XP Electric

Essential Low Voltage Solutions

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Universal Changover Switch Series

Main Switch

XP1B
Miniature Circuit Breaker

Standard
IEC60898-1

Certificate
CE

Function
Overload、short circuit、isolation

Nomenclature

XP 1B – 63 / 1P C 16

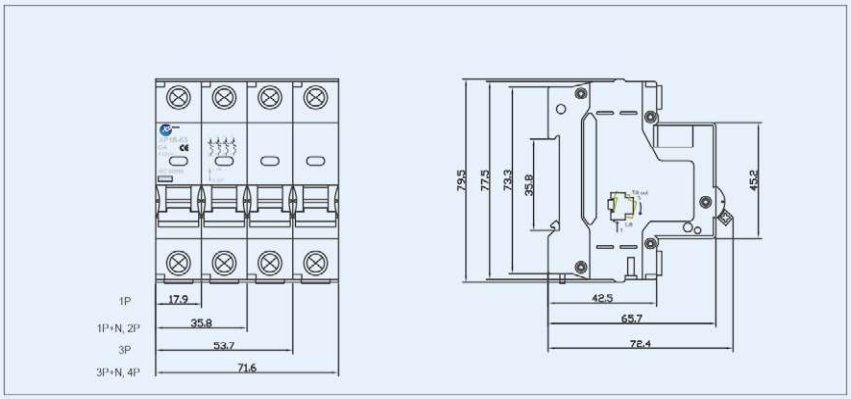
- 16 — Rated current
- C — Tripping Curve: B, C, D
- 1P — Poles
- 63 — Frame current
- 1B — Design code
- XP — Company code

Technical Parameter

Rated current In(A)	1,2,3,4,6,10,16,20,25,32,40,50,63
Rated voltage Un(V)	230V~(1P、1P+N),400V~(2~4P,3P+N)
Rated frequency	50/60 Hz
Tripping curve	B,C,D
Poles	1P,1P+N,2P,3P,3P+N,4P
Mechanical life	20000 times
Electrical life	10000times
Rated short-circuit capacity(Icn)	6000A
Operating short-circuit capacity(Icn)	6000A
Rated impulse withstand voltage	4kV
MCB per pole power consumption	Sheet 1

Rated current In(A)	Per pole power consumption (W)
1～10	2
16～32	3.5
40～63	5

Dimensions



XP1B-125
Miniature Circuit Breaker

Function

- Protection against short circuit currentand overload current andoverload current
- Isolation
- Control

CE

XP1B-125/1P

XP1B-125/3P

XP1B-125/4P

Nomenclature

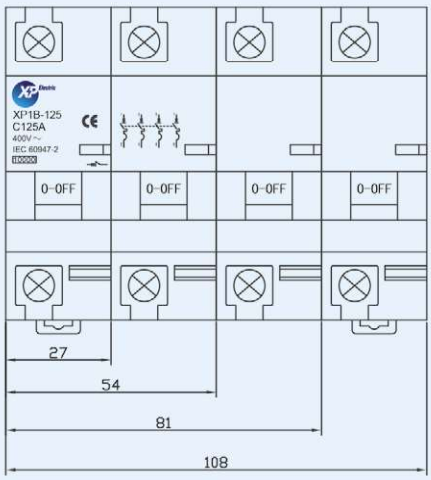
XP 1B - 125 H / 1P C 63

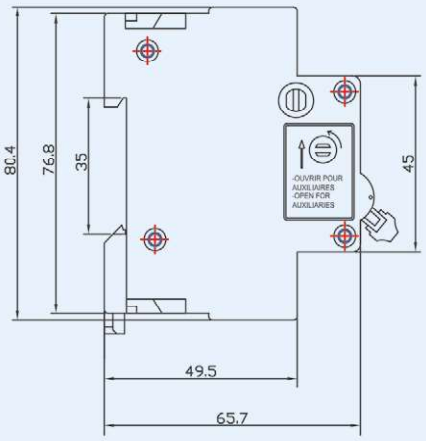
- Rated current: 63,80,100,125A
- Curve: C,D
- Poles: 1P,2P,3P,4P
- Breaking capacity: H,10000A(≤100A); L,6000A(125A)
- Frame level: 125A
- Design code
- Company code

Technical Parameter

Standard	IEC60947-2
Poles	1P, 2P, 3P, 4P
Rated current In (A)	63,80,100,125
Rated voltage Un (V)	230/400V AC 50/60 Hz
Tripping characteristic	C, D
Breaking capacity Icn (A)	H,10000A(≤100A);L,6000A(125A)
Electricd life(times)	4000
Mechnical life (times)	20000
Protection grade	IP20
Installation	installed on 35mm DIN rail

Dimensions

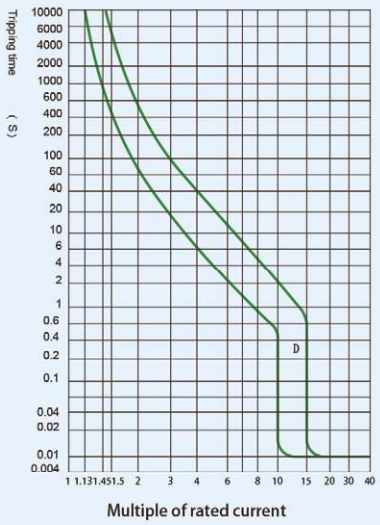




Characteristic Curve

Curve C

Curve D



Tripping Curve

Curve C:

(5-10In) protect and control circuit against overload and short circuit; protect resistive and inductive loads with low inrush current.

Curve D:

(10-20In) protect circuit and control circuit against overload and short circuit; protect circuit which supply loads with high inrush current when the circuit closing.

Order Note

Following items should be marked when ordering	Ordering sample
Product name and model Poles Tripping characteristic and rated current Quantity	To order the XP1B-125 miniature circuit breaker, 1P, Curve C, rated current is 63A, and quantity is 100 pieces, should be marked: MCB XP1B-125/1PC63, 100 PCS.

XP1B-OF
Auxiliary contact

Standard
IEC60947-5-1

Certificate
CE

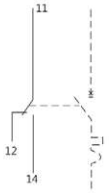
Function
Connect with MCB to control the MCB's ON/OFF by indicating

Technical Data

Using type	Rated working voltage(V)	Rate working current(A)
AC-12	AC 415	3
	AC 240	6
DC-12	DC 130	1
	DC 48	2
	DC 24	6

Operating characteristic:Connecting wire drawing (Drawing 1)
When auxiliary contact OFF, 11,12 terminal connection
When auxiliary contact ON, 11,14 terminal connection
Mechanical life:≥ 10000

Drawing 1



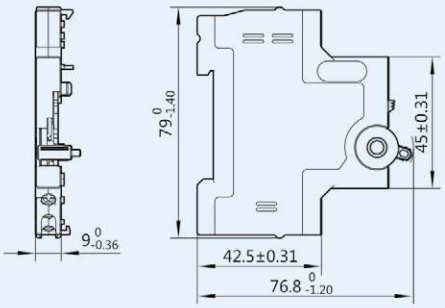
Connection and Installation

XP1B-OF connect with XP1B-63 MCB， See following drawing

Drawing 2

XP1B-OF Connect with MCB and install on 35mm DIN rail

Dimensions



Drawing 3

XP1R

Residual Current Circuit Breaker

Application

XP1R-63 residual current circuit breaker (without over current protection) is applicable to a line of AC 50Hz, 230V in single, 400V in double, and rated current up to 63A circuit, when personal electric shock or leakage current exceeds a predetermined value grid, residual current circuit breaker can be quickly cut off the failure power supply in a very short period of time, protection personal safety and electrical equipment. It can be also used for infrequent line conversion under the normal condition.

Products are applicable in industrial enterprise, commercially district, high-rise building and dwelling house.

In conforms with the standard of IEC 61008-1

Nomenclature

XP 1R – 63 / 2P 25 30

- 30 — Rated residual current
- 25 — Rated current
- 2P — Poles
- 63 — Frame level
- 1R — Design code
- XP — Company code

Main Technical Parameter

Technical Parameter	Parameter
Rated voltage	230V AC(1P+N), 400V AC(3P+N)
Rated current	25A, 40A, 63A
Rated residual current	0.03A, 0.1A, 0.3A
Poles	1P+N, 3P+N
Availability of work by dc components of points	AC type
Rated limit short-circuit current	6000A
Rated limit residual short-circuit current	6000A
Rated making and breaking capacity	500A(In=25,40A); 630A(In=63A)
Rated residual making and breaking capacity	500A(In=25,40A); 630A(In=63A)
Rated residual non-operating current	0.5I△n
Rated residual current breaking time	find table 2
Mechanical/Electrical life	find table 3
Fastening torque	(2.5～4.0)N•m
Overall & Installation Dimensions	find table 1 & table 2
Pollution degree	Ⅱ
Protection degree	IP20
Installation class	Ⅱ

Residual current breaking time

In (A)	I△n (A)	Residual current (I△) equal the below current's breaking time (s)				
		I△n	2I△n	5I△n	5A, 10A, 20A, 50A, 100A, 200A, 500A	
25, 40, 63	0.03, 0.1, 0.3	0.1	0.08	0.04	0.04	The biggest breaking time

Mechanical/Electrical life

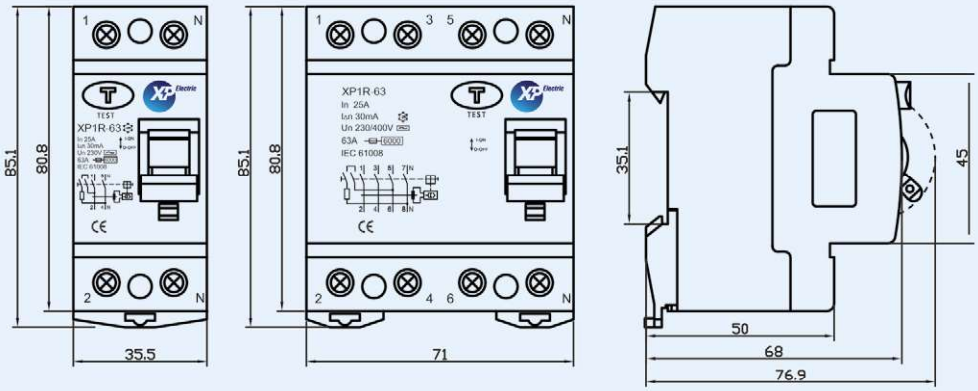
In (A)	Operating loop times		Operating frequency(times/h)
	With load operating times	Without load operating times	
25	2000	2000	240
40,63	2000	1000	120

Residual current circuit break should endure the loop times of Sheet 3.

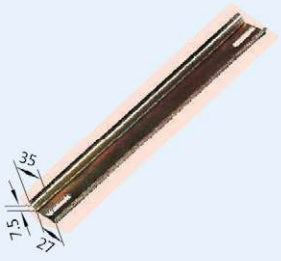
Feature

- Without auxiliary power, overcome the defect of electonic product's tpoor anti-interference, easily affect by the power grid voltage fluctuation and failure protection because of the netural line breaking.
- Rated limit breaking current up to 6kA
- Cover and other plastic parts are made of high fire-retardant, high temperature, high impact plastic
- Modular size, easy installation
- Dynamic test apparatus, make button more flexible and reliable
- Impact resistance voltage insulation performance
  a. All poles connect with the netural pole could endure 6000V impulse voltage of the peak
  b.All poles connect with netrual pole and metal support can endure 8000V impulse voltage of the peak
- SCPD:100A gG.
- Altitude:≤2000m.

Overall & Installation Dimensions



Drawing 1: Overall & Installation Dimensions



Drawing 2 : DIN mounting rails Dimensions

XP1M Series
Moulded Case Circuit Breaker

Application

XP1M series moulded case circuit breaker is one of products developed and manufactured by adopting international advanced technology. It is supplied with rated insulating voltage 550V and 800V andused for circuit of AC 50/60Hz,rated operating voltage AC 400V(or below),rated operating current up to 1600A for infrequent changing over and starting of the motors.The product conforms to IEC60947-2 standard.

Nomenclature

XP 1M - 800 H / 3P 225 M

- M: Protection type: P: for power distribution
- 225: Rated current
- 3P: Poles: 3P,4P
- H: Breaking capacity
- 800: Frame type
- 1M: Design Code
- XP: Company code

Note:

6A without thermal protection

The N-pole of four-poles breaker is sited at the right side of the product has four types:

Type A:without current trip-lease on N-pole which making all the time,not closing and opening with the other three poles.

Type B:without current trip-lease on N-pole which closing and opening with the other poles.

Type C:with current trip-lease which closing and opening with the other three poles.

Type D:with current trip-lease which making all not closing and opening with the other three poles.

Main Technical Specification

Type	Rated current(A)	Pole	Rated insulating voltage (V)	Rated operating voltage (V)	Arcingover distance (mm)	Ultimate short circuit breaking capacity(kA)	Servies short circuit breaking capacity(kA)	Operation performance		Utilizatin category
								Load	Unload	
XP1M-63L	(6),10,16, 20,25,32, 40,50,63	3,4	500V	400V	0	25	18	1500	8500	A
XP1M-63M					0	50	35			
XP1M-100L	(10),16,20, 25,32,40, 50, 63,80, 100	2,3,4	800V		0(≤50)	35	22			
XP1M-100M		3,4			0(≤50)	50	35			
XP1M-100H					0(≤50)	85	50	1000	7000	
XP1M-225L	100,125, 160,180, 200,225				≤50	35	22			
XP1M-225M					≤50	50	35			
XP1M-225H					≤50	85	50	1000	4000	
XP1M-400L	225,250,315, 350,400				≤50	50	35			
XP1M-400M					≤100	65	42			
XP1M-630L	400 500 630				≤100	50	35			
XP1M-630M					≤100	65	42			
XP1M-630H					≤100	100	65			
XP1M-800M	630 700 800	3			≤100	75	50			
XP1M-800H					≤100	100	65			
XP1M-1250M	1000 1250				≤100	100	65			
XP1M-1250H					≤100	125	75			
XP1M-1600M	1600				≤100	150	80			

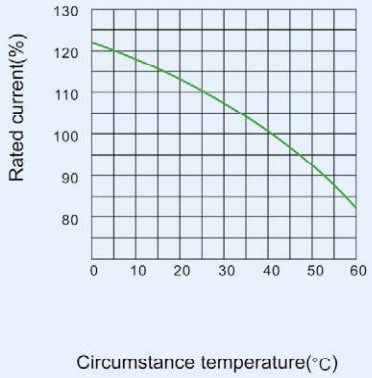
Protection Characteristic

The thermodynamic release of circuit breaker provides the feature of inverse time-delay,while the magnetic release is the instantaneous operation as shown on table 2(distribution circuit breaker)and table 3(motor protection circuit breaker).

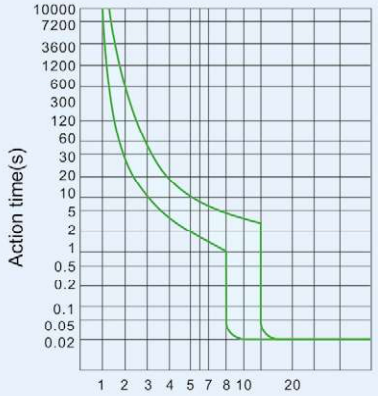
Rated current of release(A)	Thermodynamic release(ambient temperature Land+40℃ marine+45℃)		Operating current of magnetic release(A)
	1.05In(cold state) Inoperative time(h)	1.3In(heat state) Operative time(h)	
10≤In≤63	≥1	＜1	10In±20%
63＜In≤100	≥2	＜2	
100＜In≤800	≥2	＜2	5In±20% 10In±20%

Rated current of release(A)	Thermodynamic release(ambient temperature Land+40℃ marine+45℃)		Operating current of magnetic release(A)
	1.0In(cold state) non-trip time(h)	1.2In(heat state) trip time(h)	
10≤In≤225	≥2	＜2	12In±20%
225＜In≤630			

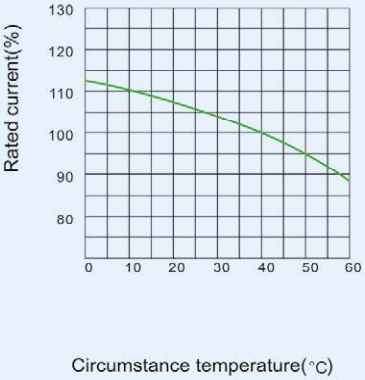
XP1M -63、100（10~32）Temperature emendation curve



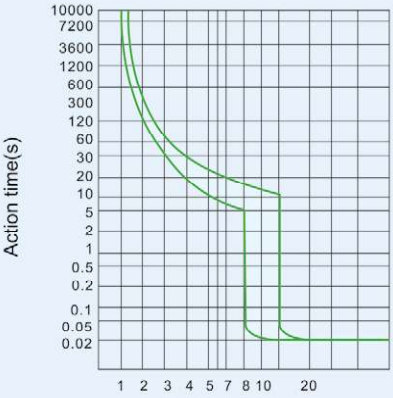
XP1M -63、100（10~32）Characteristic curve



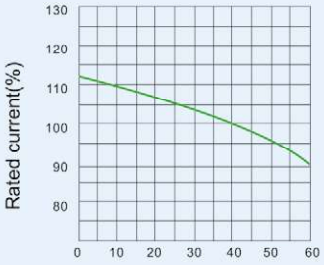
XP1M -63、100（40~100）Temperature emendation curve



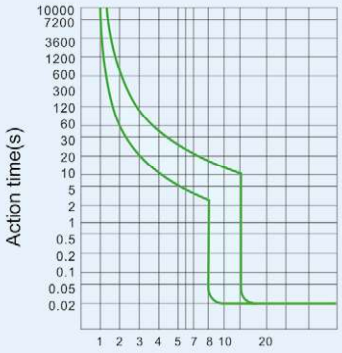
XP1M -63、100（40~100）Characteristic curve



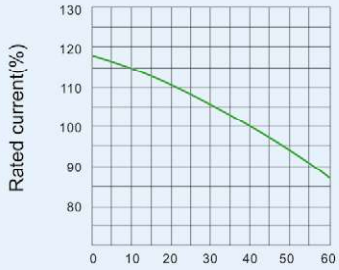
XP1M -225 Temperature emendation curve



XP1M -225 Characteristic curve

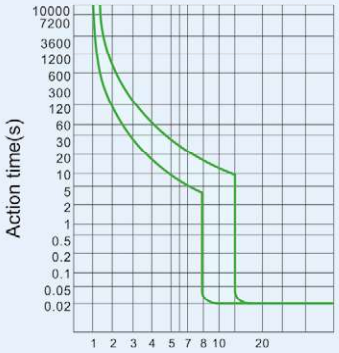


XP1M-400 Temperature emendation curve



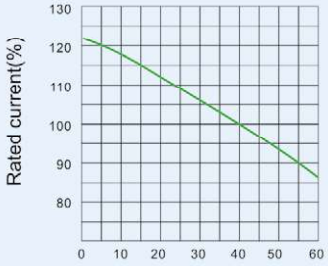
Circumstance temperature(℃)

XP1M-400 Characteristic curve



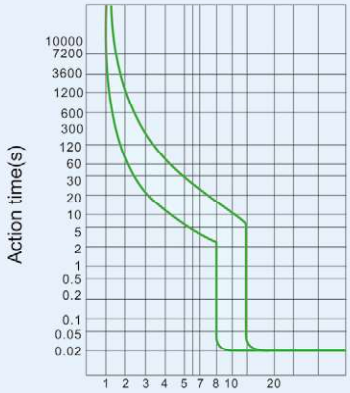
Rated current multiple

XP1M-630、800 Temperature emendation curve



Circumstance temperature(℃)

XP1M-630、800 Characteristic curve



Rated current multiple

Order Note

Following information needed be marked when order	Ordering sample
Product Name, Model&Frame level&breaking capacity Poles Rated current Protection type Quantity	To order the XP1M Moulded case circuit breaker, 3P, frame leve is 400A, high breaking capacity,rated current is 350A, for motor protection,and quantity is 100 pieces, should be marked: MCCB XP1M-400H/3P350M,100PCS.

Back panel connection

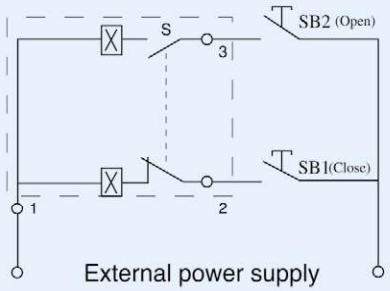
Plug-in

Accessories of Circuit Breaker

4.1 The external accessories of the breaker

Motor-driven operation device

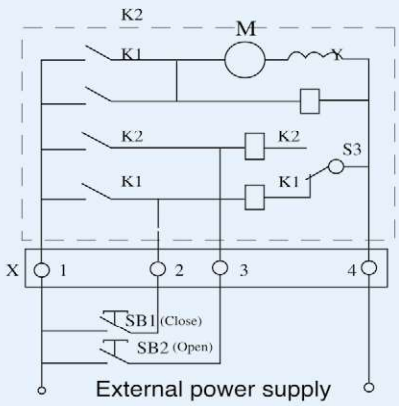
(1)Wiring diagram of type CDM electromagnetic operation device(fitting XP1M-63,100,225) see the following drawing(wiring diagram of the external accessories of the breaker in the dotted frame)



Electromagnetic operation device

Code description:
SB1,SB2 stand for push button(provided by users themselves) "X"stands for line connection terminals Motor-driven operation device
Voltage rating:AC50/60Hz 230V 400V,DC220V.

(2) Wiring diagram of type CD motor-driven operation device (fitting XP1M-400,600,800) see belows(wiring diagram of the external accessories of the breaker in the dotted frame)

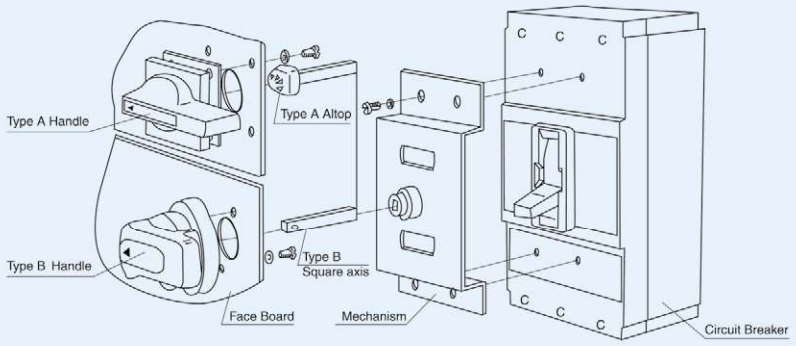


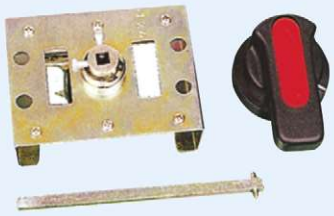
Motor-driven operation device

Code description:
SB1,SB2 stand for push button(provided by users themselves) "X"stands for line connection terminals
Voltage rating:AC50/60Hz 230V 400V,DC220V.

Rotary Handle Operation Device

The mechanism is used in moulded case circuit breaker to operate the draw-out panel, power distribution panel and supply box outside the panle by turning the handle,and to ensure the door of panle would not be opened when the breaker being on . The hand-drive mechanism can be equiped with two types of operation,one is“A”model square handle,the other is“B”model round handle.





Rotary handle operation device

Accessories

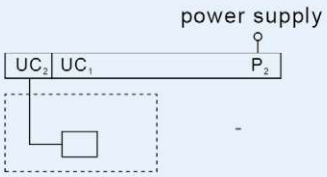
Under Voltage Release

When voltage is 35%-70% of rated voltage, the under voltage release should make the breaker reliable operation.

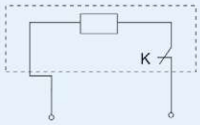
When voltage is less than 35% of rated voltage, the under voltage release should prevent breaker from making

When the voltage is more than 85% of rated voltage, the under voltage release should make the breaker reliable operation.

WARNING: ONLY AFTER THE UNDER VOLTAGE IS ENERGIZED, CAN ENERGIZE AND MAKE THE BREAKER, OTHERWISE THE BREAKER WILL NOT BE SWITCHED ON.



Frame	A XP1M-63	B XP1M-100	C XP1M-225	D XP1M-400	E XP1M-630	F XP1M-800
Rated voltage	230V AC 400V AC	230V AC 400V AC	230V AC 400V AC	230V AC 400V AC	230V AC 400V AC	230V AC 400V AC
Type code	1MA UR230A 1MA UR230A	1MB UR230A 1MB UR230A	1MC UR230A 1MC UR230A	1MD UR230A 1MD UR230A	1ME UR230A 1ME UR230A	1MF UR230A 1MF UR230A

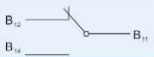


Shunt Release

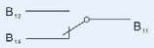
In 70% ~ 110% of the rated voltage, the breaker can reliably operate.

Frame	A XP1M-63	B XP1M-100	C XP1M-225	D XP1M-400	E XP1M-630	F XP1M-800
Rated voltage	230V AC 400V AC 110V DC 220V DC	230V AC 400V AC 110V DC 220V DC	230V AC 400V AC 110V DC 220V DC	230V AC 400V AC 110V DC 220V DC	230V AC 400V AC 110V DC 220V DC	230V AC 400V AC 110V DC 220V DC
Type code	1MA SR230A 1MA SR400A 1MA SR110D 1MA SR220D	1MB SR230A 1MB SR400A 1MB SR110D 1MB SR220D	1MC SR230A 1MC SR400A 1MC SR110D 1MC SR220D	1MD SR230A 1MD SR400A 1MD SR110D 1MD SR220D	1ME SR230A 1ME SR400A 1ME SR110D 1ME SR220D	1MF SR230A 1MF SR400A 1MF SR110D 1MF SR220D

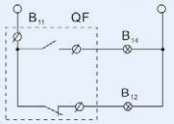
when circuit breaker is at breaking/making status



when circuit breaker is in "free release" (alarm)

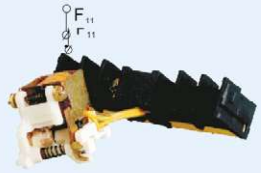


Connection chart

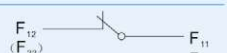


Indication of contacting status. Frame

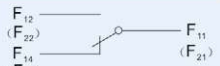
Alarm contact	A XP1M-63	B XP1M-100	C XP1M-225	D XP1M-400	E XP1M-630	E XP1M-800
Type code	1MA AMC	1MA AMC	1MB AMC	1MB AMC	1MC AMC	1MC AMC



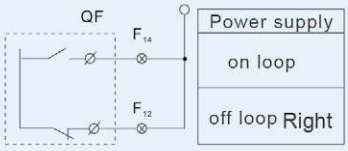
when circuit breaker is at breaking status



when circuit breaker is at breaking status



Connection chart



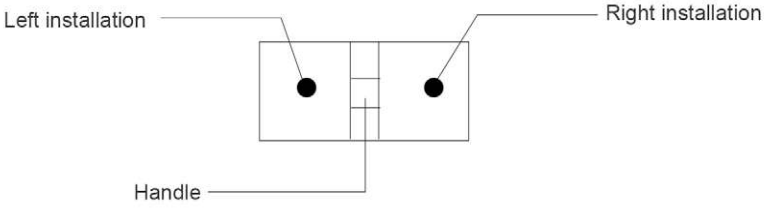
Indication of contacting status. Frame

Auxiliary Contact	A XP1M-63	B XP1M-100	C XP1M-225	D XP1M-400	E XP1M-630	F XP1M-800
	Left Right	Left Right	Left Right	Left Right	Left Right	Left Right
Type Code	1MA ACL 1MA ACL	1MB ACL 1MB ACL	1MC ACL 1MC ACL	1MD ACL 1MD ACL	1ME ACL 1ME ACL	1MF ACL 1MF ACL

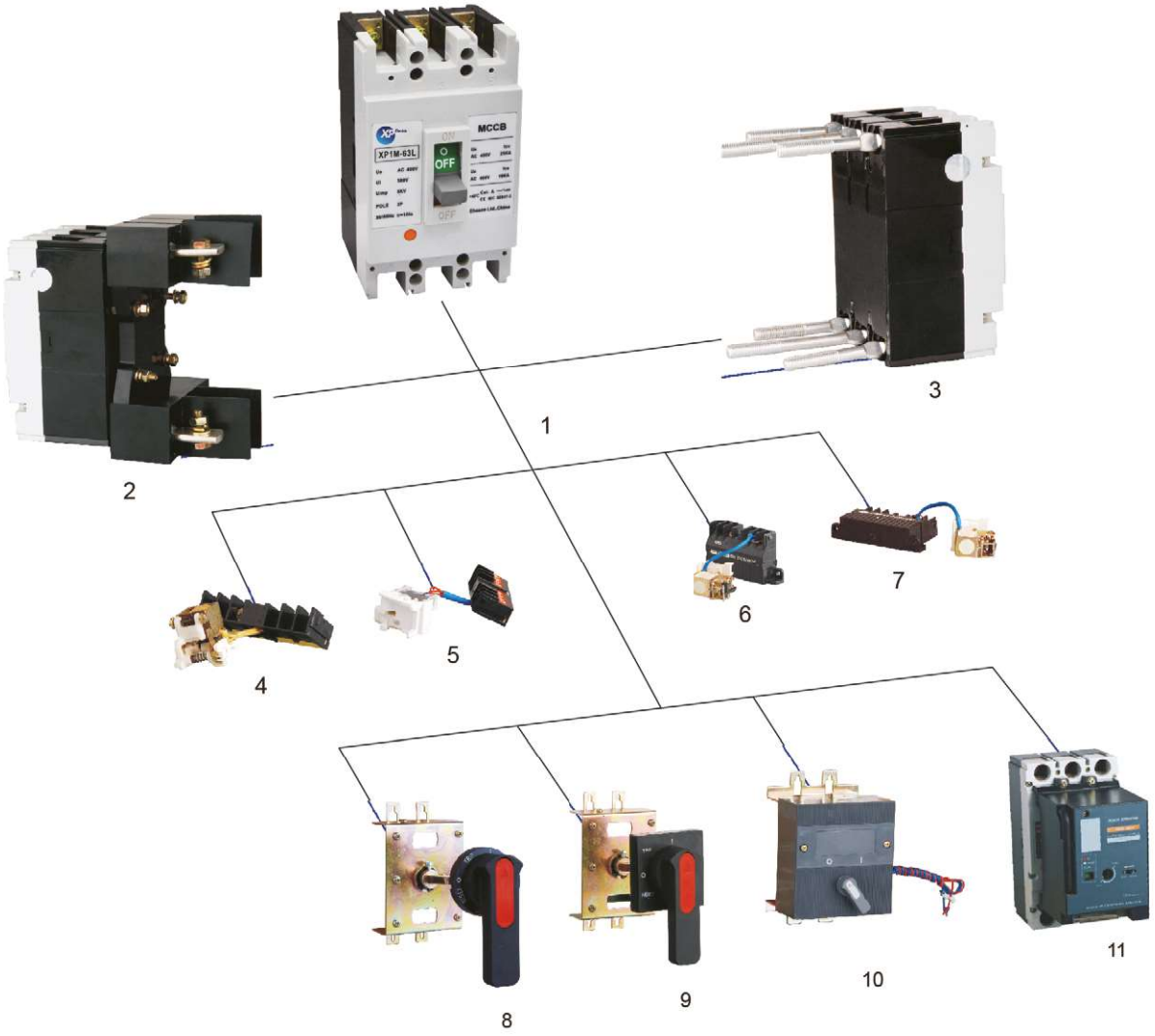
Release Types and Codes of Accessories

Codes of Acessories			Installation Types			
Name of Accessories	Electro magnetism trip	Double trip	XP1M-63L.M XP1M-100L.M.H XP1M-225L.M.H	XP1M-400L XP1M-630L.M	XP1M-400M.H	XP1M-630H XP1M-800M.H
			3poles, 4poles	3poles, 4poles	3poles	3poles
No- Accessories	200	300				
Warning contact	208	308				
Shunt trip	210	310				
Auxiliary contact	220	320				
Under-voltage shunt trip	230	330				
Auxiliary contact of trip	240	340				
Shunt trip under voltage trip	250	350				
2-group Auxiliary contact	260	360				
Auxiliary contact Under voltage trip	270	370				
Shunt trip Warning contact	218	318				
Auxiliary contact Warning contact	228	328				
Under voltage trip Warning contact	238	338				
Shunt trip Auxiliaty contact Warning contact	248	348				
2-group Auxiliary contact Warning contact	268	368				
Auxiliary contact Under voltage trip Warning contact	278	378				

Note: ○ Auxiliary contact ■ Shunt trip
● Warning contact ▲ Under-voltage trip



XP1M SERIES PRODUCT OVERVIEW



[1] Body
[2] Plug-in connection
[3] Rear panel connection
[4] Auxiliary contact
[5] Alarm contact
[6] Shunt release
[7] Under-voltage release
[8] Rotary handle operating mechanism
[9] Rotary handle operating mechanism
[10] Electromagnetic operating mechanism
[11] Electric motor operating mechanism

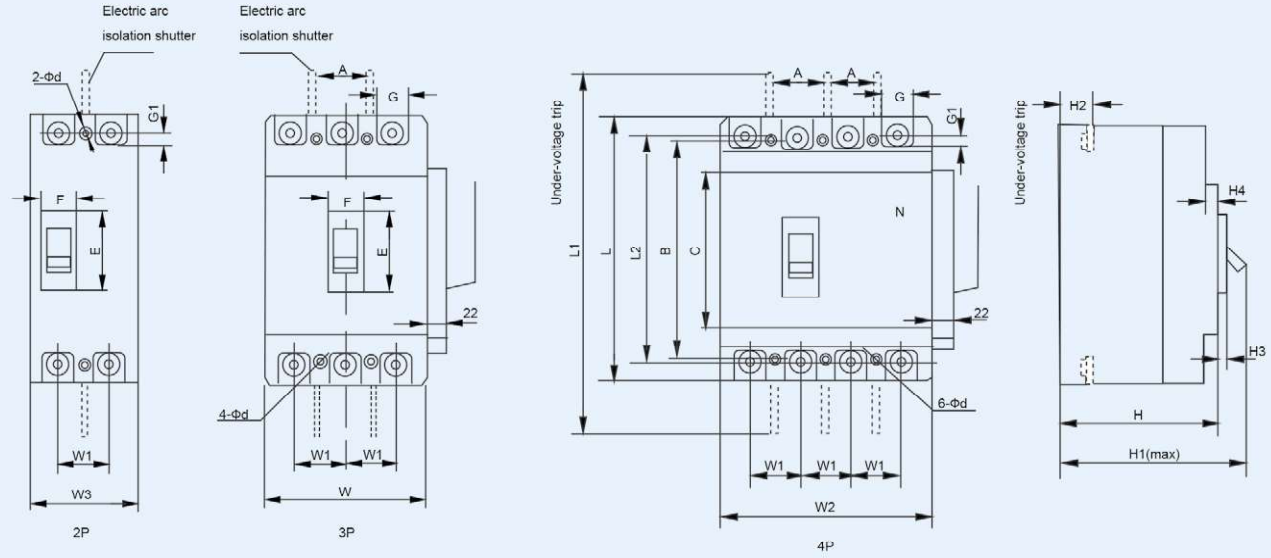
Frame			Frame A	Frame A	Frame B	Frame B	Frame B
			XP1M-63	XP1M-63	XP1M-100	XP1M-100	XP1M-100
			L	M	L	M	H
Standard			IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1
Frame current Inm		A	63	63	100	100	100
Rated current In		A	6,10,16,20,25 32,40,50,63	6,10,16,20,25 32,40,50,63	6,10,16,20,25,32 40,50,63,80,100	6,10,16,20,25,32 40,50,63,80,100	6,10,16,20,25,32 40,50,63,80,100
Poles		P	3	3,4	3	3,4	3
Rated insulating voltage Ui		V	500	500	800	800	800
Rated limited short circuit	at 400V AC	kA	25	50	35	50	85
breaking capacity Icu	at 690V AC	kA	-	-	8	10	20
Rated operating short	at 400V AC	kA	12.5	25	17.5	25	42.5
circuit breaking capacity	at 690V AC	kA	-	-	4	5	10
Arcing over distance			≤50	≤50	≤50	≤50	≤50
Operating performance	with load	times	1500	1500	1500	1500	1500
	without load	times	8500	8500	8500	8500	8500

Frame			Frame C	Frame C	Frame C	Frame D	Frame D
			XP1M-225	XP1M-225	XP1M-225	XP1M-400	XP1M-400
			L	M	H	L	M
Standard			IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1
Frame current Inm		A	225	225	225	400	400
Rated current In		A	100,125,160 180,200,225	100,125,160 180,200,225	100,125,160 180,200,225	225,250,315, 350,400	225,250,315, 350,400
Poles		P	3	3,4	3	3	3,4
Rated insulating voltage Ui		V	800	800	800	800	800
Rated limited short circuit	at 400V AC	kA	35	50	85	50	65
breaking capacity Icu	at 690V AC	kA	8	10	20	10	10
Rated operating short	at 400V AC	kA	17.5	25	42.5	25	32.5
circuit breaking capacity	at 690V AC	kA	4	5	10	5	5
Arcing over distance			≤50	≤50	≤50	≤100	≤100
Operating performance	with load	times	1000	1000	1000	1000	1000
	without load	times	7000	7000	7000	4000	4000

Frame			Frame D	Frame E	Frame E	Frame E	Frame F	Frame F
			XP1M-400	XP1M-630	XP1M-630	XP1M-630	XP1M-800	XP1M-800
			H	L	M	H	M	H
Standard			IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1	IEC60947-2 IEC60947-4-1
Frame current Inm		A	400	630	630	630	800	800
Rated current In		A	225,250,315, 350,400	400,500 630	400,500, 630	400,500, 630	630,700 800	630,700 800
Poles		P	3	3	3,4	3	3,4	3
Rated insulating voltage Ui		V	800	800	800	800	800	800
Rated limited short circuit	at 400V AC	kA	100	50	65	100	75	100
breaking capacity Icu	at 690V AC	kA	20	10	10	20	20	-
Rated operating short	at 400V AC	kA	50	25	32.5	65	37.5	50
circuit breaking capacity	at 690V AC	kA	10	5	5	10	10	-
Arcing over distance			≤100	≤100	≤100	100	≤100	≤100
Operating performance	with load	times	1000	1000	1000	1000	500	500
	without load	times	4000	4000	4000	4000	2500	2500

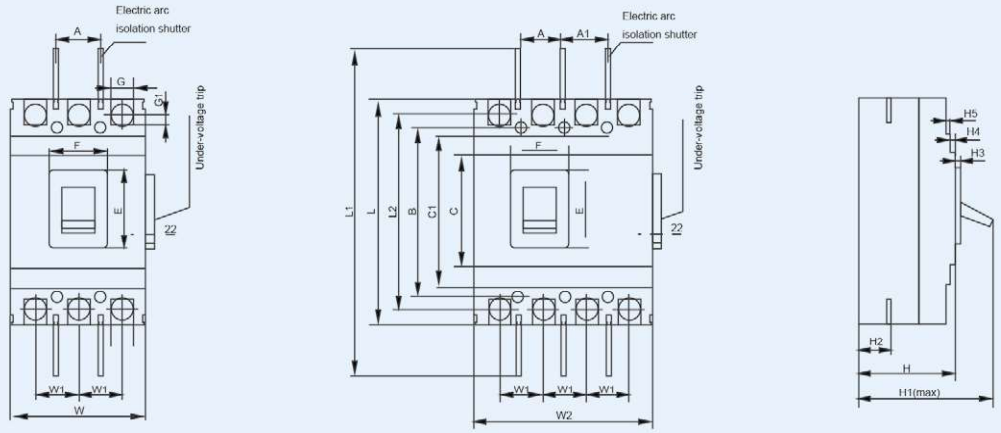
Outline and Installation Dimensions.

XP1M-63,100,225 Outline and Installation Dimension(front connection)



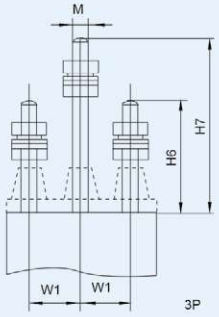
	Model	XP1M-63L	XP1M-63M	XP1M-100L	XP1M-100M XP1M-100H	XP1M-225L	XP1M-225M XP1M-225H
Dimensions	C	85	85	84	84	103	103
	E	48	48	50.5	50.5	51	51
	F	22	22	22	22	23	23
	G	14	14	17	17	22	22
	G1	6.5	6.5	7.5	7.5	11.5	11.5
	H	73	81	68	86	86.5	103
	H1	90	98.5	86	103	110	127
	H2	20	27	24	24	24	24
	H3	4	4	4	4	4	4
	H4	6	6	7	7	5	5
	L	135	135	155	155	165	165
	L1	170	173	255	255	360	360
	L2	117	117	136	136	144	144
	W	76	76	90	90	105	105
	W1	25	25	30	30	35	35
	W2	--	102.5	--	120	--	140
	W3	--	--	--	64.5	--	74.5
Installation Dimensions	A	25	25	30	30	35	35
	B	117	117	130	130	126	126
	φd	3.5	3.5	4.5X6	4.5X6	5	5

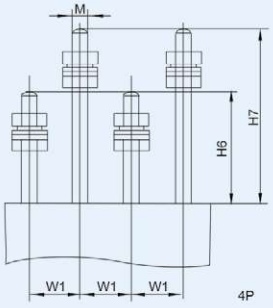
XP1M-400,630,800 Outline and Installation Dimensions(front connection)



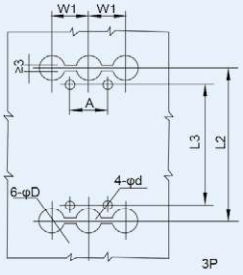
	Model	XP1M-400L	XP1M-400M XP1M-400H	XP1M-630L	XP1M-630M	XP1M-630H XP1M-800M/H
Dimensions	C	102	129	134	134	154
	C1	179	175	184	184	204
	E	90	89	89	89	106
	F	62	65	65	65	66
	G	28	30.5	40	40	44
	G1	13	10.5	13.5	13.5	12.5
	H	104	107	111	111	107
	H1	155	450	160	160	148
	H2	38	39	44	44	33
	H3	6	6	6	6	4.5
	H4	6	4.5	3.5	3.5	4.5
	H5	2.5	4.5	4.5	4.5	8
	L	257	257	270	270	280
	L1	457	457	470	470	470
	L2	225	225	234	234	243
	W	140	150	182	182	210
	W1	44	44	58	58	70
	W2	198	--	240	--	--
Installation Dimensions	A	44	44	58	58	70
	A1	50	--	58	--	--
	B	194	194	200	200	243
	φd	7	7	7	7	7

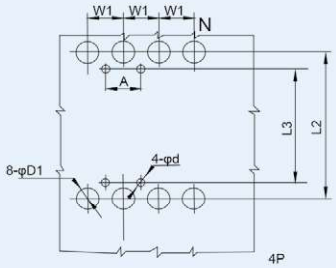
XP1M-63,100,225 Outline and installation dimension (Back connection)



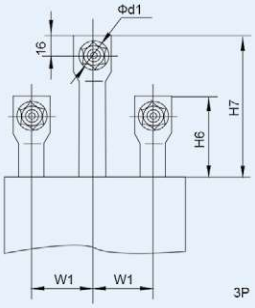


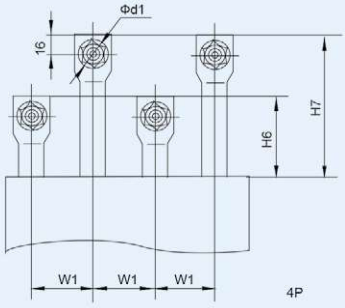
Back connection chart





XP1M-400、630、800 Outline and installation dimension(Back connection)





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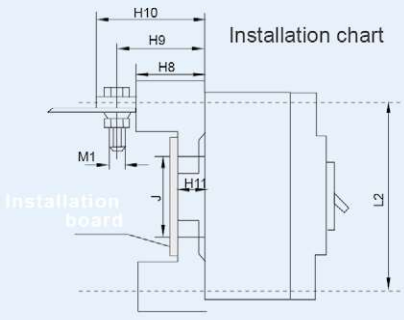
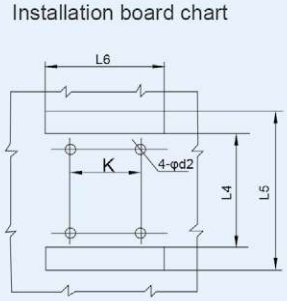




	Model	XP1M-63L XP1M-63M	XP1M-100L XP1M-100M XP1M-100H	XP1M-225L XP1M-225M XP1M-225H	XP1M-400L	XP1M-400M XP1M-400H	XP1M-630L 1M-630M	1M-630H 1M-800M 1M-800H
Dimensions of back connection & insert type	A	25	30	30	44	44	58	70
	Φd	3.5	4.5x6(long hole)	5.5	7	7	7	7
	Φd1	--	--	--	φ12.5	φ12.5	φ16.5	φ16.5
	Φd2	6	8	8	9	9	9	12
	ΦD	8	24	26	31	33	37	37
	ΦD2	8	16	20	33	37	37	37
	H6	44	68	66	60	65	65	48
	H7	66	108	110	120	120	125	125
	H8	28	51	51	61	60	60	87
	H9	38	68	72	--	83.5	93	--
	H10	44	79	91	99	106.5	112	106
	H11	8.5	17.5	17.5	22	21	21	26.5
	L2	117	132	144	225	225	234	243
	L3	117	108	126	194	194	200	243
	L4	97	95	93	165	163	165	173
	L5	138	180	190	285	285	302	305
	L6	80	95	110	145	155	185	215
	M	M6	M8	M10	--	--	--	--
	K	50.2	60	70	60	60	100	90
	J	60.7	62	54	129	129	123	143
	M1	M5	M8	M8	M10	M10	M12	M14
	W1	25	30	35	44	44	58	70

Tripping Characteristic

For power distribution

No.	Test current	I/In	Conventional time	Start status
1	Conventional non-trip current	1.05	2h(In>63A), 1h(In≤63A)	Cold status
2	Conventional trip current	1.3	2h(In>63A), 1h(In≤63A)	Right after test No.1

For motor protection

No.	Operational current	Conventional time	Start status	Remark
1	1.0In	2h	Cold status	-
2	1.2In	≤2h	Right after test No.1	-
3	1.5In	≤4min	Cold status	10≤In≤225
		≤8min	Cold status	225≤In≤630
4	7.2In	4s≤T≤10s	Cold status	10≤In≤225
		6s≤T≤20s	Cold status	225≤In≤635

XP1C
AC Contactor

Function

XP1C AC Contactor is suitable for using in the circuits of AC 50Hz or 60Hz, rated insulating voltage 660V, rated operating voltage up to 690V,rated operating voltage 380/400V in AC-3 type, rated operating current up to 95A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & mechanical interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, stardelta starter. With the thermal relay, it is combined into the electromagnetic starter. The contactor is produced according to IEC60947-4.The product is SEMKO certified.

Nomenclature

XP 1C - 09 10 / P 5

- 5 — Frequency of coil: 5: 50Hz 6: 60HZ 7: 50/60Hz
- P — Voltage of coil:P:230V U:240V Q:380V...
- 10 — Number of auxiliary contact
- 09 — Rated operating current
- 1C — Design code
- XP — Company code

Code of Coil

Coil voltage Us(V)	24	36	48	110	127	220	230	240	380	415	440	480	500	600	660
50Hz	B5	C5	E5	F5	G5	M5	P5	U5	Q5	N5	R5	-	S5	-	Y5
60Hz	B6	-	E6	F6	G6	M6	P6	U6	Q6	N6	R6	T6	-	S6	-
50/60Hz	B7	-	E7	F7	-	M7	P7	-	Q7	N7	R7	-	-	-	-

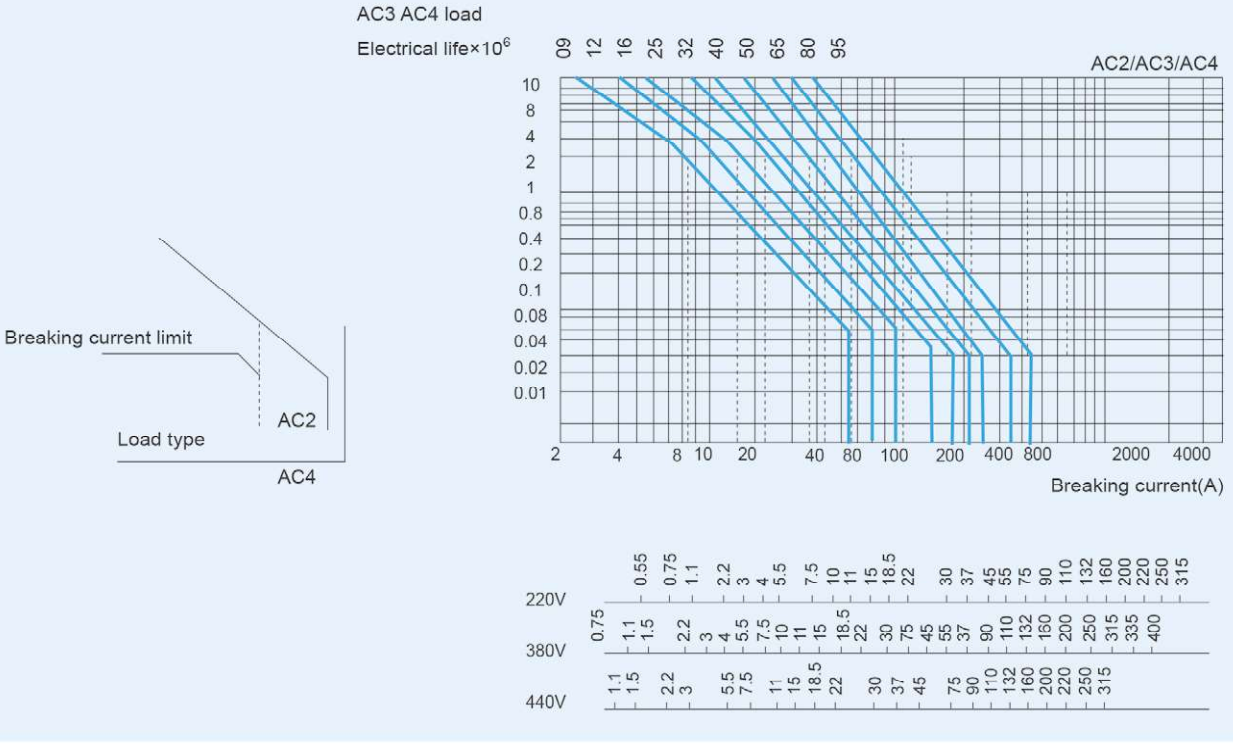
Specification of Coil

Type		XP1C-09	XP1C-12	XP1C-18	XP1C-25	XP1C-32	XP1C-40	XP1C-50	XP1C-65	XP1C-80	XP1C-95
Coil power	Pick-up (VA)	70	70	70	110	110	200	200	200	200	200
	Holding (VA)	8	8	8	11	11	20	20	20	20	20
	Power (W)	1.8~2.8	1.8~2.8	1.8~2.8	3~4	3~4	6~10	6~10	6~10	6~10	6~10

Technical Data

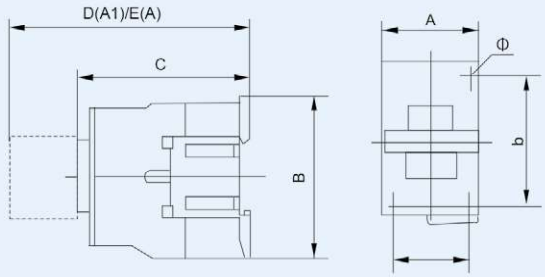
Type			XP1C-09	XP1C-12	XP1C-18	XP1C-25	XP1C-32	XP1C-40	XP1C-50	XP1C-65	XPC-80	XP1C-95
Rated working current(Ie)	380V	AC-3	9	12	18	25	32	40	50	65	80	95
		AC-4	3.5	5	7.7	8.5	12	18.5	24	28	37	44
	660V	AC-3	6.6	8.9	12	18	21	34	39	42	49	55
		AC-4	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
Rated insulating voltage (Ui) V			660	660	660	660	660	660	660	660	660	660
Conventional heating current (Ith)A			20	20	32	40	50	60	80	80	125	125
Controllable 3-phase squirrel-cage motor power(AC-3)kW		220V	2.2	3	4	5.5	7.5	11	15	18.5	22	25
		380V	4	5.5	7.5	11	15	18.5	22	30	37	45
		660V	5.5	7.5	9	15	18.5	30	33	37	45	45
AC-3	Electrical life (10^4)times		100	100	100	100	80	80	80	80	60	60
	Operation frequency (times/h)		1200	1200	1200	1200	600	600	600	600	600	600
AC-4	Electrical life (10^4)times		20	20	20	20	15	15	15	15	10	10
	Operation frequency (times/h)		300	300	300	300	300	300	300	300	300	300
Mechanical life (10^4) times			1000	1000	1000	1000	800	800	800	800	600	600
Auxiliary contact	Conventional heating current (Ith)A		10									
	Rated working voltage (Ue)V		AC 380 DC 220									
	Rated control capacity		360VA(AC-15) of 33W(DC-13)									
	Electrical life(10^4) times		100									
	Mechanical life (10^4) times		1000									
	Minimum load of making		6V 10mA									
Coil	Rated control voltage (Us) V		24,36,48,110,127,220,240,380,400 (see below the specifications of coil)									
	Operate voltage V		85%~110%Us									
	Release voltage V		20%~75%Us									
	Operate VA		70	70	70	110	110	200	200	200	200	200
	Holding VA		8	8	8	11	11	20	20	20	20	20
	Power W		1.8~2.8	1.8~2.8	1.8~2.8	3~4	3~4	6~10	6~10	6~10	6~10	6~10
Matched fuse type and current			RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-100	RT16-125
Cable connected	Number of cable		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
with terminal	Soft cable		2.5 2.5	2.5 2.5	4 4	4 4	6 6	10 10	16 16	25 25	50 25	25 50
mm^2	Solid cable		4 4	4 4	6 6	6 6	10 10	16 -	25 -	25 -	50 -	50 -

Electrical Life Curve

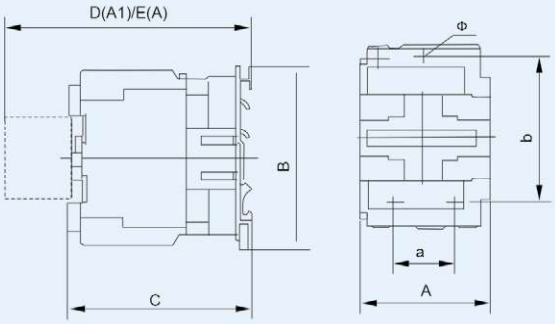


Dimensions

XP1C-09～32 Dimensions



XP1C-40～95 Dimensions



Type	A max	B max	C max	D max	E max	a	b	Φ
XP1C-09-12	47	76	82	113	133	34/35	50/60	4.5
XP1C-18	47	76	87	118	138	34/35	50/60	4.5
XP1C-25	57	86	95	126	146	40	48	4.5
XP1C-32	57	86	100	131	151	40	48	4.5
XP1C-40~65	77	129	116	145	165	40	100/110	6.5
XP1C-80~95	87	129	127	175	195	40	100/110	6.5

A) Ambient temperature: the upper limit shall not exceed +40°C; the average value within 24 hours shall not exceed +30°C; the lower limit shall be not less than -5°C;

B) Altitude: Installation altitude shall not exceed 2000m.

C) Atmosphere conditions: Relative humidity shall not exceed 50% when the ambient temperature is +40°C. Higher relative humidity is permissible at lower temperature, for example, it can be 90% at 20°C. Special measures should be taken to address the dew occurred occasionally due to temperature changes.

D) Anti-pollution degree: Ⅲ

E) Installation category: Ⅲ

F) Installation conditions: Slant of contactor mounting surface shall not exceed ± 5°. Contactor can also be installed with TH type DIN rails of 35mm (32A and below) and 35mm or 75mm (40A and above) other than by.

G) Shock: Contactors can be installed and used in situation with frequency 2~13.2 Hz, amplitude within ± 1mm or places with frequency 13.2~100 Hz and acceleration within ± 7m/s2

XP1C-18

XP1C-32

XP1C-95

3Poles							Type code
Rated operating current (AC-3) up to 400V (A)	Conventional heating current Ith (A)	Power of controlled 3-phase cage motor (AC-3)			Auxiliary contact		230V AC 50Hz Please contact us for other coil specifications.
		220V 230V	380V 400V	660V 690V			
		(kW)					
9	20	2.2	4	5.5	1 -	 1	1C-0910P5 1C-0901P5
12	20	3	5.5	7.5	1 -	- 1	1C-1210P5 1C-1201P5
18	32	4	7.5	9	1 -	- 1	1C-1810P5 1C-1801P5
25	40	5.5	11	15	1 -	- 1	1C-2510P5 1C-2501P5
32	50	7.5	15	18.5	1 -	- 1	1C-3210P5 1C-3201P5
40	60	11	18.5	30	1	1	1C-4011P5
50	80	15	22	33	1	1	1C-5011P5
65	80	18.5	30	37	1	1	1C-6511P5
80	110	22	37	45	1	1	1C-8011P5
95	110	25	45	45	1	1	1C-9511P5

XP1TR
Thermal Relay

Function

XP1TR Series overload relays apply to circuit of AC 50Hz or 60Hz, rated voltage to below 660V and rated current 0.1A~93A for AC motor overload and single phase protection during long time or intermittent long time service,which can also protect three phase serious imbalance and long starting time of motor or long time operation, can also be used for corresponding AC contactor for electromagnetic starter.

This product has innovative, elegant model and small installation area, functions such as temperature compensation, action indication, automatic and manual reset, stop with steady and reliable performance

Thermal relay can be combined/connected with contactor or installed separately.

Standard: IEC 60947-4-1

Nomenclature

XP 1TR - 25 / 18

- 18 — Setting current range(A)
- 25 — Rated current(A): 25, 36, 93
- 1TR — Design code
- XP — Company code

Structural Features

3-phase bimetal type

With overload and open-phase protection

With setting current continuous adjustable apparatus

With temperature compensation

With action indication

With testing mechanism

With stop button

With manual and automatic reset button

With electrically separable normal open and normal closed contacts

Installation method: plug installation with contactor or independent installation

Ambient temperature: The upper limit shall not exceed+40°C; the average value within 24 hours shall not exceed+35°C; the lower limit shall be not less than -5°C.

Atmosphere conditions: Relative humidity shall not exceed 50% when the ambient temperature is +40°C. Higher relative humidity is permissible at lower temperature, for example,it can reach 90% at 20°C. Special measures should be taken to address the dew occurred occasionally due to temperaturechanges.

Altitude: Installation altitude shall not exceed 2000m.

Anti-pollution degree:III.

Installation category:III.

Installation conditions: Install at proper working position, slant of contactor mounting surface shall not exceed±5°.Thermal relay shall be installed in places with no obvious shake or shock.

Environmental protection: Sufficient consideration of enviro-nmental protection factors has been taken in design process by adopting retrievable and naturally degradable materials in components.

Technical Data

Type			XP1TR-25	XP1TR-36	XP1TR-93
Standard			IEC60947-4-1	IEC60947-4-1	IEC60947-4-1
Rated working current (Ie)		A	25	36	93
Rated insulating voltage (Ui)		V	660	660	660
Phase failure protection function			√	√	√
Automatic & manual reset			√	√	√
Temperature compensation			√	√	√
Releasing indicator			√	√	√
Test & stop pushbutton			√	√	√
Auxiliary contacts					
Rated current	AC-15 230V	A	2.73	2.73	2.73
	AC-15 380V	A	1.58	1.58	1.58
	DC-13 230V	A	0.2	0.2	0.2
Ambient air temperature		℃	-5~+40	-5~+40	-5~+40
Altitude	max.	meter	2000	2000	2000
Pollution grade			3	3	3
Installation category			3	3	3
Mounting type	Independent		√	√	√
	Plug-in		√	√	√

Action Characteristics

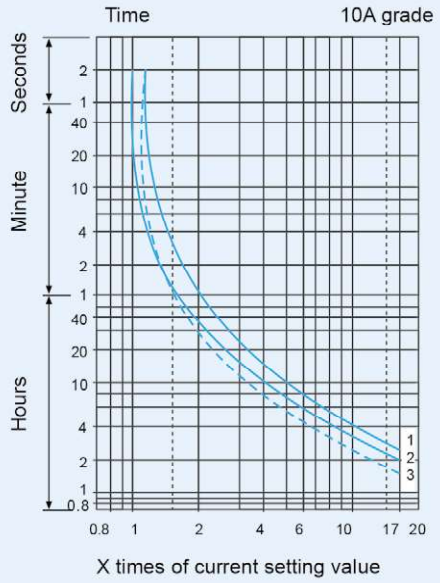
Overload protecion

Item No.	Setting current multiple	Action time	Start condition	Ambient air temperature(℃)
1	1.05	≥2h	Cold state start	20 ± 5
2	1.2	<2h	After test item 1	
3	1.5	<2min	After test item 1	
4	7.2	2s<Tp ≤10s	Cold state start	

Phase failure protection

Item No.	Setting current multiple		Action time	Start condition	Ambient air temperature(℃)
	Any two phase	The third phase			
5	1.0	0.9	≥2h	Cold state start	20 ± 5
6	1.15	0	<2h	After test item 5	

Tripping Curve



1. Equilibrium running, 3 phase, start from cold state
2. Equilibrium running, 2 phase, start from cold state
3. Equilibrium running, 3 phase, after long period of setting current (hot state)

	Rated working current(A)	Setting range (A)	Matched fuse type		Matched AC contactor	Type code
			aM(A)	gG(A)		
	25	0.1~0.16	0.25	2	XP1C-09	1TR 25/0.16
		0.16~0.25	0.25	2	XP1C-09	1TR 25/0.25
		0.25~0.4	1	2	XP1C-09	1TR 25/0.40
		0.4~0.63	1	2	XP1C-09	1TR 25/0.63
		0.63~1	2	4	XP1C-09	1TR 25/1
		1~1.6	2	4	XP1C-09	1TR 25/1.6
		1.25~2	4	6	XP1C-09	1TR 25/2
		1.6~2.5	4	6	XP1C-09	1TR 25/2.5
		2.5~4	6	10	XP1C-09	1TR 25/4
		4~6	8	16	XP1C-09	1TR 25/6
		5.5~8	12	20	XP1C-09	1TR 25/8
		7~10	12	20	XP1C-12	1TR 25/10
		9~13	16	25	XP1C-12	1TR 25/13
		12~18	20	35	XP1C-18	1TR 25/18
		17~25	25	50	XP1C-25	1TR 25/25
	36	23~32	40	63	XP1C-32	1TR 36/32
		28~36	40	80	XP1C-32	1TR 36/36
	93	23~32	40	63	XP1C-40	1TR 93/32
		30~40	40	100	XP1C-40	1TR 93/40
		37~50	63	100	XP1C-50	1TR 93/50
		48~65	63	100	XP1C-65	1TR 93/65
		55~70	80	125	XP1C-80	1TR 93/70
		63~80	80	125	XP1C-80	1TR 93/80
		80~93	100	160	XP1C-95	1TR 93/93

Order Note

Following information needed be marked when order	Ordering sample
Product name and model Rated current Setting current range	To order XP1TR thermal relay, rated current is 25A, setting current range is 18A, quantity is 1000 pieces, should be marked: Thermal relay XP1TR-25/18 1000pcs

Outline and Installation Dimensions.

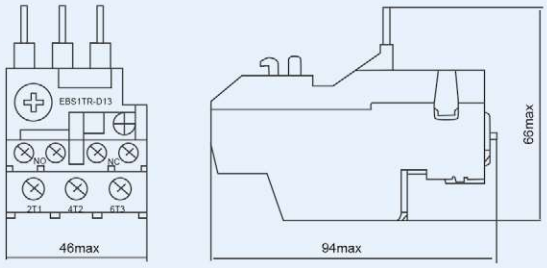


Fig 1:XP1TR-D13/Z outline dimension diagram

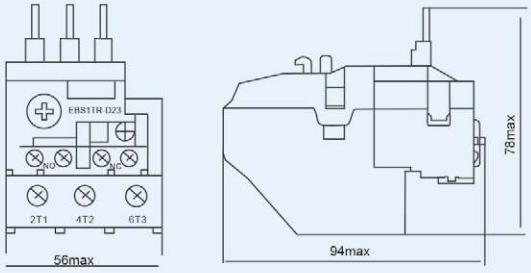


Fig 2: XP1TR-D23/Z outline dimension diagram

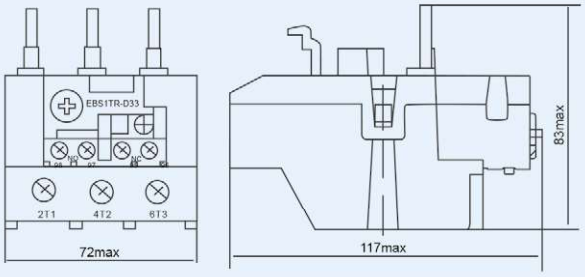


Fig 3: XP1TR-D33/Z outline dimension diagram

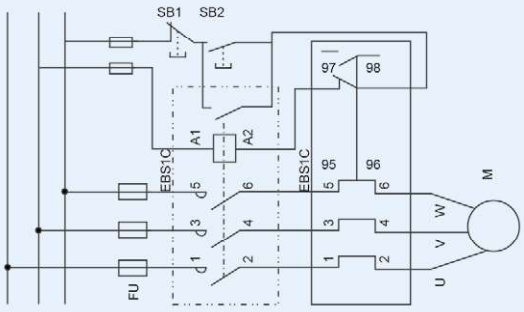


Fig 4: operating principle diagram of thermal overload relay

FU-fuse XP1C AC contactor

XP1TR-thermal relay

SB1- stop button SB2-start button

Installation Frame

XP1C-A7

Matched	Type code
1TR 25	1C A7D1064
1TR 36	1C A7D2064
1TR 93	1C A7D3064

XP6CH
Mini Contactor

Production description

- XP6CH series mini contactor mainly apply to the condition of 50Hz (or 60Hz) , 400V or less rated operation voltage, 63A or less rated current under AC-7a application, or, 32A or less rated current under AC-7b application, 6kA or less rated breaking current, which is to control the household appliances, low or micro inductive reactance load, or household motor load as well.
- This product applies to house, hotel apartment, office building shopping mall, etc to realize the auto control function.
- Its main performance indices comply with IEC 61095.

Nomenclature

XP 6CH - 63 / 2P 25 40 B7

- B7 — Coil specification
- 40 — Main contact type
- 25 — Rated current: 16, 20, 25, 32, 40, 63A
- 2P — Poles:1P, 2P, 3P, 4P,
- 63 — Frame current:25,63A
- 6CH — Design code
- XP — Company code

Features

- **Modular installation, smart design and compact structure.**
- **Standard din-rail insallation, standard modular dimensions, suitable to distributio box installation together with MCBs.**
- **Higher safe protection with fire resistant material.**
- **Safe application with function indication hole.**
- **Noise free, better application for hotel and hospital.**

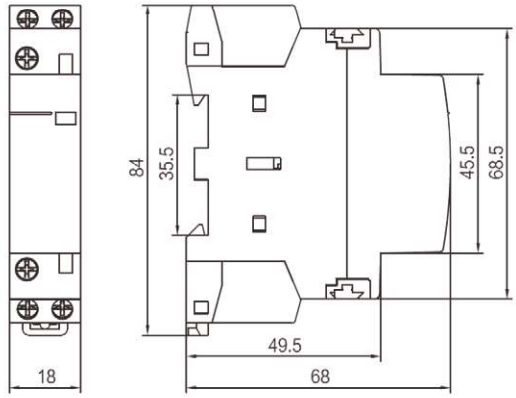
Normal Working Environment and Installation Conditions

- Ambient air temperature: -5℃～+40℃, average temperature less than +35℃ within 24 hours.
- Altitude: less than 2000 meters
- Air conditions: the air relative humidity of the installation place is less than fifty percent at the maximum temperature +40℃; a high relative humidity is allowed at the low temperature, such as 90% humidity at +20℃, special measures should be taken when coagulating frost happened occasionally because of temperature change.
- Transportation and storage temperature: -25℃～+55℃, it can approach to +70℃ in a short time (within 24 hours).
- Pollution class: 2
- Installation type: Ⅱ
- No obvious punching or vibration at the installation place
- Installation mode: adopt TH35-7.5 type DIN rail
- Products should be installed vertically, the gradient is less than ±5°between the installation surface and the vertical surface.
- Operation condition: when the ambient air temperature is within -5℃～+40℃, add rated control supply voltage Us to the contactor coil, making it fever to a stable state, and the contactor will connect when it is in 85%～110% of the rated control supply voltage, disconnect in 20%～75% of the rated control supply voltage.
- Mechanical life: the mechanical life of a contactor is no less than 1 million times.
- Electrical life: the electrical life of contactor is no less than 10 thousand times.

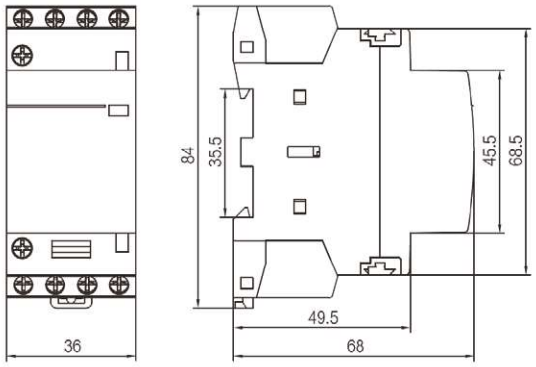
Main Technical Parameters

Design code	Poles	Contact quantity	Usage type	Rated insulation voltage	Rated working voltage	Control voltage	Rated working current	Control power
XP6CH-16	1P，2P	10,01,11,20	AC-7a	500V	250V	220/240V AC 50Hz	16/6	2.8/1
XP6CH-20							20/7	4/1.2
XP6CH-25							25/8.5	5.4/1.5
XP6CH-16	3P，4P	30,03,22,31,40 13,04			400V		16/6	2.8/1
XP6CH-20							20/7	4/1.2
XP6CH-25							25/8.5	5.4/1.5
XP6CH-32	1P，2P	10,01,11,20,02			250V		32/12	6.5/1.9
XP6CH-40							40/15	8.4/2.4
XP6CH-63							63/25	13/3.8
XP6CH-32	3P，4P	30,03,22,31,40 13,04			400V		32/12	6.5/1.9
XP6CH-40							40/15	8.4/2.4
XP6CH-63							63/25	13/3.8

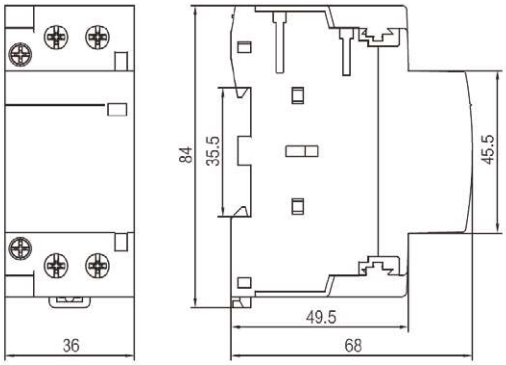
Outline and Installation Dimension



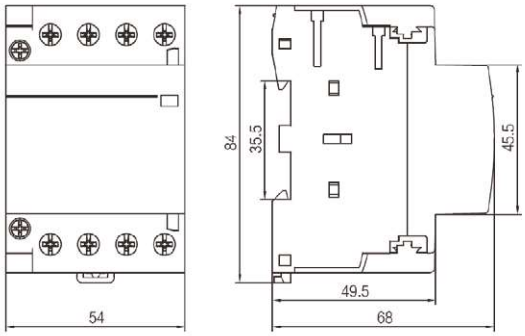
XP6CH-16,20,25,1P/2P



XP6CH-16,20,25,3P/4P



XP6CH-32,40,63,1P/2P



XP6CH-32,40,63,3P/4P

Order Note

Following items should be marked when ordering	Ordering sample
Product Name	To order the XP6CH ,rated current is 40A, 4 poles, Main 4
Poles	NO,coil:230V,50HZ should be marked:
Rated current	XP6CH-63/40P5
Main Contact type	
Coil specification	

XP9BN
Miniature Circuit Breaker

Function

- Short-circuit, Over-load and Isolation
- High short-circuit breaking capacity
- ON/ OFF status Indicator
- Double wiring terminals could be connected cable, U type and pin type busbar
- Easy installation and hanging on 35mm Din rail

Nomenclature

XP 9BN - 63 / 1P C 16 10k

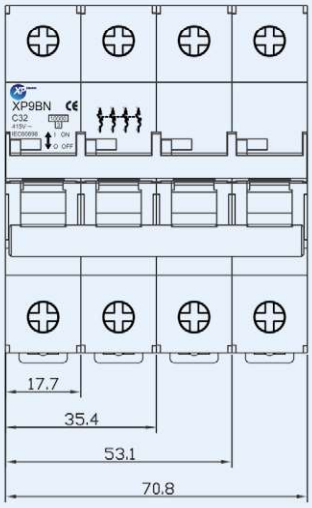
- 10k — Breaking Capacity: 10000A
- 16 — Rated current In(A): 4,6,10,16,20,25,32,40,50,63A
- C — Tripping Curve: B,C,D
- 1P — Poles: 1P, 1P+N,2P,3P, 3P+N ,4P
- 63 — Frame level: 63A
- 9BN — Design code
- XP — Company code

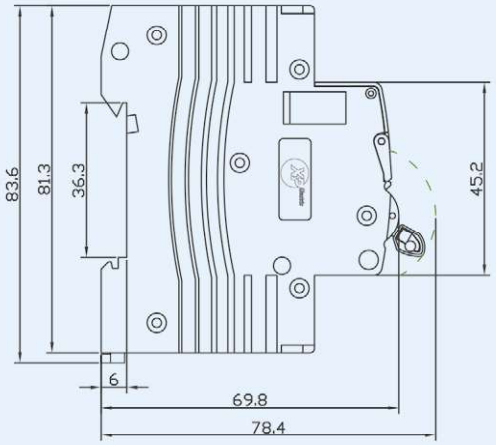
Connection capacity	Flexible conductor 35mm²	Rigid conductor 25mm²
Fastening torque	2.0Nm	
Installation	On symmetrical DIN rail 35mm	Panel mounting

Technical Parameter

Standard	IEC60898
Poles	1P, 1P+N, 2P, 3P, 3P+N, 4P,
Rated current In(A)	4, 6, 10, 16, 20, 25, 32, 40, 50,63A
Rated Voltage Un(V)	1P: 240/415V AC 50/60Hz 1P+N: 240V AC 50/60Hz 2P, 3P,3P+N,4P: 415V AC 50/60Hz
Tripping curve	B, C, D
Breaking capacity Icn(A)	10000A
Protection level	IP20
Environment Temperature	-5℃ to +40℃
Installation	On symmetrical DIN rail 35mm

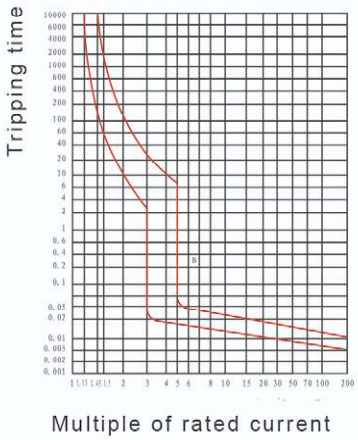
Dimensions



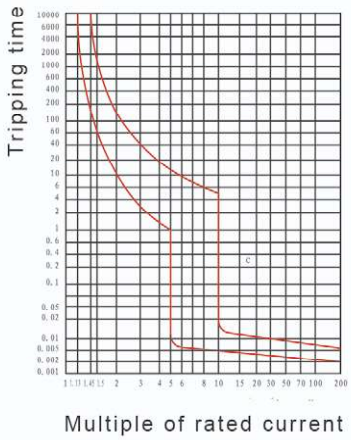


Tripping Curve

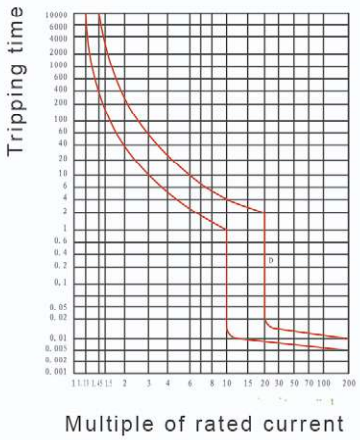
Curve B



Curve C



Curve D



Order Note

Following items should be marked when ordering	Ordering sample
Product name and model Frame level Poles Curve characteristic, rated current Quantity	To order XP9BN-63 miniature circuit breaker, 2 poles, curve C, rated current 20A, quantity is 100 pieces, should be marked : XP9BN-63/2PC20 100PCS.

XP9RN

Residual Current Circuit Breaker

Nomenclature

XP 9RN - 100 / 2P 25 / 30

- Rated residual current: 30mA, 100mA, 300mA
- Rated current: 25, 32, 40, 63, 80, 100A
- Poles: 2P, 4P
- Frame level : 100A
- Design code
- Company code

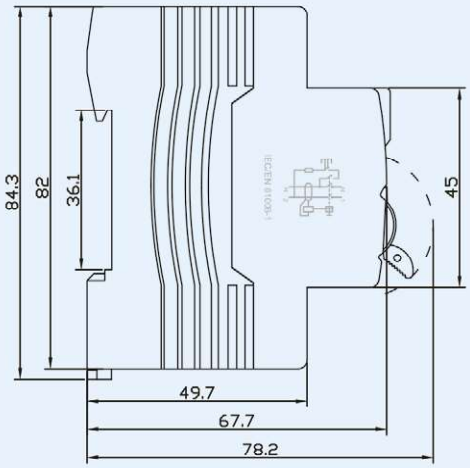
Function

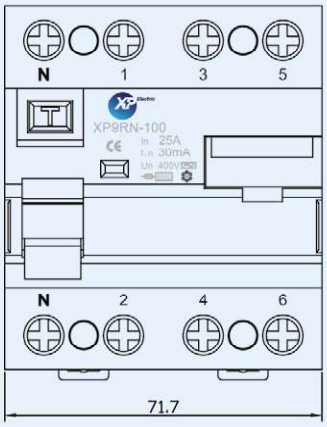
- Provides protection against earth fault/leakage current and unction of isolation
- High short-circuit current withstand capacity
- Applicable to terminal and pin/U type busbar connection
- On off display function of contact position
- Fire resistant plastic parts endures abnormal heating and strong impact
- Automatically disconnect the circuit when earth fault/leakage current occurs and exceeds the rated sensitivity

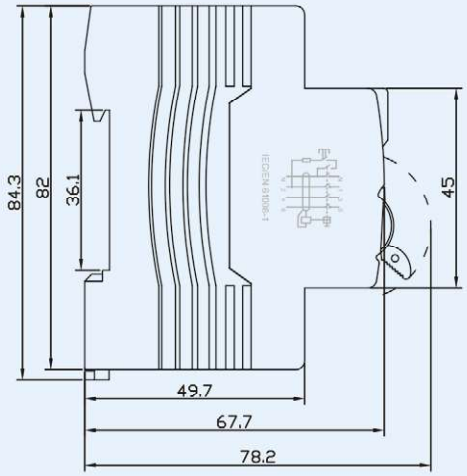
Technical Parameter

Standard	IEC61008
Poles	2P, 4P
Rated current In(A)	25,32,40,63,80,100A
Rated voltage Un (V)	2P: 230V~ 50/60Hz 4P: 400V~ 50/60Hz
Rated conditional short-circuit current Icn(A)	6000A
Rated residual operating current I△n(mA)	30,100,300
Rated residual non operating current I△no	0.5I△n～I△n
Action time	instantaneous type ≤0.1S
Protection grade	IP20
Ambient temperature	-5℃～+40℃
Installation	DIN rail 35mm, panel mounting

Dimensions







Order Note

Following items should be marked when ordering	Ordering sample
Product name and model Frame level Poles Tripping characteristic and rated current Rated residual current Quantity	To order XP9RN-100 residual current circuit breaker, frame level 100A, 2P, rated current 25A, rated residual current is 30mA, quantity 100 pieces, should be marked: RCCB XP9RN-100/2P 25/30, 100PCS.

XP9M
Series Moulded Case Circuit Breaker

Application

XP9M series moulded case circuit breaker is used in AC 660V 50/60Hz and DC up to 250V, rated current 800A. Mainly used in industry and commercial lighting system, operate the power system on and off. XP9M MCCB is an economic circuit breaker with stable and reliable performance, small size, long electrical life. And with overload and short circuit protection, can be installed with accessories such as voltage failure and under voltage protector, electromagnetic tripper etc. The XP9M can be installed and wired in front of the plate and behind the plate. What's more, the MCCB can be remote operated with manual or electric operating mechanism, can be used for infrequent circuit line switching and infrequent motor start.

Product code and implication

XP 9M – 800 / 3P 630

- 630 — Rated current
- 3P — Pole
- 800 — Frame current
- 9M — Product name and design code
- XP — Company code

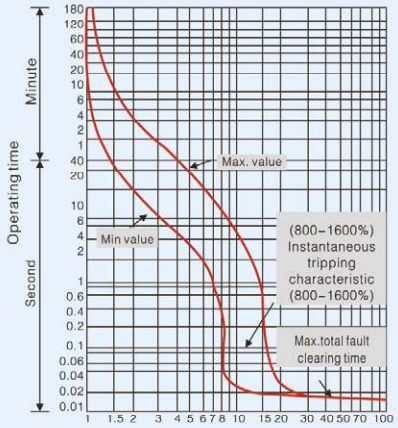
Main function parameter

Product code	Pole	Rated current(A)	Short-circuit interrupting capacity(kA) Icu/Ics							
			AC							
			230V	250V	380V	400V	415V	460V	500V	600V
XP9M-50	2P	5,10,15,20,30,40,50	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-50	3P	5,10,15,20,30,40,50	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-50	4P	5,10,15,20,30,40,50	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-100	2P	60,75,100	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-100	3P	60,75,100	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-100	4P	60,75,100	50/25	15/17.5	30/15	30/15	14/13	14/7	7.5/4	7.5/4
XP9M-225	3P	125,150,175,200,225	25/13	10/5	18/10	18/10	18/10	15/7.5	7.5/4	7.5/4
XP9M-300	3P, 4P	100,125,140,160,180,200,225,250,275,300	70/50	50/35	35/25	35/25	35/25	25/15	7.5/4	7.5/4
XP9M-630	3P, 4P	250,315,350,400,500,630	70/50	50/35	35/25	35/25	25/15	25/15	7.5/4	7.5/4
XP9M-800	3P, 4P	500,630,700,800	70/50	50/35	35/25	35/25	25/15	25/15	7.5/4	7.5/4

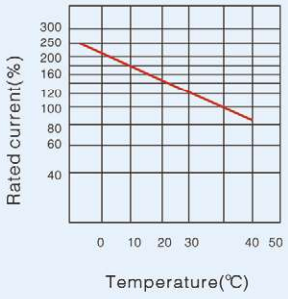
Tripping Characteristic

XP9M-50, XP9M-100

Characteristic curve

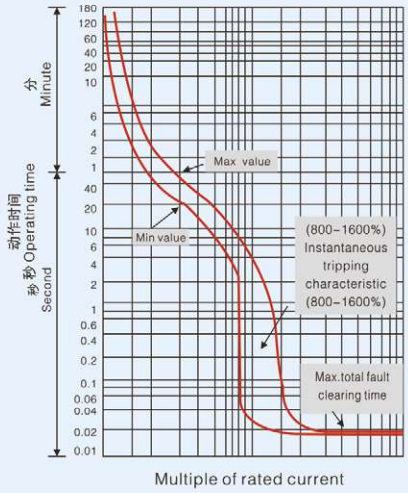


Temperature compensation curve

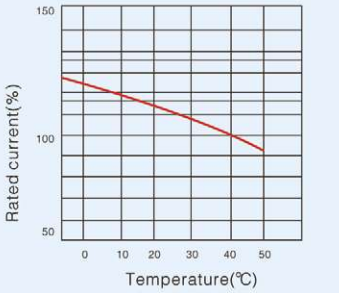


XP9M-225

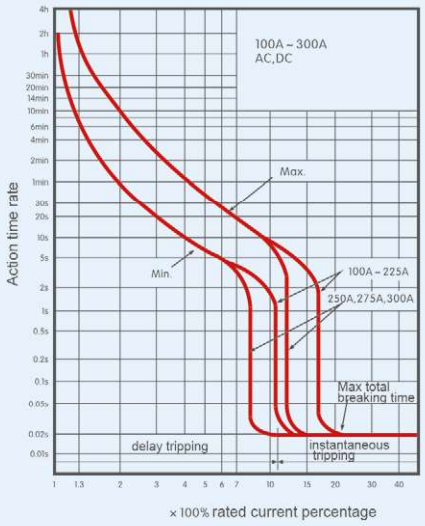
Characteristic curve



Temperature compensation curve

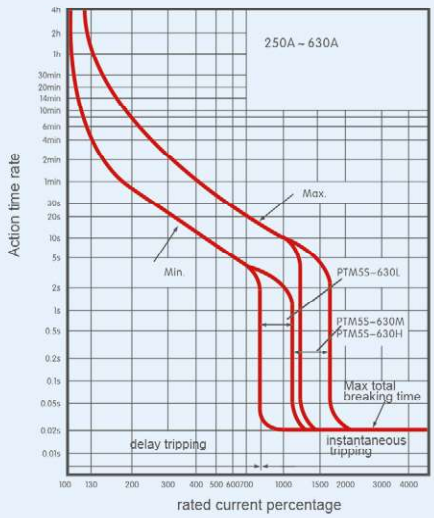


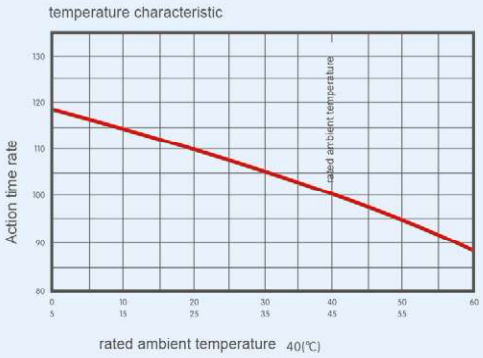
XP9M-300



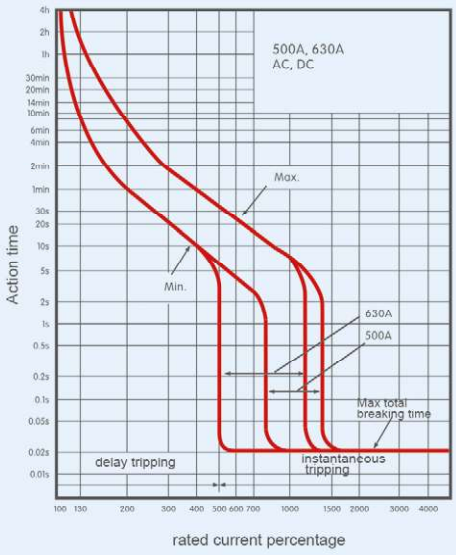
temperature characteristic

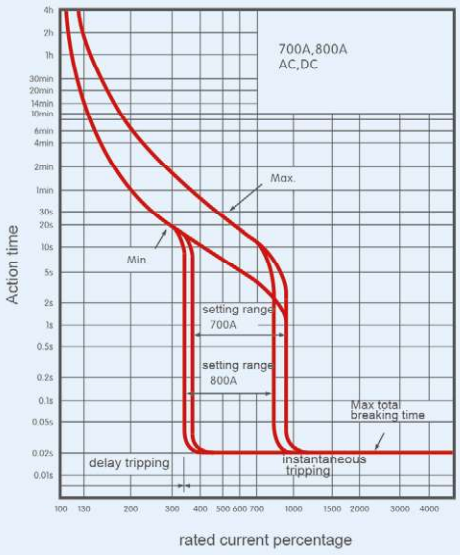
XP9M-630

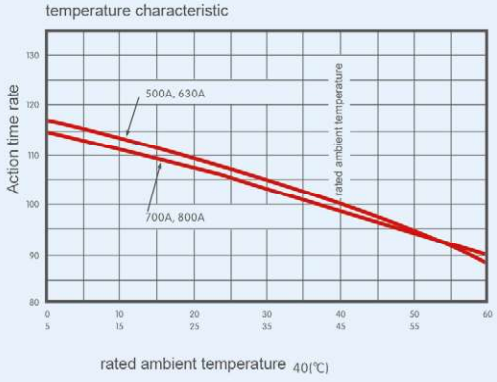




XP9M-800

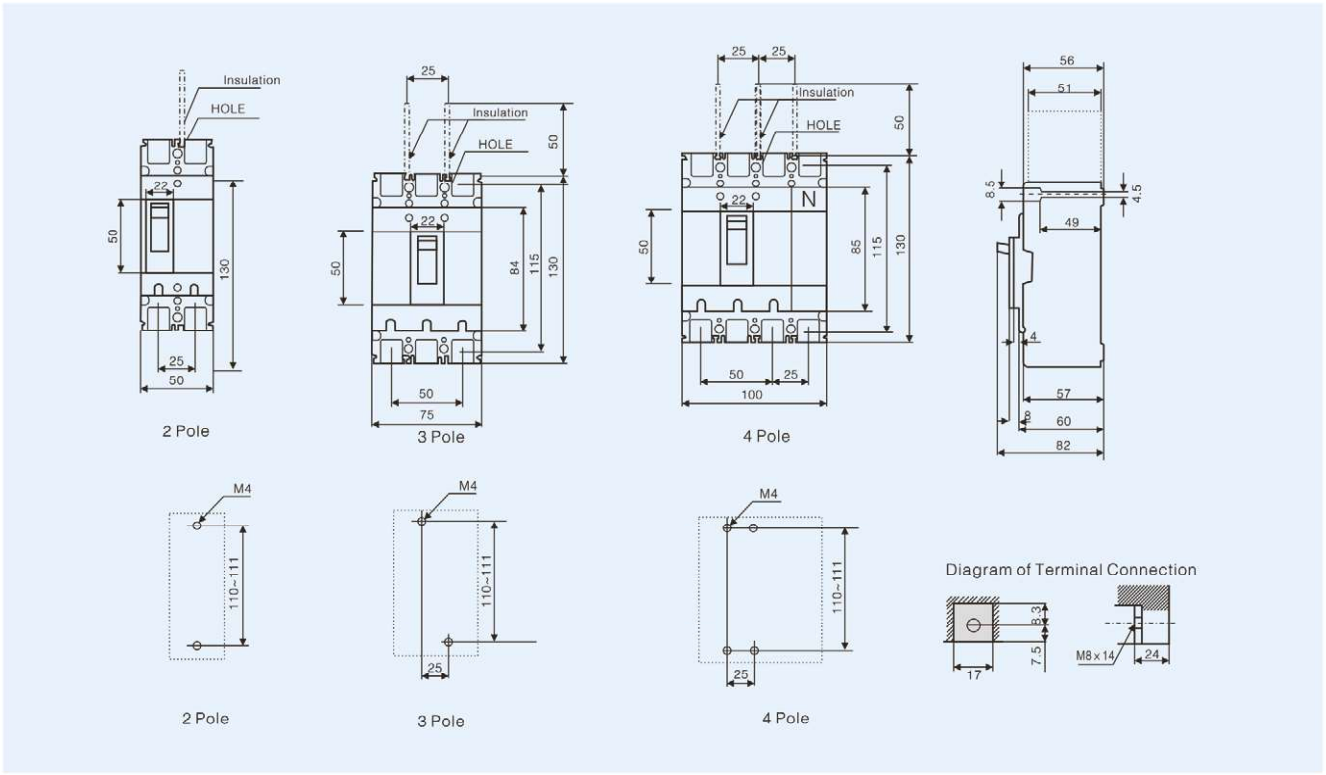




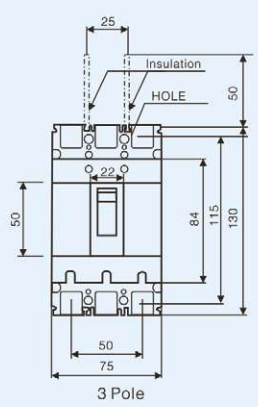


Product overview and dimension

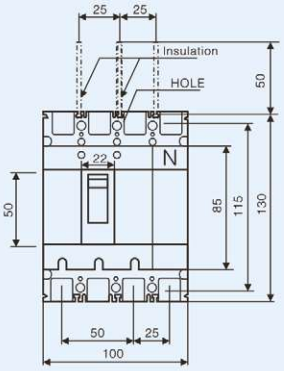
XP9M-50, XP9M-100



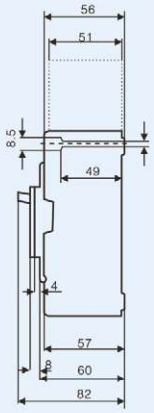
XP9M-50, XP9M-100

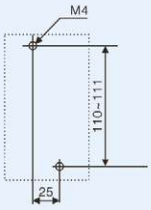


3 Pole

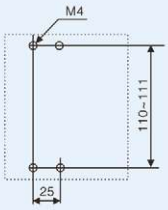


4 Pole



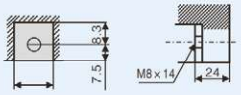


3 Pole

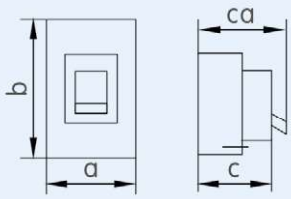


4 Pole

Diagram of Terminal Connection

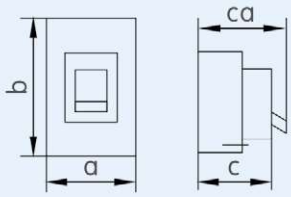


XP9M-300



Dimensions (mm)		XP9M-300S	XP9M-300M	XP9M-300H
a—b—c—ca	3P	105-165-68-92	105-165-68-92	105-165-91-115
	4P	140-165-68-92	140-165-68-92	140-165-91-115

XP9M-630,XP9M-800



Dimensions (mm)		XP9M-630S	XP9M-630M	XP9M-800H
a—b—c—ca	3P	140-257-105-155	140-257-105-155	210-257-104-155
	4P	185-257-105-155	185-257-105-155	280-257-104-155

XP9G-63
Isolating Switch

Nomenclature

XP 9G - 63 / 1P 16

- Rated current: 16, 25, 40, 63A
- Poles: 1P,2P,3P,4P
- Frame level: 63A
- Design code
- Company code

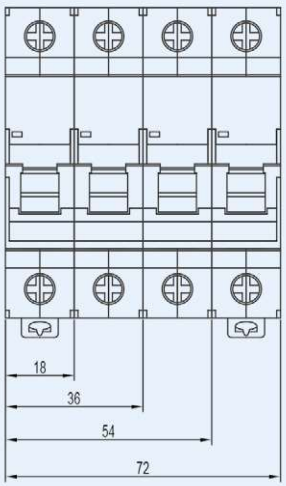
Function

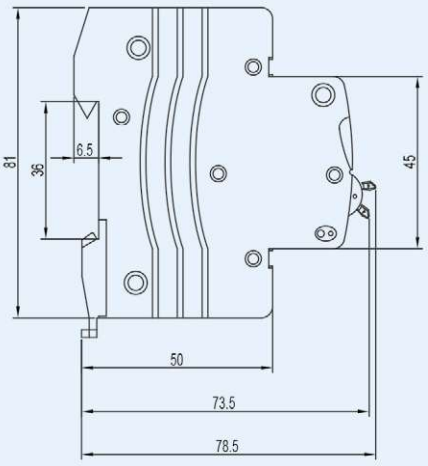
- ☐ Capable of switch electric circuit with load
- ☐ Adaptable to padlock device
- ☐ Contact position indication
- ☐ Capable of quickly releasing stored energy operation
- ☐ Highlighted of high making and breaking capacity
- ☐ High short-circuit current withstand capacity
- ☐ Used as main switch for household or similar installation

Technical Parameter

Standard	IEC60947-3
Poles	1, 2, 3, 4
Rated current(A)	16, 25, 40, 63
Rated voltage	230/400V AC 50/60Hz
Rated short-circuit making capacity	6kA
Rated withstand current	1kA within 1sec
Electro-mechanical endurance	10000 cycles
Connection capacity	Rigid conductor 25mm^2
Connection terminal	Screw terminal Pillar terminal with clamp
Installation	On symmetrical din rail 35mm Panel mounting

Dimensions





Order Note

Following items should be marked when ordering	Ordering sample
Product name and model Poles Rated current Quantity	To order XP9G-63 isolating switch, frame level 63A, 2P, rated current 25A, quantity 100 pieces, should be marked: Isolation switch XP9G-63/2P25,100PCS

XP9G-125
Isolating Switch

Function

Capable of switch electric circuit with load

Adaptable to padlock device

Contact position indication

Capable of quickly releasing stored energy operation

Highlighted of high making and breaking capacity

High short-circuit current withstand capacity

Used as main switch for household and similar installation

Nomenclature

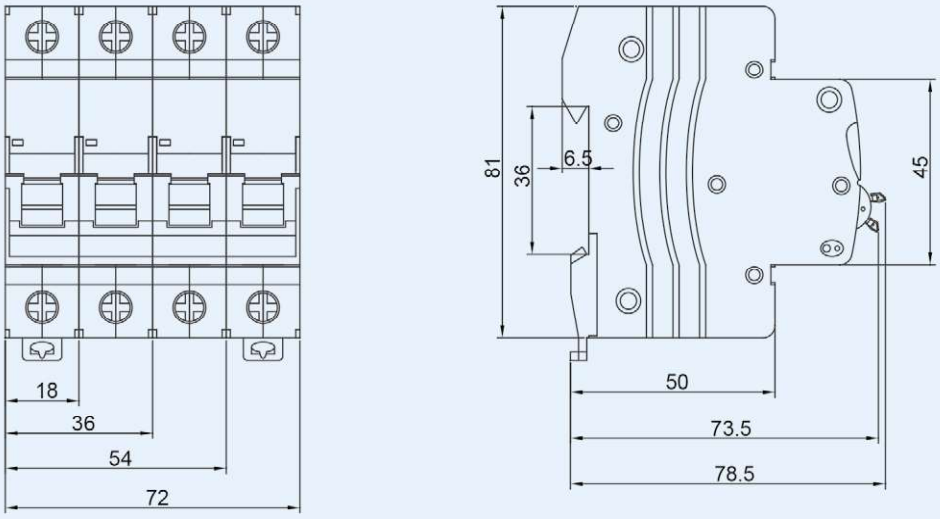
XP 9G - 125 / 1P 63

- 63 — Rated current:63,80,100,125A
- 1P — Poles: 1P,2P,3P,4P
- 125 — Frame level: 125A
- 9G — Design code
- XP — Company code

Technical Parameter

Standard	IEC60947-3
Poles	1, 2, 3, 4
Rated current(A)	63, 80, 100, 125
Rated voltage	230/400V AC 50/60Hz
Rated short-circuit making capacity	6kA
Rated withstand current	2kA within 1sec
Electro-mechanical endurance	10000 cycles
Connection capacity	Rigid conductor 25mm^2
Connection terminal	Screw terminal; Pillar terminal with clamp
Installation	On symmetrical din rail 50mm; Panel mounting

Dimensions



Order Note

Following items should be marked when ordering	Ordering sample
Product name and model Poles Rated current Quantity	To order XP9G-125 isolating switch, frame level 125A, 2P, rated current 80A, quantity 100 pieces, should be marked: Isolation switch XP9G-125/2P80 100PCS

XPSP, XP2P, XPTP

Self-recovery Over&Under Voltage Delay Protector

XPSP-63

XP2P-100

XPTP-63

Application

Self-recovery Over&Under Voltage Delay Protector is a new generation of products. It has reasonable design, assembling imported components and domestic famous components, with advanced manufacturing process. It can cut off power supply quickly and reliably under the condition of high voltage surge and under-voltage, to protect household appliances, when the voltage recovery normal, it can connect circuits automatically after a delay, to recover power, which can protect electric appliance to avoid the impact of the moment when the power supply is connected, all the functions of automation, no need manual operations, select and use double lights indicator.

Nomenclature

XP TP □ - 18

- 18 — Rated current
- □ — Derive type
- TP — Design code and product name
  - SP: Single phase, width 18 mm
  - 2P: Single phase, width 36mm, 2 indicators
  - 3P: Single phase, width 36mm, 3 indicators
  - …
  - TP: Three phase, 4P
- XP — Company code

Technical Parameter

Specification	Frame level (A)	Rated current (A)	Rated voltage (V)	Rated frequency (Hz)	Over-voltage action cut-off value (V)	Normal-voltage action cut-off value (V)
XPSP	63	32, 40, 63	230 AC	50/60	275±5	240～260
XP2P	100	32, 40, 63, 80, 100				
XPTP	100	32, 40, 63, 80, 100	380 AC		460±15	420～440

Specification	Under-voltage action cut-off value(V)	Normal-voltage action cut-off value(V)	Electricity transmitting delay after cut-off (S)	Self power consumption (W)	Mechanical life (times)
XPSP	175±5	190±5	≤60s	＜1	＞100,000
XP2P				＜1	
XPTP	300±15	335±10		＜2	

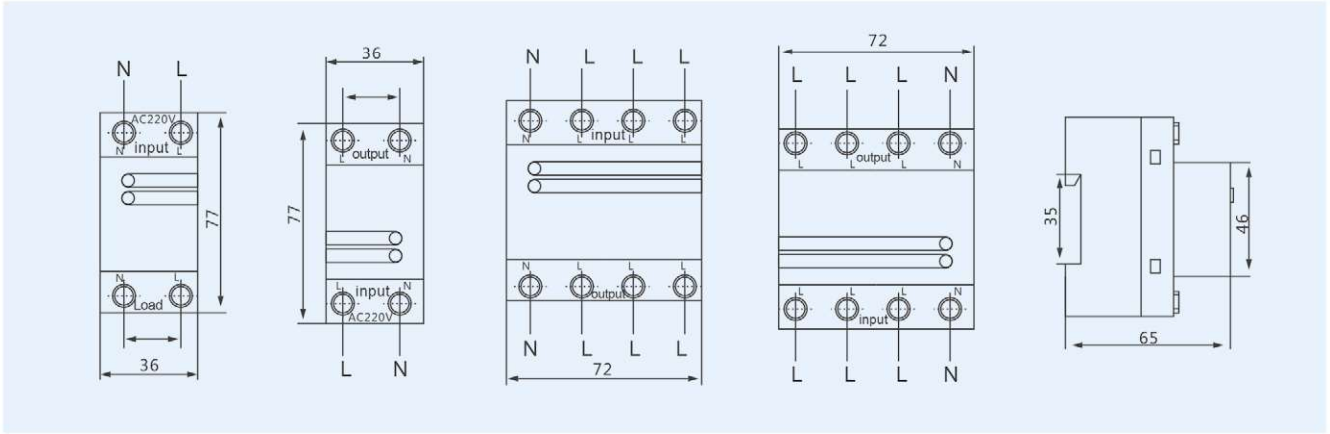
Electrical Characteristics

- **Single-phase/Three-phase line break occurred when the line is under voltage, single-phase/three-phase line voltage returns to normal by the delay automatically resets the line, without manual operation.**
- **Line instant or transient overvoltage occurs, the protector does not malfunction.**
- **Because of the contact line is not real voltage instability and other failures, or when a sudden power off and on, the protector does not pick up the line**
- **Fault voltage is highest; the protector itself will not be damaged**
- **Protector inversely time operation characteristic, action time≤1s.**
- **Impulse withstand voltage: 4kV (Comply with Ⅲ electricity safety standard)**
- **Protector has two-color LED indicates the working state, Green –ON normal voltage indication, Red -OFF under-voltage or Over-delayed instructions.**
- **Shape modular design, rail mounting**
- **Connection capacity:**63A: Under 25mm² insulated wire
  100A:Under 35mm² insulated wire

Note

- 'N' for natural line, 'L' for live line, cannot be connected in a wrong way.
- Please tighten the thread screw, prevent damage to the product before using.

Dimensions



Order Note

Following items should be marked when ordering	Ordering sample
Product name, model Circuit type, single-phase or three-phase Product width Rated current Quantity	To order the XP1P series Over&Under Voltage Protector, single-phase, rated current is 40A, product width is 36mm, and quantity is 100 pieces, should be marked: XP1P-40; 100PCS.

XP5DF/S Series
Switch Distribution Box

Nomenclature

XP 5D F - 8 A

- A: color of the door is white; B: color of the door is transparent
- Number of loop
- Installation: F: flush; S: surface type
- Design code
- Company code

Function

This product applies to terminal of AC 50Hz(or 60Hz), rated operating voltage up to 400V and rated current up to 63A, equipped with various modular electric for functions of electric energy distribution,control,(short circuit,overload,earth leakage, over-voltage) protection,signal,measurement of terminal electric appliance.

Main Technical Data

- **Equipped with transparent/non-transparent door**
- **Single row: door open upward 90 degrees;**
- **Rated current: 4 way 50A, 6-36 way 63A;**
- **Material: insulating, self-extinguishing fire material**
- **Protection level: indirect contact proof 2 protection;**

Normal Application and Installation Conditions

- **Ambient temperature: -5℃~+40℃. the average value within 24 hours shall not exceed +35;**
- **Altitude: Installation altitude shall not exceed 2000m.**
- **Humidity: Relative humidity shall not exceed 50% when the ambient temperature is +40℃. Higher relative humidity is allowed at lower temperature, for example, it can reach 90% at 20℃.**
- **Pollution grade: grade 2**
- **Installation category (over-voltage category): Ⅱ**

Structure

Symmetric base enclosure: solid enclosure can be embedded into thinner wall; knockouts of various sizes on four sides of box; Single row connecting rail can be adjusted vertically; single row: adjustable rail depth; Flat front panel can be used reversely; equipped with arc door; front panel shield can be knocked out to increase number of ways.

Order Note

Following items should be marked when ordering	Ordering sample
Product name, model Color of the door Number of loops Installation type Quantity	To order the XP5D series distribution box,white door,8 loops,flush installation type, and quantity is 100 pieces, should be marked: XP5DF-8A,100PCS.

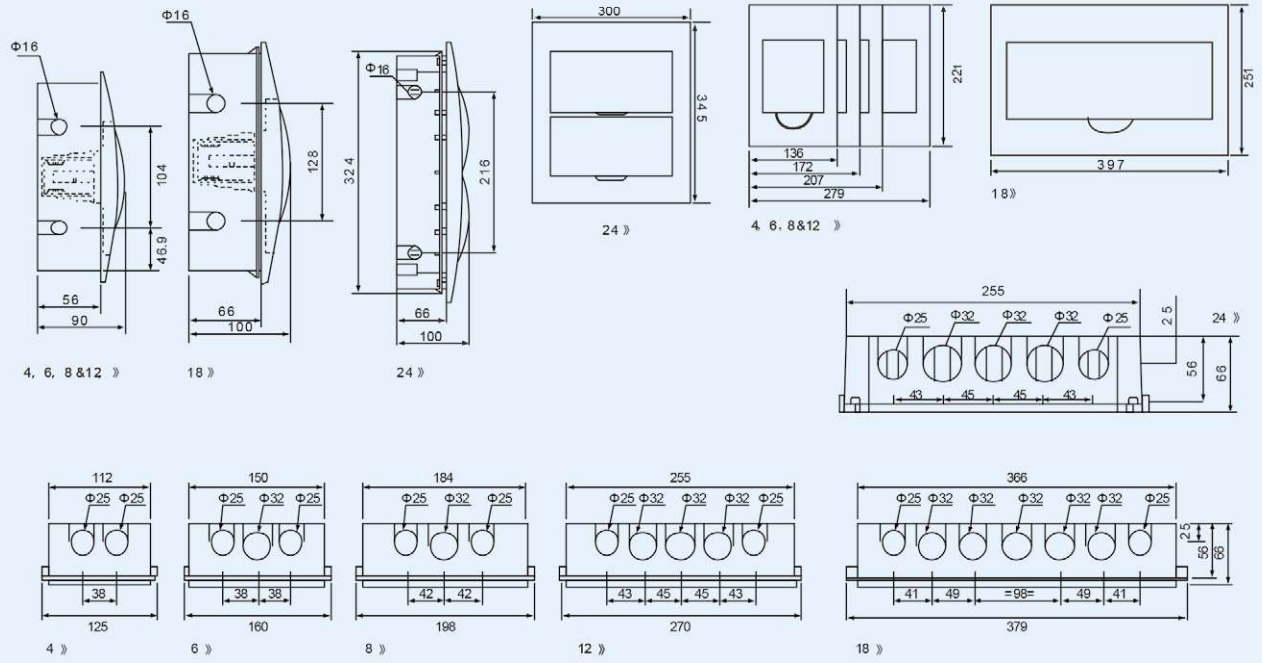
Max.rated current up to 63A

Transparent door	Max.rated current up to 63A				
Module Number	Number bar holes			Earth bar holes	Type Code
	1	2	3		
4loop	4XΦ5	—	—	3XΦ5	5DF-4-B
6loop	6XΦ5	—	—	3XΦ5	5DF-6-B
8loop	8XΦ5	—	—	4XΦ5	5DF-8-B
12loop	12XΦ5	—	—	6XΦ5	5DF-12-B
18loop	18XΦ5	—	—	9XΦ5	5DF-18-B
24loop	24XΦ5	9XΦ5	—	13XΦ5	5DF-24-B
36loop	36XΦ5	9XΦ5	9XΦ5	13XΦ5	5DF-36-B
4loop	4XΦ5	—	—	3XΦ5	5DS-4-B
6loop	6XΦ5	—	—	3XΦ5	5DS-6-B
8loop	8XΦ5	—	—	4XΦ5	5DS-8-B
12loop	10XΦ5	—	—	6XΦ5	5DS-12-B
18loop	13XΦ5	—	—	9XΦ5	5DS-18-B
24loop	13XΦ5	9XΦ5	—	13XΦ5	5DS-24-B
36loop	13XΦ5	9XΦ5	9XΦ5	13XΦ5	5DS-36-B

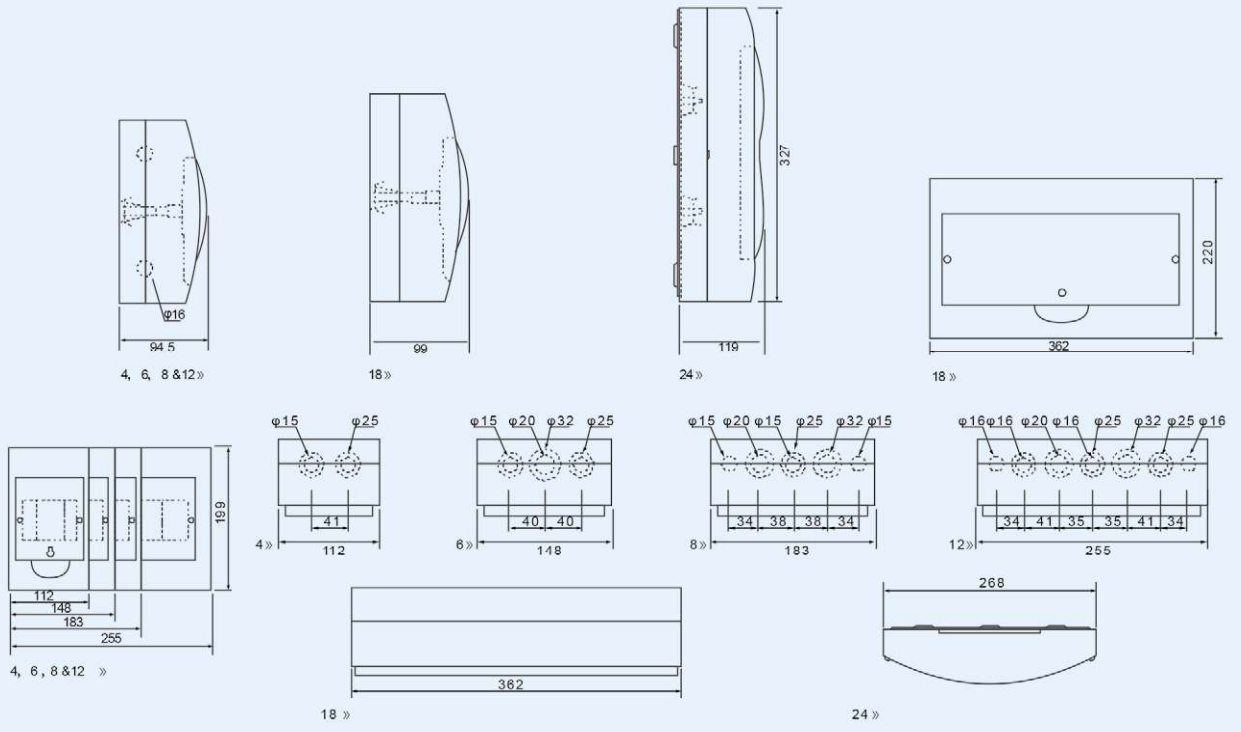
White door	Max.rated current up to 63A				
Module Number	Number bar holes			Earth bar holes	Type Code
	1	2	3		
4loop	4XΦ5	—	—	3XΦ5	5DF-4-A
6loop	6XΦ5	—	—	3XΦ5	5DF-6-A
8loop	8XΦ5	—	—	4XΦ5	5DF-8-A
12loop	12XΦ5	—	—	6XΦ5	5DF-12-A
18loop	18XΦ5	—	—	9XΦ5	5DF-18-A
24loop	24XΦ5	9XΦ5	—	13XΦ5	5DF-24-A
36loop	36XΦ5	9XΦ5	9XΦ5	13XΦ5	5DF-36-A
4loop	4XΦ5	—	—	3XΦ5	5DS-4-A
6loop	6XΦ5	—	—	3XΦ5	5DS-6-A
8loop	8XΦ5	—	—	4XΦ5	5DS-8-A
12loop	10XΦ5	—	—	6XΦ5	5DS-12-A
18loop	13XΦ5	—	—	9XΦ5	5DS-18-A
24loop	13XΦ5	9XΦ5	—	13XΦ5	5DS-24-A
36loop	13XΦ5	9XΦ5	9XΦ5	13XΦ5	5DS-36-A

Outline Dimensions

XP5DF



XP5DS



XP10D
Series Distribution Box

Application

XP10D series distribution box is suitable for using in the circuits of AC 50 Hz or 60 Hz, 230V AC, single-phase three-wire terminal of the circuit which the load current is no more than 100A, for electric equipment power distribution and control, at the same time for overload, short circuit, leakage protection of low-voltage electrical protection device. It can be used in hotels, building, industrial and mining enterprises, hospitals, schools, residential and other places of modern buildings. It have surface and flush type installation for selection.

Executive standard: IEC 60670-24

Nomenclature

XP 10D F – □ L

- L — Transparent cover color code: C,Black brown L,Blue
- □ — Number of loops
- F — Installation: S,surface F,flush
- 10D — Product model & design code
- XP — Company code

Applicable Working and Installation Condition

Ambient temperature: -25℃~+40℃;

Altitude: Installation altitude shall not exceed 2000m;

Relative humidity:Relative humidity shall not exceed 95%,when the ambient tempera

Seismic intensity: 8 Degree;

Protection level: IP30;

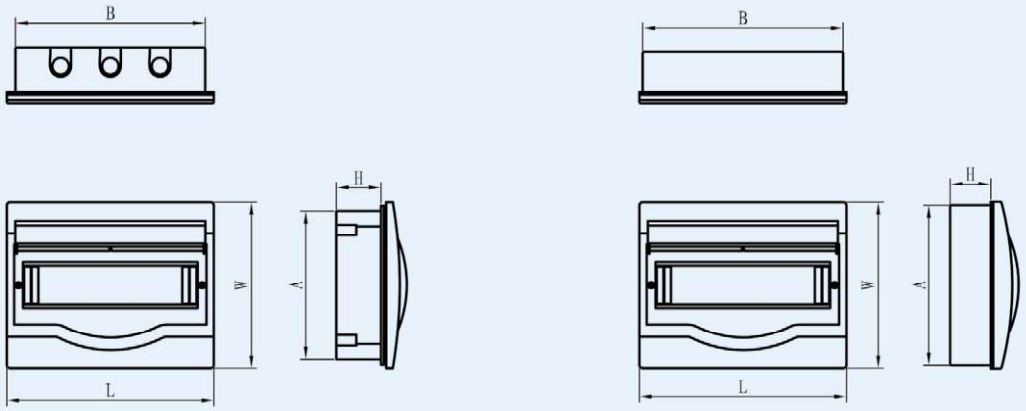
Mounted place: Without violent vibration and impact device, gradient with the vertical plane shall not exceed 5°when installing;

Working place: No corrosive gas, no conductive dust, no flammable and explosive medium;

Installation: Hanging vertical installed on the wall or embedded inside the wall;

Wiring Method: Up Income up outgoing, Up Income down outgoing, Down Income up outgoing, Down Income down outgoing;

Outline Dimension



Flush Surface

Model	Specification	Dimension(mm)									
		Flush Mounted Specifications(mm)					Surface Mounted Specifications(mm)				
		L	W	H	A	B	L	W	H	A	B
XP10D-4	2-4 loop	142	160	72	137	120	142	160	72	149	131
XP10D-8	5-8 loop	217	210	72	180	186	217	210	72	200	206
XP10D-12	9-12 loop	270	210	72	180	240	270	210	72	200	260
XP10D-16	13-16 loop	343	210	72	180	312	343	210	72	210	343

Parts Meterial

Model	Specification	Bottom box materials	Sheet materials	Transparent cover material
XP10D-4	2-4 loop	ABS	ABS	PC
XP10D-8	5-8 loop	ABS	ABS	PC
XP10D-12	9-12 loop	ABS	ABS	PC
XP10D-16	13-16 loop	ABS	ABS	PC

Order Note

Following items should be marked when ordering	Ordering sample
Product series and model Installation type Number of loops Cover color Quantity	To order XP10D series distribution box, plastic material, flush installation type,8 loops, blue transparent cover, and quantity is 1000 pieces. Should be marked: Plastic distribution box XP10DS-8L,1000PCS.

CA10
Universal Changover Switch

Nomenclature

Use as Control Switch

CA10 - □ □ □ □ / □

- Poles of contact system
- Operation diagram code
- Character code(see table 1)
- Rotation angle code
- Rated current
- Model name

Attention: rotation angle code is 30°(3); 45°(4); 60°(6); 90°(9);
30° spring return 60° locate (36); 45°spring return 90° locate (49)

Use as Control Switch

CA10 - □/ □ □· □

- Poles of contact system
- Usage code
  - Q-Start and run
  - N- Reversing
  - S- Double speed selection
  - SN- Start and reversing of double speed motor
- Rated power of 3-phase AC motor
- Rated current
- Model name

Attention : Motor switches normally rotate at 60°

Main Circuit Control Switch

CA10 - □/ □

- Pole 2-pole, 3-pole, 4-pole
- Rated current
- Model name

Attention : main circuit control switches normally rotate at 60°

Introduction

CA10 series control and load switches offer a solution for most cam switch operations. Different types can be used as control switches, switches to be installed in equipments and switches for motor control according to IEC60947-3. This range offers current capacity from 20A to 160A.

Working Condition

Recommended Ambient temperature -5℃to 40℃

Installation altitude: ≦2000m

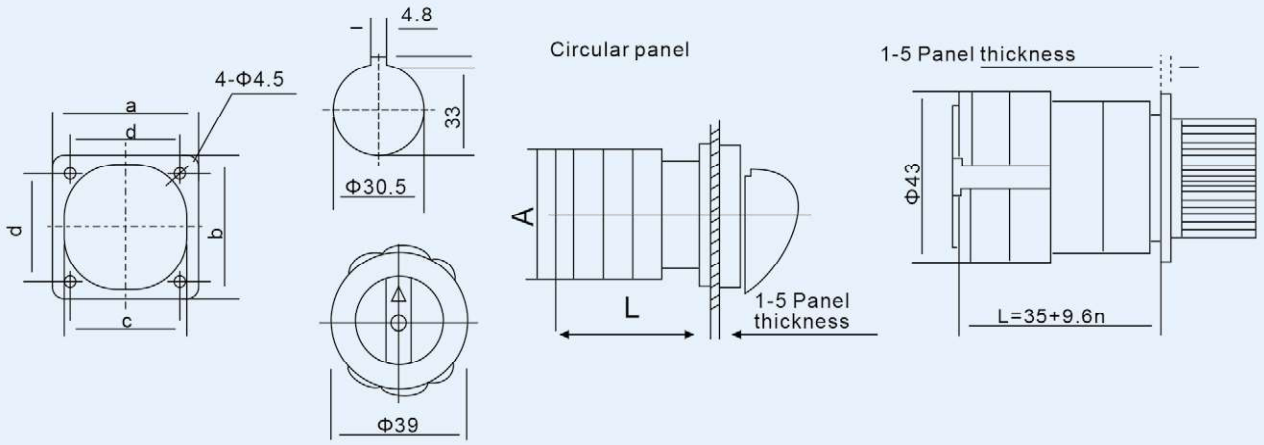
Relative atmosphere humidity do not exceed 50% when the highest temperature is +40℃. At lower temperature, higher humidity can be allowed. For example, humidity can reach 90% when temperature is 20℃. Special measures should be taken when the congealed dew appears on the surface caused by the change of temperature.

Classification

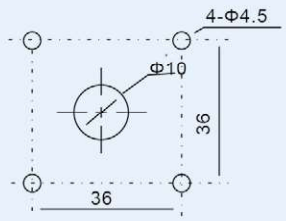
- Classified by utilization,control and load switch , motor switch, control switch
- Classified by operation limited movement spring return,limited movement with spring return
- Classified by contact system switch with limited movement has 1-12 poles (63 A only have 8 poles) , switch with spring return has 1-3 poles , motor control switch has 1-6 poles.
- Classified by rotation angle: 30°, 45°, 60°, 90°, etc.
- Classified by panel square panel, rectangular panel, circular panel (only 20A)
- Classified by handle R type, I type, F type, B type, S type, L type, P type, K type

Mounting Dimension

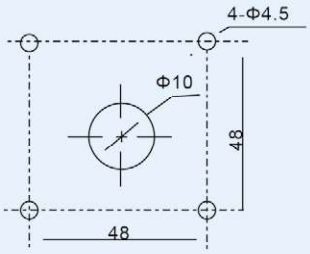
Dimension(see diagram1 and table 3)



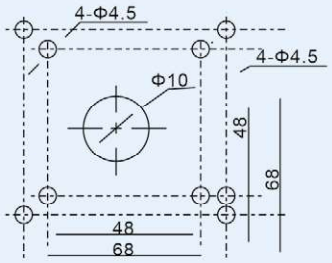
Mounting Dimension



a) Small panel mounting dimension(see diagram 2)



b) Large panel mounting dimension(see diagram 3)



c) Larger panel mounting dimension(see diagram 4), you can chose any dimension to install.

Classified by Operation Method and Position of Handle:

Operation	Character code	Position of handle			
Spring return method	A	0° 30°	0° 45°		
	B	30° 0° 30°	45° 0° 45°		
Limited movement	C	0° 30°	0° 45°	0° 60°	0° 90°
	D	30° 0° 30°	45° 0° 45°	60° 0° 60°	90° 0° 90°
	E	30° 0° 30° 60°	45° 0° 45° 90°	90° 30° 30° 90°	90° 0° 90° 180°
	F	60° 30° 0° 30° 60°	90° 45° 0° 45° 90°	90° 30° 30° 90° 150°	
	G	60° 30° 0° 30° 60° 90°	90° 45° 0° 45° 90° 135°	150° 90° 30° 30° 90° 150°	
	H	90° 60° 30° 0° 30° 60° 90°	135° 90° 45° 0° 45° 90° 135°		
	I	90° 60° 30° 0° 30° 60° 90° 120°	135° 90° 45° 0° 45° 90° 135° 180°		
	J	120° 90° 60° 30° 0° 30° 60° 90° 120°			
	K	120° 90° 60° 30° 0° 30° 60° 90° 120° 150°			
	L	150° 120° 90° 60° 30° 0° 30° 60° 90° 120° 150°			
	M	150° 120° 90° 60° 30° 0° 30° 60° 90° 120° 150° 180°			
	N		45° 45°	30° 30°	
Limited movement with spring return	Z	30° 0° 60°	90° 0° 45°		
			135° 90° 0° 45°		

Parameter

Type	Ith A	Ui V	Ue V	AC-21A Ie A	AC-22A Ie A	AC-23A Ie A	AC-23A P kW	AC-2 Ie A	AC-2 P kW	AC-3 Ie A	AC-3 P kW	AC-4 Ie A	AC-4 P kW	AC-15 Ie A	DC-13 Ie A
CA10-20	20	660	440	20	20	15	7.5	15	7.5	11	5.5	3.5	1.5	4	-
		660	240											5	1
		660	120												5
CA10-25	25	660	440	25	25	22	11	22	11	15	7.5	6.5	3	5	
		660	240											8	1.5
		660	120												9
CA10-32	32	660	440	32	32	30	15	30	15	22	11	11	5.5	6	
		660	240											14	11
		660	120												25
CA10-63	63	660	440	63	63	57	30	57	30	36	18.5	15	7.5		
		660	120												55
CA10-125	125	660	125	125	125	100	45	100	45	50	22	18	12		90
CA10-160	160	660	160	160	160	115	57	115	57	65	33	25	15		110

Operation recurrent number		
	No-load	8500
	On-load	1500
	Total	1000

Electrical life 20×10^4 6×10^4
Mechanical life 60×10^4

Type	Panel configuration	Dimension (mm) A	B	C	L	Mounting dimension a	b	d1	d2
CA10-20	M1 Square	48	48	43	22+9. 6n	36	36	Φ8.5	Φ4.5
	M2 Square	64	64	43	25+9. 6n	48	48	Φ10	Φ4.5
CA10-25	M1 Square	48	48	45.2	23+12. 8n	36	36	Φ8.5	Φ4.5
	M2 Square	64	64	45.2	26. 5+12. 8n	48	48	Φ10	Φ4.5
CA10-32	M2 Square	64	64	58	29. 2+12. 8n	48	48	Φ10	Φ4.5
CA10-63	M2 Square	64	64	66	29. 2+21. 5n	48	48	Φ10	Φ4.5
	M3 Square	88	88	66	29. 2+21. 5n	68	68	Φ10	Φ4.5
CA10-125	M3 Square	88	88	84	35+26. 5n	68	68	Φ13	Φ 6
CA10-160	M3 Square	88	88	88	35+32. 5n	68	68	Φ13	Φ 6

Attention : N – Number of poles

CA10S
Universal Changeover Switch

Introduction

CA10S built-in lock type switches are mainly used to cut off power by built-in lock, make the switch in the "OFF" ("0") position to prevent unauthorized operation.

Standard

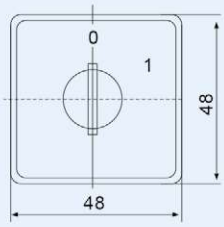
The products comply with GB14048.3 and IEC60947-3

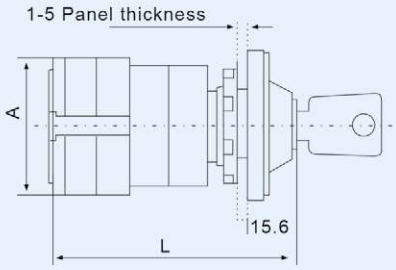
Parameter

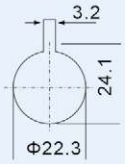
Type			LW28S-25	LW28S-32	LW28S-63
Rated insulation voltage(Ui)	V	690	690	690	690
Rated operational voltage(Ue)	V	440	440	440	440
Conventional thermal current(Ith)	A	20	25	32	63
Rated operational current(Ie)	AC-21A	20	25	32	63
	AC-22A	20	25	32	63
Rated power P AC-23A	AC-23A	15	22	30	36
	KW	7.5	11	15	18.5

Type	Dimension(mm)							Mounting dimension(mm)				
	A	B	C	D	L	I	S	a	b	c	d1	d2
CA10S-20	48	84	24	43	51.5	32.5	1~4	36	36	40	Φ8.5	20
CA10S-25	48	84	24	45.2	58	32.5	1~4	36	36	40	Φ8.5	20
CA10S-32	64	112	32	58	85	34	1~6	48	48	48	Φ10	34
CA10S-63	64	112	32	66	90	34	1~6	48	48	48	Φ10	34

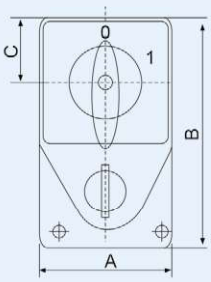
CA10S A- 25A
20A

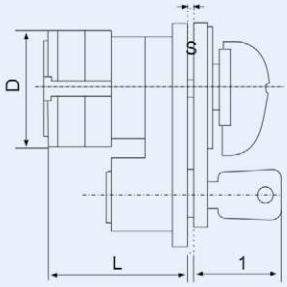


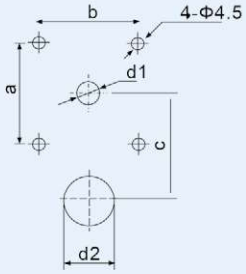




CA10S B- 25A
20A







D11
Main Switches

Nomenclature

Use as Control Switch

D11 - □ / □ □ □ □ □ □

- Case category
- Mounting method
- Earthing terminal
- Neutral terminal
- Auxilary contact
- Pole
- Rated current
- Load circuit breaker

Application

D11 main switches conform to IEC60974-3. They meet the requirements of disconnectors, main switch and maintenance switch which is suitable for ventilation, air-conditioning, water pump system, industrial unitized device, safety isolation and other distribution switches.

Working Condition

Recommended Ambient temperature -5℃to 40℃

Installation altitude: ≦2000m

Relative atmosphere humidity does not exceed 50% when the highest temperature is +40℃. At lower temperature, higher humidity can be allowed. For example, humidity can reach 90% when temperature is 20℃. Special measures should be taken when the congealed dew appears on the surface caused by the change of temperature.

Characteristic

□ **Reliability**
The breaking contact of switch has long insulation, reaching 13-14mm that far more than safety requirement of VDE0113. In most cases, our switch's safety rating surpass most existing switches.

□ **Flexible Mounting**
The switches are both suitable for panel mounting and base mounting. Base mounting can be installed conveniently and safely with screw and 35mm Din Rail. This switch system owns the largest flexibility and adaptability. We need not remove switch when adding attached contactor and neutral terminal.

□ **Convenient Mounting**
Built-in screw can avoid the trackslip in doing manual operation, enabling air operated and power-driven tool to give full play to their performance, ensuring the safety and speed of mounting.

Parameter

Controlled current or power / Using category / Type	IEC/BS/VDE Rated nominal value					
	Thermal current(Ith)	Resistance load(AC21)	AC23 Occasionaly changover motor or high inductance load		AC3 Direct online start motor	
			3x220~240V	3x380~440V	3x220~240V	3x380~440V
D11-25	25A	25A	4kW	7.5kW	3kW	5.5kW
D11-32	32A	32A	5.5kW	11kW	4kW	7.5kW
D11-40	40A	40A	7.5kW	15kW	73.5kW	11kW
D11-63	63A	63A	11kW	22kW	11kW	12.5kW
D11-80	80A	80A	18.5kW	30kW	15kW	22kW
D11-100	100A	100A	22kW	73kW	18.5kW	30kW

Attention:

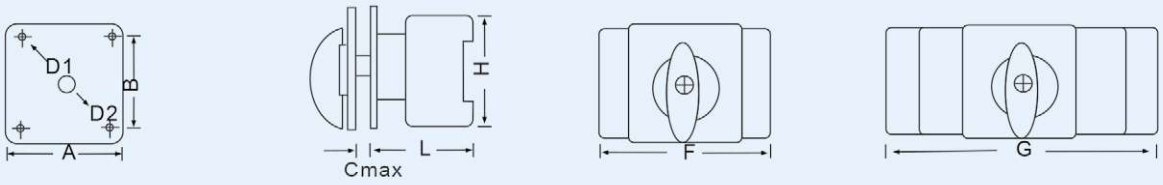
>With adjustable rotation shaft, max length-200mm

>Above types all belong to grounding type

>P-pole, N- neutral, E-grounding termianl

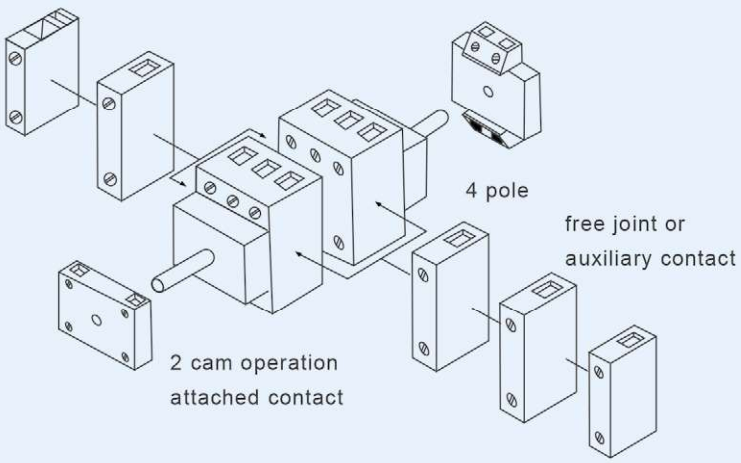
>All above type can chose accessories; side-mounting auxiliary contact, top- mounting auxiliary contact, protective cover, pad-lock handle, door inter-lock and etc.

Dimension and Mounting



2 grounding or auxiliary contact

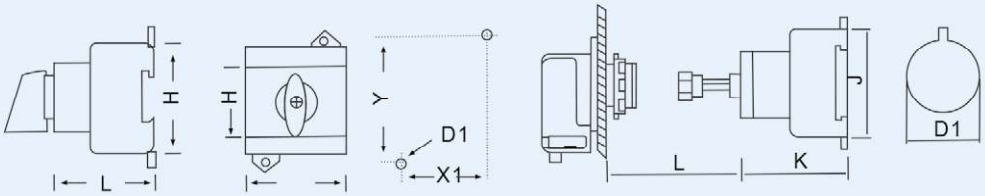
2 cam operation auxiliary contact



Parameter

Switch	Type	Pole	B	D1	F	H	L	X1	Y
D11-25/D11-32	On-Off	3pole	44	4	46	54	52	22	60
D11-40/D11-63	On-Off	3pole	45	4	53	64	59	25	70
D11-80/D11-100	On-Off	3pole	45	5.5	70	80	65	25	90

Base mounting dimension



Switch	Type	Pole	A	B	Cam	D[1]	D[2]	F	G	H	Lmin	Lmax	X[1]	X[2]	Y
D11-25 D11-32	On-Off	3pole	64	48	4	4	22	42	-	54	106	176	22	-	60
	On-Off	4pole	64	48	4	4	22	56	-	54	106	176	22	-	60
	On-Off	3pole+N	64	48	4	4	22	56	-	54	106	176	22	-	60
	On-Off	3pole+N+E	64	48	4	4	22	69	-	54	106	176	22	-	60
	On-Off	6pole	64	48	4	4	22	-	84	54	103	183	32	22	60
D11-40 D11-63	On-Off	3pole	64	48	4	4	22	50	-	64	123	193	25	-	70
	On-Off	4pole	64	48	4	4	22	66	-	64	123	193	25	-	70
	On-Off	3pole+N	64	48	4	4	22	66	-	64	123	193	25	-	70
	On-Off	3pole+N+E	64	48	4	4	22	82	-	64	123	193	25	-	70
	On-Off	6pole	64	48	4	4	22	-	100	64	126	196	50	25	70
D11-80 D11-100	On-Off	3pole	64	48	4	5.5	22	70	-	80	126	198	25	-	90
	On-Off	4pole	64	48	4	5.5	22	92	-	80	126	198	25	-	90
	On-Off	3pole+N+E	64	48	4	5.5	22	104	-	80	126	198	25	-	90
	On-Off	6pole	88	68	4	5.5	22	-	140	80	137	209	70	25	90

Padlock

Specification	Dimension(mm)			
	D1	K	Lmin	Lmax
D11-20	30.5	50	21	100
D11-32	30.5	50	21	100
D11-40	30.5	61	22	100
D11-63	30.5	61	22	100
D11-80	30.5	68	23	100
D11-100	30.5	68	23	100

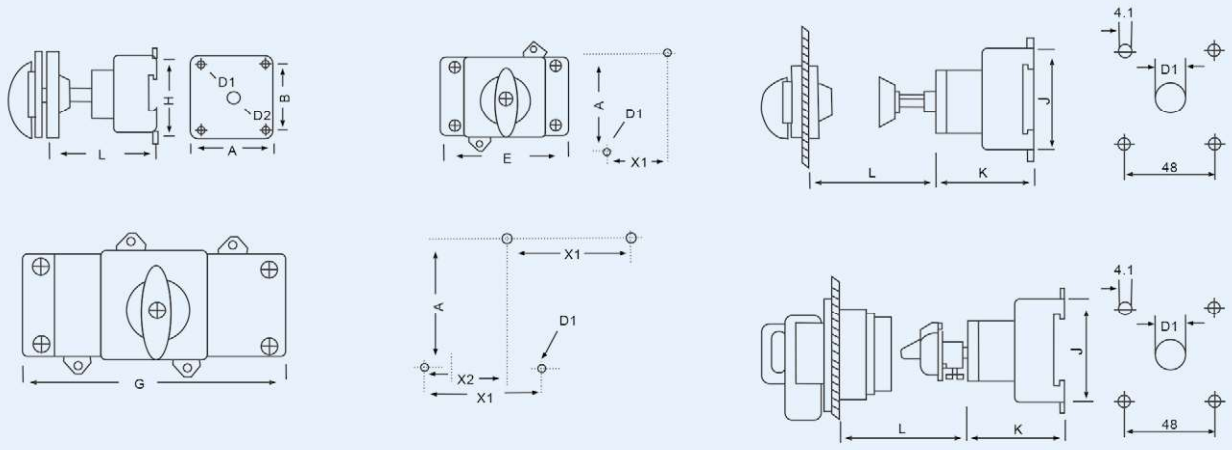
Panel

Specification	Dimension(mm)			
	D1	K	Lmin	Lmax
D11-20	22	50	32	118
D11-32	22	50	32	118
D11-40	22	61	32	118
D11-63	22	61	32	118
D11-80	22	68	32	118
D11-100	22	68	32	118

Lock

Specification	Dimension(mm)			
	D1	K	Lmin	Lmax
D11-40	39	61	61.6	118
D11-63	39	61	61.6	118
D11-80	39	68	61.5	118
D11-100	39	68	61.5	118

Base Mounting Dimension

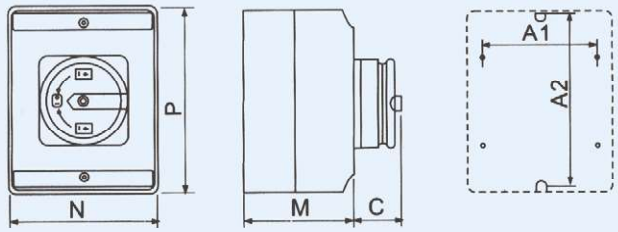


D12
Enclosed Main Switch

Main Technical Data

Types and specs	Outline dimension (mm)				Installation dimension (mm)	
	P	N	M	C	A1	A2
D12-20	125	100	85	35	60	115
D12-25	125	100	85	35	60	115
D12-32	175	114	100	35	60	165
D12-40	175	114	100	35	60	165
D12-63	240	160	120	45	142	193
D12-100	240	160	120	45	142	193

Outline and Installation Dimensions



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