W9 GROUP

Heart for the world,electricity for the night

Moulded Case Circuit Breakers

ABOUT W9

The "W9" brand was founded in 2024 and is headquartered in Yueqing, Wenzhou, the capital of China's electrical appliances. It is an enterprise that integrates design, research and development, intelligent manufacturing, and industry and trade. The company also has three factory members, including "JIUCE Electric (founded in 2016)", which specializes in Minimun Circuit Breakers, WL&WE Electric (founded in 2007)",which specializes in mouded case circuit breaker and air circuit breakers. Three companies have a total sales revenue of 600 million RMB. In 2020, "W9" (formerly known as the "WCED" British brand) was the main export brand with an annual total export value of 50 million RMB. Currently, "JIUCE", "WL", and "WE" are mainly domestic mid to high end brand strategic partners, and their product marketing is spread throughout the country and exported to more than 20 countries and regions around the world, mainly Iran, the Middle East, Russia, Australia, the United Kingdom, and so on.

The "WL" brand independently designs and manufactures products covering: thermal magnetic molded case circuit breakers, thermal magnetic adjustable molded case circuit breakers (single adjustable, double adjustable), electronic molded case circuit breakers (3 knobs and 6 knobs), leakage molded case circuit breakers, photovoltaic/wind energy molded case circuit breakers, double break point molded case circuit breakers (thermal magnetic and electronic), and various types of molded case components, with a current range of 10A-2000A, Various internal and external spare parts of molded case circuit breakers (electric operation, manual operation)

The “WE” brand independently designs and manufactures products including 400V frame circuit breakers (digital and LCD versions), DC molded case circuit breakers, AC800V-1500V frame circuit breakers, and various component accessories.

"JIUCE" brand independently designs and manufactures products covering:
MCB, RCD/RCCB, RCBO
Switch-disconnector, Distribution box, AC contactor, Surge protection device(SPD), Arc fault detection device(AFDD), Smart MCB, smart RCBO

Our manufacturing strength includes stamping workshop, injection molding workshop, spot welding workshop, assembly workshop, and mold manufacturing workshop

Our R&D strength: We have over 50 engineers for minimum circuit breakers, 50 engineers for molded case circuit breakers, and 6 engineers for ACB

Main Businesses

- Clean Energy
- Low-voltage Apparatus
- Power Transmission and Distribution
- Instrumentation and Apparatus
- Smart Home
- Intelligent Building
- Intelligent Manufacturing
- Industry Automation
- Smart Heating
- Smart Water
- Home Electrical Apparatus
- Energy Efficiency Management

ABOUT W9 Honors

W9 Honors

2007-2016
- "WL""WE""JIUCE" factory established

2020
- Certification:IEC, UL, CSA, GB, CE, UKCA, CCC
  Our company passed the ISO9001
  quality management system certification
  all products comply with RoHS and REACH

2020
- "WCED"England Brand registered

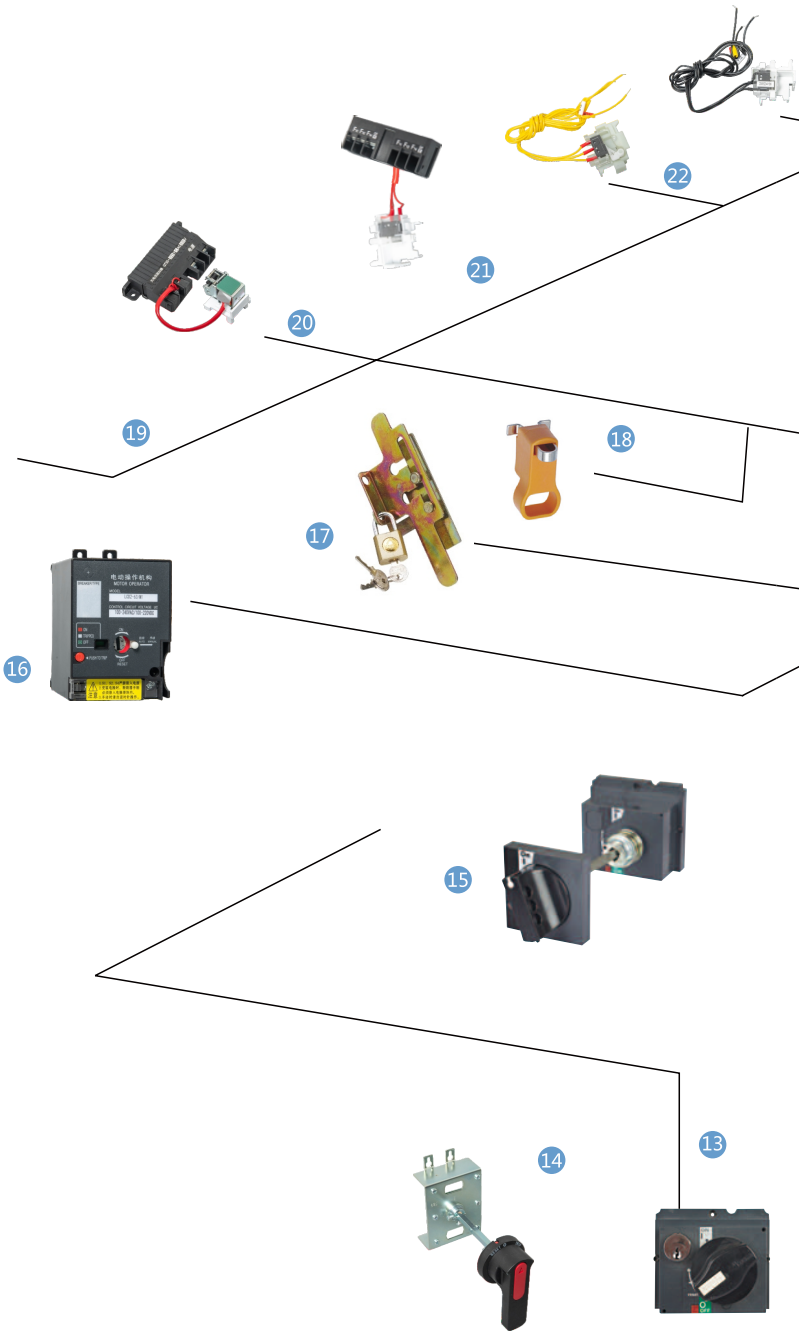
2024
- "W9-Group" Brand registered,W9 menbers:
  "WL""WE""JIUCE"

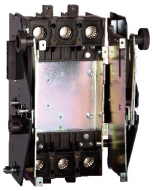
Certification

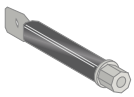
Certification:IEC, UL, CSA, GB, CE, UKCA, CCC Our company passed the ISO9001 ,quality management system certification all products comply with RoHS and REACH

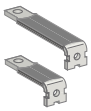
Moulded Case Circuit Breaker

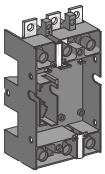
1. Body
2. Thermo magnetic release
3. Liquid crystal Module
4. Rear connectors
5. Communication module
6. Rear connectors
7. Front connection plate
8. Rear connection plate
9. Cage clamp terminal
10. Residual current protection module
11. Long terminal cover
12. Short terminal cover
13. Rotate the handle directly
14. Economic extended rotary handle
15. extended rotating handle
16. Motor driven operating mechanism
17. Mechanical interlock
18. Locking system
19. Closing electromagnet
20. Under-voltage release
21. Shunt release
22. Alarm contact
23. Auxiliary contact
24. Interphase barrier
25. Plug-in base
26. Draw-out base
27. DIN rail adaptor
28. Plug and pull safety device











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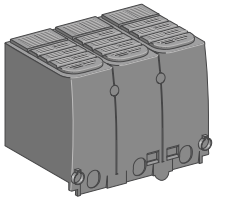
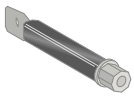
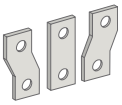


11 Sealable long terminal shields for plug-in base



Rear connectors



7 Terminal extensions

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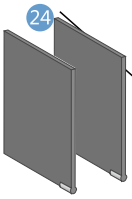
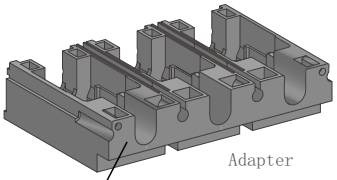
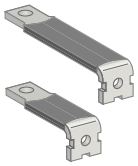


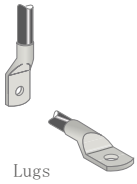
Interphase barriers



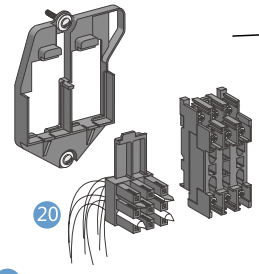
Adapter



Rear connectors

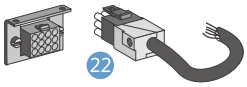


Lugs

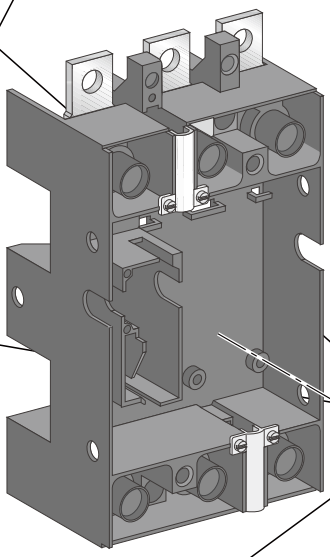


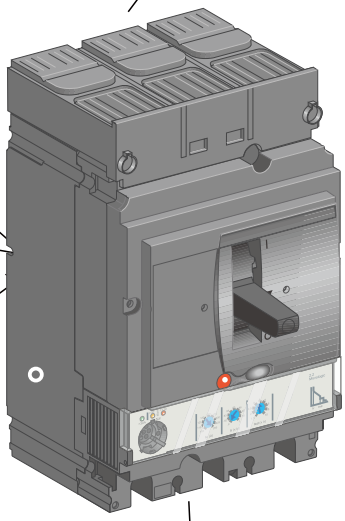
20

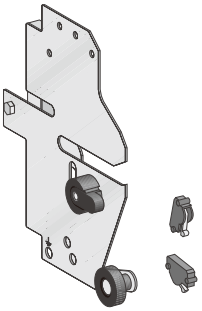
21 Automatic withdrawable auxiliary connector

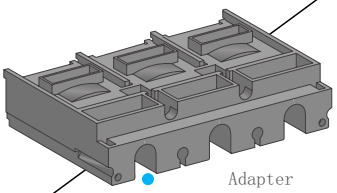


22 Manual auxiliary connector

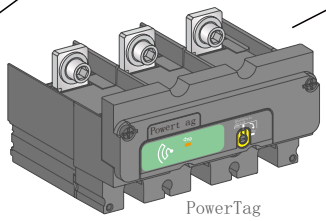




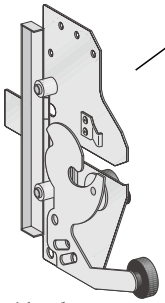




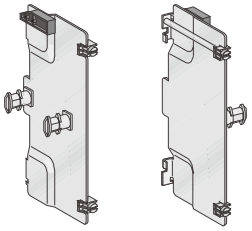
Adapter



PowerTag



Chassis side plate



Circuit breaker side plate

Contents

B

1. General

WLM6 series moulded case circuit breaker is suitable for the circuit of AC 50/60Hz, with rated voltage AC690V and below, DC system rated voltage DC1000V and below, Solar system rated voltage 1140V and below and rated current of 16A and 2000A.
It can protect circuits and electric equipment against overload, short circuit or undervoltage, and can also provide protection of overload, short circuit and under voltage for infrequent start of motor. Products have functions of power distribution protection, motor protection, residual current protection and isolation.

The circuit breaker can be installed vertically, installed horizontally and can also enter the line from the bottom.

Standards compliant:
IEC 60947-1 general rules for low-voltage switchgear and control equipment;
IEC 60947-2 low-voltage switchgear and control equipment circuit breakers;
IEC 60947-3 low-voltage switchgear and control equipment switches, disconnectors and fuse combination appliances;
IEC 60947-4-1 Electromechanical contactors and motor starters (including motor protectors) for low voltage switchgear and control equipm

2. Operating conditions

2.1 Temperature:
Operating and storage temperature is -35°C~+70°C; the average value within 24 hours does not exceed +35° C; when the ambient temperature is -35° C~+70° C, users need to consider derating or temperature compensation whose details can be referred to i

2.2 Altitude: ≤ 2000m;

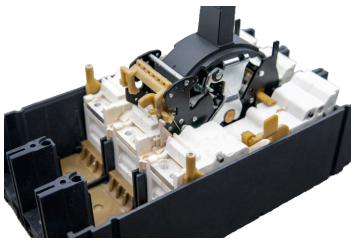
2.3 Pollution grade: Grade 3;

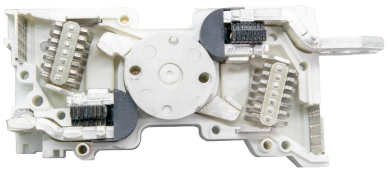
2.4 IP grade: IP20

2.5 Air conditions:
At mounting site, relative humidity not exceed 50% at the max temperature of +40° C, higher relative humidity is allowable under lower temperature. For example, RH could be 90% at +20° C, special measures should be taken to occurrence of dews.

3. Type designation

3.1 WLM6 Moulded Case Circuit Breaker and Switch Disconnector





W L M 6 □ – □ M P1/4 3 00 2 B □ □

- Rated current
  125 : 16-20-25-32-40-50-63-80-100-125
  250 : 32-63-100-125-160-180-200-225-250
  400 : 250-315-350-400
  630 : 400-500-630
  800 : 500-630-700-800
  1600 : 800-1000-1250-1600
- The code for the overload alarm non tripping function is I, and there is no need to use the code for no characteristics. 125C and other specifications of four stage circuit breakers with neutral pole types of C and D do not have this function
- N pole(4P for the Nutral Pole(Note 2))
- The motor protection is represented by 2, and there is no code for distribution.
- accessory code (see internal accessory code table)
- 200: circuit breaker with only electromagnetic release;
  300: circuit breaker with thermal-electromagnetic release;
  000: circuit breaker without over-current release
- Poles:
  1P: 1-pole 2P: 2-pole 3P: 3-pole 4P: 4-pole
- Operating way(Note 3)
- Breaking capacity code: C, S, M, H, Q (Switch disconnector type has no code)
- Frame size rated current:
  125: 125A; 250: 250A; 400: 400A
  630: 630A; 800: 800A; 1600: 1600A;2000:2000A
- DC: DC MCCB
  HU: 800V-1500V MCCB
  Blank: AC MCCB
  RT: Ajutable type(Note1)
  E: Electronic type, if with LCD, it should be EY
  LY: RCCB
- Design code
- MCCB
- Company code
- Company code

Note

Note : 1)

RT-A:only adjust for loading(0.7-1In)

RT-P: only adjust for instantanous (7-10In)

Note : 2)

In the four-pole products:

Type A: The N-pole is not equipped with over-current release, and the N-pole is always connected, not closed or opened with other three poles.

Type B: N-pole is not equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

Type C: N-pole is equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

Type D: N-pole is equipped with over-current release, and the N-pole is always connected, not closed and opened with other three poles.

Note : 3)

No code: direct operation
P1: DC3 electric operation(General market version)
P2: DC6 series electric operation(self-manufacturing)
ZY1: Rotating handle (manual center type - circular handle) - (defaulted)
ZF1: Rotating handle (manual center type - square handle)
ZY2: Rotating handle (hand operated eccentric - cirular handle)
ZF2: Rotating handle (manual eccentric square handle)
Z3: Rotating handle (hand operated integrated)
(Only available in 125, 160, and 250)Note:one pole and two pole products only have Direct operation function.
The voltage of electric operation is divided into:DC24/DC110V/DC220V/AC230V/AC400V, defaulted is:AC230V

Note : 4) Q structure:double breaking type

B

3.2 WLM6L Residual Current Breaker

wLM 6 L - 160M P1/4 3 00 2 B II / P Z , In= 100A

- Z: terminal cover — no code:normal
- 3p:400/630A Divided into narrow type and wide styles(default) — connecting assembling(note3)
- II: Leakage alarm does not trip — No code: normal product; I: Leakage alarm and trip; T: communication (Modbus)
- B: N pole(4P for the Nutral Pole(Note 2))
- 2: The motor protection is represented by 2, and there is no code for distribution. ≤40A 8.5In no-act, 500Aact; 700A-800A no motor protection
- 00: accessory code (see internal accessory code table)
- 3: 200: circuit breaker with only electromagnetic release; 300: circuit breaker with thermal-electromagnetic release; 000: circuit breaker without over-current release
- P1/4: Pole code: 3P: 3-pole; 4P: 4-pole
- M: operating code(note 1)
- 160: breaking capacity level:C/S/M/H
- L: Frame size rated current: 125A; 250A; 400A; 630A; 800A
- 6: Residual current code
- L: LY:with delay function; ELY:with LCD
- LM: Design code
- w: MCCB
- Company code

Note

Note 1

No code: direct operation

P1: DC3 electric operation(General market version)

P2: DC6 series electric operation(self-manufacturing)

ZY1: Rotating handle (manual center type - circular handle) - (defaulted)

ZF1: Rotating handle (manual center type - square handle)

ZY2: Rotating handle (hand operated eccentric - cirular handle)

ZF2: Rotating handle (manual eccentric square handle)

Z3: Rotating handle (hand operated integrated)

(Only available in 160, and 250)

The voltage of electric operation is divided into:

DC24/DC110V/DC220V/AC230V/AC400V,defaulted is:AC230V

Note 3

Blank: Front panel wiring (fixed type)

P: Connection bar (extended copper bar)

Z1: Backboard wiring (fixed type)

Z2Q: Plug in front wiring (seperated type)

Z2H: rear Plug-in wiring (seperated type)

Z3Q: Plug in front wiring (integrated type)

Z3H: rear Plug-in wiring (integrated type)

DF: Pull out front panel wiring

DR: Pull out rear wiring

tip:

160、250 non withdrawable;

Note 2

In the four-pole products:

Type A: The N-pole is not equipped with over-current release, and the N-pole is always connected, not closed or opened with other three poles.

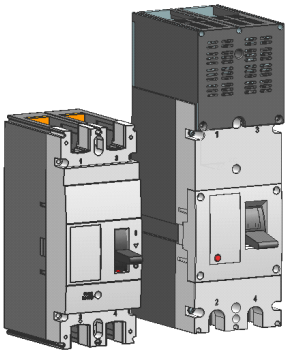
Type B: N-pole is not equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

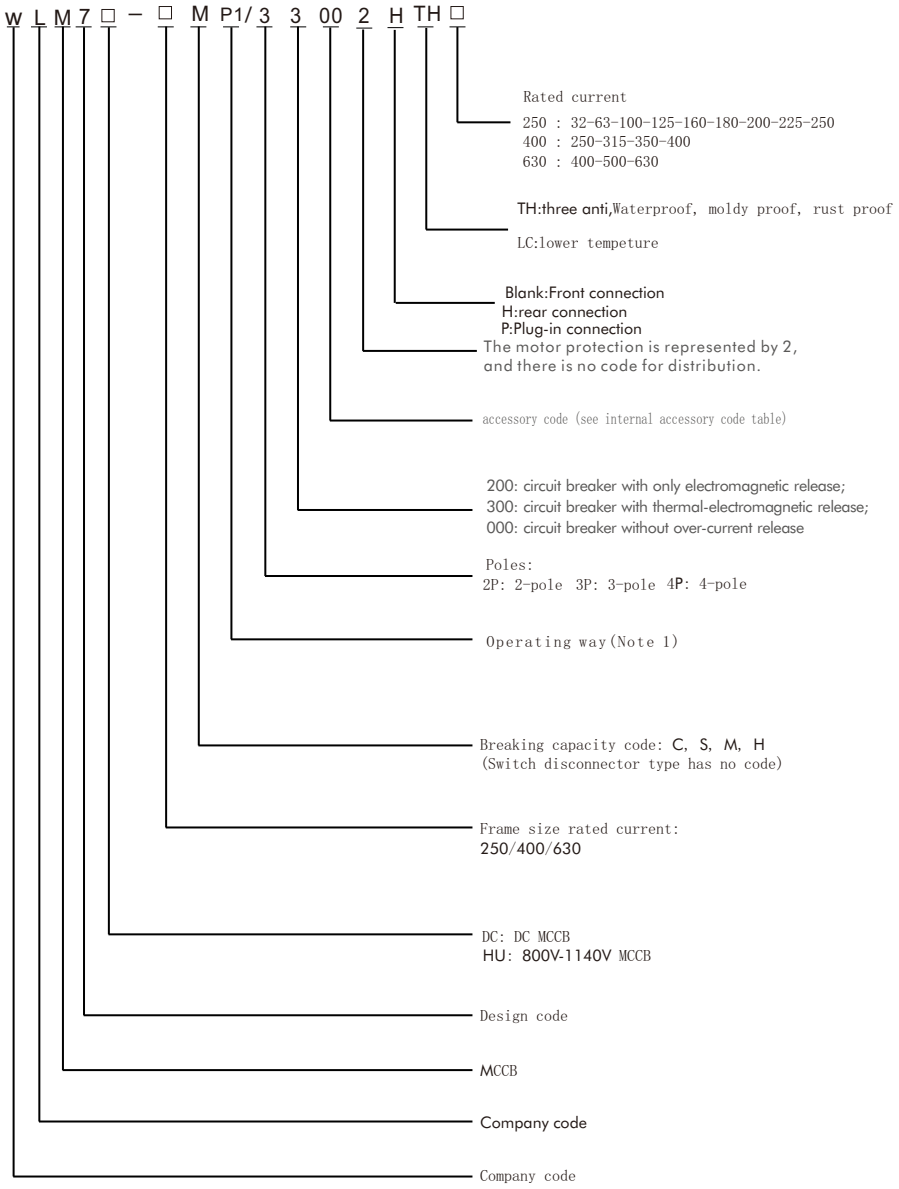
Type C: N-pole is equipped with over-current release, and N-pole is closed and opened together with other three poles (N-pole is closed first and then opened).

Type D: N-pole is equipped with over-current release, and the N-pole is always connected, not closed and opened with other three poles.

3. Type designation

3.1 WLM7 Moulded Case Circuit Breaker





Note

Note 1
No code: direct operation
P1: DC3 electric operation(General market version)
P2: DC6 series electric operation(self-manufacturing)
ZY1: Rotating handle (manual center type - circular handle) - (defaulted)
ZF1: Rotating handle (manual center type - square handle)
ZY2: Rotating handle (hand operated eccentric - cirular handle)
ZF2: Rotating handle (manual eccentric square handle)
Z3: Rotating handle (hand operated integrated)
(Only available in 125, 160, and 250)Note:one pole and two pole products only have Direct operation function.
The voltage of electric operation is divided into:DC24/DC110V/DC220V/AC230V/AC400V,defaulted is:AC230V

4. Thermal Type Technical data

WLM6 Moulded Case Circuit Breaker		125				160			
Rated operating current In (A),40℃	Magnetic type	10-16-20-25-32-40-50-63-80-100-125				16-20-25-32-40-50-63-80-100-125-160			
	Thermal-magnetic type	16-20-25-32-40-50-63-80-100-125				16-20-25-32-40-50-63-80-100-125-160			
	Adjustable type	25-32-40-50-63-80-100-125				25-32-40-50-63-80-100-125-160			
Electric characteristics									
Rated insulation voltage Ui (V)		1000				1000			
Rated impulse withstand voltage (kV)		8				8			
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690				380/400/415,440,500,660/690			
Breaking capacity code		C	S	M	H	C	S	M	H
Number of poles	1P(Adjustable has no this type)	■	■	■	■	—	—	—	—
	2P	■	■	■	■	■	■	—	—
	3P	■	■	■	■	■	■	■	■
	4P	■	■	■	■	■	■	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[3]	8	30(1P)	36(1P)	50(1P)	—	—	—	—
	AC380/400/415V	25	30	36	50	30	35	50	65
	AC440V	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	—	—	—	—
	AC660/690V	5	6	10	15	8	6	10	15
Rated service breaking capacity Ics (kA)	AC220/230/240V[3]	5	15(1P)	18(1P)	50(1P)	—	—	—	—
	AC380/400/415V	18	20	18	50	20	25	35	50
	AC440V	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	—	—	—	—
	AC660/690V	3	3	5	8	2	3	5	10
Standard		IEC/EN 60947-2							
Utilization category		A				A			
Ambient temperature		-40℃ ~+70 ℃ [2]							
Safety of insulation		■				■			
Arcing distance		0				0			
Mechanical life (CO recycle)	Maintenance	15000				15000			
Electrical life (CO recycle)	AC415V,In	8000				8000			
	AC690V,In	2000				1500			
Release units									
Distribution protection	TM	■				■			
Motor protection	TM	■				■			
Mounting and connection									
Fixed	Front connection	■				■			
	Rear connection	■				■			
Plug-in[3]	Front connection	■				■			
	Rear connection	■				■			
Draw-out[3]	Front connection	—				—			
	Rear connection	—				—			
DIN rail	Front connection	■				■			
Dimension									
Dimension (mm) W×H×D 	Width (1P/2P/3P/4P)	25/50/75/100				—/60/90/120			
	Height	130				152			
	Depth	68				68/82			
Weight									
Weight(kg)/Fixed	1P	0.34				—			
	2P	0.65				1.1			
	3P	0.913				1.501			
	4P	1.161				1.909			

Note :[1] For 1 pole product only;
[2] The operating temperature of basic (dial code) electronic type is -35℃~+70℃,and the operating temperature of standard (liquid crystal) electronic type is -5 ℃ ~+40 ℃;
[3] For 3/4 pole product only;

WLM6 Moulded Case Circuit Breaker		250					400					630			
Rated operating current In (A),40℃	Magnetic type	100-125-140-160-180-200-225-250					250-315-350-400					500-630			
	Thermal-magnetic type	100-125-140-160-180-200-225-250					250-315-350-400					500-630			
	Adjustable type	100-125-140-160-180-200-225-250					250-315-350-400					500-630			
Electric characteristics															
Rated insulation voltage Ui (V)		1000					1000					1000			
Rated impulse withstand voltage (kV)		8					8					8			
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690					380/400/415,440,500,660/690					380/400/415,440,500,600/690			
Breaking capacity code		C	S	M	H	Q	C	S	M	H	Q	S	M	H	Q
Number of poles	1P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	2P	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	3P	■	■	■	■	■	■	■	■	■	■	—	■	■	■
	4P	■	■	■	■	■	■	■	■	■	■	—	■	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[1]	30	50	65	70	—	—	50	65	70	—	—	80	85	—
	AC380/400/415V	15	30	50	65	100	—	30	70	100	150	—	70	100	150
	AC440V	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	60	—	—	—	—	65	—	—	—	65
	AC660/690V	5	8	15	20	20	—	8	20	25	20	—	10	20	20
Rated service breaking capacity Ics (kA)	AC220/230/240V[1]	20	25	40	50	—	—	—	—	—	—	—	30	50	—
	AC380/400/415V	10	15	35	50	100	—	15	50	70	150	—	50	70	150
	AC440V	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	60	—	—	—	—	65	—	—	—	65
	AC660/690V	3	4	10	15	20	—	4	10	4	20	—	10	12	20
Standard		IEC/EN 60947-2										IEC/EN 60947-2			
Utilization category		A					A					A(Thermal-magnetic)/B(Electronic)			
Ambient temperature		-40℃ ~+70 ℃[2]										-40℃ ~+70 ℃[2]			
Safety of insulation		■					■					■			
Arcing distance		0					0					0			
Mechanical life (CO recycle)	Maintenance	15000					15000					10000			
Electrical life (CO recycle)	AC415V,In	8000					8000					5000			
	AC690V,In	2000					1500					1500			
Release units															
Distribution protection	TM	■					■					■			
Motor protection	TM	■					■					■			
Mounting and connection															
Fixed	Front connection	■					■					■			
	Rear connection	■					■					■			
Plug-in[3]	Front connection	■					■					■			
	Rear connection	■					■					■			
Draw-out[3]	Front connection	—					—					■			
	Rear connection	—					—					■			
DIN rail	Front connection	■					■					—			
Dimension															
Dimension (mm) W×H×D 	Width (3P/4P)	105/140					140/184					140/184			
	Height	165/157 (Q type)					257					257			
	Depth	68/88 (H&Q type)					103/111 (Q type)					103/111 (Q type)			
Weight															
Weight(kg)/Fixed	1P	—					—					—			
	2P	—					—					—			
	3P	1.933					4.68					5.23/6 (Q type)			
	4P	2.578					6.314					6.809/7.3 (Q type)			

Note :[1] For 1 pole product only;
[2] The operating temperature of basic (dial code) electronic type is -35℃~+70℃,and the operating temperature of standard (liquid crystal) electronic type is -5 ℃ ~+40 ℃;
[3] For 3/4 pole product only;

B

WLM6 Moulded Case Circuit Breaker		800			1250			2000		
Rated operating current In (A),40℃	Magnetic type	500-630-700-800			630-700-800-1000-1250			1000-1250-1600-2000		
	Thermal-magnetic type	500-630-700-800			630-700-800-1000-1250			1000-1250-1600-2000		
	Adjustable type	500-630-700-800			630-700-800-1000-1250			—		
Electric characteristics										
Rated insulation voltage Ui (V)		1000			1000			1000		
Rated impulse withstand voltage (kV)		8			8			8		
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690			380/400/415,440,500,660/690			380/400/415,440,500,660/690		
Breaking capacity code		S	M	H	S	M	H	S	M	H
Number of poles	1P	—	—	—	—	—	—	—	—	—
	2P	—	—	—	—	—	—	—	—	—
	3P	—	■	■	■	■	■	—	■	■
	4P	—	■	■	■	■	■	—	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[1]	—	80	85	65	80	85	—	—	—
	AC380/400/415V	—	70	100	50	70	100	—	70	100
	AC440V	—	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	—	—	—	—	—
	AC660/690V	—	25	35	20	25	35	—	20	20
Rated service breaking capacity Ics (kA)	AC220/230/240V[1]	—	65	70	40	65	70	—	—	—
	AC380/400/415V	—	50	70	35	50	70	—	50	70
	AC440V	—	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	—	—	—	—	—
	AC660/690V	—	12	15	10	15	20	—	20	20
Standard										
Utilization category		A(Thermal-magnetic)/B(Electronic)			A(Thermal-magnetic)/B(Electronic)			A(Thermal-magnetic)/B(Electronic)		
Ambient temperature										
Safety of insulation		■			■			■		
Arcing distance		0			0			0		
Mechanical life (CO recycle)	Maintenance	8000			8000			8000		
Electrical life (CO recycle)	AC415V,In	1000			1000			1000		
	AC690V,In	800			800			800		
Release units										
Distribution protection	TM	■			■			■		
Motor protection	TM	■			■			■		
Mounting and connection										
Fixed	Front connection	■			—			■		
	Rear connection	■			■			—		
Plug-in[2]	Front connection	■			—			—		
	Rear connection	■			—			—		
Draw-out[2]	Front connection	■			■			—		
	Rear connection	■			■			—		
DIN rail	Front connection	—			—			—		
Dimension										
Dimension (mm) W×H×D 	Width (3P/4P)	210/280			210/280			210/280		
	Height	275.5			275.5			340		
	Depth	103			103			141		
Weight										
Weight(kg)/Fixed	1P	—			—			—		
	2P	—			—			—		
	3P	8.437			8.9			16.46/16.72/18.42		
	4P	11.245			11.931			21.4/22.78/24.1		

5. Electronic Type Technical data

WLM6E/WLM6EY Moulded Case Circuit Breaker		160				250					
Rated operating current In (A),40℃	6 adjutable knobs	12-16-20-25-32-40-50-63-80-100-125-160				100-125-160-180-200-225-250					
	3 adjutable knobs	12-16-20-25-32-40-50-63-80-100-125-160				100-125-160-180-200-225-250					
Electric characteristics											
Rated insulation voltage Ui (V)		1000				1000					
Rated impulse withstand voltage (kV)		8				8					
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690				380/400/415,440,500,660/690					
Breaking capacity code		C	S	M	H	C	S	M	H	Q	
Number of poles	1P	—	—	—	—	—	—	—	—	—	
	2P	—	—	—	—	—	—	—	—	—	
	3P	■	■	■	■	■	■	■	■	■	
	4P	■	■	■	■	■	■	■	■	■	
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	
	AC380/400/415V	—	25	50	65	—	25	50	65	100	
	AC440V	—	—	—	—	—	—	—	—	—	
	AC500V	—	—	—	—	—	—	—	—	60	
	AC660/690V	—	8	8	8	6	8	8	8	20	
Rated service breaking capacity Ics (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	
	AC380/400/415V	—	18	35	65	—	18	35	65	100	
	AC440V	—	—	—	—	—	—	—	—	—	
	AC500V	—	—	—	—	—	—	—	—	60	
	AC660/690V	—	4	8	8	—	4	8	8	20	
Rated short-time withstand current Icw (kA,1s)		—				10					
Standard		IEC/EN 60947-2									
Utilization category		A				B					
Ambient temperature		-40℃～+70 ℃[2]									
Safety of insulation		■				■					
Arcing distance		0				0					
Mechanical life (CO recycle)	Maintenance	15000				15000					
Electrical life (CO recycle)	AC415V,In	8000				8000					
	AC690V,In	2000				1500					
Release units											
Distribution protection	E	■				■					
Motor protection	E	■				■					
Mounting and connection											
Fixed	Front connection	■				■					
	Rear connection	■				■					
Plug-in[3]	Front connection	■				■					
	Rear connection	■				■					
Draw-out[3]	Front connection	—				—					
	Rear connection	—				—					
DIN rail	Front connection	■				■					
Dimension											
Dimension (mm) W×H×D	Width (3P/4P)	90/120				105/140					
	Height	152				165/157(Q type)					
	Depth	68/82				68/88					
Weight											
Weight(kg)/Adjutable	1P	—				—					
	2P	—				—					
	3P	1.553				2.118					
	4P	2.059				2.726					

WLM6E/WLM6EY Moulded Case Circuit Breaker		400					630					
Rated operating current In (A),40℃	6 adjutable knobs	200-225-250-280-300-320-350-375-400					400-440-460-480-500-530-560-600-630					
	3 adjutable knobs	200-225-250-280-300-320-350-375-400					400-440-460-480-500-530-560-600-630					
Electric characteristics												
Rated insulation voltage Ui (V)		1000					1000					
Rated impulse withstand voltage (kV)		8					8					
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690					380/400/415,440,500,660/690					
Breaking capacity code		C	S	M	H	Q	C	S	M	H	Q	
Number of poles	1P	—	—	—	—	—	—	—	—	—	—	
	2P	—	—	—	—	—	—	—	—	—	—	
	3P	—	—	■	■	■	—	—	■	■	■	
	4P	—	—	■	■	■	—	—	■	■	■	
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	—	
	AC380/400/415V	—	—	70	100	150	—	—	70	100	150	
	AC440V	—	—	—	—	—	—	—	—	—	—	
	AC500V	—	—	—	—	65		—	—	—	65	
	AC660/690V	—	—	8	8	20	—	—	8	8	20	
Rated service breaking capacity Ics (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	—	
	AC380/400/415V	—	—	50	70	150	—	—	50	70	150	
	AC440V	—	—	—	—	—	—	—	—	—	—	
	AC500V	—	—	—	—	65	—	—	—	—	65	
	AC660/690V	—	—	8	8	20	—	—	8	8	20	
Rated short-time withstand current Icw (kA,1s)		10					10					
Standard		IEC/EN 60947-2										
Utilization category		B					B					
Ambient temperature		-40℃～+70 ℃[2]										
Safety of insulation		■					■					
Arcing distance		0					0					
Mechanical life (CO recycle)	Maintenance	15000					15000					
Electrical life (CO recycle)	AC415V,In	8000					8000					
	AC690V,In	2000					1500					
Release units												
Distribution protection	E	■					■					
Motor protection	E	■					■					
Mounting and connection												
Fixed	Front connection	■					■					
	Rear connection	■					■					
Plug-in[3]	Front connection	■					■					
	Rear connection	■					■					
Draw-out[3]	Front connection	—					—					
	Rear connection	—					—					
DIN rail	Front connection	■					■					
Dimension												
Dimension (mm) W×H×D 	Width (3P/4P)	140/184					140/184					
	Height	257					257					
	Depth	103					103/111(Q type)					
Weight												
Weight(kg)/Adjustable	1P	—					—					
	2P	—					—					
	3P	4.922					5.391					
	4P	6.543					7.266					

WLM6E/WLM6EY Moulded Case Circuit Breaker		800				1250				2000		
Rated operating current In (A),40℃	6 adjutable knobs	500-550-600-630-660-700-740-780-800				850-900-950-1000-1050-1100 1150-1200-1250				500-630-700-800-1000-1250-1500-1600-2000		
	3 adjutable knobs	12-16-20-25-32-40-50-63-80-100-125-160				850-900-950-1000-1050-1100 1150-1200-1250				500-630-700-800-1000-1250-1500-1600-2000		
Electric characteristics												
Rated insulation voltage Ui (V)		1000				1000				1000		
Rated impulse withstand voltage (kV)		8				8				8		
Rated operational voltage Ue(V),AC 50/60Hz		380/400/415,440,500,660/690				380/400/415,440,500,660/690				380/400/415,440, 500,660/690		
Breaking capacity code		C	S	M	H	C	S	M	H	S	M	H
Number of poles	1P	—	—	—	—	—	—	—	—	—	—	—
	2P	—	—	—	—	—	—	—	—	—	—	—
	3P	—	—	■	■	—	—	■	■	—	■	■
	4P	—	—	■	■	—	—	■	■	—	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	—	—
	AC380/400/415V	—	—	70	100	—	25	70	100	—	70	100
	AC440V	—	—	—	—	—	—	—	—	—	20	20
	AC500V	—	—	—	—	—	—	—	—	—	—	—
	AC660/690V	—	—	20	20	—	—	20	20	—	20	20
Rated service breaking capacity Ics (kA)	AC220/230/240V[1]	—	—	—	—	—	—	—	—	—	—	—
	AC380/400/415V	—	—	50	70	—	18	50	70	—	50	70
	AC440V	—	—	—	—	—	—	—	—	—	—	—
	AC500V	—	—	—	—	—	—	—	—	—	—	—
	AC660/690V	—	—	10	10	—	—	10	10	—	10	10
Rated short-time withstand current Icw (kA,1s)		—				10						
Standard		IEC/EN 60947-2										
Utilization category		B				B				B		
Ambient temperature		-40℃～+70 ℃[2]										
Safety of insulation		■				■				■		
Arcing distance		0				0				0		
Mechanical life (CO recycle)	Maintenance	2500				2500				2500		
Electrical life (CO recycle)	AC415V,In	500				500				500		
	AC690V,In	400				400				400		
Release units												
Distribution protection	E	■				■				■		
Motor protection	E	■				■				■		
Mounting and connection												
Fixed	Front connection	■				■				■		
	Rear connection	■				■				—		
Plug-in[3]	Front connection	■				■				—		
	Rear connection	■				■				—		
Draw-out[3]	Front connection	■				■				■		
	Rear connection	■				■				■		
DIN rail	Front connection	■				■				—		
Dimension												
Dimension (mm) W×H×D 	Width (3P/4P)	210/280				210/280				210/280		
	Height	275.5				275.5				340		
	Depth	103				103				141		
Weight												
Weight(kg)/Adjustable	1P	—				—				—		
	2P	—				—				—		
	3P	9.253				9.896				16.8/17.1/18.82		
	4P	11.07				13.187				21.86/23.24/24.54		

6. RCCB Type Technical data

WLM6L/WLM6LY Residual Current protection module		125				160				250				400			
Rated current (A) of circuit breaker 40℃		16-20-25-30-32-40-50-60-63-75-80-90-100-125				16-20-25-30-32-40-50 60-63-75-80-90-100-125 140-150-160				100-125-140-150-160 175-180-200-225-250				250-315-350-400			
Rated insulation voltage Ui (V)		1000				1000				1000				1000			
Rated impulse withstand voltage (kV)		8				8				8				8			
Rated operational voltage Ue(V),AC 50/60Hz		AC230V(2P) /AC400(3P、3P+N、4P)				AC230V(2P) /AC400(3P、3P+N、4P)				AC400V				AC400V			
Breaking capacity code		C	S	M	H	C	S	M	H	C	S	M	H	C	S	M	H
Number of poles	2P	■	■	■	■	■	■	■	■	—	—	—	—	—	—	—	—
	3P	■	■	■	■	■	■	■	■	—	—	■	■	—	—	■	■
	4P	■	■	■	■	■	■	■	■	—	—	■	■	—	—	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC380/400/415V	5	8	25	35	15	20	25	35	15	25	35	50	–	–	50	65
Rated service breaking capacity Ics (kA)	AC380/400/415V	3	5	18	35	10	15	25	35	10	18	25	35	–	–	35	42
Rated residual making and breaking capacity I△m(kA)		12.5	12.5	12.5	12.5	–	–	12.5	12.5	–	–	12.5	12.5	–	–	–	16.25
Limit non-actuating time △t (ms)[1]		0.06s/0.2s/0.5s/1s				0.06s/0.2s/0.5s/1s				0.06s/0.2s/0.5s/1s				0.06s/0.2s/0.5s/1s			
Leakage alarm non-tripping function		□				□				□				□			
overcurrent tripping type		Themal type				Themal type				Themal type				Themal type			
Leakage tripping type		Electronic Type				Electronic Type				Electronic Type				Electronic Type			
Residual current type		AC				AC				AC				AC			
Standard		IEC/EN 60947-2															
Utilization category		A															
Ambient temperature		-40℃～+70 ℃[2]															
Safety of insulation		■															
Arcing distance		0															
Mechanical life (CO recycle)	Maintenance	15000				15000				15000				15000			
Electrical life (CO recycle)	AC415V,In	8000				8000				8000				8000			
	AC690V,In	2000				2000				2000				2000			
Release units																	
Mounting and connection																	
Fixed	Front connection	■				■				■				■			
	Rear connection	■				■				■				■			
Plug-in[3]	Front connection	■				■				■				■			
	Rear connection	■				■				■				■			
Draw-out[3]	Front connection	—				—				—				■			
	Rear connection	—				—				—				■			
DIN rail	Front connection	■				■				■				■			
Dimension																	
Dimension (mm) W×H×D 	Width (2P/3P/4P)	50/75/100				60/90/120				—/105/140				—/140/184			
	Height	130				155				165				257			
	Depth	68				68				68				103			
Weight																	
Weight(kg)/Fixed	2P					—				—				—			
	3P	0.913				1.45				1.532				4.758			
	4P	1.161				1.592				2.024				6.314			

Note :

[1] The operating temperature of basic (dial code) electronic type is -35℃～+70℃,and the operating temperature of standard (liquid crystal) electronic type is -5 ℃ ～+40 ℃;

B

WLM6L/WLM6LY Residual Current protection module		630		800		1250	
Rated current (A) of circuit breaker 40℃		400-500-630		500-630-700-800		1000-1250	
Rated insulation voltage Ui (V)		1000		1000		1000	
Rated impulse withstand voltage (kV)		8		8		8	
Rated operational voltage Ue(V),AC 50/60Hz		AC400(3P、3P+N、4P)		AC400(3P、3P+N、4P)		AC400V	
Breaking capacity code		M	H	M	H	M	H
Number of poles	2P	–	–	–	–	–	–
	3P	■	■	■	■	■	■
	4P	■	■	■	■	■	■
Rated ultimate short-circuit breaking capacity Icu (kA)	AC380/400/415V	50	65	50	65	50	65
Rated service breaking capacity Ics (kA)	AC380/400/415V	35	50	35	50	35	50
Rated residual making and breaking capacity I△m(kA)		16.25	16.25	16.25	16.25	16.25	16.25
Limit non-actuating time △t (ms)[1]		0.06s/0.2s/0.5s/1s		0.06s/0.2s/0.5s/1s		0.06s/0.2s/0.5s/1s	
Leakage alarm non-tripping function		□		□		□	
overcurrent tripping type		Themal type		Themal type		Themal type	
Leakage tripping type		Electronic Type		Electronic Type		Electronic Type	
Residual current type		AC		AC		AC	
Standard		IEC/EN 60947-2					
Utilization category		A					
Ambient temperature		-40℃～+70 ℃[2]					
Safety of insulation		■					
Arcing distance		0					
Mechanical life (CO recycle)	Maintenance	15000		15000		15000	
Electrical life (CO recycle)	AC415V,In	8000		8000		8000	
	AC690V,In	2000		2000		2000	
Release units							
Mounting and connection							
Fixed	Front connection	■		■		■	
	Rear connection	■		■		■	
Plug-in[3]	Front connection	■		■		■	
	Rear connection	■		■		■	
Draw-out[3]	Front connection	—		—		—	
	Rear connection	—		—		—	
DIN rail	Front connection	■		■		■	
Dimension							
Dimension (mm) W×H×D	Width (3P/4P)	140/184		210/280		210/280	
	Height	257		275.5		275.5	
	Depth	103		103		103	
Weight							
Weight(kg)/Fixed	2P	—		—		—	
	3P	5.2		8. 437		9.8	
	4P	6.672		11.245		13	

Note :

[1] The operating temperature of basic (dial code) electronic type is -35℃～+70℃,and the operating temperature of standard (liquid crystal) electronic type is -5 ℃ ～+40 ℃;

7. DC Type Technical data

WLM7DC Moulded Case Circuit Breaker		250		315		
Rated operating current In (A),40℃		63-80-100-125-140-160-180-200-225-250		280-300-315		
characteristics						
Rated insulation voltage Ui (V)		1500		1500		
Rated impulse withstand voltage Uimp (kV)		12		12		
Rated operational voltage Ue (V),DC		250 , 500 , 750 , 1000,1250,1500		250 , 500 , 750 , 1000,1250,1500		
Breaking capacity code		M	H	M	H	
Number of poles	2P	■	■	■	■	
	3P	■	■	■	■	
Rated ultimate short-circuit breaking capacity Icu(kA)	DC250V	—	50	—	50	
	DC500C	—	50	—	50	
	DC750V	—	25	—	25	
	DC1000V	15	25	15	25	
	DC1250V	—	—	—	—	
	DC1500V	5(3P20)	7.5(3P25)	5(3P20)	7.5(3P25)	
Rated service breaking capacity Ics(kA)	DC250V	—	50	—	50	
	DC500C	—	50	—	50	
	DC750V	—	25	—	25	
	DC1000V	15	25	15	25	
	DC1250V	—	—	—	—	
	DC1500V	5(3P20)	7.5(3P25)	5(3P20)	7.5(3P25)	
Standard		IEC/EN 60947-2				
Utilization category		A		A		
Ambient temperature		-40℃～+70 ℃				
Safety of insulation		■		■		
Arcing distance		0		0		
Mechanical life (CO recycle)	Maintenance free	20000		20000		
Electrical life (CO recycle)	DC1000V,In	1500		1500		
Release units						
Distribution protection	TM	■		■		
Mounting and connection						
Fixed	Front connection	■		■		
	Rear connection	■		■		
Plug-in[1]	Front connection	■		■		
	Rear connection	■		■		
Draw-out[1]	Front connection	—		—		
	Rear connection	—		—		
DIN rail	Front connection	—		—		
Dimension						
Dimension(mm) W×H×D 	Width(2P/3P/4P)	78/107		78/107		
	Height	200		200		
	Depth	109		109		
Weight						
Weight Weight (kg)/Fixed	2P	2. 35		2.35		
	3P	3		3		
	4P	—		—		

B

WLM7DC Moulded Case Circuit Breaker		400		400Q (customized)		
Rated operating current In (A),40℃		250-315-350-400		250-280-315-320-350-400		
Electric characteristics						
Rated insulation voltage Ui (V)		1500		1500		
Rated impulse withstand voltage Uimp (kV)		12		12		
Rated operational voltage Ue (V),DC		110, 250 , 500 , 750 , 1000,1200,1500		110, 250 , 500 , 750 , 1000,1200,1500		
Breaking capacity code		M	H	M	H	
Number of poles	2P	■	■	—	■	
	3P	■	■	—	—	
Rated ultimate short-circuit breaking capacity Icu(kA)	DC250V	25	50	—	70	
	DC500C	25	50	—	70	
	DC750V	15	25	—	50	
	DC1000V	15(3P30)	25(3P40)	—	50	
	DC1250V	—	—	—	20	
	DC1500V	10(3P25)	10(3P30)	—	20	
Rated service breaking capacity Ics(kA)	DC250V	25	50	—	70	
	DC500C	25	50	—	70	
	DC750V	15	25	—	50	
	DC1000V	15(3P30)	25(3P40)	—	50	
	DC1250V	—	—	—	20	
	DC1500V	10(3P25)	10(3P30)	—	20	
Standard		IEC/EN 60947-2				
Utilization category		A		A		
Ambient temperature		-40℃ ~+70 ℃				
Safety of insulation		■		■		
Arcing distance		0		0		
Mechanical life (C0 recycle)	Maintenance free	20000		15000		
Electrical life (C0 recycle)	DC1000V,In	2000(DC1500V is :1000times)		2000(DC1500V is :1000times)		
Release units						
Distribution protection	TM	■		■		
Mounting and connection						
Fixed	Front connection	■		■		
	Rear connection	■		■		
Plug-in[1]	Front connection	■		■		
	Rear connection	■		■		
Draw-out[1]	Front connection	—		—		
	Rear connection	—		—		
DIN rail	Front connection	■		■		
Dimension						
Dimension(mm) W×H×D 	Width(2P/3P)	130/182		106		
	Height	270		275		
	Depth	125.8		154.5		
Weight						
Weight Weight(kg)/Fixed	2P	2.5		5.6		
	3P	3.2		7.7		
	4P	—		—		

WLM7DC Moulded Case Circuit Breaker		630		630Q (customized)		800	
Rated operating current In (A),40℃		400-500-630		450-500-630		630-700-800	
Electric characteristics							
Rated insulation voltage Ui (V)		1500		1500		1500	
Rated impulse withstand voltage Uimp (kV)		12		12		12	
Rated operational voltage Ue (V),DC		110, 250 , 500 , 750 , 1000,1200,1500		110, 250 , 500 , 750 , 1000,1200,1500		750,1000,1200,1500	
Breaking capacity code		M	H	M	H	M	H
Number of poles	2P	■	■	—	■	■	■
	3P	■	■	—	—	■	■
Rated ultimate short-circuit breaking capacity Icu(kA)	DC250V	25	50	—	70	25	50
	DC500C	25	50	—	70	25	50
	DC750V	15	35	—	50	15	25
	DC1000V	15(3P30)	35 (3P30)	—	50	15 (3P30)	25 (3P40)
	DC1250V	—	—	—	20	—	—
	DC1500V	10(3P25)	25	—	20	10 (3P25)	20 (3P30)
Rated service breaking capacity Ics(kA)	DC250V	25	50	—	70	25	50
	DC500C	25	50	—	70	25	50
	DC750V	15	35	—	50	15	25
	DC1000V	15(3P30)	35	—	50	15	25 (3P40)
	DC1250V	—	—	—	20	—	—
	DC1500V	10(3P25)	25	—	20	10	20 (3P30)
Standard		IEC/EN 60947-2					
Utilization category		A		A		A	
Ambient temperature		-40℃ ~+70 ℃					
Safety of insulation		■		■		■	
Arcing distance		0		0		0	
Mechanical life (C0 recycle)	Maintenance free	20000		15000		15000	
Electrical life (C0 recycle)	DC1000V,In	2000(DC1500V is :1000times)		2000(DC1500V is :1000times)		2000(DC1500V is :1000times)	
Release units							
Distribution protection	TM	■		■		■	
Mounting and connection							
Fixed	Front connection	■		■		■	
	Rear connection	■		■		■	
Plug-in[1]	Front connection	■		■		■	
	Rear connection	■		■		■	
Draw-out[1]	Front connection	—		—		—	
	Rear connection	—		—		—	
DIN rail	Front connection	■		■		■	
Dimension							
Dimension(mm) W×H×D 	Width(2P/3P)	130/182		106		130/182	
	Height	270		275		270	
	Depth	154.5		154.5		154.5	
Weight							
Weight Weight(kg)/Fixed	2P	2		5.85		6.2	
	3P	8.3		—		8.5	
	4P	—		—		—	

8. HU Type Technical data

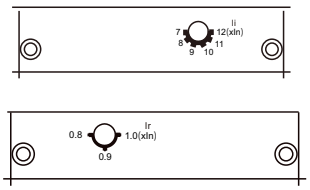
WLM7HU Moulded Case Circuit Breaker		250/315		400		630/800	
Rated operating current In (A),40℃		16-20-25-32-40-50-63-80-100-125-140-160-180-200-225-250	280 300-315	250-315-350-400		400-500-630	630-700-800
Rated insulation voltage Ui (V)		1150		1250		1250	
Rated impulse withstand voltage Uimp (kV)		12		12		12	
Rated operational voltage Ue (V),AC		415,690,800,1000,1140V		415,690,800,1000,1140V		415,690,800,1000,1140V	
Breaking capacity code		M	H	M	H	M	H
Number of poles	3P	■	■	■	■	■	■
Rated ultimate short-circuit breaking capacity Icu(kA)	AC415V				100		100
	AC690V			60	65	60	65
	AC800V	35	50	50	50	50	50
	AC1000V	15	20	20	25	20	30
	AC1140V	15	15	15	20	15	20
Rated service breaking capacity Ics(kA)	AC415V				100		100
	AC690V			60	65	60	65
	AC800V	35	50	37.5	50	37.5	50
	AC1000V	15	20	15	20	20	30
	AC1140V	15	15	15	15	15	20
Standard		IEC/EN 60947-2					
Utilization category		A		A			
Ambient temperature		-40℃～+70 ℃					
Safety of insulation		■		■			
Arcing distance		0		0			
Mechanical life (CO recycle)	Maintenance free	20000		15000		10000	
Electrical life (CO recycle)		1500		1000-5000		1000-5000	
Release units							
Distribution protection	TM	■		■		■	
Mounting and connection							
Fixed	Front connection	■		■		■	
	Rear connection	■		■		■	
Plug-in[1]	Front connection	■		■		■	
	Rear connection	■		■		■	
Draw-out[1]	Front connection	—		—		■	
	Rear connection	—		—		■	
DIN rail	Front connection	—		—		—	
Dimension							
Dimension(mm) W×H×D 	Width	107		150		182	
	Height	200		257		270	
	Depth	109		125.8		125.8	
Weight							
Weight(kg)/Fixed	3P	3		5.8		8	

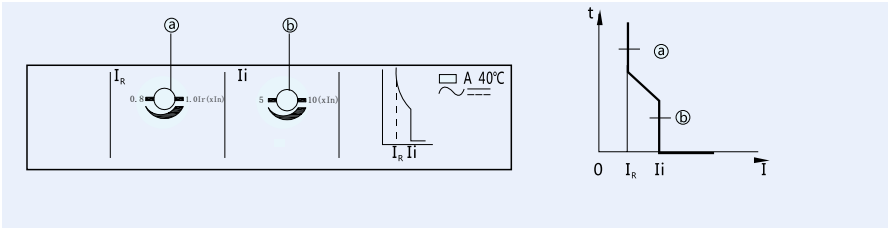
7. Release

7.1 Protection for power distribution

7.1.1 Thermo-magnetic type release TM

Thermo-magnetic release of WLM6RT-125, 250, 400, 630, 800 ,1250 and 2000 breakers can be set to meet protection requirements





Thermo-magnetic release TM	125	160	250	400	630	800	1250	2000
Number of poles	3P/4P	3P/4P	3P/4P	3P/4P	3P/4P	3P/4P	3P/4P	3P/4P
Rated current	32/40/50 63/80/100 /125	20/25/32/40/ 50/63/80/100/ 125/140/160/	160/180/ 200 225/250	315 350/400	500/630	630 /700/800	800/1000 1250	1000/1250 1600/2000
Over-load protection								
Setting current (A)=I_mx	0.7-1.0In							
Short-circuit instantaneous protection								
Setting current (A)=I_{in}x	5-10In							
Accuracy	±20%							
N-pole protection								
Setting current (A)$_{iN}$=I_nx	/	The same with the other three-phase poles.						
Accuracy	±20%							

7.1.2 Basic electronic type release for power distribution

electronic trip unit has three-stage protection of overload, short circuit short time-delay and short circuit instantaneous protection.

Electronic type		160	250	400	630	800	1250	2000
Over-load long-time delay protection	Setting current I_r=I_nx	0.4-0.5-0.6-0.7-0.8-0.9-0.95-1.0						
	6I_r Tripping time,(s)	8-12-16-24-32-48-64-96-128-256, Accuracy ±10%						
Short circuit short-time delay protection	Setting current I_{sd}=I_rx	2-3-4-5-6-7-8-10-12-0FF, Accuracy ±15%						
	Tripping time $_{sd}$T(s)	0.05-0.1-0.15-0.2-0.3, Accuracy ±20% or ±40ms (higher value willbe selected)						
Short circuit instantaneous protection	Setting current I_i=I_nx	4-6-7-8-9-10-11-12-14-0FF, Accuracy ±15%						
	Max. tripping time (ms)	60						
Neutral line protection	Setting current	I_{rN}=(0.6,1)xI_r, 0FF; I_{sdN}=(1.5-2-3-4-6-8-10)I_{rN} I_{iN}=(2-3-4-6-8-10-12)I_{rN}						
	Tripping time (s)	The same with the other three-phase poles.						

- Overload protection and tripping time setting

—The current value Ir can be adjusted according to the user's needs. The tripping time Tr is at the status of 6Ir.

- Short circuit short-time delay protection and trip time setting

—The current value Isd can be adjusted according to the user's needs. Tripping time Tsd is the shortcircuit short time-delay tripping time, which can be adjusted according to user needs.

- Short circuit instantaneous protection characteristics setting

—The current value Ii can be adjusted according to the user's needs.

- Neutral line protection feature setting

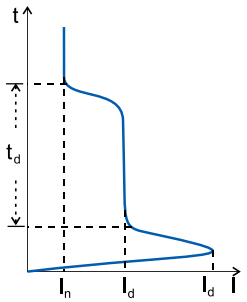
The four-pole circuit breaker N-pole protection current value can be adjusted according to user needs. The N pole tripping time is the same with the other three-phase poles.

B

7.1.3 Standard electronic type release for power distribution/moter starting
LCD release has four-stage protection of overload, short circuit short-time delay, short circuit instantaneous protection and earth fault, with real-time current display, protection parameter.

7.3.4 Motor starting characteristics

Electronic type		160	250	400	630	800	1250	2000
Over-load long-time delay protection	Setting current $I_r=I_n$x	0.4-0.5-0.6-0.7-0.8-0.9-0.95-1.0						
	$6I_r$ Tripping time$_r$(s)	8-12-16-24-32-48-64-96-128-256, Accuracy ±10%						
Short circuit short-time delay protection	Setting current $I_{sd}=I_r$x	2-3-4-5-6-7-8-10-12-14-OFF, Accuracy ±15%						
	Tripping time$_{sd}$(s)	0.05-0.1-0.15-0.2-0.3, Accuracy ±20% or ±40ms (higher value willbe selected)						
Short circuit instantaneous protection	Setting current $I=I_n$x	4-6-7-8-9-10-11-12-14-OFF, Accuracy ±15%						
	Max. tripping time (ms)	60						
Neutral line protection	Setting current	$I_{rN}=(0.6,1)x I_r$, OFF; $I_{sdN}=(1.5-2-3-4-6-8-10)I_{rN}$ $I_{iN}=(2-3-4-6-8-10-12)I_{rN}$						
	Tripping time (s)	The same with the other three-phase poles.						



Motor starting Current curve

At present, most of the motors use three-phase asynchronous induction motors, and a large part of them use the direct start mode, namely, the electric energy does not take artificial restriction measures, and directly feeds to start the motor, which is also called full-pressure start. When the asynchronous motor is directly started, a high starting current of 4 to 7 times of the rated current occurs. The reason why the asynchronous motor has a large starting current is that the motor has certain inertia, and the rotor speed cannot be immediately changed to the rated speed after starting. At this time, the relative rotational speed of the rotating magnetic field of the stator (synchronous speed of the motor, slightly higher than the rated speed) is large. The rotor winding cuts the stator magnetic field at a large speed to generate a large current; at the same time, the magnetic field generated by the large current of the rotor in turn induces the stator winding, so that the current also rapidly increases.

Startup parameter

Rated current (In): current value of the motor under rated operation

Starting current (Id): The current when the motor starts, its magnitude varies with different conditions, the average value is 7.2×In

Start peak current (Id): Transient current during the first two half-waves after the motor is powered on, typically 14 × In

Start-up time (td): generally 0.5~20s, which refers to the time when the motor has starting current

Direct startup impact on the protection device

For circuit breakers with magnetic protection, if the conventional current of the magnetic trip unit is set incorrectly, the circuit breaker will mistake the start current of the motor for short-circuit current, causing the circuit breaker to malfunction. For the independent thermal relay, the heat generated by the large starting current during the motor starting phase will also cause the relay to trip. For the contactor, if the motor needs electric or regenerative braking, it needs to be able to be broken during the motor starting phase. It generally needs to derate, in order to avoid the malfunction of the protection device caused by the start current:The inverse time characteristic curve of the independent thermal relay is required to be completely above the starting current.

The short-circuit current trip setting of the circuit breaker with magnetic protection should be greater than the peak starting current of the motor.

8. Products Controller function Technical Indicator

Intelligent controller category

function / Feature project			Knob type controller (Basic type)	Knob type controller (Communication type)	LCD controller (Basic type) meets the requirements of Southern Power Grid	LCD controller(Communication type) meets the requirements of Southern Power Grid
Protection function	current	overload protection	●	●	●	●
		Short circuit short time delay protection	●	●	●	●
		Instantaneous short-circuit protection	●	●	●	●
		Neutral line protection	○	○	○	○
		Earth Fault Protection (independent PCB full rectifier bridge)	○	○	○	○
		Current imbalance protection	—	—	●	●
		Overload warning	○	○	○	○
	voltage (2%)	Zero break protection	—	—	—	●
		Voltage imbalance protection	—	—	—	●
		Overvoltage, undervoltage, and phase loss protection	—	—	—	●
		Over and under frequency, phase sequence protection	—	—	—	○
Measurement function	current (Historical records can be queried and displayed at all times, but without a timestamp)	Phase current and medium linear current	●	●	●	●
		Average phase current	—	—	—	●
		Maximum phase current and medium linear current	—	—	—	●
		Maximum grounding current (protection value)	—	—	—	●
		Unbalanced current value between phases	—	—	—	●
	voltage	Line voltage (400V)	—	—	—	—
		Phase voltage (230V)	—	—	—	●
		Average line voltage	—	—	—	—
		Average phase voltage	—	—	—	—
		Unbalanced line voltage, unbalanced phase voltage	—	—	—	●
		phase sequence	—	—	—	—
		frequency	—	—	—	—
	Power Error<5%	Active	—	—	—	●
		Reactive	—	—	—	●
		apparent	—	—	—	●
		Power factor	—	—	—	●
maintenance function	quantity of electricity	Active Reactive Apparent	—	—	—	—
	Accumulated records (number of times)	Various types of protection tripping times Displacement times, etc	1	1	1	5
	Daily Extreme Record	Record the maximum and minimum values of current and voltage in each phase	—	—	—	●
	Event recording (number of times)	Trip records, alarm records, displacement records, etc	1	1	1	5
	Contact wear	Contact wear record	—	—	—	—
	number of operations	Record of operation times	—	—	—	○
	RTC function	Real Time Clock	—	—	—	●
	Auxiliary/Alarm Detection function	Auxiliary, alarm detection and Display circuit breaker status	—	○	—	○
	Electric operation control function	Remote electric operation control function	○	○	○	○
	human-computer interaction	LED indication	●	●	●	●
		Dot matrix/broken code (digital) display (Choose one from two)	—	—	●	●
		Key settings	—	—	●	●
	Communication function (backpack module)	Modbus RTU, DL/T 645 (with voltage) (Choose one from two)	—	●（挂模块）	—	●（通讯内置）
	Power outage query		—	—	●	●
	Accessories function	Shunt tripping function	—	○	—	○
		Overload alarm non tripping function	—	○	—	○
		Overload alarm tripping function	—	○	—	○
		Leakage module	—	○	—	○

●default configuration; ○Optional configuration; —No such configuration;

8. LCD Products Controller function Technical Indicator

Table of characteristics & functions of intelligent protection controller:
Table 1: Characteristics & Functions of Product

Spec. & Functions			
Classification	Description		
Classification		LCD+LED indicator light	●
Interface operation		Key	●
Protective functions	Current protection	Overload long time delay protection	●
		Short-circuit short time delay protection	●
		Short-circuit instantaneous protection	●
		Overload pre-alarm function	●
	Voltage protection	Under-voltage and over-voltage protection functions	●
		Phase loss protection function	●
		Protection function of fault neutral line at power supply side	-
		Protection function of voltage loss and trip at power supply side	-
	Communication function	DL/T 645-2007 Multi-functional meter communication protocol	●
		Modbus-RTU communication protocol	○
		Communication hardware 1-channel RS-485	●
	Function of external DI/O port	Auxiliary communication power input	○
		1-channel DI/O programmable control input	○
		1-channel passive contact output	-
	Fault record	Storage of 10 times of trip faults (the upper computer needs to read the feedback information uploaded each time for query of more records	●
		Record of max./min. voltage and current in 30 days	●
		Record of 10 self-check events of protector	
		Record of 80 protection function enable/disable events	●
		Record of 10 gate position change events●	●
		Record of 10 alarm events	●
		Record of 10 times of high voltage power loss and recovery	●
	Time function	With the function of real-time clock which consists of YY, MM, DD, hh, mm and ss.	●

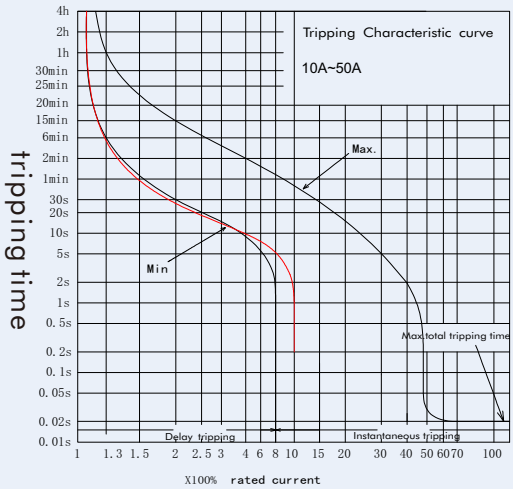
Notes: symbol "●" indicates that this function is available; symbol "○" indicates that this function can be selected; and symbol "-" indicates that this function is not available.

B

9. Tripping curve

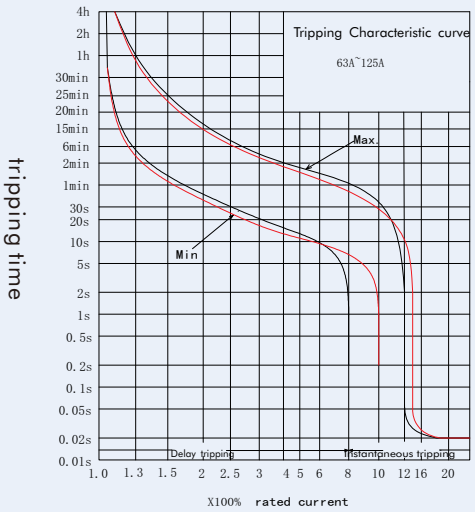
9.1 Thermal-magnetic type for power distribution

WLM6-125(10A/25A/32A/40A/50A)



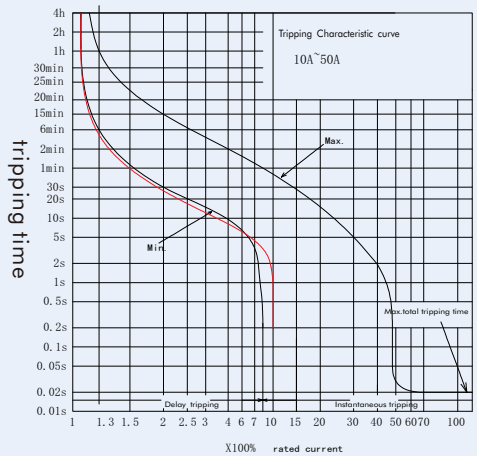
Instantaneous tripping current
600A+I200A(AC)

WLM6-125(63A/80A/100A/125A)



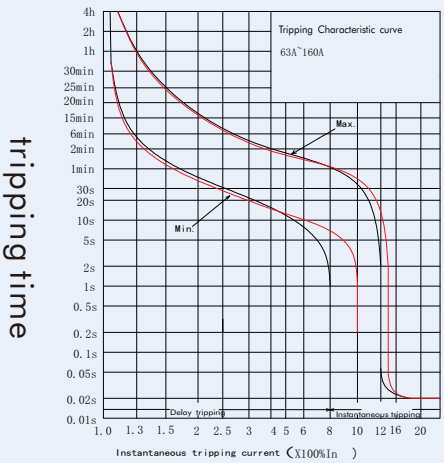
Instantaneous tripping current
600A+I200A(AC)

WLM6-160(10A/20A/25A/32A/40A/50A)



Instantaneous tripping current
600A+120A(AC)

WLM6-160(63A/80A/100A/125A/140A/160A)



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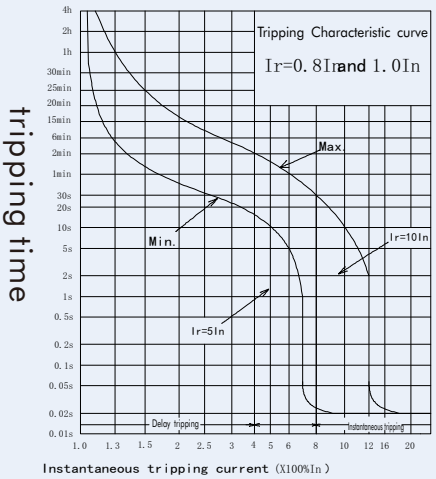
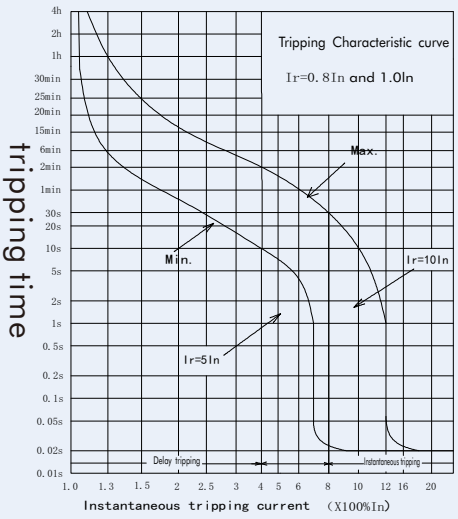
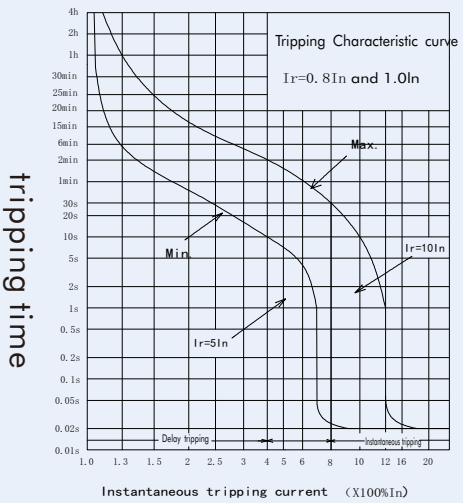
WLM6-250(100A/125A/140A/160A/180A/200A/225A/250A)



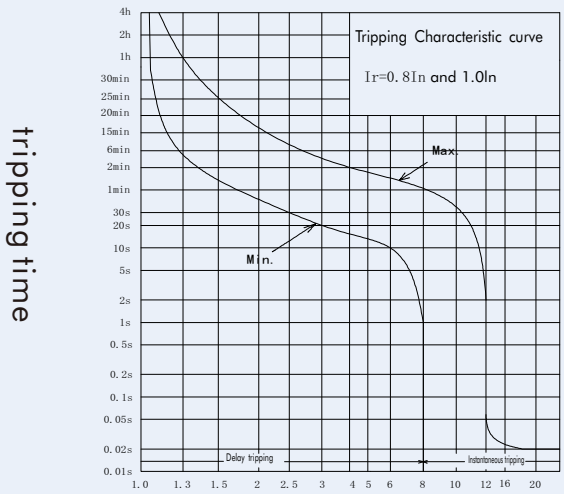
WLM6-400(300A/350A/400A)



WLM6-630(500A/630A)

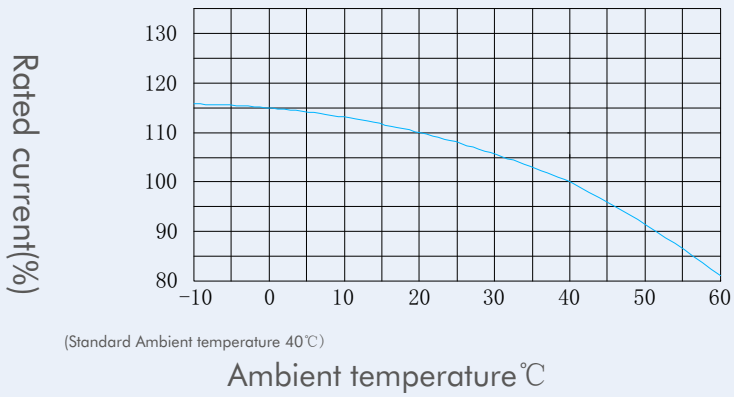


WLM6-800/1250/2000(800A~2000A)

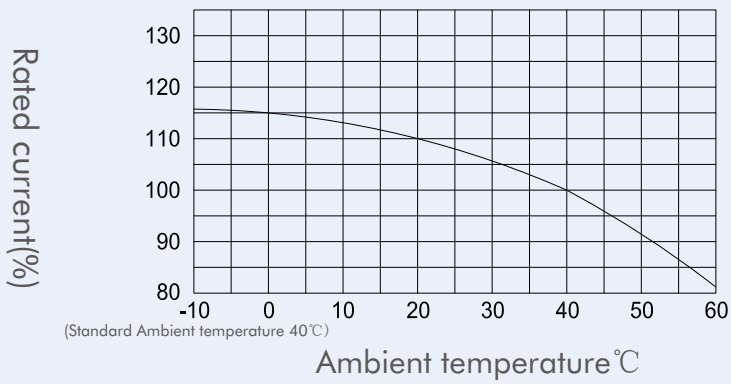


9.2 Thermal-magnetic type and electronic type for current-temperature characteristic

Thermal type current-temperature characteristic

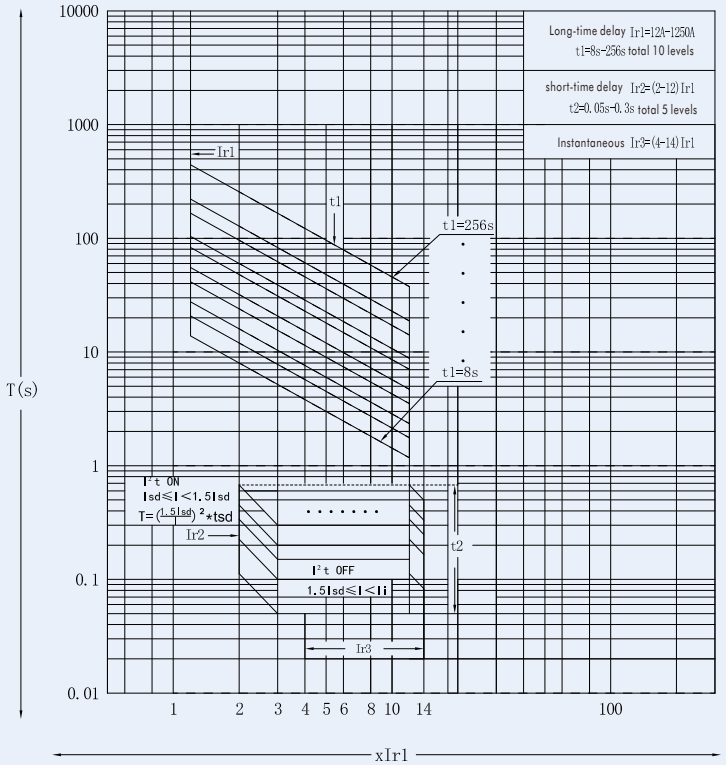


Electronic type current-temperature characteristic

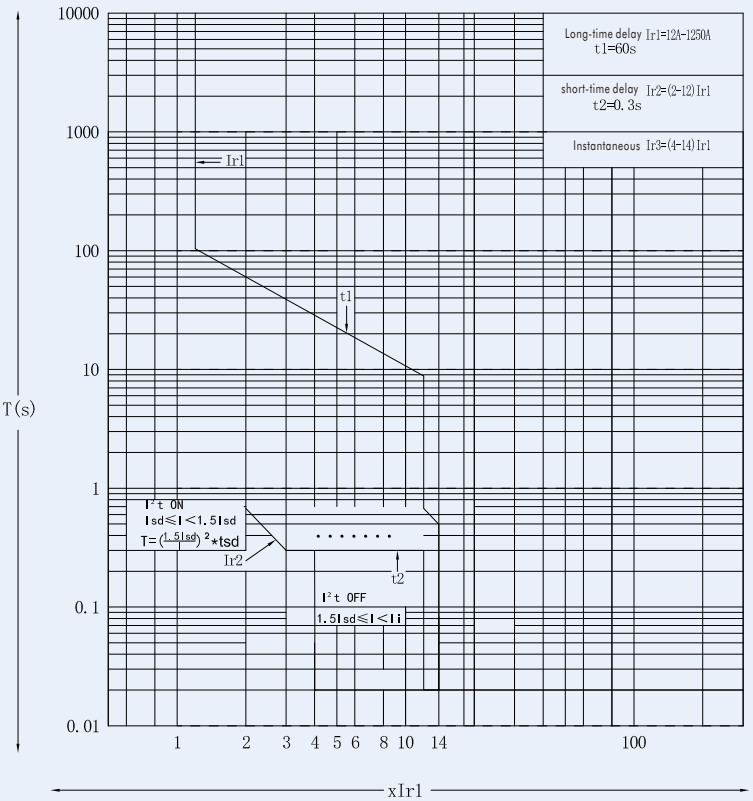


9.3 Electronic type for power distribution/motor starting

Basic electronic type with 6 knobs

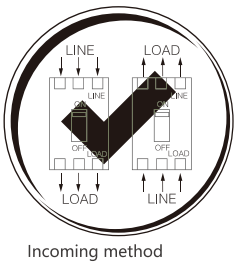


Basic electronic type with 3 knobs

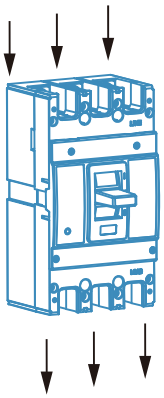


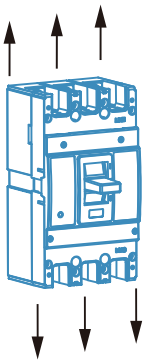
10. Mounting of circuit breaker

10.1 Modes of down-lead

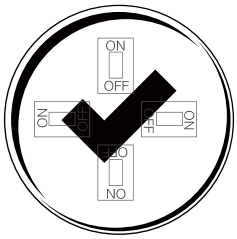


Incoming method

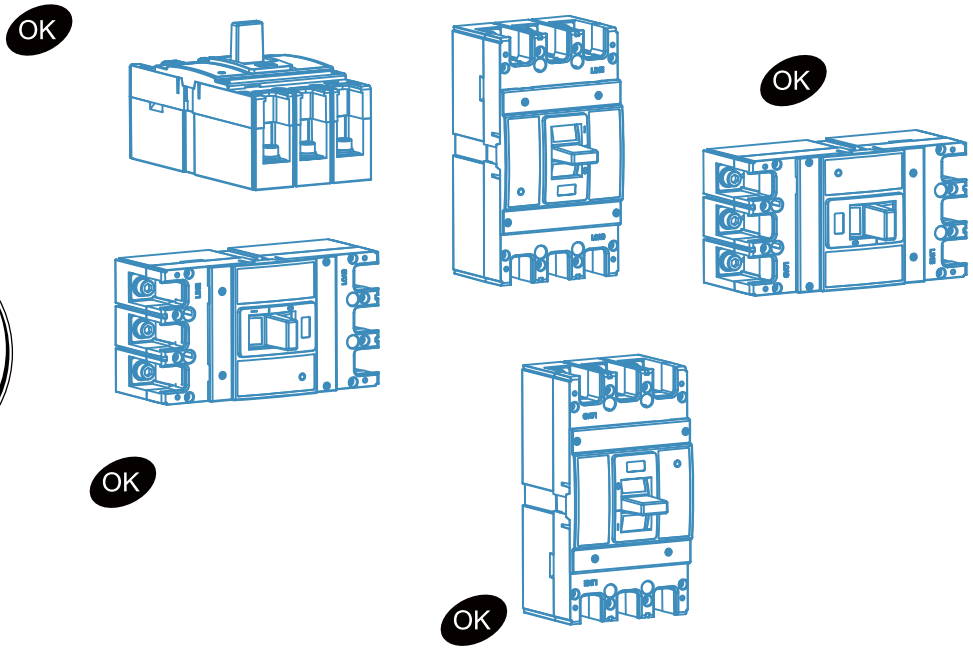




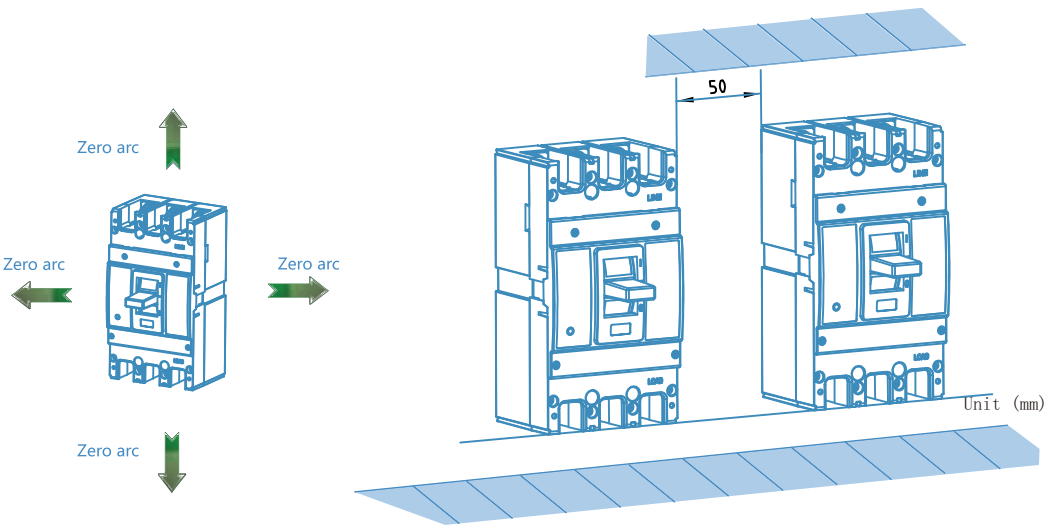
10.2 Modes of mounting



Modes of mounting



10.3 Safe distance

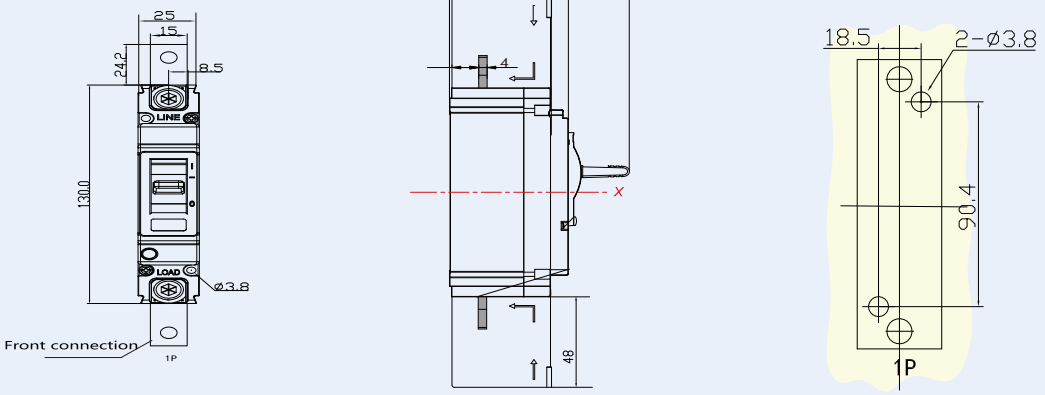


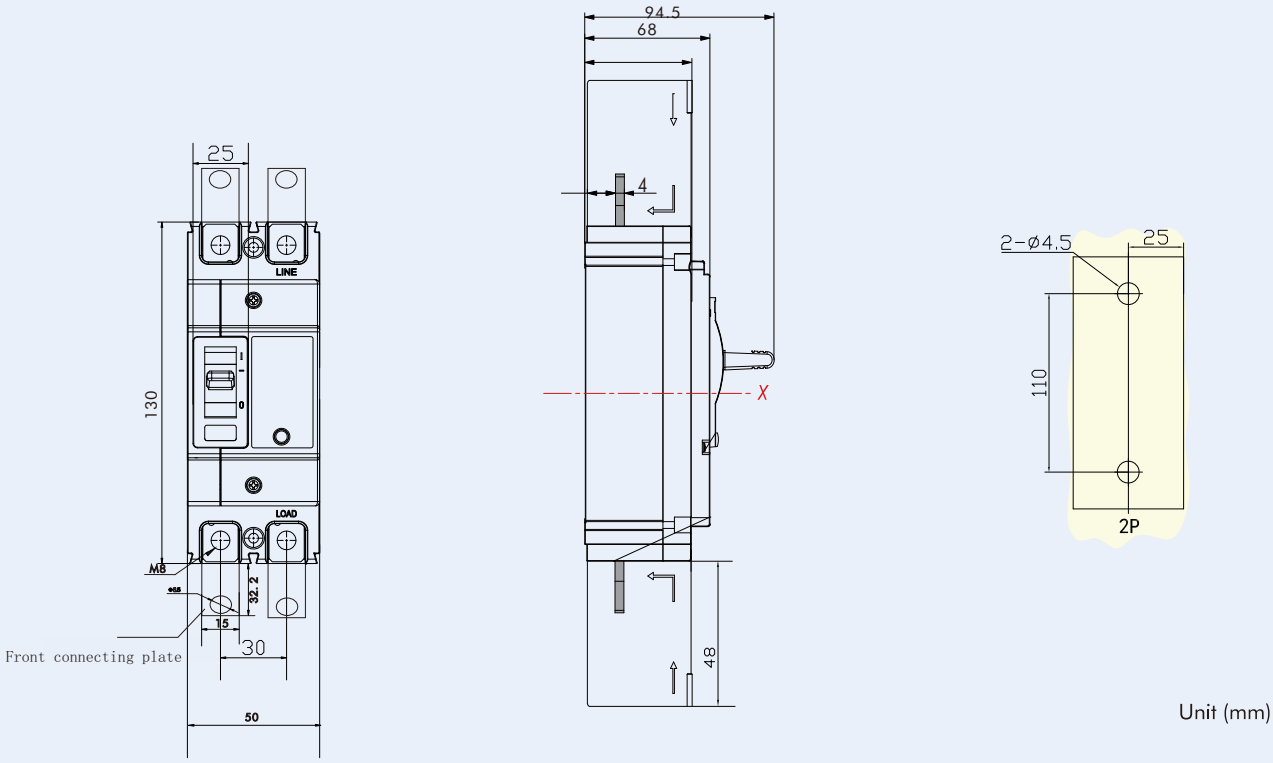
B

11. Overall and Mounting Dimensions

11.1 WLM6-125

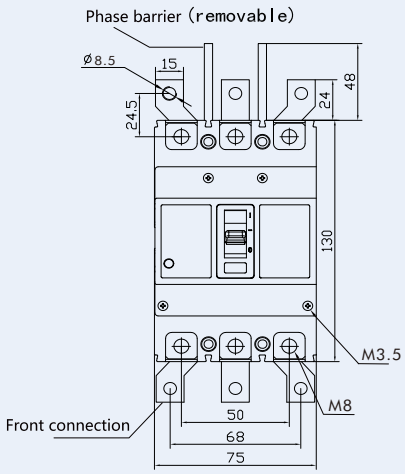
WLM6-125 Front connection



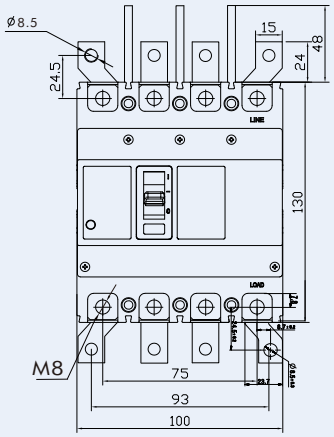


Unit (mm)

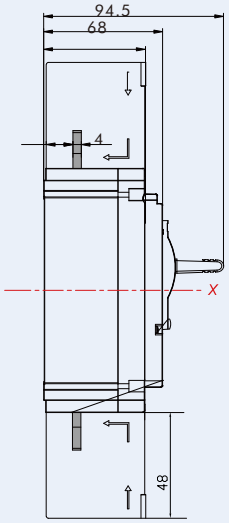
WLM6-125 Front connection (3P/4P)

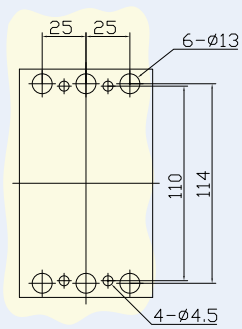


3P

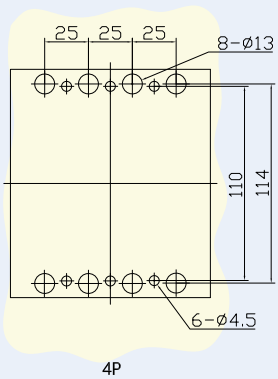


4P





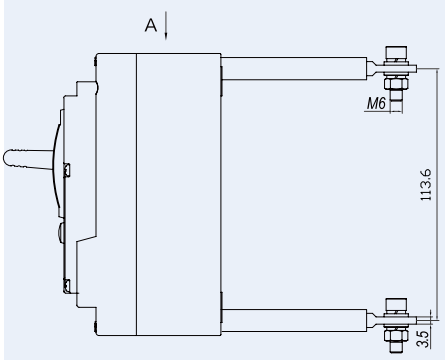
3P

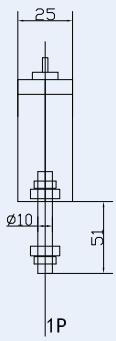


4P

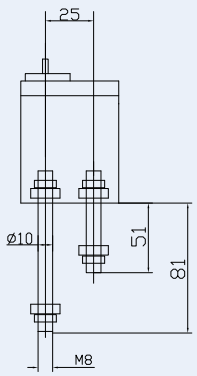
Unit (mm)

WLM6-125 Rear connection (1P/2P)





1P

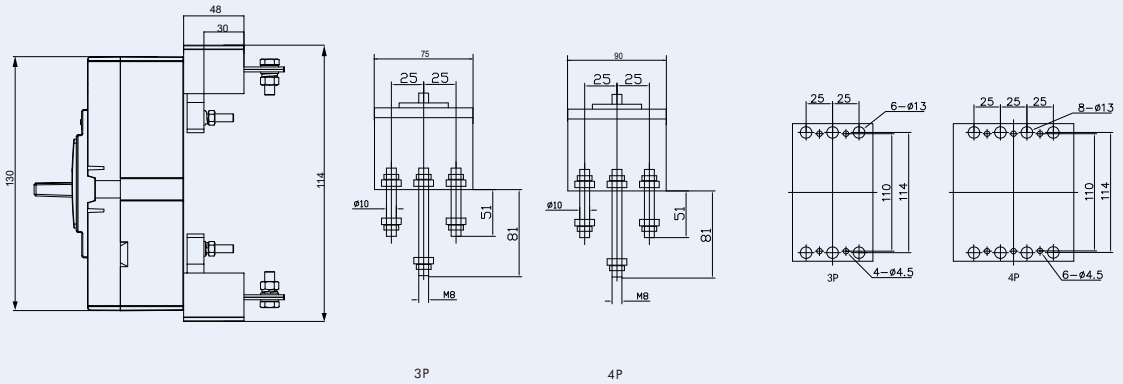


2P

Unit (mm)

B

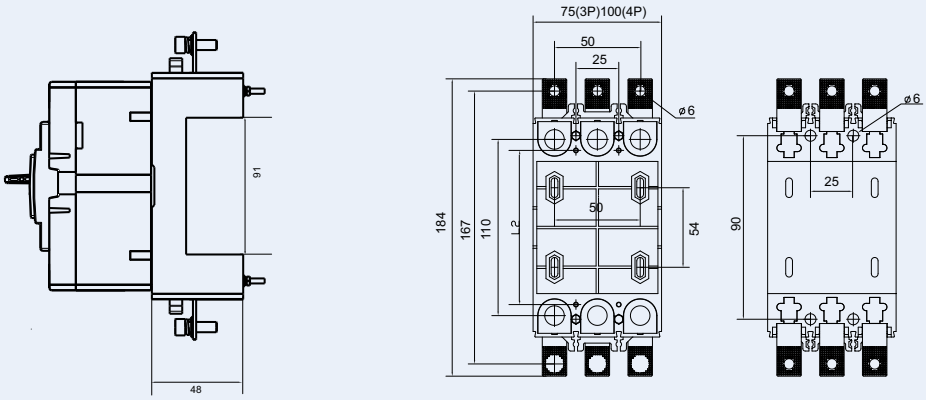
WLM6-125 Rear connection (3P/4P)



3P 4P

Unit (mm)

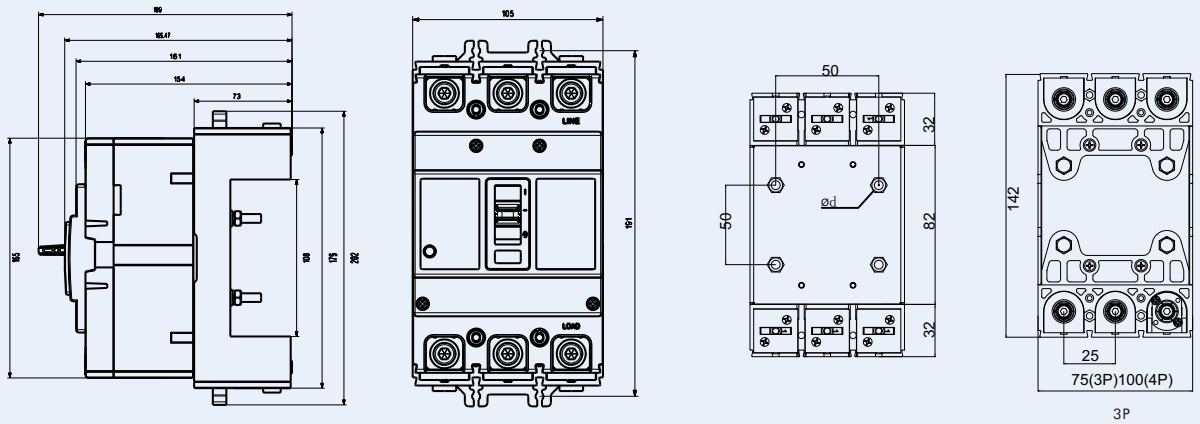
WLM6-125 Plug-in front connection



3P

Unit (mm)

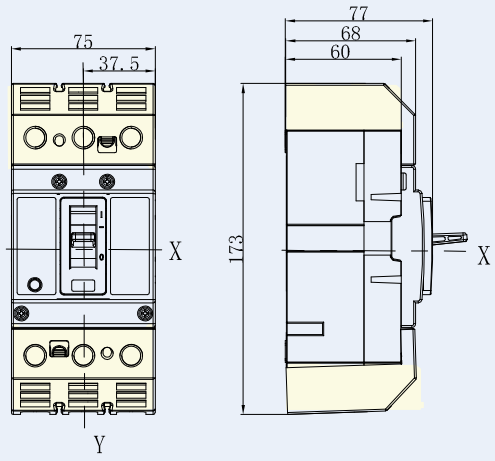
WLM6-125 Plug-in rear connection



Z3H-125

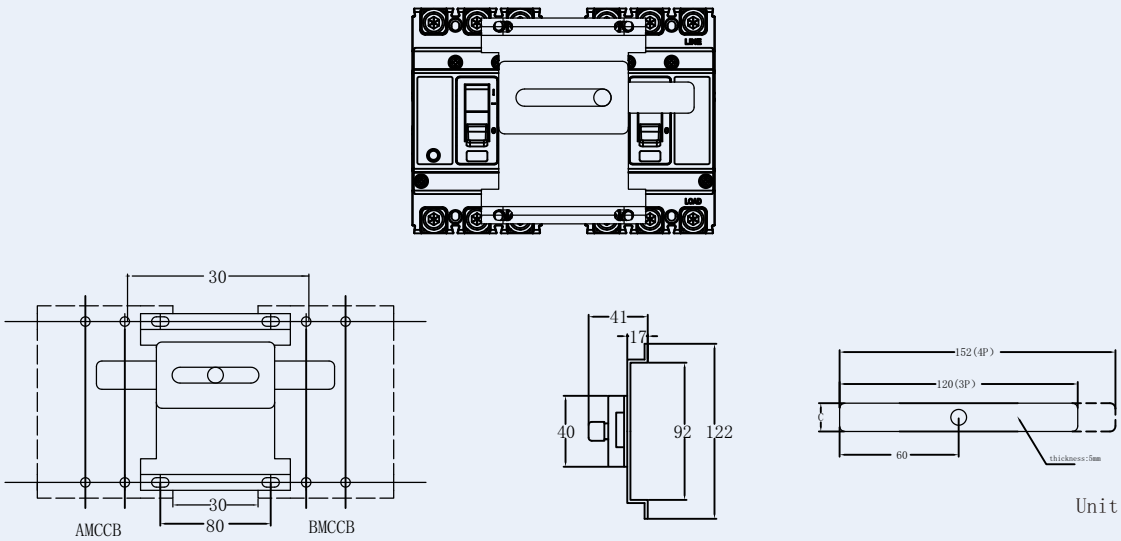
Unit (mm)

WLM6-125M/H Terminal cover



Unit (mm)

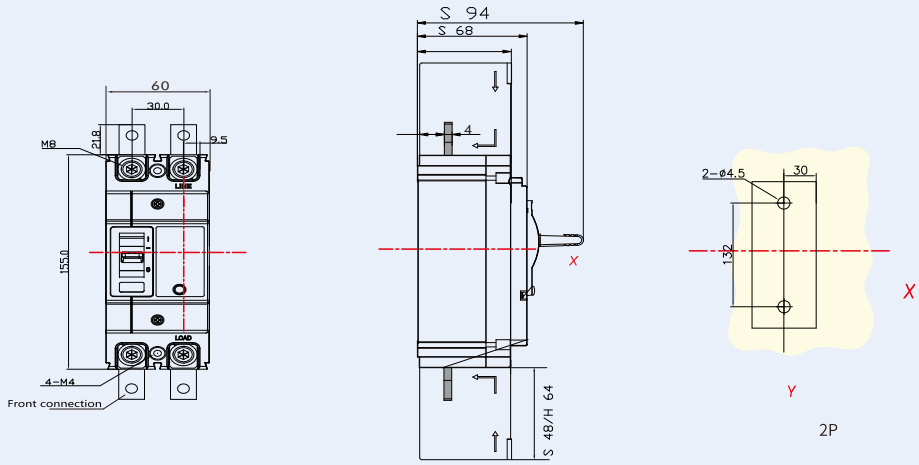
WLM6-125 Mechanical interlock



Unit (mm)

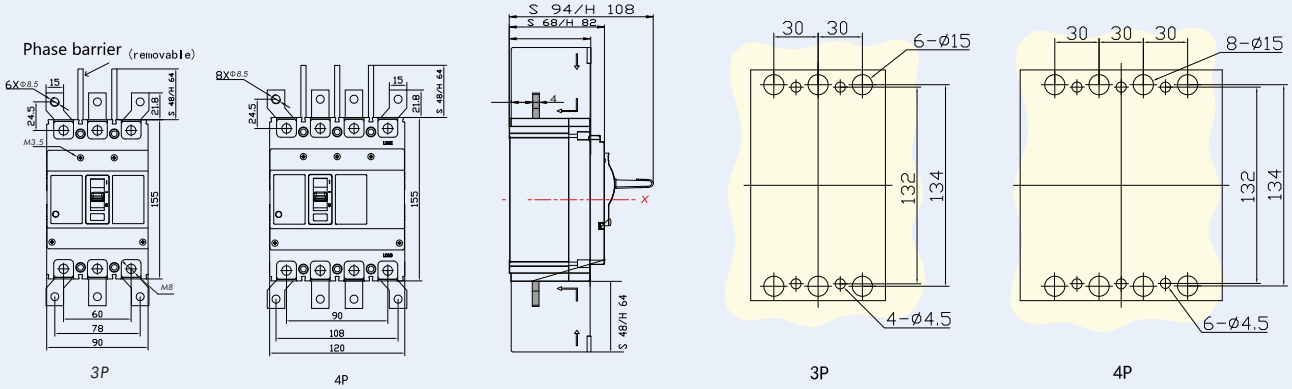
11.2 WLM6-160

WLM6-160 Front connection (2P)



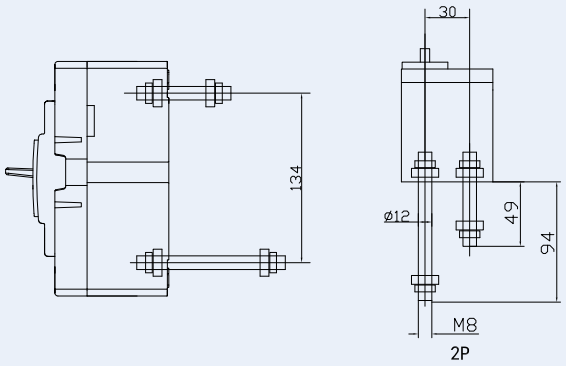
Unit (mm)

WLM6-160 Front connection (3P/4P)



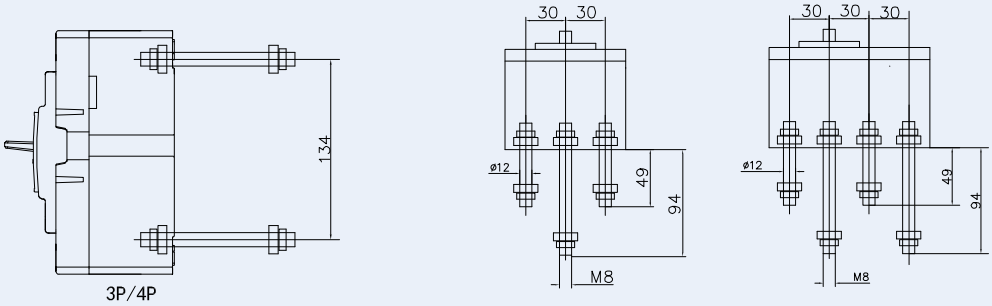
Unit (mm)

WLM6-160 Rear connection (2P)



Unit (mm)

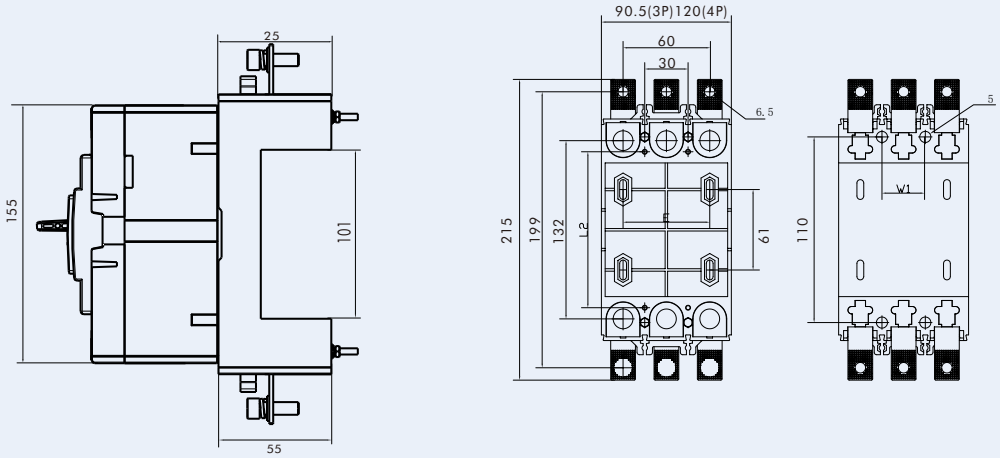
WLM6-160 Rear connection (3P/4P)



Unit (mm)

B

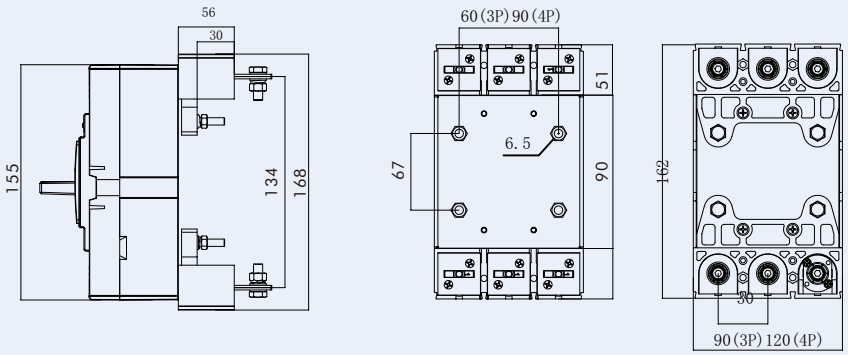
WLM6-160 Plug-in front connection



Z3Q-160

Unit (mm)

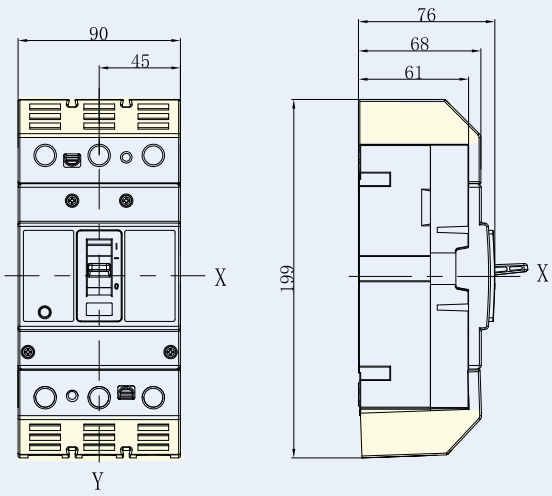
WLM6-160 Plug-in rear connection



Z3H-160

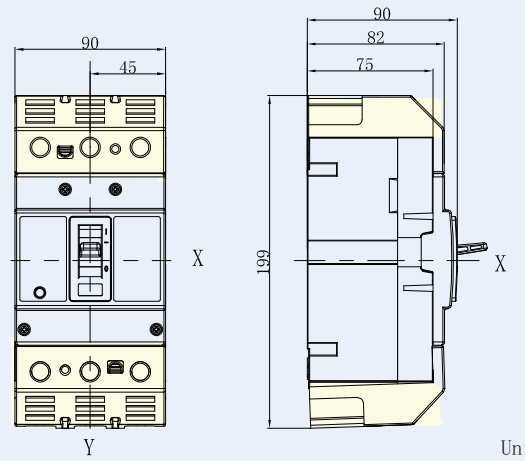
Unit (mm)

WLM6-160S Terminal cover



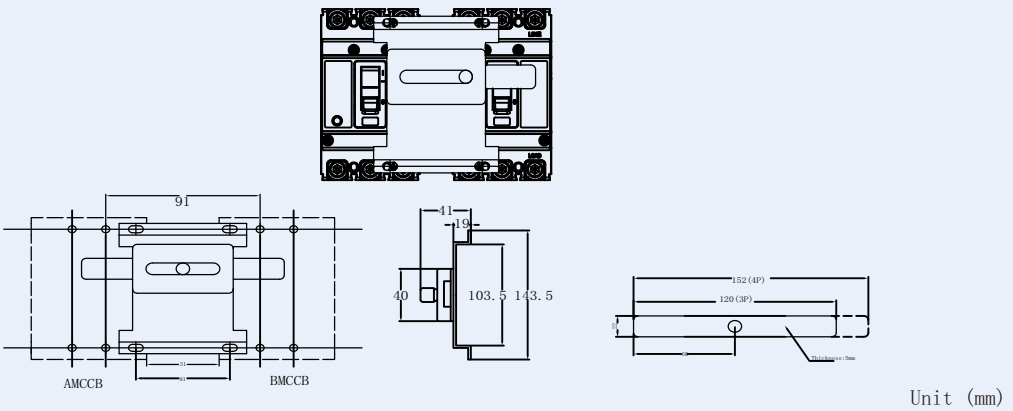
Unit (mm)

WLM6-160M/H Terminal cover



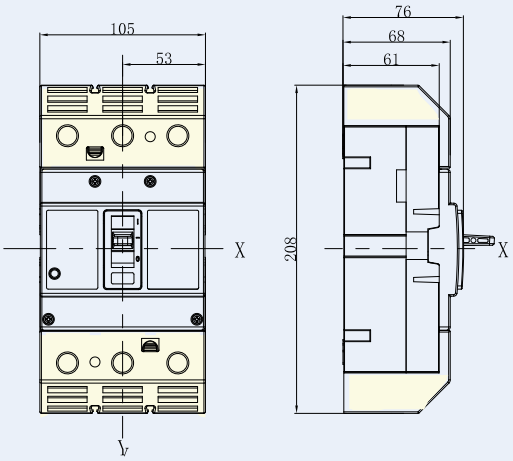
Unit (mm)

Mechanical interlock WLM6-160



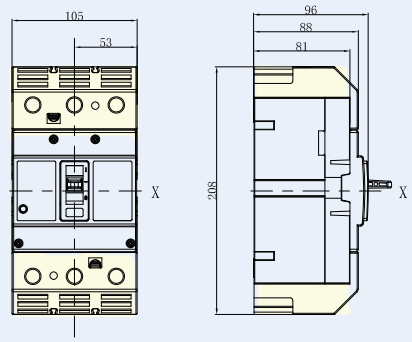
Unit (mm)

WLM6-250S Terminal cover

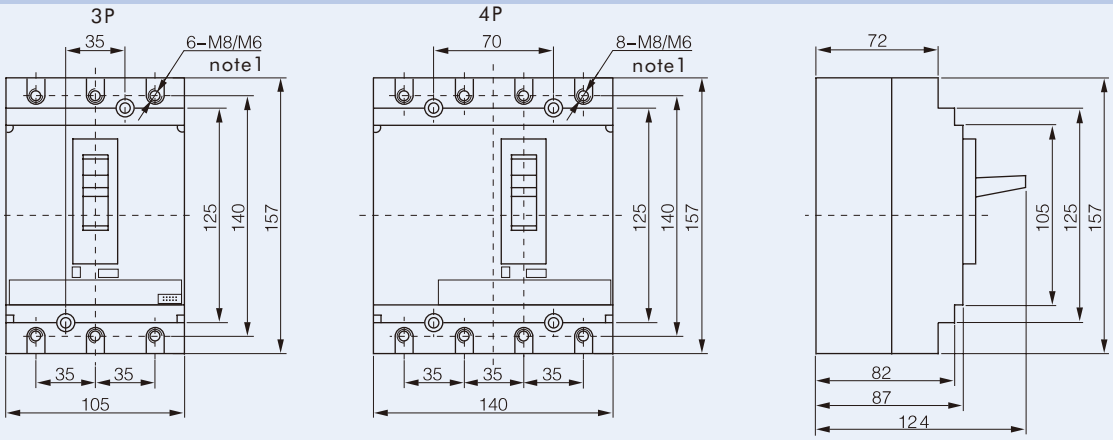


B

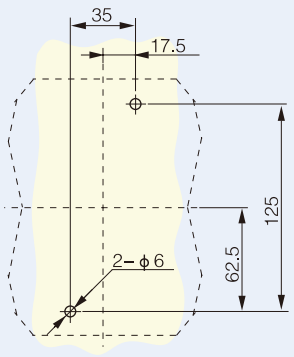
WLM6-250M/H Terminal cover



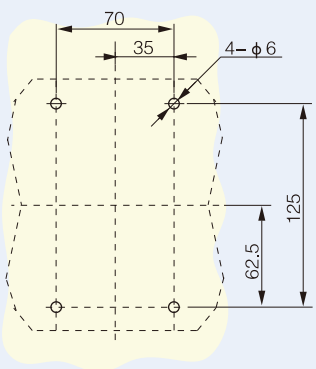
WLM6-250Q(3P/4P)Front connection



Attention1:when in > 100A,Fixing screw size should be M8, When In ≤ 100A, fixing screw size should be M6.



3P

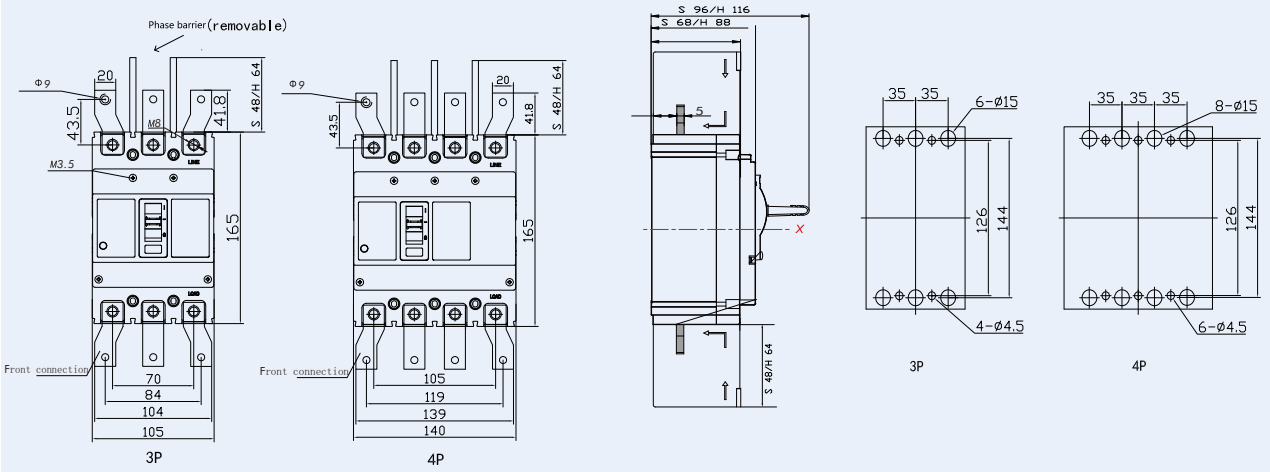


4P

Unit (mm)

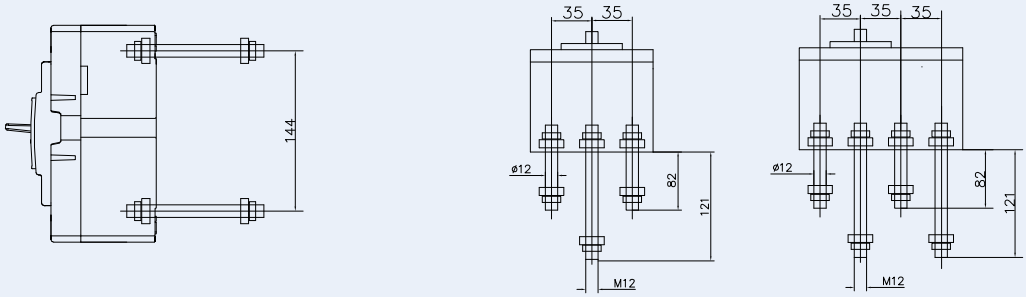
11.4 WLM6-250

WLM6-250 (3P/4P)Front connection



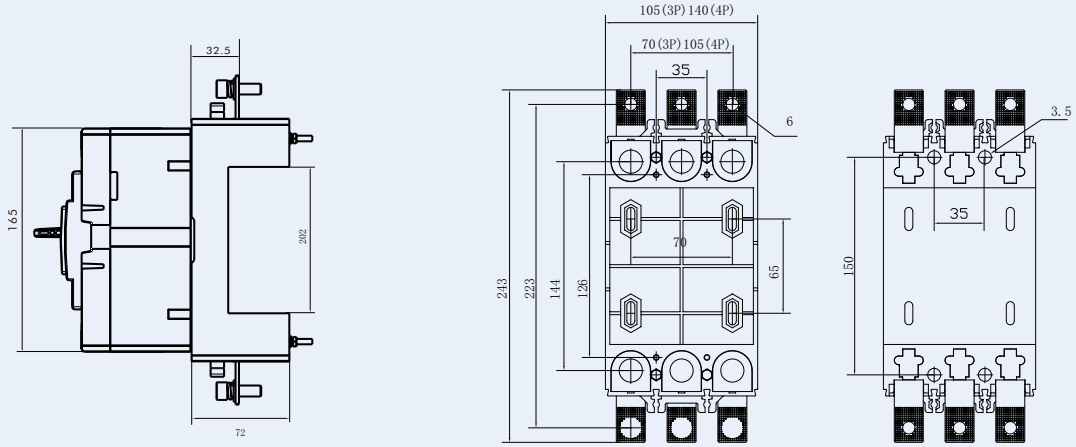
Unit (mm)

WLM6-250(3P/4P) Rear connection



Unit (mm)

WLM6-250 Plug-in front connect

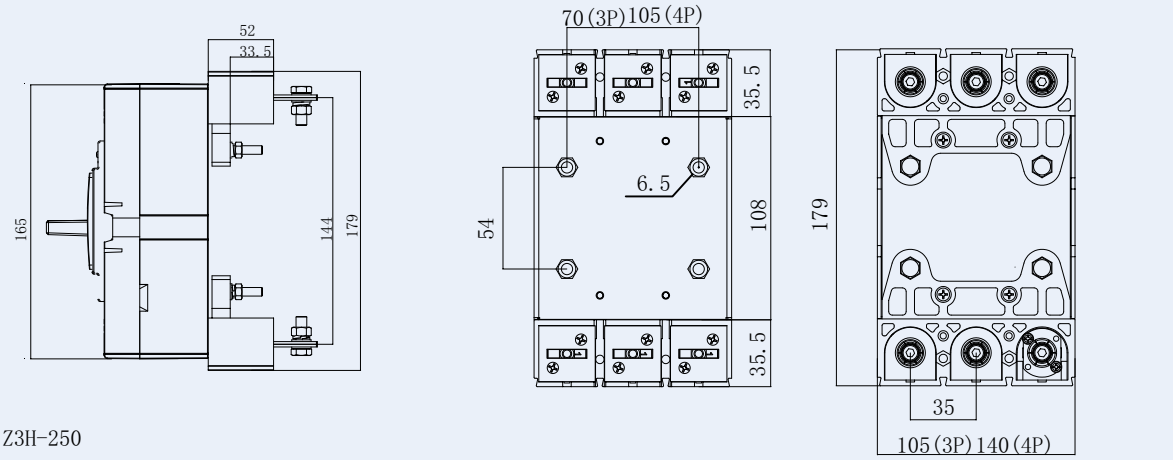


Unit (mm)

B

11.3 WLM6-250

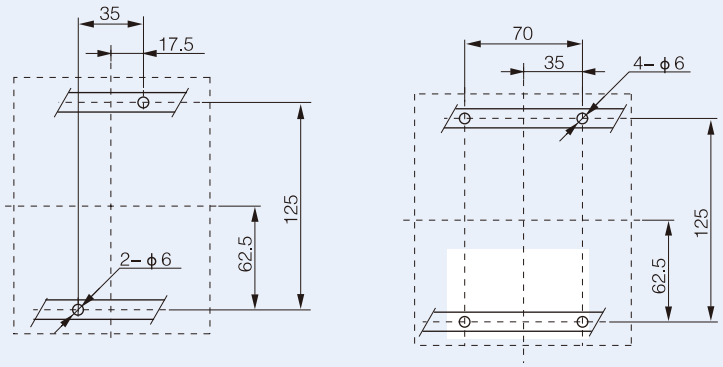
WLM6-250 Plug-in rear connection



Z3H-250

Unit (mm)

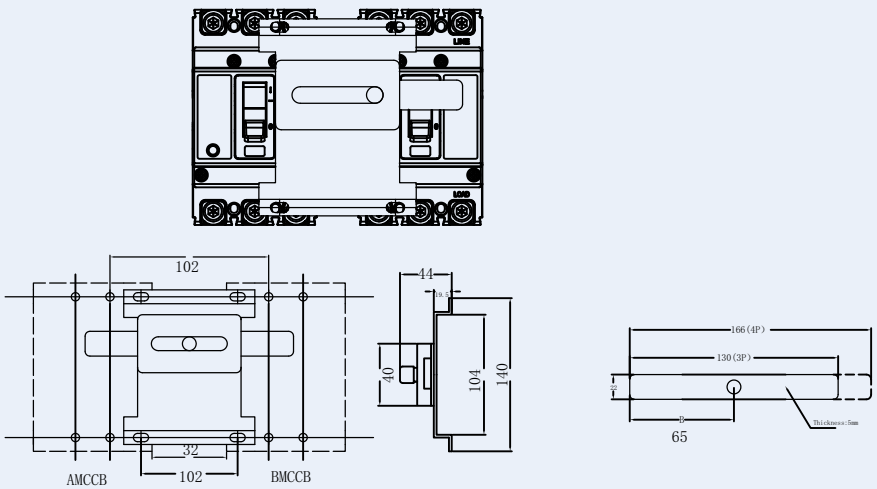
WLM6-250Q DIN-rail mounting



3P 4P

Unit (mm)

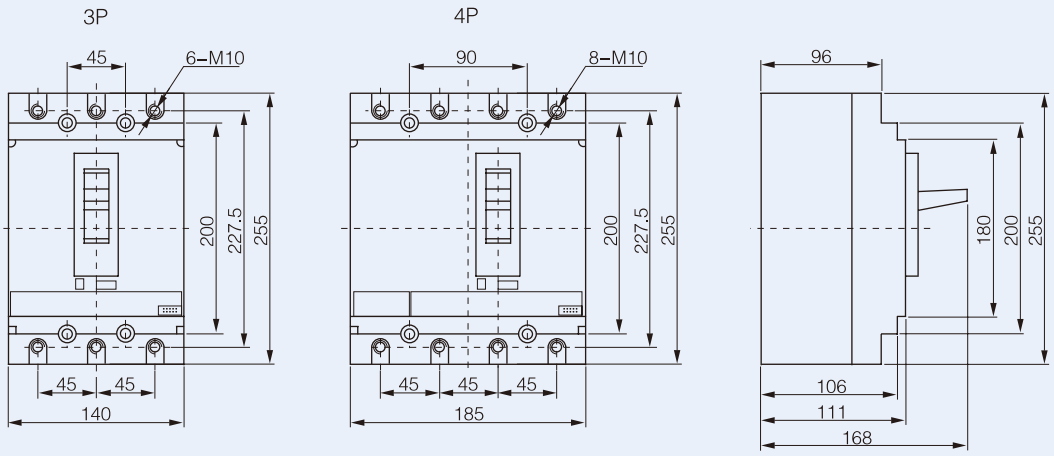
WLM6-250 Mechanical interlock

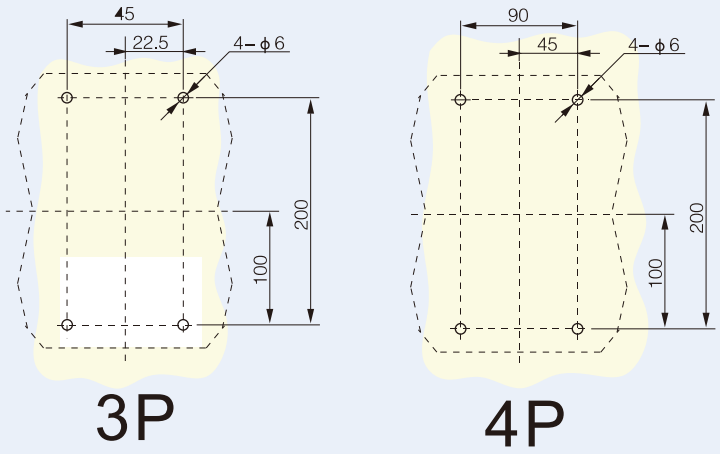


Unit (mm)

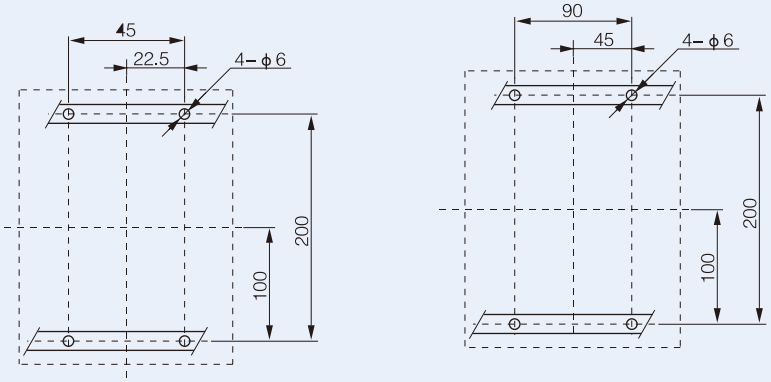
11.3 WLM6-400Q、WLM6-630Q

WLM6-400Q/630Q Front connection



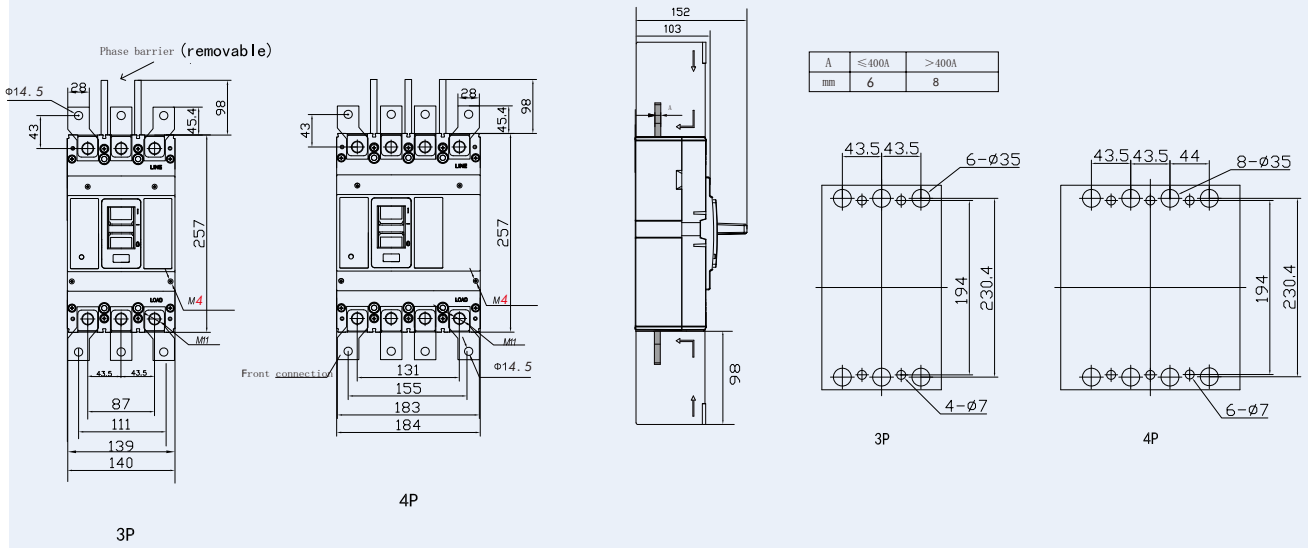


WLM6-400Q/630Q DIN-rail mounting



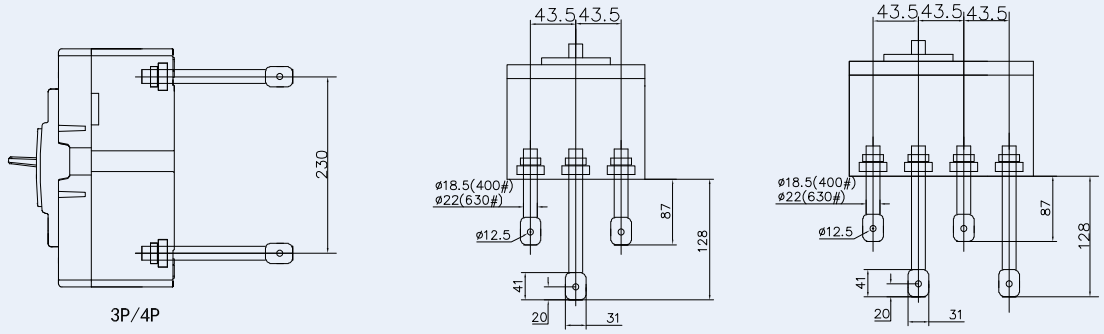
11.5 WLM6-400/630

WLM6-400/630 Front connection



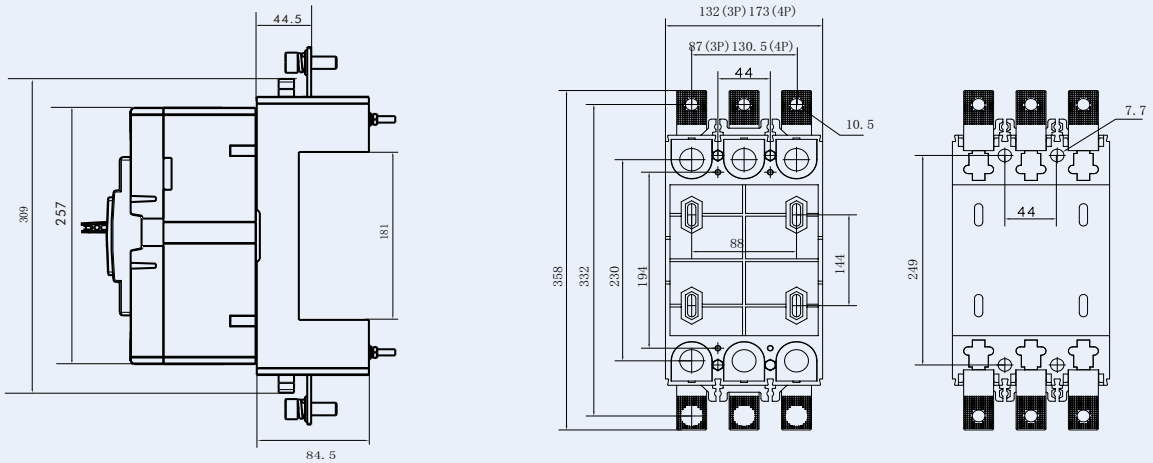
Unit (mm)

WLM6-400/630 Rear connection



Unit (mm)

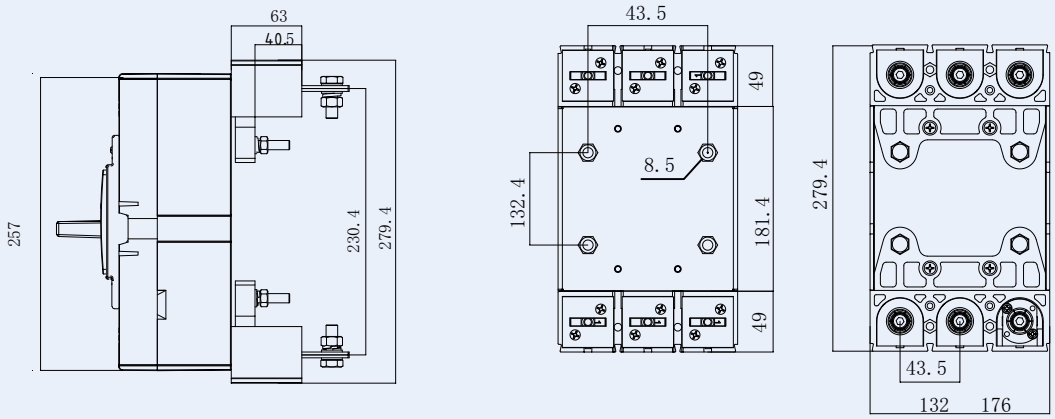
WLM6-400/630 Plug-in front connect



Unit (mm)

B

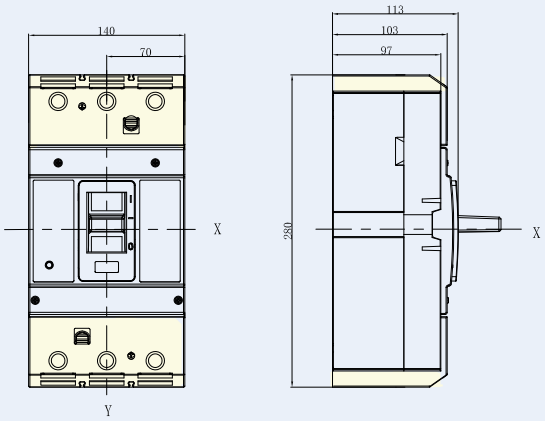
WLM6-400/630 Plug-in rear connection



Z3H-400/630

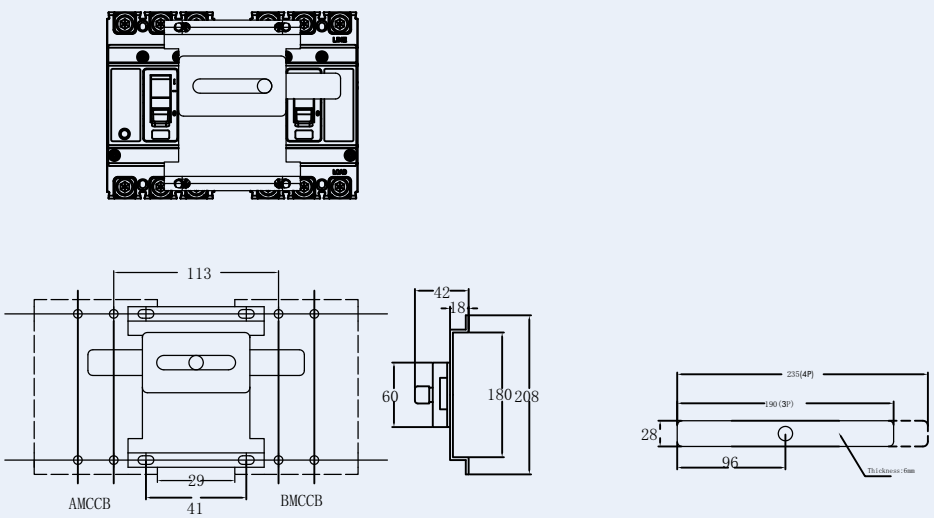
Unit (mm)

WLM6-400/630M/H Terminal cover



Unit (mm)

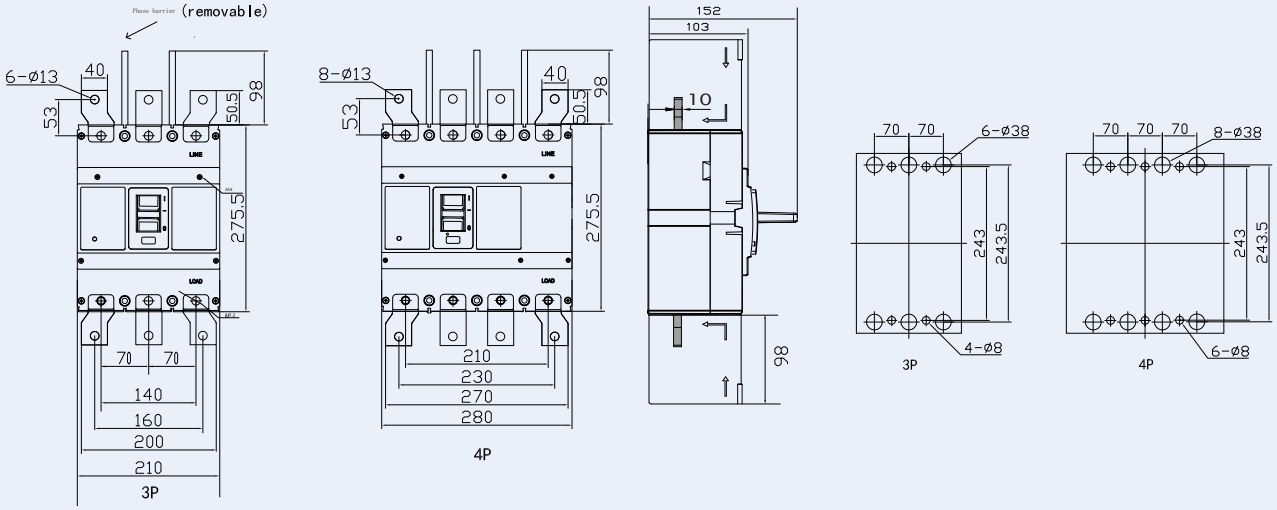
WLM6-400/630 Mechanical interlock



Unit (mm)

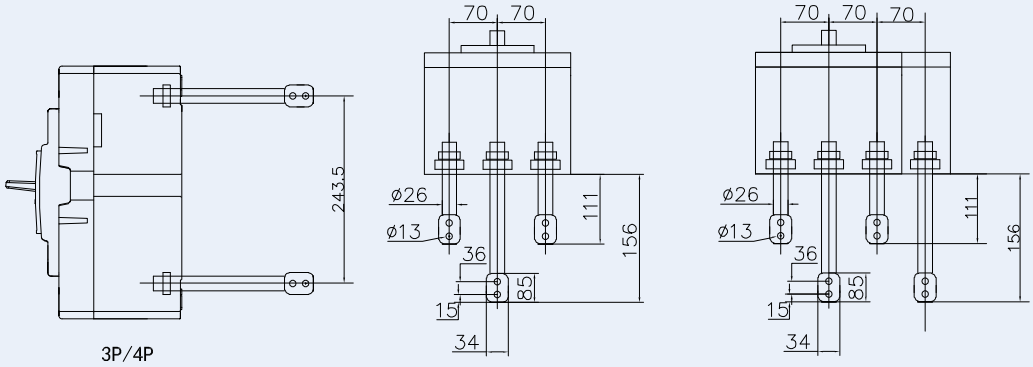
11.6 WLM6-800/1250

WLM6-800/1250 Front connection



Unit (mm)

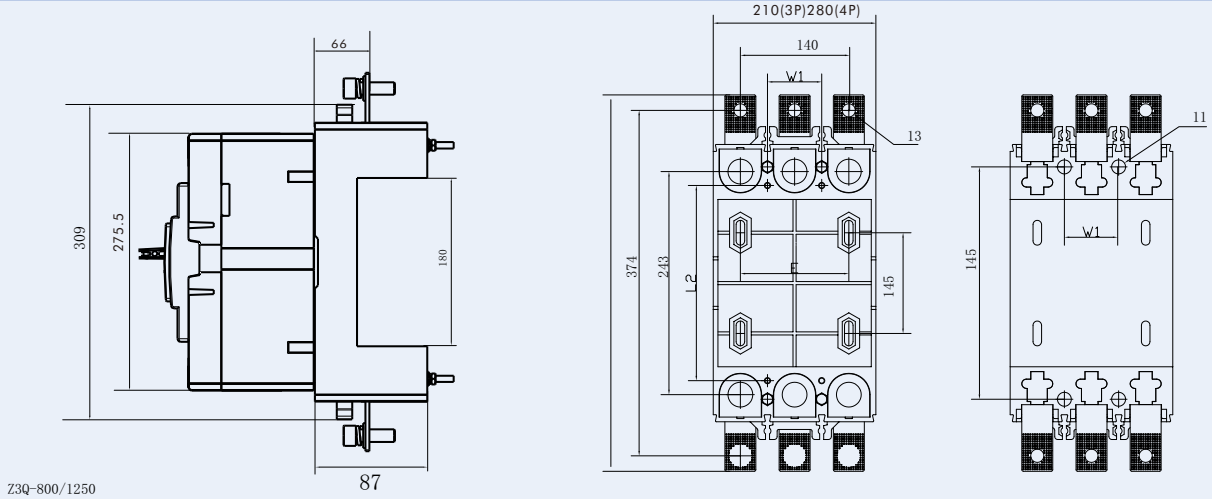
WLM6-800/1250(3P/4P) Rear connection



Z2H-800/1250

Unit (mm)

WLM6-800/1250 Plug-in front connect

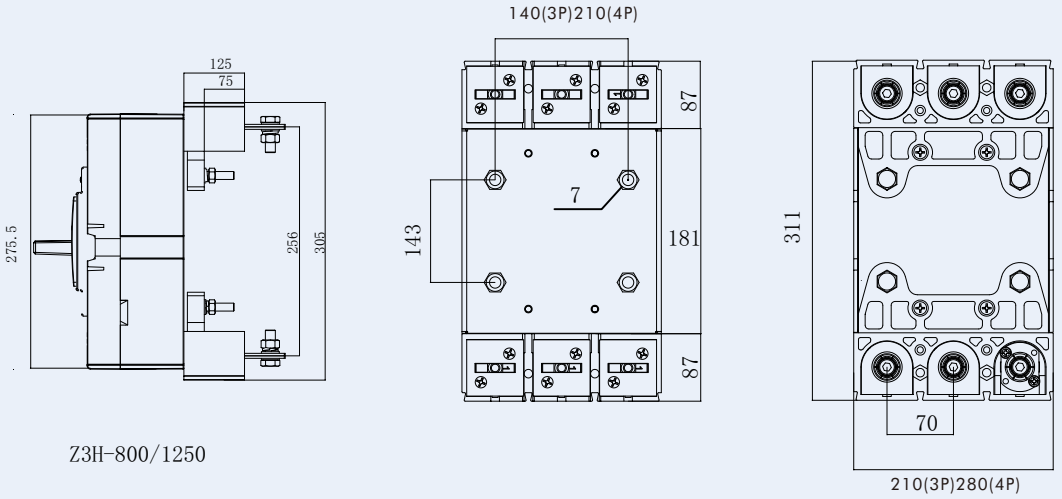


Z3Q-800/1250

Unit (mm)

B

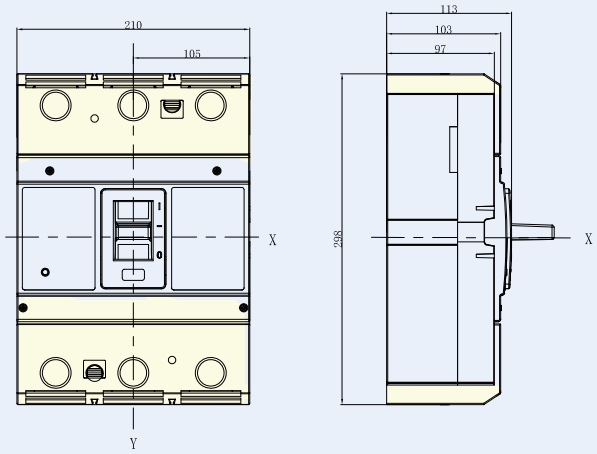
WLM6-800/1250 Plug-in rear connection



Z3H-800/1250

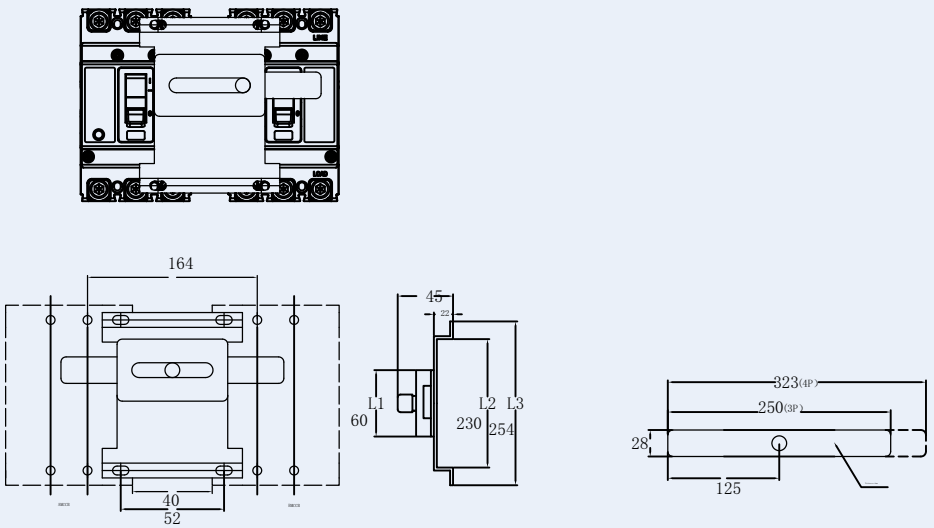
Unit (mm)

WLM6-800/1250M/H-3300 Terminal cover



Unit (mm)

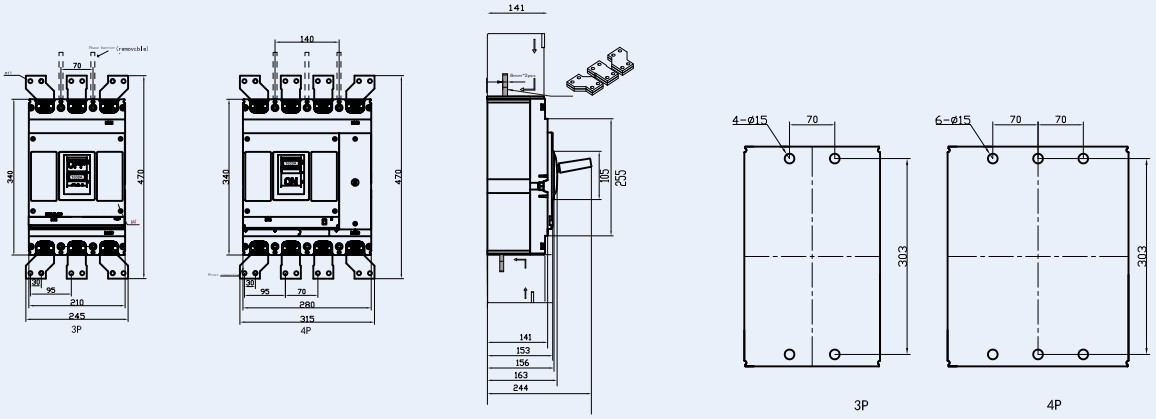
WLM6-800/1250 Mechanical interlock



Unit (mm)

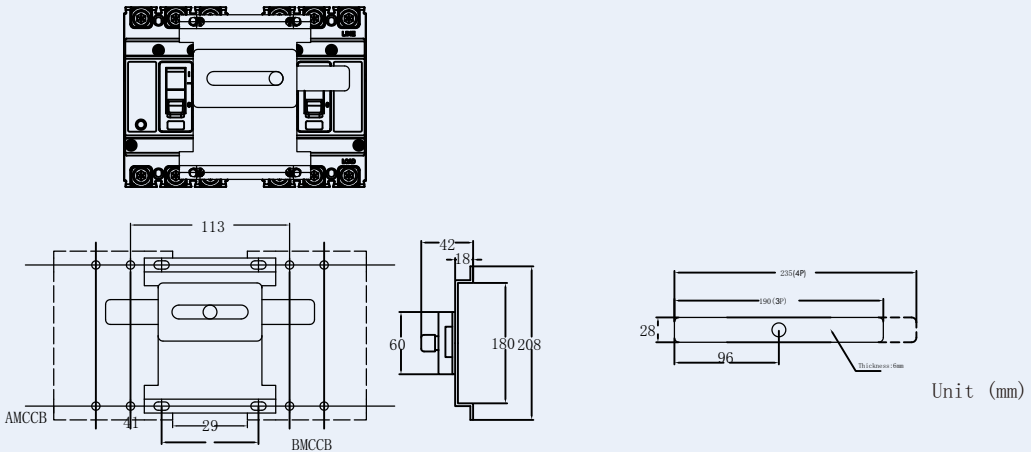
11.7 WLM6-2000

WLM6-2000 Front connection



Unit (mm)

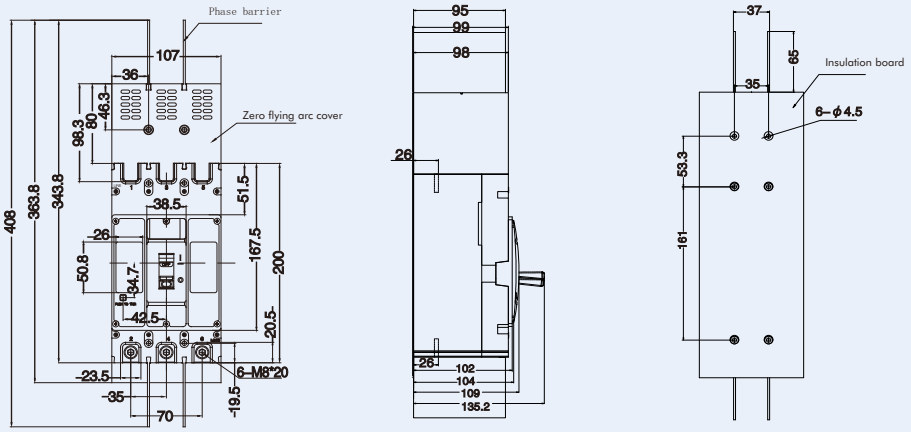
WLM6-2000 Mechanical interlock



Unit (mm)

11.8 WLM7HU-250/315

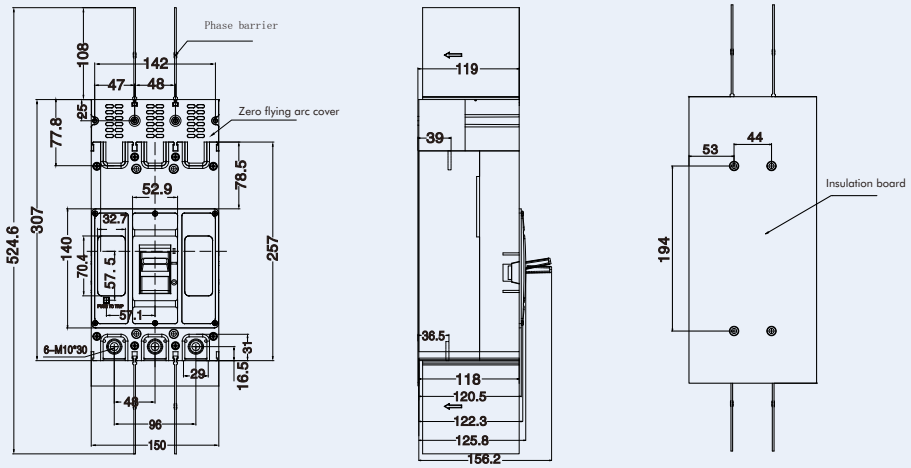
WLM7HU-250/315 3P Front connection



B

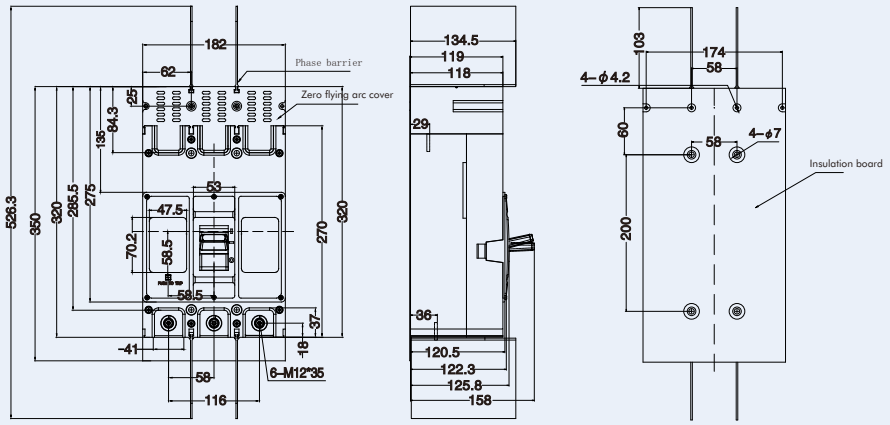
11.8 WLM7HU-400

WLM7HU-400 3P Front connection

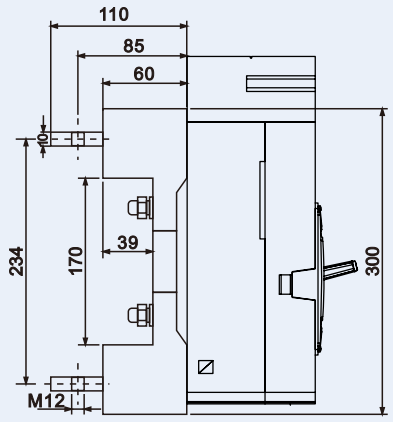


11.8 WLM7HU-630/800

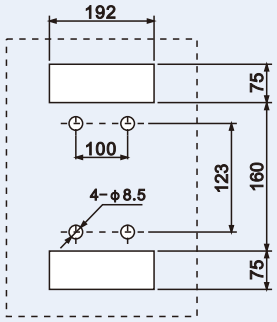
WLM7HU-630/800 3P Front connection



WLM7HU-630/800 3P plug in rear connection



Installation plate hole size



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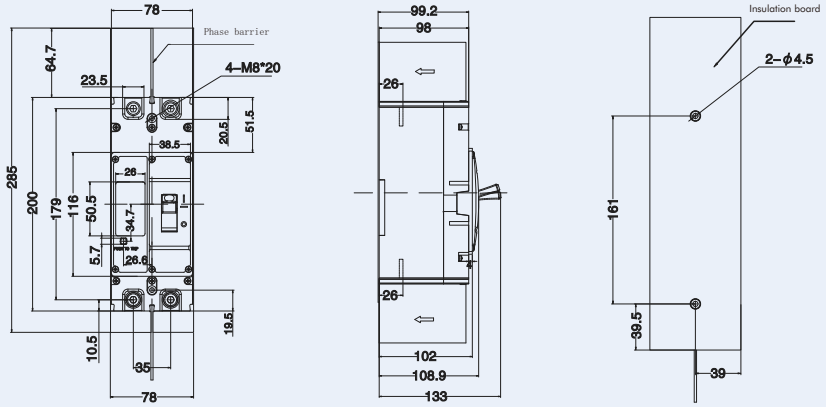
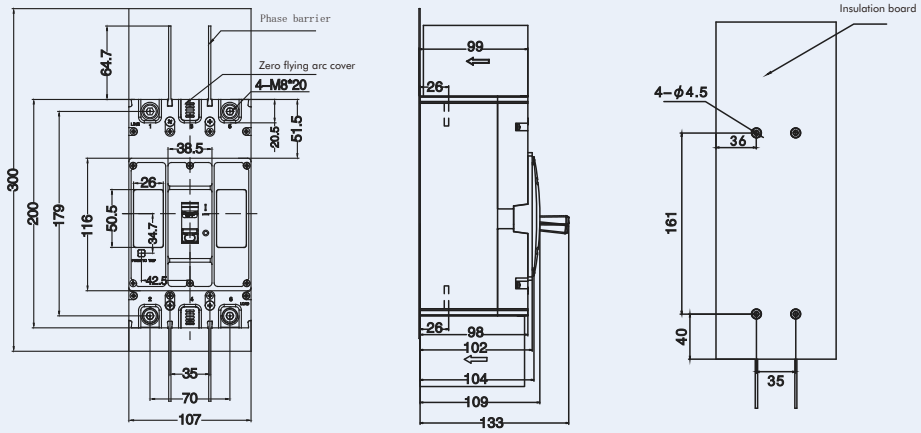
11.8 WLM7DC-250/315

WLM7DC-250/315 2P Front connection



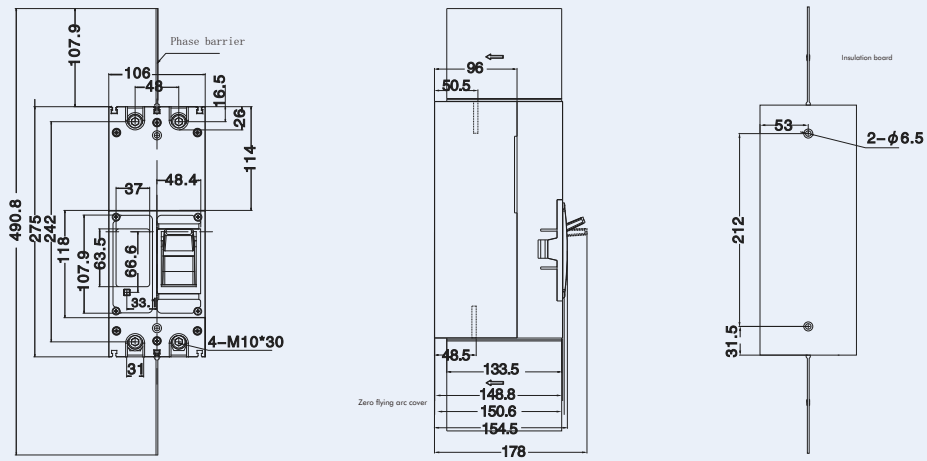
Unit (mm)

WLM7DC-250/315 3P Front connection



Unit (mm)

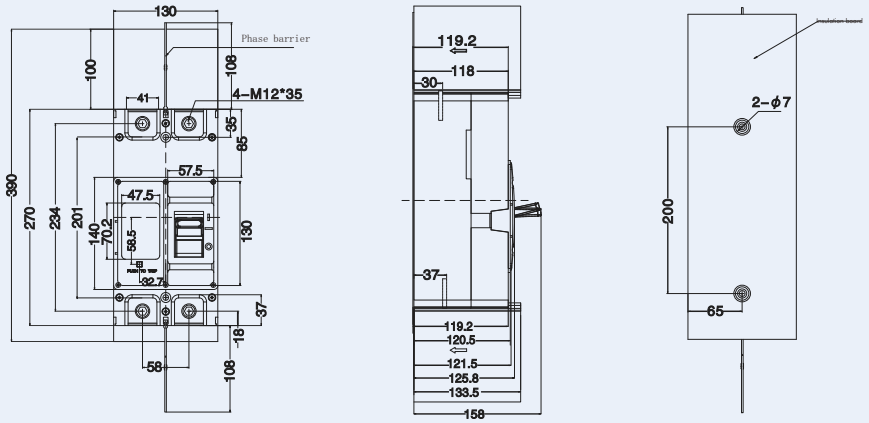
WLM7DC-400/630QH 2P Front connection



Unit (mm)

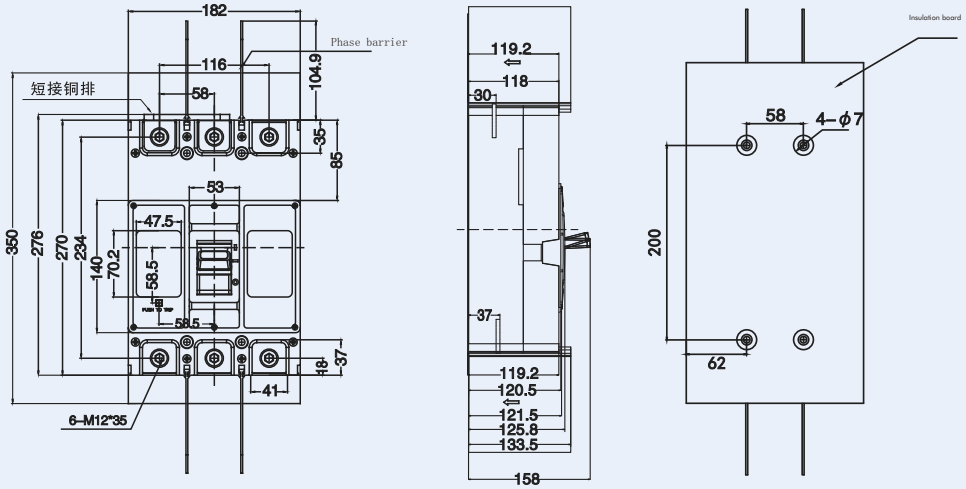
11.8 WLM7DC-400/630/800

WLM7DC-400/630/800 2P Front connection



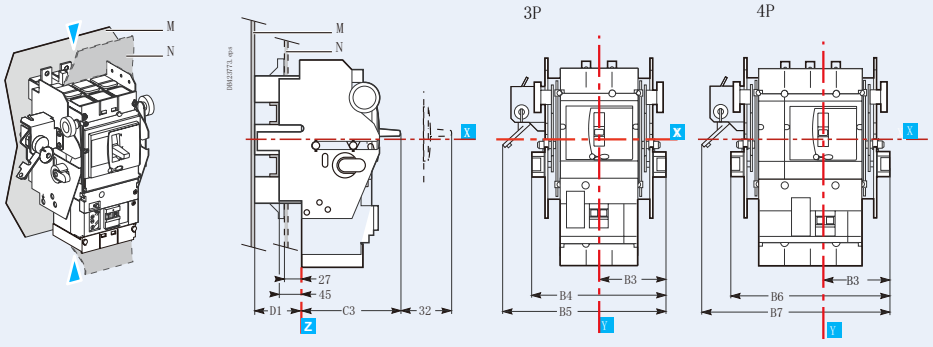
Unit (mm)

WLM7DC-400/630/800 3P Front connection



Unit (mm)

WLM6-250Q/400Q/630Q withdrawable version

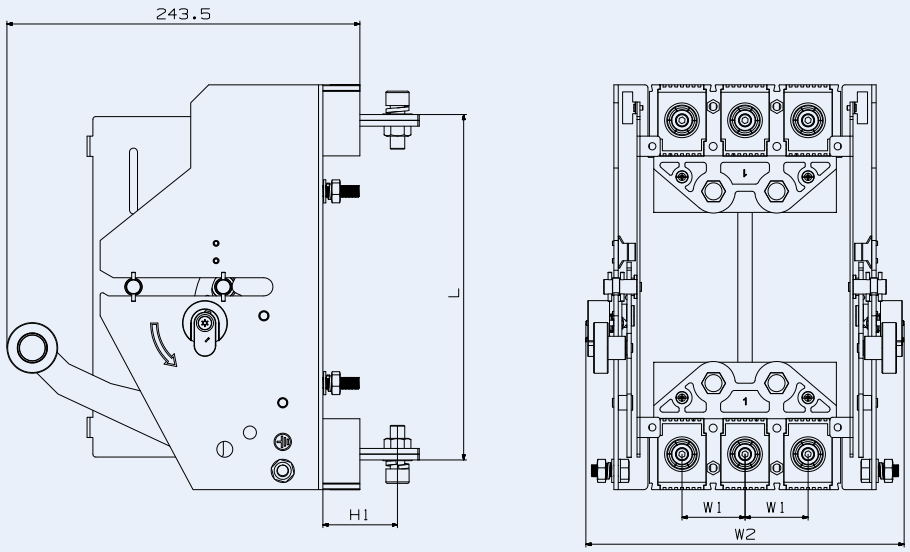


Type	A	A2	A5	A6	A7	A10	A11	B	B1	B2	B3	B4	B5	B6	B7	C3	D1
WLM6-250Q	80.5	94	155.5	236	169	175	210	52.5	105	140	92.5	185	216	220	251	126	75
WLM400/630Q	127.5	142.5	227.5	355	242.5	244	281	70	140	185	110	220	250	265	295	168	100

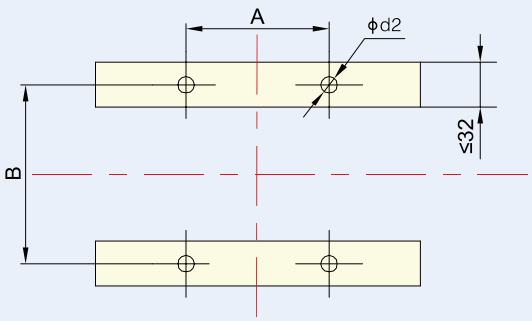
Unit (mm)

11.8 Dimensions - withdrawable version

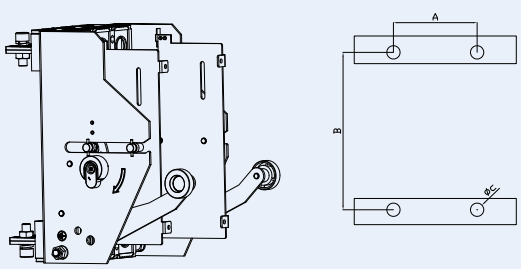
WLM6-400/630 Draw-out type



Model	circuit breaker	size				assembling size		
		L	H1	W1	W2	A	B	ϕc
SCH1-400/STM6	400/600	210	78	44	211	88	146	6.5
SCH1-630/STM6	800	212	72	70	289	140	145	8.5



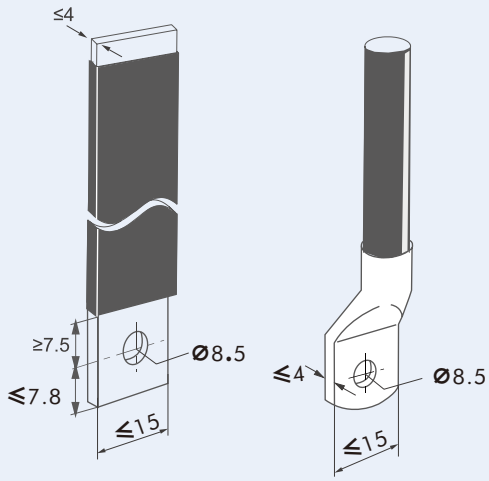
Pole	installation dimension		
	A	B	Φd2
3P	90	143	6.5
4P	135	143	6.5



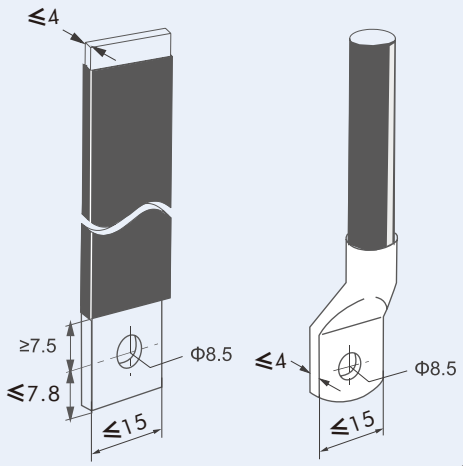
11.9 Wiring

Note:the busbar silvering is 3 μ

WLM6-125

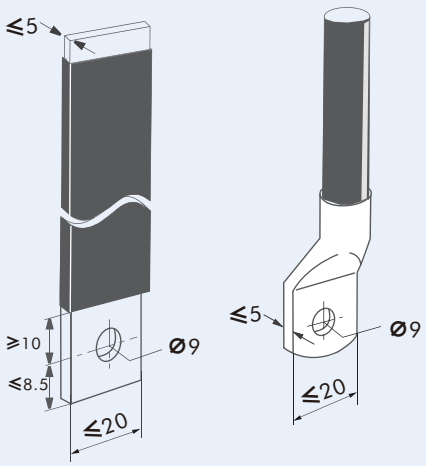


WLM6-160

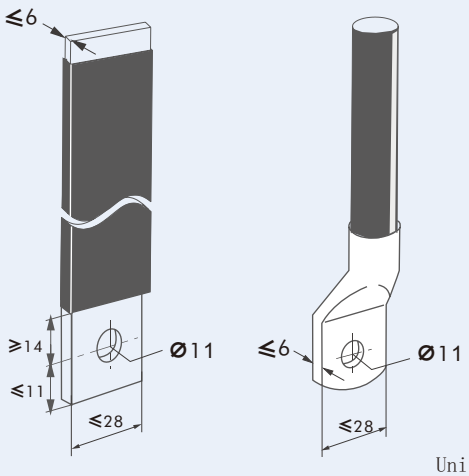


Unit (mm)

WLM6-250

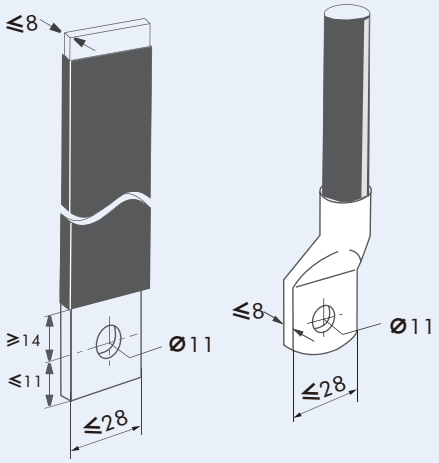


WLM6-400



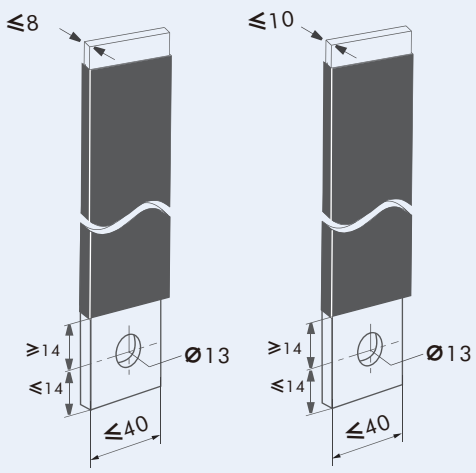
Unit (mm)

WLM6-630



WLM6-800(630A)

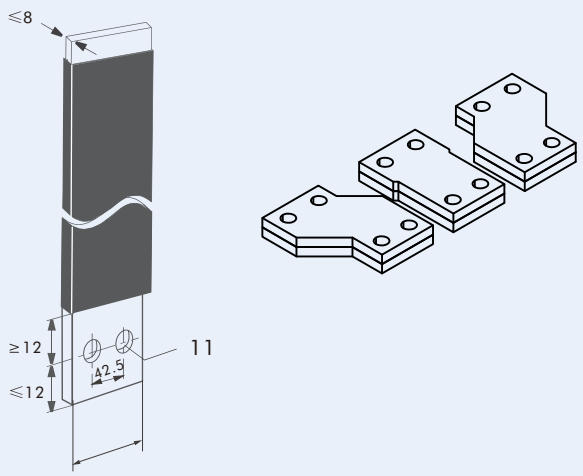
WLM6-800



Unit (mm)

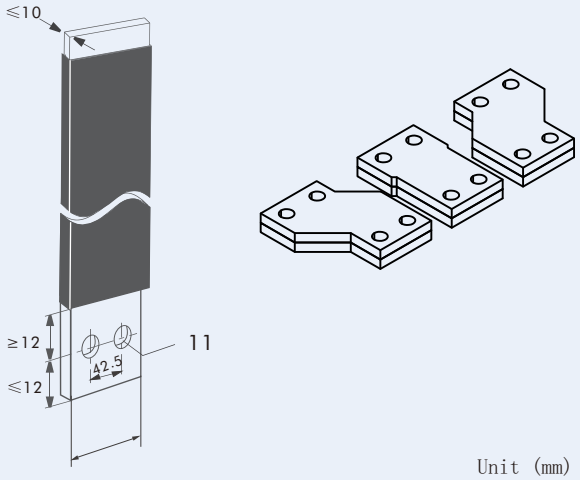
Note:the busbar silvering is 3 μ

WLM6-1250



Note:one pole should need 2 pcs of busbar

WLM6-1600/2000



Unit (mm)

Note:one pole should need 2 pcs of busbar

B

12. Accessories characteristics and installation

WLM6 moulded case circuit breaker has various accessory modules, which can be found in P84 for more details

12.1 AX Auxiliary contact

9.1.1 Function

Remotely indicate the circuit breaker's making (on) or breaking / tripping (OFF) status, connected to the auxiliary circuit of the circuit breaker.

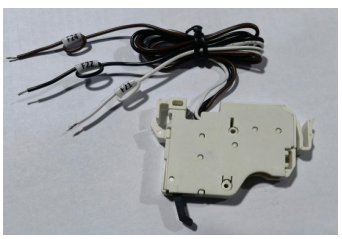
12.1.2 Model description

AX(S) – □ □ – □

- Wiring method: SX is a long line type, JXH is a terminal type
- Installation position: Z is on the left, Y is on the right, and can be omitted for both sides
- Circuit breaker frame current level current
- Name: AX represents auxiliary, (S) represents double

AX-125 single auxiliary contact

AXS-125 Double auxiliary contact



AX-400 single auxiliary contact

12.1.2 Code for mccb Frame

Frame	125/160	250	400
code	AX-125	AX-250	AX-400

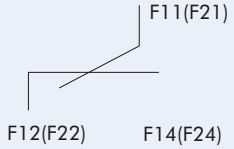
12.1.3 Indication of circuit breaker status

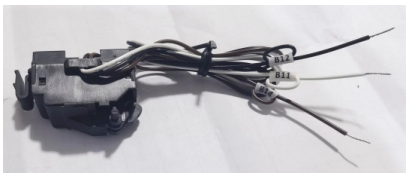
The circuit breaker is in the "off"or "free trip"position	double AX	F14 F12 — F11; F24 F22 — F21
	single AX	F14 F12 — F11
"Normally closed" contacts status	change from"closed"to "open",change from "open"to "closed"	

12.1.4 Electrical characteristics

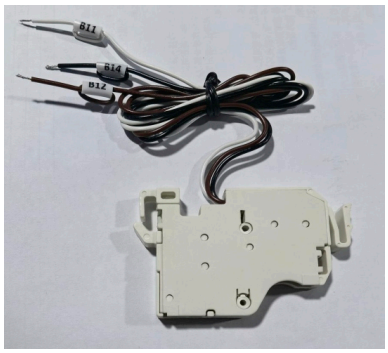
Ue (V)	AC		DC		
	230V	400V	110	220	24
In (A)	0.3	0.3	0.15	0.15	0.15

12.1.5 Wiring diagram





AL-125 alarm contact



AL-400 alarm contact

12.2 AL Alarm contact

12.2.1 Function

It is mainly used to provide a signal when the load of the circuit breaker is overloaded, short-circuit or undervoltage, or tripped.

The reasons for the failure of the alarm signal are:

- Over-load or short-circuit
- Undervoltage trip
- Residual current action trip
- Manual free trip

12.2.2 Model description

AL – □ □ – □

Wiring method: SX is a long line type, JXH is a terminal type

Installation position: Z is on the left, Y is on the right, and can be omitted for both sides

Circuit breaker frame current level current

Name:Alarm contact

12.2.3Code for mccb Frame

Frame	125/160	250	400
code	AL-125	AL-250	AL-400

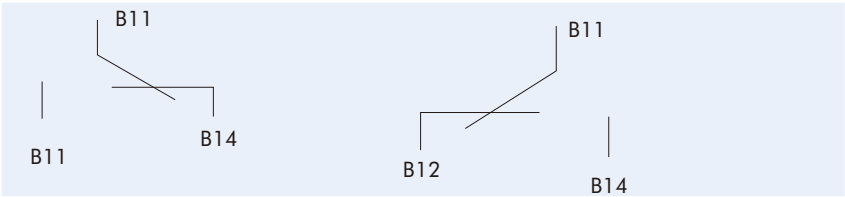
12.2.4 Indication of circuit breaker status

Circuit breaker is at breaking or making status	B14, B12 — B11
Circuit breaker is at free tripping status	B14, B12 — B11

12.2.5 Electrical characteristics

Ue	(V)	AC 230V	AC 400V	DC 110	DC 220	DC 24
In	(A)	0.3	0.3	0.15	0.15	0.15

12.2.6 Wiring diagram



B

12.3 SHT Shunt release

12.3.1 Function

Shunt releases operate according to electrical signals, enabling remote control and automatic control of circuit breakers. When the supply voltage When the voltageis equal to any voltage between 70% and 110% of the rated control power supply voltage, the shunt release should enable the circulit bresker to operate relisbly.

SHT-125shunt release

12.3.2 Model description

SHT – □ □ – □

- Wiring method: SX is a long line type, JXH is a terminal type
- Installation position: Z is on the left, Y is on the right, and can be omitted for both sides
- Circuit breaker frame current level current
- Name:shunt release

SHT-400shunt release

12.3.2 Code for mccb Frame

Frame	125/160	250	400
code	SHT-125	SHT-250	SHT-400

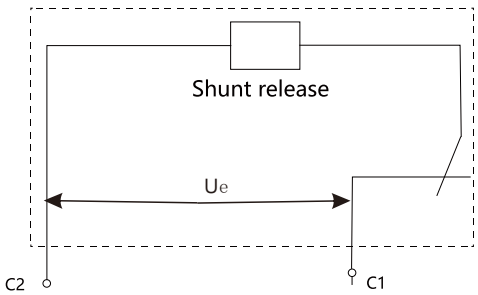
12.3.3 Electrical characteristics

Ue	(V)	AC		DC		
		230V	400V	110	220	24
In	(A)	0.3	0.3	0.15	0.15	0.15

12.3.4 Action characteristics

Can be powered for a long time. Response time: pulse type ≥ 220ms, ≤ 60ms

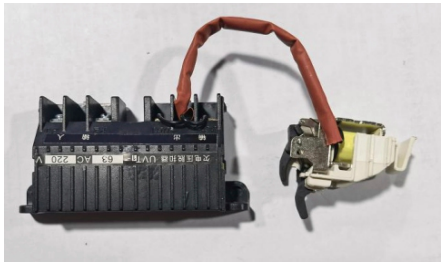
12.3.5 Wiring diagram



Note:

When the rated control power supply voltage DC24V shunt release is used, the maximum length of the copper wire (each of the two wires) must meet the following table:

Conductor cross-sectional area / Rated control supply voltageUs (DC24V)	1.5mm²	2.5mm²
100%U_s	150m	250m
85%U_s	100m	160m



UVT-125Under voltage release

UVT-400 Under voltage release

12.4 UVT Under-voltage release

12.4.1 Function

Realize the under-voltage protection function of the circuit breaker, open the circuit breaker when the power supply voltage is too low, and protect the electrical equipment.

- When the supply voltage drops (even slowly) to 70% to 35% of the rated control supply voltaage, the under voltage, the undervoltage trips, the breaker should open the circuit breaker reliably.
- When the supply voltage is equal to or greater than 85% of the rated control supply voltage of the undervoltage release, the circuit breaker should be guaranteed to close.
- When the supply voltage is less than 35% of the rated control supply voltage of the undervoltage release, the undervoltage release should prevent the circuit breaker.

12.4.2 Model description

UVT – □ □ – □

- Voltage selection range : DC24V, DC110V, DC220V, AC230V, AC400V
- Installation position: Z is on the left, Y is on the right, and can be omitted for both sides
- Circuit breaker frame current level current
- Name:under voltage release

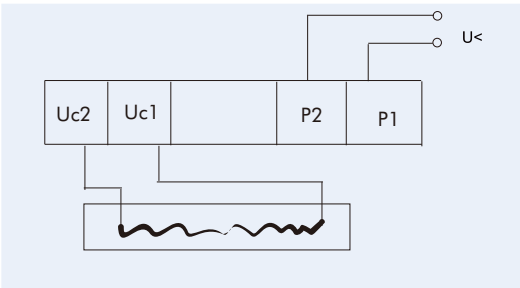
12.4.3 Code for mccb Frame

Frame	125/160	250	400
code	UVT-125	UVT-250	UVT-400

12.4.4 Electrical characteristics

Ue (V)	AC		DC		
	230V	400V	110	220	24
In (A)	0.3	0.3	0.15	0.15	0.15

12.4.5 Wiring diagram



B

DC6-250 Motor operating mechanism

12.5CD Motor-driven mechanism

12.5.1 Function

It is suitable for closing, opening and re-opening of circuit breakers at long distances as well as automation applications.

A: Protection level: IP40

- Reliable insulation;
- With isolation function indication;
- O (open), I (closed) and free trip 3 position indications;
- Free circuit breaker trip;
- Manually or automatically operated circuit breakers for closing and opening.

B: manul operation

Pull the "manul/auto" switch to the manul position and turn the operation handle to switch on and off the circuit breaker.

C: automatic operation

Pull the "manul/auto" switch to the automatic position, and remotely press the "close or open" button to switch on and off the circuit breaker.

D: Automatically switch on or off by pulse or self-holding signal control.

E: Only when the control voltage is ≥ 85% Un and ≤ 110% Un can the circuit breaker be reliably switched on and off.

12.5.2 Model description

DC6 – □ – □ – □

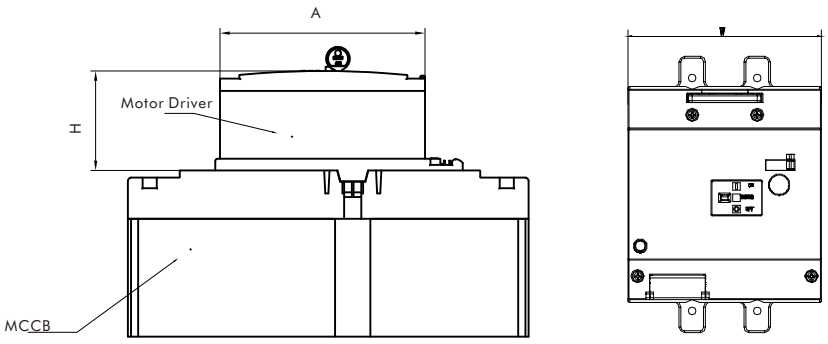
- □ : Working voltage
- □ : company code
- □ : Circuit breaker frame current level current
- DC6 : Electric operating mechanism

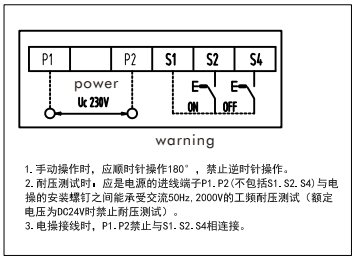
Note: The 1600 frame motor-driven mechanism is assembled in the factory and is suitable for electronic circuit breakers and disconnectors according to the inside of the circuit breaker.

12.5.3 Electrical characteristics

Model / type	125/160/250/400/630/800/1250/2000
Ue	AC230V 、400V 、DC24V
Hz	50HZ

12.5.4Installation dimension diagram of motor operating mechanism

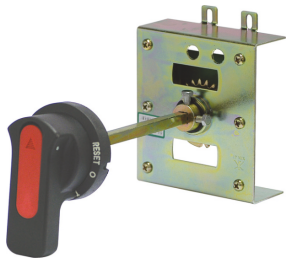




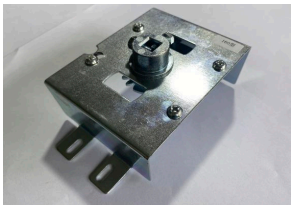
Product Model		DC6 -160	DC6 -250	DC6 -400	DC6 -800	DC6 -2000
Size	A	110	140	177	174	174
	H	62	59	61	78	78
	W	90	105	140	210	210

Motor Driver assembling sizse(mm)

12.6 SC Economic extended rotary handle



SC-160Manual operation mechanism



12.6.1 Function

The unique design and transmission structure are adopted to realize the closing, opening and re-closing operation of the circuit breaker by rotating the handle.

Protection degree: IP30

- With isolation funtion indication;
- O (open), I (closed) and free trip 3 position indications;
- The circuit breaker can be locked in the OFF position with 1~3 padlocks with a diameter of 5~8mm. At this time, it can prevent the circuit breaker from closing and the swith cabinet from opening;
- When the switch is in the ON position, the cabinet door cannot be opened under the action of the rotary handle (if the cabinet door is opened urgently, the cabinet door can be opened by the emergency unlocking device on the handle).

12.6.2 Model description

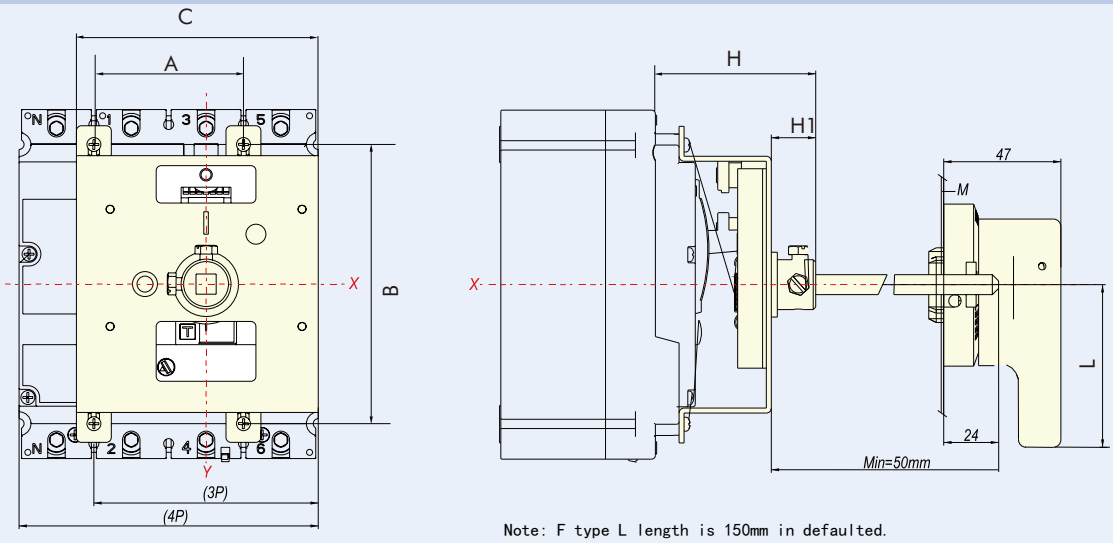
SC □ - □ Y - 3P - □ - □

- Square bar lengh size(note1)
- supplier
- poles:3P/4P
- Blank:Staight handle; Y:circle handle; F:square handle
- Circuit breaker frame current level current
- Blank:central type; 2:Eccentric type; 5:staight type
- Manual operation mechanism

Note1:default length of shaft is 150mm
150mm/200mm/300mm/350mm/500mm

12.6.3 Installation dimension drawing

SC Overall and mounting dimension

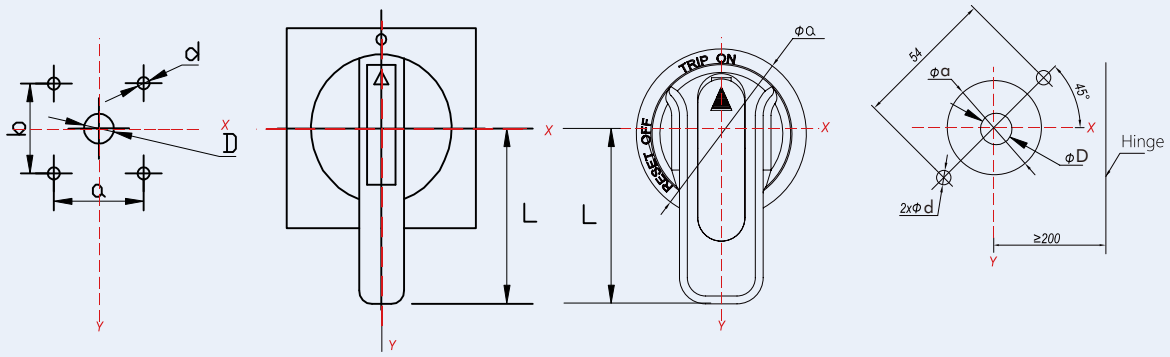


Note: F type L length is 150mm in defaulted.

Frame current		SC -125	SC -160	SC -250	SC -400/630	SC -800
Size	A	25	30	35	128	198
	B	111	132	126	194	243
	C	77	82	105	140	208
	H	58	57	64	95	94
	H1	13	13	13	20	20

Outline and Installation Dimensions of Operating Mechanism Handle for SC
Unit:mm

SC Overall and mounting dimension



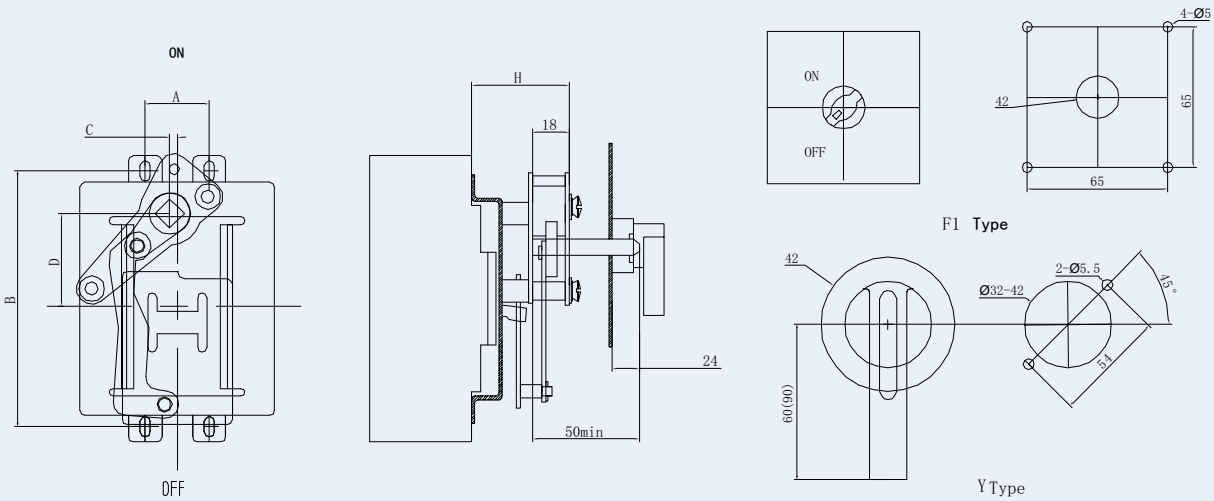
F type of extansion handle

Y type of extansion handle

Model	A1 63A-250A	A2 400A-1000A	A3 1250A-1600A
D	ø35	ø35	ø35
d	ø4.5	ø4.5	ø4.5
a	65	65	65
b	65	65	65
L	65	95	125

Model	B1 63A-250A	B2 400A-1000A	B3 1250A-1600A
D	ø35	ø35	ø35
d	ø4.5	ø4.5	ø4.5
a	ø53	ø53	ø53
L	65	95	125

SC2 Overall and mounting dimension



Frame current		SC2-125	SC2-160	SC2-250	SC2-400/630	SC2-800
Size	A	30	30	35	128	198
	B	132	132	126	194	243
	C	11	11	11	15	15
	D	32	32	32	60	60
	H	46	46	46	61	61

Outline and Installation Dimensions of Operating Mechanism Handle for Sc2
Unit:mm

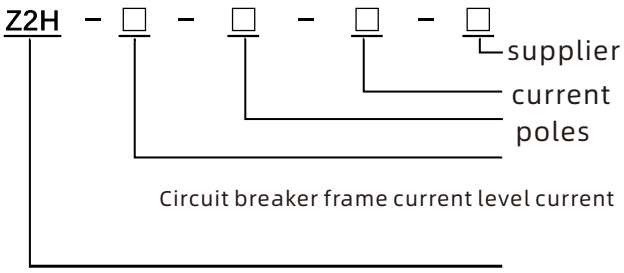
B

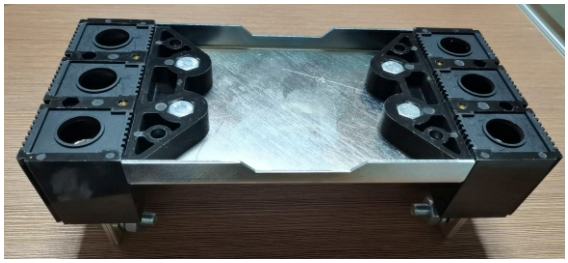
Z2H -400- ST Rear plug in seperation

12.7 Z2H Rear plug in seperation

Function: Provides flexible wiring for circuit breakers to be used in conjunction with distribution boards

12.7.1Model description



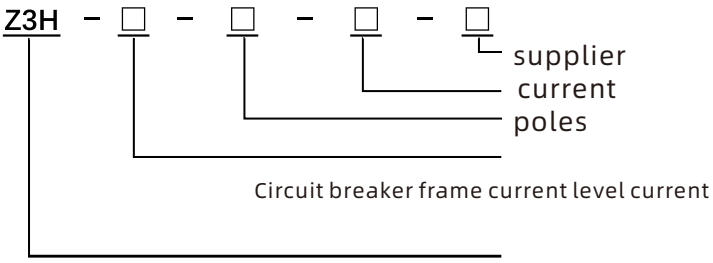


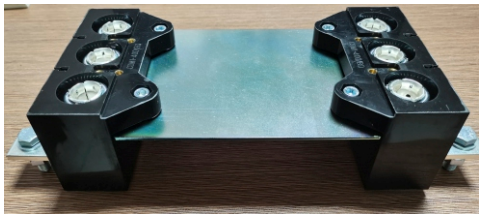
Z3H -400 -ST Rear plug-in integrated type

12.8 Z3H Rear plug-in integrated type

Function: Provides flexible wiring for circuit breakers to be used in conjunction with distribution boards

12.8.1Model description



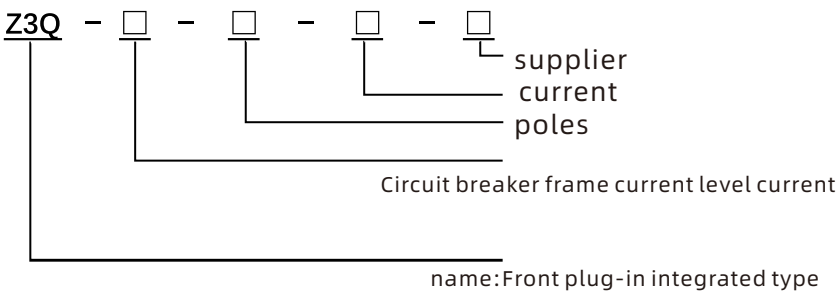


Z3Q -400 -ST Front plug-in integrated type

12.9 Z3Q Front plug-in integrated type

Function: Provides flexible wiring for circuit breakers to be used in conjunction with distribution boards

12.9.1Model description



12.10 P Front connection plate

12.10.1 Function

Make the circuit breaker have a flexible wiring mode.By installing this acceccory, the pole spacing can be increased to increase the electrical gap between adjacent poles at the inlet and outlet ends of the circuit breaker and enhance the safety between lines.

12.10..2 Model description

P-250-L-250A- 3P - A - TZ

- Customized code: blank:normal; TZ: Taizhi; CC: Changcheng
- silering code: blank: 0.3μ defaulted; A: 1μ
- Number of poles: Note1
- Current
- Material Code: Blank: Copper (T3) defaulted; L: Aluminum alloy 6061
- Frame size code
- Barsbur plate code

Note[1]: C=curved,S=straight; L=left,R=right,U=up,D=down

3P: 4C2S(curved for L&R)	4P: 6C2S(curved for L&R)
3P1: 2C1S(curved for L&R)	4P1: 3C1S(curved for L&R)
3P2: 2C4S(curved for U&D)	4P2: 4C4S(curved for U&D)
3P3: 1C2S(curved for U&D)	4P3: 2C2S(curved for U&D)
3P4: 6S(Sraight)	4P4: 8S(Sraight)
4P5: 2C2S(curved for L&R)	4P6: 4C4S(curved for L&R)
1Z1: 1S (Sraight)	2Z1: 2S(Sraight)
3Z1: 3S (Sraight)	4Z1: 4S(Sraight)
1W1: 1C (curved for L&R)	2W1: 2C (curved for L&R)
3W1: 3C (curved for L&R)	4W1: 4C (curved for L&R)
1W2: 1C (curved for U&D)	2W2: 2C(curved for U&D)
3W2: 3C(curved for U&D)	4W2: 4C(curved for U&D)

tips:1250#only has the staight type,Using for 2sets
2000#only has curved type for Left and right,using for 2sets

12.11COMA Communication module

12.11.1 Function

The COMA communication module is an interface module for the communication between the electronic plastic case circuit breaker and the bus system, and performs communication and relay control output. Combined with the Modbus-RTU communication protocol, this communication module can easily establish a connection with a fieldbus master device to achieve three remote or four remote functions.

The technical parameters are as follows:

- Rated voltage: AC230V or DC24V (error range ± 15%)
- Communication type: RS485 (Modbus-RTU protocol)
- Contact capacity: AC250V / 3A; DC30V / 3A
- Transmission distance: shielded twisted pair
- Transmission distance: 1.2km (using category A shielded twisted pair)
- Working status indication: LED indication
- Number of stations: 1 station

12.11.2 Model description

Modbus 22- M DC24V 0.5m

- Cable length
- Rated voltage: AC230V, DC24V
- Series code
- Frame code: 22 is a universal accessory for electronic molded case circuit breakers
- Communication module code

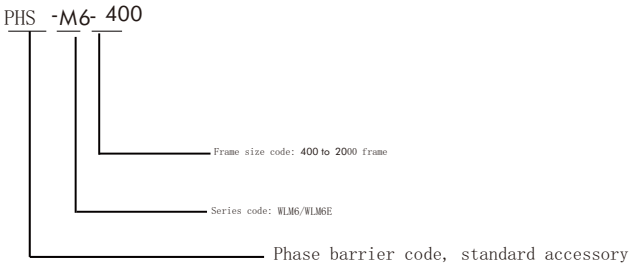
12.11.3 Communication solution

12.12 Phase barrier

12.12.1 Function

Guarantees phase-to-phase insulation safety and prevents phase-to-phase short circuit.

12.12.2 Model description

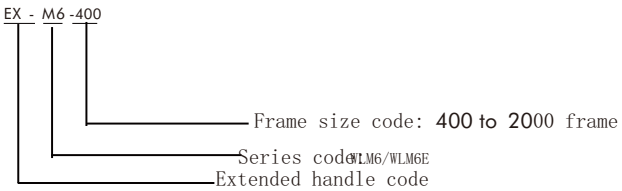


12.13 Extended handle

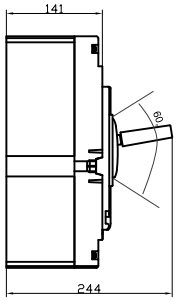
12.13.1 Function

With a unique design, the circuit breaker can be closed, opened and re-latched by rotating the handle. It is only applicable to 400-2000A.

12.13.2 Model description



12.13.3 Overall dimension



B

13. Thermal type of mccb 4 poles statement

Statement	
Type A	N pole is not equipped with over-current tripping element, has been connected with all along, and does not act with other three poles
Type B	N pole is not equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off)
Type C	N pole is equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off)
Type D	N pole is equipped with over-current tripping element, has been connected with all along, and does not act with other three poles

Note: No code for 3-pole products. Type A and Type D are corresponding to 1N and 3N, respectively. 2-pole product and 4-pole product are corresponding to Type B and Type C.

Currently, there is no transparent cover product for 63/125/630 large volume/ 800/1250 frame.

Currently, tre is heno transparent cover 2P product.

13.1 View of codes of 4-pole product

Type A: N pole is not equipped with over-current tripping element, has been connected with all along, and does not act with other three poles.

Without over-current tripper

Type B: N pole is not equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off).

Without over-current tripper

Type C: N pole is equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off).

With over-current tripper

Type D: N pole is equipped with over-current tripping element, has been connected with all along, and does not act with other three poles.

With over-current tripper

13.2 Electronic type of mccb 4 pols statement

Table 1

Code	Statement
Type A	N pole is not equipped with over-current tripping element, has been connected with all along, and does not act with other three poles
Type B	N pole is not equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off)
Type C	N pole is equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off)
Type D	N pole is equipped with over-current tripping element, has been connected with all along, and does not act with other three poles

View of codes of 4-pole product

Type A: N pole is not equipped with over-current tripping element, has been connected with all along, and does not a with other three poles.

Without overcurrent release

Type B: N pole is not equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off).

Without overcurrent release

Type C: N pole is equipped with over-current tripping element, and acts with other three poles (N-pole turn on prior to turn off).

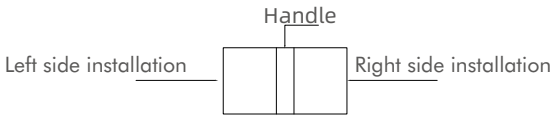
With overcurrent release

Type D: N pole is equipped with over-current tripping element, has been connected with all along, and does not act with other three poles.

With overcurrent release

B

9.25 WLM6/WLM6RT Thermal magnetic type Installation diagram of internal accessories



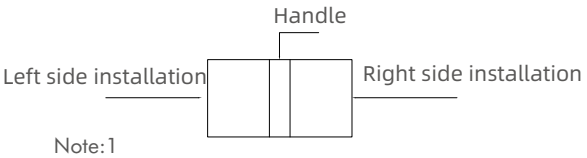
□ Alarm contact
◧ Auxiliary contact (1NO1NC)
◨ Auxiliary contact (2NO2NC)
○ Undervoltage release
● Shunt release

Note:1
Code50:125、160 need left undervoltage release customized
shunt release choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM6-125			WLM6-160			WLM6 -250		WLM6 -400/630		WLM6-800/1250/1600	
		2P	3P	4P	2P	3P	4P	3P	4P	3P	4P	3P	4P
00	No	—	—	—	—	—	—	—	—	—	—	—	—
08	Alarm contact	—	□	□	—	□	□	□	□	□	□	□	□
10	Shunt release	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●
18	Shunt release Alarm contact	—	□ ●	□ ●	—	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●	□ ●
20	Auxiliary contac (1NO 1NC)	□ ◧	◧	◧	□ ◧	◧	◧	◧	◧	◧	◧	◧	◧
27	Auxiliary contac (2NO2NC)	□ ◨	◨	◨	□ ◨	◨	◨	◨	◨	◨	◨	◨	◨
28	Alarm contact+ Auxiliary contac (1NO 1NC)	—	◧	◧	—	◧	◧	◧	◧	◧	◧	◧	◧
29	Alarm contact Auxiliary contac (2NO 2NC)	—	□ ◨	□ ◨	—	□ ◨	□ ◨	□ ◨	□ ◨	□ ◨	□ ◨	□ ◨	□ ◨
30	Under voltage release	□ ○	○	○	□ ○	○	○	○	○	○	○	○	○
38	Under voltage release+ Alarm contact	—	□ ○	□ ○	—	□ ○	□ ○	□ ○	□ ○	□ ○	□ ○	□ ○	□ ○
40	Shunt release+ Auxiliary contac (1NO 1NC)	—	◧ ●	◧ ●	—	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●
41	Shunt release+ Auxiliary contac (2NO 2NC)	—	◨ ●	◨ ●	—	◨ ●	◨ ●	◨ ●	◨ ●	◨ ●	◨ ●	◨ ●	◨ ●
48	Shunt release +Alarm contact Auxiliary contac (1NO 1NC)	—	◧ ●	◧ ●	—	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●
Note:1 50	Shunt release Under voltage release	—	○ ●	○ ●	—	○ ●	○ ●	● ○	● ○	● ○	● ○	● ○	● ○
60	2 sets of Auxiliary contac (1NO 1NC)	—	◧ ◧	◧ ◧	—	◧ ◧	◧ ◧	◧ ◧	◧ ◧	◧ ◧	◧ ◧	◧ ◧	◧ ◧
61	Auxiliary contac (1NO 1NC) Auxiliary contac (2NO 2NC)	—	◨ ◧	◨ ◧	—	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧
62	2 sets of Auxiliary contac (2NO 2NC)	—	◨ ◨	◨ ◨	—	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨
68	Alarm contact Auxiliary contac (2NO 2NC)	—	◨ ◧	◨ ◧	—	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧
69	Auxiliary contac (2NO 2NC) +Alarm contact Auxiliary contac (1NO 1NC)	—	◨ ◨	◨ ◨	—	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨	◨ ◨
70	Under voltage release+ Auxiliary contac (1NO 1NC)	—	◧ ○	◧ ○	—	◧ ○	◧ ○	◧ ○	◧ ○	◧ ○	◧ ○	◧ ○	◧ ○
71	Under voltage release Auxiliary contac (2NO 2NC)	—	◨ ○	◨ ○	—	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○
78	Under voltage release +Alarm contact Auxiliary contac (1NO 1NC)	—	◨ ○	◨ ○	—	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○	◨ ○

B

9.25 WLM6E Electronic type Installation diagram of internal accessories

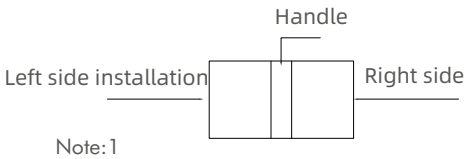


Alarm contact
Auxiliary contact
Auxiliary contact(2NO2NC)
Undervoltage release
Shunt release
Shunt release (module)

Note:1
Code50:125、160 need left undervoltage release customized
shunt release choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM6E-160		WLM6E-250		WLM6E-400/630		WLM6E-800/1250	
		3P	4P	3P	4P	3P	4P	3P	4P
00	No	——	——	——	——	——	——	——	——
08	Alarm contact	□	□	□	□	□	□	□	□
10	Shunt release	◒	◒	◒	◒	●	●	●	●
18	Shunt release+ Alarm contact	□ ◒	□ ◒	□ ◒	□ ◒	□ ●	□ ●	□ ●	□ ●
20	Auxiliary contac (1NO1NC)	◧	◧	◧	◧	◧	◧	◧	◧
27	Auxiliary contac (2NO2NC)	◨	◨	◨	◨	◨	◨	◨	◨
28	Auxiliary contac (1NO1NC)+ Alarm contact	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧
29	Auxiliary contac (2NO2NC)+ Alarm contact	——	——	——	——	□ ◨	□ ◨	□ ◨	□ ◨
30	Under voltage release	○	○	○	○	○	○	○	○
38	Under voltage release+ Alarm contact	——	——	——	——	□ ○	□ ○	□ ○	□ ○
40	Shunt release+ Auxiliary contac (1NO1NC)	◧ ◒	◧ ◒	◧ ◒	◧ ◒	◧ ●	◧ ●	◧ ●	◧ ●
41	Shunt release+ Auxiliary contac (2NO2NC)	◨ ◒	◨ ◒	◨ ◒	◨ ◒	◨ ●	◨ ●	◨ ●	◨ ●
48	Shunt release+ Auxiliary contac (1NO1NC) Alarm contact	□ ◧ ◒	□ ◧ ◒	□ ◧ ◒	□ ◧ ◒	□ ◧ ●	□ ◧ ●	□ ◧ ●	□ ◧ ●
note1 50	Shunt release+ Under voltage release	○ ◒	○ ◒	○ ◒	○ ◒	● ○	● ○	● ○	● ○
60	2 sets of Auxiliary contac (1NO1NC)	——	——	——	——	◧ ◧	◧ ◧	◧ ◧	◧ ◧
61	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC)	——	——	——	——	◨ ◧	◨ ◧	◨ ◧	◨ ◧
62	2 sets of Auxiliary contac (2NO2NC)	——	——	——	——	◨ ◨	◨ ◨	◨ ◨	◨ ◨
68	Auxiliary contac (1NO1NC)+ Auxiliary contac (1NO1NC) Alarm contact	——	——	——	——	□ ◧ ◧	□ ◧ ◧	□ ◧ ◧	□ ◧ ◧
69	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC) Alarm contact	——	——	——	——	□ ◨ ◧	□ ◨ ◧	□ ◨ ◧	□ ◨ ◧
70	Under voltage release+ Auxiliary contac (1NO1NC)	——	——	——	——	◧ ○	◧ ○	◧ ○	◧ ○
71	Under voltage release+ Auxiliary contac (2NO2NC)	——	——	——	——	◨ ○	◨ ○	◨ ○	◨ ○
78	Under voltage release+ Auxiliary contac (1NO1NC) Alarm contact	——	——	——	——	□ ◧ ○	□ ◧ ○	□ ◧ ○	□ ◧ ○

9.25 WLM6LY RCCB type Installation diagram of internal accessories

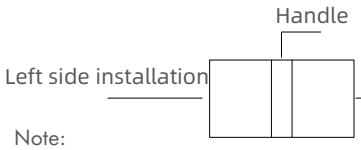


Alarm contact
Auxiliary contact(1NO1NC)
Auxiliary contact(2NO2NC)
Undervoltage release
Shunt release

Note:1
Code50:160 need left undervoltage release customized, 250 need left shunt release customized
shunt release /UV choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM6LY-160		WLM6LY-250		WLM6LY-400/630		WLM6LY -800	
		3P	4P	3P	4P	3P	4P	3P	4P
00	No	——	——	——	——	——	——	——	——
08	Alarm contact	□	□	□	□	□	□	□	□
10	Shunt release	——	●	●	●	●	●	●	●
18	Shunt release Alarm contact	——	□ ●	——	□ ●	● □	□ ●	● □	□ ●
20	Auxiliary contac (1NO 1NC)	◧	◧	◧	◧	◧	◧	◧	◧
27	Auxiliary contac (2NO2NC)	◨	◨	◨	◨	◨	◨	◨	◨
28	Alarm contact+ Auxiliary contac (1NO 1NC)	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧	□ ◧
29	Alarm contact Auxiliary contac (2NO 2NC)	——	□ ◨	——	□ ◨	□ ◧	□ ◨	□ ◧	□ ◨
30	Under voltage release	○	○	○	○	○	○	○	○
38	Under voltage release+ Alarm contact	——	□ ○	——	□ ○	□ ○	□ ○	□ ○	□ ○
40	Shunt release+ Auxiliary contac (1NO 1NC)	——	◧ ●	——	◧ ●	◧ ●	◧ ●	◧ ●	◧ ●
41	Shunt release+ Auxiliary contac (2NO 2NC)	——	◨ ●	——	◨ ●	◨ ●	◨ ●	◨ ●	◨ ●
48	Shunt release+ Auxiliary contac (1NO1NC) Alarm contact	——	□ ◧ ●	——	□ ◧ ●	□ ◧ ●	□ ◧ ●	□ ◧ ●	□ ◧ ●
Note:1 50	Shunt release+ Under voltage release	——	○ ●	——	● ○	——	● ○	——	● ○
60	2 sets of Auxiliary contac (1NO1NC)	——	◧ ◧	——	◧ ◧	◧ ◧	◧ ◧	◧ ◧	◧ ◧
61	Auxiliary contac (1NO 1NC) Auxiliary contac (2NO 2NC)	——	◨ ◧	——	◨ ◧	◨ ◧	◨ ◧	◨ ◧	◨ ◧
62	2 sets of Auxiliary contac (2NO 2NC)	——	◨ ◨	——	◨ ◨	——	◨ ◨	——	◨ ◨
68	Alarm contact Auxiliary contac (2NO 2NC)	——	□ ◧ ◧	——	□ ◧ ◧	□ ◧ ◧	□ ◧ ◧	□ ◧ ◧	□ ◧ ◧
69	Auxiliary contac (2NO 2NC) +Alarm contact Auxiliary contac (1NO 1NC)	——	□ ◧ ◨	——	□ ◧ ◨	□ ◧ ◨	□ ◧ ◨	□ ◧ ◨	□ ◧ ◨
70	Under voltage release+ Auxiliary contac (1NO 1NC)	——	◧ ○	——	◧ ○	○ ◧	◧ ○	○ ◧	◧ ○
71	Under voltage release Auxiliary contac (2NO 2NC)	——	◨ ○	——	◨ ○	——	◨ ○	——	◨ ○
78	Under voltage release +Alarm contact Auxiliary contac (1NO 1NC)	——	□ ◧ ○	——	□ ◧ ○	○ □ ◧	□ ◧ ○	○ □ ◧	□ ◧ ○

9.25 WLM6EY electronic type with LCD Installation diagram of internal accessories



Alarm contact

Auxiliary contact(1NO1NC)

Auxiliary contact(2NO2NC)

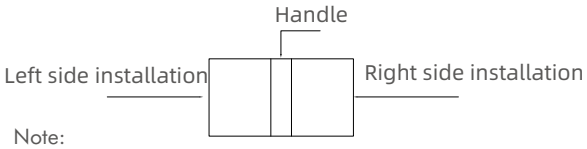
Undervoltage release

Shunt release

Note:
250 need left undervoltage release customized, 250 need left shunt release customized
shunt release /UV choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM6EY-250		WLM6EY-400/630		WLM6EY-800/1250	
		3P	4P	3P	4P	3P	4P
00	No	——	——	——	——	——	——
08	Alarm contact						
10	Shunt release						
18	Shunt release+ Alarm contact	——					
20	Auxiliary contac (1NO1NC)						
27	Auxiliary contac (2NO2NC)						
28	Auxiliary contac (1NO1NC)+ Alarm contact						
29	Auxiliary contac (2NO2NC)+ Alarm contact	——					
30	Under voltage release						
38	Under voltage release+ Alarm contact	——					
40	Shunt release+ Auxiliary contac (1NO1NC)	——					
41	Shunt release+ Auxiliary contac (2NO2NC)	——					
48	Shunt release+ Auxiliary contac (1NO1NC) Alarm contact	——					
50	Shunt release+ Under voltage release	——	——	——		——	
60	2 sets of Auxiliary contac (1NO1NC)	——					
61	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC)	——		——		——	
62	2 sets of Auxiliary contac (2NO2NC)	——		——		——	
68	Auxiliary contac (1NO1NC)+ Auxiliary contac (1NO1NC) Alarm contact	——					
69	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC) Alarm contact	——		——		——	
70	Under voltage release+ Auxiliary contac (1NO1NC)	——					
71	Under voltage release+ Auxiliary contac (2NO2NC)	——		——		——	
78	Under voltage release+ Auxiliary contac (1NO1NC) Alarm contact	——		——		——	

9.25 WLM7DC solar MCCB



Alarm contact

Auxiliary contact(1NO1NC)

Auxiliary contact(2NO2NC)

Undervoltage release

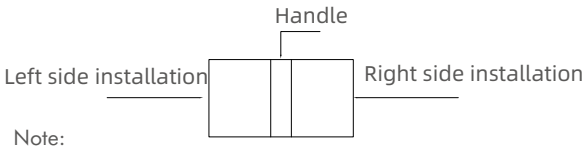
Shunt release

Note:
250 need left undervoltage release customized，250 need left shunt release customized
shunt release /UV choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM7DC-250/315		WL7DC-400/630QH	WL7DC-400/630/800	
		2P	3P	2P	2P	3P
00	No	——	——	—— ——	——	——
08	Alarm contact					
10	Shunt release					
18	Shunt release+ Alarm contact	——		——	——	
20	Auxiliary contac (1NO1NC)					
27	Auxiliary contac (2NO2NC)					
28	Auxiliary contac (1NO1NC)+ Alarm contact					
29	Auxiliary contac (2NO2NC)+ Alarm contact	——				
30	Under voltage release					
38	Under voltage release+ Alarm contact	——				
40	Shunt release+ Auxiliary contac (1NO1NC)					
41	Shunt release+ Auxiliary contac (2NO2NC)	——				
48	Shunt release+ Auxiliary contac (1NO1NC) Alarm contact	——		——	——	
50	Shunt release+ Under voltage release	——	——	——	——	
60	2 sets of Auxiliary contac (1NO1NC)					
61	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC)	——		——	——	
62	2 sets of Auxiliary contac (2NO2NC)	——		——	——	
68	Auxiliary contac (1NO1NC)+ Auxiliary contac (1NO1NC) Alarm contact	——		——	——	
69	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC) Alarm contact	——		——	——	
70	Under voltage release+ Auxiliary contac (1NO1NC)	——				
71	Under voltage release+ Auxiliary contac (2NO2NC)	——		——	——	
78	Under voltage release+ Auxiliary contac (1NO1NC) Alarm contact	——		——	——	

B

9.25 WLM7HU solar mccb



Alarm contact

Auxiliary contact(1NO1NC)

Auxiliary contact(2NO2NC)

Undervoltage release

Shunt release

Note:
250 need left undervoltage release customized, 250 need left shunt release customized
shunt release /UV choosing rage:DC24V、DC110V、DC220V、AC230V、AC400V;default:AC230V

releaes mode internal accessory code	Model / Number of poles / Accessory name	WLM7HU-250/315		WL7HU-400		WL7HU-630/800	
		3P	4P	3P	4P	3P	4P
00	No	——	——	——	——	——	——
08	Alarm contact						
10	Shunt release						
18	Shunt release+ Alarm contact						
20	Auxiliary contac (1NO1NC)						
27	Auxiliary contac (2NO2NC)						
28	Auxiliary contac (1NO1NC)+ Alarm contact						
29	Auxiliary contac (2NO2NC)+ Alarm contact						
30	Under voltage release						
38	Under voltage release+ Alarm contact						
40	Shunt release+ Auxiliary contac (1NO1NC)						
41	Shunt release+ Auxiliary contac (2NO2NC)						
48	Shunt release+ Auxiliary contac (1NO1NC) Alarm contact						
50	Shunt release+ Under voltage release						
60	2 sets of Auxiliary contac (1NO1NC)						
61	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC)						
62	2 sets of Auxiliary contac (2NO2NC)						
68	Auxiliary contac (1NO1NC)+ Auxiliary contac (1NO1NC) Alarm contact						
69	Auxiliary contac (2NO2NC)+ Auxiliary contac (1NO1NC) Alarm contact						
70	Under voltage release+ Auxiliary contac (1NO1NC)						
71	Under voltage release+ Auxiliary contac (2NO2NC)						
78	Under voltage release+ Auxiliary contac (1NO1NC) Alarm contact						

WLM6E Series Moulded Case Circuit Breaker

B

5.2 The application type: Power distribution type WLM6E

time delay + short circuit short-time delay + instantaneous short circuit protection. For example, the selection type is WLM6E – 125M/3300.

The protection code of power distribution type

Electronic tripper	Frame rated current Inm(A)	Rated current In(A)	Setting current of adjustable overload release IR(A)	Tripping characteristic/ time
Overload long-time delay	125	32	12-14-16-19-22-24-26-29-32	1.05In non tripping time (≥ 2 hours, In>63A;); 1.30 In trip time (<2 hours, In>63A);
		63	25-28-32-35-41-44-50-57-63	
		125	40-45-50-55-60-70-80-90-100	
	160	32	12-14-16-19-22-24-26-29-32	
		63	25-28-32-35-41-44-50-57-63	
		125	40-45-50-55-60-70-80-90-100	
		160	63-75-80-90-100-125-140-150-160	
	250	250	100-125-140-150-160-180-200-225-250	
	400	400	200-225-250-280-300-320-350-375-400	
	630	630	400-440-460-480-500-530-560-600-630	
	800	630	400-440-460-480-500-530-560-600-630	
		800	500-550-600-630-660-700-740-780-800	
	1250	630	400-440-460-480-500-530-560-600-630	
		800	500-550-600-630-660-700-740-780-800	
		1000	630-680-700-750-800-850-900-950-1000	
		1250	850-900-950-1000-1050-1100-1150-1200-1250	
	2000	1250	500-630-700-800-900-1000-1100-1200-1250	
		1600	630-800-900-1000-1100-1250-1400-1500-1600	
		2000	800-1000-1250-1400-1500-1600-1800-1900-2000	
Action tolerance				±20%

5.3 The application type: Motor protection type

Electronic tripper	Frame rated current Inm(A)	Rated current In(A)	Setting current of adjustable overload release IR(A)	Tripping characteristic/time
Overload long-time delay	125	32	12.5-14-16-18-20-22-25-28-30-32	1.05In non tripping time (≥ 2 hours, In>63A;); 1.30 In trip time (<2 hours, In>63A);
		63	25-28-32-36-40-45-50-56-60-63	
		125	50-56-63-70-75-80-90-100-110-125	
	160	63	25-28-32-36-40-45-50-56-60-63	
		125	50-56-63-70-75-80-90-100-110-125	
		160	63-70-80-90-100-110-125-140-150-160	
	250	250	100-110-125-140-150-160-180-200-225-250	
	320	320	125-140-160-180-200-225-250-280-300-320	
	400	400	160-180-200-225-250-280-315-350-375-400	
	630	630	250-280-315-350-375-400-450-500-560-630	
	800	630	250-280-315-350-375-400-450-500-560-630	
		800	315-350-400-450-500-560-630-700-760-800	
	1250	1250	500-630-700-800-850-900-950-1050-1150-1250	
	1250 Custom-made	1000	630-680-700-750-800-850-900-950-1000	
		1250	850-900-950-1000-1050-1100-1150-1200-1250	
Action tolerance				±20%

Tr seeting value			In=32A–2000A									
			8	12	16	24	32	48	64	96	128	256
Tripping time (s)	Power distribution	1.05IR	Do not act within 2h									
		1.3IR	Do not act within 1h									
		2IR	8	12	16	24	32	48	64	96	128	256
	Motor protection	1.05IR	Do not act within 2h									
		1.2IR	Do not act within 1h									
		1.5IR	14.2	21.3	28.4	42.7	56.9	85.3	113.8	170.7	227.6	455.1
		2IR	8	12	16	24	32	48	64	96	128	256
		7.2IR	0.62	0.93	1.23	1.85	2.47	3.70	4.94	7.41	9.88	19.75
		Tripping level	–	–	5	5	10A	10A	10	10	20	30
Note:Action tolerance ±20%, Inherent error 40ms												

When instantaneous 80% Ii, the instantaneous tripping time is ≥ 0.2s, and when 120%Ii the instantaneous tripping time is<0.2s, 2In trip time ≤ 10min

B

WLM6E Series Moulded Case Circuit Breaker

5.4 Short circuit short-time delay protection

：tsd(s)			0.05	0.1	0.15	0.2	0.3
Tripping time (s)	Isd≤I＜1.5Isd	I^2t ON Inverse time limit	$T=(\frac{1.5Isd}{I})^2*tsd$				
	1.5Isd≤I＜Ii	I^2t OFF constant time-lag	0.05±0.02	0.1±0.03	0.15±0.03	0.2±0.04	0.3±0.06
Note:Action tolerance:±20% Inherent error:40ms							

Instantaneous short circuit protection

Ii setting range

In(A)	Encoder settings Ii (*IR)	Communication settings Ii (*IR)
32-250	4、6、7、8、10、11、12、13、14、OFF;	4-14、OFF, **Step length** 0.5
400-1250	4、6、7、8、9、10、11、12、14、OFF;	
1250-2000	4、6、7、8、9、10、11、12、14、OFF;	

5.5 Instantaneous short circuit protection **tripping characristic**

Loading current	I≤0.85Ii	I≥1.15Ii
acting time	not act	≤80ms

5.7 Ground protection, single-phase and three-phase current balance type

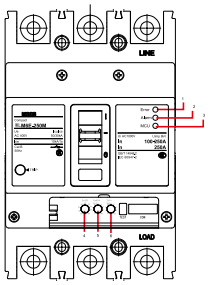
Table 12

Electronic tripper	Frame rated current Inm(A)	Rated current In (A)	Setting current of adjustable type for ground protection Ig (A)	Tripping characteristic/time
Ground protection	Whole series	32-2000	$I_g=(0.4-1)\times I_R+OFF$	When I≤ 1Ig, do not act; When I ≥ 1.1Ig, tg=(0.1-0.2-0.3-0.4)s, act
Action tolerance				

The ground protection function is used to balance the load. In case of unbalanced load, this function shall be closed or set the setting value above the allowable unbalanced current value

B

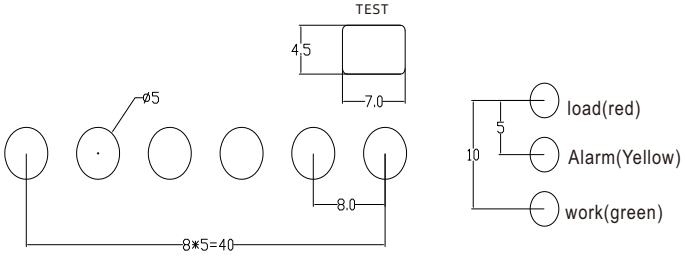
6.2 Three-knob intelligent controller



Information of three-knob intelligent controller	
1	Alarm LED indicator
2	Pre-alarm LED indicator
3	Operation LED indicator
4	Setting current of overload long-time delay current IR(A)
5	Setting current of short circuit short-time delay time Isd(A)
6	Current setting of short-circuit short delay time Ii(A)

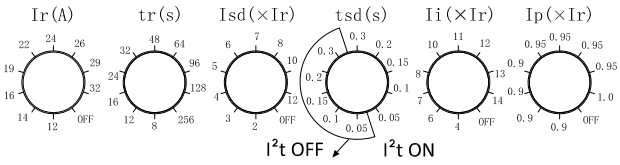
Front indication of WLM6E electronic circuit breaker with 6 knobs

mm

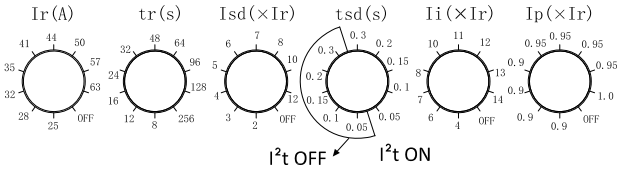


1、160A

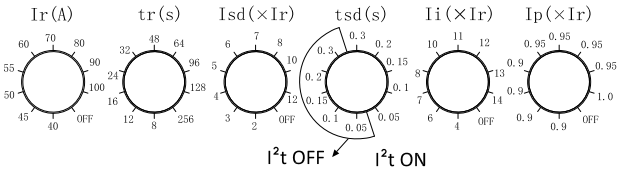
WLM6E-160.In=32A Electronic release



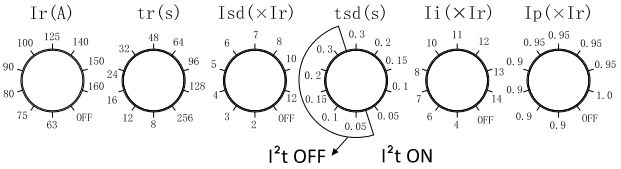
WLM6E-160.In=63A Electronic release



WLM6E-160.In=100A Electronic release

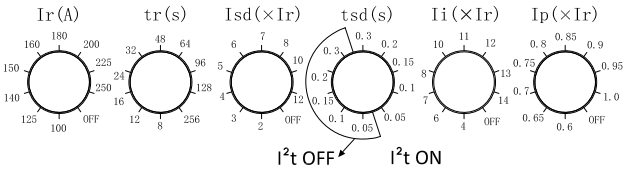


WLM6E-160.In=160A Electronic release



2、250A

WLM6E-250.In=250A Electronic release



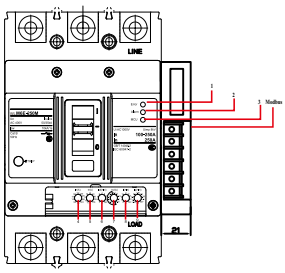
B

5.9 Overload pre-alarm

Electronic tripper	Frame rated current Inm(A)	Rated current In (A)	Setting current of adjustable type for overload pre-alarm protection tripper Ip (A)	Tripping characteristic/time
Overload pre-alarm	Whole series	32-1250	I_p=(0.7-0.75-0.8-0.85-0.9-0.95-1)×I_R+OFF	/
		1000-1250 Customized	I_p=(0.6-0.65-0.7-0.75-0.8-0.85-0.9-0.95-1)×I_R+OFF	

6 Electronic tripper

6.1 Indicator status explanation

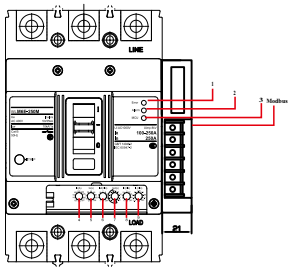


	Instruction of indicator light	Instruction of indicator operating status
1	Alarm LED indicator (red)	When I > 1.05IR, the overload alarm indicator light is on; when I≤1.0IR, the overload alarm indicator light is off;
2	Pre-alarm LED indicator (yellow)	When I > 1.1Ip, the pre-alarm indicator light is on; when I≤0.9Ip, the pre-alarm indicator light is off.
3	Running LED indicator (green)	When I > 0.4In, the operation indicator light flickers (once per second)

6.3 Pre-alarm intelligent controller (conventional)

Information of six-knob intelligent controller	
1	Alarm LED indicator light(red)
2	Pre-alarm LED indicator light (yellow)
3	Operation LED indicator light (green)
4	Setting current of overload long-time delay current IR(A)
5	Setting value of overload long-time delay time tR(s)=Table 35 for default parameters
6	Setting current of short circuit short-time delay time Isd(A)
7	Setting value of short circuit short-time delay time tsd(s)
8	Current setting of short-circuit short delay time Ii(A)
9	Setting current of overload pre-alarm Ip (A)

6.5 Grounded intelligent controller

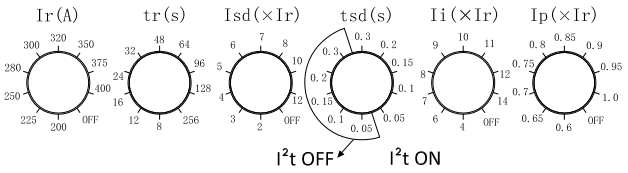


Information of six-knob intelligent controller		
1	Alarm LED indicator	Default parameters 1 Default setting value of ground protection time tg=0.4s 2 Default setting value of overload pre-alarm current Ip=0.9×IR
2	Pre-alarm LED indicator	
3	Operation LED indicator	
4	Setting current of overload long-time delay current IR(A)	
5	Setting value of overload long-time delay time tR(s)	
6	Setting current of short circuit short-time delay time Isd(A)	
7	Setting value of short circuit short-time delay time tsd(s)	
8	Current setting of short-circuit short delay time Ii(A)	
9	Setting current of ground protection Ig(A)	

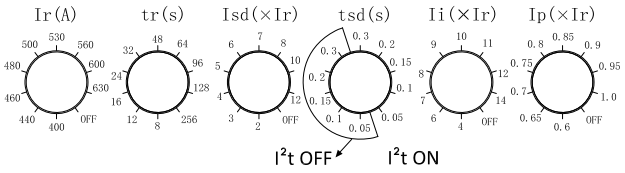
B

3、630A

WLM6E-630,In=400A Electronic release

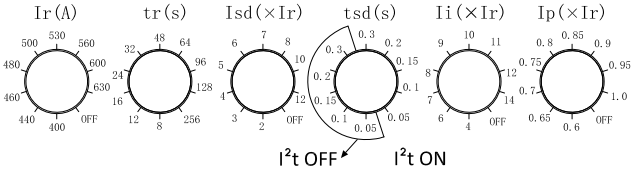


WLM6E-630.In=630A Electronic release

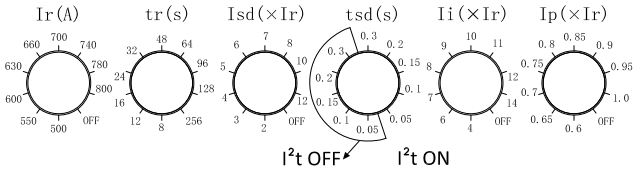


4、800A

WLM6E-800,In=630A Electronic release

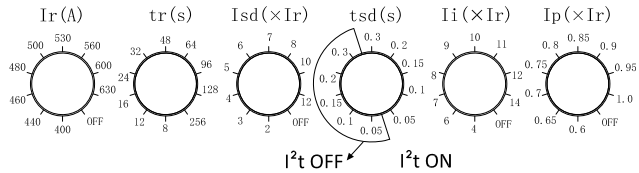


WLM6E-800,In=800A Electronic release

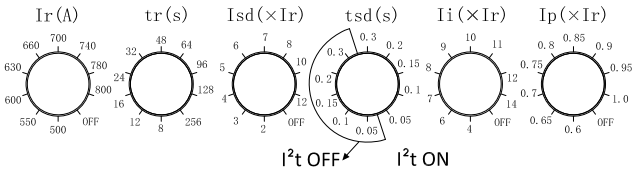


5、1250A

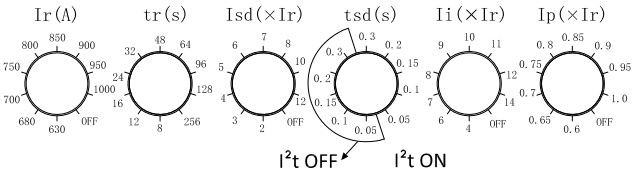
WLM6E-1250,In=630A Electronic release



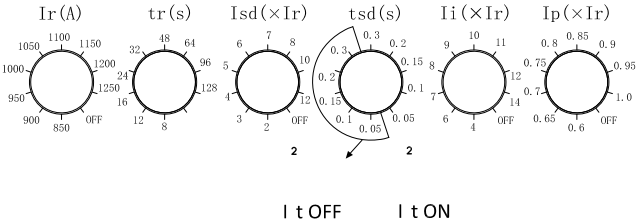
WLM6E-1250,In=800A Electronic release



WLM6E-1250,In=1000A Electronic release



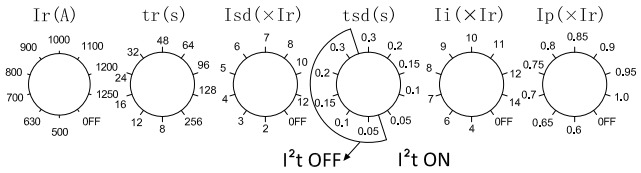
WLM6E-1250,In=1250A Electronic release



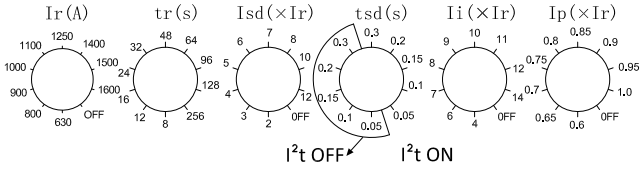
B

6、2000A

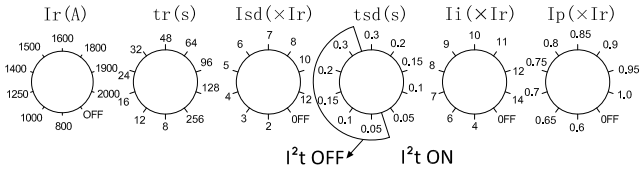
WLM6E-2000,In=1250A Electronic release



WLM6E-2000,In=1600A Electronic release



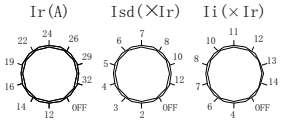
WLM6E-2000,In=2000A Electronic release



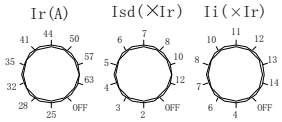
Front indication of WLM6E electronic circuit breaker with 3 knobs

1、160A

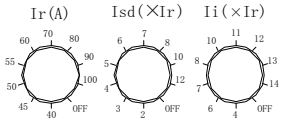
WLM6E-160.In=32A Electronic release



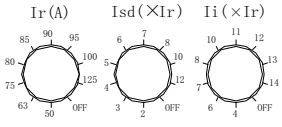
WLM6E-160.In=63A Electronic release



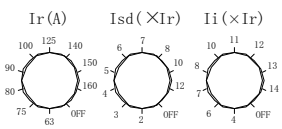
WLM6E-160.In=100A Electronic release



WLM6E-160.In=125A Electronic release

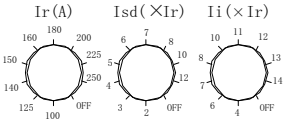


WLM6E-160.In=160A Electronic release



2、250A

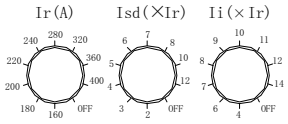
WLM6E-250.In=250A Electronic release



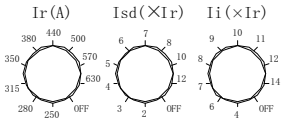
B

3、630A

WLM6E-630,In=400A Electronic release

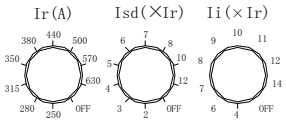


WLM6E-630.In=630A Electronic release

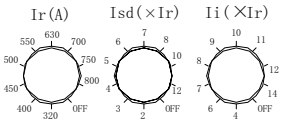


4、800A

WLM6E-800,In=630A Electronic release



WLM6E-800,In=800A Electronic release



B

7 Technical materials

Number	Current of circuit breaker	connection wire mm^2	Current of circuit breaker	connection wire mm^2
1	0-8A	1.0	9-12A	1.5
2	13-15A	2.5	16-20A	2.5
3	21-25A	4.0	26-32A	6.0
4	33-50A	10.0	51-65A	16.0
5	66-85A	25.0	86-100A	35.0
6	101-115A	35.0	116-130A	50.0
7	131-150A	50.0	151-175A	70.0
8	176-200A	95.0	201-225A	95.0
9	226-250A	120.0	251-275A	150.0
10	276-300A	185.0	301-350A	185.0
11	351-400A	240.0	401-500A	2 wires*150mm^2
12	501-630A	2 wires *185mm^2	631-800A	2 wires*240mm^2
13	801-1000A	2 wires *300mm^2	1001-1250A	2 wires*400mm^2
14	1251-1600A	2 wires *500mm^2	1601-2000A	3 wires *500mm^2

10.3 WLM6 thermal magnetic circuit breaker rated operational current and temperature compensation coefficient table

Ambient Temperature / Model	-40℃	-35℃	-30℃	-25℃	-20℃	-15℃	-10℃	-5℃	0℃	5℃	10℃	15℃	20℃	25℃	30℃	35℃	40℃	45℃	50℃	55℃	60℃	65℃	70℃	75℃
WLM6-125	1.36	1.35	1.33	1.31	1.3	1.2	1.18	1.15	1.15	1.1	1.08	1.06	1.04	1.03	1.02	1.01	1	0.977	0.957	0.936	0.915	0.894	0.873	0.851
WLM6-160	1.36	1.35	1.34	1.32	1.3	1.25	1.22	1.2	1.15	1.14	1.12	1.09	1.07	1.05	1.03	1.01	1	0.977	0.957	0.936	0.915	0.894	0.873	0.851
WLM6-250	1.48	1.45	1.4	1.35	1.3	1.25	1.2	1.18	1.15	1.13	1.11	1.09	1.08	1.07	1.05	1.02	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6-400	1.68	1.65	1.6	1.55	1.44	1.42	1.4	1.35	1.3	1.22	1.18	1.13	1.09	1.06	1.04	1.02	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6-630	1.42	1.4	1.35	1.31	1.3	1.25	1.2	1.18	1.13	1.11	1.09	1.08	1.07	1.05	1.03	1.01	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6-800	1.4	1.35	1.34	1.32	1.31	1.3	1.25	1.23	1.18	1.15	1.13	1.1	1.07	1.05	1.03	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851
WLM6-1250	1.42	1.36	1.35	1.34	1.3	1.28	1.25	1.21	1.2	1.15	1.13	1.1	1.08	1.06	1.04	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851
WLM6-1600/2000	1.4	1.35	1.3	1.25	1.2	1.19	1.18	1.15	1.12	1.15	1.13	1.1	1.08	1.06	1.04	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851

10.3 WLM6E Electronic circuit breaker rated operational current and temperature compensation coefficient table

Ambient Temperature / Model	-40℃	-35℃	-30℃	-25℃	-20℃	-15℃	-10℃	-5℃	0℃	5℃	10℃	15℃	20℃	25℃	30℃	35℃	40℃	45℃	50℃	55℃	60℃	65℃	70℃	75℃
WLM6E -160	1.36	1.35	1.34	1.32	1.3	1.25	1.22	1.2	1.15	1.14	1.12	1.09	1.07	1.05	1.03	1.01	1	0.977	0.957	0.936	0.915	0.894	0.873	0.851
WLME6 -250	1.48	1.45	1.4	1.35	1.3	1.25	1.2	1.18	1.15	1.13	1.11	1.09	1.08	1.07	1.05	1.02	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6E -400	1.68	1.65	1.6	1.55	1.44	1.42	1.4	1.35	1.3	1.22	1.18	1.13	1.09	1.06	1.04	1.02	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6E -630	1.42	1.4	1.35	1.31	1.3	1.25	1.2	1.18	1.13	1.11	1.09	1.08	1.07	1.05	1.03	1.01	1	0.985	0.968	0.952	0.935	0.919	0.887	0.855
WLM6E -800	1.4	1.35	1.34	1.32	1.31	1.3	1.25	1.23	1.18	1.15	1.13	1.1	1.07	1.05	1.03	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851
WLM6E -1250	1.42	1.36	1.35	1.34	1.3	1.28	1.25	1.21	1.2	1.15	1.13	1.1	1.08	1.06	1.04	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851
WLM6E 1600/2000	1.4	1.35	1.3	1.25	1.2	1.19	1.18	1.15	1.12	1.15	1.13	1.1	1.08	1.06	1.04	1.02	1	0.978	0.957	0.936	0.915	0.894	0.873	0.851

10.6 Derating factor table for circuit breakers with plug-in or draw-out accessories

Model		Derating factor	
		+Plug-in type	+Economic draw-out type
WLM6-125	16A-100A	1	/
	125A	0.95	/
WLM6 -250	125A-180A	1	/
	200A-250A	0.95	/
WLM6 -250 electronic type	32A、63A、100A、160A	1	/
	250A	0.95	/
WLM6 -400	250A-400A	1	1
WLM6 -400 electronic type	250A-400A	1	1
WLM6-630	400A	1	1
	500A	0.95	1
WLM6-630 electronic type	400A-500A	1	1
	630A	0.9	0.9
WLM6-800/1250/2000	500-700A	/	0.95
	800A-2000A	/	0.9
WLM6-800/1250/2000 electronic type	630A	/	1
	800A-2000A	/	0.9

10.7 Thermal type Derating factor table for circuit breakers altitude

Altitude (m)	2000	2500	3000	4000	4500	5000
Power-frequency(V) withstand voltage	2500	2500	2250	1950	1775	1625
Uimp (V)	1000	1000	900	780	710	650
Working Voltage (V)	400	400	350	312	284	260
Working current correction factor	1	1	0.98	0.95	0.92	0.9

10.7 Electronic type Derating factor table for circuit breakers altitude

Altitude (m)	2000	2500	3000	4000	4500	5000
Power-frequency(V) withstand voltage	2500	2500	2250	1950	1775	1625
Uimp (V)	1000	1000	900	780	710	650
Working Voltage (V)	400	400	350	312	284	260
Working current correction factor	1	1	0.98	0.95	0.92	0.9

B

10.8 Cascading (AC220/230/240V, R for double breaking)

Upstream	WLM6-125					WLM6-250					WLM6-400					WLM6-630					WLM6-800/1250/2000				
Breaking capacity (kA rms)	C	S	M	H	R	C	S	M	H	R	C	S	M	H	R	C	S	M	H	R	C	S	M	H	R
	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150
Downstream	Breaking capacity (kA rms)																								
WLM6-125C	25	30	40	60	60	25	30	40	60	60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WLM6-125S	30	40	50	65	65	30	40	50	65	65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WLM6-125M		50	60	80	100		50	60	80	100		50	60	80	100		50	60	80	100		50	60	80	100
WLM6-125H			70	90	120			70	90	120			70	90	120			70	90	120			70	90	120
WLM6-250C				90	140				90	140				90	140				90	140				90	140
WLM6 -250S					150			60		150					150					150					150
WLM6-250M							50	70	80	100		50	60	80	100		50	60	80	100		50	60	80	100
WLM6-250H									90	120			70	90	120			70	90	120			70	90	120
WLM6-400C									90	140				90	140				90	140				90	140
WLM6 -400S										150					150					150					150
WLM6 -400M												50	60	80	100		50	60	80	100		50	60	80	100
WLM6 -400H													70	90	120			70	90	120			70	90	120
WLM6 -630S														90	140				90	140				90	140
WLM6 -630M															150					150					150
WLM6 -630H																	50	60	80	100		50	60	80	100
WLM6 -800S																		70	90	120			70	90	120
WLM6 -800M																			90	140				90	140
WLM6 -800H																				150					150
WLM6 - 1600M																						50	60	80	100
WLM6 - 1600H																							70	90	120
WLM6 - 2000M																								90	140
WLM6 - 2000H																									150

10.9 Cascading (AC380/400/415V,R for double breaking)

Upstream	WLM6-125					WLM6-250					WLM6-400					WLM6-630					WLM6-800/1250/2000				
Breaking capacity (kA rms)	C	S	M	H	Q	C	S	M	H	Q	C	S	M	H	Q	C	S	M	H	Q	C	S	M	H	Q
	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150	36	50	70	100	150
Downstream	Breaking capacity (kA rms)																								
WLM6-160C	20	25	25	25	25	20	25	25	25	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WLM6-160S	30	30	30	30	30	30	30	30	30	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
WLM6-160M/H		50	50	80	100		50	50	80	100		50	50	80	100		50	50	80	100		50	50	80	100
WLM6-160Q			70	90	100			70	90	100			70	90	100			70	90	100			70	90	100
WLM6-250C				90	140				90	140				90	140				90	140				90	140
WLM6 -250S					150					150					150					150					150
WLM6-250M/H							50	50	80	100		50	50	80	100		50	50	80	100		50	50	80	100
WLM6-250Q								70	90	120			70	90	120			70	90	120			70	90	120
WLM6 -400S												50					50					50			
WLM6 -400M													65					65					65		
WLM6 -400H												50	50	70	100		50	50	70	150		50	50	70	100
WLM6 -400 Q												50	85	100	150		50	85	100	150		50	85	100	150
WLM6 -630M												50	80				50	80				50	80		
WLM6 -630H													80	85				80	85				80	85	
WLM6 -630Q																	50	80	85	150		50	80	85	150
WLM6 -800M																		70	85	120			70	85	120
WLM6 -800H																			85	100				85	100
WLM6 - 1600M																						50	50	80	100
WLM6 - 1600H																						50	50	85	100
WLM6 - 2000M																							70	90	120
WLM6 - 2000H																								90	140
																									150

Note

11. Ordering notice

11.1 Quick selection of DC circuit breaker

B

WLM7 DC - 250 S 2 300 Z In

Current type	Frame current(A)	Breaking code	Poles	Rated current(A)	Terminal	In current
DC : Direct current	125 250 400	C : 20kA S : 35kA M : 50kA H : 75kA	2P : Two-pole 3P : Three-pole	125 : 16, 20, 25, 32, 40, 50, 63, 80, 100, 125 250 : 125, 160, 180, 200, 225, 250 320 : 100, 125 140, 160, 180, 200,225,250, 280,315,320 400 : 250, 315 350, 400		
	630	M : 50kA H : 75kA	3P : Three-pole 4P : Four-pole	630: 400,500,630		

Note: 1)
Note: 1)

11.2 Quick selection of 800V-1140V circuit breaker

WLM6 - HU - 250 P 3 300 2 TH 250

Company code	MCCB Type	Frame current (A)	Operation way	Poles	internal accessories	Special purpose	Rated current(A)
WLM6 moulded case circuit breaker	HU: AC 800V-1500V	250 320 400/630	P1: DC3 electric operation(General market version) P2: DC6 series electric operation(self-manufacturing) ZY1: Rotating handle (manual center type - circular handle) - (defaulted) ZF1: Rotating handle (manual center type - square handle) ZY2: Rotating handle (hand operated eccentric - circular handle) ZF2: Rotating handle (manual eccentric square handle) Z3: Rotating handle (hand operated integrated)	1P : One pole 2P : Two-pole 3P :Three-pole 4B : Four-pole[2] 4C : Four-pole[2] 3P:Three-pole 4B : Four-pole[2] 4C : Four-pole[2]	check page 51	TH:Waterproof, moldy proof, rust proof LC:low temperature	250: 63,75,80,100,125,140,160,180 200,225,250 320: 16,20,25,32,40,50,63,75,80,100 125,140,160,180,200,225,250,320 400/630: 225,250,320,350,400,500,630

11.3 Quick selection of power distribution and motor protection circuit breakers1

WLM6 RT - 250 S 4300 300 125

Company code	MCCB Type	Frame current (A)	Breaking Capacity code	Poles	internal accessories	Rated current(A)	
WLM6 moulded case circuit breaker	Blank: AC MCCB RT: Ajutable type E: Electronic type, EY: E with LCD L: RCCB LY: RCCB with LCD	125 250 400 630 800	C : 20kA S : 35kA M : 50kA H : 75kA Q : 150kA	1P : One pole 2P : Two-pole 3P :Three-pole 4B : Four-pole[2] 4C : Four-pole	check page 51	125 : 16, 20, 25, 32, 40, 50, 63, 80, 100, 125	
						250 : 125, 160 180, 200, 225 250	250 : 32, 63, 100 160, 250
				3P:Three-pole 4B : Four-pole[2] 4C : Four-pole		400 : 250, 315 350, 400	400 : 250, 400
						630 : 400, 500	630 : 400, 630
						800 : 500, 630 700, 800	800 : 630, 800
		1600 2000	M : 50kA H : 75kA Q : 150kA	3P:Three-pole 4B : Four-pole[2] 4C : Four-pole[2]		1250 : 630. 700, 800, 1000, 1250 2000:1000,1250,1600,2000	

For customer needs beyond the technical requirements of the sample, you can contact the company's sales department or technical department as a special order processing; The body and accessories should be written separately when ordering. If the user requires the factory to assemble the body and accessories, it must be specified when ordering, otherwise the factory will ship separately; Motor protection is only applicable to 3P / 4P;

[2] 4B: Neutral poles without protection, can be operated with other three poles;

4C: Neutral poles with protection, can be operated with other three poles.

[3]

MCCB Modlle List

(pls□√ Tick Or Fill in_____)

Company	
Model List	□ WLM6 □one knob □two knob □ S □ 1P □Rated current _____ A □ WLM6E □three knob □six knob □ C □ 2P ■ WLM6EY (LCD type) □ M □ 3P □ WLM6L □ WLM6LY □ H □ 4P □ WLM7 □DC □ HU □ LCD

Table

Function	wiring way	■ up in down out	□ up out down in
	Plug in way		
	Knob	□six knob □three knob Current range: 100A-400A/630-1250A ;	Frame size: 250A/400A/630A800A/1250A
	Testing	Temperature : □-30℃ ■40℃ □50℃ □55℃	Protection: □Power distributor □ Moctor protection
	Temperature rising	■ Normal	□ lower temperature rising 55K
	Conmunication	□DL645	□ Customized : Modbus RTU485
	Breaking capacity	□ Normal	□ Customized 70/100 KA
	Electronic life	■Normal	□Customized
	Mechanical life	■ Normal	□Customized
	Ig protection	■ Have	□ No
	loading pre-alarm	■ Have	□ No
	communication	■ Have Voltage: □ AC230V □ AC400V □ DC24V others:_____	■ No
	ROHS	□Have	■ No
	Salt spray test	■ Have □48h □ 72h	■ No
Apperance	Base cover colour	■blanck 3C □ COOL GRAY 1C	
	Handle colour	■blanck3C □ Red 186C □gray11C □ dark gray 7547U □ blue3015C □ gray 430C	
	Middle cover colour	material:■DMC □PA6	Prited: line、LOAD: ■have □ No
		■ blanck3C □ COOL GRAY 1C □dark gray 7547U □ gray 430C □ Cool gray 431C	
	Top cover colour	■ blanck3C □ COOL GRAY 1C □dark gray 7547U □ gray 430C □ Cool gray 431C	
	Tripping Knob	□ RED 186C □ dark blue 661U-1 □Orange1645C	
	adjustable Knob	□ RED 186C □ dark blue 661U-1 □light blue2128C □Orange1645C	
	top cover screw	□Blue white zinc □ Black zinc others:_____	
Stickers	Nameplate	□Blank □Laser □ Print □name plate	
	Nameplate	□ Customer provide □ W9 provide □ others:_____	
	Current plate	■Blanck □ White	position: ■Base right side □ middle cover
	Side information plate	□ Customer provide ■ W9 provide □ others:_____	□ No
	Series No.	■ Have	□ No
	box plate	□ Customer provide □ W9 provide □ others:_____	□ No
	outside box plate	□ Customer provide □ W9 provide □ others:_____	□ No
Accessories	Shunt release	AC230V □; AC380V/400V □ ; DC220V □ ; DC24V □ ;	
	Undervoltage release	AC230V □ ; AC380V/400V □ ; DC220V □ ; DC24V □ ;	
	Auxiliary switch	1 set □; 2 sets □	
	Wiring method of internal accessories	lead wire [default]; terminal block □;	
	Length of accessory wire	50cm (default); 100cm [chargeable] □; customized length [chargeable] □;	

Accessory			
	Motor Driver (DC3/DC6)	P1: DC3 electric operation(General market version)	□ DC24 □ DC110V □ DC220V □ AC400V
		P2: DC6 series electric operation(self-manufacturing)	■ AC230V(defaulted)
	Terminal Cover		
	Busbar		
	Operation Handle	Zy1: Rotating handle (manual center type - circular handle) - (defaulted)	
		Zf1: Rotating handle (manual center type - square handle)	
		Zy2: Rotating handle (hand operated eccentric - cirular handle)	
		Zf2: Rotating handle (manual eccentric square handle)	
		Z3: Rotating handle (hand operated integrated)	
instructions	Neutral	■ Have	□ No
	Customized	□ Customer provide □ W9 provide □ others:_____	□ No
Box	Neutral	■ Have	□ No
	Customized	□ Customer provide □ W9 provide □ others:_____	□ No
Packaging box	Neutral	■ Have	□ No
	Customized	□ Customer provide □ W9 provide □ others:_____	□ No
Sealing tape	Neutral	■ Have	□ No
	Customized	□ Customer provide □ W9 provide □ others:_____	□ No
others			
Notes			

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