AceReare

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ARM6系列新能源 / 智能塑壳断路器 ARM6 SERIES SOLAR SYSTEM TYPE / INTELLIGENT TYPE MCCB



AceReare 瑞睿电气



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Company Profile

Company Profile of AceReare Electric

7,000+

12,000

Covering an area of more than 7000m²

HIGH QUALITY MCCB MANUFACTURER

LLLL



The standardized workshop covers an area of 12000m²

With more than 300 employees





AceReare Electric (Zhejiang) Co., Ltd HIGH QUALITY MCCB MANUFACTURER

Company Profile Company Profile of AceReare Electric

1. Group Profile

Founded in 2015, AceReare Electric, headquartered in Yueqing City of Wenzhou, the city of China's electrical appliances, is a modern national hightech enterprise with R&D as the core and intelligent production as the guide. The company integrates R&D, manufacturing and sales, and has the process production capacity and quality control capacity of the whole process chain of low-voltage circuit breakers. It has become a well-known enterprise brand in the low-voltage circuit breaker manufacturing industry.

The company has two wholly-owned subsidiaries, "AceReare Electric" and "Kerui Electric". It has established strategic cooperation relationships with nearly 100 high-end customers at home and abroad. Its marketing network covers more than 30 provinces and cities in China mainland, Hong Kong, Macao and Taiwan. Its products are exported to more than 20 countries and regions around the world.

2. Introduction to main products

The company's products cover: frame type circuit breakers, thermomagnetic molded case circuit breakers, electronic molded case circuit breakers, leakage molded case circuit breakers, photovoltaic high-voltage molded case circuit breakers, photovoltaic DC molded case circuit breakers, intelligent measurement molded case circuit breakers, double-break molded case circuit breakers and various parts and components.



3. Enterprise honor

The company has laboratories with sound testing methods, and is also the drafting unit of national standards and industrial standards. Scientific research cooperation was carried out with Shanghai liaotong University, Xi'an University of Architecture and Technology, South China University of Technology and other institutions of higher learning to promote the research and development of building hardware accessories, smart home and other products. It has successively won the honorary titles of National High-tech Enterprise, National Intellectual Property Advantage Enterprise, Wenzhou Enterprise Technology Research and Development Center, Yueging Enterprise Technology Center, Wenzhou Demonstration Enterprise for Integration of Industrialization and informatization; it has won more than ten invention patents, high-tech products in Zhejiang Province and many other awards.



Company Profile

Development history

• 2015

- Company founded
- Established an independent R&D team
- Obtained various certificates of products

• 2016-2018

- Industrialization of mold design and processing
- Set up a comprehensive product laboratory
- Put into automatic production line



• 2019-2022..

- Built an information data center
- Focusing on informatization, promoting automation process
- Focusing on informatization, promoting management process

ARM6DC/ARM6HU

Series Molded Case Circuit Breaker









Product series overview

- ARM6DC and ARM6HU molded case circuit breakers (hereinafter referred to as the circuit breaker) are ARM6 series products launched by our company, which are classified into three series:
- ARM6DC series circuit breakers have three frame sizes of 250A, 400A and 500A and the current ranges from 63A-500A, of which 400A and 500A are the same frame size. 250 frame size is of 2 poles and 4 poles with the rated working voltage up to 1000V DC for 2 poles and 1500V for 4 poles, 400 and 500 are of 4 poles with rated working voltage up to 1500V.
- ARM6HU series circuit breakers have three frame sizes of 250A, 400A and 630A and the current ranges from 63A-630A.

Product related information

- The whole series of circuit breakers can be installed horizontally (transversely), vertically (upright) and flat.
- All series of circuit breakers have isolation function, and their corresponding symbols are: _____/
- The circuit breaker shall comply with the following standards: IEC60947-1 and GB/T14048.1Low-voltage switchgear and controlgear-Part 1: General rules IEC60947-2 and GB/T14048.2 Low-voltage switchgear and controlgear-Part 2: Circuit breakers IEC60947-4-1 and GB/T14048.4 Low-voltage switchgear and controlgear-Part 4-1: Contactors and motor-starters-Electromechanical contactors and motor-starters (including motor protector)

Correct use and installation conditions

- The ambient air temperature is -5°C~+40°C;
- The altitude of the installation site shall not exceed 2000m;
- The relative humidity of the air at the installation site shall not exceed 50% when the maximum temperature is+40°C, and there can be a higher relative humidity at a lower temperature, such as 90% at 20°C. Special measures shall be taken for occasional condensation due to temperature change;
- The pollution level is 3;
- The circuit breaker shall pass the GB/T2423.10 test and be able to withstand mechanical vibration with frequency of 2Hz~13.2Hz, displacement of \pm 1mm, frequency of 13.2Hz~100Hz and acceleration of \pm 0.7g;
- The installation type of the main circuit of the circuit breaker is III, and the installation type of other auxiliary circuits and control circuits is II;
- The circuit breaker is applicable to electromagnetic environment A;
- The humid tropics type (TH type) circuit breaker passes the test requirements of GB/T2423.4 and GB/T2423.18, and can withstand the influence of humid air, salt mist, oil mist and mold;
- The circuit breaker shall be installed in the place where there is no explosion hazard, conductive dust, metal corrosion and insulation damage;
- The circuit breaker shall be installed in the place free from invasion of rain and snow;
- Operating conditions: The circuit breaker passes the test requirements of GB/T2423.1 and GB/T2423.2, and the ambient air temperature can be as low as -25°C (products with temperature as low as -40°C can be provided, please consult our company), and as high as+70 °C (for derating use when the temperature exceeds+40°C, see the technical data in this sample for details); The circuit breaker shall pass GB/T2423.4 test Db (temperature+55°C, relative humidity 95%); The characteristics will not be affected when the altitude reaches 2500m (for derating use when the altitude exceeds 2500m, see the technical data in this catalogue for details);
- Storage conditions: ambient air temperature is -25°C~+70°C

ARM6DC







Purpose and scope of application

ARM6DC-250/2300 series photovoltaic DC molded case circuit breakers (hereinafter referred to as circuit breakers) are suitable for infrequent switching and infrequent motor starting in circuits with rated insulation voltage of DC1500V, rated working voltage of DC1500V, and rated working current from 63A to 500A. The circuit breaker has overload long time delay and short circuit instantaneous action functions.

The circuit breaker has the advantages of small volume, high breaking capacity, short arc, high reliability, good environmental protection and comprehensive functions.

The circuit breaker can be installed vertically (i.e. upright) or horizontally (i.e. transversely). The circuit breaker has the isolation function, and its corresponding symbols are: " _____ "

Model and its meaning

AR	М	6	DC	-	250/		2	3	00 (Note 3)	
1	2	3	4		5		6	7	8	
1 AceReare			4 For DC system			stem	7 Release mode (Note 2)			
2 Molded case circuit breaker			5 Rated current of frame size			rent of frame size	8 Accessory code (Note 1)			
3	3 Design code6 Number of p			of poles						

Accessory code Note: 1:00-no accessory; 08-alarm contact; 10-shunt release; 20-auxiliary contact; 28-auxiliary contact, alarm contact; 40-auxiliary, shunt; 18-alarm, shunt;

2: Tripping mode; 3: Thermal-electromagnetic release

3: Shunt voltage (AC230V, AC400V, DC220V, DC24V optional) and accessory wire length should be noted after the rated current

Normal working environment

1. Generally, the altitude does not exceed 2000m. When the altitude exceeds 2000m, it shall be corrected according to the parameters in Table 4;

2. Ambient air temperature: the ambient air temperature in normal use shall not exceed 70°C and not be lower than -25°C (LC low-temperature products shall be customized if lower than -25°C). When the air temperature exceeds the normal range, the rated working current can be corrected according to the parameters in Table 2; 3. Humidity: under the ambient temperature of +40°C, the relative humidity of the atmosphere shall not exceed 50%. If the temperature decreases, it can be used under higher humidity conditions. The monthly average relative humidity of the wettest month is 90%;

4. Installation category: I for main circuit, II for auxiliary circuit and control circuit;

- 5. Pollution level: 3;
- 6. Maximum inclination angle: 22.5°;

7. In the place where there is no explosive medium, and the medium is free of gas and conductive dust that can corrode metal and damage insulation

8. In the place free from rain and snow.

Protection characteristics

Thermal release of circuit breaker has inverse time limit characteristics; the electromagnetic release has instantaneous action characteristics and delay characteristics as shown in the table below

					Table 2
No.	Rated current In(A)	Name of test current	I/In	Agreed time	Initial state
1	80~250	Agreed non-tripping current	1.05	≥2	Cold state
	80~250	Agreed tripping current	1.3	≥2	Cold state
7	2 63	Agreed non-tripping current	1.05	≥2	Immediately after the No. 1 test
2	05	Agreed tripping current	1.3	≥2	Immediately after the No. 1 test
3	225~500	Agreed non-tripping current	1.05	≥2h	Cold state
4	225~500	Agreed tripping current	1.3	<2h	Immediately after the No. 1 test

1. Instantaneous protection adjustable range: 6 In, with accuracy of $\pm 20\%$.

2. Rated current (A): 60, 80, 100, 125, 140, 160, 180, 200, 225, 250, 315, 350, 400, 500

3. Frame size current (A): 250, 400, 500.

Derating factor

Derating factor for ambient temperature change of circuit breaker

1. Tripping characteristics change due to ambient air temperature change, see Table 3 for correction

Ambient air	50° C	55° C	60° C	65° C	70° C	
Temperature correction	1	0.9	0.9	0.8	0.8	

2. Note: when the temperature is lower than 50°C, derating is not considered.

When the ambient temperature is 40°C and the altitude is greater than 2000 meters, the tripping characteristics will change in consideration of the insulation characteristics and cooling capacity of the air, which should be corrected, as shown in Table 4.

consideration of the insulation characteristics and cooling capacity of the air, which should be corrected, as shown in Table 4.							
Altitude (m)	2000	2500	3000	3500	4000		
Correction factor of working current	1	1	0.98	0.97	0.96		
Correction factor of short-circuit breaking capacity	1	1	0.83	0.77	0.71		
Power frequency withstand voltage correction factor	1	1	1	1	1		

Tripping mode of circuit breaker

ARM6DC circuit breaker can be classified into two release modes:

----Only electromagnetic release with code 2, such as ARM6DC-250/32001;

-----Thermal+electromagnetic release with code number 3, such as ARM6DC-250/3300I.

Protection function	Frame size	Rated current In (A)	Action characteristics		
Overload protection	Full range	63~500	Press I ² t to act 1.05I _n (cold state), non-action 1.3I _n (hot state), action \leq 1h (I, 1.05I _n (cold state), non-action 1.3I _n (hot state), action \leq 2h (I _n	, ≤ 63A) within 2h (I _n >63A)	
	Frame size	Rated current $I_n(A)$	Setting value of short-circuit protective current I,(A)	Action time	
Short circuit	250	63~250	5-6-7-8-9-10I _n	Instantaneous action	
protection	400	250~400	5-6-7-8-9-10In		
	500	250~500	5-6-7-8-9-10I _n		
Action tolerance	2		±20%		

The release mode code is 2, only with electromagnetic release

	Frame size	Rated current I _n (A)	Setting value of short-circuit protective current I,(A)	Action time
Short circuit	250 63~250		5-6-7-8-9-10I _n	Instantaneous action
protection	400	250~400	5-6-7-8-9-10I _n	
	500	250~500	5-6-7-8-9-10In	
Action toleranc	e		±20%	

Table 2

Main performance index of ARM6DC series circuit breaker

Appearance				
Model	ARM6DC-250		ARM6DC-400	ARM6DC-500
Rated current In (A)	63A/80A/100A/1 140A/160A/180A 225A/250A		250A/315A/350A/400A	250A/315A/350A/400A/500A
Number of poles	2P	4P	4P	4P
Rated working voltage Ue (V)	1000VDC	1500VDC	1500VDC	1500VDC
Ultimate short-circuit breaking capacity Icu (kA)	40	20	20	20
Service short-circuit breaking capacity lcs (kA)	40	20	20	20
Rated insulation voltage Ui (V)	1500V		1500V	1500V
Impulse withstand voltage Uimp (kV)	12kV		12kV	12kV
Mechanical life (time)	7000		4000	4000
Electrical life (time)	1000		1000	1000
Arcing distance (mm)	Upper/lower:10	0/0	Upper/lower:100/0	Upper/lower:100/0
	Left/right/front/	rear: 0/0/0	Left/right/front/rear: 0/0/0	Left/right/front/rear: 0/0/0
	89.5	142.5	198	198
Overall dimension (mm)	200	200	257	257
	108	108	108	108

Note: The characteristic curve is measured in cold state.



ARM6DC-250 time/current characteristic curve

ХIп

20 30 40 5060 80100

20 30 40 5060 80100

XIn

200 300

Circuit breaker connection mode

Wiring mode of circuit breaker in DC different systems with different voltages: ARM6DC can realize the following wiring methods, but for the convenience of users, the typical solution adopts type E wiring mode for three poles and type H wiring mode for four poles. Please refer to the overall dimensions and installation dimensions of ARM6DC circuit breaker. The overall installation dimensions of other wiring methods are the same.

Schematic diagram of ARM6D⁽ wiring mode



Different power supply systems/load wiring modes applicable to ARM6DC circuit breaker

Rated working voltage		Power/load wiring mode								
Rated working voltage		nded syste	m		Negative pole grounded system				Central point grounded system	
DC500V	Е	-	-	-	E	F	-	-	-	
DC750V	E	Ga	G	Н	-	F	G	I	н	
DC1000V	-	Ga	G	Н	-	-	-	I	Н	

Note: 1. In the negative pole grounded system, the user must connect according to the wiring mode in the table above; 2. For ungrounded system and central point grounded system, the wiring mode in the above table is recommended. Users can also exchange the positive and negative poles according to the actual situation, and also exchange the power supply and load wiring positions;

3. Ga type wiring mode provides GM3DG-250 (In2100A), GM3DG-400 and GM3DG-630 specifications.

IOUE	

Series Molded Case Circuit Breaker

DC system application

The following aspects are mainly considered when selecting the circuit breaker in the DC system:

- Rated working voltage, considering the number of series poles for breaking
- Rated current, considering load power
- Breaking capacity, considering the maximum short-circuit current at the installation point

Grounded system mode

System Type		Grou	Ungrounded system		
System type		Negative pole grounding	Central point grounding	ongrounded system	
Various fault typ	es				
	Fault I	The maximum short-circuit current is generated, and the contact connected to the positive pole of the power supply is disconnected	The U/2 voltage generates a short circuit current close to the maximum, and the contact connected to the positive pole of the power supply is disconnected	No influence	
Fault influence	Fault III	The maximum short-circuit current is generated, but the contacts in series are all involved in breaking	The maximum short-circuit current is generated, but the contacts in series are all involved in breaking	The maximum short-circuit current is generated, but the contacts in series are all involved in breaking	
	Fault IIII	No influence	Same as fault I, but only the contact connected to the negative pole of the power supply	No influence	
Worst condition		Fault I	Faults I and III	Fault II	
Breaking condition		Breaking can be performed in series at the positive pole	For each pole, breaking maximum short-circuit current is performed at U/2	The two poles jointly perform the breaking	

Internal accessories code of circuit breaker

		——— Handle
Left side installatio n →	•	- Right side installation

	Model	ARM6DC-250/2P	ARM6DC-250/4P	ARM6DC-400	ARM6DC-500
Code	Accessory name	2	4	4	4
208,308	Alarm contact	←□	←□	←□	←
210,310	Shunt release	←	<- ●	<-●	← 0
230,320	Auxiliary contact	←_	← ■	←	← ■
228,328	Auxiliary contact, alarm contact	<→	o→		o →
240,340	Shunt release, auxiliary contact	<-	← ● ■→	< ●■ →	← ● ■
250,350	Shunt release, undervoltage release		← ● ○ →	← ● ○ →	← ● ○→
260,360	Two sets of auxiliary contacts		<	←	←
270,370	Auxiliary contact, Shunt release		← ■ ○-→	←■○ →	<-■ ○→
218,318	Shunt release, alarm contact		←□ ●→	←□ ●→	←□ ●→
230,330	Undervoltage release			← □ ■ →	← □□■→
238,338	Undervoltage release, alarm contact		←□□○→	←□ ○→	←□□○→
248,348	Shunt release, auxiliary contact, alarm contact				< <u>∎</u> ●→
268,368	Two sets of auxiliary contact, alarm contact		<		< <u>∎</u> ∎→
278,378	Auxiliary contact, undervoltage release, alarm contact		<- <u></u>	<- <u>□</u> ○-+	<- <u>□</u> →

Note: 1. 200: circuit breaker with only electromagnetic release; 300: circuit breaker with thermal-electromagnetic release; 000: circuit breaker without overcurrent release (disconnector)

□ Alarm contact

- Auxiliary contact
- Shunt release
- O Undervoltage release
- → Lead wire direction

ARM6DC ARM6HU Series DC Molded Case Circuit Breaker Series Molded Case Circuit Breaker

Accessories

1. Model explanation of accessories: shunt release: FT, auxiliary contact: FC, alarm contact: BC.

2. Shunt release FT.

2.1 When the control supply voltage reaches 70%~110% Us, the circuit breaker can reliably disconnected.



Wiring diagram of shunt release (internal accessories of switch in dashed frame)

2.2 It is forbidden to power on the shunt release for a long time, and the power-on time is \leq 5s. 2.3 See Fig. 4 and Fig. 5 for the wiring diagram of auxiliary contact FC.





The circuit breaker in the "OFF" and "TRIP" position

The circuit breaker in the "ON" position

Fig.5

3. Alarm contact BC.

3.1 The function of alarm contact is to indicate the tripping operation or free tripping of overload, short circuit, ground fault or undervoltage.

3.3 When the circuit breaker is normally closed or open, the alarm contact will not act, and the alarm will only be given when the circuit breaker is in trip-free (or fault tripping) position. The contact position then changes, that is, from normally open to normally closed, and from normally closed to normally open. When the circuit breaker is reset, the alarm contact will return to its original position.

3.3 See Fig. 6 for circuit breaker in the "OFF" and "ON" position

3.4 See Fig. 7 for circuit breaker in the trip-free (alarm) position.





The circuit breaker in the "OFF" and "ON" positions

The circuit breaker in the trip-free (alarm) position









ARM6DC-400-4300 / ARM6DC-500-4300





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Installation safety clearance of circuit breaker

1. For incoming line mode, the lower incoming line will not affect the normal use of the product and will not reduce the capacity.

2. Fixing method: base plate and hollow plate.

3. See the figure for safety distance.

ARM6DC-250-2300



Minimum distance between circuit breaker and base plate, top plate and side plate



Minimum distance between circuit breakers in vertical row

ARM6DC-250-4300



Minimum distance between circuit breaker and base plate, top plate and side plate



Minimum distance between circuit breakers in row

Code	Min. distance (mm)
А	0
В	35
С	40
D	55

1. Connection without insulation

2. Insulated cable

3. Insulated terminal



Minimum distance between circuit breakers in row



Minimum distance between circuit breakers in vertical row

ARM6DC-400-4300/ARM6DC-500-4300



Minimum distance between circuit breakers and base plate, top plate and side plate (Insulating board is provided by our company)



Minimum distance between circuit breakers in vertical row

Code	Min. distance (mm)
А	10
В	35
С	0
D	13
E	40
Н	55

1. Connection without insulation

- 2. Insulated cable
- 3. Insulated terminal



Minimum distance between circuit breakers in row

Code	Min. distance (mm)
А	10
В	35
С	0
D	13
E	40
Н	55

1. Connection without insulation

2. Insulated cable

3. Insulated terminal

Series Molded Case Circuit Breaker

Connection mode:

Connection mode of ARM6DC-250-2300



1. Size of wiring screw: M10.

2. Connecting bar size: A (max)=9mm, B (max)=20mm.

3. Torque of wiring screw: 8.8~10.8N.

4. The size of copper conductor or copper bar for connection is as shown in the following table.

Rated current (A)	63	80	100	125, 140	160	180, 200, 225	250
Recommended cross section of conductor (mm ²)	16	25	35	50	70	95	120

Connection mode of ARM6DC-250-4300



1. Size of wiring screw: M8.

2. Connecting bar size: A (max)=9mm, B (max)=20mmC=27mm.

3. Torque of wiring screw: 8.8~10.8N.

4. The size of copper conductor or copper bar for connection is as shown in the following table.

Rated current (A)	63	80	100	125, 140	160	180, 200, 225	250
Recommended cross section of conductor (mm ²)	16	25	35	50	70	95	120

ARM6DC-400-4300 ARM6DC-500-4300



1. Size of wiring screw: M10.

2. Connecting bar size: A (max)=14mm, B (max)=30mm, C= φ 10.5mm。

3. Torque of wiring screw: 18.2~23.5N.

4. The size of copper conductor or copper bar for connection is as shown in the following table.

Rated current (A)	2 2 5	2 50	315	3 50	400	500
Cross section of copper conductor (mm ²)	95	1 20	185	185	2 40	150 × 2



ARM6HU

Purpose and scope of application

ARM6HU series molded case circuit breakers are suitable for infrequent switching and infrequent starting of motors in AC 50Hz (or 60Hz) circuits, with rated working voltage up to AC1000V. The circuit breaker has overload, short circuit and undervoltage protection functions, and can protect lines and power equipment from damage.

The circuit breaker has isolation function. This product complies with GB/T14048.2.

Model and its meaning

	AR	М	6HU	-				/ 🗌		
	1	2	3		4	5	6	7	8	9
1	AceRear	e					4 Fra	ame siz	е	
2	Molded o	case cir	cuit brea	aker		- 1	5 Br	eaking	capa	city l
3	Design c	ode					6 Op	peration	mod	le (N

Note: 1: 0: no release; 1: only with instantaneous release; 2: complex release 2: no code with handle operation; P: electric operation; Z: manual operation

Normal working environment

1. Altitude: ≤ 2000m.

2. Ambient temperature: -40~70°C.

3. When the ambient temperature is +40°C, the relative humidity shall not exceed 50%, and the lower temperature can have higher humidity. For example, when the ambient temperature is 25°C, the relative humidity can reach 80%. Corresponding measures shall be taken for the condensation caused by temperature changes. 4. It can withstand the influence of humid air.

- 5. It can withstand the influence of salt mist and oil mist.
- 6. It is resistant to the influence of mold.

7. The installation category of the circuit breaker connected to the main circuit is: III, and the installation category of the circuit breaker not connected to the main circuit is: II

8. The pollution level is 3.

9. In the place where there is no explosive medium, and the medium is free of gas and conductive dust that can corrode metal and damage insulation.

10. In the place free from rain and snow.

11. The user shall negotiate with the manufacturer when the service conditions are more severe than the above. 12. Storage environment

Item	Item
Ambient temperature	-40 ~ 70°C
Corresponding humidity	25°C ≤ 80%







Derating factor

Derating factor of ambient temperature change

1. See Table 3 for the change of ambient air temperature on tripping characteristics

	Derating factor	Temperature								
		40°C	45℃	50°C	55°C	60°C	65°C	70°C		
Derating factor	ARM6HU-250	1	0.982	0.963	0.944	0.924	0.904	0.882		
	ARM6HU-400	1	0.981	0.962	0.942	0.922	0.901	0.879		
	ARM6HU-630	1	0.979	0.958	0.937	0.915	0.893	0.871		

Table 3

Table 4

Table 5

Note: When the ambient temperature is lower than 40°C, the product can be used normally without capacity reduction.

14. High altitude derating factor

1: If the altitude is lower than 2km, capacity reduction is not required;

2: If the altitude is higher than 2km, see Table 4 for the derating coefficient.

Altitude (m)	2000	2500	3000	3500	4000	4500	5000
Operating current correction factor	In	In	0.980In	0.972In	0.963In	0.95In	0.938In
Maximum working voltage (V)	1000	1000	1000	1000	1000	1000	1000
Power frequency withstand voltage (V)	3500	3500	3150	2970	2700	2600	2380
Insulation voltage (V)	1140	1140	1140	1140	1140	1140	1140

15. Tightening torque value of conductor part wiring threaded hole terminal (see Table 5)

No	Rated current of frame size	lated current of frame size Thread diameter			
1	250	M8	12		
2	400	M10	20		
3	630	M12	35		

Main performance index of ARM6HU series circuit breaker

Appearance				
Model	ARM6HU-250	ARM6HU-320	ARM6HU-400	ARM6HU-630
Rated current In (A)	63A/80A/100A/125A/ 140A/160A/180A/200A/ 225A/250A	100A/125A/140A 160A/180 A /200A 225A250A/300A/ 320A	225A/250A/315A /350A/400A	400A/500A/630A
Number of poles	ЗР	3P	ЗР	ЗР
Breaking capacity level	М	Μ	М	Μ
Rated working voltage Ue (V)	800V	800V	800V	800V
Ultimate short-circuit breaking capacity Icu (kA)	36.5	50	40	30
Service short-circuit breaking capacity lcs (kA)	30	50	36.5	23
Rated working voltage Ue (V)	1000V	1000V	1000V	1000V
Ultimate short-circuit breaking capacity Icu (kA)	12	20	15	15
Service short-circuit breaking capacity lcs (kA)	12	20	15	15
Rated working voltage Ue (V)	1140V	1140V	1140V	1140V
Ultimate short-circuit breaking capacity Icu (kA)	12	20	15	15
Service short-circuit breaking capacity lcs (kA)	12	20	15	15
Rated insulation voltage Ui (V)	1140V	1140V	1140V	1140V
Impulse withstand voltage Uimp (kV)	8000V	8000V	12000V	12000V
Mechanical life (time)	7000	7000	4000	4000
Electrical life (time)	1500	1500	1000	1000
Arcing distance (mm)	(Up/Below)(mm):100mm (Left/Right)(mm):100mm (Front/Back)(mm): 0mm	(Up/Below)(mm):100mn (Left/Right)(mm):100mm (Front/Back)(mm): 0mm	(Up/Below)(mm):100mm (Left/Right)(mm):100mm (Front/Back)(mm): 0mm	(Up/Below)(mm):100mm (Left/Right)(mm):100mm (Front/Back)(mm): 30mm/0mm
	113	139	150	182
Overall dimensions (mm)	165	200	257	270
	104.6	115.5	106.9	110.4







Internal accessories code of circuit breaker



	Model Number of poles	ARM6HU-250	ARM6HU-320	ARM6HU-400	ARM6HU-630
Code	Accessory name	3	3	3	3
208, 308	Alarm contact	←□	←_□	←□	←□
210, 310	Shunt release	←●	←	← ●	←
230, 320	Auxiliary contact	←	←	← ■	←
230, 330	Undervoltage release	0→	•→	o→	o+
240, 340	Shunt release, auxiliary contact		< ● ■ →	<- ■	<
250, 350	Shunt release, undervoltage release	€ 0 →	€ 0 →	← ● ○->	< ● ○ →
260, 360	Two sets of auxiliary contact	←	←	<- □ →	←■ →
270, 370	Auxiliary contact, undervoltage release	← ■ ○→	← ■ ○→		← ■ ○ →
218, 318	Shunt release, alarm contact		←□ ●→	<-	<- ↓ ↓
228, 328	Auxiliary contact, alarm contact	<	< □ →	←□ ■→	←□ ■→
238, 338	Undervoltage release, alarm contact	← □ ○ →	←□ ○→	←□ ○→	←□ ○→
248, 48	Shunt release, auxiliary contact, alarm contact		<	< <u></u>	+
268, 368	Two sets of auxiliary contact, alarm contact			< <u>,</u>	<
278, 378	Auxiliary contact, undervoltage release,alarm contact		< ■ ○ →	<	<

Note: 1. 200: circuit breaker with electromagnetic release only; 300: circuit breaker with thermal-electromagnetic release; 000: circuit breaker without overcurrent release (disconnector);

2. For ARM6HU-400, the auxiliary contacts in 248,348,278,378 specifications are a pair of contacts (i.e.,1NO, 1NC), and the auxiliary contacts in 268 and 368 specifications are three pairs of contacts (i.e., 3NO, 3NC); The number of auxiliary contacts is two groups for specifications of ARM6HU-400 and above, and one group for ARM6HU-250 and below.

3. For ARM6HU-250, two pairs of contacts can be provided for the auxiliary contacts in 220, 320, 240, 340, 270 and 370 specifications (i.e., 2NO, 2NC), and three pairs of contacts can be provided for 260 and 360 (i.e., 3NO, 3NC), but it should be noted when ordering.

Internal and external accessories

- Accessories description
- 1. Undervoltage release

When the circuit breaker is equipped with an undervoltage release, the undervoltage release shall be energized before the circuit breaker can be closed. The power supply should be connected according to the terminal number on the external undervoltage module (it is unnecessary to distinguish positive and negative poles for DC power supply). When the supply voltage drops to 70%~35% of the rated working voltage of the undervoltage release, the undervoltage release can reliably break the circuit breaker; when the supply voltage is lower than 35% of the rated working voltage of the undervoltage release, the undervoltage release can prevent the circuit breaker from closing; when the supply voltage is higher than 85% of the rated working voltage of the undervoltage release, the undervoltage release can ensure the reliable closing of the circuit breaker.

2. Shunt release

The power supply should be connected according to the lead wire number (it is unnecessary to distinguish positive and negative poles for DC power supply). When the applied voltage of the shunt release is between 70% and 110% of the rated control supply voltage, the circuit breaker can be reliably disconnected.

3. Auxiliary contact and alarm contact (see Table 8)



Wiring diagram of undervoltage release

Table 8 Rated value of auxiliary conta

Item	Frame size current (A)	Agreed thermal current(A)	Rated working current at AC40OV (A)
	250		0.3
Auxiliary contact	400-630	3	0.4
	250		0.3
Alarm contact	400-630	3	0.4



Auxiliary contact wiring diagram 4. Electric operating mechanism







Wiring diagram of shunt release

Power Supply
Closing circuit
Opening circuit

Internal and external accessories

5. Before the installation of the manual operating mechanism, the switch cabinet door where the operating handle is installed shall be holed according to the drawing, and the distance from the holing center to the hinge shall be more than 100mm. Place the circuit breaker with the operating mechanism fixed on the cover on the mounting plate and fix it slightly. Fix the square shaft of the control lever in the square hole for installing the square shaft on the operating mechanism. Close the door panel with hole, adjust the position of the circuit breaker, so that the square shaft center is consistent with the handle hole center. Open the door panel of the switch cabinet, and fix the handle when the rotation handle "OFF" indicates in the horizontal position. Close the switch cabinet door plate with the rotation handle installed, and try to operate the handle. The rotation should be flexible and free. The circuit breaker should be open when the handle is in the horizontal position, and closed when the handle is in the vertical position.





Holing drawing of A type handle

Holing drawing of F type handle

6. Wiring mode

Table 6 Sectional area of connecting conductor and rated current to be used

Rated current (A)	63	80	100	125 140	160	180 200 225	250
Sectional area of conductor (mm ²)	16	25	35	50	70	95	120

Terminal cover and base plate design of ARM6HU

ARM6HU-250(BMC base plate design)



ARM6HU-250(epoxy board base plate design)

0



31

ARM6HU-400/630(epoxy board base plate design)



Overall and installation dimensions





C

Щ



ARM6HU-250-3300 (epoxyboard)





Overall and installation dimensions

ARM6HU-400-3300 (epoxyboard)









Overall and installation dimensions

ARM6HU-630-3000 (epoxy board)









Installation method

1. Insulation test

The circuit breaker has been tested for insulation according to the standard before delivery. Since the circuit breaker is equipped with an electronic circuit board, the following steps must be followed if retesting is carried out before installation: ①Use a 500VDC megger.

②When the circuit breaker is in the disconnected state, respectively conduct between the incoming and outgoing connecting plates 1-2, 3-4 and 5-6, and between the connecting plates 1, 3 and 5 and the housing (the housing is covered with metal foil).

③For undervoltage release connected to the main circuit, conduct between the incoming line and the circuit breaker housing. (4) The insulation resistance shall not be less than $20M\Omega$. Note: The insulation test can also be carried out after the electronic circuit board is separated.

2. Please install it on metal and other flame retardants.

①Installation safety clearance of circuit breaker





2 When the user is using the circuit breaker, terminal covers shall be installed on the terminal side 1, 3 and 5 of circuit breaker as shown in the figure, and interphase partitions shall be installed on the terminal side 2, 4 and 6 of circuit breaker, and insulating board shall be padded between the circuit breaker and the metal mounting plate. The holing size of insulating board shall be the same as that of the mounting plate, which shall be prepared by the user.



Mode ARM6HU-ARM6HU- A: Between circuit breakers

B: Terminal cover to metal

C: Circuit breaker side to side wall

D: Center of circuit breaker to top

of terminal cover

el	А	В	С	D	E	F	G	Н	Ι
J-250	30	30	30	30	151	9	0	4	9
J-400	30	30	30	30	200	26	26	26	1.2
J - 630	30	30	30	30	200	26	26	26	1.2

Unit: mm

ARM6Z





Purpose and scope of application

ARM6Z series intelligent measuring circuit breaker (hereinafter referred to as circuit breaker) is suitable for distribution protection of circuit with frequency of AC 50Hz/60Hz, rated working current 125A to 250A, rated insulation voltage 1000V and rated working voltage AC380V. The measuring switch has functions such as long delay, short circuit short delay, instantaneous, overvoltage/undervoltage and phase failure protection, providing protection for the line and power equipment. With the ability to provide feedback on product current, voltage, power, energy and other information to terminal device with accuracy up to the meter level, it's used for detecting and monitoring the load end, reducing the operation and maintenance cost of the power grid, and

providing necessary data for future energy efficiency system. The measuring switch also has functions such as automatic identification of distribution network topology relationship, error monitoring of

energy meter and power line carrier communication.

Our company has launched this new circuit breaker aimed at the development needs of smart grids. This series of product has multiple independent innovative technologies of our company.

The circuit breaker can be installed vertically (i.e. upright), horizontally (i.e. transversely). The circuit breaker has isolation function, and its corresponding symbol is: The circuit breaker meets the standards of 1EC60947-2 and GB/T14048.2.

Overview and characteristics of circuit breakers:

The ARM6Z-250 intelligent measuring switch launched by our company is a new product aimed at the development needs of smart grids. This series of products have multiple independent innovative technologies of our company, and have the following main characteristics: • Comprehensive protection

Equipped with three sections of current, voltage and phase loss protection; Real-time measurement

Equipped with multiple measurement functions, real-time monitoring of busbar current, voltage, power, power factor, etc; • Electric energy metering

Measurement of total active power and split phase power of three-phase circuit; • Four remote function

It supports remote control, remote signaling, remote measurement and remote adjustment; Flexible communication

It supports various communication methods such as RS485 communication and carrier, micro power wireless, etc., supports DL/T 645 protocol, DL/T 698 protocol and MODBUS protocol, and supports functions such as parameter setting, status query, remote control, etc; Status monitoring

Real time monitoring of switch opening and closing status effectively supports fault isolation and positioning analysis; it can monitor the temperature of incoming and outgoing line joint and provide early warning of wiring fault;

High reliability

The switch has strong anti-interference ability and high reliability.

Temperature detection

It can monitor and measure the temperature inside the inlet and outlet terminals of the switch and the switch body.

Model and its meaning

AR	М	6	Ζ							
1	2	3	4	5	6	7		8	9	10
1 Ac	ereare					6 Ratec	lultima	ate shor	t-circuit	breaking capacity level (note 1)
2 Mc	2 Molded case circuit breaker 7 Operation mode (note 2)									
3 De	3 Design code 8 Number of poles									
4 Ele	4 Electronic release					9 Release mode and accessory code (see internal accessory code table)				
5 Ra	ted cur	rent of	frame	size	1	10 Product type (note 3)				

Note:1. According to the rated ultimate short-circuit breaking capacity, it can be classified into M type high breaking type and H type high breaking type.

2. No code for direct operation of handle: electric operation is represented by P; The rotation handle is represented by Z. 3. The basic type has no code, the intelligent communication type is represented by Z, the programming communication type is represented by B, the fire protection type is represented by X, and the LCD is represented by L.

Normal working environment

1. The ambient air temperature is -5°C~+40°C; and the average value within 24 hours shall not exceed +35%°C;

2. The altitude of the installation site shall not exceed 2000m;

3. The relative humidity of the air at the installation site shall not exceed 50% when the maximum temperature is+40 °C , and there can be a higher relative humidity at a lower temperature, such as 90% at 20°C. Special measures shall be taken for occasional condensation due to temperature change;

4. The pollution level is 3;

5. The switch shall pass the GB/T2423.10 test and be able to withstand mechanical vibration with frequency of 2Hz~13.2Hz, displacement of ± 1mm, frequency of 13.2Hz~100Hz and acceleration of ± 0.7g;

6.The circuit breaker shall be installed in the place where there is no explosion hazard, conductive dust, metal corrosion and insulation damage;

7. The circuit breaker shall be installed in the place free from invasion of rain and snow;

8. Operating conditions: The switch passes the test requirements of GB/T2423.1 and GB/T2423.2, and the ambient air temperature can be as low as -40°C and as high as +70°C (drating when the temperature exceeds +40°C); the characteristics will not be affected when the altitude reaches 2500m (derating when the altitude exceeds 2500m);

9.Storage conditions: ambient air temperature is -40 °C ~+70 °C.

Derating coefficient

f the altitude exceeds 2000m in the applicable working environment, the electrical performance of the circuit breaker shall be corrected according to the following table:

ARM6Z circuit breaker

Altitude (m)	Power frequency withstand voltage (V)	Insulation voltage (V)	Maximum working voltage (V)	Operating current correction factor
2000	3000	800	690	1
2500	3000	800	690	1
3000	2500	720	620	0.98
4000	2200	630	540	0.95
4500	2100	580	500	0.94
5000	2000	530	460	0.93

Note: The maximum working voltage of the ARM6Z circuit breaker is 400V.

Technical specifications of ARM6Z intelligent molded case switch controller

Appearance	
Model	ARM6Z-250
Rated current In (A)	125A、160A、180A、200A、250A
Rated current of frame size Inm (A)	250A
Usage category	Category B
Rated ultimate short-circuit breaking capacity level	L
Number of poles (P)	3 P
Rated working voltage Ue (V)	400V
Rated ultimate short-circuit breaking capacity Icu (kA)	36kA
Rated serviceshort-circuitbrea king capacity lcs (kA)	25kA
Rated short-time withstand current lcw (kA/1S)	3kA/1s
Rated insulation voltage Ui (V)	1000V
Rated impulse withstand voltage Uimp (V)	8KV
Mechanical life (time)	7000
Electrical life (time)	1000
Arcing distance (mm)	≤50
W*L*H (mm) +++ weight 3P	





Technical specifications of ARM6Z intelligent molded case switch controller

Appearance	
Model ARM6Z-400	
Rated current In (A) 200A、250A、315A、3	50A、400A
Rated current of frame size 400A Inm (A)	
Usage category Category B	
Rated ultimate short-circuit breaking capacity level	
Number of poles (P) 3 P	
Rated working voltage Ue (V) AC400V	
Rated ultimate short-circuit breaking capacity Icu (kA)	
Rated serviceshort-circuitbrea king capacity lcs (kA)	
Rated short-time withstand current lcw (kA/1S)5kA/1s	
Rated insulation voltage Ui (V) 800V	
Rated impulse withstand voltage Uimp (V)	
Mechanical life (time) 7000	
Electrical life (time) 1000	
Arcing distance (mm)	
w*L*H	
(mm) (mm) (mm) (mm) (mm) (mm) (mm) (mm)	
<u>w</u> weight 3Р 121	

Technical specifications of ARM6Z intelligent molded case switch controller

Appearance	
Model	ARM6Z-630
Rated current In (A)	400A、420A、440A、460A、4
Rated current of frame size Inm (A)	630A
Usage category	Category B
Rated ultimate short-circuit breaking capacity level	L
Number of poles (P)	3 P
Rated working voltage Ue (V)	AC400V
Rated ultimate short-circuit breaking capacity Icu (kA)	65kA
Rated serviceshort-circuitbrea king capacity lcs (kA)	42kA
Rated short-time withstand current lcw (kA/1S)	5kA/1s
Rated insulation voltage Ui (V)	800V
Rated impulse withstand voltage Uimp (V)	8KV
Mechanical life (time)	4000
Electrical life (time)	1000
Arcing distance (mm)	≤50
₩*L*H	182
	290
<u>w</u> <u>н</u> weight 3P	125



480A、500A、530A、560A、600A、630A

Technical specifications of ARM6Z intelligent molded case switch controller

Current protection		Available for overload long delay, short circuit short delay and short circuit instantaneous protection
Protection function	Voltage protection	Available for overvoltage and undervoltage protection
	Phase loss protection	Available
	Current	0.004ln ≤ l ≤ 0.01ln, accuracy±0.75%;
	Current	0.01ln ≤l≤1.2ln, accuracy±0.5%.
-	Voltage	0.7Un ≤ U ≤ 1.3Un, accuracy±0.5%
Measurement	Frequency	45Hz~55Hz, accuracy ±0.01Hz
function		Active power: ±0.5%, reactive power: ±2%, apparent power: ±2%
-	Power	Resolution: 0.001, 0.5-1.00, error limit: ± 0.005.
-	Power factor	Total and split phase forward and reverse active electric quantity, as well as combined active electric quantity
	Electric quantity	Measurement accuracy meets level 0.55
Monitoring function	Switch status	Closing position, opening position, tripping position
Topology function	Тороlоду	Available for transmitting and identifying topological signal
Remote signaling	Remote signaling	Switch opening, closing, tripping position and fault remote signaling
Four remote function	Remote control	It supports remote tripping command
i our remote function	Remote measurement	Electrical parameter such as current, voltage, power and electric quantity
-	Remote adjustment	It supports remote setting of switch operating parameter
	RS485	2-way, 1200-9600bps, supporting uplink and downlink
Communication	HPLC	1-way, 2-12MHz, supporting national network interconnection and interworking
function	Bluetooth	1-way, BLE5.0
-	Communication protoco	ol DL/T645-2007 protocol, DL/T698 protocol, Modbus protocol, etc
	Pulse output	Active pulse, reactive pulse, second pulse
-	Fault memory	Current overload, short circuit, voltage fault, etc
Advanced feature	Power outage reporting	It supports carrier reporting within 30s after power outage
	Tomporative	It supports temperature monitoring of inlet and outlet connector
	Temperature monitorine	It supports temperature monitoring inside the switch body
-	Remote output	It supports multiple optional remote control outputs

Note: 1. The power and electrical measurement functions need to be connected to N line

2. When the product is fully functional, it needs to be connected to N line

3. Remote output is an optional function

4. Temperature monitoring is an optional function

5. The communication protocol supports DL/T645 protocol by default, and other protocols can be customized according to customer requirement

6. Voltage protection and phase loss protection are optional functions

Overload long delay protection

Overload long delay protection parameter set value

Parameter	Frame current	Set value	Factory set value
Action set value Ir1	2 50	100~250A continuously adjustable	250A
Delay time set value t1		12s <mark>~</mark> 99s adjustable	90s
Action set value Ir1	4 00	200~400 continuously adjustable	400A
Delay time set value t1	-	12s ~ 99s adjustable	90s
Action set value Ir	6 30	400 ~ 630 continuously adjustable	630A
Delay time set value t1		12s ~ 99s adjustable	90s

Overload long delay action characteristics

Ambient temperature	Current name	Current	Time
+40C	Agreed non tripping current	1.05lr1	≥ 2h
	Agreed tripping current	1.3Ir1	≤ 2h

Note: Overload protection is carried out according to the inverse time limit characteristic: T-(2lr1/I) t1, with a delay accuracy of ±10%. Ir1 is the set value for long delay protection, and t1 is the set value for long delay time. 2. Short circuit short delay protection

Short circuit short delay protection prevents impedance short circuit in the distribution system, and tripping delay is to achieve selective protection.

Short circuit short delay protection related parameter setting

Parameter setting	Set value	Factory set value
Short delay action current set value Ir2	4lr1 、5lr1 、6l r1 、7lr1 、8lr1 、	6lr1
Short detay action current set value in2	9lr1 、 10lr1 、 11lr1 、 12lr1	
Short delay time set value t2	0.1s 、0.2s 、0.3s 、 0.4s、0FF	0 .3s

Short circuit short delay protection action characteristics

Characteristic	Fault current multiple	Tripping characteristics	Delay error
Non-action characteristic	≤0.8lr2	Non-action	/
Action characteristic	≥1.2lr2	Delay action	± 40ms

3 、 Short circuit instantaneous protection Short circuit instantaneous protection related parameter setting

Characteristic	Set value	Factory set value
Instantaneous action current set value Ir3	4lr1 、5lr1 、6lr1 、7lr1 、8lr1 、 9lr1 、10lr1 、11lr1 、12lr1	10lr1

Short circuit instantaneous protection action characteristics

Characteristic	Fault current multiple (I/Ir3)	Tripping characteristics	Delay error
Non-action characteristic	≤0.8	Non-action	≥ 200ms
Action characteristic	≥1.2	Delay action	< 200ms

Circuit breaker internal accessory code

Manual operation installation drawing and overall dimensions ARM6Z-250-3300

Left s	ide installation	Handle	Alarm contactAuxiliary contactShunt release	 ○ Undervoltage release → Lead wire direction
releaes mode and internal accessory code	Model Number of poles Accessory name	ARM6Z- 3P	250	
208 308	Alarm contact	←□		
210 310	Shunt release	¢-[0]		
220 320	Auxiliary contac	←∎		
230 330	Under voltage release	←0		
240 340	Shunt release Auxiliary contac	* • •	>	
260 360	Auxiliary contac	* =	•	
270 370	Auxiliary contac Under voltage release	+0 •	•	
218 318	Shunt release Alarm contact	* • D	•	
228 328	Auxiliary contac Alarm contact	*[B]		
238 338	Under voltage release Alarm contact	+0_D	•	
248 348	Shunt release Alarm contact Auxiliary contac	< <u>●</u>	•	
268 368	Alarm contact Auxiliary contac			
278 378	Under voltage release Alarm contact Auxiliary contac			

Note:

1)accessory:Leading line type /terminal type

2)Leading line is 50 by default, 100 can be made(we should take an extra charge)

3). 200: circuit breaker with only electromagnetic release; 300: circuit breaker with thermal-electromagnetic release; 000: circuit breaker without over-current release (disconnector)

4)"/" in the table indicates not provided。

5)Please contact the company for accessories that are not included in the table attachments.



ARM6Z-400-3300













Schematic diagram of LCD switch



250A



Indication and display functions

DF

D

125

155



1. Indication function

a) Work light: It flashes once (green) every 1-2s after power on; b) Communication light: Slow flashing indicates HPLC networking; Constant off indicates successful networking;

It flashes yellow and green alternately during HPLC communication; C) Alarm light: It flashes (red) when an alarm event (such as overvoltage or undervoltage) occurs;

pulse equivalent value (1kWh/pulse constant);

e) Reactive light: the intelligent measuring switch emits a pulse when the accumulated total reactive energy reaches the pulse

equivalent value (1kvarh/pulse constant).

2 Display function

The display function includes real-time data display function, event record query, parameter setting function and product

information display.

2.1 Real-time data display function

2.1.1 Scroll up/scroll down key: it switches the display interface.

Closing 16:54:30 Closing 16:54:30 220.1 V 220.1 V 100.1 A Ia: Ib: 100.1 Ub: 220.1 V 100.1 Ic: 1.000 330.003 kw otal : otal 1.000 110.001 kw PFa: Pa: 1.000 110.001 kv PFb: Pb: 1.000 110.001 kv PFc: nlet temperature outlet temperature 20.0℃ 30.0° Ta: ſa: 20.0℃ 30.00 Tb: Tb: 20.0℃ Tc: Tc: 30.00

2.1.3 Display operation

In real-time data display mode, press the OK button to enter the operation interface. The operation interface includes four enu options: event record, protection parameter, system parameters and product information. In this interface, the user can use the up and down keys to move the selection, and press the OK key to enter the submenu.

> 3 minutes of keyless operation Automatically return to real-time display interface



Select the interface option, and press the OK button to enter the submenu



d) Active light: the intelligent measuring switch emits a pulse when the accumulated total active electrical energy reaches the

2.1.2 Under the real-time data display interface, press the OK button to enter the operation interface





• System parameter interface:

Keep the button operation consistent with the protection parameter setting interface.







Keep the button operation mode consistent with the protection parameter



The wiring of conventional switch is shown in the figure



ARM6DC ARM6HU Series DC Molded Case Circuit Breaker Series Molded Case Circuit Breaker

Secondary terminal wiring is arranged from left to right (with 3.5mm spacing pluggable terminal block)

No.	Item	Terminal description
1	PPS	Second pulse
2	P+	Active pulse output
3	Q+	Reactive
4	GND	Public area
5	485B1	Maintenance
6	485A1	Maintenance
7	485B2	Meter reading
8	485A2	Meter reading

Note: It is recommended to use 0.5mm² multi-core flexible wire and crimp the connection lug.

Installation safety clearance



Circuit breaker installation safety clearance

A		C	D		
Model	Without zero arcing cover	With zero arcing cover	D	C	U
ARM6Z-250	50	25	25	25	25

nductive	circuit	(including	no	obstructions	or
		(

- B: Circuit breaker terminal to bottom wall
- C: Circuit breaker side to side wall (including no obstructions
- or grounded metal)
- D: To non-conductive component
- Note: E represents the interphase partition. Interphase partition
- or zero arcing cover must be installed

Unit: mm

ARM6DC	ARM6HU	ARM6Z
Series DC Molded Case Circuit Breaker	Series Molded Case Circuit Breaker	series intelligent measuring switch

MCCB Modle List

(pls□√ Tick Or Fill in_____)

Company Quantity Order Date Model List ARM1 Magnatic List L S 2P Rated current A Model List ARM3 Despinition L S 2P Rated current A Type of N-pole Type E: N-pole always ON, which is not connected with other three poles Defore opening (default): Type C: N-pole with over-current protection, closing and opening together with other three poles D: Type C: N-pole with over-current protection, closing and opening together with other three poles D: Type C: N-pole with over-current protection, and it's always ON, does not close or open with other three poles: Products user For power distribution(no code) (default value): for motor protection [code 2]: 200: circuit breaker with electromagnetic release only: 300: circuit breaker with thermal electromagnetic release: 000: circuit breaker without over-current release (disconnector) Electromagnetic trelease: 000: circuit breaker without over-current release (used as disconnector) [code 00]; Utiout over-current release (used as disconnector); Discritic operation mode: discritic operation [c					•	
Model List <pre> ARM3</pre> ARM3 ARM4	Company		Quantity		Order Date	
Type B: N-pole always ON, which is connected with other three poles before opening [default]; Type of N-pole Type of N-pole Type C: N-pole with over-current protection, closing and opening together with other three poles □; Type D: N-pole with over-current protection, and it's always ON, does not close or open with other three poles □; Type D: N-pole with over-current protection, and it's always ON, does not close or open with other three poles □; Products user For power distribution[no code] (default value); for motor protection [code 2]; 200: circuit breaker with electromagnetic release only; 300: circuit breaker with thermal electromagnetic release; 000: circuit breaker without over-current release (disconnector) Electromagnetic release; 000: circuit breaker without over-current release (disconnector) Leakage alarm non-tripping []; withing mode Front panel (default); rear panel H_]; plug-in front panel (Code 1] □; Wiring mode Front panel (default); rear panel H_]; plug-in front panel CRQ_]; plug-in type rear panel CRH_]; Operate ways 9. Operation mode:direct operation (default); Electric operating mechanism P voltage level: AC230V □; AC400V □; DC24V □; Electric operating mechanism P voltage level: AC230V □; AC400V □; DC24V □; Electric operating mechanism P voltage level: AC230V □; AC400V □; DC24V □; Note: AC or DC power supply can be used for CD2 electric operation power supply, while	Model List	□ ARM3 □ Magnatic □ X □ E □ ARM5	□ C]L □ L □ M		□Rated current A	
Type of N-pole Typ A: N-pole always ON, which is not connected with other three poles [; Type C: N-pole with over-current protection, closing and opening together with other three poles [; Type D: N-pole with over-current protection, and it's always ON, does not close or open with other three poles [] Type D: N-pole with over-current protection, and it's always ON, does not close or open with other three poles [] Products user For power distribution[no code] (default value); for motor protection [code 2]; 200: circuit breaker with electromagnetic release only; 300: circuit breaker with thermal electromagnetic threemomagnetic compound tripping[code 300](default value); only electromagnetic threemomagnetic compound tripping [ode 000]; Electronic overload alarm non-tripping function [code 1] [Electronic overload alarm tripping function [] Electronic overload alarm non-tripping function [code 1] []; Wiring mode Front panel (default); rear panel H[]; plug-in front panel CRQ]; plug-in type rear panel CRH]; Draw-out type (125 frame without draw-out type); 9. Operation mode: direct operation (default); Electric operation mode: direct operation (default); Electric operation mode: direct operation (default); Electric operating mechanism 2: operating m	Туре		Explaination			
Products user 200: circuit breaker with electromagnetic release only; 300: circuit breaker with thermal electromagnetic release; 000: circuit breaker without over-current release (disconnector) Electromagnetic release; 000: circuit breaker without over-current release (disconnector) Electromagnetic tripping : Without over-current release [used as disconnector] [code 000]; Leakage alarm non-tripping function [Type of N-pole	Typ A: N-pole always ON, which is no Type C: N-pole with over-current prot Type D: N-pole with over-current prot	t connected with c ection, closing an	other three poles d opening togethe	; r with other three poles \Box ;	
only electromagnetic tripping : Note that the tripping tripping in the tripping in the tripping in the tripping in tripping in tripping in tripping in tripping in the tripping in the tripping in the tripping in tripr	Products user	For power distribution[no code] (default value); for motor protection [code 2]; 200: circuit breaker with electromagnetic release only; 300: circuit breaker with thermal				
Wiring mode Draw-out type (125 frame without draw-out type); 9. Operation mode:direct operation (default); Electric operating mechanism P voltage level: AC230V ; AC400V ; DC24V ; Electric operation type: CD2 [default]; CDM [for frame size of 250 and below]; CD [for frame size above 250] ; Note: AC or DC power supply can be used for CD2 electric operation power supply; Manual operating mechanism Z: operating mechanism Cs1 Cs2 rotating handle F A Connection terminal: none [default]; BC ; JGC ; Terminal block: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Undervoltage 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]];	Tripping type	only electromagnetic tripping □; Without over-current release [used as disconnector] [code 000]; Leakage alarm non-tripping function □ Leakage alarm tripping function □; Electronic overload alarm non-tripping function [code I] Electronic overload alarm tripping function □;				
Operate ways Electric operating mechanism P voltage level: AC230V ; AC400V ; DC24V ; Electric operation type: CD2 [default]; CDM [for frame size of 250 and below]; CD [for frame size above 250] ; Note: AC or DC power supply can be used for CD2 electric operation power supply, while only AC power supply can be used for CD2 and below]; CD [for frame size above 250] ; Note: AC or DC power supply can be used for CD2 electric operation power supply; Manual operating mechanism Z: operating mechanism Cs1 Cs2 rotating handle F A Connection terminal: none [default]; JBC ; JGC ; Terminal block: none [default]; added]; Mechanical interlocking mechanism: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Undervoltage 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]];	Wiring mode					
Note: AC or DC power supply can be used for CD2 electric operation power supply, while only AC power supply can be used for CDM and CD electric operation power supply; Manual operating mechanism Z: operating mechanism Cs1 [Cs2] rotating handle F[A] Connection terminal: none [default]; JBC]; JGC]; Terminal block: none [default]; added]; Mechanical interlocking mechanism: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Mounting base of front panel wiring guide: none [default]; added]; Undervoltage 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 accessories 50cm (default]; 100cm [chargeable]]; customized length [chargeable]];	Operate ways	Electric operating mechanism P voltage level: AC230V 🗆; AC400V 🗆; DC24V 🗔; Electric operation type: CD2 [default]; CDM [for frame size of 250 and below];				
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]];		Note: AC or DC power supply can be used for CDM and CD e supply can be used for CDM and CD e Manual operating mechanism Z: ope Connection terminal: none [default]; Terminal block: none [default]; adde Mechanical interlocking mechanism:	electric operation erating mechanism JBC 🗆 ; JGC 🗆 d 🗆 ; none [default]; ad	power supply; a Cs1		
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] ;	Shunt release	AC230V []; AC380V/400V []; DC2	20V ; DC24V];		
Wiring method of internal accessories lead wire [default]; terminal block □; Length of accessory wire 50cm (default); 100cm [chargeable] □; customized length [chargeable] □;	Undervoltage release	AC230V □; AC380V/400V□; DC220V□; DC24V□;				
internal accessories Length of accessory wire 50cm (default); 100cm [chargeable] : customized length [chargeable] ;	Auxiliary switch	1 set 🗆 ; 2 sets 🗆				
accessory wire 50cm (default); 100cm [chargeable] []; customized length [chargeable] [];	5	lead wire [default]; terminal block □;				
Operating handle none [default]; added \Box ;		50cm (default); 100cm [chargeable] 🗆 ; customized length [chargeable] 🗆 ;				
	Operating handle					

ARM3L Model	Leakage type product selection			
Rated residual operating current I∆n (mA)	Type I: leakage current gear 100/30 125/250: 100 [; 300]; 500 Type II: leakage current gear 125/25 125/250: 30 [; 100]; 300 [400/630: 300]; 500]; 1000			
Delay time ∆t(s)	non-delay 🗌 ; 0.1 🗌 ; 0.5 🗌 ; 1			

Supplementary notes

1. Label: 2. Package: 3. Others: 300/500 0 □; 250; frame size: 30/100/300;400/630frame size: 300/500/1000 □; 0 □; 1 □;