300	6	HDB6v631NR300
	2P	230	30	8	HDB6v632P
			100	8	HDB6v632PR100
			300	8	HDB6v632PR300
	3P	400	30	12	HDB6v633P
			100	12	HDB6v633PR100
			300	12	HDB6v633PR300
	3P+N	400	30	14	HDB6v633N
			100	14	HDB6v633NR100
			300	14	HDB6v633NR300
	4P	400	30	16	HDB6v634P
			100	16	HDB6v634PR100
			300	16	HDB6v634PR300

Note: Width refers to mutultiple of 9mm

HDB6v Residual Current Protection Module

Standard: IEC 61009-1
Electronic type: AC
Sensitivity: 30, 100, 300mA

Technical Data

RCBO	HDB6v Residual Current Protection Module		
Electrical Features	Standard	IEC61009-1	
	Electronic Type	AC	
	Poles	1P+N, 2P, 3P, 3P+N, 4P	
	Frame Size	32AF, 63AF	
	Rated Voltage Ue	230/400V AC	
	Rated Insulation Voltage	500V	
	Breaking Capacity	After HDB6s combined with HDB6v, the breaking capacity refers to HDB6s	
	Sensitivity	30,100, 300mA	
	Tripping Indication	On is a residual opening current indication, which distinguish residual current from other faults	
	Manual Control	Allows for two kinds of reset Reset at the same time with breaker Reset before breaker	
	'G' products offer over-voltage protection	280V±5% AC, applicable to products with 1P+N and 2P	
Mechanical Features	Electrical Durability	2000 times (In≤25A) 1000times (In>25A)	
	Mechanical Durability	2000 times	
	Protection Degree	IP20	
	Tropicaliation	Treatment 2	
	Ambient Temperature	-5°C~+40°C	
Connection	-Up to 16mm^2 cables (V32) -Up to 25mm^2 cables (V63)		
Installation	Rated Current(A)	Screw	Rated Torque (Nm) / Limiting Torque (Nm)
	V32	M4	2.2 / 3.0
	V63	M5	2.5 / 4.5

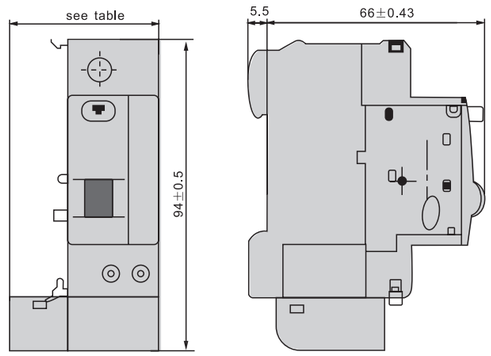
Final Distribution

HDB6v Residual Current Protection Module

Standard: IEC 61009-1
Electronic type: AC
Sensitivity: 30, 100, 300mA

Overall Dimensions

Unit: mm



	V32	V63
1P+N	45±0.32	54±0.37
2P	63±0.37	72±0.43
3P	90±0.5	108±0.57
3P+N	99±0.5	126±0.64
4P	117±0.57	144±0.72

HDB6v Residual Current Protection Module

Standard: IEC 61009-1
Electronic type: AC
Sensitivity: 30, 100, 300mA

Assembly

HDB6v can be assembled with HDB6s to be residual current breaker overcurrent

- Protection of persons against indirect contacts
- Supplementary protection of persons against direct contacting
- Prevention of electric-caused fire
- Overvoltage protection by products marked“G”

Final Distribution

HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker

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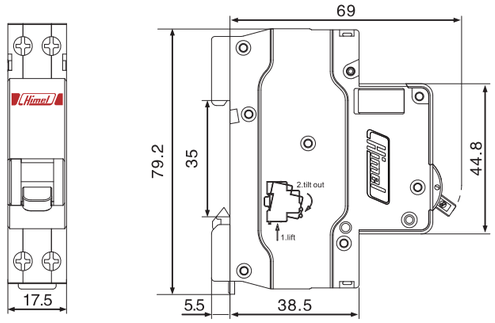
Functions and Features
IEC61009-1

HDB3wPLE Phase Line + Neutral Line Circuit Breaker



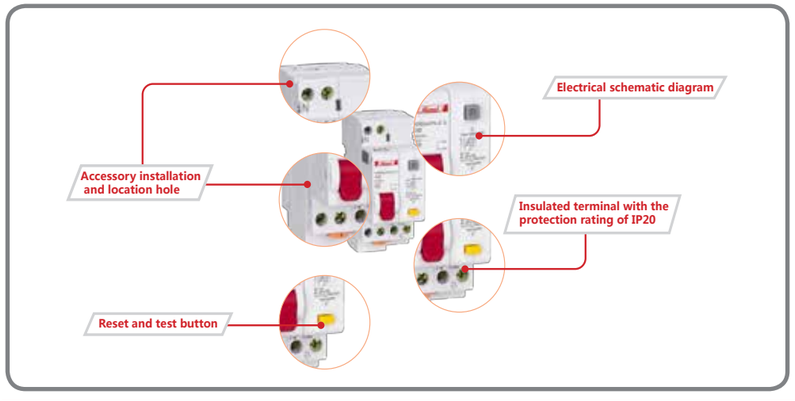
HDB3wPLE phase line + neutral line residual current operated circuit breaker has the following functions:

- Short circuit protection
- Overload protection
- Isolating function
- Leakage protection function
- Overvoltage protection function

Main Features

Rated operating voltage (V)	1P+N: 240AC
Rated current (A)	6-40
Rated frequency (Hz)	50/60
Poles	1P+N
Breaking capacity (kA)	3,4.5
Rated residual operating current (mA)	30
Over-voltage protection function	280±5% AC

Product Details Display



HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker

3SERIES MORE VALUE FOR PRICE!

Functions and Features
IEC61009-1

Electrical characteristics

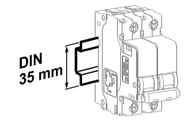
Rated insulation voltage Ui	（V）	250 (phase-to-ground) / 500 (phase-to-phase)
Maximum working voltage U_{Bmax} 1P+N	（V）	240AC
Rated short-circuit capacity Icn (IEC/EN61009-1)	（KA）	3,4.5
Rated impulse withstand voltage Uimp (1.2/50)	（KA）	4
Dielectric test voltage		2kV (50/60Hz 1 minute)
Isolating function		Available
Pollution class		2
Electric shock protection grade		II
Tripping type		Thermal magnetic tripping
Thermal magnetic trip characteristics C curve (5In~10In)		●
D curve (10In~14In)		●
Electrical and mechanical accessories		●

Mechanical characteristics

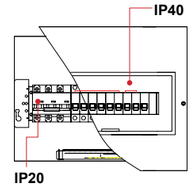
Tripping indication		Residual current action tripping indication is available on HDB3wPLE. Upspring of the reset button indicates leakage trip
Manual control	Over-current fault	The circuit breaker and the residual current operated device reset simultaneously
	Leakage fault	The residual current operated device resets before the circuit breaker resets
Handle		Red, pad printing indicating ON-OFF position
Mechanical life	Times	10000
Protection rating	Times	4000
Protection rating	Installed in distribution box	IP40
	Installed directly	IP20
Mechanical shock resistance		30g, 3 shocks, last for 11ms (Places with no significant vibration or shock)
Anti-vibration (IEC/EN 60068-2-6)		Places with no significant vibration or shock
Damp and hot resistance (IEC 60068-2)	Damp and hot ℃ /RH	Category 2, 28 cycles Relative humidity 90%~96% at 55℃ Relative humidity 90%~100% at 25℃
Reference ambient temperature	℃	30℃
Operating ambient temperature (daily mean temperature ≤ +35°)	℃	-20℃ ~+60℃
Storage temperature	℃	-40℃ ~+70℃

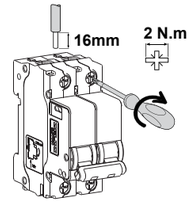
Installation Features

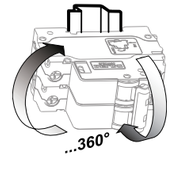
Terminal type		U Terminals
Maximum wiring capacity	（A）	Current ratings 6-40:16mm2
Maximum ultimate torque	（A）	Current ratings 6-40:2N.m
Tools		Cross head screwdriver or flathead screwdriver
Installation		Installed on standard DIN guide rail (35mm)
Line incoming mode		Top incoming



Installed on 35mm standard guide rail







Flexible installation direction

HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker

3SERIES MORE VALUE FOR PRICE!

Functions and Features
IEC61009-1

HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker

Product name	Breaking capacity	Trip type	Rated current	Residual current	Other functions
HDB3wPLE	Breaking capacity	C	6		G
	↓	↓	↓	↓	↓
	3kA 4.5kA	C: C D: D	6: 6A 10: 10A 16: 16A 20: 20A 25: 25A 32: 32A 40: 40A	Default: 30mA	Default: No over-voltage protection G: Overvoltage protection

Note: Only specifications marked with asterisk symbol have over-voltage function.

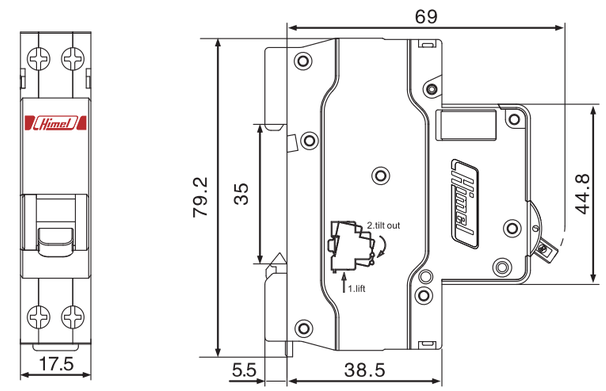
HDB3wPLE phase line + neutral line Residual current operated circuit breaker	Type	Rated current	Trip type	
			C	D
3kA	1P+N	6	HDB3wPLEAC6	HDB3wPLEAD6
		10	HDB3wPLEAC10	HDB3wPLEAD10
		16	HDB3wPLEAC16	HDB3wPLEAD16
		20	HDB3wPLEAC20	HDB3wPLEAD20
		25	HDB3wPLEAC25	HDB3wPLEAD25
		32	HDB3wPLEAC32	HDB3wPLEAD32
		40	HDB3wPLEAC40	HDB3wPLEAD40
		6	HDB3wPLEAC6G	
		10	HDB3wPLEAC10G	
		16	HDB3wPLEAC16G	
		20	HDB3wPLEAC20G	
		25	HDB3wPLEAC25G	
		32	HDB3wPLEAC32G	
		40	HDB3wPLEAC40G	
4.5kA	1P+N	6	HDB3wPLEC6	
		10	HDB3wPLEC10	HDB3wPLED10
		16	HDB3wPLEC16	HDB3wPLED16
		20	HDB3wPLEC20	HDB3wPLED20
		25	HDB3wPLEC25	HDB3wPLED25
		32	HDB3wPLEC32	HDB3wPLED32
		40	HDB3wPLEC40	HDB3wPLED40
		6	HDB3wPLEC10G	
		10	HDB3wPLEC16G	
		16	HDB3wPLEC20G	
		20	HDB3wPLEC25G	
		25	HDB3wPLEC32G	
		32	HDB3wPLEC40G	
		40	HDB3wPLEC6G	

HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker

3SERIES MORE VALUE FOR PRICE!

Functions and Features
IEC61009-1

HDB3wPLE Phase Line + Neutral Line Residual Current Operated Circuit Breaker



Final Distribution

HDB6pLE Residual Current Operated Circuit Breaker

Standard: IEC 61009-1
Electronic type: AC
Breaking Capacity: 4500KA
Sensitivity: 30mA

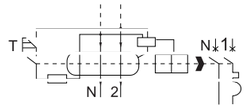
Function

HDB6pLE electronic type residual current operated circuit breakers combine the following functions:

- Protection of circuits against overload currents
- Protection of circuits against short-circuit currents
- Protection of users against indirect contact
- Additional protection for users against direct contacts (30mA)
- Protection for electrical installations against insulation faults (fire hazard, etc)
- Isolation

Order Information

Type	Width (mm)	Rated (A)	Reference C curve
1P+N	36	6	HDB6pLEC6
		10	HDB6pLEC10
		16	HDB6pLEC16
		20	HDB6pLEC20
		25	HDB6pLEC25
		32	HDB6pLEC32
		40	HDB6pLEC40



Technical Data

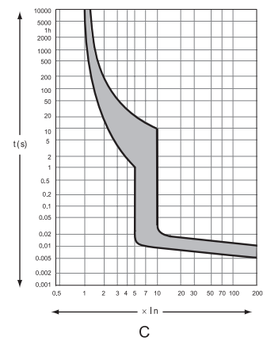
RCBO	HDB6pLE Residual Current Operated Circuit Breaker			
Electrical Features	Standard	IEC/EN 61009-1		
	Certification	CB CE SEMKO		
	Electronic Type	AC		
	Poles	1P+N		
	Rated Current In	6,10,16, 20, 25, 32, 40A		
	Rated Voltage Ue	230V AC		
	Insulation Voltage Ui	500V		
	Breaking Capacity	4.5kA		
	Sensitivity	30mA		
	Tripping Curve (see following tripping curve pictures)			
	C Curve: the magnetic release operates between 5 and 10 In			
Mechanical Features	Electrical Durability	2000 times		
	Mechanical Durability	4000 times		
	Protection Degree	2		
	Tropicalization	Treatment 2		
	Ambient Temperature	-5°C~+40°C		
Connection	Up to 25mm^2 cables			
Installation	Rate current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	6-40	M5	2.5	4.5
Mounting	35mm Din-rail			

HDB6pLE Residual Current Operated Circuit Breaker

Standard: IEC/EN 61009-1
Electronic type: AC
Breaking Capacity: 4500A
Sensitivity: 30mA

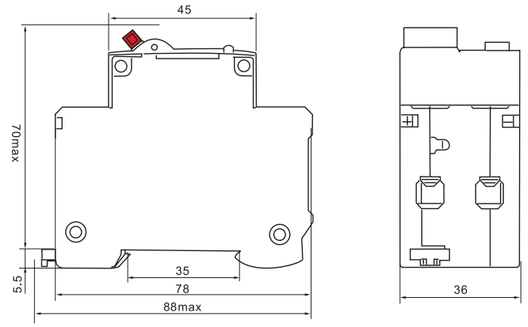
Tripping Curve

HDB6pLE Residual Current Operated Circuit Breaker



Overall Dimensions

Unit: mm



HDB9PLE Residual Current Operated Circuit Breaker

Standard: IEC/EN 61009-1
Electronic Type: AC
Breaking Capacity: 4500A, 6000A
Sensitivity: 30mA

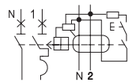
Function

HDB9PLE electronic type residual current operated circuit breakers combine the following functions:

- Protection of circuits against overload currents
- Protection against short-circuit currents
- Protection against indirect contacts
- Additional protection for users against direct contacts (30mA)
- Protection for electrical installations against insualtion faults (fire hazard, etc.)
- Isolation

Order Information

Type	Rating (A)	Breaking Capacity (kA)	Width (in mode.of 9mm)	Reference C curve
1P+N	6	4.5	2	HDB9PLEa40C6s
	10	4.5	2	HDB9PLEa40C10s
	16	4.5	2	HDB9PLEa40C16s
	20	4.5	2	HDB9PLEa40C20s
	25	4.5	2	HDB9PLEa40C25s
	32	4.5	2	HDB9PLEa40C32s
	40	4.5	2	HDB9PLEa40C40s
	6	6	2	HDB9PLEN40C6s
	10	6	2	HDB9PLEN40C10s
	16	6	2	HDB9PLEN40C16s
	20	6	2	HDB9PLEN40C20s
	25	6	2	HDB9PLEN40C25s
	32	6	2	HDB9PLEN40C32s
	40	6	2	HDB9PLEN40C40s



Technical Data

RCBO	HDB9PLE Residual Curent Operated Circuit Breaker	
Electrical Features	Standard	IEC/EN 61009-1
	Certificate	CB,CE,TUV
	Electronic Type	AC
	Poles	1P+N
	Rated Current In (A)	6, 10, 16, 20, 25, 32, 40
	Insulation Voltage Ui	500V
	Breaking Capacity	4500A, 6000A
	Sensitivity	30mA
	Tripping Curve (see following tripping curve pictures)	
	C Curve: the magnetic release operates between 5 and 10 In	
Mechanical Features	Electrical Durability	10000 times
	Mechanical Durability	20000 times
	Protection Degree	IP20
	Tropicalization	Treatment 2
	Ambient Temperature	-25°C~+70°C
Rated Current, A	6 10 16,20 25 32 40	
Cross-sectional area of conductor mm^2	1 1.5 2.5 4 6 10	

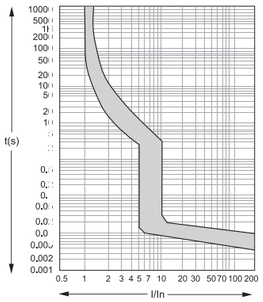
HDB9PLE Residual Current Operated Circuit Breaker

Standard: IEC/EN 61009-1
Electronic Type: AC
Breaking Capacity: 4500A, 6000A
Sensitivity: 30mA

Technical Data

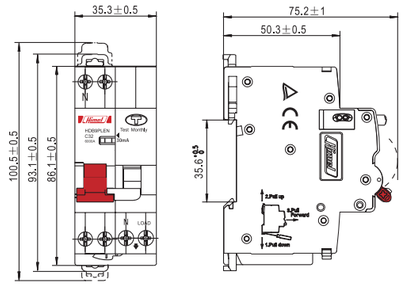
RCBO	HDB9PLE Residual Curent Operated Circuit Breaker			
Connection	6 - 40A, up to 25mm^2 cables			
Electrical Features	Rated Current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	6-40	M4	2.0	3.0
Mounting	35mm Din-Rail			

Tripping Curve



C Curve

Overall Dimensions



Accessories

SD + OF + MX+OF

Final Distribution

HDB6VR Electromagnetic Type Residual Current Switch

Standard: IEC/EN 61008-1
RCCB Type: A C, A
Sensitivity: 10, 30, 100, 300mA

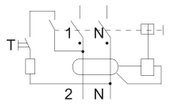
Function

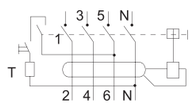
HDB6VR Electromagnetic Type Residual Current Switch combine the following functions:

- Protection for users against indirect contacts
- Additional protection for users against direct contacts (30mA)
- Protection for electrical installations against insulation faults (fire hazard, etc)

Order Information

Type		Width (In mod. of 9mm)	Rating (A)	Sensitivity (mA)	Reference	
					AC type	A type
2P	63AF	4	10	30	HDB6VR210SC	HDB6VR210SA
				100	HDB6VR210YC	HDB6VR210YA
				300	HDB6VR210TC	HDB6VR210TA
			16	30	HDB6VR216SC	HDB6VR216SA
				100	HDB6VR216YC	HDB6VR216YA
				300	HDB6VR216TC	HDB6VR216TA
			25	30	HDB6VR225SC	HDB6VR225SA
				100	HDB6VR225YC	HDB6VR225YA
				300	HDB6VR225TC	HDB6VR225TA
			40	30	HDB6VR240SC	HDB6VR240SA
				100	HDB6VR240YC	HDB6VR240YA
				300	HDB6VR240TC	HDB6VR240TA
			63	30	HDB6VR263SC	HDB6VR263SA
				100	HDB6VR263YC	HDB6VR263YA
				300	HDB6VR263TC	HDB6VR263TA
	100AF		80	30	HDB6VR280SC	HDB6VR280SA
				100	HDB6VR280YC	HDB6VR280YA
				300	HDB6VR280TC	HDB6VR280TA
			100	30	HDB6VR2100SC	HDB6VR2100SA
				100	HDB6VR2100YC	HDB6VR2100YA
				300	HDB6VR2100TC	HDB6VR2100TA
4P	63AF	8	10	30	HDB6VR410SC	HDB6VR410SA
				100	HDB6VR410YC	HDB6VR410YA
				300	HDB6VR410TC	HDB6VR410TA
			16	30	HDB6VR416SC	HDB6VR416SA
				100	HDB6VR416YC	HDB6VR416YA
				300	HDB6VR416TC	HDB6VR416TA
			25	30	HDB6VR425SC	HDB6VR425SA
				100	HDB6VR425YC	HDB6VR425YA
				300	HDB6VR425TC	HDB6VR425TA
			40	30	HDB6VR440SC	HDB6VR440SA
				100	HDB6VR440YC	HDB6VR440YA
				300	HDB6VR440TC	HDB6VR440TA
			63	30	HDB6VR463SC	HDB6VR463SA
				100	HDB6VR463YC	HDB6VR463YA
				300	HDB6VR463TC	HDB6VR463TA
	100AF		80	30	HDB6VR480SC	HDB6VR480SA
				100	HDB6VR480YC	HDB6VR480YA
				300	HDB6VR480TC	HDB6VR480TA
			100	30	HDB6VR4100SC	HDB6VR4100SA
				100	HDB6VR4100YC	HDB6VR4100YA
				300	HDB6VR4100TC	HDB6VR4100TA





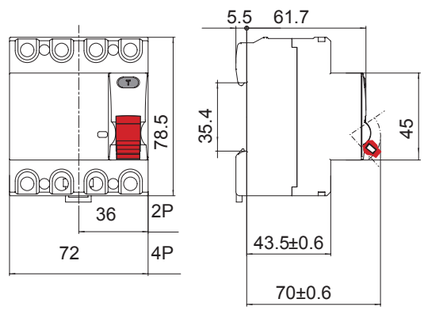
HDB6VR Electromagnetic Type Residual Current Switch

Standard: IEC/EN 61008-1
RCCB Type: A C, A
Sensitivity: 30, 100, 300mA

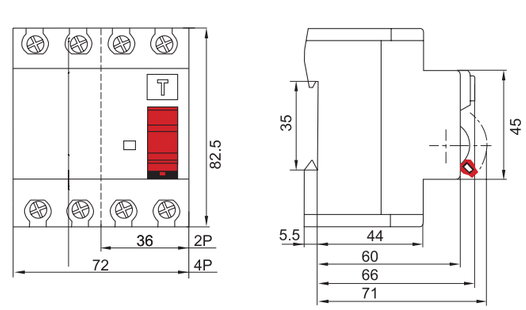
RCCB	HDB6VR Electromagnetic Type Residual Current Switch			
Electrical Features	Standard	IEC/EN 61008-1		
	Certification	TUV,CE,CB		
	Type	AC, A		
	Poles	2P, 4P		
	Rated Current In	10,16, 25, 32, 40, 63, 80, 100A		
	Rated Voltage Ue	230/400V AC		
	Insulation Voltage Ui	500V		
	Sensitivity	10, 30, 100, 300mA		
Mechanical Features	Electrical Durability	1000 times		
	Mechanical Durability	2000 times		
	Overload or Short Circuit Protection	No		
	Tripping Indication	Instantaneous, rated residual operated current, unadjustable		
	Fault Current Indicator	Mechanical indication in the front		
	Protection Degree	2		
	Tropicalization	Treatment 2		
	Ambient Temperature	-25°C~+40°C		
Connection	Up to 25mm^2 cables (In≤63A)		Up to 35mm^2 cables (In>63A)	
Installation	Rate current(A)	Screw	Rated Torque (Nm)	Limiting Torque (Nm)
	25-100	M5	2.0	4.5
Mounting	35mm Din-rail			

Overall Dimensions

Unit: mm



HDB6VR-63



HDB6VR-100

Incomer General Protection Residual

Current Operated Circuit Breaker

General protection fixed rating GARDY

Our range of Low Voltage Residual Current operated Circuit breaker for 30 to 60 A, (1 Ph + N) or (3Ph + N), 300 mA, allows to offer to every type of installation the best adapted product.

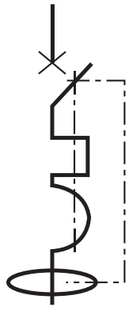
Safety for subscriber :

- Residual current device 300 mA integrated
  Big reliability own current system .
- N pole close the first and open the last to fix the voltage.

Advantage for power supplier

- Economic product adapted to traditionnal connection.
- Complied with french standard NFC 61 450 and
  IEC61009-1 for residual current protection.

Protection of installation



Protection against :

- **Short circuit.**
- **Overload.**
- **Indirect contact.**

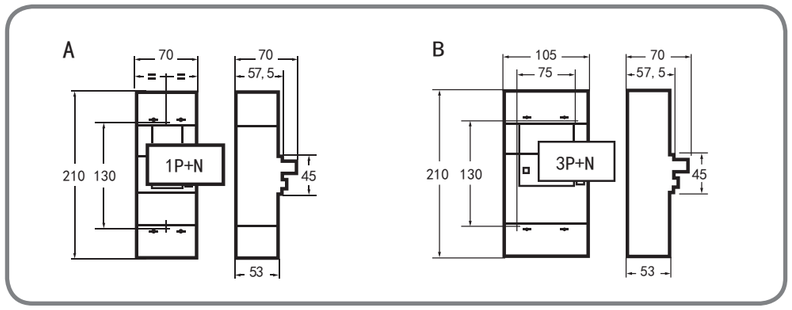
Incomer General Protection Residual

Current Operated Circuit Breaker

Technical data

Dimension - Installation : screw diameter 4

For 2 poles (1P+N) For 4 poles (3P+N)



Selection table

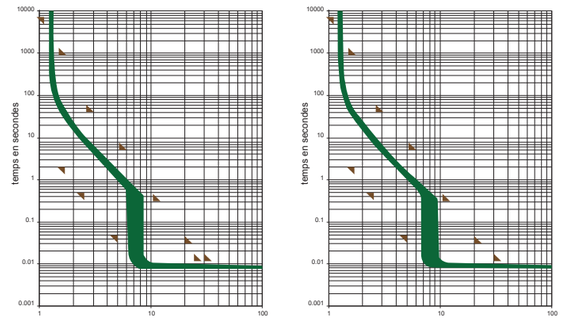
Note : For specific needs (number of poles, voltage, rating current, sensibility...), Thank you for consulting us

Type	Rating current	Rated Voltage	residual device(1)	Breaking capacity (1)*)	dimension see drawning	references HIMEL
	(A)	(V)	(mA)	(kA)		
Two poles 1 ph.+ N	30	230	300	1,5	A	230300T1
Four poles 3 ph. +N	30	400	300	1,5	B	430300T1
	60	400	300	2,4	B	460300T1

1) IEC 61009-1

1) *NF C 61450 et 4,5 kA in according with IEC 60898-1

Tripping curve



General characteristics

- Run time of residual current device
  < 0,2 s for I∆n
  < 0,1 s for 2 I∆n
- Residual current tripping between150 and 300 mA with own current
- Operating temperature : from -20°C to +55°C
- Voltage drop :
  N pole + neutral < 0,9 V
- Insulating resistance :
  >2 MOhm
- Dielectric withstand
  50Hz during 1mn
  2 kV between poles
  2 kV between upstream and downstream
- Tripping Curve C
  Instantaneous tripping between 5 and 10 In

Other characteristics

- Corrosion withstand :
  8 days in wet surrounding enclosure CCTU4 cycle
- Weight
  2 poles (1P+N) : 0,5 kg
  4 poles (3P+N) : 0,85kg
- Protection degree
  IP40

Easy to operate

- Operate in all positions.
- Control opening/closing by push button.
- Captive screw terminal.
- Orientable terminal.
- Connection up to 25mm²
- Neutral marking with blue

Final Distribution

Accessories

HDB9, HDB9P, HDB9LE, HDB9PLE

Accessories

Sketch map of installation with breaker

Remote Control Auxiliaries

OF contact auxiliary

- Indicate ON or OFF state of the breaker
- Basic type of auxiliary contact: 1NO+INC

SD fault-indicating switch

- Sends out fault signal on the front when breaking down
- Indicator on the front to show fault trip
- Basic type of auxiliary contact: 1NO+1NC

Tripping Device

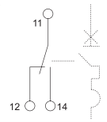
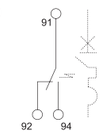
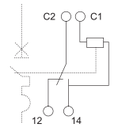
MX+OF shunt trip release

- Indicates ON or OFF state of the breaker
- Directly installs on the left of MCB without tools

Introductions

- Directly installs on the left of MCB without tools
- Each MCB assembles maximum 3 control auxiliaries (OF or SD)

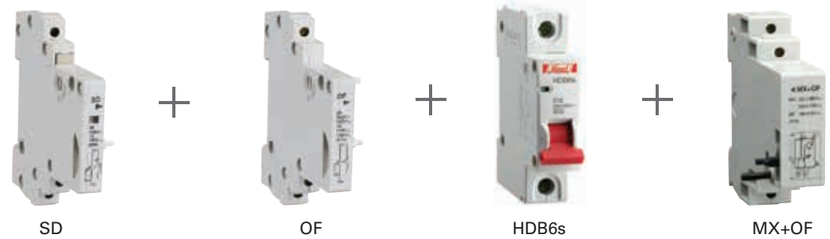
Order Information

Type	Width (mm)	Voltage (V)	Reference
OF 	9		HDB963OF
SD 	9		HDB963SD
MX+OF 	18	AC/DC 12/24V	HDB963MX24
	18	AC/DC 48V	HDB963MX48
	18	AC 100-415V DC 110-130V	HDB963MX415

Accessories

HDB6s

Sketch map of installation with breakers



Remote Control Auxiliaries

OF contact auxiliary

- Indicate ON or OFF state of the breaker
- Basic type of auxiliary contact: 1NO+1NC
- Connection: 1-4mm^2 cables

SD fault-indicating switch

- Sends out fault signal indicated on the front when breaking down
- Indicator on the front to show fault trip
- Basic type of auxiliary contact: 1NO+1NC
- Connection: 1-4mm^2 cables

Tripping Device

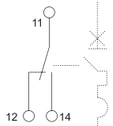
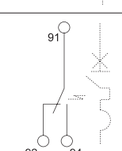
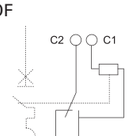
MX+OF shunt trip release

- Indicate ON or OFF state of the breaker
- Makes the assembled breaker trip once it has received the signal
- Basic type of auxiliary contact: 1NO+1NC
- Connection: 1-4mm^2 cables

Introductions

- OF, SD must be assembled on the left, one auxiliary only
- Each time only one auxiliary accepted on the left of MCB
- MX+OF must be assembled on the right, one MX+OF only
- HDB6s can't assemble MX+OF while assembled with HDB6v

Order Information

Type	Width (mm)	Voltage (V)	Reference
OF 	9		HDB6sOF
SD 	9		HDB6sSD
MX+OF 	18	AC/DC 12-24V	HDB6sMX24
	18	AC/DC 24-48V	HDB6sMX48
	18	AC110-127V	HDB6sMX110
	18	AC230-400V	HDB6sMX230

Accessories

Remote indication accessories

OF Auxiliary contact
- External circuit, indicating the close and open status of the circuit breaker
- Basic form of auxiliary contacts; one normally open and one normally closed
- Wiring capacity: 1-2.5mm^2 wire

SD Alarm contact
- Issue a signal in case of circuit breaker fault trip
- Mechanical indication on the front panel can indicate the fault trip
- Basic form of auxiliary contacts; one normally open and one normally closed
- Wiring capacity: 1-2.5mm^2 wire

Trip accessories

MX+OF Shunt release
- External circuit, indicating the close and open status of the circuit breaker
- Trigger the circuit breaker assembled with it to trip after obtaining the signal
- Basic form of auxiliary contacts; one normally open and one normally closed
- Wiring capacity: 1-2.5mm^2 wire

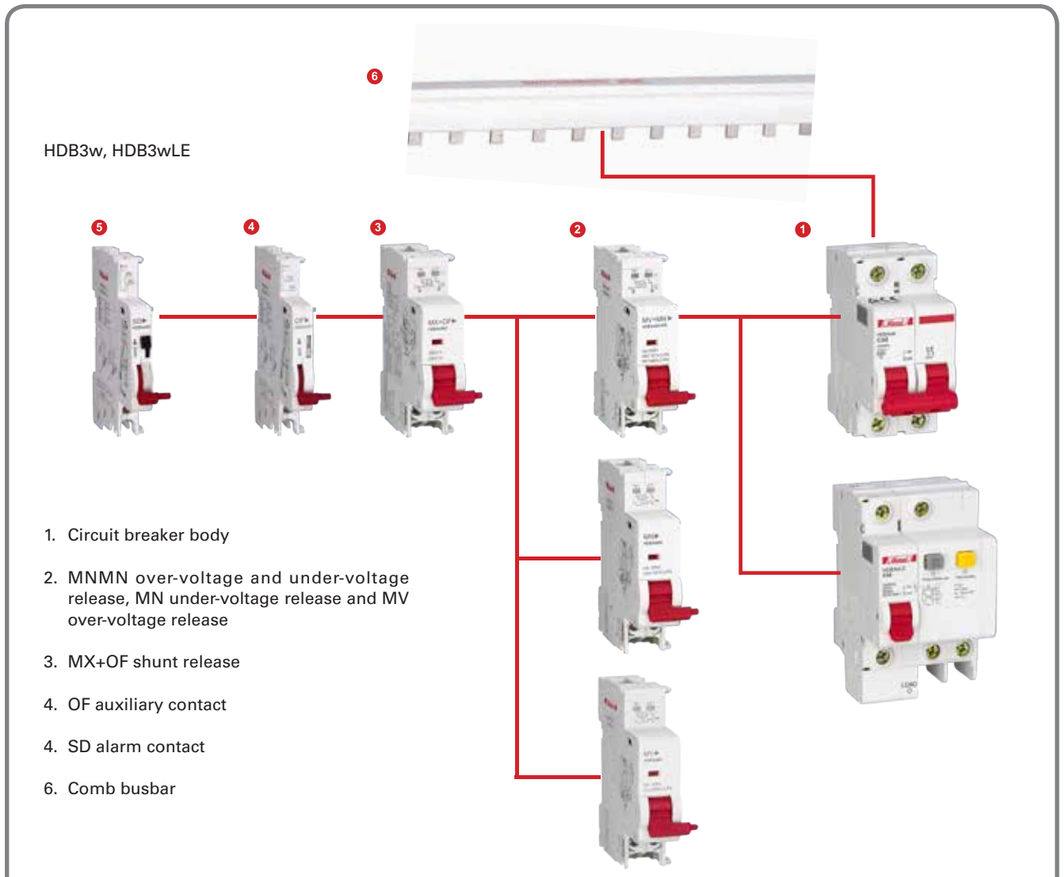
MV Over-voltage release
- Protect the line over-voltage fault
- Trigger the circuit breaker assembled with it to trip after the voltage at both ends of the release rises to the rated range
- The fault trip indication is provided on the front panel and the upspring of the indicating part indicates the over-voltage trip
- Rated work trip over-voltage: 280 (1±5%) V AC
- Wiring capacity: 1-2.5mm^2

MN Under-voltage release
- Protect the line under-voltage fault
- Trigger the circuit breaker assembled with it to trip after the voltage at both ends of the release rises to the rated range
- The fault trip indication is provided on the front panel and the upspring of the indicating part indicates the under-voltage trip
- Rated work trip under-voltage: 161 (1±5%) V AC, under-voltage protection range (35% 70%) Ue
- Wiring capacity: 1-2.5mm^2

MVMN Over-voltage and under-voltage release
- Protect the line over-voltage, under-voltage and other faults
- Trigger the circuit breaker assembled with it to trip after the voltage at both ends of the release rises to the rated range
- The fault trip indication is provided on the front panel and the upspring of the indicating part indicates the over-voltage or under-voltage trip
- Rated work trip over-voltage: 280 (1±5%) V AC, rated work trip under-voltage: 161(1±5%) V AC, under-voltage protection range (35% 70%) Ue
- Wiring capacity: 1-2.5mm^2

Accessories
HDB3w, HDB3wLE
3SERIES MORE VALUE FOR PRICE!

Schematic Diagram of Installation of Accessories



1. Circuit breaker body
2. MNMN over-voltage and under-voltage release, MN under-voltage release and MV over-voltage release
3. MX+OF shunt release
4. OF auxiliary contact
4. SD alarm contact
6. Comb busbar

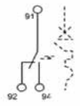
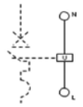
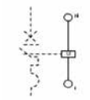
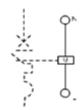
Assembly instructions
1. The accessories are installed on the left of the circuit breaker without tools
2. The total width of the accessory assembly is within 54mm
   The order and quantity from left to right: OF, SD (3 max.) +MO, MV, MN, MVMN (2 max.) +MCB
3. The accessories are commonly used in HDB3w, HDB3wLE, HDB3wP, HDB3wPLE

Accessories Selection

HDB3w, HDB3wLE

3SERIES MORE VALUE FOR PRICE!

Assembly Instructions

Product name	Width (mm)	Voltage range (V)	Order number
OF 	9	AC 415V/3A, 240V/6A DC 130V/1A, 48V/2A, 24V/6A	HDB3wOF
SD 	9	AC 415V/3A, 240V/6A DC 130V/1A, 48V/2A, 24V/6A	HDB3wSD
MX+OF 	18 18	AC 130V-415V DC 110-130V AC/DC 24V-48V	HDB3wMO220 HDB3wMO24
MV 	18	AC 130V-415V DC 110-130V AC/DC 24V-48V	HDB3wMV
MN 	18	AC 240V	HDB3wMN
MVMN 	18	AC 240V	HDB3wMVMN

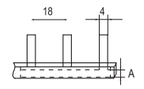
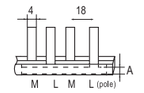
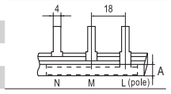
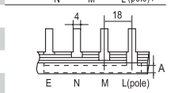
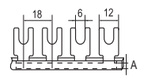
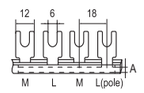
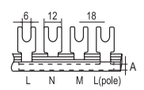
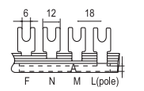
Accessories

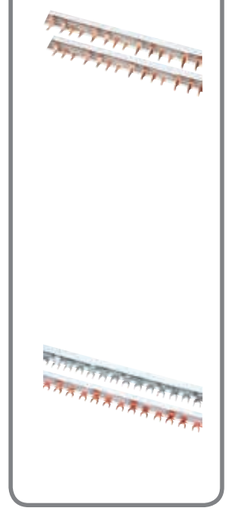
Busbar

Technical Data

Standard	IEC 60664
Material of Busbar	E-CU-F25
Material of Insulation	PVC
Short-circuit Strength	50kA
Nominal Voltage	415V
Operating Voltage	Max 500V
Surge Voltage	4kV
Clima Stability	IEC 60068-2

Order Information

Type	Pole	Thickness of Pin(mm)	Section Cross(mm2)	Max. current(A) End feed-in	A	Length	Reference	Dimension (mm)
PIN-TYPE	1	1.2	6	40	5	1m	HBBT1P40A12P	
		1.2	10	63	9	1m	HBBT1P63A12P	
		1.4	16	75	9	1m	HBBT1P75A15P	
		1.5	16	80	9	1m	HBBT1P80A15P	
		1.6	16	85	9	1m	HBBT1P85A15P	
	2	1.2	6	40	5	1m	HBBT2P40A12P	
		1.2	10	63	9	1m	HBBT2P63A12P	
		1.4	16	75	9	1m	HBBT2P75A15P	
		1.5	16	80	9	1m	HBBT2P80A15P	
		1.6	16	85	9	1m	HBBT2P85A15P	
	3	1.2	6	40	5	1m	HBBT3P40A12P	
		1.4	16	75	9	1m	HBBT3P75A15P	
		1.5	16	80	9	1m	HBBT3P80A15P	
		1.6	16	85	9	1m	HBBT3P85A15P	
	4	1.2	6	40	5	1m	HBBT4P40A12P	
		1.4	16	75	9	1m	HBBT4P75A15P	
		1.5	16	80	9	1m	HBBT4P80A15P	
		1.6	16	85	9	1m	HBBT4P85A15P	
U-TYPE	1	1.2	6	40	5	1m	HBBT1P40A12F	
		1.2	10	63	9	1m	HBBT1P63A12F	
		1.5	10	63	7	1m	HBBT1P63A15F	
		1.4	16	75	9	1m	HBBT1P75A15F	
		1.5	16	80	9	1m	HBBT1P80A15F	
		1.6	16	85	9	1m	HBBT1P85A15F	
	2	1.2	6	40	5	1m	HBBT2P40A12F	
		1.2	10	63	9	1m	HBBT2P63A12F	
		1.5	10	63	7	1m	HBBT2P63A15F	
		1.4	16	75	9	1m	HBBT2P75A15F	
		1.5	16	80	9	1m	HBBT2P80A15F	
		1.6	16	85	9	1m	HBBT2P85A15F	
	3	1.2	6	40	5	1m	HBBT3P40A12F	
		1.2	10	63	9	1m	HBBT3P63A12F	
		1.5	10	63	7	1m	HBBT3P63A15F	
		1.4	16	75	9	1m	HBBT3P75A15F	
		1.5	16	80	9	1m	HBBT3P80A15F	
		1.6	16	85	9	1m	HBBT3P85A15F	
	4	1.2	6	40	5	1m	HBBT4P40A12F	
		1.2	10	63	9	1m	HBBT4P63A12F	
		1.5	10	63	7	1m	HBBT4P63A15F	
		1.4	16	75	9	1m	HBBT4P75A15F	
		1.5	16	80	9	1m	HBBT4P80A15F	
		1.6	16	85	9	1m	HBBT4P85A15F	



Control Devices Product Overview

Control Devices

HDCH8s 312

Rated Voltage (Ue):250V 400V
Rated Insulation Voltage Ui: 500V AC
Coil Voltage (Us): AC230V 50/60Hz

Time Relay

HDRT8 315

Rated Voltage (Ue): 230V
Rated Current (Ie): 5A

Surge Protective Device Product Overview

Surge Protective Device

HDY3 317

In: :1P, 1P+N, 2P, 3P, 3P+N, 4P
Nominal discharge current In(8/20us) kA:
10,20,30,40,50

HDCH8S Modular Contactor

Standard: IEC 61095

Function

HDCH8S Modular Contactor provide:

- HDCH8S Modular Contactor provide:
- Switch on or Switch off lighting or other equipments

Order Information

Pole	Current (A)	Contacts	Reference
2P	16	2NO	HDCH8S16220
		2NC	HDCH8S16202
		1NO 1NC	HDCH8S16211
	20	2NO	HDCH8S20220
		2NC	HDCH8S20202
		1NO 1NC	HDCH8S20211
	25	2NO	HDCH8S25220
		2NC	HDCH8S25202
		1NO 1NC	HDCH8S25211
	40	2NO	HDCH8S40220
		2NC	HDCH8S40202
		1NO 1NC	HDCH8S40211
	63	2NO	HDCH8S63220
		2NC	HDCH8S63202
		1NO 1NC	HDCH8S63211
4P	16	4NO	HDCH8S16440
		4NC	HDCH8S16404
		2NO 2NC	HDCH8S16422
		3NO 1NC	HDCH8S16431
	20	4NO	HDCH8S20440
		4NC	HDCH8S20404
		2NO 2NC	HDCH8S20422
		3NO 1NC	HDCH8S20431
	25	4NO	HDCH8S25440
		4NC	HDCH8S25404
		2NO 2NC	HDCH8S25422
		3NO 1NC	HDCH8S25431
	40	4NO	HDCH8S40440
		4NC	HDCH8S40404
		2NO 2NC	HDCH8S40422
		3NO 1NC	HDCH8S40431
	63	4NO	HDCH8S63440
		4NC	HDCH8S63404
		2NO 2NC	HDCH8S63422
		3NO 1NC	HDCH8S63431

HDCH8S Modular Contactor

Standard: IEC 61095

Technical information

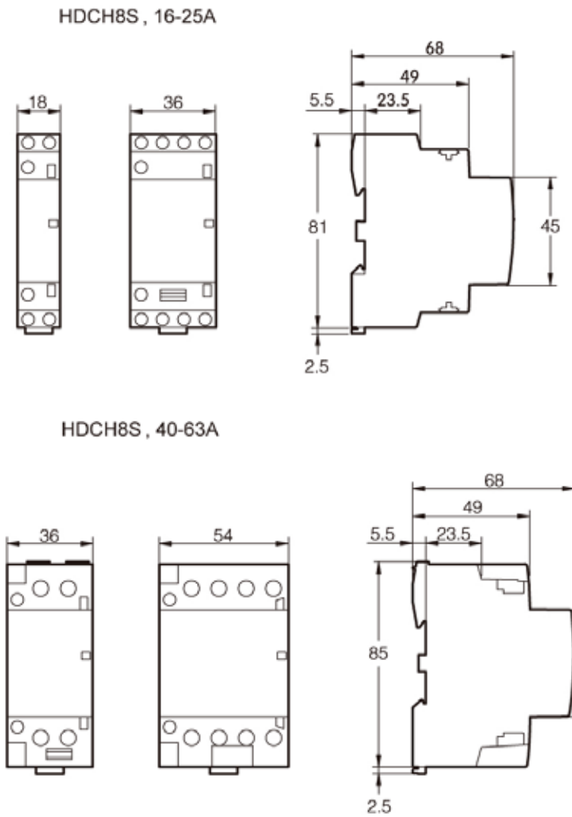
Parameter \ Item			16	20	25	40	63
Standard			IEC 61095				
Rated Current In(A)		AC-7a	16	20	25	40	63
		AC-7b	6	7	8.5	15	20
Conventional Free Air Thermal Current Ith(A)			25	25	25	63	63
Rated Insulation Voltage Ui(V)			500				
Rated Voltage Ue(V)			250 400				
Ambient Temperature			-5˚C~ 40˚C				
Making and Breaking Capacity (AC-7a)			1.5Ie				
Main Contacts		2P	1NO1NC, 2NO, 2NC				
		4P	2NO2NC, 3NO1NC, 4NO, 4NC				
Controlled power (kW)	AC-7a	230V	3.5	4.5	5.5	9	14
		400V	6.5	8	10	16	25
	AC-7b	230V	1.4	1.6	2	3.5	4.5
		400V	2.4	2.8	3.4	6	8
Electrical durabilities			10×10^4				
Mechanical durabilities			100×10^4				
Operation frequency /1h			100				
Coil Voltage Us(V)			AC 230V 50/60Hz				
Wiring Ability (mm^2)	Control circuit	Rigid wire	1.5~2.5 mm^2			2×1.5mm^2	
		Flexible wire	1.5~2.5 mm^2			2×2.5mm^2	
	Main circuit	Rigid wire	1.5~6mm^2			6~25mm^2	
		Flexible wire	1~4 mm^2			6~16mm2	

HDCH8S Modular Contactor

Standard: IEC 61095

Overall Dimensions

HDCH8S 16-63A



Final Distribution

HDRT8 Time Relay

Standard: IEC 60947-5

Function

HDRT8 Time Relay provide:

- Disconnect Delay
- Connect Delay

Order Information

Limit Delay Time	Delay Type	Reference
10s	Power delay	HDRT810B
120s	Power delay	HDRT8120B
480s	Power delay	HDRT8480B
480s	Off delay	HDRT8480A

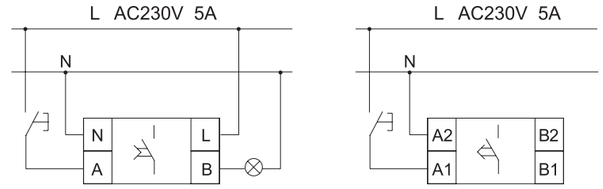
Technical Data

Building Control Command Devices	HDRT8 Time Relay
Standard	IEC 60947-5
Rated Voltage Ue	230V AC
Rated Current(Ie)	5A
Delay Type	Off delay
	Power delay
Limit Delay Time	10s 120s 480s
Conventional Thermal Current(I^{th})	8A
Timing Range	0.1-10s (≤10s)
	10-120s (≤120s)
	30-480s (≤480s)
Contact Type	Normally open contact
Contact Number	1
Rated Control Supply Voltage(Us)	230V AC
Operating Voltage Range	85%-110%Us
Electrical Durability	30000 times
Rated Wattage	<1W
Insulation Resistance	>1.5MΩ
Insulation Strength	To each: AC 1760V 5s Disconnect between the contact position: AC 1000V 1min
Connection	Up to 1mm^2 cables

HDRT8 Time Relay

Standard: IEC 60947-5

Wiring Diagram

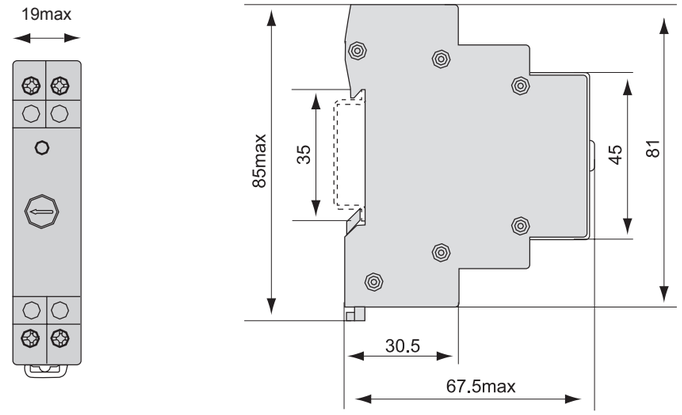


HDRT8-480A

HDRT8-10B, 120B, 480B

Overall Dimensions

Unit: mm



Final Distribution

HDY3 Power Surge Protector

Standard: IEC61643-1

3SERIES MORE VALUE FOR PRICE!

HDY3 Technical Parameters

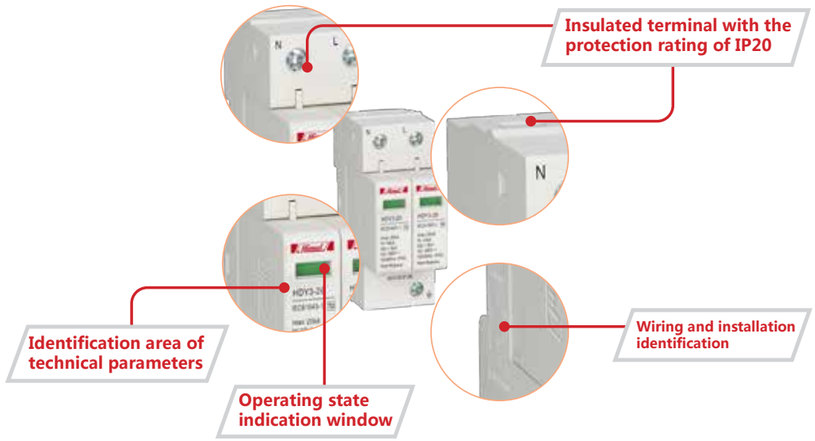
Product model		HDY3-20				HDY3-40				HDY3-65			
Nominal discharge current In	kA	10				20				30			
Maximum discharge current Imax	kA	20				40				65			
Maximum allowable backup fuse strength	A gL	50				100				125			
Maximum continuous operating voltage Uc	V	275	340	385	440	275	340	385	440	275	340	385	440
Protection level Up	kV	1.3	1.5	1.6	1.8	1.5	1.8	1.8	2.0	1.6	1.9	2.0	2.2
Leakage current 7 5%Uc 1mA	μA	≤20											
Response time	ns	≤25											
Waveform	μs	8 / 20											
Product structure		Plug-in											
Protection rating		II											
Poles		1P,2P,3P,4P,1P+ N,3P+ N											
Operating state indication window		Available (green: normal; red: fault)											
Terminal wiring capacity		Minimum 4mm2 for copper wire, maximum: 36mm2 for single strand, 25mm2 for multi-strand											
Conformance standard		IEC61643 -1											
Optional accessories		Available (YX remote signaling)											

HDY3 Power Surge Protector

Standard: IEC61643-1

3SERIES MORE VALUE FOR PRICE!

Product Details Display



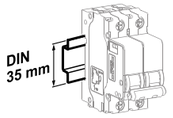
HDY3 Power Surge Protector

Standard: IEC61643-1

3SERIES MORE VALUE FOR PRICE!

HDY3 Technical Parameters

Product model		HDY3-80				HDY3-120				HDY3-160			
Nominal discharge current In	kA	40				60				80			
Maximum discharge current Imax	kA	80				120				160			
Maximum allowable backup fuse strength	A gL	160				200				250			
Maximum continuous operating voltage Uc	V	275	340	385	440	275	340	385	440	275	340	385	440
Protection level Up	kV	2.2	2.5	2.5	2.8	2.3	2.5	2.5	2.8	2.3	2.5	2.5	2.8
Leakage current 7 5%Uc 1mA	μA	≤20											
Response time	ns	≤25											
Waveform	μs	8 / 20											
Product structure		Plug-in											
Protection rating		II											
Poles		1P,2P,3P,4P,1P+ N,3P+ N											
Operating state indication window		Available (green: normal; red: fault)											
Terminal wiring capacity		Minimum 4mm2 for copper wire, maximum: 36mm2 for single strand, 25mm2 for multi-strand											
Conformance standard		IEC61643 -1											
Optional accessories		Available (YX remote signaling)											



Installed on 35mm standard guide rail

Wiring capacity: 15mm2 (max)
Umax: AC125V Imax: 1A

Final Distribution

HDY3 Power Surge Protector

Standard: IEC61643-1

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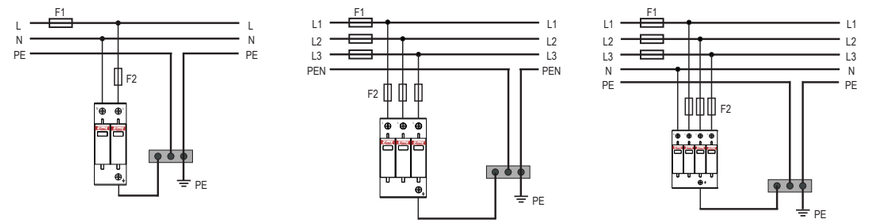
Accessories

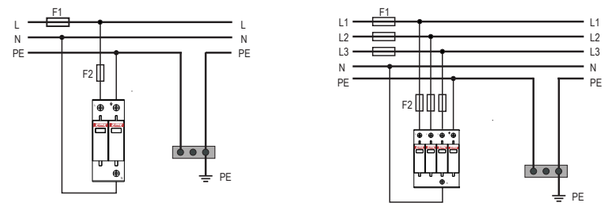
Remote signaling YX	
Rated operating voltage Ue	125V
Rated operational current Ie	1A
Contact	A normally open contact and a normally closed contact
Function	When SPD module is detached due to fault, the normally open contact will be closed and the normally closed contact will be disconnected to send out the fault information

HDY3 Wiring Diagram

TN-S System Installation Diagram



TT System Installation Diagram



HDY3 Power Surge Protector

Standard: IEC61643-1

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HDY3 Power Surge Protector

Product name	Maximum discharge current	Poles	Maximum continuous voltage	Accessories
HDY3	60	1	275	YX
	↓	↓	↓	↓
	20: 20kA 40: 40kA 65: 65kA 80: 80kA 120: 120kA 160: 160kA	1: 1P 2: 2P 3: 3P 4: 4P 5: 1P+N 6: 3P+N	Default: AC385V 275: AC275V 440: AC440V	YX: Remote signaling

HDY3 Power surge protector	Type	Rated current	Maximum discharge current					
			275V		385V		440V	
	1P	20	HDY3201275		HDY3201		HDY3201440	
		40	HDY3401275		HDY3401		HDY3401440	
		65	HDY3651275		HDY3651		HDY3651440	
		80	HDY3801275	HDY3801275YX	HDY3801	HDY3801YX	HDY3801440	HDY3801275YX
		120	HDY31201275	HDY31201275YX	HDY31201	HDY31201YX	HDY31201440	HDY31201275YX
		160	HDY31601275	HDY31601275YX	HDY31601	HDY31601YX	HDY31601440	HDY31601275YX
	2P	20	HDY3202275	HDY3202275YX	HDY3202	HDY3202YX	HDY3202440	HDY3202440YX
		40	HDY3402275	HDY3402275YX	HDY3402	HDY3402YX	HDY3402440	HDY3402440YX
		65	HDY3652275	HDY3652275YX	HDY3652	HDY3652YX	HDY3652440	HDY3652440YX
		80	HDY3802275	HDY3802275YX	HDY3802	HDY3802YX	HDY3802440	HDY3802440YX
		120	HDY31202275	HDY31202275YX	HDY31202	HDY31202YX	HDY31202440	HDY31202440YX
		160	HDY31602275	HDY31602275YX	HDY31602	HDY31602YX	HDY31602440	HDY31602440YX
	3P	20	HDY3203275	HDY3203275YX	HDY3203	HDY3203YX	HDY3203440	HDY3203440YX
		40	HDY3403275	HDY3403275YX	HDY3403	HDY3403YX	HDY34403440	HDY3403440YX
		65	HDY3653275	HDY3653275YX	HDY3653	HDY3653YX	HDY3653440	HDY3653440YX
		80	HDY3803275	HDY3803275YX	HDY3803	HDY3803YX	HDY3803440	HDY3803440YX
		120	HDY31203275	HDY31203275YX	HDY31203	HDY31203YX	HDY31203440	HDY31203440YX
		160	HDY31603275	HDY31603275YX	HDY31603	HDY31603YX	HDY31603440	HDY31603440YX

HDY3 Power Surge Protector

Standard: IEC61643-1

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HDY3 Power Surge Protector

2P

4P

HDY3 Power surge protector	Poles	Rated current	Maximum discharge current					
			275V		385V		440V	
	4P	20	HDY3204275	HDY3204275YX	HDY3204	HDY3204YX	HDY3204440	HDY3204440YX
		40	HDY3404275	HDY3404275YX	HDY3404	HDY3404YX	HDY3404440	HDY3404440YX
		65	HDY3654275	HDY3654275YX	HDY3654	HDY3654YX	HDY3654440	HDY3654440YX
		80	HDY3804275	HDY3804275YX	HDY3804	HDY3804YX	HDY3804440	HDY3804440YX
		120	HDY31204275	HDY31204275YX	HDY31204	HDY31204YX	HDY31204440	HDY31204440YX
		160	HDY31604275	HDY31604275YX	HDY31604	HDY31604YX	HDY31604440	HDY31604440YX
	1P+N	20	HDY3205275	HDY3205275YX	HDY3205	HDY3205YX	HDY3205440	HDY3205440YX
		40	HDY3405275	HDY3405275YX	HDY3405	HDY3405YX	HDY3405440	HDY3405440YX
		65	HDY3655275	HDY3655275YX	HDY3655	HDY3655YX	HDY3655440	HDY3655440YX
		80	HDY3805275	HDY3805275YX	HDY3805	HDY3805YX	HDY3805440	HDY3805440YX
		120	HDY31205275	HDY31205275YX	HDY31205	HDY31205YX	HDY31205440	HDY31205440YX
		160	HDY31605275	HDY31605275YX	HDY31605	HDY31605YX	HDY31605440	HDY31605440YX
	3P+N	20	HDY3206275	HDY3206275YX	HDY3206	HDY3206YX	HDY3206440	HDY3206YX
		40	HDY3406275	HDY3406275YX	HDY3406	HDY3406YX	HDY3406440	HDY3406YX
		65	HDY3656275	HDY3656275YX	HDY3656	HDY3656YX	HDY3656440	HDY3656YX
		80	HDY3806275	HDY3806275YX	HDY3806	HDY3806YX	HDY3806440	HDY3806YX
		120	HDY31206275	HDY31206275YX	HDY31206	HDY31206YX	HDY31206440	HDY31206YX
		160	HDY31606275	HDY31606275YX	HDY31606	HDY31606YX	HDY31606440	HDY31606YX

HDY3 Power Surge Protector

Standard: IEC61643-1

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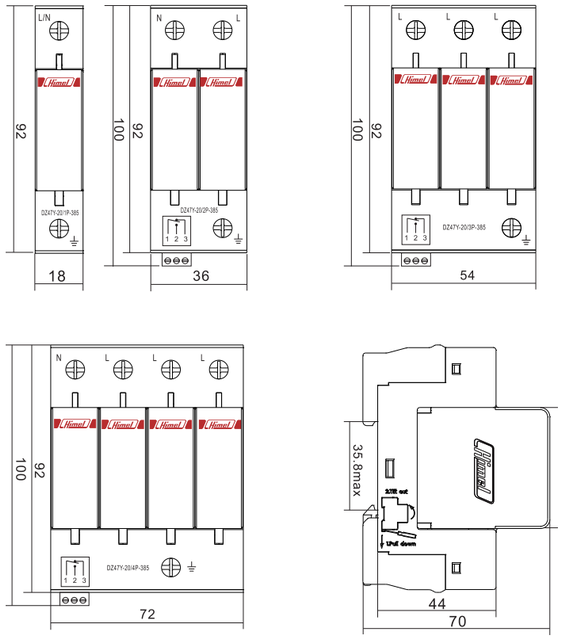
HDY3 Installation Dimension

HDY3-20/40/65



Final Distribution

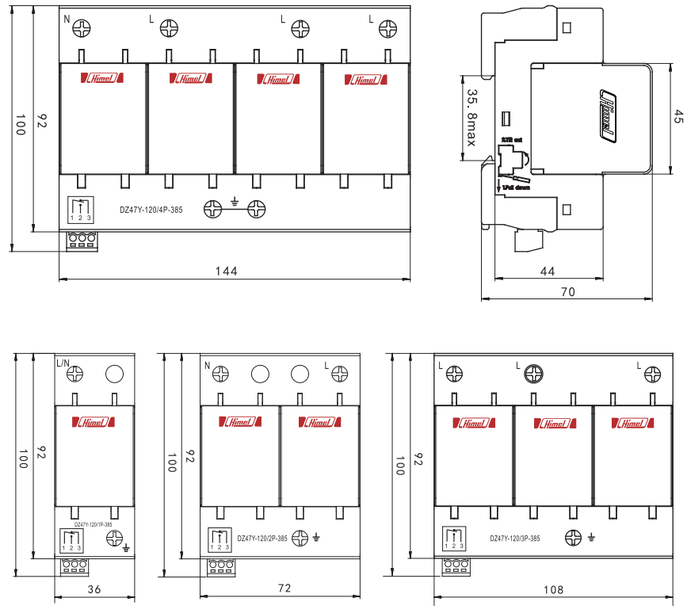
HDY3 Power Surge Protector

Standard: IEC61643-1

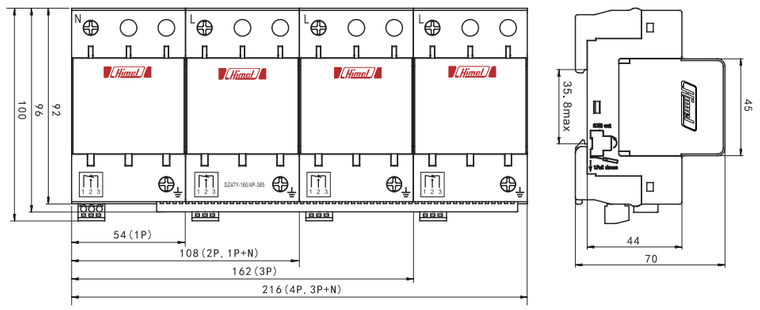
3SERIES MORE VALUE FOR PRICE!

HDY3 Installation Dimension

HDY3-80/120



HDY3-160



Distribution Box

Consumer Box

HDPZ50 326

No. of ways:
6,8,12,16,20,24
Protection Grade: IP30

Metal Enclosure

HJXF 328

Protection Grade:
IP43, IP54

Distribution Board

HD4 331

Enclosure Ingress Protection :
IP31 (Other IP ratings like IP55,
IP66 are optional)
Type of Cover: Flush type, Surface Type
Type of Door: Flush type with cover

Wiring Device

HWD 333

Type: British style

HDPZ50 Series Consumer Box

Standard: IEC60439-1 IEC60670

CE

Function

HDPZ50 series Consumer Box provide:
- Protection against overload
- Protection against over voltage
- Protection against leakage

Order Information

Material	Installation	No. of Ways	Reference
Metal Box & Plastic Cover	Surface installation	6	HDPZ50M6
		8	HDPZ50M8
		12	HDPZ50M12
		16	HDPZ50M16
		20	HDPZ50M20
		24	HDPZ50M24
	Flush installation	6	HDPZ50R6
		8	HDPZ50R8
		12	HDPZ50R12
		16	HDPZ50R16
		20	HDPZ50R20
		24	HDPZ50R24
Full Plastic (fire-retardancy)		4	HDPZ50PM4IP30F
		6	HDPZ50PM6IP30F
		8	HDPZ50PM8IP30F
		12	HDPZ50PM12IP30F
		15	HDPZ50PM15IP30F
		18	HDPZ50PM18IP30F
		24	HDPZ50PM24IP30F
		36	HDPZ50PM36IP30F
		4	HDPZ50PR4IP30F
		6	HDPZ50PR6IP30F
		8	HDPZ50PR8IP30F
		12	HDPZ50PR12IP30F
		15	HDPZ50PR15IP30F
		18	HDPZ50PR18IP30F
		24	HDPZ50PR24IP30F
		36	HDPZ50PR36IP30F
Full Plastic (Non fire-retardancy)		4	HDPZ50PM4NF
		6	HDPZ50PM6NF
		8	HDPZ50PM8NF
		12	HDPZ50PM12NF
		15	HDPZ50PM15NF
		18	HDPZ50PM18NF
		24	HDPZ50PM24NF
		36	HDPZ50PM36NF
		4	HDPZ50PR4NF
		6	HDPZ50PR6NF
		8	HDPZ50PR8NF
		12	HDPZ50PR12NF
		15	HDPZ50PR15NF
		18	HDPZ50PR18NF
		24	HDPZ50PR24NF
		36	HDPZ50PR36NF

HDPZ50 Series Consumer Box

Standard: IEC60439-1 IEC60670

Technical Data

Type	HDPZ50	HDPZ50P
Material	Box: Metal, Cover: Plastic	Full Plastic
Fire-resistancy	Fire-resistant	Optional
Protection Grade	IP30	IP30
Rated Operation Voltage	230/400V	230/400V
Rated Insulated Voltage	500V	500V
Rated Operating Current	100A	100A
Withstand Current	6kA	6kA

Overall Dimensions

HDPZ50

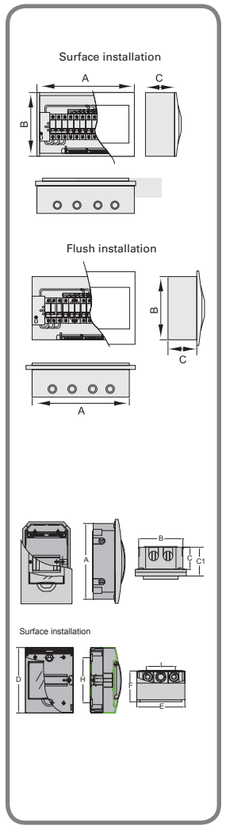
Unit: mm

Metal Box & Plastic	Surface Installation		Flush Installation		Thickness
	A	B	A	B	C
6	171	220	163	200	90
8	207	220	199	200	90
12	279	220	272	200	90
16	351	220	343	200	90
20	423	220	413	200	90
24	303	383	282	364	90

HDPZ50P

Unit: mm

Full Plastic Loop Number	Dimension for Hidden Installation				Dimension for Surface Installation				
	Height	Width	Thickness		Height	Width	Thickness	Installation Dimension	
	A	B	C	C1	D	E	F	H	I
4	200	114	61	78	200	112	91	138	-
6	200	150	61	78	200	147	96	144	-
8	200	186	61	78	200	183	96	144	-
12	196	258	61	78	200	255	96	144	-
15	198	311	61	78	200	310	96	144	-
18	216	363	61	78	218	362	96	162	290
24	310.5	261	74.5	92	324	270	102	230	207
36	414.5	261	70.5	88	459	270	102	418	207



HJXF Metal Enclosure

Standard: EN60529

Function

HJXF Metal Enclosure provide:

- Control, monitoring, measurement and protection for the electric power loops and main power
- Controlling equipment.

Order Information

Type	Thickness	Dimension (mm)								Lock	Reference
		Overall			Installation		Mounting				
		H	W	D	H1	B1	H6	B6	Thick		
HJXF 2520 14 IP43 Improved	1.0	250	200	140	295	128	130	128	1.0	1	HJXF252014B
HJXF 3025 14 IP43 Improved	1.0	300	250	140	345	178	180	178	1.0	1	HJXF302514B
HJXF 3025 18 IP43 Improved	1.0	300	250	180	345	178	180	178	1.0	1	HJXF302518B
HJXF 3030 14 IP43 Improved	1.0	300	300	140	345	228	180	228	1.0	1	HJXF303014B
HJXF 3030 18 IP43 Improved	1.0	300	300	180	345	228	180	228	1.0	1	HJXF303018B
HJXF 4030 14 IP43 Improved	1.0	400	300	140	445	228	280	228	1.0	1	HJXF403014B
HJXF 4030 20 IP43 Improved	1.0	400	300	200	445	228	280	228	1.0	1	HJXF403020B
HJXF 5040 14 IP43 Improved	1.0	500	400	140	545	328	380	328	1.0	2	HJXF504014B
HJXF 5040 20 IP43 Improved	1.0	500	400	200	545	328	380	328	1.0	2	HJXF504020B
HJXF 5040 25 IP43 Improved	1.0	500	400	250	545	328	380	328	1.0	2	HJXF504025B
HJXF 6040 14 IP43 Improved	1.2	600	400	140	645	328	480	328	1.2	2	HJXF604014B
HJXF 6040 20 IP43 Improved	1.2	600	400	200	645	328	480	328	1.2	2	HJXF604020B
HJXF 6040 25 IP43 Improved	1.2	600	400	250	645	328	480	328	1.2	2	HJXF604025B
HJXF 6050 14 IP43 Improved	1.2	600	500	140	645	428	480	428	1.2	2	HJXF605014B
HJXF 6050 20 IP43 Improved	1.2	600	500	200	645	428	480	428	1.2	2	HJXF605020B
HJXF 6050 25 IP43 Improved	1.2	600	500	250	645	428	480	428	1.2	2	HJXF605025B
HJXF 7050 16 IP43 Improved	1.2	700	500	160	745	428	580	428	1.2	2	HJXF705016B
HJXF 7050 20 IP43 Improved	1.2	700	500	200	745	428	580	428	1.2	2	HJXF705020B
HJXF 7050 25 IP43 Improved	1.2	700	500	250	745	428	580	428	1.2	2	HJXF705025B
HJXF 8060 20 IP43 Improved	1.5	800	600	200	845	528	680	528	1.5	2	HJXF806020B
HJXF 8060 25 IP43 Improved	1.5	800	600	250	845	528	680	528	1.5	2	HJXF806025B
HJXF 10080 20 IP43 Improved	1.5	1000	800	200	1045	728	880	728	1.5	2	HJXF1008020B
HJXF 10080 25 IP43 Improved	1.5	1000	800	250	1045	728	880	728	1.5	2	HJXF1008025B
HJXF 10080 30 IP43 Improved	1.5	1000	800	300	1045	728	880	728	1.5	2	HJXF1008030B

Final Distribution

HJXF Metal Enclosure

Standard: EN60529

Order Information

Type	Thickness	Dimension (mm)								Lock	Reference
		Overall			Installation		Mounting				
		H	W	D	H1	B1	H6	B6	Thick		
HJXF 2520 14 IP54	1.2	250	200	140	310	150	172	122	2.0	1	HJXF252014Q
HJXF 3025 14 IP54	1.2	300	250	140	360	200	222	172	2.0	1	HJXF302514Q
HJXF 3025 18 IP54	1.2	300	250	180	360	265	222	172	2.0	1	HJXF302518Q
HJXF 3030 14 IP54	1.2	300	300	140	360	265	222	222	2.0	1	HJXF303014Q
HJXF 3030 18 IP54	1.2	300	300	180	360	265	222	222	2.0	1	HJXF303018Q
HJXF 4030 14 IP54	1.2	400	300	140	460	365	322	222	2.0	1	HJXF403014Q
HJXF 4030 20 IP54	1.2	400	300	200	460	365	322	222	2.0	1	HJXF403020Q
HJXF 5040 14 IP54	1.2	500	400	140	560	465	422	322	2.0	2	HJXF504014Q
HJXF 5040 20 IP54	1.2	500	400	200	560	465	422	322	2.0	2	HJXF504020Q
HJXF 5040 25 IP54	1.2	500	400	250	560	465	422	322	2.0	2	HJXF504025Q
HJXF 6040 14 IP54	1.5	600	400	140	660	565	522	322	2.0	2	HJXF604014Q
HJXF 6040 20 IP54	1.5	600	400	200	660	565	522	322	2.0	2	HJXF604020Q
HJXF 6040 25 IP54	1.5	600	400	250	660	565	522	322	2.0	2	HJXF604025Q
HJXF 6050 14 IP54	1.5	600	500	140	660	565	522	422	2.0	2	HJXF605014Q
HJXF 6050 20 IP54	1.5	600	500	200	660	565	522	422	2.0	2	HJXF605020Q
HJXF 6050 25 IP54	1.5	600	500	250	660	565	522	422	2.0	2	HJXF605025Q
HJXF 7050 16 IP54	1.5	700	500	160	760	665	622	422	2.0	2	HJXF705016Q
HJXF 7050 20 IP54	1.5	700	500	200	760	665	622	422	2.0	2	HJXF705020Q
HJXF 7050 25 IP54	1.5	700	500	250	760	665	622	422	2.0	2	HJXF705025Q
HJXF 8060 20 IP54	1.5	800	600	200	860	765	722	522	2.0	2	HJXF806020Q
HJXF 8060 25 IP54	1.5	800	600	250	860	765	722	522	2.0	2	HJXF806025Q
HJXF 10080 20 IP54	1.5	1000	800	200	1060	965	922	722	2.0	2	HJXF1008020Q
HJXF 10080 25 IP54	1.5	1000	800	250	1060	965	922	722	2.0	2	HJXF1008025Q
HJXF 10080 30 IP54	1.5	1000	800	300	1060	965	922	722	2.0	2	HJXF1008030Q

HJXF Metal Enclosure

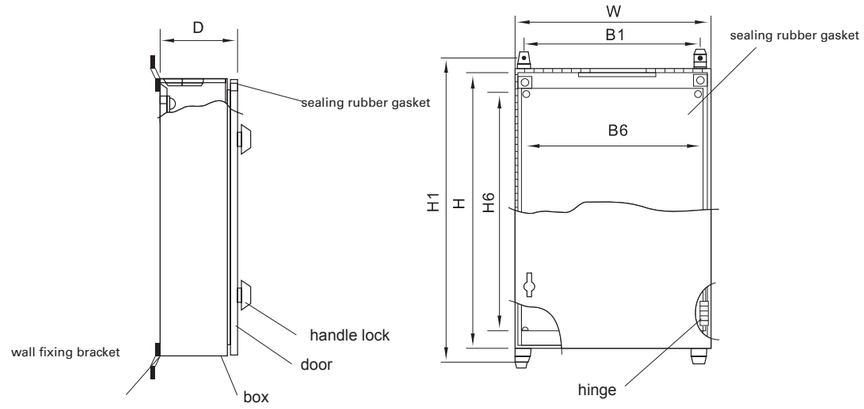
Standard: EN60529

Technical Data

Type	HJXF
Protection Grade	IP43, IP54
Standard:	EN60529
Certificate	CE
Sheet Thickness	1.0~1.5mm
Mounting Plate Thickness	1.0~1.5mm
Hinge	Enhanced
Sealing Rubber Gasket	Black rubber gasket
Cable Gland	Bottom only

Overall Dimensions

Unit: mm



Final Distribution

H4D Distribution Board

Standard: IEC61439-3

- Non-split type
- Suitable for Din type MCB
- Turst worthy for safety
- Easy to install

- High quality
- Impact resistant
- Many advantages
- Excellent design finish
- Long life

- Suitable for industrial, commercial and domestic installations
- Enclosure Ingress protection-IP31 (Other IP ratings like IP55, IP66 are optional)
- Outgoing feeders suitable to accept SP, DP and TP MCBs
- Single busbar type. (split busbar is optional)
- Comply with IEC61439-3
- MCB Short circuit rating is 6KA or 10KA
- Suitable to install at 400V/415V, 50Hz AC Three phase four wire system
- Knock-outs are available at top and bottom for easy termination of conduit and wires
- Brass Neutral and Earth bars with enough cable terminating arrangement

The DB is suitable for either 1no. 3P/4P isolator-100A + 1no. 4P ELCB (upto 100A)
Or 1no. 4P ELCB (upto 100A) + 1no. 3P or 4P Isolator inter connected with 25Sq.mm single core cables.

Catalogue Selection (Example)

H4D04-M24

- 4pole slot
- 2 nos of 4P slot
- Main incoming side
- 4 TP ways(for 4x3=12nos SP MCBs)
- Din Type
- 4 wire (R,Y,B &N)
- DB for HIMEL make breakers

H4D Distribution Board

Standard: IEC61439-3

Models		Dimensions		
Descirption	**Catalogue Number**	**Hight**	**Width**	**Depth(box+door)**
4 way TPN	H4D04-M24	508	350	113
6 way TPN	H4D06-M24	562	350	113
8 way TPN	H4D08-M24	616	350	113
10 way TPN	H4D10-M24	670	350	113
12 way TPN	H4D12-M24	724	350	113
14 way TPN	H4D14-M24	778	350	113
16 way TPN	H4D16-M24	832	350	113

Type of cover: a) Flush type
b) Surface type

Type of door: Flush type with cover

Type of lock: a) Standard sliding latch PVC
b) Optional lock type

Paint finish: Epoxy polyester Powder Coated

Paint colour: RAL 7035 (other colours like RAL 7032 is optional for quantity order)

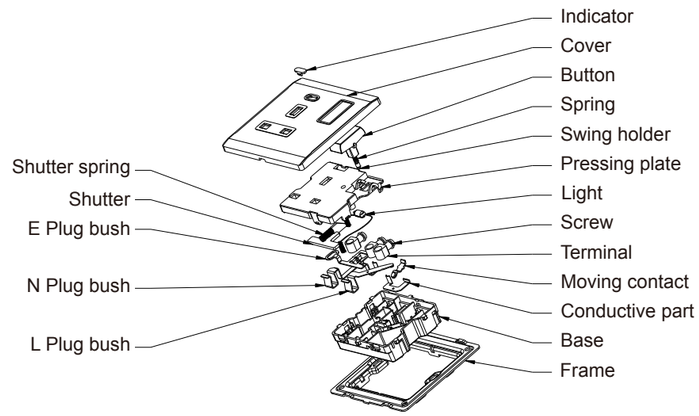
Sheet thickness: 1.2mm (optional:1mm or other size)

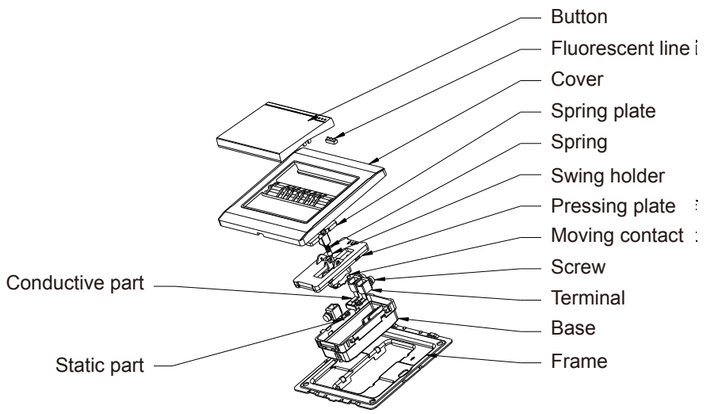
Final Distribution

HWD Series British Style Wiring Device

Standard: IEC61439-3

Main Product Structure Description

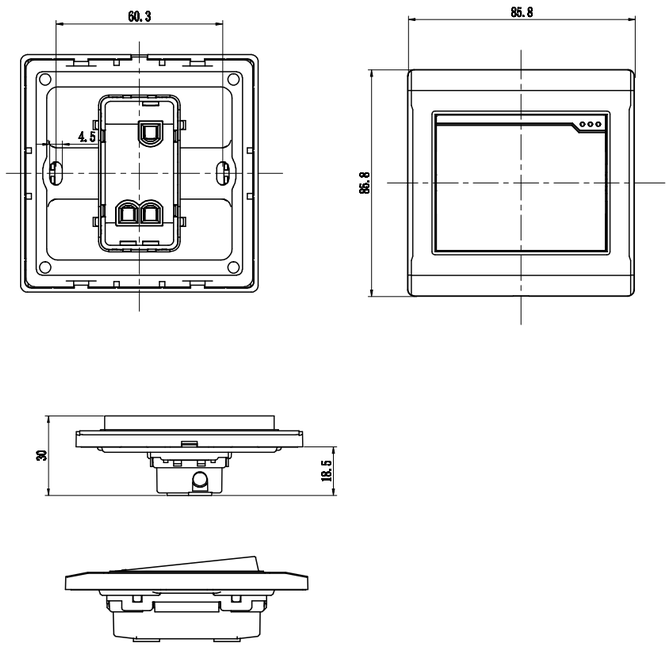




HWD Series British Style Wiring Device

Standard: IEC61439-3

Features and Dimension



HWD Series British Style Wiring Device

Standard: IEC61439-3

HWDYLK1 1 gang 1 way switch

HWDYLK2 1 gang 2 way switch

HWDYL2K1 2 gang 1 way switch

HWDYL2K2 2 gang 2 way switch

HWDYL3K1 3 gang 1 way switch

HWDYL3K2 3 gang 2 way switch

HWDYL4K1 4 gang 1 way switch

HWDYL4K2 4 gang 2 way switch

HWDYLTg dimmer switch

HWDYLTs fan speed controller

HWD Series British Style Wiring Device

Standard: IEC61439-3

HWDYLTel 1 gang 4 core Tel socket

HWDYLD 1 gang data socket

HWDYL2D 2 gang data socket

HWDY2Tel 2 gang 4 core Tel socket

HWDYTelLD Tel and data socket

Final Distribution

HWD Series British Style Wiring Device

Standard: IEC61439-3

HWDYLTV TV socket

HWDYLK1SC15
1 gang 15A switched socket single pole

HWDYTVLD 1 gang data socket

HWDYTVTel TV and 4 core Tel socket

Final Distribution

HWD Series British Style Wiring Device

Standard: IEC61439-3

HWDY245K1
1 gang 20A switch With neon without fuse

HWDYLSW
1 gang unswitch Multi-purpose socket

HWDYL2K12SF13
2 gang 13A switch socket

HWDYLK1SF131P
1 gang 13A switch socket

HWDYLK1SW
1 gang switch Multi-purpose socket

HWDYL2K12SW
2 gang switch Multi-purpose socket

Product Overview

Contactor

HDC3 340
Current: 6-95A
Pole: 3P
Coil Voltage: AC24-440V

HDC6 351
Current: 9-630A
Pole: 3P
Coil Voltage: AC24-440V

HJX2 4P 369
Current: 9-95A
Pole: 4P
Coil Voltage: AC24-440V

HJX2-F 4P 375
Current: 115-800A
Pole: 4P
Coil Voltage: AC110-440V

HDC17K 382
Current: 6-9A
Pole: 3P/4P
Coil voltage: AC24-400V

Thermal Overload Relay

HDR3 386
Setting Current: 0.1~93A
Trip Class: 10A, 10

HDR6 391
Setting Current: 0.1-630A
Trip Class: 10A,10

HDC3 AC Contactor

Overview

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MORE VALUE FOR PRICE!

Product Overview

With the new generation of technical platform and automated production and testing equipment, the brand new HDC3 motor control and protection products effectively fit the actual customer application needs, becoming products with convenient use and international leading quality. The series include three major categories, namely HDC3 AC contactor, HDR3 thermal overload relay and HDZ3 contactor relay and their accessories.

Product range

- HDC3 AC contactor: 6-95A, totally 12 current specifications
  Accessories: HPCs transparent dust cover, HFD6 top auxiliary contact, HFC6 side auxiliary contact, HFT6 air delayed head and HFR6 mechanical interlock
  Certification: CB,CE, SEMKO
- HDR3 thermal overload relay: setting current covering 0.1~93A
  Accessories: independent mounting base
  Certification: CB,CE, SEMKO
- HDZ3 contactor relay: 2NO+2NC, 3NO+1NC, 4NO+0NC, 1NO+3NC and 0NO+4NC
  Accessories: HPCs transparent dust cover, HFD6 top auxiliary contact and HFT6 air delayed head
  Certification: CE

Standards met

- IEC 60947-1 General provisions
- IEC 60947-4-1 Contactors
- IEC 60947-5-1 Relays

Normal installation and operation conditions

Installation position:
The installation site shall be vertical, with inclination at all directions not exceeding ±22.5°. (HDR3 of no greater than 5°); installation Class III;

Pollution class:
Class 3

Ambient temperature:

- In normal operation, the ambient temperature ranges between -5℃ and +40℃ with average value in 24h no more than +35℃ ;
- Storage temperature: -25℃ ~ +55℃ , up to +70℃ within a short time (24h)

Altitude:
Altitude at normal installation position does not exceed 2000m.

Humidity

- The atmospheric relative humidity does not exceed 50% when the highest ambient temperature is +40**℃**. It is allowed to have a relative higher humidity under lower temperature, e.g. up to 90% at +20**℃**.
- For occasional dew due to changes of the temperature, preventive measures shall be taken.

Product protection grade:
IP20

HDC3 AC contactor

Functions and features

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Main Technical Parameters of HDC3

Contactor model			HDC3-06	HDC3-09	HDC3-12	HDC3-18	HDC3-25	HDC3-32	HDC3-38	HDC3-40	HDC3-50	HDC3-65	HDC3-80	HDC3-95
Main circuit characteristics														
Number of poles			3 poles											
Rated insulation voltage(Ui)		V	690											
Rated operational voltage(Ue)		V	660											
Conventional thermal current(Ith)			16	20	20	25	32	40	40	50	60	80	110	110
Rated operational current(Ie)	AC-3,380/400V	A	6	9	12	18	25	32	38	40	50	65	80	95
	AC-3,660/690V	A	3.8	6.6	8.9	12.0	18.0	22.0	22.0	34.0	39.0	42.0	49.0	49.0
	AC-4,380/400V	A	2.6	3.5	5.0	7.7	8.5	12.0	14.0	18.5	24.0	28.0	37.0	44.0
	AC-4,660/690V	A	1	1.5	2.0	3.8	4.4	7.5	8.9	9.0	12.0	14.0	17.3	21.3
Rated operating power (Pe)	AC-3,380/400V	kW	2.2	4.0	5.5	7.5	11.0	15.0	18.5	18.5	22.0	30.0	37.0	45.0
	AC-3,660/690V	kW	3	5.5	7.5	10.0	15.0	18.5	18.5	30.0	33.0	37.0	45.0	45.0
	AC-4,380/400V	kW	1.1	2.2	3.0	4.0	5.5	7.5	7.5	7.5	11.0	15.0	18.5	22.0
	AC-4,660/690V	kW	0.75	1.1	1.5	3.7	4.0	5.5	7.5	7.5	11.0	11.0	15.0	18.5
Mechanical durabilities		10,000 times	1200				1000			900			650	
Electrical durabilities	AC-3	10,000 times	110					90					65	
	AC-4	10,000 times	22					22		17			11	
Operation frequency	AC-3	Time/hour	1200					600						
	AC-4	Time/hour	300					300						
Coil														
Rated control circuit voltage (Us)	50Hz	V	24、36、48、110、127、220/230、240、380/400、415、440											
	50/60Hz	V	24、36、48、110、127、220/230、240、380/400、415、440											
Allowable control circuit voltage(Us)	Operation	V	85%~110% Us											
	Drop-out	V	20%~75% Us											
Coil power	Inrush	VA	50	60			70			200			200	
	Sealed	VA	6~9.5	6~9.5			6~9.5			15~20			15~20	
	Heat dissipation	W	1~3	1~3			1~3			6~10			6~10	
Main circuit terminal wiring capability														
Flexible wire	1 wire	mm²	1…4				1.5…6			2.5…25			4…50	
Without terminal	2 wire	mm²	1…4				1.5…6			2.5…16			4…25	
Flexible wire	1 wire	mm²	1…4				1…6			2.5…25			4…50	
With terminal	2 wire	mm²	1…2.5				1…4			2.5…10			4…16	
Fixed wire	1 wire	mm²	1…4			1.5…6		1.5…10		2.5…25			4…50	
Without terminal	2 wire	mm²	1…4			1.5…6		1.5…6		2.5…10			4…25	
Auxiliary contact														
Conventional thermal current (Ith)		A	10											
Rated operational voltage (Ue)	AC	V	380											
	DC	V	220											
Rated control capacity	AC-15	VA	360											
	DC-13	W	33											
Certification			CB、CE、SEMKO											

HDC3 AC contactor

Functions and features

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Main Technical Parameters of HDC3-N

Contactor model	Rated insulation voltage	Rated operational voltage	Conventional thermal current	Intermittent periodic duty AC-4	
	Ui(V)	Ue(V)	Ith(A)	Ie(A)	Pe(kw)
HDC3-09N	690	380/400	20	3.5	1.5
		660/690		1.5	1.1
HDC3-12N	690	380/400	20	5	2.2
		660/690		2	1.5
HDC3-18N	690	380/400	25	7.7	3.3
		660/690		3.8	3
HDC3-25N	690	380/400	32	8.5	4
		660/690		4.4	4
HDC3-32N	690	380/400	40	12	5.4
		660/690		7.5	5.5
HDC3-38N	690	380/400	40	14	5.5
		660/690		8.9	6
HDC3-40N	690	380/400	50	18.5	7.5
		660/690		9	7.5
HDC3-50N	690	380/400	60	24	11
		660/690		12	10
HDC3-65N	690	380/400	80	28	15
		660/690		14	11
HDC3-80N	690	380/400	110	37	18.5
		660/690		17.3	15
HDC3-95N	690	380/400	110	44	22
		660/690		21.3	18.5

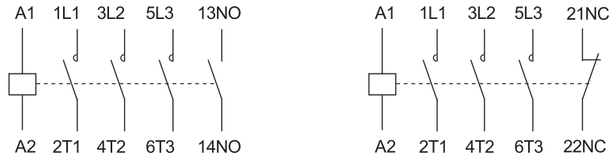
Motor Control and Protection

HDC3 AC contactor

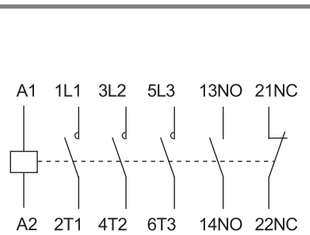
Functions and features

Wiring diagram

HDC3 6~38



HDC3 40~95

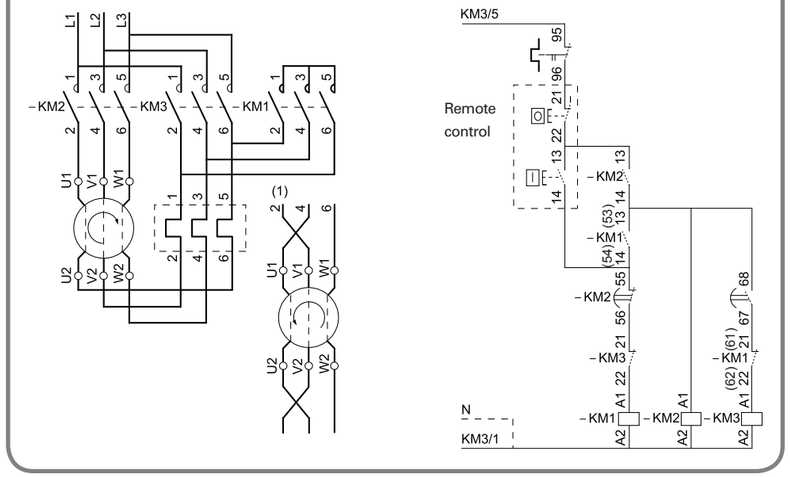


HDC3 AC contactor

Functions and features

Wiring diagram

Wiring diagram for star-delta starter

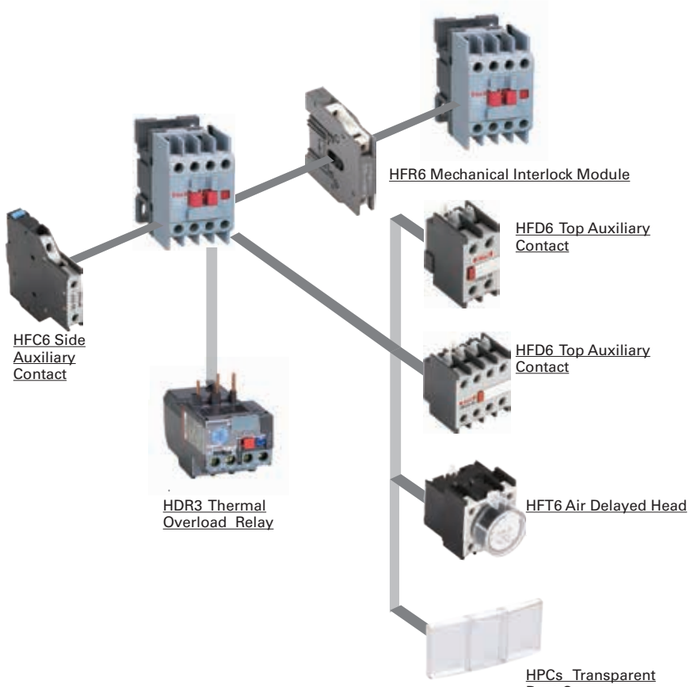


HDC3 AC contactor

Functions and features

Schematic Diagram of Accessory Installation

HDC3 schematic diagram of accessories



Note: HDC3-06 cannot be equipped with side auxiliary contact and mechanical interlock module

Transparent cover

Contact Type	Reference
HDC3-6~38A/HDZ3	HPCs38
HDC3-40~65A	HPCs65
HDC3-80~95A	HPCs95

Note: For the detailed information of accessories of HFC6, HFD6, HFR6, HFT6 etc., please refer to P327, P328.

HDC3 AC Contactor

Order Information

HDC3 AC Contactor

Product Name	Current Specification	Auxiliary Contact	Coil Voltage	Coil frequency
HDC3	06	10	M	5
	↓	↓	↓	↓
	06:6A ... 95:95A	10:1NO+0NC 01:0NO+1NC 11:1NO+1NC	B:24V ... M:220V/230V ... Q:380V/400V ...	5:50Hz 7:50/60Hz

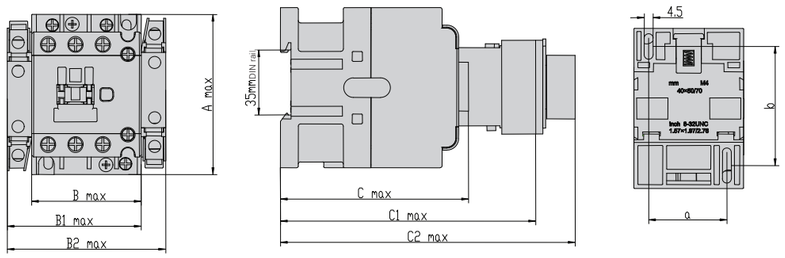
Motor power Pe(KW AC-3,380V)	Rated current Ie(A)	Auxiliary contact		Reference
		NO	NC	
2.2	6	1	0	HDC3 06 10 *
		0	1	HDC3 06 01 *
4	9	1	0	HDC3 09 10 *
		0	1	HDC3 09 01 *
5.5	12	1	0	HDC3 12 10 *
		0	1	HDC3 12 01 *
7.5	18	1	0	HDC3 18 10 *
		0	1	HDC3 18 01 *
11	25	1	0	HDC3 25 10 *
		0	1	HDC3 25 01 *
15	32	1	0	HDC3 32 10 *
		0	1	HDC3 32 01 *
18.5	38	1	0	HDC3 38 10 *
		0	1	HDC3 38 01 *
18.5	40	1	1	HDC3 40 11 *
22	50	1	1	HDC3 50 11 *
30	65	1	1	HDC3 65 11 *
37	80	1	1	HDC3 80 11 *
45	95	1	1	HDC3 95 11 *

Note: Only 3 poles is available
* means coil voltage code + frequency code

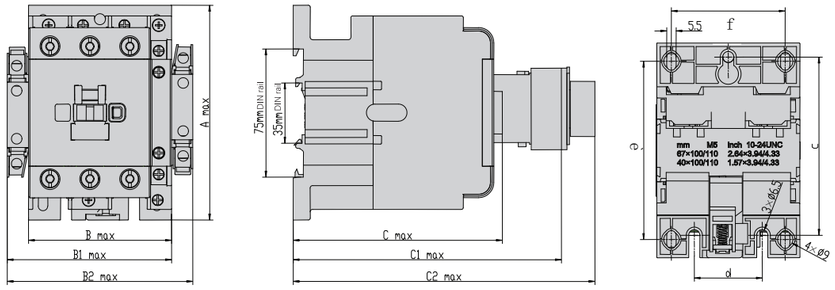
Coil voltage code										
Coil Voltage(V)	24	36	48	110	127	220/230	240	380/400	415	440
*	B	C	E	F	S	M	U	Q	L	X

Overall and installation dimensions

HDC3 06-38A



HDC3-40-95A



Overall and installation dimensions

Overall Dimension of HDC3 06-95A AC contactor

Model	Amax	Bmax	B1max	B2max	Cmax	C1max	C2max
HDC3-06	74.5	45.5	-	-	75	107	132
HDC3-09, 12, 18	74.5	45.5	58	71	82.5	114.5	139.5
HDC3-25, 32, 38	83	56.5	69	82	97	129	154
HDC3-40, 50, 65	127.5	74.5	88	101	117	148.5	173.5
HDC3-80,95	127.5	85.5	99	112	125.5	157	182

Note: B1max-contactor+HFC6 B2max--Contactor+2 pieces of HFC6 C1max--Contactor+HFD6 C2max--Contactor+HFT6

Installation dimension of HDC3 06-95A AC Contactor

Model	a	b	c	d	e	f
HDC3-06	35	50/60	-	-	-	-
HDC3-09, 12, 18	35	50/60	-	-	-	-
HDC3-25, 32, 38	40	50/60	-	-	-	-
HDC3-40, 50, 65	-	-	105	40	100/110	59
HDC3-80,95	-	-	105	40	100/110	67

HDC3-N reversible AC contactor

Order Information

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HDC3-N reversible AC contactor

Product Name	Current Specification	Mechanical interlock	Auxiliary Contact	Coil Voltage	Coil frequency
HDC3	09	N	10	M	5
	↓	↓	↓	↓	↓
	09:9A ... 95:95A	N:Mechanical interlock	10:1NO+0NC 01:0NO+1NC 11:1NO+1NC	B:24V ... M:220V/230V ... Q:380V/400V ...	5:50Hz 7:50/60Hz

Motor powerPe(KW AC-4,380V)	Rated current Ie(A)	Auxiliary contact		Reference
		NO	NC	
1.5	9	1	0	HDC3 09N 10 *
		0	1	HDC3 09N 01 *
2.2	12	1	0	HDC3 12N 10 *
		0	1	HDC3 12N 01 *
3	18	1	0	HDC3 18N 10 *
		0	1	HDC3 18N 01 *
4	25	1	0	HDC3 25N 10 *
		0	1	HDC3 25N 01 *
5.5	32	1	0	HDC3 32N 10 *
		0	1	HDC3 32N 01 *
5.5	38	1	0	HDC3 38N 10 *
		0	1	HDC3 38N 01 *
7.5	40	1	1	HDC3 40N 11 *
11	50	1	1	HDC3 50N 11 *
15	65	1	1	HDC3 65N 11 *
18.5	80	1	1	HDC3 80N 11 *
22	95	1	1	HDC3 95N 11 *

Note: Only 3 poles is available;
* means coil voltage code + frequency code

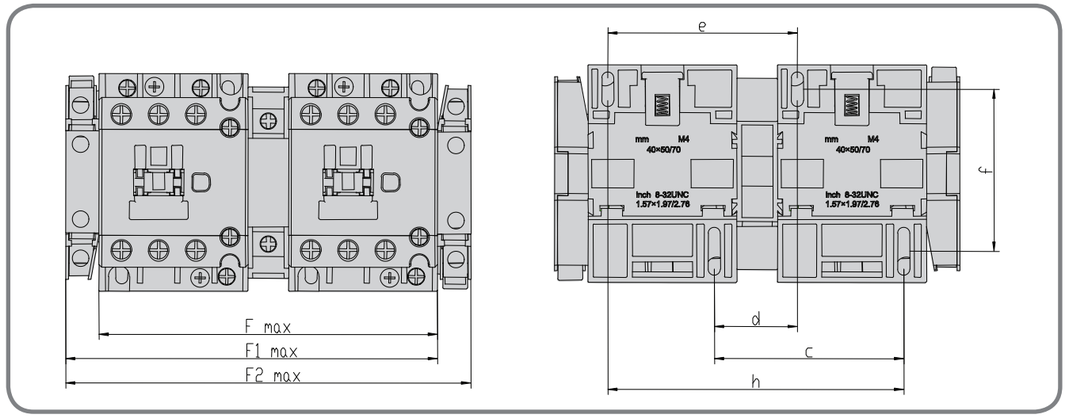
Coil voltage code					
Coil voltage(V)	24	36	110	220/230	380/400
*	B	C	F	M	Q

HDC3-N Directional AC contactor

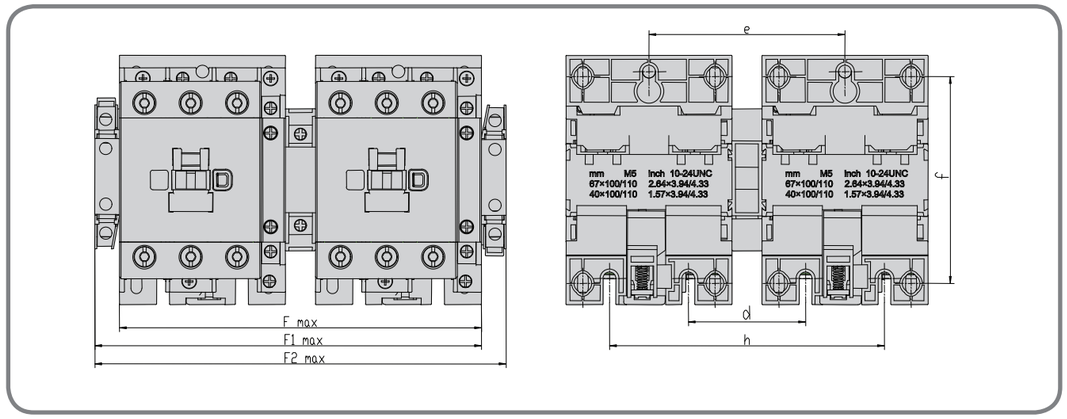
3SERIES MORE VALUE FOR PRICE!

Overall and installation dimensions AC contactor

HDC3-N 09-38A



HDC3-N 40-95A



Overall dimension of HDC3-N 09-95A directional AC contactor

Model	Fmax	F1max	F2max	c	d	e	f	h
HDC3-09N, 12N, 18N	107	120	131	60	25	60	50/60	95
HDC3-25N, 32N, 38N	129	142	153	71	31.5	71	50/60	111.5
HDC3-40N, 50N, 65N	163	180	193	-	50	90	100/110	130
HDC3-80N,95N	186	202	215	-	60	100	100/110	140

Product List

HDC6 AC Contactor

HDC6 AC Contactor

Rated Operational Current	AC-3,	400V	9A	12A	18A	25A	32A	40A	50A	65A	80A	95A	115A	150A	185A	225A	265A	330A	400A	500A	630A
Power of Controlled	AC-3,	400V	4kW	5.5kW	7.5kW	11kW	15kW	18.5kW	22kW	30kW	37kW	45kW	55kW	75kW	90kW	110kW	132kW	160kW	200kW	250kW	335kW
Three-Phase Cage Motor	AC-3,	690V	5.5kW	7.5kW	10kW	15kW	18.5kW	30kW	33kW	37kW	45kW	45kW	80kW	100kW	110kW	129kW	160kW	220kW	280kW	335kW	450kW

Accessories and Spare Parts

Top of Auxiliary Contact		**2 poles:** HFD6-11, HFD6-20, HFD6-02 **4 poles:** HFD6-22, HFD6-13, HFD6-31, HFD6-40, HFD6-04	**2 poles:** HFD6-11, HFD6-20, HFD6-02 **4 poles:** HFD6-22, HFD6-13, HFD6-31, HFD6-40, HFD6-04
Side Auxiliary Contact		**2 poles:** HFC6-11, HFC6-20, HFC6-02	**No side auxiliary contact**
Air Delayed Head		**Making time-delay:** HFT6-20, HFT6-22, HFT6-24 **Breaking time-delay:** HFT6-30, HFT6-32, HFT6-34	**Making time-delay:** HFT6-20, HFT6-22, HFT6-24 **Breaking time-delay:** HFT6-30, HFT6-32, HFT6-34
Mechanical Interlocking Module		HFR6-32 **Adaptive to Product of 9-32A, horizontal installation** HFR6-95 **Adaptive to Product of 40-95A, horizontal installation**	**Horizontal installation and vertical installation**
HX6 Coil		**Order reference:** HX6+AF+Us+frequency **For example:** HX632N7	**Spare parts,** HX6-115-630 (Voltage AC: 230V, 400V for option)
Main Contact		**Not applicable**	**Spare parts,** HMC6-115-630

HDR6 Thermal Overload Relay

Thermal Overload Relay		HDR6-18 0.10-0.15A 0.12-0.18A ... 14-18A	HDR6-32 6.3-9A 9-12A ... 23-32A	HDR6-95 30-40A 37-50A ... 80-95A	HDR6-185 48-65A 255-70A ... 150-185A	HDR6-630F 145-200A 180-250A ... 460-630A

HDZ6 Contactor Relay

Contactor Relay		HDZ6-32, HDZ6-41

HDC6 AC Contactor

Order Information

Product Name	Rated Current	Auxiliary Contact	Coil Voltage	Coil Frequency
HDC6	09	11	M	
	09:9A ... 630:630A	11:1NO+1NC 00:0NO+0NC	B:24V ... X:440V	Default: 50HZ 7:50/60HZ

AC-3, 380/400V		Instant Auxiliary Contact		Reference
Rated Current (A)	Rated Power (KW)			
9	4	1	1	HDC6 09 11*.
12	5.5	1	1	HDC6 12 11*.
18	7.5	1	1	HDC6 18 11*.
25	11	1	1	HDC6 25 11*.
32	15	1	1	HDC6 32 11*.
40	18.5	1	1	HDC6 40 11*.
50	22	1	1	HDC6 50 11*.
65	30	1	1	HDC6 65 11*.
80	37	1	1	HDC6 80 11*.
95	45	1	1	HDC6 95 11*.
115	55	-	-	HDC6 115 00*.
150	75	-	-	HDC6 150 00*.
185	90	-	-	HDC6 185 00*.
225	110	-	-	HDC6 225 00*.
265	132	-	-	HDC6 265 00*.
330	160	-	-	HDC6 330 00*.
400	200	-	-	HDC6 400 00*.
500	250	-	-	HDC6 500 00*.
630	335	-	-	HDC6 630 00*.

Note: "*" Coil voltage code "." Coil frequency

Code Table of Coil Voltage

Coil Voltage (V)	24	36	48	110	127	220	230	240	380	400	415	440
50HZ	B	C	E	F	S	M	-	-	Q	V	L	X
50/60HZ	B7	-	E7	F7	-	M7	N7	U7	Q7	V7	-	-

Note: 115-630AF refers to the actual situation

HDC6-N Directional AC Contactor

Order Information

Product Name	Rated Current	Directional Conatctor	Coil Voltage	Coil Frequency
HDC6	09	N	M	
	09:9A ... 630:630A	N	B:24V ... X:440V	Default: 50HZ 7:50/60HZ

AC-3, 380/400V		Instant Auxiliary Contact		Reference
Rated Current (A)	Rated Power (KW)			
9	4	1	1	HDC6 09N*.
12	5.5	1	1	HDC6 12N*.
18	7.5	1	1	HDC6 18N*.
25	11	1	1	HDC6 25N*.
32	15	1	1	HDC6 32N*.
40	18.5	1	1	HDC6 40N*.
50	22	1	1	HDC6 50N*.
65	30	1	1	HDC6 65N*.
80	37	1	1	HDC6 80N*.
95	45	1	1	HDC6 95N*.
115	55	-	-	HDC6 115N*.
150	75	-	-	HDC6 150N*.
185	90	-	-	HDC6 185N*.
225	110	-	-	HDC6 225N*.
265	132	-	-	HDC6 265N*.
330	160	-	-	HDC6 330N*.
400	200	-	-	HDC6 400N*.
500	250	-	-	HDC6 500N*.
630	335	-	-	HDC6 630N*.

Note: "*" Coil voltage code "." Coil frequency

Code Table of Coil Voltage

Coil Voltage (V)	24	36	48	110	127	220	230	240	380	400	415	440
50HZ	B	C	E	F	S	M	-	-	Q	V	L	X
50/60HZ	B7	-	E7	F7	-	M7	N7	U7	Q7	V7	-	-

Note: 115-630AF refers to the actual situation

HDC6 AC Contactor

Main Technical Parameter

Main Technical Parameter





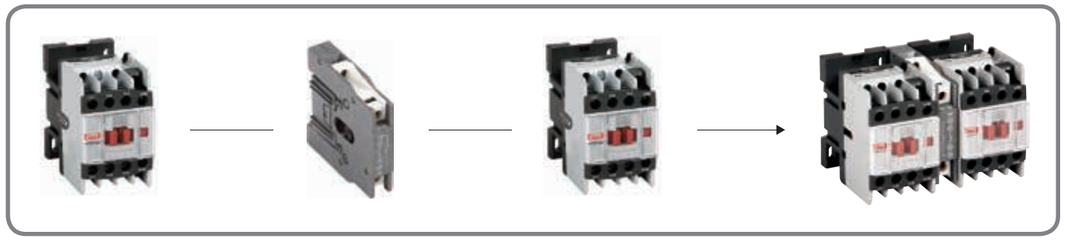



Model	HDC6-09	HDC6-12	HDC6-18	HDC6-25	HDC6-32	HDC6-40	HDC6-50	HDC6-65	HDC6-80	HDC6-95
Main Circuit Characteristics										
Rated Operational Current (AC380V/400V) Ie, AC-3	9A	12A	18A	25A	32A	40A	50A	65A	80A	95A
Ie, AC-4	3.5A	8.9A	12A	18A	21A	34A	39A	42A	49A	55A
Ie, AC-1	20A	20A	32A	40A	50A	60A	80A	80A	125A	125A
Rated Isolation Voltage (Ui)	690V									
Rated Operational Voltage (Ue)	690V									
Number of Poles	3									
Rated Operational Power Class AC-3 220/240V	2.2kW	3kW	4kW	5.5kW	7.5kW	11kW	15kW	18.5kW	22kW	25kW
380/400V	4kW	5.5kW	7.5kW	11kW	15kW	18.5kW	22kW	30kW	37kW	45kW
415/440V	4kW	5.5kW	9kW	11kW	15kW	22kW	25kW	37kW	45kW	45kW
660/690V	5.5kW	7.5kW	10kW	15kW	18.5kW	30kW	33kW	37kW	45kW	45kW
AC-3 Electric durabilities (10 thousand times)	100	100	100	100	80	80	80	80	60	60
AC-3 Operating Rate (time/h)	1200	1200	1200	1200	600	600	600	600	600	600
Mechanical Durabilities (10 thousand times)	1000	1000	1000	1000	800	800	800	800	800	800
Coil										
Rated Control Circuit Voltage (Us) 50Hz	24V, 36V, 48V, 110V, 127V, 220V, 380V, 400V, 415V, 440V									
Rated Control Circuit Voltage (Us) 50/60Hz	24V, 48V, 110V, 220V, 230V, 240V, 380V, 400V									
Allowable Control Circuit Voltage (Us) Operation	85%~110% Us									
Allowable Control Circuit Voltage (Us) Drop-out	20%~75% Us									
Coil Power Inrush VA	70			110			200			
Coil Power Sealed VA	8			11			20			
Coil Power Heat dissipation W	1.8~2.7			3~4			6~10			
Terminal Wiring Ability										
Flexible Wire Without Terminal Block 1 pc (wire section mm^2)	1~4	1~4	1.5~6	1.5~10	2.5~10	2.5~25	2.5~25	2.5~25	4~50	4~50
Flexible Wire Without Terminal Block 2 pcs (wire section mm^2)	1~4	1~4	1.5~6	1.5~6	2.5~10	2.5~16	2.5~16	2.5~16	4~25	4~25
Flexible Wire With Terminal Block 1 pc (wire section mm^2)	1~4	1~4	1~6	1~6	1~10	2.5~25	2.5~25	2.5~25	4~50	4~50
Flexible Wire With Terminal Block 2 pcs (wire section mm^2)	1~2.5	1~2.5	1~4	1~4	1.5~6	2.5~10	2.5~10	2.5~10	4~16	4~16
Fixed Wire Without Terminal Block 1 pc (wire section mm^2)	1~4	1~4	1.5~6	1.5~6	1.5~10	2.5~25	2.5~25	2.5~25	4~50	4~50
Fixed Wire Without Terminal Block 2 pcs (wire section mm^2)	1~4	1~4	1.5~6	1.5~6	2.5~10	2.5~16	2.5~16	2.5~16	4~25	4~25
Auxiliary Contact										
Rated Thermal Current (Ith) A	10									
Rated Operational Voltage (Ue) AC V	400									
Rated Operational Voltage (Ue) DC V	220									
Rated Control Capacity AC-15 VA	360									

Contactor Type	HDC6-115	HDC6-150	HDC6-185	HDC6-225	HDC6-265	HDC6-330	HDC6-400	HDC6-500	HDC6-630
Main Circuit Characteristics									
Rated Operational Current (AC380V/400V) Ie, AC-3	115A	150A	185A	225A	265A	330A	400A	500A	360A
Ie, AC-4	52A	60A	79A	85A	105A	117A	138A	147A	188A
Ie, AC-1	200A	250A	275A	315A	350A	400A	500A	630A	800A
Rated Isolation Voltage (Ui)	1000V								
Rated Operational Voltage (Ue)	690V								
Number of Pole	3								
Rated Operational Power Class AC-3 220/240V	30kW	40kW	55kW	63kW	75kW	100kW	110kW	147kW	200kW
380/400V	55kW	75kW	90kW	110kW	132kW	160kW	200kW	250kW	335kW
415/440V	59kW	80kW	100kW	110kW	140kW	180kW	220kW	280kW	375kW
660/690V	80kW	100kW	110kW	129kW	160kW	220kW	280kW	335kW	450kW
AC-3 Electric durabilities (10 thousand times)	120	120	100	100	80	80	80	80	80
AC-3 Operating Rate (time/h)	600	600	600	600	600	600	300	300	300
Mechanical Durabilities (10 thousand times)	1000	1000	600	600	600	600	600	600	600
Coil									
Rated Control Circuit Voltage (Us) 50Hz	110V, 127V, 220V, 230V, 240V, 380V, 400V, 440V								
Rated Control Circuit Voltage (Us) 50/60Hz	110V, 220V, 380V (115-225AF)								
Allowable Control Circuit Voltage (Us) Operation	85%~110% Us								
Allowable Control Circuit Voltage (Us) Drop-out	20%~75% Us								
Coil Power Inrush VA	550		800		1200		1200	1250	1650
Coil Power Sealed VA	45		55		13		20	24	22
Coil Power Heat dissipation W	16		24		12		14	18	20
Terminal Wiring Ability									
Fixed Wire Without Terminal Block 1 pc (wire section mm^2)	95	120	150	185	240	240	-	-	-
Fixed Wire Without Terminal Block 2 pcs (wire section mm^2)	-	-	-	-	-	-	150	240	-
Copper Bar 2 pcs (size mm^2)	20*3	25*3	25*3	32*4	32*4	30*5	30*5	40*5	60*5
Auxiliary Contact									
Rated Thermal Current (Ith) A	10								
Rated Operational Voltage (Ue) AC V	400								
Rated Operational Voltage (Ue) DC V	220								
Rated Control Capacity AC-15 VA	360								

HDC6 AC Contactor

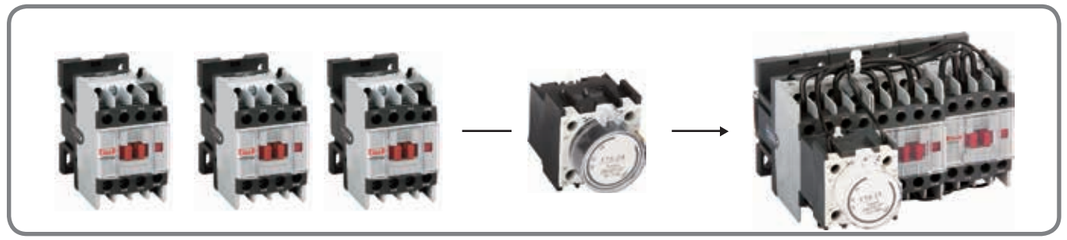
Directional Contactor



Directional Contactor (horizontal installation)	Rated Capacity (kW) AC-3		Rated Current (Ie) AC-3		Rated Thermal Current (A) AC-1
	400V	690V	400V	690V	
HDC6-09N	4	5.5	9	6.6	20
HDC6-12N	5.5	7.5	12	8.9	20
HDC6-18N	7.5	10	18	12	32
HDC6-25N	11	15	25	18	40
HDC6-32N	15	18.5	32	21	50
HDC6-40N	18.5	30	40	34	60
HDC6-50N	22	33	50	39	80
HDC6-65N	30	37	65	42	80
HDC6-80N	37	45	80	49	125
HDC6-95N	45	45	95	55	125
HDC6-115N	55	80	115	86	200
HDC6-150N	75	100	150	108	200
HDC6-185N	90	110	185	118	275
HDC6-225N	110	129	225	137	275
HDC6-265N	132	160	265	170	315
HDC6-330N	160	220	330	235	380
HDC6-400N	200	280	400	303	450
HDC6-500N	250	335	500	353	630
HDC6-630N	335	450	630	462	800

HDC6 AC Contactor

Option for Star Delta Starter



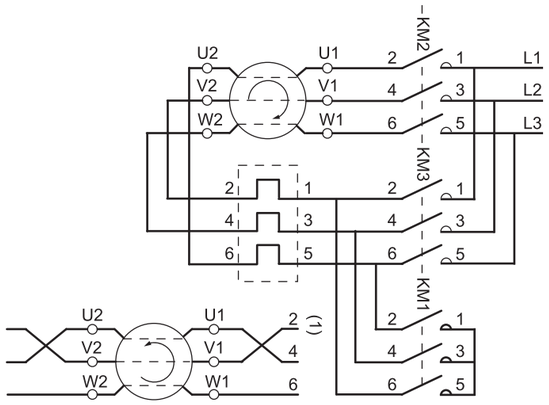
Contactor (HDC6-09~95)

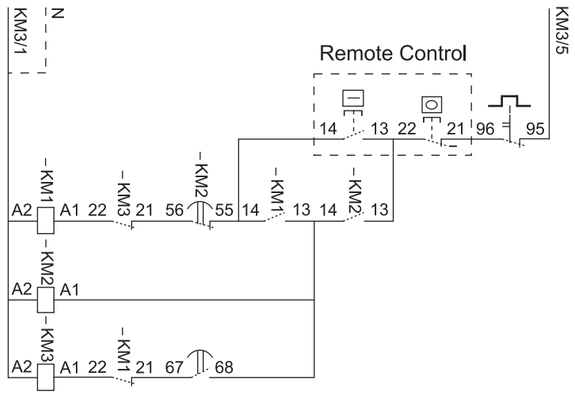
Max. Starting Frequency, 30 time/h; Max. Starting Time, 30s							
Motor			Contactor	Contactor	Contactor	Thermal Overload Relay	
Class AC-3 50Hz 3-Phase Electromotor Delta Connection			Straight Connection KM2	Delta Connection KM3	Star Connection KM1		
P (KW)	In (A)	IrD (A)	Type	Type	Type	Type	Setting Range (A)
1.5	3.5	2	HDC6-09	HDC6-09	HDC6-09	HDR6-18	1.8~2.5
2.2	5	3	HDC6-09	HDC6-09	HDC6-09	HDR6-18	2.5~3.6
3	6.6	4	HDC6-09	HDC6-09	HDC6-09	HDR6-18	3.5~4.8
4	8.5	5	HDC6-09	HDC6-09	HDC6-09	HDR6-18	4.5~6.3
5.5	11.5	6	HDC6-09	HDC6-09	HDC6-09	HDR6-18	5~7
7.5	15.5	9	HDC6-12	HDC6-12	HDC6-09	HDR6-18	9~12
9	18.5	11	HDC6-18	HDC6-18	HDC6-12	HDR6-18	11~15
11	22	13	HDC6-18	HDC6-18	HDC6-12	HDR6-18	11~15
15	30	16	HDC6-25	HDC6-25	HDC6-18	HDR6-32	14~18
18.5	37	22	HDC6-25	HDC6-25	HDC6-18	HDR6-32	18~25
22	44	26	HDC6-32	HDC6-32	HDC6-25	HDR6-32	23~32
30	60	35	HDC6-40	HDC6-40	HDC6-32	HDR6-95	30~40
37	72	40	HDC6-50	HDC6-50	HDC6-40	HDR6-95	37~50
45	85	47	HDC6-65	HDC6-65	HDC6-50	HDR6-95	37~50
55	105	58	HDC6-80	HDC6-80	HDC6-65	HDR6-95	55~70
75	138	78	HDC6-95	HDC6-95	HDC6-80	HDR6-95	63~80

HDC6 AC Contactor

Option for Star-Delta Starter

Wiring Diagram for Star-Delta Starter

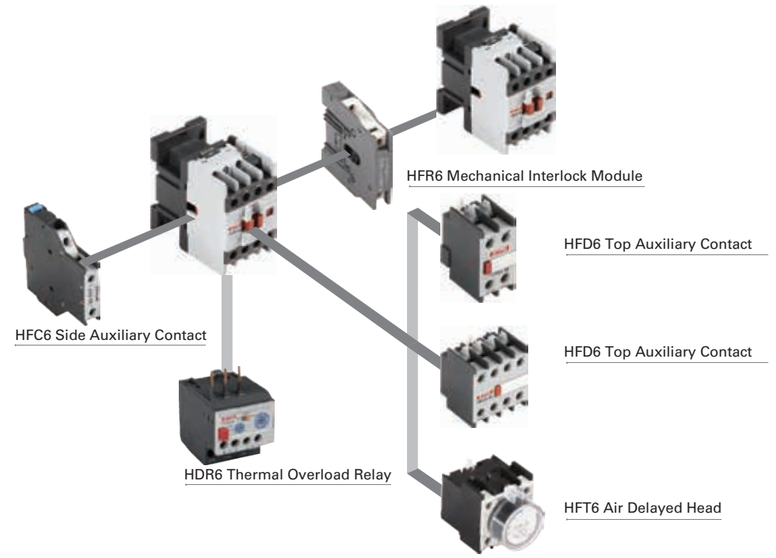




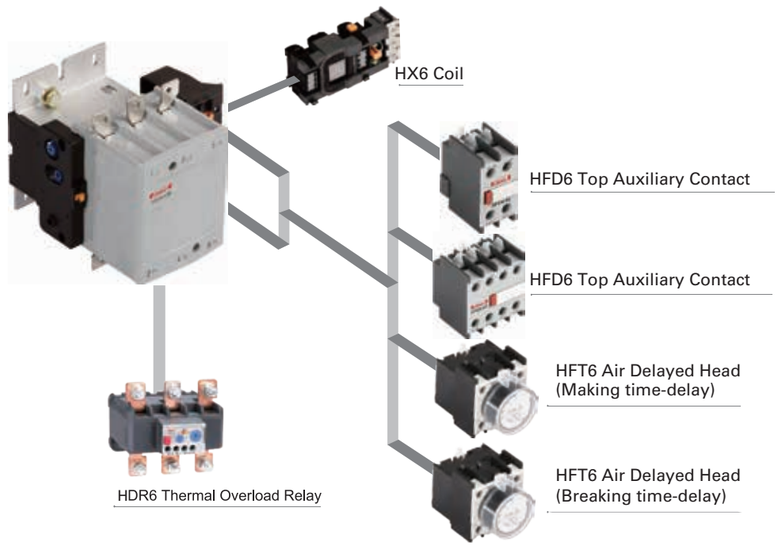
HDC6 AC Contactor

Accessories

HDC6-9~95A Contactor Accessory



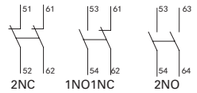
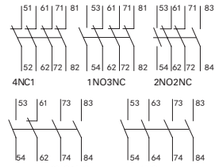
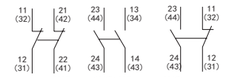
HDC6-115~630A Contactor Accessory



HDC6 AC Contactor

Accessories

Auxiliary Contact

Installation Position	Pole	Composition NO	Composition NC	Contact Point Layout	Reference
Top	2	0	2		HFD6 02
		1	1		HFD6 11
		2	0		HFD6 20
	4	0	4		HFD6 04
		1	3		HFD6 13
		2	2		HFD6 22
		3	1		HFD6 31
		4	0		HFD6 40
Side	2	0	2		HFC6 02
		1	1		HFC6 11
		2	0		HFC6 20

HFT6 Air Delayed Head

Installation Position	Delay Type	Wiring Diagram	Delay Range	Reference
Top	Making time-delay		0.1-3s 0.1-30s 10-180s	HFT6 20 HFT6 22 HFT6 24
	Breaking time-delay		0.1-3s 0.1-30s 10-180s	HFT6 30 HFT6 32 HFT6 34

HDC6 AC Contactor

Accessories

Mechanical Interlock Module

Horizontal Installation		
Interlock Method	Contact Type	Reference
Mechanical interlock with electrical interlock	HDC6-9~32	HFR6 32 H
	HDC6-40~95	HFR6 95 H
Mechanical interlock without electrical interlock	HDC6-115~150	HFR6 FF H
	HDC6-185~225	HFR6 GGH
	HDC6-265~330	HFR6 HHH
	HDC6-400~500	HFR6 KK H
	HDC6-630	HFR6 LL H

Vertical Installation (Mechanical interlock without electrical interlock)		
Contact Type		Interlock Device Reference
Bottom	Top	
HDC6-115 or HDC6-150	HDC6-115	HFR6 FF V
	HDC6-150	HFR6 FF V
	HDC6-185	HFR6 FG V
	HDC6-225	HFR6 FG V
	HDC6-265	HFR6 FH V
	HDC6-330	HFR6 FH V
	HDC6-400	HFR6 FH V
	HDC6-500	HFR6 FH V
	HDC6-630	HFR6 FL V
HDC6-185 or HDC6-225	HDC6-185	HFR6 GG V
	HDC6-225	HFR6 GG V
	HDC6-265	HFR6 GK V
	HDC6-330	HFR6 GK V
	HDC6-400	HFR6 GK V
	HDC6-500	HFR6 GK V
	HDC6-630	HFR6 GL V
HDC6-265 or HDC6-330	HDC6-265	HFR6 HK V
	HDC6-330	HFR6 HK V
	HDC6-400	HFR6 HK V
	HDC6-500	HFR6 HK V
	HDC6-630	HFR6 HL V
HDC6-400	HDC6-400	HFR6 HK V
	HDC6-500	HFR6 HK V
	HDC6-630	HFR6 HL V
HDC6-500	HDC6-500	HFR6 HK V
	HDC6-630	HFR6 HL V
HDC6-630	HDC6-630	HFR6 LL V

Note: Vertical installation adopts mechanical Interlock device equipped with the interlock without electricity

HDC6 AC Contactor

Accessories

HX6 Coil

Adaptive Contactor	Coil Voltage	Reference
115A-150A	220V	HX6 150 M
	380V	HX6 150 Q
185A-225A	220V	HX6 225 M
	380V	HX6 225 Q
265A-330A	220V	HX6 330 M
	380V	HX6 630 M
400A	220V	HX6 630 Q
	380V	HX6 400 M
500A	220V	HX6 400 Q
	380V	HX6 500 M
630A	220V	HX6 500 Q
	380V	HX6 330 Q

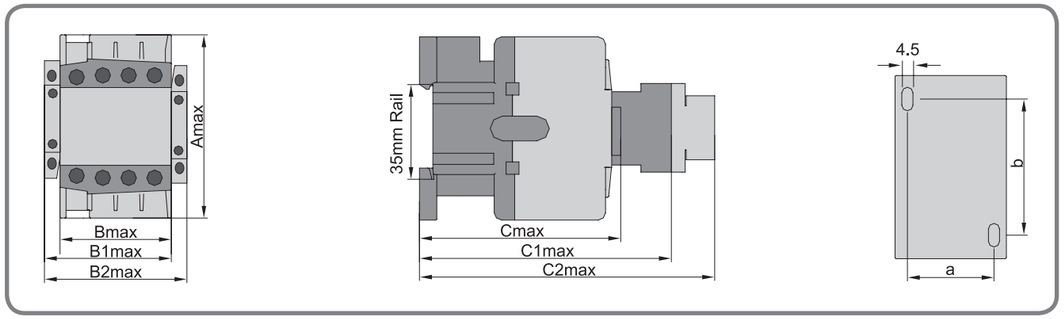
HMC6 Main Contact

Number of Poles	Contactor Current Specification	Reference
3	115A	HMC6 115
	150A	HMC6 150
	185A	HMC6 185
	225A	HMC6 225
	265A	HMC6 265
	330A	HMC6 330
	400A	HMC6 400
	500A	HMC6 500
	630A	HMC6 630

HDC6 AC Contactor

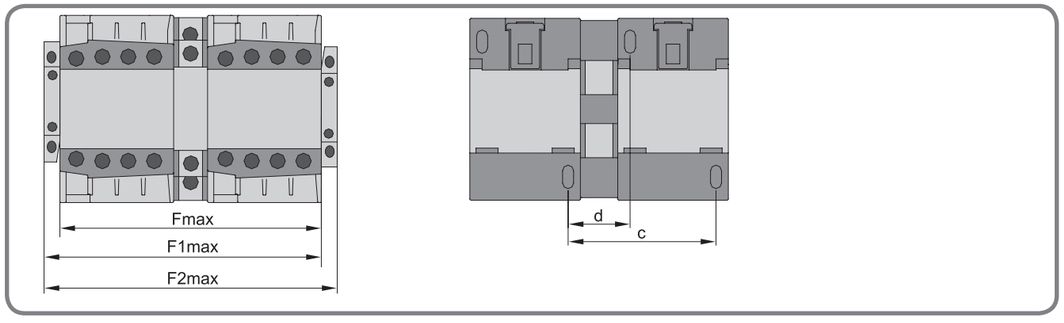
Overall Dimension of Installation

HDC6-9~32



HDC6	9/12	18	25/32
A	74.5	74.5	80
B (without accessory)	45.5	45.5	56.5
B1 (with one HFC6)	58	58	69
B2 (with two HFC6)	71	71	82
C (without accessory)	84	89	99.5
C1 (with HFD6)	116	122	132
C2 (with HFT6)	141	145	156
a	35	35	40
b	50/60	50/60	50/70

HDC6-9~32N

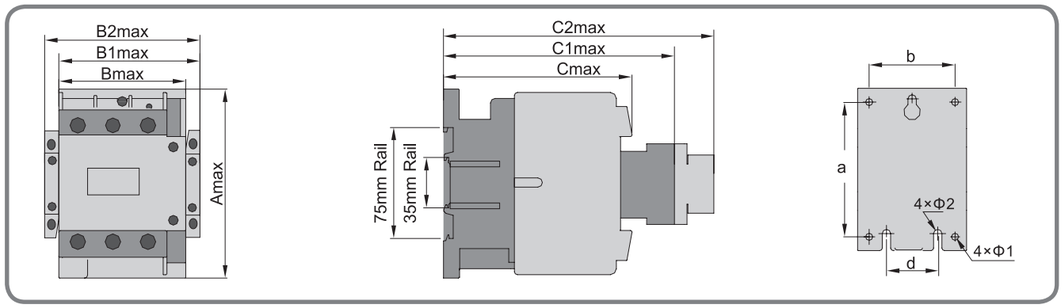


HDC6	9N/12N	18N	25N/32N
F (without accessory)	108	108	132
F1 (with one HFC6)	119	119	143
F2 (with two HFC6)	131	131	155
c	60	60	71.5
d	25	25	31.5

HDC6 AC Contactor

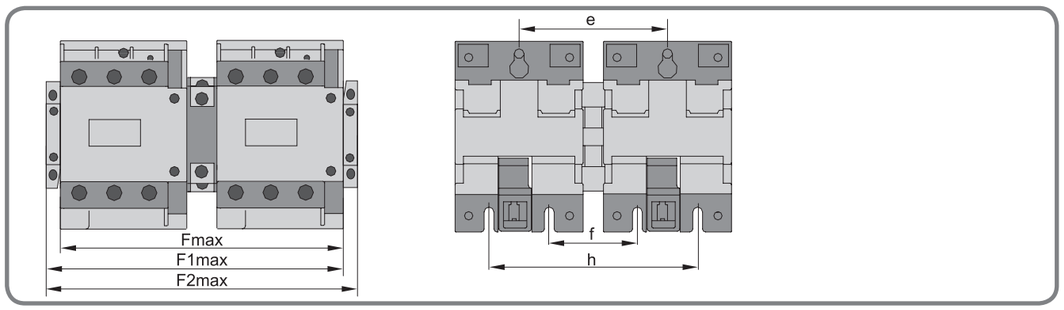
Overall Dimension of Installation

HDC6-40~95



HDC6	40/50/65	80/95
A	127	127
B (without accessory)	75	85
B1 (with one HFC6)	89	99
B2 (with two HFC6)	102	112
C (without accessory)	118.5	127.5
C1 (with HFD6)	150	160
C2 (with HFT6)	175	185
a	105	105
b	59	67
c	105	105
d	40	40
Φ1	5.5	5.5
Φ2	6.5	6.5

HDC6-40N~95N

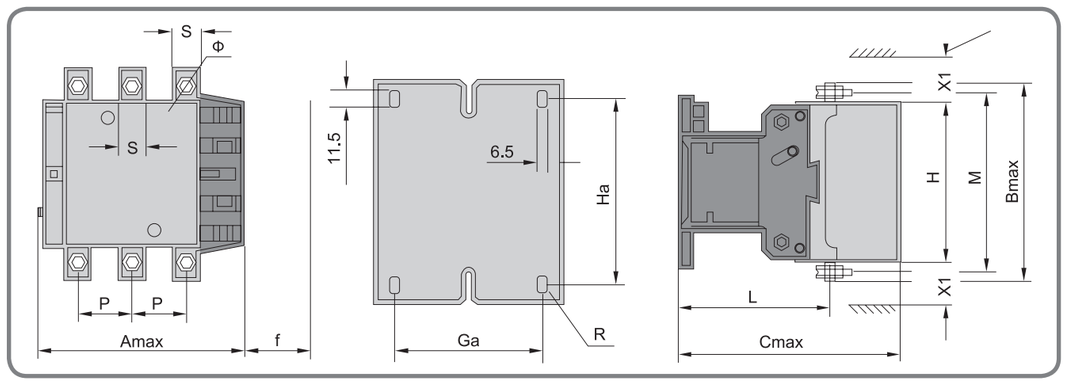


HDC6	40N/50N/65N	80N/95N
F (without accessory)	169	190
F1 (with one HFC6)	182	203
F2 (with two HFC6)	195	216
e	90	100.5
f	50	60.5
h	130	140

HDC6 AC Contactor

Overall Dimension of Installation

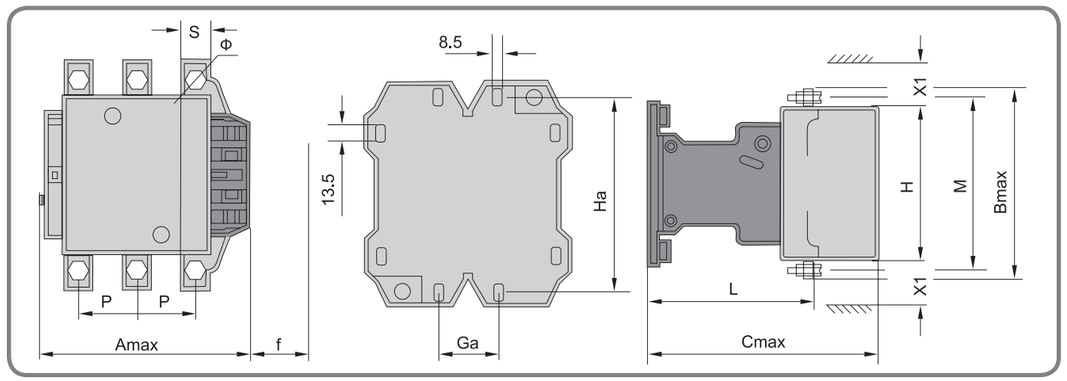
HDC6-115~330



Type	Amax	Bmax	Cmax	P	S	φ	f	M	H	L	X1 (200-550V)	X1 (600-1000V)	Ga	Ha
HDC6-115	167	163	172	37	20	M6	131	147	124	107	10	15	80	110~120
HDC6-150	167	171	172	40	20	M8	131	150	124	107	10	15	80	110~120
HDC6-185	171	174	183	40	20	M8	131	154	127	113.5	10	15	80	110~120
HDC6-225	171	197	183	48	25	M10	131	172	127	113.5	10	15	80	110~120
HDC6-265	202	203	215	48	25	M10	147	178	147	141	10	15	96	110~120
HDC6-330	213	206	220	48	25	M10	147	181	158	145	10	15	96	110~120

Note: ‘f’ reserved space to ensure draw-out coil can take out easily

HDC6-400~500



Type	Amax	Bmax	Cmax	P	S	φ	f	M	H	L	X1 (200-550V)	X1 (600-1000V)	Ga	Ha
HDC6-400	213	206	220	48	25	M10	146	181	158	145	15	20	80	170~180
HDC6-500	223	233	233	55	30	M10	150	208	172	146	15	20	80	170~180

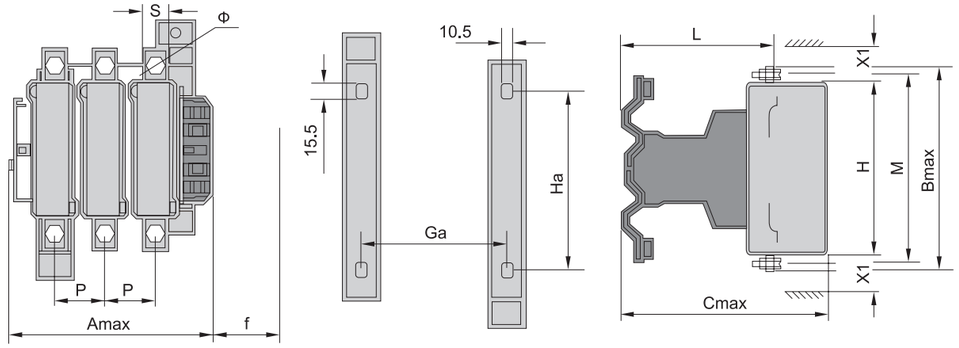
Note: ‘f’ reserved space to ensure draw-out coil can take out easily

Motor Control and Protection

HDC6 AC Contactor

Overall Dimension of Installation

HDC6-630



Type	Amax	Bmax	Cmax	P	S	φ	f	M	H	L	X1 (200-550V)	X1 (600-1000V)	Ga	Ha
HDC6-630	309	304	256	80	40	M12	181	264	202	155	20	30	180	180~190

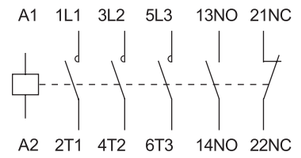
Note: ‘f’ reserved space to ensure draw-out coil can take out easily

HDC6 AC Contactor

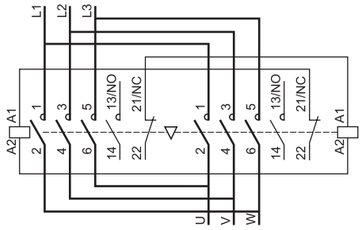
Overall Dimension of Installation

Wiring Diagram

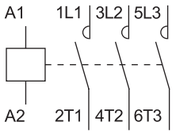
HDC6 -09~95



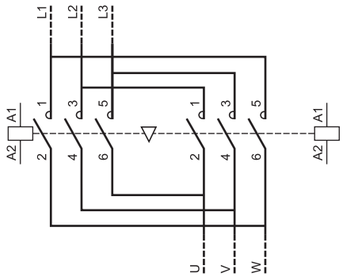
HDC6-09N~95N
(Horizontal Installation, Mechanical +Electrical Interlock)



HDC6-115~630



HDC6-115N~630N
(Horizontal Installation, Mechanical Interlock)



HJX2 4P AC Contactor

Standard: IEC 60947-4-1

CE

Function

HJX2 4P AC contactors provide:
- Remote make & break of circuits
- Frequent start and stop of motors

Order Information

Motor P(kW) AC-380/400V	Rated current(A) AC-3 380/400V	Main contact		Reference
4	9	4	0	HJX20904*7
		2	2	HJX20908*7
5.5	12	4	0	HJX21204*7
		2	2	HJX21208*7
11	25	4	0	HJX22504*7
		2	2	HJX22508*7
18.5	40	4	0	HJX24004*7
		2	2	HJX24008*7
22	50	4	0	HJX25004*7
		2	2	HJX25008*7
30	65	4	0	HJX26504*7
		2	2	HJX26508*7
37	80	4	0	HJX28004*7
		2	2	HJX28008*7
45	95	4	0	HJX29504*7
		2	2	HJX29508*7

Reference Description

Product name	Rated current	Main Contact	Coil Voltage	Coil Frequency
HJX2	09	04	*	7
	09:9A 12:12A ... 95:95A	04:4NO+0NC 08:2NO+2NC	B:24V ... X:440V	7:50/60Hz

Coil voltage code

Coil voltage	24V	36V	48V	110V	127V	220V	230V	240V	380V	400V	415V	440V
*	B	C	E	F	S	M	N	U	Q	V	L	X

HJX2 4P AC Contactor

Standard: IEC 60947-4-1

CE

Technical Data

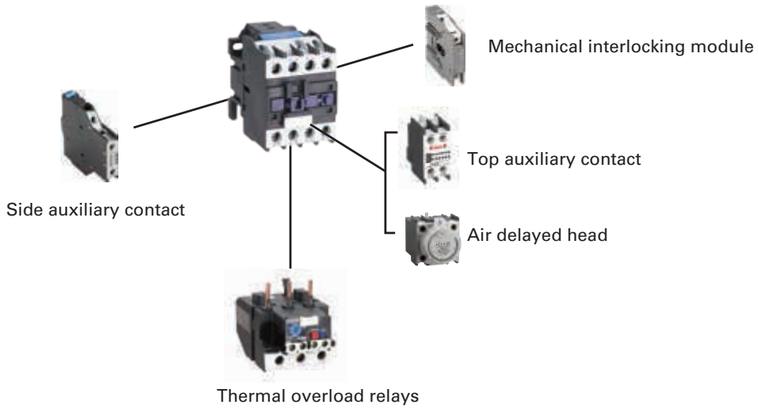
Model			HJX2-09	HJX2-12	HJX2-25	HJX2-40	HJX2-50	HJX2-65	HJX2-80	HJX2-95
Main circuit characteristics										
Rated Operational voltage （Ue）							690V			
Rated Isolation Voltage（Ui）							690V			
Rated Impulse Withstand Voltage（Uimp）							8kV			
Conventional thermal current A			25	25	40	60	80	80	125	125
Rated Operational Current	380/400V AC-3	A	9	12	25	40	50	65	80	95
	660/690V AC-3	A	6.6	8.9	18	34	39	42	49	49
	380/400V AC-4	A	3.3	5	8.5	18.5	24	28	37	44
	660/690V AC-4	A	1.5	2	4.4	9	12	14	17.3	21.3
Rated Power of controlled3 -phase cage motor	380/400V AC-3	KW	4	5.5	11	18.5	22	30	37	45
	660/690V AC-3	KW	5.5	7.5	15	30	33	37	45	45
	380/400V AC-4	KW	1.2	2.2	4	7.5	11	15	18.5	22
	660/690V AC-4	KW	1.1	1.5	4	7.5	11	11	15	18.5
Electric durabilities	AC-3	$\times10^4$ operations	70	70	70	56	56	56	42	42
	AC-4	$\times10^4$ operations	14	14	14	10	10	10	7	7
Mechanical durabilities		$\times10^4$ operations	1000	1000	1000	800	800	800	600	600
Operating rate	220/380V	cycles/h	1200	1200	1200	600	600	600	600	600
40% load factor	660V	cycles/h	300	300	300	300	300	300	300	300
Matched fuse			HRT16-25	HRT16-25	HRT16-50	HRT16-63	HRT16-80	HRT16-80	HRT16-125	HRT16-125
Cable connection cross section		mm^2	1.5	1.5	4	10	16	16	25	35
Coil										
Coil Voltage(Us)		V	AC24V, 36V, 48V, 110V, 127V, 220V, 230V, 240V, 380V, 400V, 415V, 440V							
Operational voltage		V	85%...110% Us							
Drop-out voltage		V	20%...75% Us							
Coil Power	Inrush	VA	70	70	110	200	200	200	200	200
	Sealed	VA	9	9	11	24	24	24	24	24
	Heat Dissipation	W	2.7	2.7	4	10	10	10	10	10
Terminal Wiring Ability										
Flexible Wire Without Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4	1～4	1.5～6	2.5～25	2.5～25	2.5～25	4～50	4～50
	2pc(Section of Connecting Conduction mm^2)		1～4	1～4	1.5～6	2.5～16	2.5～16	2.5～16	4～25	4～25
Flexible Wire With Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4	1～4	1～6	2.5～25	2.5～25	2.5～25	4～50	4～50
	2pc(Section of Connecting Conduction mm^2)		1～2.5	1～2.5	1～4	2.5～10	2.5～10	2.5～10	4～16	4～16
Fixed Wire Without Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4	1～4	1.5～6	2.5～25	2.5～25	2.5～25	4～50	4～50
	2pc(Section of Connecting Conduction mm^2)		1～4	1～4	1.5～6	2.5～16	2.5～16	2.5～16	4～25	4～25
Auxiliary Contact										
Rated Thermal Current (Ith)		A	10							
Rated Operational Voltage (Ue)	AC	V	400							
	DC	V	220							
Rated Control Capacity	AC-15	VA	360							
	DC-13	VA	33							

Motor Control and Protection

HJX2 4P AC Contactor

Standard: IEC 60947-4-1

HJX2-4P Contactor Accessories



Contactor

	9	12	25	40	50	65	80	95		
Top auxiliary contact	2 Poles:HF411,HF402,HF420 4 Poles:HF404,HF413,HF422,HF431,HF440									
Side auxiliary contact	2 Poles:HFC611,HFC602,HFC620									
Air delayed head	Making time-delay:HSK420,HSK422,HSK424 Breaking time-delay:HSK430,HSK432,HSK434									
Mechanical interlocking module	9-25A:HFR632H 40-95A:HFR695HX									
Thermal overload relays	**HJRS1D-25** 0.1-0.16A ... 17-25A			**HJRS1D-36** 23-32A 30-40A		**HJRS1D-93** 23-32A ... 80-93A				

HJX2 4P AC Contactor

Standard: IEC 60947-4-1

Accessories

HF4 Top auxiliary contact

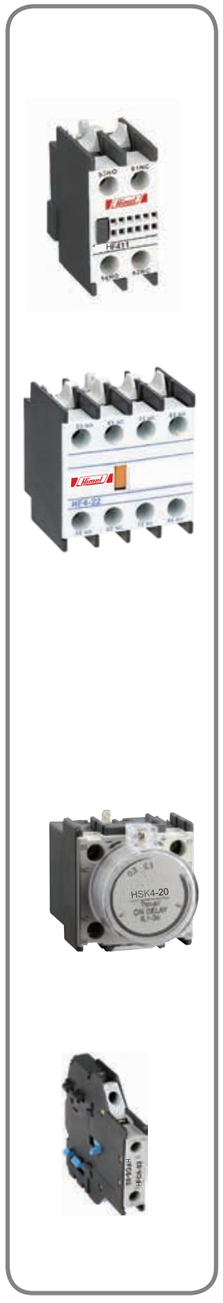
Pole	Contact NO	Contact NC	Wiring diagram	Reference
2P	1	1		HF411
	0	2		HF402
	2	0		HF420
4P	0	4		HF404
	1	3		HF413
	2	2		HF422
	3	1		HF431
	4	0		HF440

HSK4 Air delayed head

Delay Type	Wiring diagram	Delay Range	Reference
Making time-delay		0.1-3S	HSK420
		0.1-30S	HSK422
		10-180S	HSK424
Breaking time-delay		0.1-3S	HSK430
		0.1-30S	HSK432
		10-180S	HSK434

HFC6 Side auxiliary contact

Pole	Contact NO	Contact NC	Wiring diagram	Reference
2P	0	2		HFC602
	1	1		HFC611
	2	0		HFC620



HJX2 4P AC Contactor

Standard: IEC 60947-4-1

Accessories

Mechanical interlocking module

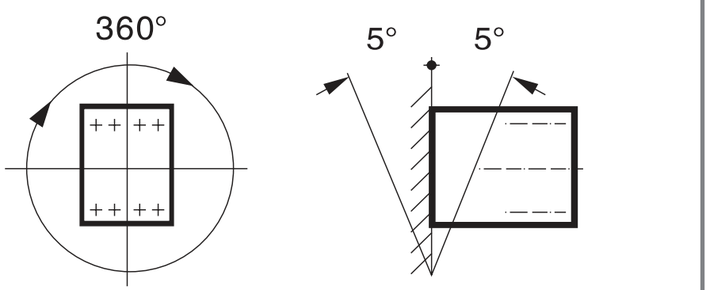
Contactor Specifications	Reference
HJX2-9~25	HFR632H
HJX2-40~95	HFR695HX

Working Conditions

- Ambient temperature:-5°C+40°C, the daily average temperature ≤ 35°C
- Altitude: ≤ 2000 m;
- The atmospheric relative humidity does not exceed 50% when the highest ambient temperature is +40°C. It is allowed to have a relative higher humidity under lower temperature, e.g. up to 90% at +20°C. For occasional dew due to changes of the temperature, preventive measures shall be taken.
- Pollution Level: 3

Installation Conditions

- Installation Type: Ⅲ
- Installation position: Should be installed in the absence of a significant shake and shock and vibration place.The installation site shall be vertical , with inclination at all directions not exceeding ±5°



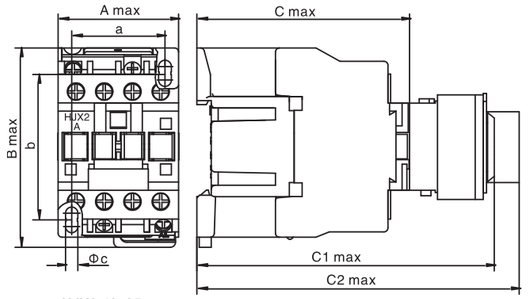
HJX2 4P AC Contactor

Standard: IEC 60947-4-1

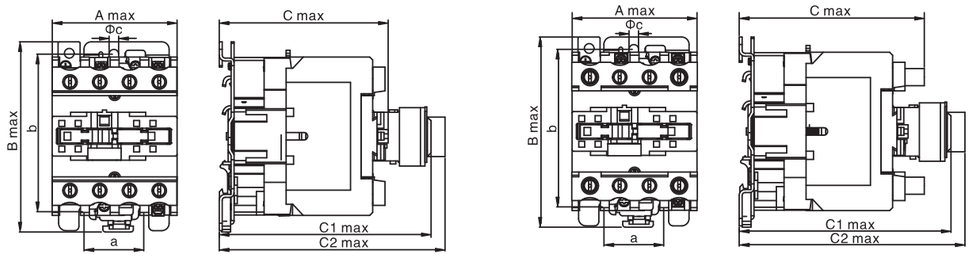
Overall Dimensions

Unit:mm

■ HJX2-09~25



■ HJX2-40~95



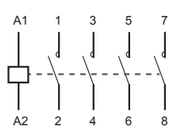
Overall dimesions & mounting figures Unit:mm

Model	A max	B max	C max	C1 max	C2 max	a	b	c
HJX2-0904,0908,1204,1208	47	76	82	115	134	35	50/60	4.5
HJX2-2504,2508	58	86	96	130	149	40	50/60	4.5
HJX2-4004,5004,6504	85	128	116	149	168	40	100/110	6.5
HJX2-4008,5008,6508	85	128	126	149	168	40	100/110	6.5
HJX2-8004,9504	96	128	127	160	179	40	100/110	6.5
HJX2-8008,9508	96	128	136	160	179	40	100/110	6.5

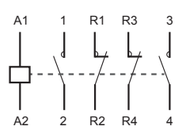
Remark: C1max—Cotactor+HF4(or HFD6) C2max—Cotactor+HSK4(or HFT6)

Wiring diagram

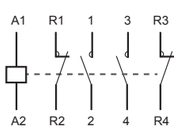
■ HJX2-0904~9504



■ HJX2-0908~2508



■ HJX2-4008~9508



Motor Control and Protection

HJX2-F 4P AC Contactor

Standard: IEC 60947-4-1

CE

Function

HJX2-F 4P AC contactors provide:
- Remote make & break of circuits
- Frequent start and stop of motors

Order Information

Motor P(kW) AC-380/400V	Rated current(A) AC-3 380/400V	Main contact		Reference
55	115	4	0	HJX2F1154*7
75	150	4	0	HJX2F1504*7
90	185	4	0	HJX2F1854*7
100	225	4	0	HJX2F2254*7
132	265	4	0	HJX2F2654*7
160	330	4	0	HJX2F3304*7
200	400	4	0	HJX2F4004*7
250	500	4	0	HJX2F5004*7
335	630	4	0	HJX2F6304*7
400	800	4	0	HJX2F8004*7

Reference Description

Product name	Rated current	Main Contact	Coil Voltage	Coil Frequency
HJX2F	115	4	*	7
	115:115A 150:150A ... 800:800A	4:4NO+0NC	F:110V ... X:440V	7:50/60Hz

Coil voltage code								
Coil voltage	110V	200V	230V	240V	380V	400V	415V	440V
*	F	M	N	U	Q	V	L	X

HJX2-F 4P AC Contactor

Standard: IEC 60947-4-1

CE

Technical Data

Model		HJX2-F115	HJX2-F150	HJX2-F185	HJX2-F225	HJX2-F265	HJX2-F330	HJX2-F400	HJX2-F500	HJX2-F630	HJX2-F800
Main circuit characteristics											
Rated Operational voltage （Ue)		380/400V, 660/690V									
Rated Isolation Voltage（Ui)		690V									
Rated Impulse Withstand Voltage（Uimp)		8kV									
Conventional thermal current		200	250	275	315	350	400	500	630	800	800
Rated Operational Current	440V AC-3 A	115	150	185	225	265	330	400	500	630	800
	440V AC-4 A	52	60	79	85	105	117	138	147	188	195
	660V AC-3 A	86	107	118	135	170	235	305	355	460	493
	660V AC-4 A	49	57	69	82	98	107	135	145	170	175
	Ie max AC-1 A θ ≤ 40 °C	200	250	275	315	350	400	500	630	800	800
Rated power of AC-3	220/240V	30	40	55	63	75	100	129	147	200	220
	380/400V	55	75	90	100	132	160	200	250	335	400
	415V	59	80	100	110	140	180	220	280	375	425
	440V	59	80	100	110	140	180	220	280	375	425
	500V	75	90	110	129	160	200	257	335	400	450
	660/690V	80	100	120	129	180	220	280	355	450	475
	1000V	65	65	100	140	147	160	185	335	450	450
Electric durabilities	AC-3 $\times10^4$ operations	60	60	50	50	50	50	30	30	20	15
	AC-4 $\times10^4$ operations	15	15	15	15	15	15	8	8	5	4
Mechanical durabilities	$\times10^4$ operations	300	300	300	300	300	300	100	100	100	100
Operating rate cycles/h	AC-1, AC-2, AC-3	600	600	600	600	600	600	300	300	300	300
	AC-4	150	150	150	150	150	150	150	150	150	150
Matched fuse	Model	HRT16-1	HRT16-1	HRT16-2	HRT16-2	HRT16-2	HRT16-3	HRT16-3	HRT16-3	HRT16-3	HRT16-4
	Rated current(A)	200	250	315	315	400	500	500	500	630	800
Cable connection cross section mm²		95	120	150	185	240	240	2*150	2*240	2*60*5	2*60*5
Coil											
Coil Voltage(Us)	V	110V, 220V, 230V, 240V, 380V, 400V, 415V, 440V									
Operational voltage	Pull in voltage V	85%…110% Us									
Drop-out voltage	Drop-out voltage AC V	20%…75% Us									
	Drop-out voltage DC V	10%…75% Us									
Average Coil Power	Inrush AC VA	855	855	1180	1180	700	700	1150	1150	1730	1730
	Sealed AC VA	8.1	8.1	10.9	10.9	10	10	18	20	25	25
	Inrush DC VA	665	665	902	902	803	803	1140	1220	1920	1920
	Sealed DC VA	4.83	4.83	5.07	5.07	4.53	4.53	7.5	8	12.5	12.5
	Heat Dissipation W	7.2	7.2	9.8	9.8	10.4	10.4	14	18	20	20
Terminal Wiring Ability - Main Circuit											
Wiring Bar	Bar quantity	2	2	2	2	2	2	2	2	2	2
	Dimensions	20×3	25×3	25×3	32×3	32×4	30×5	30×5	40×5	60×5	60×5
Wire With Lug Plate	mm²	95	120	150	185	240	240	2×150	2×240	---	---
Wire With Coupler	mm²	95	120	150	185	240	---	---	---	---	---
Fastening Torque	N.m	10	18	18	35	35	35	35	35	58	58

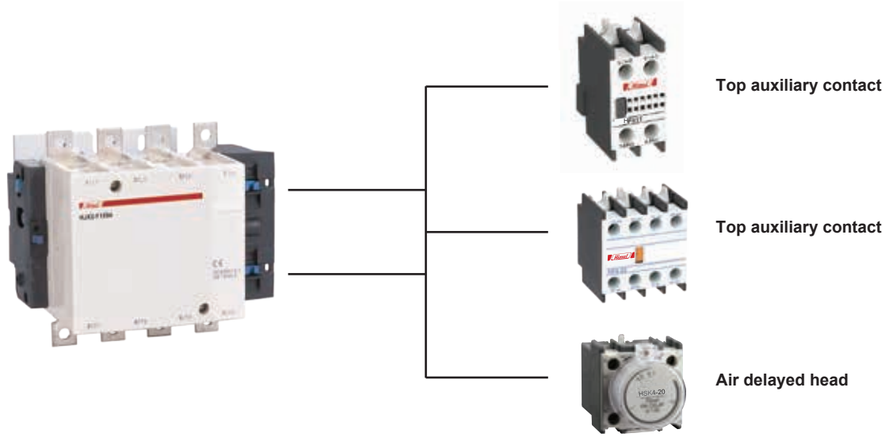
HJX2-F 4P AC Contactor

Standard: IEC 60947-4-1

Technical Data

Terminal Wiring Ability - Main Circuit			
Flexible Wire Without Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4
	2pc(Section of Connecting Conduction mm^2)		1～4
Flexible Wire With Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4
	2pc(Section of Connecting Conduction mm^2)		1～2.5
Fixed Wire Without Terminal Block	1pc(Section of Connecting Conduction mm^2)		1～4
	2pc(Section of Connecting Conduction mm^2)		1～4
Fastening Torque	N.m		1.2
Auxiliary Contact			
Rated Thermal Current (Ith)		A	10
Rated Operational Voltage (Ue)	AC	V	400
	DC	V	220
Rated Control Capacity	AC-15	VA	360
	DC-13	VA	33

HJX2-F 4P Contactor Accessories



HJX2-F 4P AC Contactor

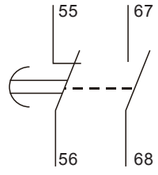
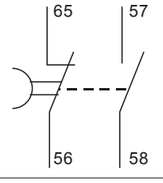
Standard: IEC 60947-4-1

Accessories

HF4 Top of auxiliary contact

Pole	Contact NO	Contact NC	Wiring diagram	Reference
2P	1	1		HF411
	0	2		HF402
	2	0		HF420
4P	0	4		HF404
	1	3		HF413
	2	2		HF422
	3	1		HF431
	4	0		HF440

HSK4 Air delayed head

Delay type	Wiring diagram	Delay range	Reference
Making time-delay		0.1-3S	HSK420
		0.1-30S	HSK422
		10-180S	HSK424
Breaking time-delay		0.1-3S	HSK430
		0.1-30S	HSK432
		10-180S	HSK434

HJX2-F 4P AC Contactor

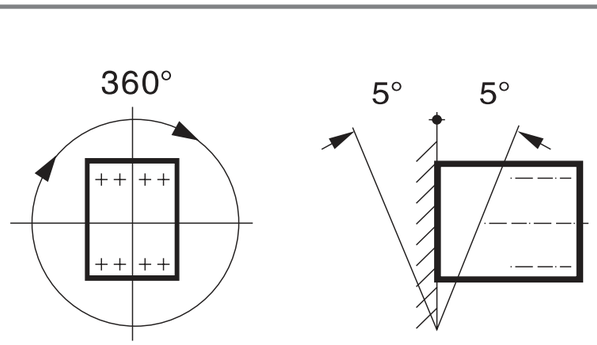
Standard: IEC 60947-4-1

Working Conditions

- Ambient temperature for operating:-5**℃** +40℃ , the daily average temperature ≤ 35℃ .
- Ambient temperature for storage and transportation: -25…+55 ℃ and can reach 70℃ in short time.
- Altitude: ≤ 2000 m, and the altitude could be higher under lower operating voltage and operating current.
- The atmospheric relative humidity does not exceed 50% when the highest ambient temperature is +40℃. It is allowed to have a relative higher humidity under lower temperature, e.g. up to 90% at +20℃. For occasional dew due to changes of the temperature, preventive measures shall be taken.
- Pollution Level: 3
- Protection class: IP00 (IP20 if with terminal protection cover)

Installation Conditions

- Installation Type: Ⅲ
- Installation position: Should be installed in the absence of a significant shake and vibration place. The installation site shall be vertical , with inclination at all directions not exceeding ±5°. When the coil controling voltage no lower than 85%Us, the inclination should be no more than ±30°.

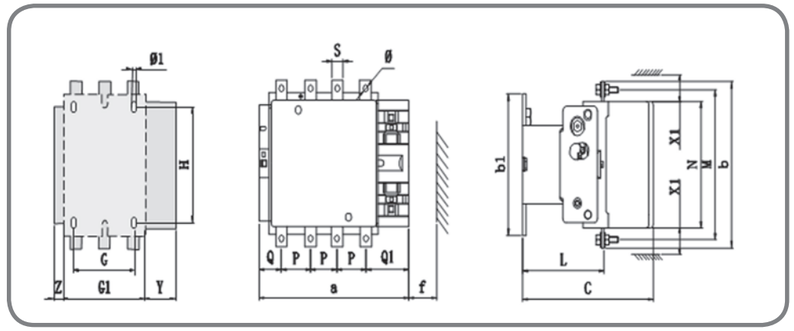


HJX2-F 4P AC Contactor

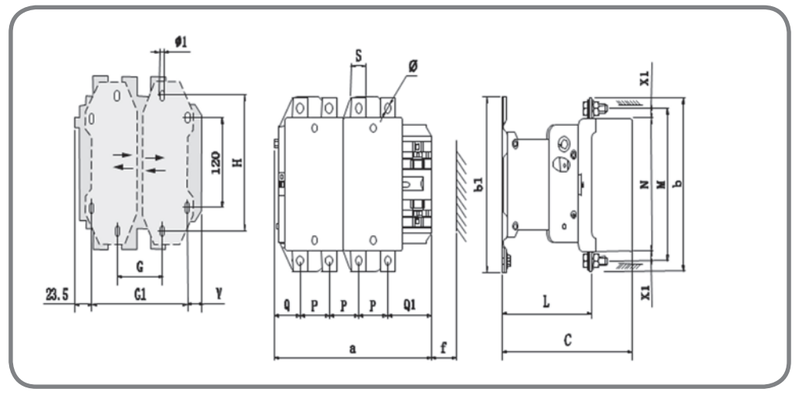
Standard: IEC 60947-4-1

Overall Dimensions

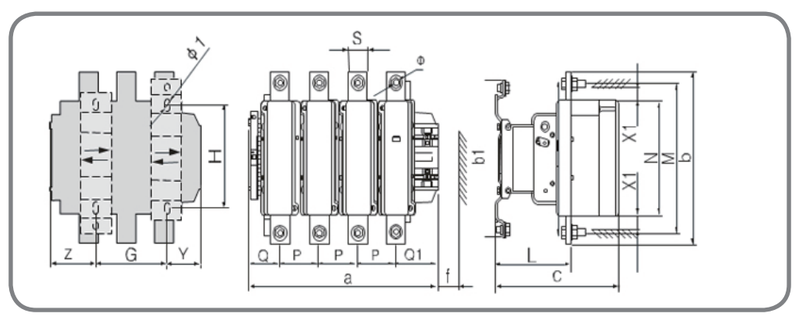
HJX2-F115~330



HJX2-F400~500



HJX2-F630~800



HJX2-F 4P AC Contactor

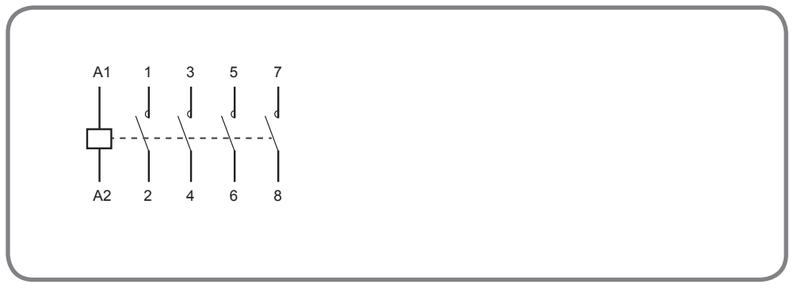
Standard: IEC 60947-4-1

HJX2-F115~800 Overall Dimensions and Mounting Figures

HJX2-F	a	P	Q	Q1	S	φ	f	b	b1	M	N	C	L	G	H	φ1	G1	Z	Y	X1	
																				500V	>500V
1154	220.5	37	29.5	60	20	M6	131	162	137	147	124	171	107	80	120-106	6.5	143	13.5	44	10	15
1504	200.5	40	25	55.5	20	M8	131	170	137	150	124	171	113.5	80	120-106	6.5	143	13.5	44	10	15
1854	208.5	40	29	59.5	20	M8	130	174	137	154	127	181	113.5	80	120-106	6.5	151	13.5	44	10	15
2254	208.5	48	17	47.5	25	M10	130	197	137	172	127	181	113.5	80	120-106	6.5	151	20.5	44	10	15
2654	244.5	48	34	66.5	25	M10	147	203	145	178	147	213	141	96	120-106	6.5	186	20.5	38	10	15
3304	261	48	43	74	25	M10	147	206	145	181	158	219	145	96	120-106	6.5	202.5	20.5	38	10	15
4004	261	48	43	74	25	M10	151	206	209	181	158	219	145	80(66-102)	180	8.5	170(156-192)	23.5	67.5	15	20
5004	288	55	46	77	30	M10	169	238	209	208	172	232	146	140(66-175)	180	8.5	230(156-265)	23.5	34.5	15	20
6304	389	80	60	89	40	M12	201	304	280	264	202	255	155	240(150-275)	180	10.5	---	60.5	68.5	20	30
8004	389	80	60	89	40	M12	201	304	280	264	202	255	155	240(150-275)	180	10.5	---	60.5	68.5	20	30

Wiring Diagram

HJX2-F1154-8004



HDC17-K Mini AC Contactor

Standard: IEC 60947-4-1

HDC17-K AC contactor provide:
Remote make & break of circuits
Frequent start and stop of motors

Order Information

Moter P(kW) 380V	Rated current(A)	Main contact		Auxiliary contact		Reference
		NO	NC	NO	NC	
2.2	6	3	0	1	0	HDC17K63010*·
		3	0	0	1	HDC17K63001*·
		4	0	0	0	HDC17K64000*·
		2	2	0	0	HDC17K62200*·
4	9	3	0	1	0	HDC17K93010*·
		3	0	0	1	HDC17K93001*·
		4	0	0	0	HDC17K94000*·
		2	2	0	0	HDC17K92200*·
4	12	3	0	1	0	HDC17K123010*·
		3	0	0	1	HDC17K123001*·
		4	0	0	0	HDC17K124000*·

Reference Description

HDC17-K 6 30 10 * ·

- · — Coil Frequency
- * — Coil Voltage
- 10 — Auxiliary contact
- 30 — Main contact
- 6 — Rate current
- HDC17-K — Model

■ **Coil voltage code**

coil voltage	24V	36V	110V	127V	220/230V	380/400V
*	B	C	F	S	M	Q

■ **Coil frequency code**

coil frequency	50/60Hz
·	7

HDC17-K Mini AC Contactor

Standard: IEC 60947-4-1

Technical Data

Model			HDC17-K06	HDC17-K09	HDC17-K12
Main circuit characteristics					
Rated operational current	380V/400V, AC-3	A	6	9	12
	380V/400V, AC-4	A	2.6	3.5	5
	660V/690V, AC-3	A	3.5	5	6
	660V/690V, AC-4	A	1.2	1.5	2
Rated operational voltage		V	220/230, 380/400, 660/690		
Rated insulation voltage		V	690		
Rated conventional thermal current		A	16	20	20
Pole			3, 4		
Power of controlled	220V/230V, AC-3	kW	1.5	2.2	3
3-phase cage motor	380V/400V, AC-3	kW	2.2	4	5.5
	660V/690V, AC-3	kW	3	4	4
Electric durabilities	AC-3	$\times 10^4$ operations	100		
Operating rate		cycles/h	1200		
Electric durabilities	AC-4	$\times 10^4$ operations	20		
Operating rate		cycles/h	600		
Mechanical durabilities		$\times 10^4$ cycles	1000		
Matched Fuse			HRT16-16	HRT16-20	
Cable connection	Inflexible cable	number of piece	2		
	Cross Section of Cable	mm^2	4		
Coil					
Coil voltage(Us)		V	AC 24V,36V,110V,127V,220/230V,380/400V		
Operational voltage		V	85%～110% Us		
Drop-out voltage		V	20%～75% Us		
Inrush		VA	30		
Sealed		VA	4.5		
Auxliary contact					
Rated conventional thermal current		V	690		
Rated insulation voltage		A	10		
Rated operational current	380V, AC-15	A	0.95		
	220V, DC-13	A	0.15		
Control capacity	AC-15	VA	360		
	DC-13	W	33		

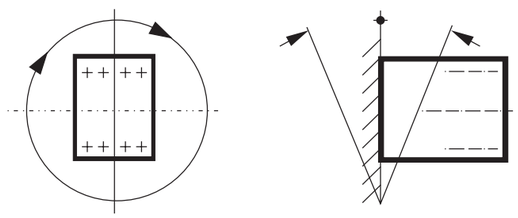
HDC17-K Mini AC Contactor

Standard: IEC 60947-4-1

Working Conditions

- Ambient temperature:-5℃～+40℃, the daily average temperature ≤ 35℃
- Altitude: ≤ 2000 m
- Humidity: Maximum temperature is +40℃, air relative humidity of not more than 50%,at a lower temperature allows a higher relative humidity. For example, 20℃, when up to 90%, and occasionally due to temperature changes resulting from Gel should take special measures
- Pollution Level: 3
- Installation Type: Ⅲ
- Installation position: should be installed in the absence of a significant shake and shock and vibration place

Install Location



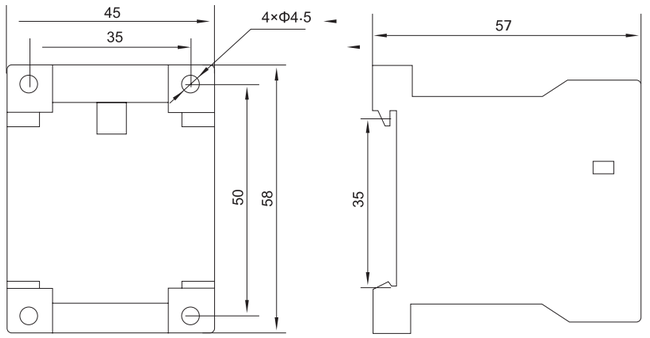
Motor Control and Protection

HDC17-K Mini AC Contactor

Standard: IEC 60947-4-1

Overall Dimensions

Unit: mm



HDR3 Thermal Overload Relay

Functions and features

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MORE VALUE FOR PRICE!

Main technical parameters

HDR3Thermal Overload Relay				
Temperature compensation		-5℃~+40℃		
Trip level	10A	HDR3-25,36		
	10	HDR3-93		
Rated insulation voltage(Ui)	V	660V		
Product features				
Overload protection		Yes		
Phase-failure protection		Yes		
Manual reset		Yes		
Automatic reset		Yes		
Stop button		Yes		
Test button		Yes		
Trip indication		Yes		
Tolerance on slope in any direction		±5°		
Auxiliary circuit				
Utilization category		AC-15		DC-13
Rated frequency	HZ	50	50	
Rated insulation voltage (Ui)	V	500	500	500
Rated operational Voltage (Ue)	V	230	400	230
Rated operational current Ie	A	1.57	0.90	0.14
Conventional thermal current Ith	A NO	5	5	5
	NC	5	5	5
Product Certification		CB, CE, SEMKO		

Base

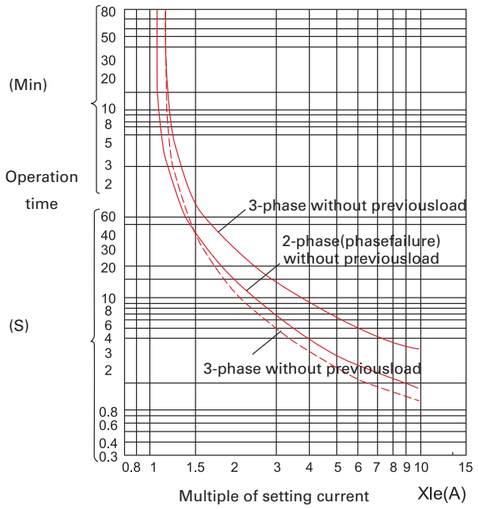
Name	Reference
HDR3-25	HJRS1D25J
HDR3-36	HJRS1D36J
HDR3-93	HJRS1D93J

Tripping Characteristic

No.	Multiples of Setting Current	Tripping Time		Initial Condition	Ambient Temperature
		Trip class 10A	Trip class 10		
Tripping Characteristics for Current Balance					
1	1.05	Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.2	Tripping within 2h	Tripping within 2h	After No.1 Test	
3	1.5	<2min	<4min	After No.1 Test	
4	7.2	2s<Tp≤10s	4s<Tp≤10s	Without previous load	+20°C
Tripping Characteristics for Current Imbalance					
	Any 2-Phase, 3rd Phase				
1	1.0	Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.15	Tripping within 2h	Tripping within 2h	After No.1 Test	

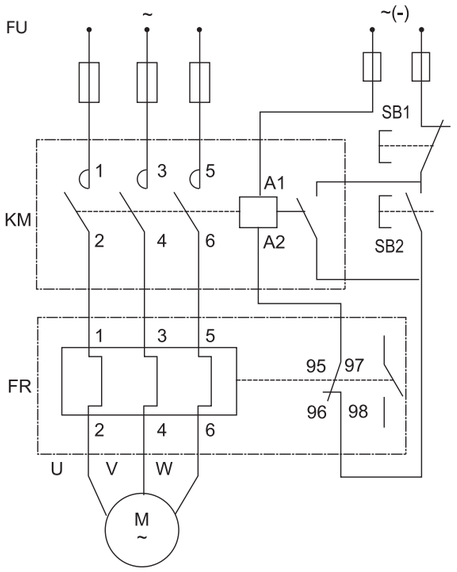
Tripping Characteristics

Average value (Environment temperature 20°C)



HDR3 Thermal Overload Relay
Functions and features

Installation wiring diagram



FU-Fuse.
KM-Contactor.
FR-Thermal overload relay
SB1-Stop button.
SB2-Start button.

HDR3 Thermal Overload Relay

Order Information

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HDR3 Thermal Overload Relay

Product Name	Frame current	Auxiliary Contact
HDR3	25	P16
	↓	↓
	25:25A 36:36A 93:93A	1P6: 1.0-1.6A P16: 0.1-0.16 ... 93: 80-93A P means decimal point

Frame Rating Current (A)	Setting Current(A)	Fuse current used for matching with Relay	Contactor used for matching with Relay	Reference
		HRT16 is recommended	HDC3 is recommended	
25	0.1-0.16	4	09-38	HDR325P16
	0.16-0.25	4	09-38	HDR325P25
	0.25-0.4	4	09-38	HDR325P4
	0.4-0.63	4	09-38	HDR325P63
	0.63-1	4	09-38	HDR3251
	1-1.6	4	09-38	HDR3251P6
	1.6-2.5	6	09-38	HDR3252P5
	2.5-4	10	09-38	HDR3254
	4-6	16	09-38	HDR3256
	5.5-8	20	09-38	HDR3258
	7-10	20	09-38	HDR32510
	9-13	25	12-38	HDR32513
	12-18	35	18-38	HDR32518
	17-25	50	25-38	HDR32525
36	23-32	63	25-32	HDR33632
	30-40	80	32-38	HDR33640
93	23-32	63	40-95	HDR39332
	30-40	80	40-95	HDR39340
	37-50	100	50-95	HDR39350
	48-65	100	50-95	HDR39365
	55-70	125	65-95	HDR39370
	63-80	125	80-95	HDR39380
	80-93	160	95	HDR39393

HDR3 Thermal Overload Relay

Overall and installation dimensions

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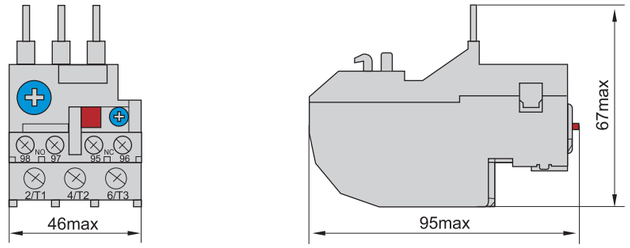
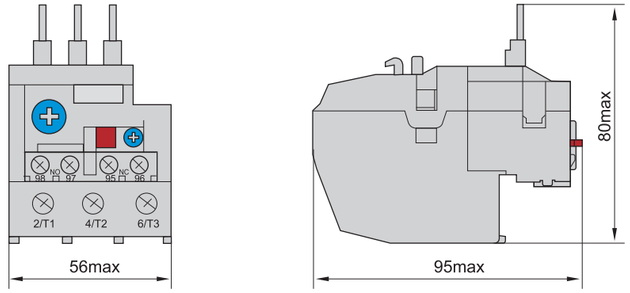
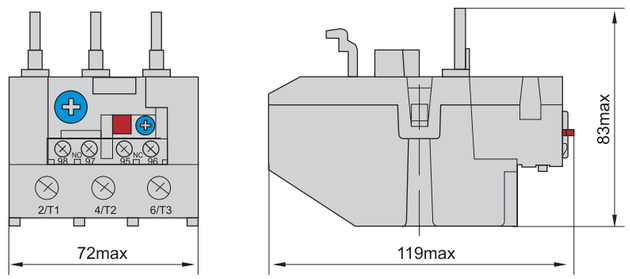
Overall dimension drawing of HDR3-25/Z



Overall dimension drawing of HDR3-36/Z



Overall dimension drawing of HDR3-93/Z



HDR6 Thermal Overload Relay

Order Information

Product Type	Frame Current	Setting Current	Installation Type
HDR6	18	P15	
	18: 18A ... 630:630A	15: 0.1-0.15 ... 630:460-630A P means decimal point	Default: None F: Independent installation

Range for Setting Current	Fuse used for Matching with Relay		Matched Contactor	Reference
	aM	gG		
0.10-0.15A	0.25	2	HDC6-09~18	HDR6 18 P15
0.12-0.18A	0.25	2	HDC6-09~18	HDR6 18 P18
0.18-0.25A	0.5	2	HDC6-09~18	HDR6 18 P25
0.25-0.36A	1	2	HDC6-09~18	HDR6 18 P36
0.35-0.50A	1	2	HDC6-09~18	HDR6 18 P5
0.50-0.70A	1	2	HDC6-09~18	HDR6 18 P7
0.63-0.90A	2	4	HDC6-09~18	HDR6 18 P9
0.90-1.20A	2	4	HDC6-09~18	HDR6 18 1P2
1.20-1.80A	4	6	HDC6-09~18	HDR6 18 1P8
1.80-2.50A	4	6	HDC6-09~18	HDR6 18 2P5
2.50-3.60A	6	10	HDC6-09~18	HDR6 18 3P6
3.50-4.80A	8	16	HDC6-09~18	HDR6 18 4P8
4.50-6.30A	8	16	HDC6-09~18	HDR6 18 6P3
5-7A	12	20	HDC6-09~18	HDR6 18 7
6.3-9A	12	20	HDC6-09~18	HDR6 18 9
9-12A	16	25	HDC6-09~18	HDR6 18 12
11-15A	20	35	HDC6-09~18	HDR6 18 15
14-18A	20	35	HDC6-09~18	HDR6 18 18
6.3-9A	12	20	HDC6-25~32	HDR6 32 9
9-12A	16	25	HDC6-25~32	HDR6 32 12
12-18A	20	35	HDC6-25~32	HDR6 32 18
18-25A	25	50	HDC6-25~32	HDR6 32 25
23-32A	40	63	HDC6-25~32	HDR6 32 32
18-25A	25	50	HDC6-40~95	HDR6 95 25
23-32A	40	63	HDC6-40~95	HDR6 95 32
30-40A	40	100	HDC6-40~95	HDR6 95 40
37-50A	63	100	HDC6-40~95	HDR6 95 50
48-65A	63	100	HDC6-40~95	HDR6 95 65
55-70A	80	125	HDC6-40~95	HDR6 95 70
63-80A	80	125	HDC6-40~95	HDR6 95 80
80-95A	100	160	HDC6-40~95	HDR6 95 95

Base

Adaptive Thermal Relay Type	Reference
HDR6-18	HDR6 18 J
HDR6-32	HDR6 32 J
HDR6-95	HDR6 95 J

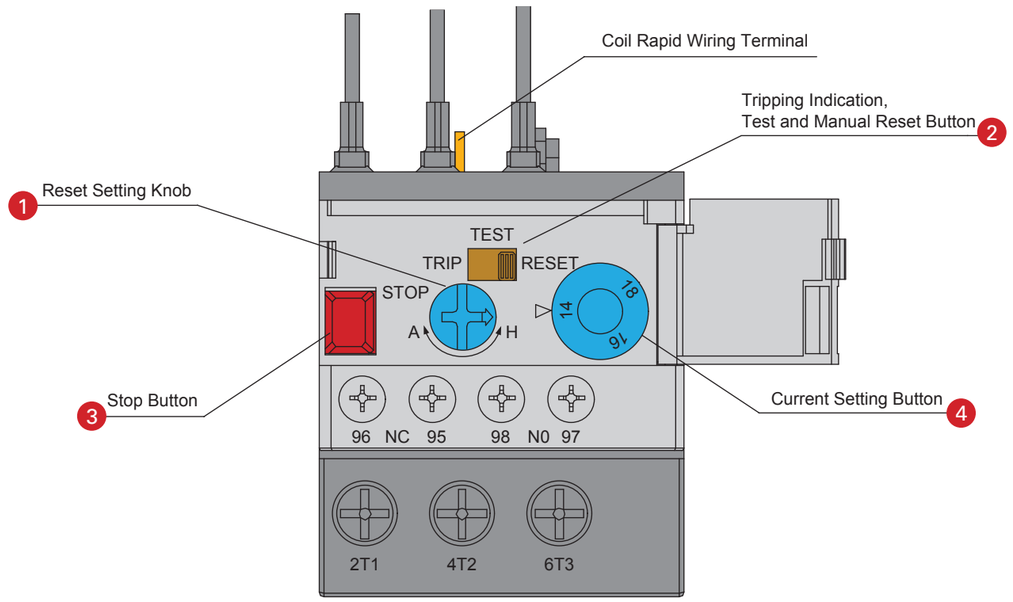
HDR6 Thermal Overload Relay

Order Information

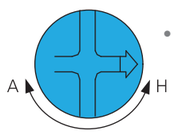
Range for Setting Current	Fuse used for Matching with Relay		Matched Contactor	Reference
	aM	gG		
48-65	80	100	HDC6-115~185	HDR6 185 65
55-70	80	100	HDC6-115~185	HDR6 185 70
63-80	80	100	HDC6-115~185	HDR6 185 80
75-95	100	125	HDC6-115~185	HDR6 185 95
90-115	125	200	HDC6-115~185	HDR6 185 115
105-135	160	200	HDC6-115~185	HDR6 185 135
120-150	160	200	HDC6-115~185	HDR6 185 150
130-160	160	250	HDC6-115~185	HDR6 185 160
150-185	200	250	HDC6-115~185	HDR6 185 185
145-200	200	400	HDC6-225~630	HDR6 630 200F
180-250	250	400	HDC6-225~630	HDR6 630 250F
230-320	355	500	HDC6-225~630	HDR6 630 320F
290-400	400	630	HDC6-225~630	HDR6 630 400F
350-480	500	800	HDC6-225~630	HDR6 630 480F
460-630	630	800	HDC6-225~630	HDR6 630 630F

HDR6 Thermal Overload Relay

Introduction for Functions

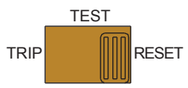


1 Reset Setting Knob



- Manual Reset for Arrow Pointing to 'H';
- Automatic Reset for Arrow Pointing to 'A'.

2 Tripping Indicator, Test and Manual Reset Button

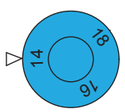


- After the operation of tripping indication and thermal overload relay, yellow button to 'Trip' position means 'tripping'
- After the operation of manual reset, the reset is realized to put yellow button back to 'Reset' position;
- Implement the test to simulate the tripping (use NO and NC contact to operate) and check the control circuit. When carrying out the test under manual reset state, put back to 'Reset' position after reaching 'Trip'. Automatically rebound to 'Reset' after switching to 'Trip' for automatic reset.

3 Stop Button

- Make NC Contact operate, but not influence NO contact. After pressing Stop Button, cut control circuit off and the electromotor stops working.

4 Current Setting Button



- Set the value of setting current for rated electromotor.

HDR6 Thermal Overload Relay

Technical Parameter

Main Technical Parameter

Temperature Compensation		-10° C~+55° C
Trip Class	10A	HDR6-18,32,630/F
	10	HDR6-95,185
Frame Current	HDR6-18	0.1~18A
	HDR6-32	6.3~32A
	HDR6-95	18~95A
	HDR6-185	48~185A
	HDR6-630/F	145~630A
Rates impulse withstand voltage (Uimp)		6kV
Protection Function		Over-load Protection
		Phase Failure Protection
		Manual and Automatic Reset
		Tripping Indication
		Stop Button
		Test Button
Installation Method		Assembly / Independent: HDR6-18~185
		Independent: HDR6-630/F
Auxiliary Circuit		
Rated Thermal Current		6A
Contact Type		1NO+1NC
Rated Insulating Voltage		690V
Control Capacity	AC-15 220V/240V	1.64A
	AC-15 380V/415V	0.95A
	DC-13 220V/240V	0.23A
Wiring Ability	Wire Section	1mm^2

HDR6 Thermal Overload Relay

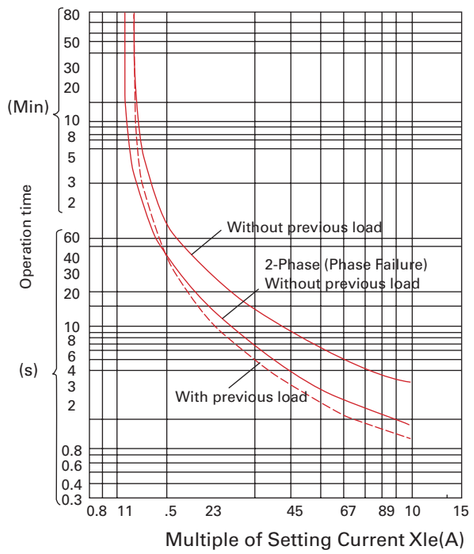
Tripping Characteristics and Wiring Diagram

Tripping Characteristics

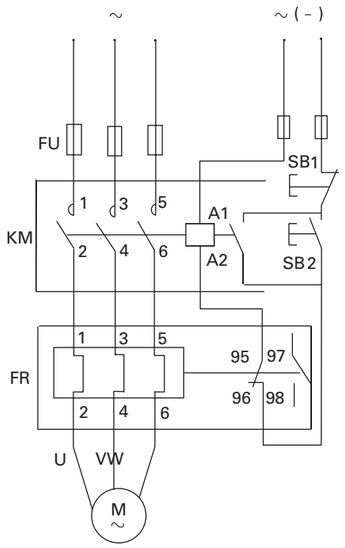
No.	Multiple of Setting Current		Tripping Time		Initial Condition	Ambient Temperature
			Trip class 10A	Trip class 10		
Tripping Characteristics for Current Balance						
1	1.05		Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.2		Tripping within 2h	Tripping within 2h	After No.1 Test	
3	1.5		<2min	<4min	After No.1 Test	
4	7.2		2s<Tp≤10s	4s<Tp≤10s	Without previous load	+20°C
Tripping Characteristics for Current Imbalance						
	Any 2-Phase, 3rd Phase					
1	1.0	0.9	Non-tripping within 2h	Non-tripping within 2h	Without previous load	+20°C
2	1.15	0	Tripping within 2h	Tripping within 2h	After No.1 Test	

Tripping Characteristics

Average Value (Environmental Temperature: 20°C)



Wiring Diagram

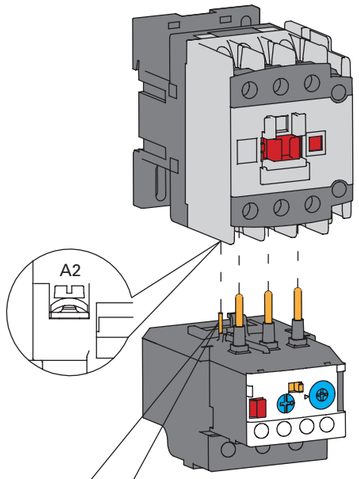


HDR6 Thermal Overload Relay

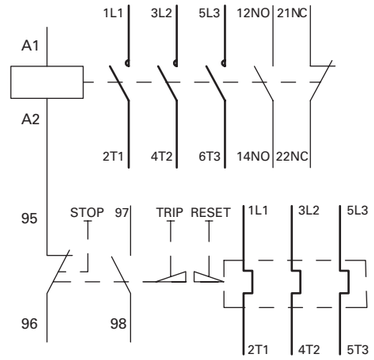
Installation Methods

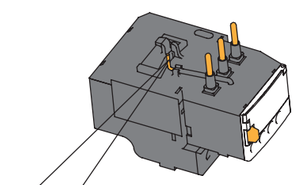
HDR6-9~95

Assembly Installation

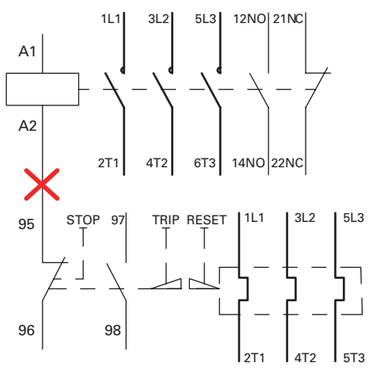


This wire is the coil rapid wiring terminal which can be used as the assembly with the contactor. When two are completely connected, it is to ensure that the screw in A2 contact point of the contactor coil is tightened.





If this wiring terminal is not used it can be cut short and then insulating tape can be used in conductive parts.

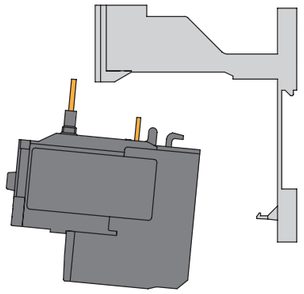


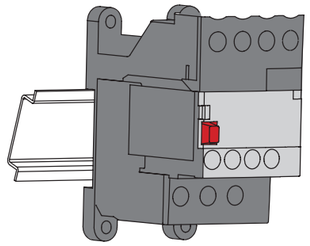
HDR6 Thermal Overload Relay

Installation Methods

HDR6-9~95

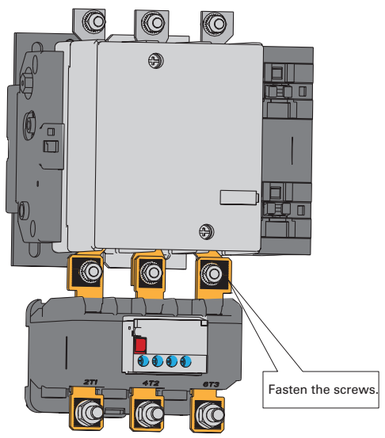
Independent Installation



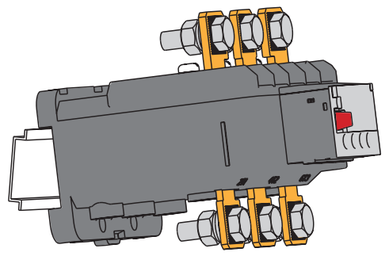


HDR6-185

Assembly Installation



Independent Installation



Note: It also can be fixed by screws.

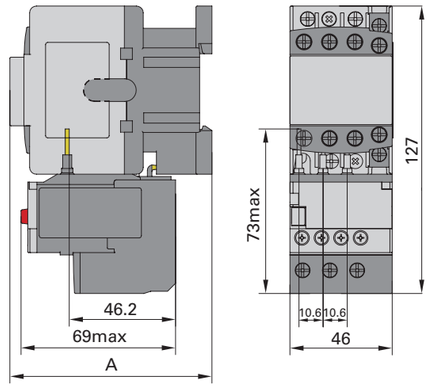
HDR6-630/F

It only can be fixed by 75mm railway or screws

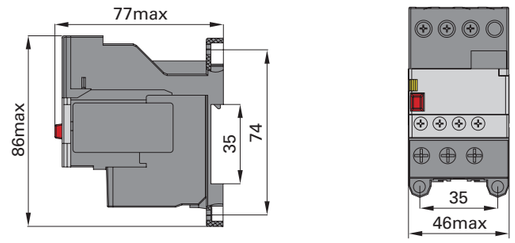
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-18 Assembly Installation



HDR6-18 Independent Installation

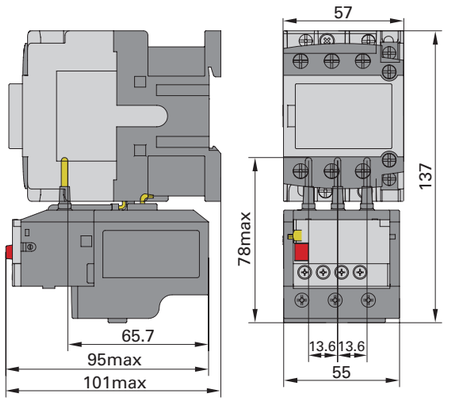


Assembly Installation for HDR6-18 and HDC6-09, 12, 18			
	HDC6-09	HDC6-12	HDC6-18
A	84	84	89

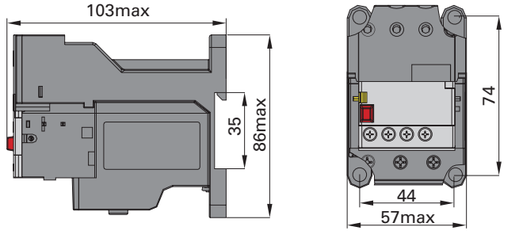
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-32 Assembly Installation



HDR6-32 Independent Installation

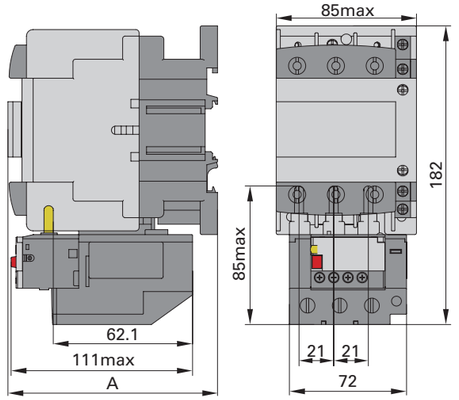


Motor Control and Protection

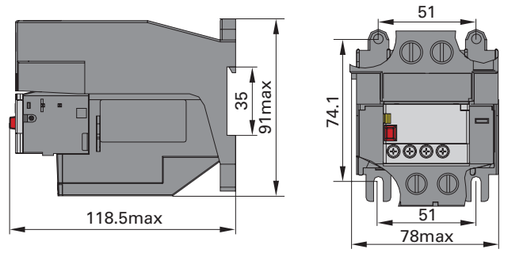
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-95 Assembly Installation



HDR6-95 Independent Installation

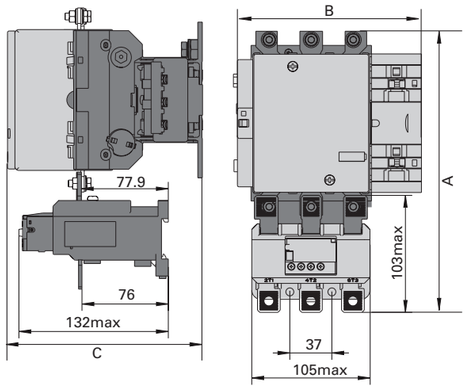


Assembly Installation for HDR6-95 and HDC6-40~95					
	HDC6-40	HDC6-50	HDC6-65	HDC6-80	HDC6-95
A	118.5	118.5	118.5	127.5	127.5

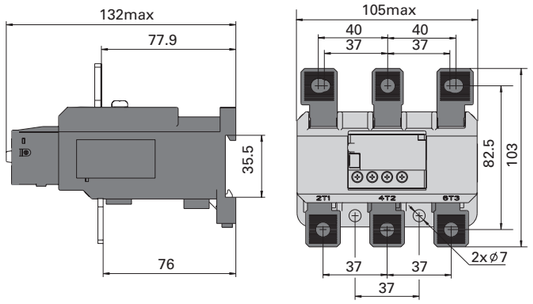
HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-185 Assembly Installation



HDR6-185 Independent Installation



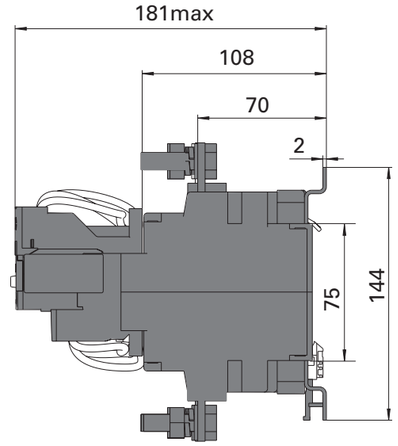
Assembly Installation for HDR6-185 and HDC6-115~185			
	HDC6-115	HDC6-150	HDC6-185
A	248	253	257
B	167	167	171
C	172	172	183

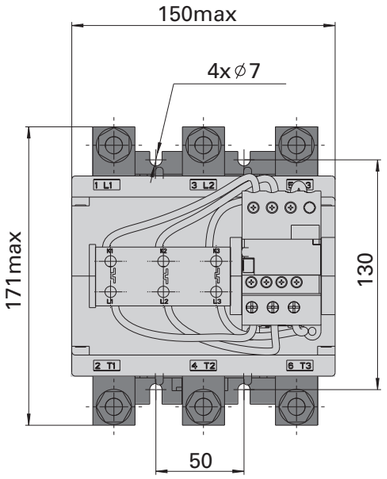
Motor Control and Protection

HDR6 Thermal Overload Relay

Overall Dimension of Installation

HDR6-630/F Independent Installation





Product Overview

Definite Purpose Contactor

HDC9 404

Current: 25-65A
Poles: 3P

Application:
Power factor correction

Contactor Relay

HDZ3 407

Current:
22,31,40,13,04

Application:
AC24-440V

HDZ6 411

Contact:
41, 32

Coil Voltage:
AC24-440V

Control Relay

HDZ8P 414

Contact:
2Z, 3Z, 4Z

Coil Voltage:
AC6-380V
DC6-220V

HJSZ3 416

Rated working voltage:
120V, 240V, 400V
Relay Time: 0.05s-24h

HXJ9 420

Voltage: 380V, 400V

Motor Protector

HDP6 421

Frame Current: 32A
Setting Current: 0.1-32A

Magnetic Starter

HDS6 428

Frame Current: 32,95
Setting Current: 1-95A

HDC9 Capacitor Switching Contactor

Standard: IEC 60947-4-1 IEC 60947-5-1

Function

HDC9 capacitor switching contactor provide:
- Switch three-phase unipolar or multipolar capacitor group,to improve their power factor
- Reduce the current closing of the impact of capacitor

Order Information

Rate conventional thermal current`	Auxiliary contact		Reference
	NO	NC	
25	1	1	HDC92511*·
	2	0	HDC92520*·
	0	2	HDC92502*·
32	1	1	HDC93211*·
	2	0	HDC93220*·
	0	2	HDC93202*·
43	1	1	HDC94311*·
	2	0	HDC94320*·
	0	2	HDC94302*·
63	1	2	HDC96312*·
	2	1	HDC96321*·
95	1	2	HDC99512*·
	2	1	HDC99521*·

Reference Description

HDC9 9 10 * ·

- · — Coil Frequency
- * — Coil Voltage
- 10 — Auxiliary contact
- 9 — Rate conventional thermal current
- HDC9 — Model

Coil voltage code

coil voltage	36V	110V	127V	220V	380V	400V
*	C	F	S	M	Q	V

Coil frequency code

coil frequency	50Hz	60Hz
·	5	6

HDC9 Capacitor Switching Contactor

Standard: IEC 60947-4-1 IEC 60947-5-1

Technical Data

Model			HDC9-25	HDC9-32	HDC9-43	HDC9-63	HDC9-95
Main circuit							
Rated operational voltage		V	400				400
Rated insulation voltage		V	500				
Controlled capacitor rate capacity	400V, AC-6b	A	17	23	29	43	63
Controlled capacitor rate capacity	230V, AC-6b	Kvar	6	9	10	15	22.5
	400V, AC-6b	Kvar	12	18	20	30	45
Rate conventional thermal current		A	25	32	43	63	95
Control inrush current capacity			≤20In				
Mechanical life		$\times 10^4$ operations	100				
Electric life	400V, AC-6b	$\times 10^4$ operations	10				
Operating frequency	400V, AC-6b	operations/h	300				120
Cable connection cross section of copper conductor		mm^2	4				
Coil							
Coil voltage(Us)		V	AC36,110,127, 220, 380, 400				
Operational voltage		V	85%~110%Us				
Drop-out voltage		V	20%~75%Us				
Auxiliary contact							
Rate conventional thermal current		A	10				
Minimum load can be connected			6V×10mA				

Working Conditions

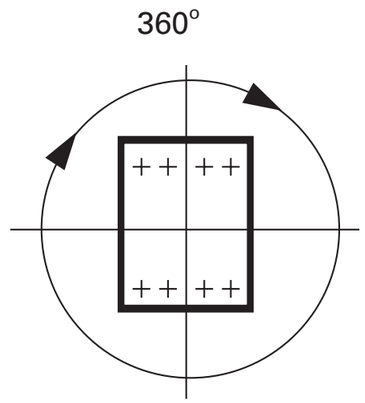
- Ambient temperature:-5°C～+40°C, the daily average temperature ≤ 35°C
- Altitude: ≤ 2000 m
- The atmospheric relative humidity does not exceed 50% when the highest ambient temperature is +40°C. It is allowed to have a relative higher humidity under lower temperature, e.g. up to 90% at +20°C. For occasional dew due to changes of the temperature, preventive measures shall be taken.
- Pollution Level: 3

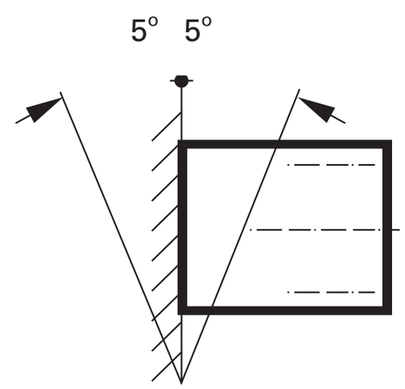
HDC9 Capacitor Switching Contactor

Standard: IEC 60947-4-1 IEC 60947-5-1

Installation Conditions

- Installation Type: III
- Installation position: should be installed in the absence of a significant shake and shock and vibration point





HDZ3 Contactor Relay

Functions and features

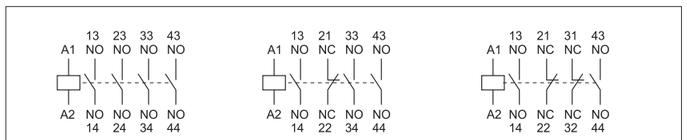
3SERIES MORE VALUE FOR PRICE!

CE

Main technical parameters

Rated insulation voltage (Ui)	V	690
Conventional thermal current (Ith)	A	10
Rated operational current (Ie)	A	AC-15 380V: 0.95
		DC-13 220V: 0.15
Contact combination		2NO+2NC,3NO+1NC,4NO+0NC,1NO+3NC,0NO+4NC
Electrical durabilities	10,000 times	110
Mechanical durabilities	10,000 times	1100
Operation frequency	times/Hour	1200
Rated control circuit voltage(Us)	50Hz	24,36,48,110,127,220/230,240,380/400,415,440
	50/60Hz	24,36,48,110,127,220/230,240,380/400,415,440
Operational voltage range	V	AC 85%...110% Us
Drop-out voltage range	V	AC 20%...75% Us
Production Certification		CE

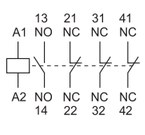
Wiring Diagram



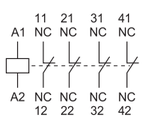
HDZ3-40

HDZ3-31

HDZ3-22



HDZ3-13



HDZ3-04

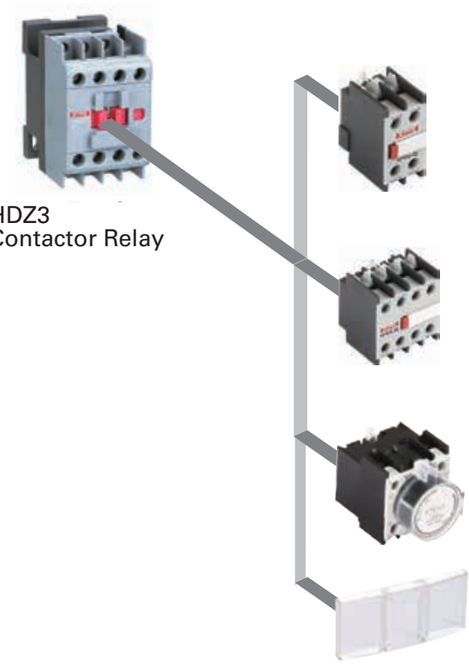
HDZ3 Contactor Relay

Functions and features

3SERIES MORE VALUE FOR PRICE!

CE

Schematic diagram of Accessory installation



HDZ3
Contactor Relay

HFD6 Top Auxiliary Contact

HFD6 Top Auxiliary Contact

HFT6 Air Delayed Head

HPCs Transparent Dust Cover

HDZ3 Contactor Relay

Order Information

HDZ3 Contactor Relay

Product Name	Contact	Coil Voltage	Coil Frequency
HDZ3	22	M	5
	↓	↓	
	22: 2NO+2NC 31: 3NO+1NC 40: 4NO+0NC 13: 1NO+3NC 04: 0NO+4NC	B:24V … M: 220V/230V … Q: 380V/400V …	5: 50Hz 7: 50/60Hz

Contact		Reference
NO	NC	
2	2	HDZ322*
3	1	HDZ331*
4	0	HDZ340*
1	3	HDZ313*
0	4	HDZ304*

Coil voltage code										
Coil voltage(V)	24	36	48	110	127	220/230	240	380/400	415	440
*	B	C	E	F	S	M	U	Q	L	X

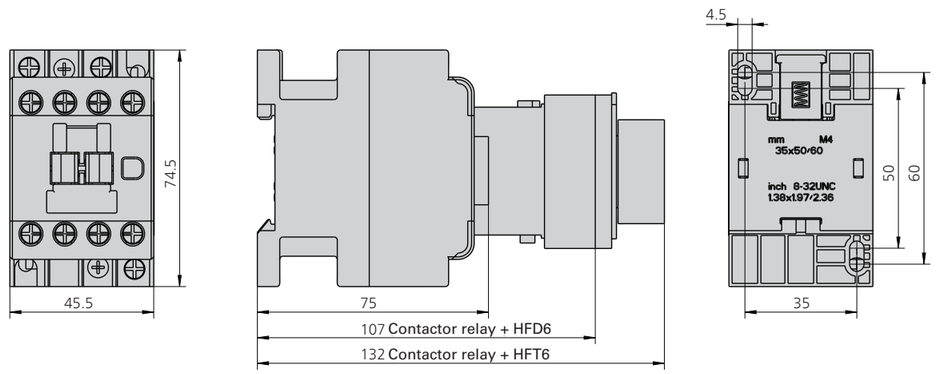
Note: * means coil voltage code

HDZ3 Contactor Relay

Overall and installation dimensions

Overall and installation dimensions

HDZ3



HDZ6 Contactor Relay

Order Information

Product Type	Contact	Coil Voltage	Coil Frequency
HDZ6	32	M	
	32:3NO+2NC 41:4NO+1NC	B: 24V ... X: 440V	Default: 50HZ 7:50/60HZ

Contact Form		Reference
4	1	HDZ6 41*·
3	2	HDZ6 32*·

Code Table of Coil Voltage

Coil Voltage (V)	24	36	48	110	127	220	380	415	440
50HZ	B	C	E	F	S	M	Q	L	X
50/60HZ	B7	-	E7	F7	-	M7	Q7	-	-

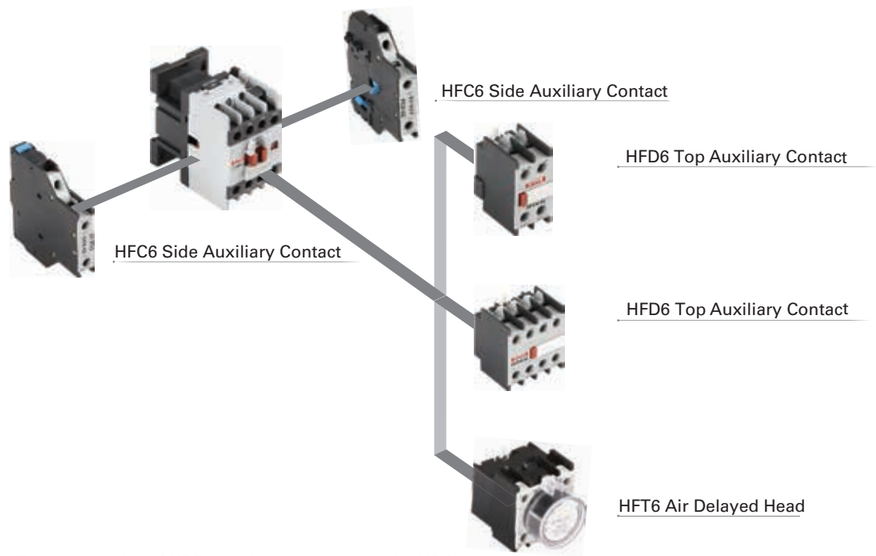
HDZ6 Contactor Relay

Main Technical Parameter

Main Technical Parameter

Type		HDZ6-41	HDZ6-32
Contact		4NO+1NC	3NO+2NC
AC-15	Rated Operational Voltage	AC230V	AC400V
	Rated Operational Current	1.6A	0.95A
DC-13	Rated Operational Voltage	DC125V	DC220V
	Rated Operational Current	0.55A	0.27A
Rated Operational Voltage		690V	
Rated Operational Current		10A	
Mechanic Durability		10 Million Times	
Electric Durability		1 Million Times	
Control Circuit Voltage	50HZ	24V 36V 48V 110V 127V 220V 380V 415V 440V	
(Us)	50/60HZ	24V 48V 110V 220V 380V	
Operational Voltage Range		85%~110% Us	
Drop-out Voltage Range		20%~75% Us	
Wiring Ability		≤2.5(X2) mm^2	

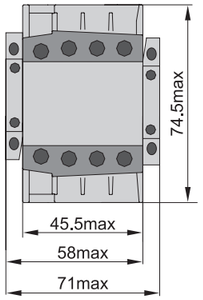
Diagram for Accessory Installation

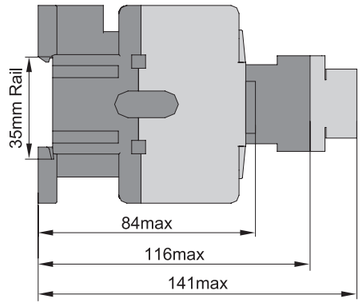


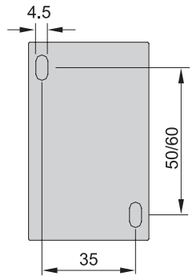
Note: The accessories of HDZ6 are in common use with HDC6,
and please refer to **page 327** for more information about the accessories.

HDZ6 Contactor Relay

Order Information

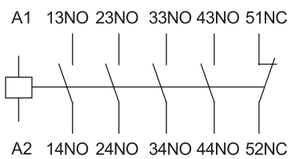




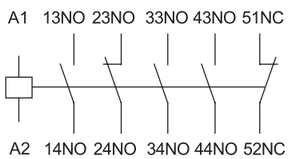


Wiring Diagram

HDZ6-41



HDZ6-32



HDZ8P Miniature Relay

Function

- Used to implement the conversion of intermediate control signals and low-power output. In the field of industrial control, used in conjunction with contactors, relays, circuit breakers, etc.

Order Information

Rated Current	Poles	LED	Voltage Type	Reference
5A	2	L	AC	HDZ8P052L*1
		None	AC	HDZ8P052*1
		L	DC	HDZ8P052L*Z1
		None	DC	HDZ8P052*Z1
	3	L	AC	HDZ8P053L*1
		None	AC	HDZ8P053*1
		L	DC	HDZ8P053L*Z1
		None	DC	HDZ8P053*Z1
	4	L	AC	HDZ8P054L*1
		None	AC	HDZ8P054*1
		L	DC	HDZ8P054L*Z1
		None	DC	HDZ8P054*Z1
3A	4	L	AC	HDZ8P034L*1
		None	AC	HDZ8P034*1
		L	DC	HDZ8P034L*Z1
		None	DC	HDZ8P034*Z1
10A	2	L	AC	HDZ8P102L*1
		None	AC	HDZ8P102*1
		L	DC	HDZ8P102L*Z1
		None	DC	HDZ8P102*Z1
	3	L	AC	HDZ8P103L*1
		None	AC	HDZ8P103*1
		L	DC	HDZ8P103L*Z1
		None	DC	HDZ8P103*Z1
	4	L	AC	HDZ8P104L*1
		None	AC	HDZ8P104*1
		L	DC	HDZ8P104L*Z1
		None	DC	HDZ8P104*Z1

Coil voltage code												
Voltage	6V	12V	24V	36V	48V	60V	110V	127V	220V	230V	240V	380V
*	I	J	B	C	E	D	F	S	M	N	U	Q

HDZ8P Miniature Relay

Technical information

	5A		3A,5A	10A		
	2P	3P	4P	2P	3P	4P
Coil voltage	AC6V-380V ,DC6V-220V					
Contact capacity	5A/240VAC/28VDC		3-5A/240VAC/28VDC		10A/240VAC/28VDC	
LED	LED ,No LED					
Nominal Coil Power	0.9W/1.2VA			0.9W/1.2VA	1.4W/2VA	1.5W/2.5VA
Contact Resistance	≤100mΩ				≤50mΩ	
Insulation Resistance	≥500mΩ					
Dielectric Strength	BCC 1500VAC 1minute					
	BOC 1000VAC 1minute					
Operate / Release Time	25ms / 25ms					
Installation method	PCB installation, Socket			PCB mounting, Socket		

HJSZ3 Series Electronic Time Relay

Standard: IEC 60947-5-1

Function

HJSZ3 Series electronic time relay provide
- Rated AC frequency 50Hz & controlling voltage 400V or below
- Be used as time-control component in the automatic controlling circuit, according to the scheduled time turn on or off the circuit

Order Information

Relay mode	Rated working voltage	Relay time	Reference
Relay after power-on	120V	A: 0.05-0.5s/5s/30s/3M	HJSZ3AA120
		B: 0.1-1s/10s/60s/6M	HJSZ3AB120
		C: 0.5-5s/50s/5M/30M	HJSZ3AC120
		D: 1-10s/100s/10M/60M	HJSZ3AD120
		E: 6s-60s/10M/60M/6h	HJSZ3AE120
		F: 0.2M-2M/20M/2h/12h	HJSZ3AF120
		G: 0.4M-4M/40M/4h/24h	HJSZ3AG120
	240V	A: 0.05-0.5s/5s/30s/3M	HJSZ3AA240
		B: 0.1-1s/10s/60s/6M	HJSZ3AB240
		C: 0.5-5s/50s/5M/30M	HJSZ3AC240
		D: 1-10s/100s/10M/60M	HJSZ3AD240
		E: 6s-60s/10M/60M/6h	HJSZ3AE240
		F: 0.2M-2M/20M/2h/12h	HJSZ3AF240
		G: 0.4M-4M/40M/4h/24h	HJSZ3AG240
	400V	A: 0.05-0.5s/5s/30s/3M	HJSZ3AA400
		B: 0.1-1s/10s/60s/6M	HJSZ3AB400
		C: 0.5-5s/50s/5M/30M	HJSZ3AC400
		D: 1-10s/100s/10M/60M	HJSZ3AD400
		E: 6s-60s/10M/60M/6h	HJSZ3AE400
		F: 0.2M-2M/20M/2h/12h	HJSZ3AF400
		G: 0.4M-4M/40M/4h/24h	HJSZ3AG400

HJSZ3 Series Electronic Time Relay

Standard: IEC 60947-5-1

Technical information

Relay mode	Rated working voltage	Relay time	Reference
Relay after power-off	120V	1S: 0.1-1s	HJSZ3F1S120
		2S: 0.2-2s	HJSZ3F2S120
		3S: 0.3s-3s	HJSZ3F3S120
		5S: 0.5s-5s	HJSZ3F5S120
		6S: 0.6s-6s	HJSZ3F6S120
		10S: 1s-10s	HJSZ3F10S120
		20S: 2s-20s	HJSZ3F20S120
		30S: 3s-30s	HJSZ3F30S120
		60S: 6s-60s	HJSZ3F60S120
		100S: 10s-100s	HJSZ3F100S120
		180S: 18s-180s	HJSZ3F180S120
		4M: 0.4min-4min	HJSZ3F4M120
		5M: 0.5min-5min	HJSZ3F5M120
		6M: 0.6min-6min	HJSZ3F6M120
		10M: 1min-10min	HJSZ3F10M120
		20M: 2min-20min	HJSZ3F20M120
		30M: 3min-30min	HJSZ3F30M120
	240V	1S: 0.1-1s	HJSZ3F1S240
		2S: 0.2-2s	HJSZ3F2S240
		3S: 0.3s-3s	HJSZ3F3S240
		5S: 0.5s-5s	HJSZ3F5S240
		6S: 0.6s-6s	HJSZ3F6S240
		10S: 1s-10s	HJSZ3F10S240
		20S: 2s-20s	HJSZ3F20S240
		30S: 3s-30s	HJSZ3F30S240
		60S: 6s-60s	HJSZ3F60S240
		100S: 10s-100s	HJSZ3F100S240
		180S: 18s-180s	HJSZ3F180S240
		4M: 0.4min-4min	HJSZ3F4M240
		5M: 0.5min-5min	HJSZ3F5M240
		6M: 0.6min-6min	HJSZ3F6M240
		10M: 1min-10min	HJSZ3F10M240
		20M: 2min-20min	HJSZ3F20M240
		30M: 3min-30min	HJSZ3F30M240
	400V	1S: 0.1-1s	HJSZ3F1S400
		2S: 0.2-2s	HJSZ3F2S400
		3S: 0.3s-3s	HJSZ3F3S400
		5S: 0.5s-5s	HJSZ3F5S400
		6S: 0.6s-6s	HJSZ3F6S400
		10S: 1s-10s	HJSZ3F10S400
		20S: 2s-20s	HJSZ3F20S400
		30S: 3s-30s	HJSZ3F30S400
		60S: 6s-60s	HJSZ3F60S400
		100S: 10s-100s	HJSZ3F100S400
		180S: 18s-180s	HJSZ3F180S400
		4M: 0.4min-4min	HJSZ3F4M400
		5M: 0.5min-5min	HJSZ3F5M400
		6M: 0.6min-6min	HJSZ3F6M400
		10M: 1min-10min	HJSZ3F10M400
		20M: 2min-20min	HJSZ3F20M400
		30M: 3min-30min	HJSZ3F30M400

HJSZ3 Series Electronic Time Relay

Standard: IEC 60947-5-1

Technical Data

Condition	AC-15	400V/1.95A; 240V/1.5A; 120V/3.0A
	DC-13	250V/0.27A; 125V/0.55A
Repetitive error		≤5%
Rated themal current		5A
Mechanical life		≥1×10^6 times
Electric life		≥1×10^5 times
Power loss		≤3W
Working mode		A: Relay after power-on F: Relay after power-off
Reset mode		A: Power-off reset F: External device reset
Contactor endurance		A: 5A (Resistive) F: 1A（Resistive）
Relay time		HJSZ3A: 0.05s-0.5s/5s/30s/3M, 0.1s-1s/10s/60s/6M 0.5s-5s/50s/5M/30M, 1s-10s/100s/10M/60M 6s-60s/10M/60M/6h, 0.2M-2M/20M/2h/12h 0.4M-4M/40M/4h/24h HJSZ3F: 0.1s-1s, 0.2s-2s, 0.3s-3s, 0.5s-5s, 0.6s-6s, 1s-10s, 2s-20s, 3s-30s, 6s-60s, 10s-100s, 10s-120s, 10s-180s, 0.4M-4M, 0.5M-5M, 0.6M-6M, 1M-10M, 2M-20M, 3M-30M
Temp.		-5°C～+40°C
Install mode		Din rail mounted, Panel mounted

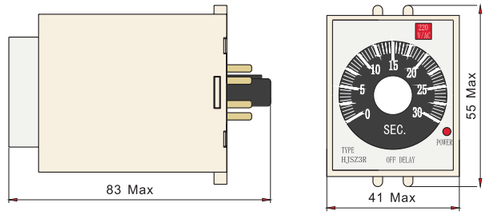
Motor Control and Protection

HJSZ3 Series Electronic Time Relay

Standard: IEC 60947-5-1

Overall Dimensions

Unit: mm



HXJ9 Phase Failure And Sequence Protection Relay

Standard: IEC 60947-5-1

Function

HXJ9 phase failure and sequence proctection relay provide:

- Rated AC frequency of 50Hz, rated control supply voltage AC 400V
- Phase failure and phase sequence protection

Order Information

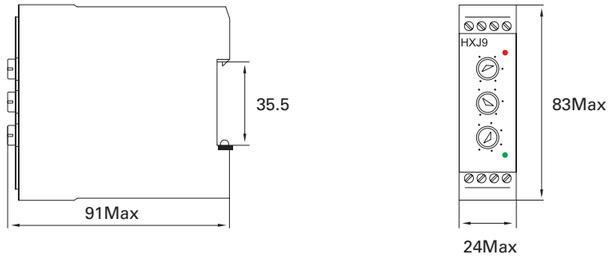
Function	Voltage	Reference
Phase failure	380V	HXJ9380
Sequency protection	400V	HXJ9400

Technical Data

Standard	IEC 60947-5-1
Overvoltage protection	400-480V (adjustable), Reaction time: 1.5-4S (adjustable)
Undervoltage protection	320-400V (adjustabe). Reaction time: 2-9S (adjustable)
Phase failure & phase Wrong protect time	Reaction time ≤2S
Contactor mode	1 NO, 1NC
Contactor endurance	5A Resistive
Power voltage	AC 400V
Mechanical lifetime	$\geq 1 \times 10^6$ times
Electrical lifetime	$\geq 1 \times 10^5$ times
Power loss	≤1W
Contactor capacity	AC400V×3

Overall Dimensions

Unit: mm



HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Order Information

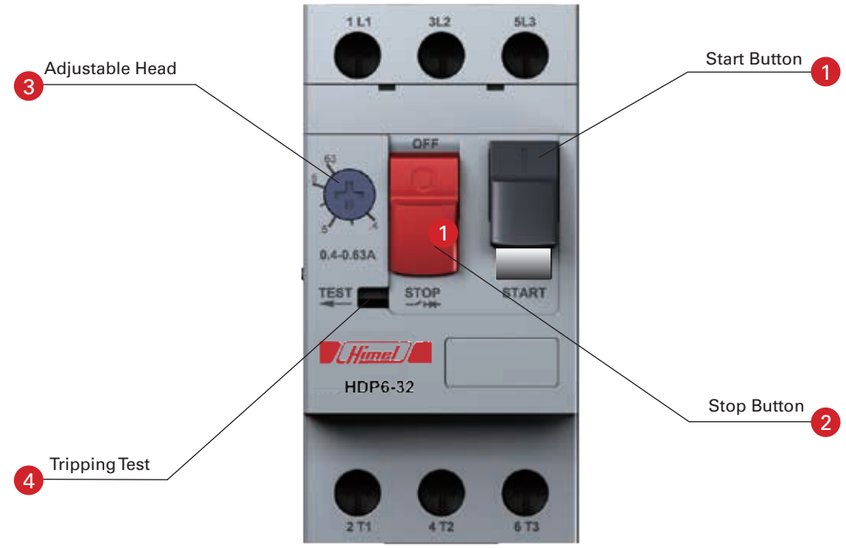
Product Name	Frame Current	Setting Current
HDP6	32	P16
	↓	↓
	32:32A	P16:0.1-0.16A ..... 32:24-32A P means decimal point

Thermal Release	Magnetic Release	400/415V,50/60Hz,AC-3	Recommended	Reference
Setting Current	Current Id	Rated Operating Power	Contactor	
0.1-0.16A	1.5A	-	HDC6-0911	HDP6 32 P16
0.16-0.25A	2.4A	0.06KW	HDC6-0911	HDP6 32 P25
0.25-0.4A	5A	0.09KW	HDC6-0911	HDP6 32 P4
0.4-0.63A	8A	0.12KW	HDC6-0911	HDP6 32 P63
0.63-1A	13A	0.25KW	HDC6-0911	HDP6 32 1
1-1.6A	22.5A	0.37KW	HDC6-0911	HDP6 32 1P6
1.6-2.5A	33.5A	0.75KW	HDC6-0911	HDP6 32 2P5
2.5-4A	51A	1.5KW	HDC6-0911	HDP6 32 4
4-6.3A	78A	2.2KW	HDC6-0911	HDP6 32 6P3
6-10A	138A	4KW	HDC6-0911	HDP6 32 10
9-14A	170A	5.5KW	HDC6-1211	HDP6 32 14
13-18A	223A	7.5KW	HDC6-1811	HDP6 32 18
17-23A	327A	9KW	HDC6-2511	HDP6 32 23
20-25A	327A	11KW	HDC6-2511	HDP6 32 25
24-32A	416A	15KW	HDC6-3211	HDP6 32 32

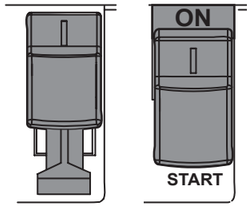
HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Introduction for Functions

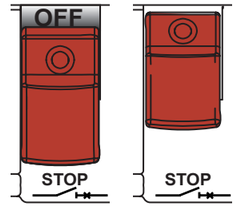


1 Start Button



- Press to start HDP6
- After downward pull-out, lock the start button to stop the work

2 Stop Button



- Press to stop HDP6

3 Adjustable Head

- Set the thermal trip current

4 Tripping Test

- Can simulate the tripping action, test product performance

Motor Control and Protection

HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Main Technical Parameter

Operation mode	Button operated
Frame current	32A
Rated impulse withstand voltage	6000V
Rated operational voltage	690V
Rated isolation voltage	690V
Rated operational frequency	50/60Hz
Trip class	10A
Fastening torque	1.7N • m
Mechanical durabilities	100000
Electrical durabilities AC-3 400V	100000
Overload protection category	Phase failure, thermal overload
Short circuit protection	Yes
Isolation function	Yes
Temperature compensation function	Yes

Breaking Capacity

Setting Current	Ue:230/240V		Ue:400/415V		Ue:440V		Ue:500V		Ue:690V	
	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics	Icu	Ics
0.1-0.16A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.16-0.25A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.25-0.4A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.4-0.63A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
0.63-1A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
1-1.6A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA
1.6-2.5A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	3kA	2.25kA
2.5-4A	100kA	100kA	100kA	100kA	100kA	100kA	100kA	100kA	3kA	2.25kA
4-6.3A	100kA	100kA	100kA	100kA	50kA	50kA	50kA	50kA	3kA	2.25kA
6-10A	100kA	100kA	100kA	100kA	15kA	15kA	10kA	10kA	3kA	2.25kA
9-14A	100kA	100kA	15kA	7.5kA	8kA	4kA	6kA	4.5kA	3kA	2.25kA
13-18A	100kA	100kA	15kA	7.5kA	8kA	4kA	6kA	4.5kA	3kA	2.25kA
17-23A	50kA	50kA	15kA	6kA	6kA	3kA	4kA	3kA	3kA	2.25kA
20-25A	50kA	50kA	15kA	6kA	6kA	3kA	4kA	3kA	3kA	2.25kA
24-32A	50kA	50kA	10kA	5kA	6kA	3kA	4kA	3kA	3kA	2.25kA

Remark: Icu Rated Ultimate Short-circuit Breaking Capacity
Ics Rated Service Short-circuit Breaking Capacity

HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Main Technical Parameter

Fuse Select gL/gG (When the prospective short-circuit current is greater than the rated ultimate short-circuit breaking capacity Icu, need a spare fuse)

Setting Current	Ue: 230/240V	Ue: 400/415V	Ue: 690V
0.1-0.16A	-	-	-
0.16-0.25A	-	-	-
0.25-0.4A	-	-	-
0.4-0.63A	-	-	-
0.63-1A	-	-	-
1-1.6A	-	-	-
1.6-2.5A	-	-	20
2.5-4A	-	-	32
4-6.3A	-	-	40
6-10A	-	-	40
9-14A	-	80	50
13-18A	-	80	50
17-23A	100	100	50
20-25A	100	100	50
24-32A	100	100	50

Note: '-'no need to use fuse

3 Phase Motor Rated Power, 50/60Hz, AC-3

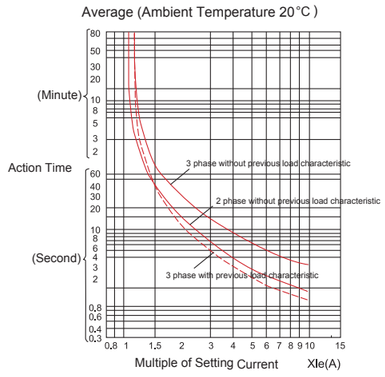
Setting Current	Ue: 230/240V	Ue: 400/415V	Ue: 690V
0.1-0.16A	-	-	-
0.16-0.25A	-	0.06kw	-
0.25-0.4A	-	0.09kw	-
0.4-0.63A	-	0.12kw	0.37kw
0.63-1A	-	0.25kw	0.55kw
1-1.6A	-	0.37kw	1.1kw
1.6-2.5A	0.37kw	0.75kw	1.5kw
2.5-4A	0.75kw	1.5kw	3kw
4-6.3A	1.1kw	2.2kw	4kw
6-10A	2.2kw	4kw	7.5kw
9-14A	3kw	5.5kw	9kw
13-18A	4kw	7.5kw	11kw
17-23A	5.5kw	9kw	15kw
20-25A	5.5kw	11kw	18.5kw
24-32A	7.5kw	15kw	22kw

HDP6 Motor Circuit Breaker

Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

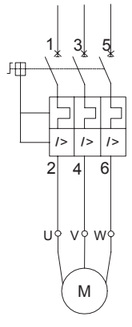
Operating Characteristics

No.	Multiple of Setting Current		Trip time	Starting Conditions	Ambient Temperature
Tripping Characteristics for Phase Load Balance					
1	1.05		Non-tripping within 2h	Without previous load	+20°C
2	1.2		Tripping within 2h	Immediately after No.1 test	+20°C
3	1.5		Tripping within 2m	Immediately after No.1 test	+20°C
4	7.2		Tripping within 2s<Tp≤10s	Without previous load	+20°C
Tripping Characteristics for Phase Load Unbalance (Phase Failure)					
	Any 2-Phase	3rd Phase			
1	1.0	0.9	Non-tripping within 2h	Without previous load	+20°C
2	1.15	0	Tripping within 2h	Immediately after No.1 test	+20°C
The temperature compensation performance					
1	1.0		Non-tripping within 2h	Without previous load	+40°C
2	1.2		Tripping within 2h	Immediately after No.1 test	+40°C
3	1.05		Non-tripping within 2h	Without previous load	-5°C
4	1.3		Tripping within 2h	Immediately after No.3 test	-5°C



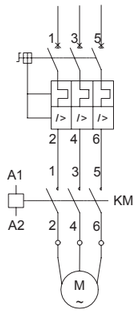
Wiring Diagram

HDP6 drive motor directly



Used for low operation frequency area

HDP6 use with HDC6



Used for high operation frequency area

HDP6 Motor Circuit Breaker Accessories

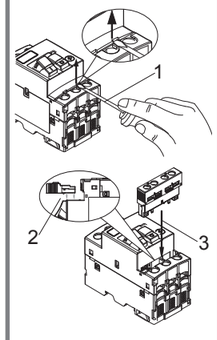
Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Accessories

Name		Type	Spec.	Reference
Undervoltage Release		HAU	110~127V	HAU110
			220~240V	HAU220
			380~400V	HAU380
			415V	HAU415
Shunt Release		HAS	110~127V	HAS110
			220~240V	HAS220
			380~400V	HAS380
			415V	HAS415
Auxiliary Contact	Top	HAE	2NO	HAE20
			1NC+1NO	HAE11
	Side	HAN	2NO	HAN20
			1NC+1NO	HAN11
Waterproof Cover		HDP6-32MC	IP55	HDP632MC

Parameters of instantaneous auxiliary contact					
Name	Rated Isolation Voltage UI	Applicable Cat.	Rated Operational Voltage	Rated Operational Current	Conventional Heating Current
Top Auxiliary Contact	250V	AC-15	24V	2A	2.5A
			48V	1.25A	2.5A
			110V	1A	2.5A
			230V	0.5A	2.5A
		DC-13	24V	1A	2.5A
			48V	0.3A	2.5A
Side Auxiliary Contact	690V	AC-15	48V	6A	6A
			110V	4.5A	6A
			230V	3.3A	6A
			380V	2.2A	6A
		DC-13	24V	6A	6A
			48V	5A	6A
			220V	0.5A	6A

Installation of HAE11 or HAE20

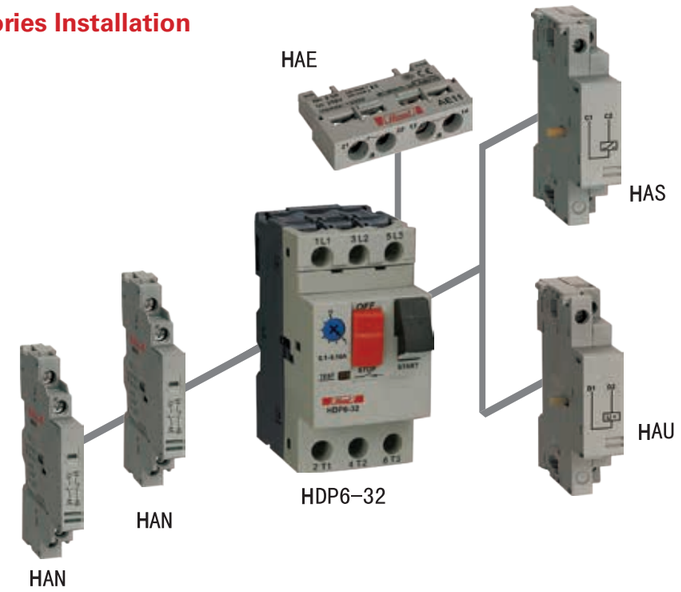


1. Pry the top auxiliary protective cover up;
2. Put the flat surface of the top auxiliary contact close to the circuit breaker;
3. Align the installation position and insert it.

HDP6 Motor Circuit Breaker Accessories

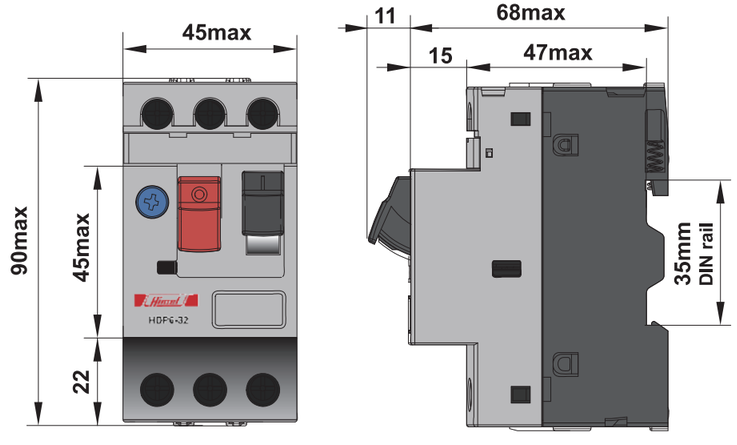
Standard: IEC 60947-1, IEC 60947-2, IEC 60947-4-1

Accessories Installation



Type	Name	Installation Position	The largest installed Qty.
HAE	Top Auxiliary Contact	Face-up	1
HAN	Side Auxiliary Contact	Left Side	2
HAU	Undervoltage Release	Right Side	1
HAS	Shunt Release	Right Side	1

Overall Dimension for Installation



HDS6 Magnetic Starter

Standard: IEC 60947-4

Order information

Name of Product	Frame size	Rated Current	Control Voltage & Frequency	Setting Current
HDS6	32	09	N	4P8
	32: 32A	09:9A	B:24V 50/60HZ	P15：0.1-0.15A
	95: 95A	…	…	…
		95:95A	V:400V 50/60HZ	95：80-95A Default: Without Relay

Remark: P means decimal point

Frame size	Rated Current	Setting Current (A)	Order No. With Button
32	09	0.1-0.15A	HDS63209*P15
		0.12-0.18A	HDS63209*P18
		0.18-0.25A	HDS63209*P25
		0.25-0.36A	HDS63209*P36
		0.35-0.5A	HDS63209*P5
		0.5-0.7A	HDS63209*P7
		0.63-0.9A	HDS63209*P9
		0.9-1.2A	HDS63209*1P2
		1.2-1.8A	HDS63209*1P8
		1.8-2.5A	HDS63209*2P5
		2.5-3.6A	HDS63209*3P6
		3.5-4.8A	HDS63209*4P8
		4.5-6.3A	HDS63209*6P3
		5-7A	HDS63209*7
		6.3-9A	HDS63209*9
	12	9-12A	HDS63212*12
	18	11-15A	HDS63218*15
		14-18A	HDS63218*18
	25	18-25A	HDS63225*25
	32	23-32A	HDS63232*32
	09		HDS63209*
	12		HDS63212*
	18		HDS63218*
	25		HDS63225*
	32		HDS63232*
95	40	30-40A	HDS69540*40
	50	37-50A	HDS69550*50
	65	48-65A	HDS69565*65
	80	55-70A	HDS69580*70
		63-80A	HDS69580*80
	95	80-95A	HDS69595*95
	40		HDS69540*
	50		HDS69550*
	65		HDS69565*
	80		HDS69580*
	95		HDS69595*

Note: “*” means coil voltage code.

Code Table of Coil Voltage							
Coil Voltage (V)	24	110	220	230	380	400V	415
50/60Hz	B	F	M	N	Q	V	L

HDS6 Magnetic Starter

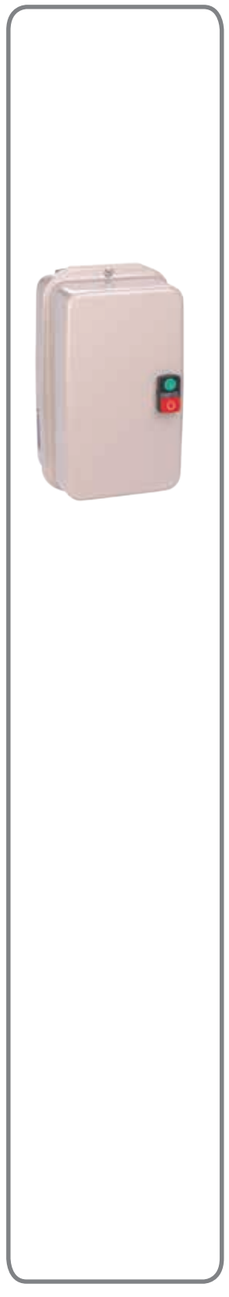
Standard: IEC 60947-4

Applicable Scope

HDS6 Series of Magnetic Starter (hereinafter referred to as “Starter”) is mainly used for control AC 50/60Hz and maximum rated working voltage up to 660V, as well as direct start and stop of three-phase squirrel cage induction motor with maximum rated working current up to 95A under using type of AC-3, and providing overloading protection against the motor.

Technical Parameter

Type	Setting Current (A)	Controllable Max Power of Motor (KW) 380V				Option Type	
		240V	400V	440V	690V	AC Contactor Type	Thermal Overload Relay Type
HDS6-32	0.1-0.15A	2.2kW	4kW	4kW	5.5kW	HDC60911*	HDR618P15
	0.12-0.18A	2.2kW	4kW	4kW	5.5kW		HDR618P18
	0.18-0.25A	2.2kW	4kW	4kW	5.5kW		HDR618P25
	0.25-0.36A	2.2kW	4kW	4kW	5.5kW		HDR618P36
	0.35-0.5A	2.2kW	4kW	4kW	5.5kW		HDR618P5
	0.5-0.7A	2.2kW	4kW	4kW	5.5kW		HDR618P7
	0.63-0.9A	2.2kW	4kW	4kW	5.5kW		HDR618P9
	0.9-1.2A	2.2kW	4kW	4kW	5.5kW		HDR6181P2
	1.2-1.8A	2.2kW	4kW	4kW	5.5kW		HDR6181P8
	1.8-2.5A	2.2kW	4kW	4kW	5.5kW		HDR6182P5
	2.5-3.6A	2.2kW	4kW	4kW	5.5kW		HDR6183P6
	3.5-4.8A	2.2kW	4kW	4kW	5.5kW		HDR6184P8
	4.5-6.3A	2.2kW	4kW	4kW	5.5kW		HDR6186P3
	5-7A	2.2kW	4kW	4kW	5.5kW		HDR6187
	6.3-9A	2.2kW	4kW	4kW	5.5kW		HDR6189
	9-12A	3kW	5.5kW	5.5kW	7.5kW	HDC61211*	HDR61812
	11-15A	4kW	7.5kW	9kW	10kW	HDC61811*	HDR61815
	14-18A	4kW	7.5kW	9kW	10kW		HDR61818
	18-25A	5.5kW	11kW	11kW	15kW	HDC62511*	HDR63225
	23-32A	7.5kW	15kW	15kW	18.5kW	HDC63211*	HDR63232
HDS6-95	30-40A	11kW	18.5kW	22kW	30kW	HDC64011*	HDR69540
	37-50A	15kW	22kW	25kW	33kW	HDC65011*	HDR69550
	48-65A	18.5kW	30kW	37kW	37kW	HDC66511*	HDR69565
	55-70A	22kW	37kW	45kW	45kW	HDC68011*	HDR69570
	63-80A	22kW	37kW	45kW	45kW		HDR69580
	80-95A	25kW	45kW	45kW	45kW	HDC69511*	HDR69595

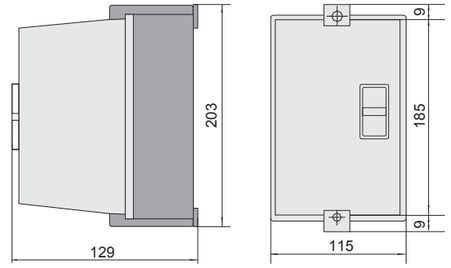


HDS6 Magnetic Starter

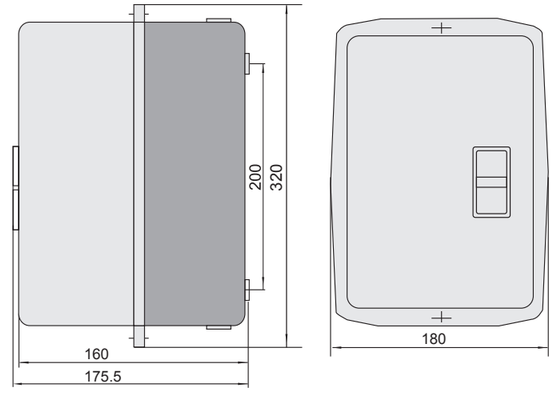
Standard: IEC 60947-4

Overall Dimension of Installation (mm)

HDS6-32



HDS6-95



Control Signal

Indicator Light

HLD11 432

IP degree: IP65

Specification:
AC/DC: 6V 12V 24V 36V 48V 110V 220V 230V
AC: 220V 230V 380V

Pushbutton Switches

HLAY5 436

IP degree: IP55

Specification:
AC-15: 380V/2A 220V/3.3A
DC-13: 220V/0.5A 110V/1.1A

HLAY7 446

Specification:
AC-15: 660V/1.1A
380V/2.0A 220V/3.3A
DC-13: 440V/0.25A
220V/0.5A 110V/1.1A

HLAY8 452

Specification:
AC-15: 660V/1.5A
380V/2.5A 220V/4.5A
DC-13: 440V/0.2A
220V/0.4A 110V/0.8A

HLD11 Indicator Light

Standard: IEC 60947-5-1

Function

HLD11 Series of indicator light provide:
- Pilot signal, anticipating signals
- Emergency signals and other instructions incidents signals

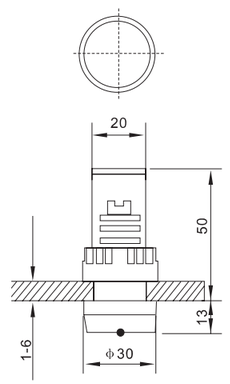
Technical Data

Rated voltage (V)	AC/DC 6 12 24 36 48 110	AC 220 230 380
Rated current (mA)	≤50	≤20
Working life (H)	30000	
Brightness of light (cd/m^2)	≥40	
Power frequency withstand voltage	2500V AC 1min	
Before board protect degree	IP65	

Order Information

Installation dimension	Type	Step-down Type	Rated voltage	Button colour	Reference
22:¢22	A: Full cover head & long terminal	2: Resistance type 4: Capacitance type	AC.DC 6V	○	HLD1122A21T7
				●	HLD1122A21T3
				●	HLD1122A21T4
				●	HLD1122A21T5
				●	HLD1122A21T8
			AC.DC 12V	○	HLD1122A21J7
				●	HLD1122A21J3
				●	HLD1122A21J4
				●	HLD1122A21J5
				●	HLD1122A21J8
			AC.DC 24V	○	HLD1122A21B7
				●	HLD1122A21B3
				●	HLD1122A21B4
				●	HLD1122A21B5
				●	HLD1122A21B8
			AC.DC 110V	○	HLD1122A21F7
				●	HLD1122A21F3
				●	HLD1122A21F4
				●	HLD1122A21F5
				●	HLD1122A21F8
			AC.DC 220V	○	HLD1122A21M7
				●	HLD1122A21M3
				●	HLD1122A21M4
				●	HLD1122A21M5
				●	HLD1122A21M8
			AC 230V	○	HLD1122A41N7
				●	HLD1122A41N3
				●	HLD1122A41N4
				●	HLD1122A41N5
				●	HLD1122A41N8

Overall Dimensions Unit:mm

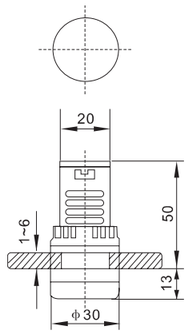


HLD11 Indicator Light

Standard: IEC 60947-5-1

Order Information

Installation dimension	Type	Step-down type	Rated voltage	Button colour	Reference
			AC 380V	○	HLD1122A41Q7
				●	HLD1122A41Q3
				●	HLD1122A41Q4
				●	HLD1122A41Q5
				●	HLD1122A41Q8
22:¢22	B: Half cover head & long terminal	2: Resistance type 4: Capacitance type	AC.DC 6V	○	HLD1122B21T7
				●	HLD1122B21T3
				●	HLD1122B21T4
				●	HLD1122B21T5
				●	HLD1122B21T8
			AC.DC 12V	○	HLD1122B21J7
				●	HLD1122B21J3
				●	HLD1122B21J4
				●	HLD1122B21J5
				●	HLD1122B21J8
			AC.DC 24V	○	HLD1122B21B7
				●	HLD1122B21B3
				●	HLD1122B21B4
				●	HLD1122B21B5
				●	HLD1122B21B8
			AC.DC 110V	○	HLD1122B21F7
				●	HLD1122B21F3
				●	HLD1122B21F4
				●	HLD1122B21F5
				●	HLD1122B21F8
			AC.DC 220V	○	HLD1122B21M7
				●	HLD1122B21M3
				●	HLD1122B21M4
				●	HLD1122B21M5
				●	HLD1122B21M8
			AC 230V	○	HLD1122B41N7
				●	HLD1122B41N3
				●	HLD1122B41N4
				●	HLD1122B41N5
				●	HLD1122B41N8
			AC 380V	○	HLD1122B41Q7
				●	HLD1122B41Q3
				●	HLD1122B41Q4
				●	HLD1122B41Q5
				●	HLD1122B41Q8



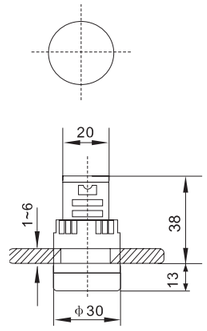
Overall Dimensions Unit: mm

HLD11 Indicator Light

Standard: IEC 60947-5-1

Order Information

Installation dimension	Type	Step-down type	Rated voltage	Button colour	Reference
22:¢22	C: Full cover head & short terminal	2: Resistance type 4: Capacitance type	AC.DC 6V	○	HLD1122C21T7
				●	HLD1122C21T3
				●	HLD1122C21T4
				●	HLD1122C21T5
				●	HLD1122C21T8
			AC.DC 12V	○	HLD1122C21J7
				●	HLD1122C21J3
				●	HLD1122C21J4
				●	HLD1122C21J5
				●	HLD1122C21J8
			AC.DC 24V	○	HLD1122C21B7
				●	HLD1122C21B3
				●	HLD1122C21B4
				●	HLD1122C21B5
				●	HLD1122C21B8
			AC 220V	○	HLD1122C41M7
				●	HLD1122C41M3
				●	HLD1122C41M4
				●	HLD1122C41M5
				●	HLD1122C41M8
			AC 230V	○	HLD1122C41N7
				●	HLD1122C41N3
				●	HLD1122C41N4
				●	HLD1122C41N5
				●	HLD1122C41N8
			AC 380V	○	HLD1122C41Q7
				●	HLD1122C41Q3
				●	HLD1122C41Q4
				●	HLD1122C41Q5
				●	HLD1122C41Q8



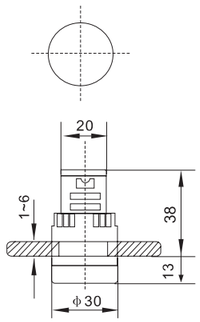
Overall Dimensions Unit: mm

HLD11 Indicator Light

Standard: IEC 60947-5-1

Order Information

Installation dimension	Type	Step-down type	Rated voltage	Button colour	Reference
22: ¢22	D: Half cover head & short terminal	2: Resistance type 4: Capacitance type	AC.DC 6V	○	HLD1122D21T7
				●	HLD1122D21T3
				●	HLD1122D21T4
				●	HLD1122D21T5
				●	HLD1122D21T8
			AC.DC 12V	○	HLD1122D21J7
				●	HLD1122D21J3
				●	HLD1122D21J4
				●	HLD1122D21J5
				●	HLD1122D21J8
			AC.DC 24V	○	HLD1122D21B7
				●	HLD1122D21B3
				●	HLD1122D21B4
				●	HLD1122D21B5
				●	HLD1122D21B8
			AC 220V	○	HLD1122D41M7
				●	HLD1122D41M3
				●	HLD1122D41M4
				●	HLD1122D41M5
				●	HLD1122D41M8
			AC 230V	○	HLD1122D41N7
				●	HLD1122D41N3
				●	HLD1122D41N4
				●	HLD1122D41N5
				●	HLD1122D41N8
			AC 380V	○	HLD1122D41Q7
				●	HLD1122D41Q3
				●	HLD1122D41Q4
				●	HLD1122D41Q5
				●	HLD1122D41Q8



HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Function

HLAY5 series of pushbutton switches provide:
- Control and indicate the status of the circuit

Technical Data

Usage mode		Rated value	
AC-15	Rated voltage (Ue) V	380	220
	Rated current (Ie) A	2	3.3
DC-13	Rated voltage (Ue) V	220	110
	Rated current (Ie) A	0.5	1.1
Mechanical endurance	10^5	30 (Flush type), 10 (Illuminated)	
		1 (Emergency stop, Selective-type, Key-type)	
Electric endurance	10^5	AC-6 (Flush type), DC-3 (Illuminated)	
		1 (Emergency stop, Selective-type, Key-type)	
Rated themal current (Ith) A		6	
Before board Ingress protection		IP40, and some specifications can reach IP55 or IP65 with protection cover	

Illuminated pushbutton							
Power supplier voltage	V	6	12	24	110	220	380
LED		√	√	√	√	√	–
Neon lamp		–	–	–	√	√	√
Filament lamp		√	√	√	–	–	–

Rated impulse withstand voltage (Uimp) V: 6000

Working Condition

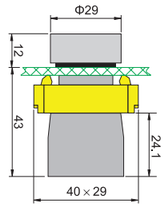
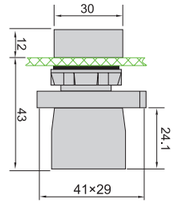
Temperature	-5°C to +40°C
Ralative humidity	⩽50% (40°C) 90% (20°C)
Altitude	⩽2000m
Pollution degree	3

HLAY5 Pushbutton Switches

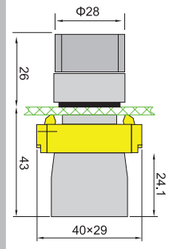
Standard: IEC 60947-5-1

Order Information

Flush — Unit: mm

Name	Material	Type	Color	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	B: Metal	A: Momentary	1: White 2: Back 3: Green 4: Red 5: Yellow 6: Blue	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	○ HLAY5BA15 ● HLAY5BA25 ● HLAY5BA31 ● HLAY5BA42 ● HLAY5BA55 ● HLAY5BA65	
	E: Plastic	A: Momentary	1: White 2: Back 3: Green 4: Red 5: Yellow 6: Blue	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	○ HLAY5EA15 ● HLAY5EA25 ● HLAY5EA31 ● HLAY5EA42 ● HLAY5EA55 ● HLAY5EA65	

Selective Button Switch — Unit: MM

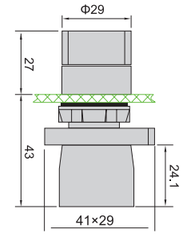
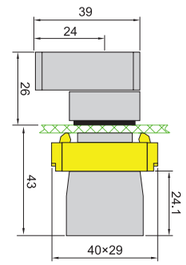
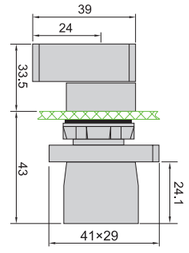
Name	Material	Type	Operation	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	B: Metal	D: Selective button with short handle	2:2p C R 3:3p L C R 4:2p C R 5:3p L C R	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	HLAY5BD21 HLAY5BD25 HLAY5BD33 HLAY5BD45 HLAY5BD53	

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Selective Switches — Unit: mm

Name	Material	Type	Operation	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	E: Plastic	D: Selective switch with short handle	2:2p C R 3:3p L C R 4:2p reset C R 5:3p reset L C R	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	HLAY5ED21 HLAY5ED25 HLAY5ED33 HLAY5ED45 HLAY5ED55	
	B: Metal	J: Selective switch with long handle	2:2p 3:3p 4:2p reset 5:3p reset	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	HLAY5BJ21 HLAY5BJ25 HLAY5BJ33 HLAY5BJ45 HLAY5BJ55	
	E: Plastic	J: Selective switch with long handle	2:2p 3:3p 4:2p reset 5:3p reset	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	HLAY5EJ21 HLAY5EJ25 HLAY5EJ33 HLAY5EJ45 HLAY5EJ55	

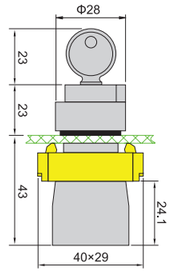
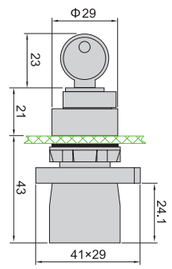
Industrial Control Components

HLAY5 Pushbutton Switches

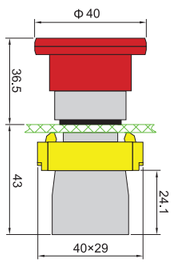
Standard: IEC 60947-5-1

Order Information

Key-operated Selective Switches — Unit: mm

Name	Material	Type	Operation	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	B: Metal	G: Key-operated selective switches	2:2p C R	1: 1NO	HLAY5BG21	
			3:3p L C R	2: 1NC	HLAY5BG25	
			4:2p reset C R	3: 2NO	HLAY5BG33	
			5:3p reset L C R	4: 2NC	HLAY5BG45	
				5: 1NO+1NC	HLAY5BG55	
	E: Plastic	G: Key-operated selective switches	2:2p C R	1: 1NO	HLAY5EG21	
			3:3p L C R	2: 1NC	HLAY5EG25	
			4:2p reset C R	3: 2NO	HLAY5EG33	
			5:3p reset L C R	4: 2NC	HLAY5EG45	
				5: 1NO+1NC	HLAY5EG55	

Mushroom Button — Unit: MM

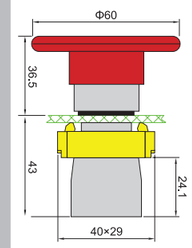
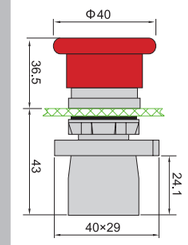
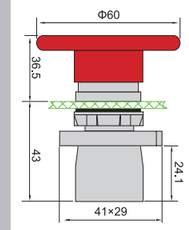
Name	Material	Type	Color	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	B Metal	C: Φ40 Mushroom	3 Green	1: 1NO	● HLAY5BC31	
			4 Red	2: 1NC	● HLAY5BC42	
				3: 2NO	● HLAY5BC35	
				4: 2NC	● HLAY5BC45	
				5: 1NO+1NC		

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Mushroom Button — Unit: mm

Name	Material	Type	Color	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐		
	B: Metal	R: 60 Mushroom	3 Green	1: 1NO	● HLAY5BR31	
			4 Red	2: 1NC	● HLAY5BR42	
				3: 2NO	● HLAY5BR35	
				4: 2NC	● HLAY5BR45	
				5: 1NO+1NC		
	E: Plastic	C: 40 Mushroom	3 Green	1: 1NO	● HLAY5EC31	
			4 Red	2: 1NC	● HLAY5EC42	
				3: 2NO	● HLAY5EC35	
				4: 2NC	● HLAY5EC45	
				5: 1NO+1NC		
	E: Plastic	R: 40 Mushroom	3 Green	1: 1NO	● HLAY5ER31	
			4 Red	2: 1NC	● HLAY5ER42	
				3: 2NO	● HLAY5ER35	
				4: 2NC	● HLAY5ER45	
				5: 1NO+1NC		

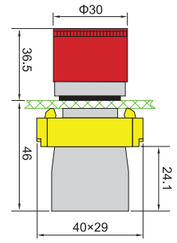
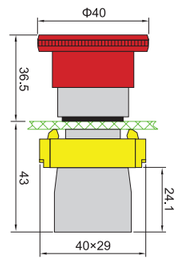
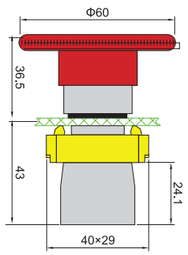
Industrial Control Components

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Emergency Stop Button — Unit: mm

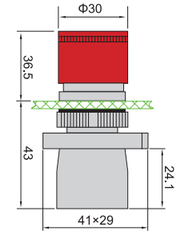
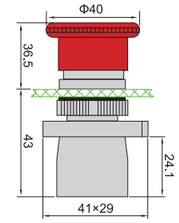
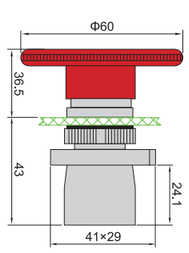
Name	Material	Type	Head	Color	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐	☐		
	B Metal	S: Emergency	4: Φ30	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5BS431 ● HLAY5BS442 ● HLAY5BS435 ● HLAY5BS445	
	B Metal	S: Emergency	5: Φ40	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5BS531 ● HLAY5BS542 ● HLAY5BS535 ● HLAY5BS545	
	B Metal	S: Emergency	6: Φ60	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5BS631 ● HLAY5BS642 ● HLAY5BS635 ● HLAY5BS645	

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Emergency Stop Button — Unit: mm

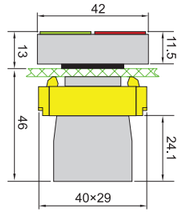
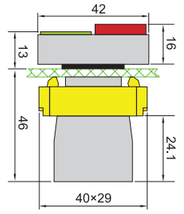
Name	Material	Type	Head	Color	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐	☐		
	E: Plastic	S: Emergency	4: Φ30	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5ES431 ● HLAY5ES442 ● HLAY5ES435 ● HLAY5ES445	
	E: Plastic	S: Emergency	5: Φ40	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5ES531 ● HLAY5ES542 ● HLAY5ES535 ● HLAY5ES545	
	E: Plastic	S: Emergency	6: Φ60	3 Green 4 Red	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	● HLAY5ES631 ● HLAY5ES642 ● HLAY5ES635 ● HLAY5ES645	

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Two-head Button — Unit: mm

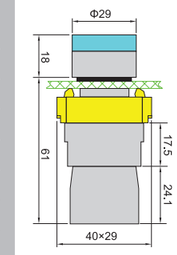
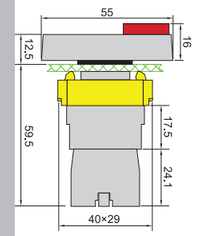
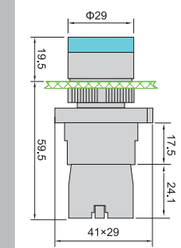
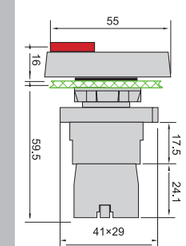
Name	Material	Type	Head	No. of head	NO + NC	Reference	Dimension
HLAY5	☐	☐	☐	☐	☐		
	B: Metal	L8:Two-head	3: Flush button	2: 2	5: 1NO+1NC	HLAY5BL8325	
	B: Metal	L8:Two-head	4: One high, one low	2: 2	5: 1NO+1NC	HLAY5BL8425	

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Illuminated Pushbutton Switches — Unit: mm

Name	Material	Type	Color	Voltage	NO + NC	Light	Reference	Dimension
HLAY5	☐	☐	☐	⊛	☐	⊛		
	B: Metal	W3: Flush	1: White 3: Green 4: Red 5: Yellow 6: Blue 7: Pure white 8: Pure blue	T: 6V B: 24V F: 110V M: 220V Q: 380V	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	N: Neon L: LED Blank: Filament	○ HLAY5BW31*5⊛ ● HLAY5BW33*1⊛ ● HLAY5BW34*2⊛ ● HLAY5BW35*5⊛ ● HLAY5BW36*5⊛ ● HLAY5BW37*5⊛ ● HLAY5BW38*5⊛	
	B: Metal	W8:Two head	4: One high one low	T: 6V B: 24V F: 110V M: 220V Q: 380V	5: 1NO+1NC	N: Neon L: LED Blank: Filament	HLAY5BW84*5⊛	
	E: Plastic	W3: Flush	1: White 3: Green 4: Red 5: Yellow 6: Blue 7: Pure white 8: Pure blue	T: 6V B: 24V F: 110V M: 220V Q: 380V	1: 1NO 2: 1NC 3: 2NO 4: 2NC 5: 1NO+1NC	N: Neon L: LED Blank: Filament	○ HLAY5EW31*5⊛ ● HLAY5EW33*2⊛ ● HLAY5EW34*1⊛ ● HLAY5EW35*5⊛ ● HLAY5EW36*5⊛ ● HLAY5EW37*5⊛ ● HLAY5EW38*5⊛	
	E: Plastic	W8:Two head	4: One high one low	T: 6V B: 24V F: 110V M: 220V Q: 380V	5: 1NO+1NC	N: Neon L: LED Blank: Filament	HLAY5EW84*5⊛	

Note: Supply voltage code:T:6V, B:24V, F:110V, M:220V, N:230V, Q:380V
The pure white and pure blue are only available for LED lamp

HLAY5 Pushbutton Switches

Standard: IEC 60947-5-1

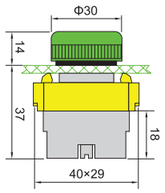
Order Information

Indication Lamp — Unit: mm

Name	Material	Type	Voltage	Color	Light	Reference	Dimension
HLAY5	☐	☐	⊡	☐	⊡		

Material	Type	Voltage	Color	Light
B: Metal	V: Indication	T: 6V B: 24V F: 110V M: 220V Q: 380V	1: White 3: Green 4: Red 5: Yellow 6: Blue 7: Pure white 8: Pure blue	N: Neon L: LED Blank: Filament

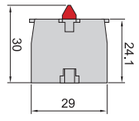
Reference
○ HLAY5BV*1*
● HLAY5BV*3*
● HLAY5BV*4*
● HLAY5BV*5*
● HLAY5BV*6*
○ HLAY5BV*7*
● HLAY5BV*8*



Base — Unit: MM

Name	Type	Contact	Reference	Dimension
HLAY5	☐	☐		

Type	Contact	Reference
BE: Auxiliary contact	101: 1NO 102: 1NC 103: 2NO 104: 2NC 105: 1NO+1NC	HLAY5BE101 HLAY5BE102 HLAY5BE103 HLAY5BE104 HLAY5BE105



Note: Supply voltage code: T:6V, B:24V, F:110V, M:220V, N:230V, Q:380V
The pure white and pure blue are only available for LED lamp

HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Function

HLAY7 series of pushbutton switches provide:
- Control and indicate the status of the circuit

Technical Data

Usage mode		Rated value		
AC-15	Rated voltage (Ue) V	660	380	220
	Rated current (Ie) A	1.1	2	3.3
DC-13	Rated voltage (Ue) V	440	220	110
	Rated current (Ie) A	0.25	0.5	1.1
Mechanical endurance	10^5	30 (Flush type), 10 (Illuminated)		
		0.5 (Emergency stop, Selective-type, Key-type)		
Electric endurance	10^5	6 (Flush type), 1 (Illuminated)		
		0.5 (Emergency stop, Selective-type, Key-type)		
Rated themal current (Ith)	A	10		
Operation frequency	T/h	1200		
Contact resistance	m Ω	≤50		

Illuminated pushbutton				
		Filament lamp	Neon lamp	LED
Working voltage	(Ue)V	6,12, 24	110, 220, 380	6,12, 24
Lifetime	h	≥1000	≥2000	≥3000

Working Condition

Ambient Temperature	-5°C~+40°C
Ralative humidity	≤ 50% (40°C) 90% (20°C)
Altitude	≤ 2000m
Pollution degree	3

HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Flush Button — Unit: mm

Name	NO + NC	Type	Color	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐		

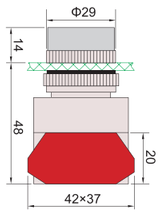
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

BN: Momentary

1: White
2: Back
3: Green
4: Red
5: Yellow
6: Blue

2: Φ 22
3: Φ 25
4: Φ 30

- ○ HLAY711BN12
- ● HLAY711BN22
- ● HLAY711BN32
- ● HLAY711BN42
- ● HLAY711BN52
- ● HLAY711BN62



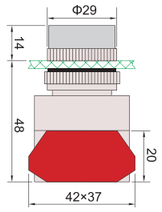
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

BNZS: Maintained

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

- ● HLAY711BNZS32
- ● HLAY711BNZS42



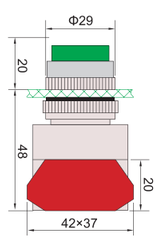
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

GN: Momentary

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

- ● HLAY711GN32
- ● HLAY711GN42



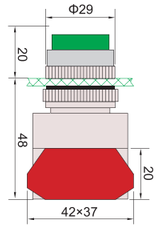
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

GNZS: Maintained

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

- ● HLAY711GNZS32
- ● HLAY711GNZS42



HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Flush Button — Unit: mm

Name	NO + NC	Type	Color	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐		

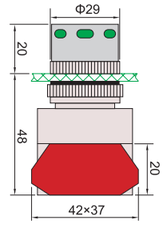
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

JN: Full protection

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

- ● HLAY711JN32
- ● HLAY711JN42



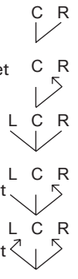
Selective Switches — Unit: mm

Name	NO + NC	Type	Operation	Color	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐	☐		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

X: Selective button with short handle

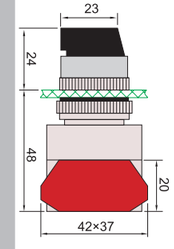
20:2p
21:2p reset
30:3p
31:3p reset
33:3p reset



2: Black
3: Green
4: Red

2: Φ22
3: Φ25
4: Φ30

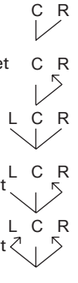
- ● HLAY711X2022
- ● HLAY711X2132
- ● HLAY711X3042
- ● HLAY711X3122
- ● HLAY720X3022



10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

XB : Selective button with long handle

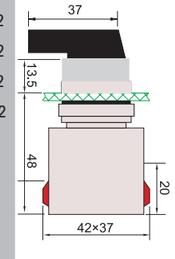
20:2p
21:2p reset
30:3p
31:3p reset
33:3p reset



2: Black
3: Green
4: Red

2: Φ22
3: Φ25
4: Φ30

- ● HLAY711XB2022
- ● HLAY711XB2132
- ● HLAY711XB3042
- ● HLAY711XB3022
- ● HLAY720XB3322



Industrial Control Components

HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Key-operated Selective Switches — Unit: mm

Name	NO + NC	Type	Operation	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

Y: Key-operated

20:2p 

21:2p 

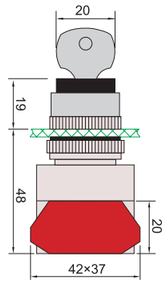
30:3p 

31:3p reset 

33:3p reset 

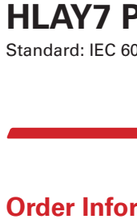
2: Φ 22
3: Φ 25
4: Φ 30

HLAY711Y202
HLAY711Y212
HLAY711Y302
HLAY711Y312
HLAY711Y332



Mushroom Button — Unit: mm

Name	NO + NC	Type	Color	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐		



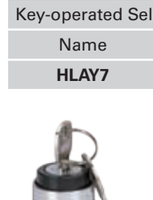
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

M: Momentary

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

● HLAY711M32
● HLAY711M42



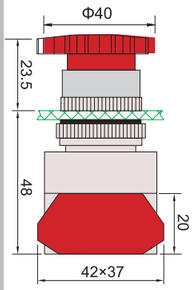
10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

MZS: Maintained

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

● HLAY711MZS32
● HLAY711MZS42



HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Emergency Stop Button — Unit: mm

Name	NO + NC	Type	Color	Installation	Reference	Dimension
HLAY7	☐	☐	☐	☐		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

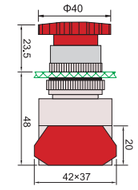
ZS: Emergency

3: Green
4: Red

2: Φ 22
3: Φ 25
4: Φ 30

● HLAY710ZS32
● HLAY701ZS42

● HLAY711ZS32
● HLAY711ZS42



Illuminated Pushbutton Switches — Unit: mm

Name	NO + NC	Type	Color	Voltage	Installation	Light	Reference	Dimension
HLAY7	☐	☐	☐	⊡	☐	⊡		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

D: Momentary (Illuminated)

3: Green
4: Red
5: Yellow
6: Blue
7: Pure white
8: Pure blue

T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22
3: Φ 25
4: Φ 30

N: Neon
L: LED
Default: Filament

● HLAY711D3*2*
● HLAY711D4*2*
● HLAY711D5*2*
● HLAY711D6*2*
○ HLAY711D7*2*
● HLAY711D8*2*

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

DZS: Maintained (Illuminated)

3: Green
4: Red
5: Yellow
6: Blue
7: Pure white
8: Pure blue

T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22
3: Φ 25
4: Φ 30

N: Neon
L: LED
Default: Filament

● HLAY711DZS3*2*
● HLAY711DZS4*2*
● HLAY711DZS5*2*
● HLAY711DZS6*2*
○ HLAY711DZS7*2*
● HLAY711DZS8*2*

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

DM: Momentary (Illuminated)

3: Green
4: Red

T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22
3: Φ 25
4: Φ 30

N: Neon
L: LED
Default: Filament

● HLAY711DM3*2*
● HLAY711DM4*2*

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

DMZS: Maintained (Illuminated)

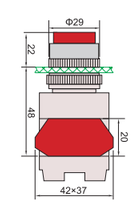
3: Green
4: Red

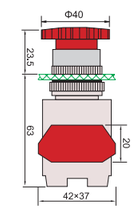
T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22
3: Φ 25
4: Φ 30

N: Neon
L: LED
Default: Filament

● HLAY711DMZS3*2*
● HLAY711DMZS4*2*





Note: Supply voltage code: T:6V, B:24V, F:110V, M:220V, N:230V, Q:380V
The pure white and pure blue are only available for LED lamp

HLAY7 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Illuminated Selective Switches — Unit: mm

Name	NO + NC	Type	Operation	Color	Voltage	Install	Light	Reference	Dimension
HLAY7	☐	☐	☐	☐	⊡	☐	⊡		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

XD: Selective (Illuminated)

20:2p C R
30:3p L C R

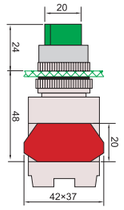
3: Green
4: Red

T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22
3: Φ 25
4: Φ 30

N: Neon
L: LED
Default: Filament

- HLAY711XD203*2*
- HLAY711XD204*2*
- HLAY711XD303*2*
- HLAY711XD304*2*



Indication Lamp — Unit: mm

Name	Type	Color	Voltage	Installation	Reference	Dimension
HLAY7	☐	☐	⊡	☐		

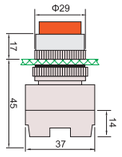
XD1: Filament
XD2: Neon
XD3: LED

1: White
3: Green
4: Red
5: Yellow
6: Blue
7: Pure white
8: Pure blue

T: 6V
B: 24V
F: 110V
M: 220V
Q: 380V

2: Φ 22

- HLAY7XD11*2
- HLAY7XD23*2
- HLAY7XD34*2
- HLAY7XD15*2
- HLAY7XD26*2
- HLAY7XD37*2
- HLAY7XD38*2



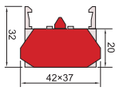
Base — Unit: mm

Name	Type	Contact	Reference	Dimension
HLAY7	☐	☐		

BE: Auxiliary contact

101: 1NO
102: 1NC
103: 2NO
104: 2NC
105: 1NO+1NC

- HLAY7BE101
- HLAY7BE102
- HLAY7BE103
- HLAY7BE104
- HLAY7BE105



Note: Supply voltage code: T:6V, B:24V, F:110V, M:220V, N:230V, Q:380V
The pure white and pure blue are only available for LED lamp.

HLAY8 Pushbutton Switches

Standard: IEC 60947-5-1

Function

HLAY8 series of pushbutton switches provide:
- Control and indicate the status of the circuit

Technical Data

Usage mode		Rated value		
AC-15	Rated voltage (Ue) V	660	380	220
	Rated current (Ie) A	1.5	2.5	4.5
DC-13	Rated voltage (Ue) V	440	220	110
	Rated current (Ie) A	0.25	0.4	0.8
Mechanical endurance	10^5	30 Flush type 3 Selective, 0.5 Emergency stop, Key-type		
Electric endurance	10^5	6 (Flush type), 1 (Illuminated) 0.5 (Emergency stop, Key-type)		
Rated themal current (Ith)	A	10		
Contact resistance	m Ω	≤50		

Illuminated pushbutton										
Rated working voltage	(Ue)V	6	12	24	36	48	110	220	230	380
Power supply		AC, DC						AC		
Rated working current	(Ie)mA	≤50						≤20		

Working Condition

Ambient Temperature	-5°C ~ +40°C
Ralative humidity	≤50% (40°C) 90% (20°C)
Altitude	≤2000m
Pollution degree	3

HLAY8 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

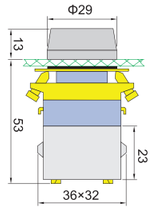
Flush Button — Unit: mm

Name	NO + NC	Type	Color	Reference	Dimension
HLAY8	☐	☐	☐		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

BN: Momentary

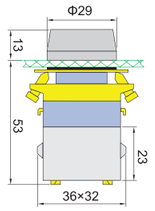
1: White	○ HLAY811BN1
2: Black	● HLAY811BN2
3: Green	● HLAY811BN3
4: Red	● HLAY811BN4
5: Yellow	○ HLAY811BN5
6: Blue	● HLAY811BN6



10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

BNZS: Maintained

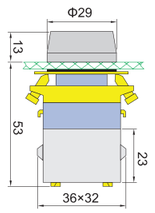
3: Green	● HLAY811BNZS3
4: Red	● HLAY811BNZS4
5: Yellow	○ HLAY811BNZS5



10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

S: Waterproof

3: Green	● HLAY811S3
4: Red	● HLAY811S4
5: Yellow	○ HLAY811S5



HLAY8 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Selective Switches — Unit: mm

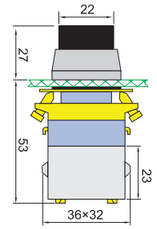
Name	NO + NC	Type	Operation	Color	Reference	Dimension
HLAY8	☐	☐	☐	☐		

10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

X: Selective button with short handle

20:2p		2: Black
21:2p reset		3: Green
30:3p		4: Red
31:3p reset		
33:3p reset		

● HLAY811X202	
● HLAY811X213	
● HLAY811X304	
● HLAY811X312	
● HLAY820X332	

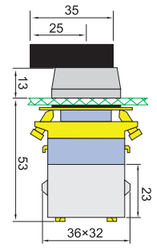


10: 1NO
01: 1NC
20: 2NO
02: 2NC
11: 1NO+1NC

XB: Selective button with long handle

20:2p		2: Black
21:2p reset		3: Green
30:3p		4: Red
31:3p reset		
33:3p reset		

● HLAY811XB202	
● HLAY811XB213	
● HLAY811XB304	
● HLAY811XB312	
● HLAY820XB332	



HLAY8 Pushbutton Switches

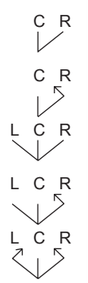
Standard: IEC 60947-5-1

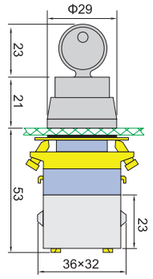
Order Information

Key-operated Selective Switches — Unit: mm

Name	NO + NC	Type	Operation	Reference	Dimension
HLAY8	□	□	□		

NO + NC	Type	Operation	Reference
10: 1NO	Y: Key-operated	20:2p	HLAY811Y20
01: 1NC		21:2p reset	HLAY811Y21
20: 2NO		30:3p	HLAY820Y30
02: 2NC		31:3p reset	HLAY811Y31
11: 1NO+1NC		33:3p reset	HLAY811Y33

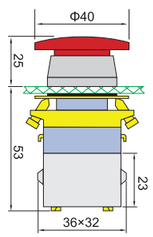




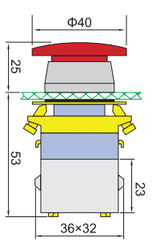
Mushroom Button — Unit: mm

Name	NO + NC	Type	Color	Reference	Dimension
HLAY8	□	□	□		

NO + NC	Type	Color	Reference
10: 1NO	M: Momentary	3: Green	● HLAY811M3
01: 1NC		4: Red	● HLAY811M4
20: 2NO			
02: 2NC			
11: 1NO+1NC			



NO + NC	Type	Color	Reference
10: 1NO	MZS: Maintained	3: Green	● HLAY811MZS3
01: 1NC		4: Red	● HLAY811MZS4
20: 2NO			
02: 2NC			
11: 1NO+1NC			



HLAY8 Pushbutton Switches

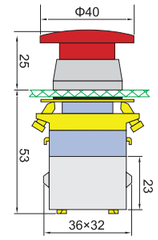
Standard: IEC 60947-5-1

Order Information

Emergency Stop Button — Unit: mm

Name	NO + NC	Type	Color	Reference	Dimension
HLAY8	□	□	□		

NO + NC	Type	Color	Reference
10: 1NO	ZS: Emergency	3: Green	● HLAY811ZS3
01: 1NC		4: Red	● HLAY811ZS4
20: 2NO			
02: 2NC			
11: 1NO+1NC			



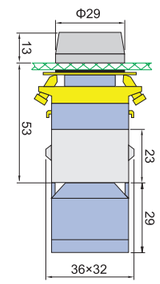
Illuminated Pushbutton Switches — Unit: mm

Name	NO + NC	Type	Color	Voltage	Power	Reference	Dimension
HLAY8	□	□	□	⊠	□		

NO + NC	Type	Color	Voltage	Power	Reference
10: 1NO	D: Momentary (Illuminated)	3: Green	T: 6V	2: AC/DC	● HLAY811D3*4
01: 1NC		4: Red	B: 24V	4: AC	● HLAY811D4*4
20: 2NO		5: Yellow	F: 110V		● HLAY811D5*2
02: 2NC		6: Blue	M: 220V		● HLAY811D6*2
11: 1NO+1NC		7: Pure white	Q: 380V		○ HLAY811D7*2
		8: Pure blue			● HLAY811D8*2

NO + NC	Type	Color	Voltage	Power	Reference
10: 1NO	DZS: Maintained (Illuminated)	3: Green	T: 6V	2: AC/DC	● HLAY811DZS3*4
01: 1NC		4: Red	B: 24V	4: AC	● HLAY811DZS4*4
20: 2NO		5: Yellow	F: 110V		● HLAY811DZS5*2
02: 2NC		6: Blue	M: 220V		● HLAY811DZS6*2
11: 1NO+1NC		7: Pure white	Q: 380V		○ HLAY811DZS7*2
		8: Pure blue			● HLAY811DZS8*4

NO + NC	Type	Color	Voltage	Power	Reference
10: 1NO	DS: Waterproof (Illuminated)	3: Green	T: 6V	2: AC/DC	● HLAY811DS3*4
01: 1NC		4: Red	B: 24V	4: AC	● HLAY811DS4*4
20: 2NO			F: 110V		● HLAY811DS5*2
02: 2NC			M: 220V		
11: 1NO+1NC			Q: 380V		



Note: Supply voltage code: T:6V, B:24V, F:110V, M:220V, N:230V, Q:380V
The pure white and pure blue are only available for LED lamp

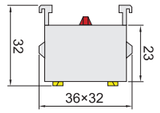
Industrial Control Components

HLAY8 Pushbutton Switches

Standard: IEC 60947-5-1

Order Information

Base — Unit: MM

Name	Type	Contact	Reference	Dimension
HLAY8	☐	☐		
	BE: Auxiliary contact	101: 1NO 102: 1NC 103: 2NO 104: 2NC 105: 1NO+1NC	HLAY8BE101 HLAY8BE102 HLAY8BE103 HLAY8BE104 HLAY8BE105	

Fuse Overview

Fuse

HRT16 459

Rated working current:
2~630A
Rated operation voltage:
500/690V
Rated breaking capacity:
120KA(500), 50KA(690V)

HRT18 462

Rated working current:
2~63A
Rated operation voltage:
380V
Rated breaking capacity:
100kA

HRT16 Fuse

Standard: IEC 60269

Function

HRT16 fuse provide:

- Protection of circuits against overload current
- Protection of circuits against short-circuit current

Order Information

Fuse-link	Rated Current In (A)	Suitable fuse bases	Weight (g)	Reference
HRT16-00C	2	HRT16-00	123	HRT16000S2
	4			HRT16000S4
	6			HRT16000S6
	8			HRT16000S8
	10			HRT16000S10
	12			HRT16000S12
	16			HRT16000S16
	20			HRT16000S20
	25			HRT16000S25
	32			HRT16000S32
	40			HRT16000S40
	50			HRT16000S50
	63			HRT16000S63
	80			HRT16000S80
	100			HRT16000S100
HRT16-00	2	HRT16-00	170	HRT16002
	4			HRT16004
	6			HRT16006
	8			HRT16008
	10			HRT160010
	12			HRT160012
	16			HRT160016
	20			HRT160020
	25			HRT160025
	32			HRT160032
	40			HRT160040
	50			HRT160050
	63			HRT160063
	80			HRT160080
	100			HRT1600100
	125			HRT1600125
	160			HRT1600160
HRT16-1	80	HRT16-1	450	HRT16180
	100			HRT161100
	125			HRT161125
	160			HRT161160
	200			HRT161200
	250			HRT161250
HRT16-2	125	HRT16-2	660	HRT162125
	160			HRT162160
	200			HRT162200
	250			HRT162250
	300			HRT162300
	315			HRT162315
	355			HRT162355
	400			HRT162400

HRT16 Fuse

Standard: IEC 60269

Order Information

Fuse-link	Rated Current In (A)	Suitable fuse bases	Weight (g)	Reference
HRT16-3	315	HRT16-3	850	HRT163315
	355			HRT163355
	400			HRT163400
	450			HRT163450
	500			HRT163500
	630			HRT163630

Order Information

Fuse Base	Rated Current In(A)	Material	Weight (g)	Reference
HRT16-00	160	Resin	200	HRT1600ZS
HRT16-1	250	Resin	700	HRT161ZS
HRT16-2	400	Resin	1150	HRT162ZS
HRT16-3	630	Resin	1280	HRT163ZS

Technical Data

Rated working current	2-630A
Rated operation voltage	500/690V
Rated breaking capacity	120KA(500), 50KA(690V)

Accessory-puller

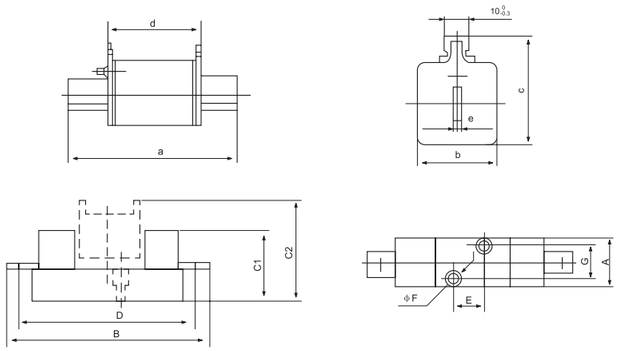
Metrial	Usage	Reference
ABS (flame resistance)	Assemble and replace HRT16 fuse	HRT16C

HRT16 Fuse

Standard: IEC 60269

Overall Dimensions

Unit: mm



Type	HRT16-00C	HRT16-00	HRT16-1	HRT16-2	HRT16-3
a	78.5	78.5	135	150	150
b	21	29	48	58	67
c	57	57	62	72	85
d	49	49	67	67	67
e	6	6	6	6	6
A	-	30	58	64	64
B	-	120	200	250	250
C1	-	61	83	99	105
C2	-	85	96	112	120
D	-	100	175	200	210
E	-	25	25	25	25
F	-	7.5	10.5	10.5	10.5
G	-	—	30	30	30

HRT18 Fuse

Standard: IEC 60269

CE

Function

HRT18 fuse provide:

- Protection of circuits against overload current
- Protection of circuits against short-circuit current

Order Information

Cylindrical Fuse	Rated Current In(A)	Weight (g)	Reference
HRT18-32	2	8	HRT1810382
	4		HRT1810384
	6		HRT1810386
	8		HRT1810388
	10		HRT18103810
	12		HRT18103812
	16		HRT18103816
	20		HRT18103820
	25		HRT18103825
	32		HRT18103832
HRT18-63	2	20	HRT1814512
	4		HRT1814514
	6		HRT1814516
	8		HRT1814518
	10		HRT18145110
	12		HRT18145112
	16		HRT18145116
	20		HRT18145120
	25		HRT18145125
	32		HRT18145132
	40		HRT18145140
	50		HRT18145150
	63		HRT18145163

HRT18 Fuse

Standard: IEC 60269

Order Information

Holder of fuse	Pole	Rated Current In(A)	Note	Weight (g)	Reference
HRT18-32X	1P	32	Material: Resin	82	HRT1832ZXB
	2P		With indicator		HRT1832Z2XB
	3P				HRT1832Z3XB
HRT18-32	1P	32	Material: Resin	82	HRT1832ZB
	2P		Without indicator		HRT1832Z2B
	3P				HRT1832Z3B
HRT18-32X	1P	32	Material: Nylon	82	HRT1832ZX
	2P		With indicator		HRT1832Z2X
	3P				HRT1832Z3X
HRT18-32	1P	32	Material: Nylon	82	HRT1832Z
	2P		Without indicator		HRT1832Z2
	3P				HRT1832Z3
HRT18-63X	1P	63	Material: Resin	206	HRT1863ZXB
	2P		With indicator		HRT1863Z2XB
	3P				HRT1863Z3XB
HRT18-63	1P	63	Material: Resin	206	HRT1863ZB
	2P		Without indicator		HRT1863Z2B
	3P				HRT1863Z3B

Technical Data

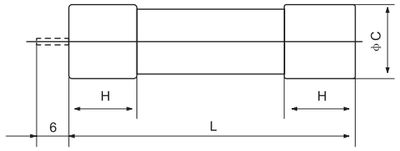
Rated working current	2-63A
Rated operation voltage	380V
Rated breaking capacity	100KA

HRT18 Fuse

Standard: IEC 60269

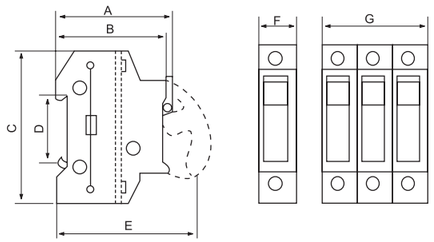
Overall Dimensions

Unit: mm



Cylindrical Fuse

Type	Size	L	C	Hmax
HRT18-32	10x38	38±0.6	10.3±0.1	10.5
HRT18-63	14x51	$51^{+0.6}_{-1.0}$	14.3±0.1	13.8



Holder of fuse

Type	A	B	C	D	E	F	G
HRT18-32	63	60	79	35	80	18	54
HRT18-63	78	76	103	35	110	25	75

Industrial Plugs & Sockets Overview

HDPM Moving Industrial plugs 466

Pole: 2P+E~3P+N+E
Voltage: 110~415V
Current: 16,32,63,125A

HDP Fixed Industrial Plugs 467

Pole: 2P+E~3P+N+E
Voltage: 110~415V
Current: 16,32,63,125A

HDSM Moving Industrial Sockets 468

Pole: 2P+E~3P+N+E
Voltage: 110~415V
Current: 16,32,63,125A

HDSF Fixed Industrial Sockets 469

Pole: 2P+E~3P+N+E
Voltage: 110~415V
Current: 16,32,63,125A

HDPS Multi-function Plugs and Sockets 470

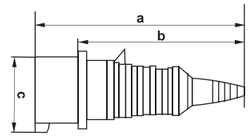
Pole: 2P+E
Voltage: 110V, 230V
Current: 16A

HDPM Moving Industrial Plugs

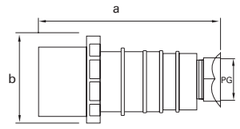
Standard: IEC 60309-1-2

Moving Industrial Plugs

	Pole No.	IP	Nominal voltage	Nominal current(A)	Reference
	2P+E	44	110~130	16	HDPM316IP441
				32	HDPM332IP441
	2P+E	44	230~250	16	HDPM316IP44
				32	HDPM332IP44
	3P+E	44	400~415	16	HDPM416IP44
				32	HDPM432IP44
	3P+N+E	44	230~400	16	HDPM516IP44
			240~415	32	HDPM532IP44
	2P+E	67	230~250	63	HDPM363IP67
	3P+E	67	400~415	63	HDPM463IP67
	3P+N+E	67	230~400	63	HDPM563IP67
			240~415	125	HDPM5125IP67



	16Amp			32Amp		
Poles	3	4	5	3	4	5
a	142	142	169	178	178	178
b	105	105	132	132	132	137
c	47	53	61	63	63	70



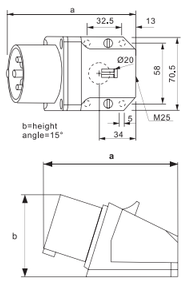
	63Amp			125Amp		
Poles	3	4	5	3	4	5
a	230	230	230	295	295	295
b	109	109	109	124	124	124
c	36	36	36	50	50	50

HDP Fixed Industrial Plugs

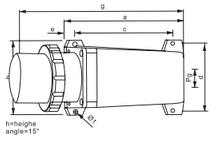
Standard: IEC 60309-1-2

Fixed Industrial Plugs

	Pole No.	IP	Nominal voltage	Nominal current(A)	Reference
	2P+E	44	110~130	16	HDP316IP441
				32	HDP332IP441
	2P+E	44	230~250	16	HDP316IP44
				32	HDP332IP44
	3P+E	44	400~415	16	HDP416IP44
				32	HDP432IP44
	3P+N+E	44	230~400	16	HDP516IP44
			240~415	32	HDP532IP44
	2P+E	67	230~250	63	HDP363IP67
	3P+E	67	400~415	63	HDP463IP67
	3P+N+E	67	230~400	63	HDP563IP67



	16Amp			32Amp		
Poles	3	4	5	3	4	5
a	151	152	160	189	189	194
b	66	76	90	90	90	90



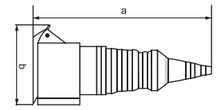
	63Amp		
Poles	3	4	5
a	193	193	193
b	122	122	122
c	157	157	157
d	109	109	109
e	19	19	19
f	6	6	6
g	288	288	288
h	127	127	127
PG	29	29	29

HDSM Moving Industrial Sockets

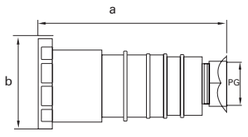
Standard: IEC 60309-1-2

Moving Industrial Sockets

	Pole No.	IP	Nominal voltage	Nominal current(A)	Reference
	2P+E	44	110~130	16	HDSM316IP441
				32	HDSM332IP441
	2P+E	44	230~250	16	HDSM316IP44
				32	HDSM332IP44
	3P+E	44	400~415	16	HDSM416IP44
				32	HDSM432IP44
	3P+N+E	44	230~400	16	HDSM516IP44
			240~415	32	HDSM532IP44
	2P+E	67	230~250	63	HDSM363IP67
				125	HDSM3125IP67
	3P+E	67	400~415	63	HDSM463IP67
				125	HDSM4125IP67
	3P+N+E	67	230~400	63	HDSM563IP67
			240~415	125	HDSM5125IP67



	16Amp			32Amp		
Poles	3	4	5	3	4	5
a	130	131	139	149	149	154
b	66	76	90	90	90	100



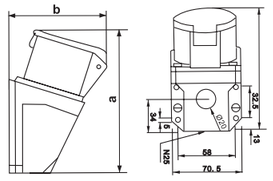
	63Amp			125Amp		
Poles	3	4	5	3	4	5
a	240	240	240	300	300	300
b	112	112	112	126	126	126
PG	36	36	36	50	50	50

HDSF Moving Industrial Sockets

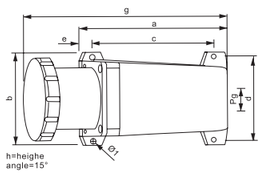
Standard: IEC 60309-1-2

Moving Industrial Sockets

	Pole No.	IP	Nominal voltage	Nominal current(A)	Reference
	2P+E	44	110~130	16	HDSF316IP441
				32	HDSF332IP441
	2P+E	44	230~250	16	HDSF316IP44
				32	HDSF332IP44
	3P+E	44	400~415	16	HDSF416IP44
				32	HDSF432IP44
	3P+N+E	44	230~400	16	HDSF516IP44
			240~415	32	HDSF532IP44
	2P+E	67	230~250	63	HDSF363IP67
				125	HDSF3125IP67
	3P+E	67	400~415	63	HDSF463IP67
				125	HDSF4125IP67
	3P+N+E	67	230~400	63	HDSF563IP67
			240~415	125	HDSF5125IP67



	16Amp			32Amp		
Poles	3	4	5	3	5	5
a	128	128	129	141	141	143
b	86	90	96	97	97	104
M	25	25	25	25	25	25



	63Amp			125Amp		
Poles	3	4	5	3	4	5
a	193	193	193	220	220	220
b	122	122	122	140	140	140
c	157	157	157	185	185	185
d	109	109	109	130	130	130
e	19	19	19	17	17	17
f	6	6	6	8	8	8
g	270	270	270	320	320	320
h	130	130	130	150	150	150
PG	29	29	29	36	36	36

HDPS Multi-function Plugs & Sockets

Standard: IEC 60309-1-2

Multi-function Plugs and Sockets

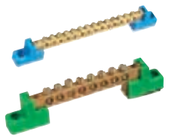
Pole No.	Input	Output	Nominal voltage(V)	Nominal current(A)	Reference
2P+E	1 Plug	2 socket	230	16	HDPS316230
2P+E	1 Plug	2 socket	110	16	HDPS316110
2P+E	1 Plug	3 socket	230	16	HDPS416230
2P+E	1 Plug	3 socket	110	16	HDPS416110

Industrial Control Components

Copper Terminal Block Overview

HTB010 473

Hole: 4, 6, 8, 10, 12, 14, 16
Hole diameter (mm): 5.2, 6
Screw dimension (mm): M4*8, M5*10
Max current(A): 100, 150

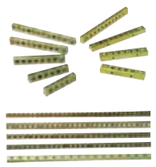


HTB019 474

Hole: 4, 6, 8, 10, 12, 14, 16
Hole diameter (mm): 5.2, 6
Screw dimension (mm): M4*8, M5*10
Max current (A):1 00, 150

HTB007 475

Hole: 6, 8, 10, 12, 14, 16
Hole diameter (mm): 5.2, 6
Screw dimension (mm): M4*8, M5*10
Max current (A): 100, 150



HTB043 476

Hole: 78, 109, 116, 133
Hole diameter (mm): 5~9
Screw dimension (mm): M4*8~M6*12
Max current (A): 100~200

HTB112 476

Hole: 2x7, 2x15, 4x7, 4x11, 4x15
Hole diameter (mm): 5.2
Screw dimension (mm): M4
Max current (A): 125

DIN Rail Overview

HDIN 477

Thickness(mm): 1.0
Length: 1000mm,2000mm
Material: Aluminum, Steel

HCF Series Cable Connector

Technical Data

- Thread specification: International metric standard
- Material: Nylon 66
- Working temp.: -40°C～+100°C
- Max temp. In short time: +120°C
- Installation: Standard threaded hole
- Colour: Black & gray

Order Information

Cable range (mm)	Thread external diameter (mm)	Panel hole (mm)	Thread length (mm)	Spanner size A&F	Reference Black	Reference Gray
7.6-4.6	12	12.5	8.5	18/19	HCFMG12IP68B	HCFMG12IP68W
10-6	16	16.5	15	22/22	HCFMG16IP68B	HCFMG16IP68W
14-9	20	20.5	15	27/27	HCFMG20IP68B	HCFMG20IP68W
18-13	25	25.5	15	33/33	HCFMG25IP68B	HCFMG25IP68W
25-18	32	33	15	41/41	HCFMG32IP68B	HCFMG32IP68W
30-24	40	41	20	50/50	HCFMG40IP68B	HCFMG40IP68W
41-30	50	51	22	62/62	HCFMG50IP68B	HCFMG50IP68W
51-40	63	64	25	75/75	HCFMG63IP68B	HCFMG63IP68W
7-3.5	7	12.5	8	17/19	——	HCFPG7IP54W
8-4.5	9	15.2	8.5	22/19	——	HCFPG9IP54W
10.5-6	11	18.6	9	24/22	——	HCFPG11IP54W
12.5-7.5	13.5	20.4	9.6	27/24	——	HCFPG135IP54W
14-8.5	16	22.5	10	30/27	——	HCFPG16IP54W
18-12.5	21	28.3	12	36/33	——	HCFPG21IP54W
25-18	29	37	15	46/41	——	HCFPG29IP54W
30-23	36	47	15	57/50	——	HCFPG36IP54W
39-30	42	54	15.5	64/62	——	HCFPG42IP54W
45-35	48	59.3	15.5	70/65	——	HCFPG48IP54W

HTB010 Series Copper Terminal Block

Order Information

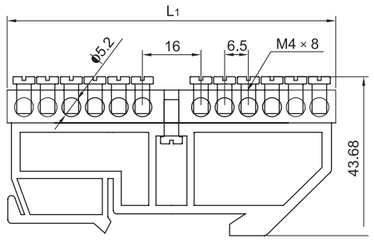
HTB0100609

Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension (mm) (L)	Overall dimensions (mm) (L1)	Reference
4	6 x 9	5.2	35 x 7.5	88.5 x 12.1	HTB0100609W4*
6	6 x 9	5.2	35 x 7.5	88.5 x 12.1	HTB0100609W6*
8	6 x 9	5.2	35 x 7.5	88.5 x 12.1	HTB0100609W8*
10	6 x 9	5.2	35 x 7.5	88.5 x 12.1	HTB0100609W10*
12	6 x 9	5.2	35 x 7.5	90.5 x 12.1	HTB0100609W12*
14	6 x 9	5.2	35 x 7.5	103.5 x 12.1	HTB0100609W14*
16	6 x 9	5.2	35 x 7.5	116.5 x 12.1	HTB0100609W16*

'*' means support color below:
Y =Yellow
B = Blue

Dimension

Unit: mm



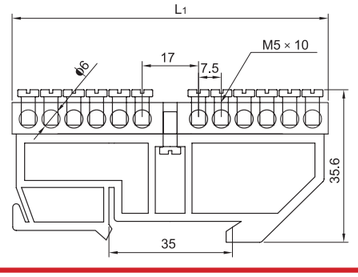
HTB0100812

Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension(mm) (L)	Overall dimensions (mm) (L1)	Reference
4	8 x 12	6	35 x 7.5	88.5 x 12.1	HTB0100812W4*
6	8 x 12	6	35 x 7.5	88.5 x 12.1	HTB0100812W6*
8	8 x 12	6	35 x 7.5	88.5 x 12.1	HTB0100812W8*
10	8 x 12	6	35 x 7.5	88.5 x 12.1	HTB0100812W10*
12	8 x 12	6	35 x 7.5	102.5 x 12.1	HTB0100812W12*
14	8 x 12	6	35 x 7.5	117.5 x 12.1	HTB0100812W14*
16	8 x 12	6	35 x 7.5	132 x 12.1	HTB0100812W16*

'*' means support color below:
Y =Yellow
B = Blue

Dimension

Unit: mm



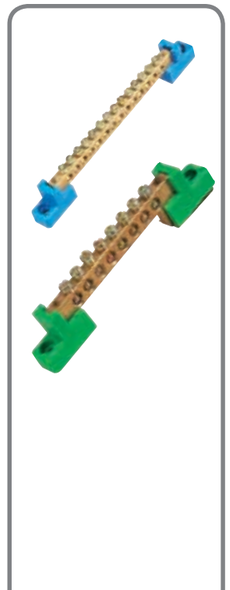
HTB019 Series Copper Terminal Block

Order Information

HTB0190609

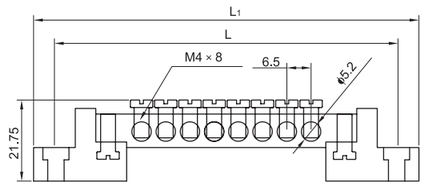
Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension(mm) (L)	Overall dimensions (mm) (L1)	Reference
4	6 x 9	5.2	64.5	76.5 x 12.5	HTB0190609W4*
6	6 x 9	5.2	77.5	89.5 x 12.5	HTB0190609W6*
8	6 x 9	5.2	90.5	102.5 x 12.5	HTB0190609W8*
10	6 x 9	5.2	103.5	115.5 x 12.5	HTB0190609W10*
12	6 x 9	5.2	116.5	128.5 x 12.5	HTB0190609W12*
14	6 x 9	5.2	129.5	141.5 x 12.5	HTB0190609W14*
16	6 x 9	5.2	142.5	154.5 x 12.5	HTB0190609W16*

'*' means support color below:
G = Green
B = Blue



Dimension

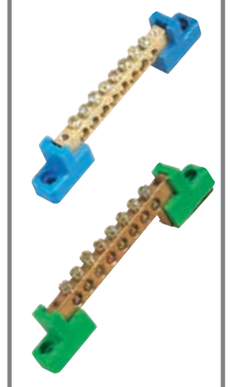
Unit:mm



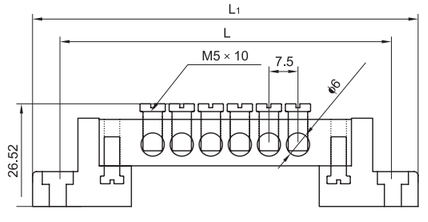
HTB0070812

Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension (mm) (L)	Overall dimensions (mm) (L1)	Reference
4	8 x 12	6	71.5	84.5 x 12.5	HTB0190812W4*
6	8 x 12	6	86.5	99.5 x 12.5	HTB0190812W6*
8	8 x 12	6	101.5	114.5 x 12.5	HTB0190812W8*
10	8 x 12	6	116.5	129.5 x 12.5	HTB0190812W10*
12	8 x 12	6	131.5	144.5 x 12.5	HTB0190812W12*
14	8 x 12	6	146.5	159.5 x 12.5	HTB0190812W14*
16	8 x 12	6	161.5	174.5 x 12.5	HTB0190812W16*

'*' means support color below:
G = Green
B = Blue



Dimension



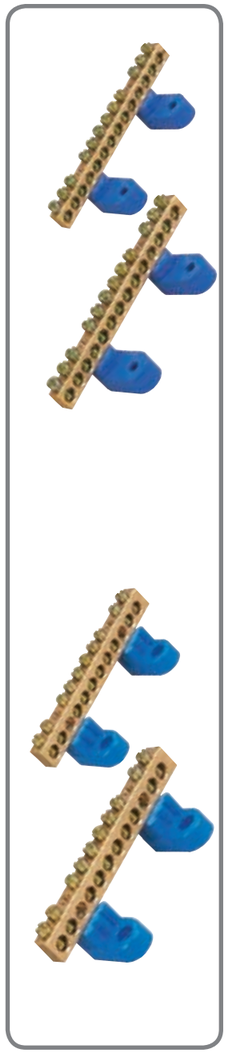
HTB007 Series Copper Terminal Block

Order Information

HTB0070609

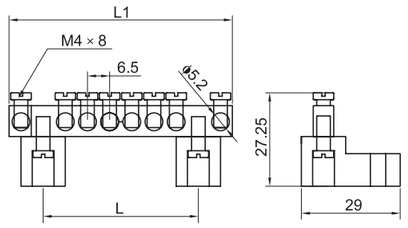
Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension(mm) (L)	Overall dimensions (mm) (L1)	Reference
6	6 x 9	5.2	44.5	58.5 x 29	HTB0070609W6*
8	6 x 9	5.2	44.5	65.5 x 29	HTB0070609W8*
10	6 x 9	5.2	44.5	78.5 x 29	HTB0070609W10*
12	6 x 9	5.2	44.5	91.5 x 29	HTB0070609W12*
14	6 x 9	5.2	44.5	104.5 x 29	HTB0070609W14*
16	6 x 9	5.2	44.5	117.5 x 29	HTB0070609W16*

'*' means support color below:
G = Green
B = Blue



Dimension

Unit: mm



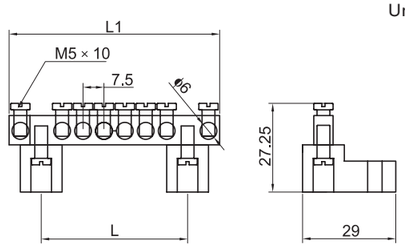
HTB0070812

Holes	Cross section (mm)	Hole diameter (mm)	Installation dimension(mm) (L)	Overall dimensions (mm) (L1)	Reference
6	8 x 12	6	52.5	68.5 x 28.5	HTB0070812W6*
8	8 x 12	6	52.5	77.5 x 28.5	HTB0070812W8*
10	8 x 12	6	52.5	92.5 x 28.5	HTB0070812W10*
12	8 x 12	6	52.5	107.5 x 28.5	HTB0070812W12*
14	8 x 12	6	52.5	122.5 x 28.5	HTB0070812W14*
16	8 x 12	6	52.5	137.5 x 28.5	HTB0070812W16*

'*' means support color below:
G = Green
B = Blue

Dimension

Unit: mm

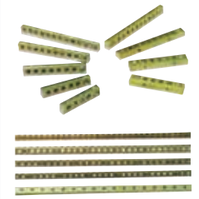


HTB043 & HTB112 Series Copper Terminal Blocks

Order Information

HTB043

Holes	Cross section (mm)	Hole diameter (mm)	Screw dimensions (mm)	Reference
78	16 x 16	9	M6*12	HTB0431616W078
109	14 x 14	7	M6*12	HTB0431414W109
116	10 x 10	6	M5*10	HTB0431010W116
116	8 x 12	6.5	M5*10	HTB0430812W116
116	8 x 10	6	M5*10	HTB0430810W116
116	9 x 9	5.5	M5*10	HTB0430909W116
133	7 x 9	5.2	M4*10	HTB0430709W133
133	8 x 8	5.2	M4*8	HTB0430808W133
133	6 x 9	5.2	M4*8	HTB0430609W133
133	6 x 8	5	m4*8	HTB0430608W133



HTB112

Line	Holes per line	Overall diamension			Installation dimensions (mm) (L)	Reference
		Length	Width	Height		
2	7	65	45	51	45 x M4	HTB112W2P7
2	15	132	45	51	112 x M4	HTB112W2P15
4	7	65	88	51	45 x M4	HTB112W4P7
4	11	100	88	51	80 x M4	HTB112W4P11
4	15	132	88	51	112 x M4	HTB112W4P15

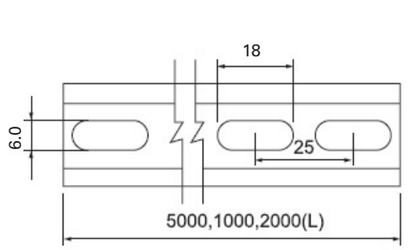
HDIN Rail Series

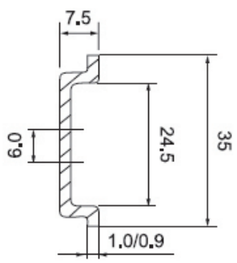
Order Information

Thickness (mm)	Length	Material	Reference
1.0	1000mm	Aluminum	HDIN02T1000
	2000mm	Aluminum	HDIN02T2000
	1000mm	Steel	HDIN12T1000
	2000mm	Steel	HDIN12T2000

Order Information

Unit: mm





Current Transformer Overview

Current Transformer

HLMK 479

Class: 0.5, 1.0
Current Ratio: 30/5~5000/5
Bar: 30x10, 40x10, 50x10, 60x20, 80x10(60x30), 100x10(80x30), 120x10(80x30

Meter Overview

Single-phase

HDDS607/HDDS606 482

Type:
Single-phase

Specification
1.5(6)A, 3(6)A
2.5(10A), 5(20)A
5(30)A, 10(40)A
15(60)A, 20(80)A
30(100)A

Meter Overview

Three-phase

HDTS607 484

Type:
Three-phase
Four-wire

Specification
1.5(6)A, 3(6)A
2.5(10A), 5(20)A
5(30)A, 10(40)A
15(60)A, 20(80)A
30(100)A

HDSS607 487

Type:
Three-phase
Three-wire

Specification
1.5(6)A, 3(6)A
5(20)A, 10(40)A
15(60)A, 20(80)A
30(100)A

Panel Meter

H72 Series 490

Type:
- Ammeter
- Voltmeter
- Frequency meter

Specification
72x72mm

H96 Series 492

Type:
- Ammeter
- Voltmeter
- Frequency meter

Specification
96x96mm

HLMK Series Current Transformer

Standard: IEC 60044-1

Function

HLMK Series Current Transformer provide:

- Measuring and transforming the high current to low current

Order Information

Class: 0.5
Maximum Voltage: 0.66KV

Model	Current ratio (A)	Rated Load (VA)	Bar (mm)	Diameter (mm)	Number of Turns through the core	Reference
HLMK-0.66-30	30/5	5-3.75		20	5	HLMKP63030
	50/5	5-3.75		20	3	HLMKP65030
	75/5	5-3.75		20	2	HLMKP67530
	100/5	5-3.75		20	1	HLMKP610030Z
	100/5	5-3.75		20	2	HLMKP610030
	150/5	5-3.75		20	1	HLMKP615030
	200/5	5-3.75	30×10	20	1	HLMKP620030
	250/5	5-3.75	30×10	20	1	HLMKP625030
	300/5	5-3.75	30×10	20	1	HLMKP630030
HLMK-0.66-40	250/5	5-3.75	40×10	30	1	HLMKP625040
	300/5	5-3.75	40×10	30	1	HLMKP630040
	400/5	5-3.75	40×10	30	1	HLMKP640040
	500/5	5-3.75	40×10	30	1	HLMKP650040
HLMK-0.66-50	300/5	5-3.75	50×10	35	1	HLMKP630050
	400/5	5-3.75	50×10	35	1	HLMKP640050
	500/5	5-3.75	50×10	35	1	HLMKP650050
	600/5	10-3.75	50×10	35	1	HLMKP660050
	750/5	10-3.75	50×10	35	1	HLMKP675050
	800/5	10-3.75	50×10	35	1	HLMKP680050
	1000/5	10-3.75	50×10	35	1	HLMKP6100050
HLMK-0.66-60	500/5	5-3.75	60×20	45	1	HLMKP650060
	600/5	10-3.75	60×20	45	1	HLMKP660060
	750/5	10-3.75	60×20	45	1	HLMKP675060
	800/5	10-3.75	60×20	45	1	HLMKP680060
	1000/5	10-3.75	60×20	45	1	HLMKP6100060
	1200/5	10-3.75	60×20	45	1	HLMKP6120060
	1500/5	10-3.75	60×20	45	1	HLMKP6150060
HLMK-0.66-80	600/5	10-3.75	80×10 or 60×30	50	1	HLMKP660080
	750/5	10-3.75	80×10 or 60×30	50	1	HLMKP675080
	800/5	10-3.75	80×10 or 60×30	50	1	HLMKP680080
	1000/5	10-3.75	80×10 or 60×30	50	1	HLMKP6100080
	1200/5	10-3.75	80×10 or 60×30	50	1	HLMKP6120080
	1500/5	15-3.75	80×10 or 60×30	50	1	HLMKP6150080
	2000/5	15-3.75	80×10 or 60×30	50	1	HLMKP6200080
	2500/5	20-3.75	80×10 or 60×30	50	1	HLMKP6250080
HLMK-0.66-100	600/5	10-3.75	100×10 or 80×30	60	1	HLMKP6600100
	750/5	10-3.75	100×10 or 80×30	60	1	HLMKP6750100
	800/5	10-3.75	100×10 or 80×30	60	1	HLMKP6800100
	1000/5	10-3.75	100×10 or 80×30	60	1	HLMKP61000100
	1200/5	10-3.75	100×10 or 80×30	60	1	HLMKP61200100
	1500/5	15-3.75	100×10 or 80×30	60	1	HLMKP61500100
	2000/5	15-3.75	100×10 or 80×30	60	1	HLMKP62000100
	2500/5	20-3.75	100×10 or 80×30	60	1	HLMKP62500100
	3000/5	20-3.75	100×10 or 80×30	60	1	HLMKP63000100
HLMK-0.66-120	1500/5	15-3.75	120×10 or 80×30	60	1	HLMKP61500120
	2000/5	15-3.75	120×10 or 80×30	60	1	HLMKP62000120
	2500/5	20-3.75	120×10 or 80×30	60	1	HLMKP62500120
	3000/5	20-3.75	120×10 or 80×30	60	1	HLMKP63000120
	4000/5	25-3.75	120×10 or 80×30	60	1	HLMKP64000120
	5000/5	25-3.75	120×10 or 80×30	60	1	HLMKP65000120

HLMK Series Current Transformer

Standard: IEC 60044-1

Order Information

Class: 1
Maximum Voltage: 0.66KV

Model	Current ratio (A)	Rated Load (VA)	Bar (mm)	Diameter (mm)	Number of Turns through the core	Reference
HLMK-0.66-30	30/5	5-3.75		20	5	HLMKP6P13030
	50/5	5-3.75		20	3	HLMKP6P15030
	75/5	5-3.75		20	2	HLMKP6P17530
	100/5	5-3.75		20	2	HLMKP6P110030
	150/5	5-3.75		20	1	HLMKP6P115030
	200/5	5-3.75	30×10	20	1	HLMKP6P120030
	250/5	5-3.75	30×10	20	1	HLMKP6P125030
HLMK-0.66-40	300/5	5-3.75	30×10	20	1	HLMKP6P130030
	250/5	5-3.75	40×10	30	1	HLMKP6P125040
	300/5	5-3.75	40×10	30	1	HLMKP6P130040
	400/5	5-3.75	40×10	30	1	HLMKP6P140040
	500/5	5-3.75	40×10	30	1	HLMKP6P150040
	600/5	10-3.75	40×10	30	1	HLMKP6P160040
HLMK-0.66-50	300/5	5-3.75	50×10	35	1	HLMKP6P130050
	400/5	5-3.75	50×10	35	1	HLMKP6P140050
	500/5	5-3.75	50×10	35	1	HLMKP6P150050
	600/5	10-3.75	50×10	35	1	HLMKP6P160050
	750/5	10-3.75	50×10	35	1	HLMKP6P175050
	800/5	10-3.75	50×10	35	1	HLMKP6P180050
	1000/5	10-3.75	50×10	35	1	HLMKP6P1100050
	1200/5	10-3.75	60×20	35	1	HLMKP6P1120050
HLMK-0.66-60	500/5	5-3.75	60×20	45	1	HLMKP6P150060
	600/5	10-3.75	60×20	45	1	HLMKP6P160060
	750/5	10-3.75	60×20	45	1	HLMKP6P175060
	800/5	10-3.75	60×20	45	1	HLMKP6P180060
	1000/5	10-3.75	60×20	45	1	HLMKP6P1100060
	1200/5	10-3.75	60×20	45	1	HLMKP6P1120060
	1500/5	10-3.75	60×20	45	1	HLMKP6P1150060
	2000/5	10-3.75	60×20	45	1	HLMKP6P1200060
HLMK-0.66-80	600/5	10-3.75	80×10 or 60×30	50	1	HLMKP6P160080
	750/5	10-3.75	80×10 or 60×30	50	1	HLMKP6P175080
	800/5	10-3.75	80×10 or 60×30	50	1	HLMKP6P180080
	1000/5	10-3.75	80×10 or 60×30	50	1	HLMKP6P1100080
	1200/5	10-3.75	80×10 or 60×30	50	1	HLMKP6P1120080
	1500/5	15-3.75	80×10 or 60×30	50	1	HLMKP6P1150080
	2000/5	15-3.75	80×10 or 60×30	50	1	HLMKP6P1200080
	2500/5	20-3.75	80×10 or 60×30	50	1	HLMKP6P1250080
HLMK-0.66-100	600/5	10-3.75	100×10 or 80×30	60	1	HLMKP6P1600100
	750/5	10-3.75	100×10 or 80×30	60	1	HLMKP6P1750100
	800/5	10-3.75	100×10 or 80×30	60	1	HLMKP6P1800100
	1000/5	10-3.75	100×10 or 80×30	60	1	HLMKP6P11000100
	1200/5	10-3.75	100×10 or 80×30	60	1	HLMKP6P11200100
	1500/5	15-3.75	100×10 or 80×30	60	1	HLMKP6P11500100
	2000/5	15-3.75	100×10 or 80×30	60	1	HLMKP6P12000100
	2500/5	20-3.75	100×10 or 80×30	60	1	HLMKP6P12500100
	3000/5	20-3.75	100×10 or 80×30	60	1	HLMKP6P13000100
HLMK-0.66-120	1500/5	15-3.75	120×10 or 80×30	60	1	HLMKP6P11500120
	2000/5	15-3.75	120×10 or 80×30	60	1	HLMKP6P12000120
	2500/5	20-3.75	120×10 or 80×30	60	1	HLMKP6P12500120
	3000/5	20-3.75	120×10 or 80×30	60	1	HLMKP6P13000120
	4000/5	25-3.75	120×10 or 80×30	60	1	HLMKP6P14000120
	5000/5	25-3.75	120×10 or 80×30	60	1	HLMKP6P15000120

HLMK Series Current Transformer

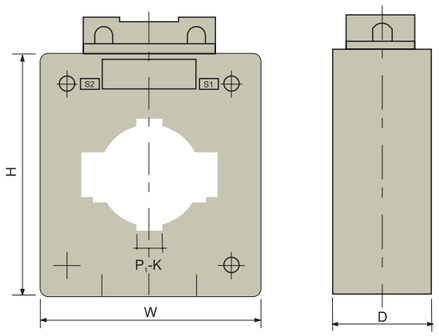
Standard: IEC 60044-1

Technical Data

- Primary current: 30A-5000A
- Secondary approval: 5A
- Maximum voltage: 0.66kV
- Class: 0.5, 1.0
- Short time thermal current: Ith=100Ih
- Rated security coefficient: FS<5
- Standard: IEC 60044-1

Overall Dimensions

Unit: mm



Model	H	W	D
HLMK-0.66-30	79	60	37
HLMK-0.66-40	99	75	40
HLMK-0.66-50	99	82	40
HLMK-0.66-60	126	102	40
HLMK-0.66-80	118	125	40
HLMK-0.66-100	136	170	40
HLMK-0.66-120	136	190	41

HDDS607/HDDS606 Single-phase Electronic Watt-hour Meter

Standard: IEC 62053-21

Function

HDDS607/HDDS606 single-phase watt-hour meter provide:

- Measuring the active energy in the single-phase AC power network with frequency of 50Hz or 60Hz
- Measuring the active energy for enterprises, transformer sub-station or power sub-station
- Automation meter in power transmission and distribution network

Order Information

Function Description	Current specification	Reference
Type A (Import chip)	1.5(6)A	HDDS607N16M4A
Type A (Import chip)	2.5(10)A	HDDS607N110M4A
Type A (Import chip)	5(20)A	HDDS607N120M4A
Type A (Import chip)	5(30)A	HDDS607N130M6A
Type A (Import chip)	10(40)A	HDDS607N140M4A
Type A (Import chip)	15(60)A	HDDS607N160M4A
Type A (Import chip)	20(80)A	HDDS607N180M4A
Type A (Import chip)	30(100)A	HDDS607N1100M3A
Type C (Domestic chip)	1.5(6)A	HDDS607N26M4C
Type C (Domestic chip)	2.5(10)A	HDDS607N210M4C
Type C (Domestic chip)	5(20)A	HDDS607N220M4C
Type C (Domestic chip)	5(30)A	HDDS607N230M6C
Type C (Domestic chip)	10(40)A	HDDS607N240M4C
Type C (Domestic chip)	15(60)A	HDDS607N260M4C
Type C (Domestic chip)	20(80)A	HDDS607N280M4C
Type C (Domestic chip)	30(100)A	HDDS607N2100M3C
LCD without 485 communications	1.5(6)A	HDDS606N16M4CD
LCD without 485 communications	2.5(10)A	HDDS606N110M4CD
LCD without 485 communications	5(20)A	HDDS606N120M4CD
LCD without 485 communications	5(30)A	HDDS606N130M6CD
LCD without 485 communications	10(40)A	HDDS606N140M4CD
LCD without 485 communications	15(60)A	HDDS606N160M4CD
LCD without 485 communications	20(80)A	HDDS606N180M4CD
LCD with 485 communications	1.5(6)A	HDDS606N16M4CD485
LCD with 485 communications	5(20)A	HDDS606N120M4CD485
LCD with 485 communications	10(40)A	HDDS606N140M4CD485
LCD with 485 communications	15(60)A	HDDS606N160M4CD485
LCD with 485 communications and infrared communications	1.5(6)A	HDDS606N116M4CD485I
LCD with 485 communications and infrared communications	2.5(10)A	HDDS606N110M4CD485I
LCD with 485 communications and infrared communications	5(20)A	HDDS606N120M4CD485I
LCD with 485 communications and infrared communications	5(30)A	HDDS606N130M6CD485I
LCD with 485 communications and infrared communications	10(40)A	HDDS606N140M4CD485I
LCD with 485 communications and infrared communications	15(60)A	HDDS606N160M4CD485I
LCD with 485 communications and infrared communications	20(80)A	HDDS606N180M4CD485I
LCD with 485 communications and infrared communications	30(100)A	HDDS606N1100M3CD485I

Note: Special specifications can be customized

HDDS607/HDDS606 Single-phase Electronic Watt-hour Meter

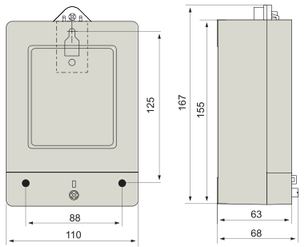
Standard: IEC 62053-21

Technical Data

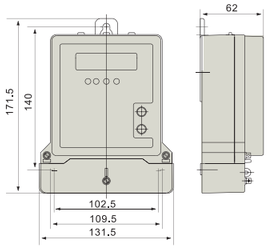
Standard	IEC 62053-21
Certificate	KEMA
Working voltage (V)	230V
Power loss	Voltage circuit ≤2W per10VA, Current circuit≤4VA
Optional functions	LCD display, Infrared communication, 485 communication
Normal working temp.	-10°C~+45°C
Limited working temp.	-25°C~+55°C
Normal working voltage	0.9~1.1 (Ref. voltage)
Limited working voltage	0.8~1.15 (Ref. voltage)
Relative humidity	<75%
Installation location	Should be installed in the height of 1.8m vertically and the angularity ≤1°

Overall Dimensions

Unit: mm



Single-phase Type A,C Meter



Single-phase LCD Meter

HDTS607 Three-phase Four-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

Function

HDTS607 Three Phase four-wire watt-hour meter provide:

- Measuring the active energy in the three-phase four-wire AC power network at frequency of 50Hz or 60Hz
- Measure the active energy of enterprises, transformer sub-station or power stations, and be used as automation meters of power transmission and distribution network

Order Information

Voltage (V)	Grade	Current (A)	Reference
57.7/100	1	1.5(6)	HDTS607WY16M4
		3(6)	HDTS607WY16M2
230/400	1	1.5(6)	HDTS607NV16M4
		2.5(10)	HDTS607NV110M4
		3(6)	HDTS607NV16M2
		5(20)	HDTS607NV120M4
		10(40)	HDTS607NV140M4
		15(60)	HDTS607NV160M4
		20(80)	HDTS607NV180M4
		30(100)	HDTS607NV1100M3

NOTE: 'M' expresses the current multiple in the standard codes
Transformer function (H) is only available for 1.5(6)A and 3(6)A

Power Energy Management

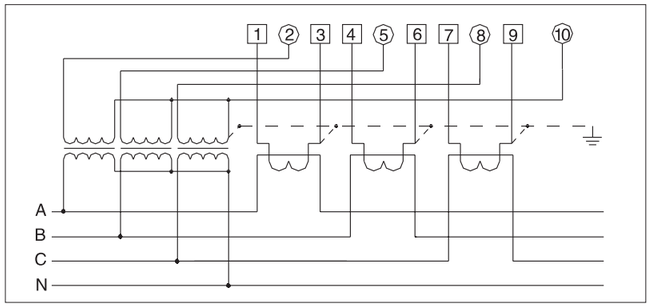
HDTS607 Three-phase Four-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

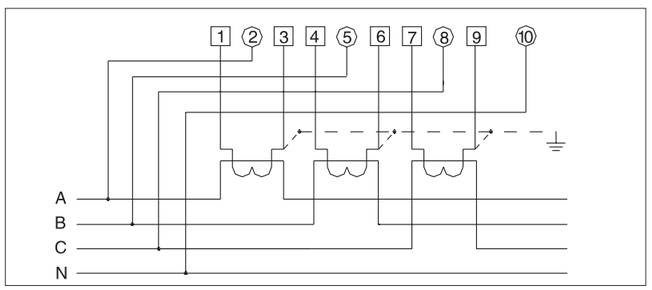
Technical Data

Working voltage	57.7/100V, 230/400V
Power loss	Voltage circuit ≤2W per10VA, Current circuit ≤4VA
Optional functions	LCD display, Infrared communication, 485 communication
Normal working temp.	-10°C～+45°C
Ultimate working temp.	-25°C～+55°C
Normal working voltage	0.9～1.1 (Ref. voltage)
Ultimate working voltage	0.8～1.15 (Ref. voltage)
Relative humidity	＜75%
Installation location	Should be installed in the height of 1.8m vertically and the angularity ≤1°.

Wiring Diagram



• Wiring diagram for 3 x 57.7/100V ≤3 x 3(6)A with voltage transformer

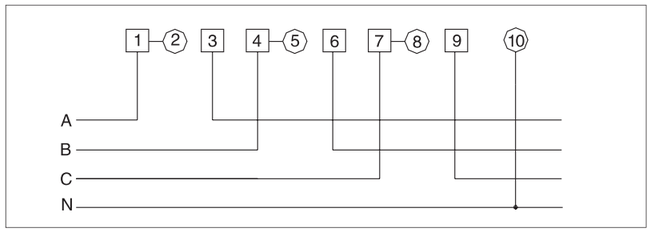


• Wiring diagram for 3 x 230/400V ≤3 x 3(6)A with current transformer

HDTS607 Three-phase Four-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

Wiring Diagram

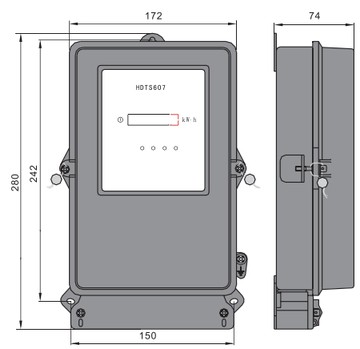


• Wiring diagram for 3 x 230/400V ⩾3 x 2.5(10)A direct

• Wiring diagram for impulse testing

Overall Dimensions

Unit: mm



Power Energy Management

HDSS607 Three-phase Three-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

Function

HDSS607 Single-phase electronic watt-hour meter provides:

- Measuring the active energy in the three-phase three-wire AC power network at frequency of 50Hz or 60Hz
- Measure the active energy of enterprises, transformer sub-station or power stations, and be used as automation meters of power transmission and distribution network

Order Information

Voltage (V)	Grade	Current (A)	Reference
100	1	1.5（6）	HDSS607Y16M4
		3（6）	HDSS607Y16M2
400	1	1.5（6）	HDSS607V16M4
		3（6）	HDSS607V16M2
		5（20）	HDSS607V120M4
		10（40）	HDSS607V140M4
		15（60）	HDSS607V160M4
		20（80）	HDSS607V180M4
		30（100）	HDSS607V1100M3

NOTE: 'M' expresses the current multiple in the standard codes
Transformer function (H) is only available for 1.5(6)A and 3(6)A

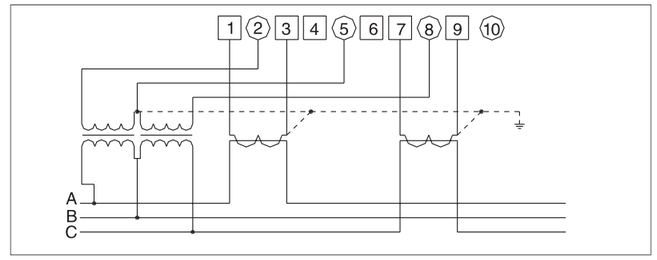
HDSS607 Three-phase Three-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

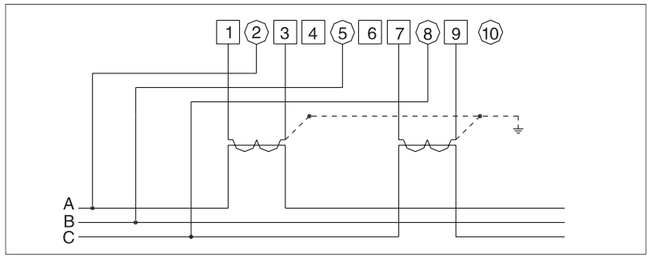
Technical Data

Standard	IEC 62053-21
Working voltage	100V 400V
Power loss	Voltage circuit≤2W per 10VA, Current circuit ≤ 4VA
Optional functions	LCD display, Infrared communication, 485 communication
Normal working temp.	-10°C～+45°C
Ultimate working temp.	-25°C～+55°C
Normal working voltage	0.9～1.1 (Ref. voltage)
Ultimate working voltage	0.8～1.15 (Ref. voltage)
Relative humidity	＜75%
Installation location	Should be installed in the height of 1.8m vertically and the angularity ≤1°.

Wiring Diagram



- Wiring diagram for 3 x 100V ≤3 x 3(6)A with voltage transformer



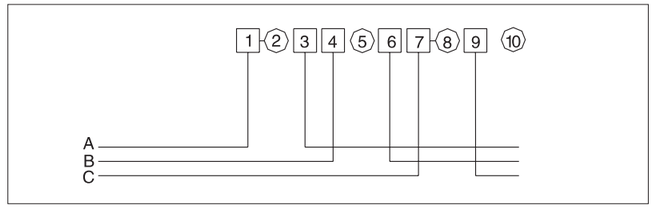
- Wiring diagram for 3 x 400V ≤3 x 3(6)A with current transformer

Power Energy Management

HDSS607 Three-phase Three-wire Electronic Watt-hour Meter

Standard: IEC 62053-21

Wiring Diagram

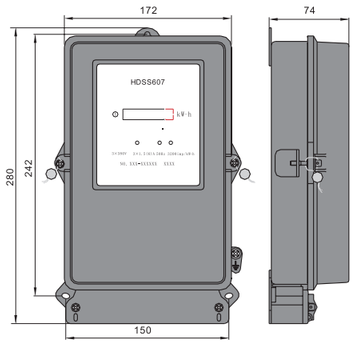


- Wiring diagram for 3 x 400V ≥3 x 2.5(10)A direct

- Wiring diagram for impulse testing

Overall Dimensions

Unit: mm



H72 Series Panel Meter

Standard: IEC 60051

Function

H72 series panel meter provide:

- H72T/H72L applies to measure the current, voltage or frequency in the AC circuit
- H72C applies to measure the current or voltage in the DC circuit
- Mainly be used as an indicating instrument for high or low-voltage switch cabinet, power supply cabinet, control cabinet and other electric-control facilities in the AC transmission circuit system

Order Information

Type	Accuracy rating	Specification	Note	Dimensions (mm)	Reference
Ammeter	1.5	30/5A	AC Type	72×72×67.5	H72TA30
		40/5A	External connection	72×72×67.5	H72TA40
		50/5A	transformer	72×72×67.5	H72TA50
		60/5A	2 times of current	72×72×67.5	H72TA60
		75/5A	overload	72×72×67.5	H72TA75
		80/5A		72×72×67.5	H72TA80
		100/5A		72×72×67.5	H72TA100
		150/5A		72×72×67.5	H72TA150
		160/5A		72×72×67.5	H72TA160
		200/5A		72×72×67.5	H72TA200
		250/5A		72×72×67.5	H72TA250
		300/5A		72×72×67.5	H72TA300
		400/5A		72×72×67.5	H72TA400
		600/5A		72×72×67.5	H72TA600
		800/5A		72×72×67.5	H72TA800
		1000/5A		72×72×67.5	H72TA1000
		1600/5A		72×72×67.5	H72TA1600
		5000/5A		72×72×67.5	H72TA5000
		10000/5A		72×72×67.5	H72TA10000
		5A	AC Type Direct connection	72×72×67.5	H72TA5A
	2.5	15A	AC Type	72×72×67.5	H72TA15A
		20A	Direct connection	72×72×67.5	H72TA20A
		25A	2 times of current	72×72×67.5	H72TA25A
		30A	overload	72×72×67.5	H72TA30A
		40A		72×72×67.5	H72TA40A
		50A		72×72×67.5	H72TA50A
		60A		72×72×67.5	H72TA60A
		80A		72×72×67.5	H72TA80A
		100A		72×72×67.5	H72TA100A
	1.5	5A	DC Type	72×72×67.5	H72CA5A
Voltmeter	1.5	300V	AC Type	72×72×67.5	H72LV300
		500V		72×72×67.5	H72LV500
		600V		72×72×67.5	H72LV600
		500V	DC Type	72×72×67.5	H72CV500
Frequency meter	1.0	45-55HZ (200V)	AC Type	72×72×67.5	H72LHZ01200V

Power Energy Management

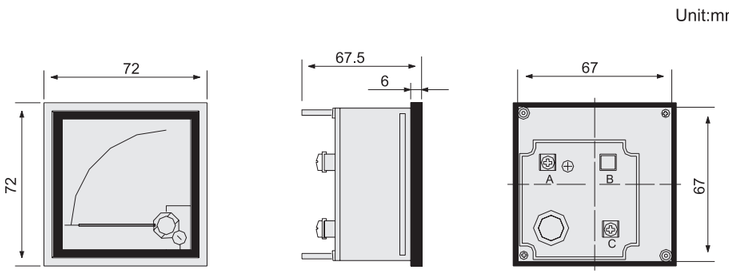
H72 Series Panel Meter

Standard: IEC 60051

Technical Data

Standard	IEC 60051
Dielectric strength test	Frequency 50/60Hz, Voltage 2000V, duration 1 minute
Impact test	Max acceleration 147m/s^2
Response time	≤4s
Angular Deflection	90°
Temp.	-25°C～+40°C
Humidity	(25%～80%) RH
Environment	No mildew, insects, salt mist, dew, sand and dust is permitted
Installation	Installed vertically
Ingress protection:	IP42

Overall Dimensions



H96 Series Panel Meter

Standard: IEC 60051

Function

H96 series panel meter provide:

- H96T/H96L applies to measure the current, voltage or frequency in the AC circuit
- H96C applies to measure the current or voltage in the DC circuit
- Mainly be used as an indicating instrument for high or low-voltage switch cabinet, power supply cabinet, control cabinet and other electric-control facilities in the AC transmission circuit system

Order Information

Type	Accuracy rating	Specification	Note	Dimensions (mm)	Reference
Ammeter	1.5	30/5A	AC Type	96×96×67.5	H96TA30
		40/5A	External connection	96×96×67.5	H96TA40
		50/5A	transformer	96×96×67.5	H96TA50
		60/5A		96×96×67.5	H96TA60
		75/5A		96×96×67.5	H96TA75
		80/5A		96×96×67.5	H96TA80
		100/5A		96×96×67.5	H96TA100
		150/5A		96×96×67.5	H96TA150
		160/5A		96×96×67.5	H96TA160
		200/5A		96×96×67.5	H96TA200
		250/5A		96×96×67.5	H96TA250
		300/5A		96×96×67.5	H96TA300
		400/5A		96×96×67.5	H96TA400
		600/5A		96×96×67.5	H96TA600
		800/5A		96×96×67.5	H96TA800
		1000/5A		96×96×67.5	H96TA1000
		1600/5A		96×96×67.5	H96TA1600
		5000/5A		96×96×67.5	H96TA5000
		10000/5A		96×96×67.5	H96TA10000
		5A	AC Type Direct connection	96×96×67.5	H96TA5A
	2.5	15A	AC Type	96×96×67.5	H96TA15A
		20A	Direct connection	96×96×67.5	H96TA20A
		25A		96×96×67.5	H96TA25A
		30A		96×96×67.5	H96TA30A
		40A		96×96×67.5	H96TA40A
		50A		96×96×67.5	H96TA50A
		60A		96×96×67.5	H96TA60A
		80A		96×96×67.5	H96TA80A
		100A		96×96×67.5	H96TA100A
	1.5	5A	DC Type	96×96×67.5	H96CA5A
Voltmeter	1.5	300V	AC Type	96×96×67.5	H96LV300
		500V		96×96×67.5	H96LV500
		600V		96×96×67.5	H96LV600
		500V	DC Type	96×96×67.5	H96CV500
Frequency meter	1.0	45-55HZ (200V)	AC Type	96×96×67.5	H96LHZ01200V

H96 Series Panel Meter

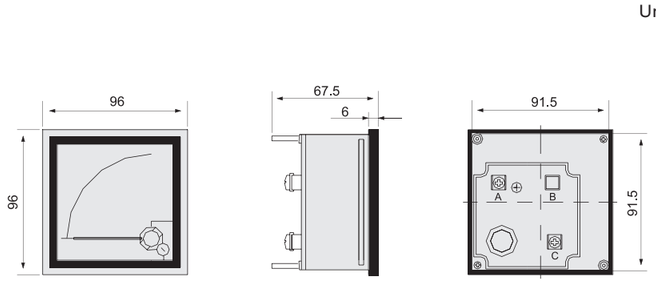
Standard: IEC 60051

Technical Data

Standard	IEC 60051
Dielectric strength test	Frequency 50/60Hz, Voltage 2000V, duration 1 minute
Impact test	Max acceleration 147m/s^2
Response time	≤4s
Angular Deflection	90°
Temp.	-25°C～+40°C
Humidity	(25%～80%) RH
Environment	No mildew, insects, salt mist, dew sand and dust is permitted
Installation	Installed vertically
Ingress protection:	IP42

Overall Dimensions

Unit: mm



Digital Time Switch Overview

HKG316T 495

Max. switch times per day:
10-on-10-off,
8-on-8-off

Reset: Power-off reset

HKG316TD 496

Max. switch times per day:
16-on-16-off

Reset: Key-button reset

HKG816A 497

Max. switch times per day:
16-on-16-off

Reset: Key-button reset

HKG816B 497

Max. switch times per day:
8-on-8-off

Reset: Key-button reset

HKG316T Series Digital Time Switch

Standard: IEC 60947-5-1

Function

HKG316T Series Digital Time Switch provide:

- Rated AC frequency of 50Hz, rated AC control voltage 400V or below
- Time control components in automatic control circuit, according to the scheduled time to turn-on or off the circuits

Order Information

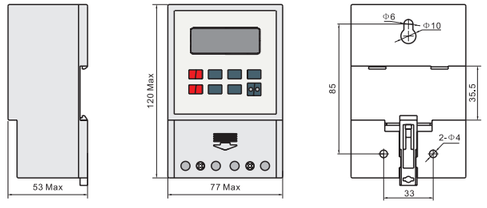
Output loops	Rated control voltage	Reference
10-on-10-off (Single output)	400AC:230V	HKG316T230
	AC:400V	HKG316T400
8-on-8-off (Double output)	AC:230V	HKG316T2230
	AC:400V	HKG316T2400

Technical Data

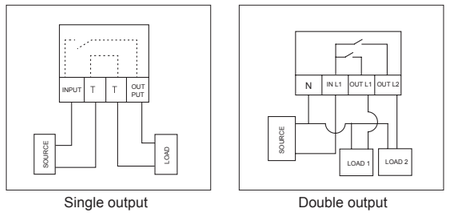
Standard	IEC 60947-5-1
Control time	Setting Value range from 1 min to 168h, Operation by daily or weekly
Using mode	AC-15: 240V/3A 400V/1.9A
Control power	≤ 6kW
Rated control voltage	230/400V AC
Rated thermal cur.	10A
Accuracy	≤ 2s/day
Mechanical life	≥ $1x10^6$ times
Electrical life	≥ $1x10^5$ times
Power loss	≤ 3W
Temp.	-5°C～+40°C
Display model	Digital LED display
Time-set mode	Digital Keyswitch setting
Battery	Inner alkaline battery
Install mode	Install mounted, Din rail mounted

Overall Dimensions

Unit: mm



Wiring Diagram



Single output

Double output

HKG316TD Series Digital Time Switch

Standard: IEC 60947-5-1

Function

HKG316TD Series Digital Time Switch provide:

- Rated AC frequency of 50Hz, rated control supply voltage AC 400V or below
- Any circuit equipment that need to be turned on or off timely

Order Information

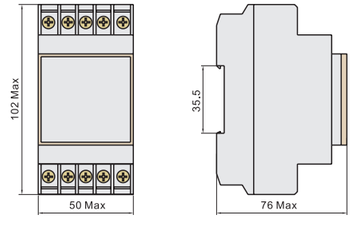
Output loops	Rated control voltage	Reference
16-on-16-off	AC: 230V	HKG316TD230
	AC: 400V	HKG316TD400

Technical Data

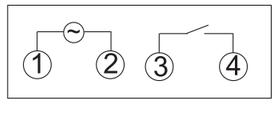
Standard	IEC 60947-5-1
Control time	Setting value range from 1 min to 168h, Operation by daily or weekly
Using mode	AC-15: 240V/3A 400V/1.9A
Control power	≤ 6kW
Rated control voltage	230/400V AC
Rated thermal cur.	10A
Accuracy	≤ 2s/day
Mechanical life	≥ $1x10^6$ times
Electrical life	≥ $1x10^5$ times
Power loss	≤ 3W
Temp.	-5°C～+40°C
Display modet	Digital LED display
Time-set mode	Digital Keyswitch setting
Battery	Inner rechargeable battery
Install mode	Install mounted, Din rail mounted

Overall Dimensions

Unit: mm



Wiring Diagram



HKG816 Series Digital Time Switch

Standard: IEC 60947-5-1

Function

HKG816 Series Digital Time Switch provide:

- Rated AC frequency of 50Hz, rated AC control voltage 230V or below
- Be used as time control components in automatic control circuit, according to the scheduled time to turn on or off the circuits

Order Information

Cover	Output loops	Rated control voltage	Reference
Non-transparent cover	16-on-16-off	AC: 230V	HKG816B230
Transparent cover	8-on-8-off	AC: 230V	HKG816A230

Technical Data

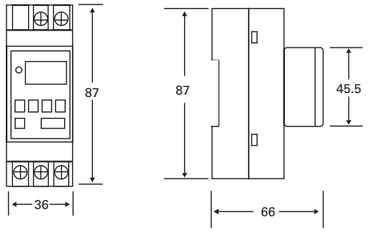
Standard	IEC 60947-5-1
Control time	Setting Value range from 1 min to 168 hrs Operate by daily or weekly
Using mode	AC-15: 240V/3A; 400V/1.9A
Control power	≤ 6kW
Rated control voltage	230V AC
Rated thermal cur.	10A
Accuracy	≤ 2s/day
Mechanical life	≥ $1x10^6$
Electrical life	≥ $1x10^5$
Power loss	≤ 4.5W
Temp.	-5°C～+40°C
Display mode	Digital LED display
Time-set mode	Digital keyswitch setting
Battery	Inner rechangable battery
Install mode	Din rail mounted

HKG816A

HKG816B

Overall Dimensions

Unit: mm



Voltage Stabilizer Overview

Single-phase

HTND 499

Type: Single-phase (Analog meter/Digital meter)

Specification: 0.5kVA, 1kVA, 1.5kVA,
2kVA, 3kVA, 5kVA, 7kVA,
10kVA, 15kVA, 20kVA, 30kVA

HTND3 501

Type: Single phase full automatic AC voltage stabilizer(LCD display)

Specification: 1kVA, 1.5kVA, 2kVA, 3kVA, 5kVA,
7kVA, 10kVA, 15kVA, 20kVA, 30kVA

Three-phase

HSJW 503

Type: Three-phase

Specification: 1.5kVA, 3kVA
4.5kVA, 6kVA, 9kVA, 15kVA,
20kVA, 30kVA, 45kVA, 60kVA

HSBW 505

Type: Three-phase Compensation

Specification: 10kVA, 15kVA
30kVA, 50kVA, 100kVA, 150kVA,
200kVA, 250kVA, 300kVA, 400kVA,
500kVA, 600kVA, 800kVA, 1000kVA,
1600kVA, 2000kVA

Uninterrupted Power Supply Overview

HUPS

HUPS 507

Power Capacity (VA):
600VA,800VA,1000VA

HTND Single-phase Full Automatic AC Voltage Stabilizer

Standard: EN 61000-6-2 EN 61000-6-4 EN 61558-1

Function

HTND single-phase AC voltage stabilizer provide:

- This product is constructed by connecting three stabilizers with Y-connection
- Wide input voltage range, high efficiency, over-load protection, short adjusting time, high regulation accuracy, same input and output voltage waveform, small volume, less weight
- Available in the electric equipments and facilities in housing, school, shop, office and precision instrument for scientific experiment

Order Information

Form	Output voltage	Power rating	Reference		
			European plug	British plug	Terminal connect
Desktop	220V	0.5K	HTNDP5HE220	HTNDP5HB220	
		1K	HTND1HE220	HTND1HB220	-
		1.5K	HTND1P5HE220	HTND1P5HB220	-
		2K	-	-	HTND2H220*
		3K	-	-	HTND3H220*
		5K	-	-	HTND5H220*
		7K	-	-	HTND7H220*
		10K	-	-	HTND10H220*
Cabinet	220V	10K	-	-	HTND10GH220*
		15K	-	-	HTND15GH220*
		20K	-	-	HTND20GH220*
		30K	-	-	HTND30GH220*
Desktop	230V	0.5K	HTNDP5HE230	HTNDP5HB230	
		1K	HTND1HE230	HTND1HB230	-
		1.5K	HTND1P5HE230	HTND1P5HB230	-
		2K	-	-	HTND2H230*
		3K	-	-	HTND3H230*
		5K	-	-	HTND5H230*
		7K	-	-	HTND7H230*
		10K	-	-	HTND10H230*
Cabinet	230V	10K	-	-	HTND10GH230*
		15K	-	-	HTND15GH230*
		20K	-	-	HTND20GH230*
		30K	-	-	HTND30GH230*

Note: * = "default" means Analog meter type

* = "E" means Digital Meter type

0.5K HTNDP5HE220 HTNDP5HB220

HTND Single-phase Full Automatic AC Voltage Stabilizer

Standard: EN 61000-6-2 EN 61000-6-4 EN 61558-1

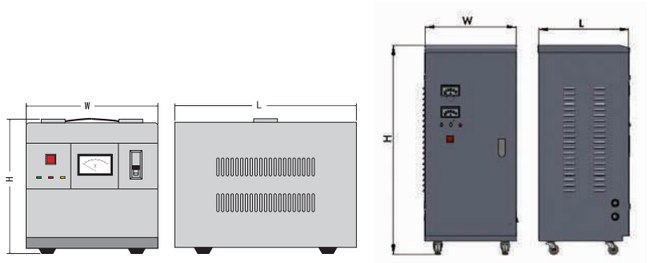
Technical Data

Type		HTND0.5kVA~5kVA	HTND7kVA~30kVA
Output voltage	Voltage regulation accuracy	220±4%,110±4%	220±4%
	Undervoltage protection	184V±4V (set up according to the customers request)	
	Overvoltage protection	246V±4V	
Phase		Single-phase	
Input voltage range		150V-250V	
Efficiency		>90%	
Voltage regulation speed		<1s(when input voltage change 10%)	
Frequency		50/60Hz	
Ambient temperature, relative humidity		-5℃~40℃ below 90%	
Rated maximum output current(A)		2(500VA), 4(1000VA), 6(1500VA), 8(2000VA) 12(3000VA), 20(5000VA), 25(7000VA), 40(10KVA) 85(15KVA), 73(20KVA), 109(30KVA)	
Withstand voltage		1500V/1min	

- Standard: EN 61000-6-2 EN 61000-6-4 EN 61558-1
- Certification: CE

Overall Dimensions

Unit: mm



Product shape	Model	Width×Length×Height		
		W	L	H
Desktop	HTND-0.5	190	160	135
	HTND-1	205	190	155
	HTND-1.5	205	190	155
	HTND-2	240	270	200
	HTND-3	225	305	235
	HTND-5	225	310	290
	HTND-7	240	387	360
	HTND-10	240	387	360
Cabinet type	HTND-10	310	340	535
	HTND-15	340	360	640
	HTND-20	340	380	780
	HTND30	425	390	845

HTND3 Single-phase Full Automatic AC Voltage Stabilizer

Standard: EN 61000-6-2 EN 61000-6-4 EN61558-1

HTND3-Series High-precision Full Automatic AC Voltage Stabilizer provide:

- Novel and luxury apearance;
- LCD display, and central processor CPU control;
- Wide range of input voltage(150~250V), without additional distortion;
- Complete protection function: electrical overload protection, over voltage protection, short circuit and temperature protection;
- Good output voltage waveform, smooth regulating process, without instantaneous power outages;
- High precision of output voltage(220V ±4%);

Order information

Product name	Rated power kVA	Structure	Plug type	Output voltage
HTNDC	10	G	E	230
↓	↓	↓	↓	↓
HTNDC:HTND3	1: 1kVA 1P5: 1.5kVA 2: 2kVA … 30: 30kVA	Default: Desk type G: Cabinet type	E: Europe type HB: British type H:Terminal connect	Default: 220V output 230: 230V output

Shape	Output voltage	Power rating	Reference		
			European plug	British plug	Terminal connect
Desktop	220V	1k	HTNDC1HE	HTNDC1HB	
		1.5k	HTNDC1P5HE	HTNDC1P5HB	
		2k	HTNDC2HE	HTNDC2HB	
		3k	HTNDC3HE	HTNDC3HB	
		5k	HTNDC5HE	HTNDC5HB	
		7k	HTNDC7HE	HTNDC7HB	
		10k	HTNDC10HE	HTNDC10HB	
Cabinet	220V	10k			TNDC10GH
		15k			TNDC15GH
		20k			TNDC20GH
		30k			TNDC30GH
Desktop	230V	1k	HTNDC1HE230	HTNDC1HB230	
		1.5k	HTNDC1P5HE230	HTNDC1P5HB230	
		2k	HTNDC2HE230	HTNDC2HB230	
		3k	HTNDC3HE230	HTNDC3HB230	
		5k	HTNDC5HE230	HTNDC5HB230	
		7k	HTNDC7HE230	HTNDC7HB230	
		10k	HTNDC10HE230	HTNDC10HB230	
Cabinet	230V	10k			TNDC10GH230
		15k			TNDC15GH230
		20k			TNDC20GH230
		30k			TNDC30GH230

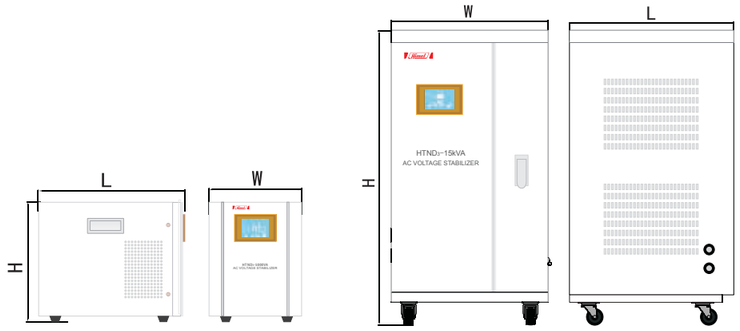
HTND3 Single-phase Full Automatic AC Voltage Stabilizer

Standard: EN 61000-6-2 EN 61000-6-4 EN 61558-1

Technical Data

Product Model		HTND3-High-precision Full Automatic AC Voltage Stabilizer
The input voltage	V	150~250
Output overvoltage	V	220x (1±4%)
Output overvoltage protection	V	246±4
Frequency	Hz	50/60
Temperature rise	K	<90
Efficiency	%	>92
Response time	s	<1

Overall Dimensions



Product shape	Model	Width×Length×Height			Weight (kg)
		W	L	H	
Desktop	HTND3-1	165	275	215	5.8
	HTND3-1.5	165	275	215	6.2
	HTND3-2	175	300	230	7.8
	HTND3-3	215	305	265	12.5
	HTND3-5	220	325	285	15.7
	HTND3-7	245	420	378	26.5
	HTND3-10	245	420	378	29.3
Cabinet	HTND3-10	310	340	530	33
	HTND3-15	340	360	650	56.5
	HTND3-20	390	380	770	63.5
	HTND3-30	425	380	845	77

HSJW Three-phase Full Automatic AC Voltage Stabilizer

Function

HSJW three-phase AC voltage stabilizer provide:

- This product is constructed by connecting three stabilizers with Y-connection
- Wide input voltage range, high efficiency, over-load protection, short adjusting time, high regulation accuracy, same input and output voltage waveform, small volume, less weight
- Available in the electric equipment and facilities in housing, school, shop, office and precision instrument for scientific experiment

Order Information

Shape	Power rating	Reference
Desktop	1.5 kVA	HSJW1P5
	3k VA	HSJW3
	4.5 kVA	HSJW4P5
Cabinet	6 kVA	HSJW6G
	9 kVA	HSJW9G
	15 kVA	HSJW15G
	20 kVA	HSJW20G
	30 kVA	HSJW30G
	45 kVA	HSJW45G
	60kVA	HSJW60G

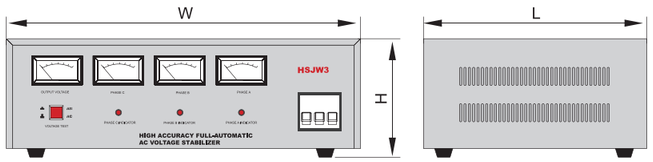
Technical Data

Type		HSJW 1.5KVA~60KVA
Output voltage	Voltage regulation accuracy	380V ±4%
	Low-voltage protection	340V±7V(adjustable)
	Over-voltage protection	420V ±7V
Input voltage range		280~415V
Efficiency		90%
Voltage regulation speed		<1s(voltage fluctuation≥10%)
Frequency		50/60Hz
Waveform distortion:		No additional distortion
Withstand voltage		1500V/1min
Temperature rise		<+60°C
Environment temp.		-5°C~+40°C

Overall Dimensions

Unit: mm

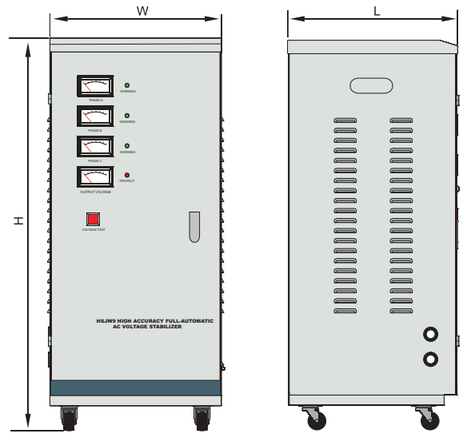
Desktop



HSJW Three-phase Full Automatic AC Voltage Stabilizer

Overall Dimensions

- Cabinet



Form	Model	Width×Length×Height		
		W	L	H
Desktop	HSJW-1P5	485	315	165
	HSJW-3	485	315	165
	HSJW-4.5	485	315	165
Cabinet	HSJW-6	278	322	665
	HSJW-9	320	325	750
	HSJW-15	350	350	855
	HSJW-20	425	390	845
	HSJW-30	440	415	875
	HSJW-45	550	450	1170
	HSJW-60	600	495	1300

Power Energy Management

HSBW Three-phase Compensation AC Voltage Stabilizer

Function

HSBW three-phase compensation AC voltage stabilizer provide:

- This product is designed and developed with the international advanced compensation technology Keep the output voltage in steady state automatically when the network voltage fluctuate or the load current varies
- Provided with over-voltage, over-current, phase sequence protection function

Order Information

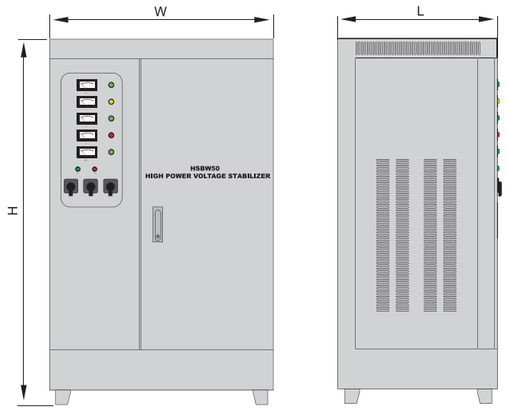
Power rating	Reference
10kVA	HSBW10
15kVA	HSBW15
30kVA	HSBW30
50kVA	HSBW50
100kVA	HSBW100
150kVA	HSBW150
180kVA	HSBW180
200kVA	HSBW200
225kVA	HSBW225
250kVA	HSBW250
300kVA	HSBW300
400kVA	HSBW400
500kVA	HSBW500
600kVA	HSBW600
800kVA	HSBW800
1000kVA	HSBW1000
1600kVA	HSBW1600
2000kVA	HSBW2000

Technical Data

Type		HSBW 10KVA~2000KVA
Output voltage	Voltage regulation accuracy	380V ±3%
	Low-voltage protection	340V±7V
	Over-voltage protection	425V ±7V
Input voltage range		304~456V
Efficiency		⩾98 %
Voltage regulation speed		<1s (voltage fluctuation ⩾10%)
Frequency		50/60Hz
Waveform distortion		⩽1%
Insulation resistance		⩾2MΩ
Withstand voltage		2000V/1min
Temperature rise		<+60°C
Ambient temperature		-5°C~+40°C

HSBW Three-phase CompensationAC Voltage Stabilizer

Overall Dimensions



Unit: mm

Model	No. of Cabinet	Width×Length×Height			
		W	L	H	
HSBW-10	1	750	580	1170	
HSBW-20	1	750	580	1170	
HSBW-50	1	800	570	1300	
HSBW-100	1	850	645	1460	
HSBW-200	1	1050	750	1850	
HSBW-500	1	1400	1100	2100	
HSBW-800	2	1350	1100	2200	
HSBW-1000	2	1300	1200	2200	*Main cabinet
		1500	1200	2200	*Assistant cabinet
HSBW-1600	4	1450	1200	2255	
HSBW-2000	4	1450	1200	2255	

Power Energy Management

Features

1. Power Capacity : 600VA
2. Automatic Voltage Regulation (AVR) instantly corrects voltage fluctuations so you can work indefinitely through brownouts and over voltages without discharging the battery, prolonging battery life.
3. Status indications: multi-color LED and audible alarm combine to alert you to critical battery and load conditions.
4. UPS ON / OFF Switch
5. Wide input voltage range: 140 – 290 V
6. Outlets: three (3) IEC type sockets ease connection to your computer equipment.
7. Supplied IEC jumper cord replaces your computer cord which is then used to connect the UPS to the wall socket.
8. Fuse: protects the UPS from severe overloads.
9. Battery connector: for safe transportation and prolonging battery storage life.

Himel Uninterrupted Power Supply
HUPS600 Overview

Product Specifications

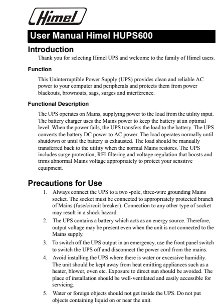
UPS600 Specifications:	
Input	
Nominal voltage	230V
Frequency	50Hz+/-5Hz
Input voltage range for main operations	140-290V
Input Connection	IEC-320C14
Output	
Power Capacity	600VA/360W
Voltage (Battery Mode)	230V Nominal(110V optional)
Frequency(Battery Mode)	50Hz+/-1%
Voltage (Mains AVR Mode)	230V Nominal
Output Connections	(3)IEC-320C13(Battery Backup+Surge Protector)
Transfer Time(Typical ms)	11ms
Surge protection	
AC Power	190J
Battery	
Type	Sealed, Lead Acid Maintance Free
Number	One, 12/7.5Ah
Typical Recharge Time	4-6 Hours (Up to 90% of full capacity)
Management	
Indication	Visual and Audible Alarms
Physical	
Form Factor	Tower
Net Weight(kg.)	4.8Kg
Gross Weight(kg.)	5.4Kg
Dimensions(L*W*D)(mm)	283mm×100mm × 142mm
Environmental	
Operating Temperature	0-40°C (32-104°F)
Storage Temperature	0-40°C (32-104°F)
Humudity	0-95% RH non-condensing

Availability depends on connected load

Typical application	HUPS600 runtime
All-in-one PC with 15" LCD monitor	27 minutes
Typical home or office PC with 19" LCD monitor	14 minutes
Performance PC with 22" LCD monitor	9 minutes

What is inside the HUPS600 Box ?

- **English User manual**



- **IEC Jumper (IEC13 to IEC14)**

- **Warranty Card**

Power Energy Management

Himel Uninterrupted Power Supply

HUPS800 & HUPS1000 Overview

HUPS800 Features

1. Power Capacity : 800VA
2. Automatic Voltage Regulation (AVR) instantly corrects voltage fluctuations so you can work indefinitely through brownouts and over voltages without discharging the battery, prolonging battery life.
3. Status indication: green-color LED and audible alarm combine to alert you to UPS status and battery conditions.
4. UPS ON / OFF Switch
5. Wide input voltage range: 140 – 300 V
6. Outlets: four (4) IEC type sockets ease connection to your computer equipment.
7. Supplied French-IEC14 jumper cord replaces your computer cord which is then used to connect the UPS to the wall socket.
8. Fuse: protects the UPS from severe overloads.
9. Battery connector: for safe transportation and prolonging battery storage life.

Himel Uninterrupted Power Supply

HUPS800 & HUPS1000 Overview

HUPS1000 Features

1. Power Capacity : 1000VA
2. Automatic Voltage Regulation (AVR) instantly corrects voltage fluctuations so you can work indefinitely through brownouts and over voltages without discharging the battery, prolonging battery life.
3. Status indication: green-color LED and audible alarm combine to alert you to UPS status and battery conditions.
4. UPS ON / OFF Switch
5. Wide input voltage range: 140 – 300 V
6. Outlets: four (4) IEC type sockets ease connection to your computer equipment.
7. Supplied French-IEC14 jumper cord replaces your computer cord which is then used to connect the UPS to the wall socket.
8. Fuse: protects the UPS from severe overloads.
9. Battery connector: for safe transportation and prolonging battery storage life.

Power Energy Management

Himel Uninterrupted Power Supply

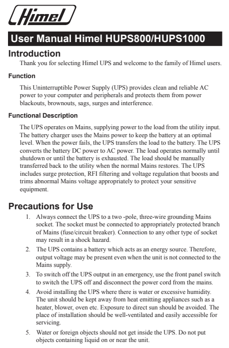
HUPS800 & HUPS1000 Overview

Product Specifications

	HUPS800	HUPS1000
Input		
Nominal voltage	230V	
Frequency	60/50Hz	
Input voltage range for main operations	140Vac to 300Vac	
Input Connection	IEC-320C14	
Output		
Power Capacity	800VA	1000VA
Peak VA	800VA/480W	1000VA/600W
Voltage (Battery Mode)	230Vac nominal	
Frequency (Battery Mode)	50Hz±1%	
Voltage(Main AVR mode)	230 Vac nominal	
Output Connections	(4)IEC-320C13(Battery Backup)	
Transfer Time(Typical ms)	Typical 4-8ms	
Battery		
Type	Sealed, Lead Acid Maintance Free	
Number	One 12V, 9Ah	Two 12V, 7Ah
Typical Recharge Time	4-6 hours (up to 90% of full capacity)	
Protection	Deep discharge protection	
Management		
Indication	Visual and Audible Alarms	
Physical		
Form Factor	Tower	Tower
Net Weight(kg.)	4.9Kg	7.8Kg
Gross Weight(kg.)	5.1Kg	8.5kg
Dimensions(H*W*D)(mm)	142mm×101mm × 300mm	182mm×130mm × 320mm
Environmental		
Operating Temperature	0-40°C (32-104°F)	
Storage Temperature	0-40°C (32-104°F)	
Humudity	0-95% RH non-condensing	

What is inside the Box ?

- **English/French/Arabic User manual**



Himel

User Manual Himel HUPS800/HUPS1000

Introduction

Thank you for selecting Himel UPS and welcome to the family of Himel users.

Function

This Uninterruptible Power Supply (UPS) provides clean and reliable AC power to your computer and peripherals and protects them from power blackouts, brownouts, sags, surges and interference.

Functional Description

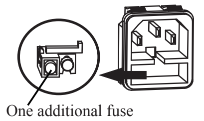
The UPS operates on Mains, supplying power to the load from the utility input. The battery charger uses the Mains power to keep the battery at an optimal level. When the power fails, the UPS transfers the load to the battery. The UPS converts the battery DC power to AC power. The load operates normally until shutdown or until the battery is exhausted. The load should be manually transferred back to the utility when the normal Mains restores. The UPS includes surge protection, RFI filtering and voltage regulation that boosts and trims abnormal Mains voltage appropriately to protect your sensitive equipment.

Precautions for Use

1. Always connect the UPS to a two -pole, three-wire grounding Mains socket. The socket must be connected to appropriately protected branch of Mains (fuse/circuit breaker). Connection to any other type of socket may result in a shock hazard.
2. The UPS contains a battery which acts as an energy source. Therefore, output voltage may be present even when the unit is not connected to the Mains supply.
3. To switch off the UPS output in an emergency, use the front panel switch to switch the UPS off and disconnect the power cord from the mains.
4. Avoid installing the UPS where there is water or excessive humidity. The unit should be kept away from heat emitting appliances such as a heater, blower, oven etc. Exposure to direct sun should be avoided. The place of installation should be well-ventilated and easily accessible for servicing.
5. Water or foreign objects should not get inside the UPS. Do not put objects containing liquid on or near the unit.

- **IEC Jumper (French to IEC14)**

- **Additional fuse**



One additional fuse

Availability depends on connected load

Typical application	HUPS800 runtime	HUPS1000 runtime
All-in-one PC with 15" LCD monitor (about 65 watts)	30 minutes	80 minutes
Typical home or office PC with 19" LCD monitor (about 120 watts)	16 minutes	40 minutes
Performance PC with 22" LCD monitor (about 180 watts)	9 minutes	25 minutes

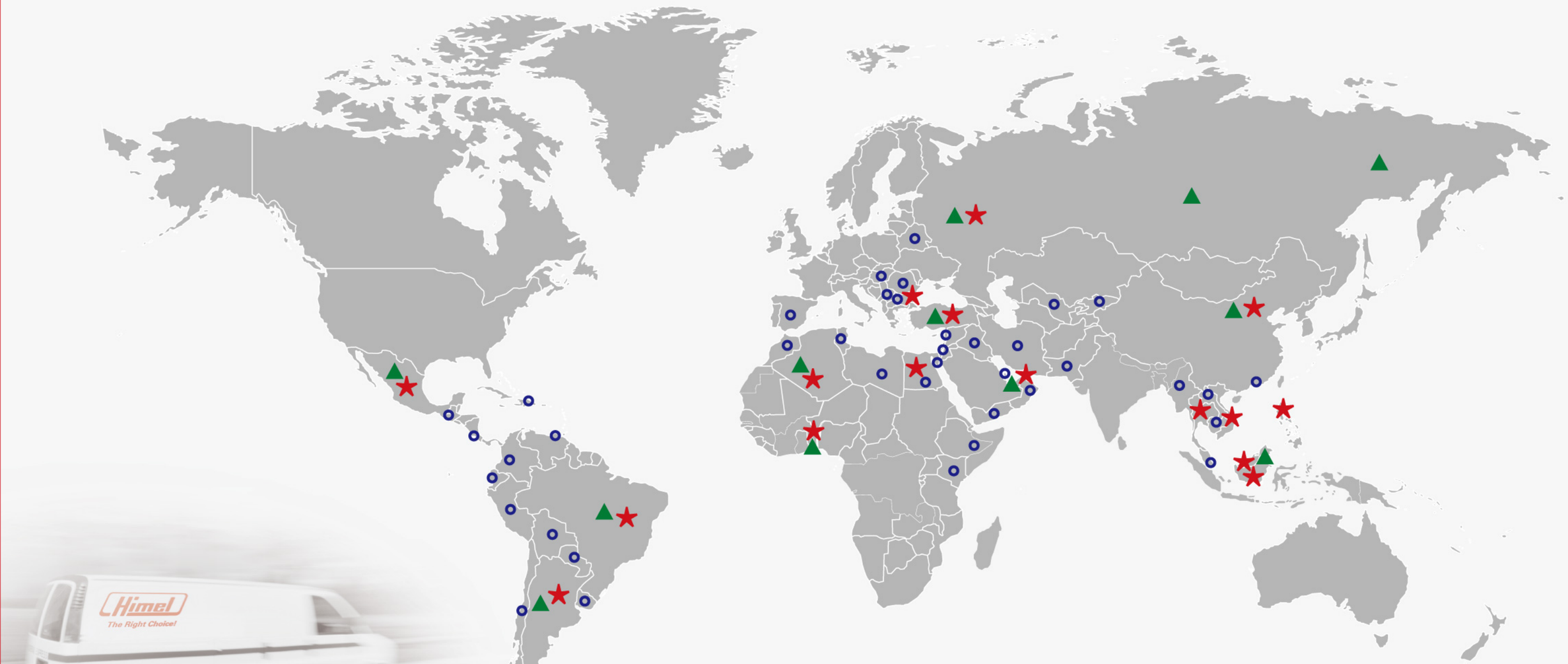
Memo

Memo

Memo

A Company to Serve You Where You Are

Himel
The Right Choice!



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