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Overview

Dc circuit breaker limited current performance, can accurately protect relay protection, automatic device from overload, short circuit and other faults. Advantages of current limiting and arc extinguishing capabilities of dc circuit breakers.

TechnicaL Specification

Rated Working Voltage U800V/1000V DCFrame Current In63A, 50A, 40A, 32A, 25A, 20A, 16A, 10ARated Current In63A, 50A, 40A, 32A, 25A, 20A, 16A, 10ARated Insulation Voltage Uim800V/1000VRated Insulation Voltage Uimp6kVTripping CharacteristicsB/CTripping TypeB/CRated Short-Circuit Breaking6kARated Short-Circuit Breaking6kARated Service Short-Circuit Breaking6kARated Service Short-Circuit Breaking6kARated Service Short-Circuit Breaking6kARated Service Short-Circuit Breaking6kABectrical LifeActualActual>1500 CyclesStandard300 CyclesStandard9700 CyclesOvervoltage CategoryIIIPollution DegreeIP40; Wiring port IP20Resistance to humidity =nd heatClass 2Relative Humidity495 %Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-6Shocksacc. to IEC60068-2-7Terminal capacity2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-30°C~70°CStorage Temperature-40°C-85°CInstallation MethodDINElevation<2000mWidth:72mmHigh: 87.5mmDimensionHigh: 87.5mmWeight0.12kg/Pole	Pole		2Р	
Frame Current 63A Rated Current In 63A, 50A, 40A, 32A, 25A, 20A, 16A, 10A Rated Insulation Voltage Uimp 800V/1000V Rated Impulse Withstand Voltage Uimp 6kV Tripping Characteristics B/C Tripping Type Thermal Magnetic Rated Short-Circuit Breaking Capacity Icu 6kA Rated Service Short-Circuit Breaking Capacity Icu 6kA Rated Service Short-Circuit Interrupting Capacity Icu 6kA Rated Service Short-Circuit Interrupting Capacity Icu 6kA Bectrical Life Actual >1500 Cycles Standard 300 Cycles Standard 9700 Cycles Overvoltage Category III Pollution Degree 3 Relative Humidity Indext Class 2 Relative Humidity Indext Class 2 Relative Humidity Standard 3.0°C-207 Vibration acc. to IEC60068-2-27 Terminal capacity 2.0~3.5 Nm Ambient Temperature -30°C ~70°C Storage Temperature -30°C ~70°C Storage Temperature -30°C ~70°C Storage Temperature -30°C ~70°C Installation Method DIN Elevation <2000m	Rated Working Voltage	Ue	800V/1000V DC	
Rated Current In63A, 50A, 40A, 32A, 25A, 20A, 16A, 10ARated Insulation Voltage Uimp800V/1000VRated Impulse Withstand Voltage Uimp6kVTripping CharacteristicsB/CTripping TypeThermal MagneticRated Jtimate Short-Circuit Breaking6kARated Strice Short-Circuit Breaking6kAStandard300 CyclesMechanical LifeActualActual>10000 CyclesOvervoltage CategoryIIIPollution Degree3Ingress ProtectionIP40; Wiring port IP20Resistance to humidityheatClass 2Relative Humidity\$95 %Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-6Shocksacc. to IEC60068-2-6Shocksacc. to IEC60068-2-6Shocksacc. to IEC60068-2-6Shocksacc. to IEC60068-2-7Terminal capacity2.0 ~ 3.5 NmAmbient Temperature-30°C ~ 70°CStorage Temperature-30°C ~ 70°CInstallation MethodDINElevation<2000m	Frame Current		63A	
Rated Insulation Voltaye Uim800V/1000VRated Impulse Withstand Voltage Uimp6kVTripping CharacteristicsB/CTripping TypeThermal MagneticRated Ultimate Short-Circuit Breaking Capacity Ics6kARated Service Short-Circuit Breaking Capacity Ics6kABetcrice Short-Circuit Breaking Capacity IcsActualStandard300 CyclesBechanical Life Covervoltage CategoryActualVervoltage CategoryIIIPollution Degree3Ingress ProtectionIP40; Wiring port IP20Resistance to humidityHeatClass 2Relative HumidityS95 %VibrationClass 2Shocksacc. to IEC60068-2-63Shocksacc. to IEC60068-2-63Shocks	Rated Current In		63A, 50A, 40A, 32A, 25A, 20A,16A,10A	
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Tripping Characteristics B/C Tripping Type Thermal Magnetic Rated Climate Short-Circuit Breaking Capacity Ics 6kA Rated Service Short-Circuit Interrupting Capacity Ics 6kA Electrical Life Actual > 1500 Cycles Standard 300 Cycles Mechanical Life Actual > 10000 Cycles Mechanical Life Actual > 10000 Cycles Overvoltage Category III 9700 Cycles Overvoltage Category III 9700 Cycles Pollution Degree 3 1P40; Wiring port IP20 Resistance to humidity → Intervolting IP40; Wiring port IP20 Resistance to humidity → Intervolting ≤ 95 % Vibration acc. to IEC60068-2-6 Shocks acc. to IEC60068-2-6 Shocks acc. to IEC60068-2-27 Terminal capacity 2.0~35 Nm Ambient Temperature -30°C -70°C Storage Temperature -30°C -70°C Storage Temperature -40°C ~85°C Installation Method DIN Elevation ≤2000m <	Rated Impulse Withstand Voltage Uimp		6kV	
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Mechanical LifeActual>10000 CyclesStandard9700 CyclesOvervoltage CategoryIIIPollution Degree3Ingress ProtectionIP40; Wiring port IP20Resistance to humidityClass 2Relative Humidity $\leq 95 \%$ Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-7Terminal capacity2.5~35mm?Fastening Torque of Terminals2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation $\leq 2000m$ MightHigh; 87.5mmWidth:72mmWight0.12kg/Pole		Standard	300 Cycles	
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Pollution Degree3Ingress ProtectionIP40; Wiring port IP20Resistance to humidity and heatClass 2Relative Humidity ≤ 95 %Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-27Terminal capacity $2.5 \sim 35 mm$?Fastening Torque of Terminals $2.0 \sim 3.5$ NmAmbient Temperature $-30^\circ C \sim 70^\circ C$ Storage Temperature $-40^\circ C \sim 85^\circ C$ Installation MethodDINElevation $\leq 2000m$ DimensionHigh: 87.5mmWidth:72mmDepth: 81mmWeight $0.12kg/Pole$	Overvoltage Category		Ш	
Ingress ProtectionIP40; Wiring port IP20Resistance to humidity and heatClass 2Relative Humidity \leq 95 %Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-27Terminal capacity2.5~35mm?Fastening Torque of Terminals2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation \leq 2000mDimensionHigh: 87.5mmWeight0.12kg/Pole	Pollution Degree		3	
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Relative Humidity≤ 95 %Vibrationacc. to IEC60068-2-6Shocksacc. to IEC60068-2-27Terminal capacity2.5~35mm?Fastening Torque of Terminals2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation≤2000mDimensionHigh: 87.5mmWeight0.12kg/Pole	Resistance to humidity	and heat	Class 2	
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Terminal capacity2.5~35mm?Fastening Torque of Terminals2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation<2000m	Shocks		acc. to IEC60068-2-27	
Fastening Torque of Terminals2.0~3.5 NmAmbient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation≤2000mDimensionWidth:72mmDimensionHigh: 87.5mmWeight0.12kg/Pole	Terminal capacity		2.5~35mm?	
Ambient Temperature-30°C~70°CStorage Temperature-40°C~85°CInstallation MethodDINElevation<2000m	Fastening Torque of Ter	minals	2.0 ~ 3.5 Nm	
Storage Temperature-40°C~85°CInstallation MethodDINElevation≤2000mDimensionWidth:72mmHigh: 87.5mmDepth: 81mmWeight0.12kg/Pole	Ambient Temperature		-30°C~70°C	
Installation Method DIN Elevation ≤2000m Dimension Width:72mm High: 87.5mm Depth: 81mm Weight 0.12kg/Pole	Storage Temperature		-40°C~85°C	
Elevation ≤2000m Dimension Width:72mm High: 87.5mm Depth: 81mm Weight 0.12kg/Pole	Installation Method		DIN	
Dimension Width:72mm High: 87.5mm Depth: 81mm Weight 0.12kg/Pole	Elevation		≤2000m	
Dimension High: 87.5mm Depth: 81mm Weight 0.12kg/Pole			Width:72mm	
Depth: 81mm Weight 0.12kg/Pole	Dimension		High: 87.5mm	
Weight 0.12kg/Pole			Depth: 81mm	
	Weight		0.12kg/Pole	

Contact Configuration



Standard time-current band

Test	Instantaneous release type	DC test current	Starting state	Tripping or non-tripping time limit	Expected results	Remarks
	B, C	1.13In	Cold state	t≥ 1h(ln≤ 63A)	No tripping	/
b	B, C	1.45In	Followed by a test	t < 1h(ln≤ 63A)	Tripping	The current rises steadily within 5S
С	B、 C	2.55In	Cold state	1s < t < 60s(In≤ 63A) 1s < t < 60s(In≤ 63A)	Tripping	/
d B, C	B、C Cold state	4In	California	0.1s < t < 45s(In≤ 32A) 0.1s < t < 90s(In≤ 32A)	Tripping	
		Cold state	0.1s < t < 15s(In≤ 32A) 0.1s < t < 30s(In≤ 32A)	inpping	Close the auxiliary switch to turn on the power	
0	P C	7In	Cold state	+ < 0.1c	Tripping	-
e B, C	15In	Colu State	ι < 0.15	inpping		

Dimensions(unit:mm)





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1 3 load * * * *			
2 4			





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Overview

- Suitable for industrial, commercial, high-rise and civil residences circuit protection.
- Features
- Up to 63A current rating
- Current limiting design
- \bullet Three levels of short-circuit protection ,categorized by B $_{\sim}\,$ C and
- D curves.
- Captive screws cannot be lost
- Contact position indicator(red/green)
- Easy installation on DIN rail

TechnicaL Specification

Specifications	
Rated voltage(v)	230/400V(1P)、400V(2P、3P、4P)
Rated current(A)	6、10、16、20、25、32、40、50、63
Poles	1P、2P、3P、4P
Rated breaking capacity(A)	4500
Tripping characteristics	Table 1
Mechanical & Electrical life	4000
Tripping characteristics	B、C、D
Tightening torque (N·m)	2.5
Pollution Degree	2
Protection class	lp20
Overvoltage category	П
Standards	IEC60898 -1、GB/T10963 . 1
Compliant certification	ССС

► Table 1: Tripping characteristics (Reference temp.30°C)

ltem	Rated current(A)	Initial status	Test current In(A)	Time limit for tripping or non-tripping	Expected result	Remarks
Delay	≤63	Cold	1.13In	≤1h	Non-tripping	
Delay	≤63	Following previous test	1.45In	< 1h	Tripping	Current smoothly rises to specified value within 5s
Delay	≤32	Cold	2.55In	1 <t<60s< td=""><td>Tripping</td><td></td></t<60s<>	Tripping	
Delay	>32	Cold	2.55In	1 <t<120s< td=""><td>Tripping</td><td></td></t<120s<>	Tripping	
Instantaneous	Any value	Cold	3、5、10ln	≤0.1s	Non-tripping	B, C, D
Instantaneous	Any value	Cold	5、10、20ln	<0.1s	Tripping	B、C、D

Note: The term"cold "means that the test is carried out at a reference calibration temperature without load before the test.

Dimensions(unit:mm)



Wiring Diagram

1P	2P	3P	4P
1 <u>∗</u>	1 <u>*</u> 3 *	1 ± 3 ± 5 ±	1 ± 3 ± 5 ± 7 ±
2	2 4		

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Overview

- Suitable for industrial, commercial, high-rise and civil residences circuit protection.
- Features
- Up to 63A current rating
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- D curves.
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- Contact position indicator(red/green)
- Easy installation on DIN rail

TechnicaL Specification

Specifications	
Rated voltage(v)	230V(1P)、400V(2~4P)
Rated current(A)	63A、80A、100A
Poles	1P、2P、3P、4P
Rated breaking capacity lcn(A)	Icu=Ics=6000A
Rated impulse withstand voltage Uimp(V)	6000V
Tripping characteristics	Table 1
Mechanical & Electrical life	8500&1500(Operating frequency: 120 /h)
Pollution Degree	2
Tightening torque(N•m)	2.5
Protection class	IP20
Overvoltage category	П&Ш
Standards	IEC 60947-2 、GB/T14048.2
Compliant certification	ССС

Wiring Diagram

1P	2P	3P	4P
1 ∗	1 <u>∗</u> 3 <u>∗</u>	1 ± 3 ± 5 ±	1 ± 3 ± 5 ± 7 ±
2 ⊂	2 4		

► Table 1: Tripping characteristics (Reference temp.30°C)

ltem	Test current In(A)	Initial status	Time limit for tripping or non-tripping	Expected result	Remarks
а	1.05ln	Cold	t≤1h (In≤63A) t≤2h (In≥63A)	Non-tripping	
b	1.3ln	Following Item a test	t<1h (In≤63A) t<2h((In≥63A)	Tripping	Current smoothly rises to specified value within 5s
с	2In	Cold	0 <t<300s< td=""><td>Tripping</td><td></td></t<300s<>	Tripping	
d	8In	Cold	t≤0.2s	Non-tripping	
е	12In	Cold	t<0.2s	Tripping	

Note: The term"cold "means that the test is carried out at a reference calibration temperature without load before the test.

Dimensions(unit:mm)











MDB7-100ARD electric energy meter external circuit breaker (hereinafter referred to as circuit breaker) is suitable for AC 50Hz, rated working voltage up to 400V, rated current to 100A, longdistance control breaking or closing operation of the line, at the same time The line acts as an overload and short circuit protection, and can also be used as an infrequent operation conversion of the line. At present, it is widely used in intelligent prepaid meters to control the closing and breaking of lines. Meet the standard: GB10963.1, IEC60898-1.

Electrical performance

Project	Parameter	Project	Parameter
Number of poles	2P、4P	Instantaneous trip type	С
Features	Short circuit protection, overload protection, isolated, remote split/ close control	Short circuit protection, overload protection, isolated, remote split/ close control	
Rack rated current value Inm	100A	Mechanical life	10000
Rack rated current value Inm	230V AC(2P)/400V AC(4P))/400V AC(4P) Electrical life	
Rated current In	ted current In 32A, 40A, 50A, 63A, Overcurrent tripping characteristics		See Table 1 and Figure 1
Remote control fund	Remote control function		
Project	Parameter	Project	Parameter
Closing time	tc≤3s	Split/close switch	Phase line power
Power-on delay	td≤4s	Phase leakage current	IL≤0.2mA
Control level voltage	220V AC±30%	Control signal indicator	Have
Control level current	lc≤1mA	Feedback signal	Have
Closing module power take-off mode	Take power before the control line meter, take power after closing/ opening the short	Split/close operation mode	Built-in shaft drive

timetable

Overview

PV plastic smart circuit breakers (hereinafter referred to as: circuit breaker) is a circuit breaker integrating residual current relay, contactor and molded case circuit breaker. It is suitable for three-phase four-wire neutral point grounding power supply and demand system. Or the ground fault of the electrical equipment, over current, short circuit, phase loss and over voltage protection. It can also prevent electrical fires and electrical equipment damage caused by ground faults of electrical circuits or electrical equipment and provide indirect contact protection for personal electric shock hazards.

The product complies with the GB14048.2-2008 GB/T22387-2008 standard. The photovoltaic molded case intelligent circuit breaker is equipped with RS485 serial interface, which can set the protection characteristic parameters through the programmer, and can meet the requirements of communication networking.

The main technical parameters

Specification model	MDM8L-125	MDM8L-250	MDM8L-400	MDM8L-630	MDM8L-800	
Rated Voltage(V)	380V	380V	380V	380V	380V	
Shelf current In(A)	125	250	400	630	800	
Rated current lr (standard type)	40、63、 80、100、 125	100, 160 200, 250	250、315 350、400	400, 500, 630	630、 700、800	
Rated current lr (electronic)	(0.	.4-1.0) xln+o	off (can be adju	isted every	0.1ln)	
Rated ultimate short-circuit breaking capacity leu (kA)	30	35	50	65	65	
Rated operating short-circuit breaking capacity les (kA)	15	22	35	42	42	
Rated residual short- circuiting (breaking) capability la m (kA)	7.5	8.75	12.5	16.25	16.25	
Rated residual operating current Im (standard type)	75mA/150mA/ 300mA/500mA		100mA/200mA/ 300mA/500mA	100mA/300mA/500mA/ 800mA		
	Leakage alarm, automatic tracking					
Rated residual operating current I n (electronic)	50mA/100	mA/300mA/! a	500m A/800mA/ utomatic tracki	'1000mA/lea ng	kage alarm,	
Rated residual non- operating current	0.5 l△ n					
Residual current breaking time		≤ 0.	2S S-type 0.5	S 1S		
Limit no drive time	∆t>0.06s (2 I △ n) (S-type)					
Undervoltage action value (standard type)	145V±5% (automatically close after voltage recovery				recovery)	
Overvoltage action value (standard type)	280V:	±5% (autom	atically close a	fter voltage	recovery)	







MDM1Z/5Z DC Moulded Case Circuit Breaker

MDM1Z/5Z DC Moulded Case Circuit Breaker



MDM1Z-125



MDM5Z-400



Overview

MDM1Z PV DC Moulded Case Circuit Breaker (MCCB) are mainly used in large solar power system, which are applied for solar DC combiner box, inverter and DC power distribution cabinet. Rated voltage up to 1000V DC, current up to 630A, with the function of overload protection and short-circuit protection.

- High Shot- Circuit/Breaking Capacity
 Protection Functions: Overload, Short circuit, Unfrequent Operation
 Rated Voltage up to 1000V DC
 Rated Current 125A,250A.400A,630A
 IEC60947-2, GB14048-2

- Easy Installation

Dimensions(unit:mm)









TechnicaL Specification

BD series PV DC MCCB							
Туре			MDM1Z-125	MDM1Z-250	MDM5Z-400	MDM5Z-630	
Pole			4P	4P	4P	4P	
Max Rated Current			125A	250A	400A	630A	
Electrical Characte	ristics						
Rated Working Volta	age	Ue	1000V DC	1000V DC	1000V/1500V DC	1000V/1500V DC	
Rated Current		In(A)	63/80/100/125	125/160200/250	250/300/315 350/400	400/500/630	
Rated Insulated Volt	tage	Ui	1000V DC				
Rated Impulsed Volt	tage	Uimp		8	kV		
1 Min Power Freque	ncy Withstand V	oltage	3.8 KV	3.8 KV	3.8 KV	3.8 KV	
Utimate Breaking Ca	apacity	lcu	20 KA	20 KA	20 KA	20 KA	
Run Breaking Capacity Ics		lcs	15 KA	15 KA	15 KA	15 KA	
Protection							
Tripping Type			Thermal Magnetic Type				
Control And Indica	tion						
ControlMode	Manual	Direct (RHD)		Opt	ional		
		Extended(ERH)		Opt	ional		
	MOD			Opt	ional		
Shunt Release (SHT))			Opt	ional		
Auxiliary Release				Opt	ional		
Terminal End Cover				Y	es		
Interphase Barriers				Y	es		
Service Life/Cycle (Operation						
Mechanical			14000	14000	5000	5000	
Electrical			5000	5000	1500	1500	
Size(LxWx H)			150.5x122x92.5	165x140x88	258x198x107	282x282x115	
Ingress Protection				All Sides IP40 ,Conn	ection Terminal IP20		
Installation Enviro	nment						
Comply With				IE C60947-2	/GB14048.2		
Storage Temperatur	re			-40°C~	∙+85°C		

Wiring Diagram



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MDM6Z DC Moulded Case Circuit Breaker



Overview

MDM6Z series molded case circuit breaker, rated voltage up to DC1500V, current up to 400A. The breaking capacity of DC1500V is up to 10kA, which can reliably protect the system against short circuit.

Dimensions(unit:mm)





MDM6Z-630/800 38 <u>8</u> 8 注,X-X、Y-Y为三极断路器中心

TechnicaL Specification

Model	MDM6Z-250			MDM6Z-320			MDM6Z-400			MDM6Z-630		MDM6Z-800		
Shell frame grade Rated current Inm (A)		250			320		400		630		800			
Rated current In (A)	125、 180、	140、 200、 250	160、 225、	280、	315、	320	315、	350、	400	400、	500、	630	630、70	0、800
pole	2	3	3	2	3	3		4			4		4	
Rated operating voltage Ue (V)AC.	1000	1250	1500	1000	1250	1500	1000	1250	1500	1000	1250	1500	1000 12	50 1500
Rated insulation voltage Ui (V)	1000	1500	1500	1000	1500	1500		1500			1500		150	00
Rated impact withstand voltage Uimp (kV)								12						
Ultimate short-circuit breaking capacity LCU (kA)								20						
Operating short circuit breaking capacity lcs (kA)								20						
Connection mode	Тор	dowi	n out	Тор	down	out	out In the out			In the out		In the out		
Mechanical life (total number of times)								10000)					
Electrical life (total number of times)								2000						
Total break time (MS)								20						
Whether it has isolation characteristics								yes						
Standard.						IEC 6	0947-2	2 GB	/T 14	048.2.				
Permissible ambient temperature							-40	~+70	* C					
Protection grade								lp20						
Quality certification						C	cc, c	E C	В、 ТО	V				
But with attachments			Auxi	liary, a	alarm	, shun	t, man	ual o	perat	ion, el	ectric	opera	ation	
Arc distance (mm)						≥50(zero a	rc wit	h arc i	mask)				
Instantaneous action value	10In													
Overall dimension LxWxH(mm)	180x	76x12	6(2P)/	180x1()7x126	6(3P)	258	(200x	107	280x	280x1	15.5	280x280)x115.5
installation						Fixe	ed typ	e, plu	g-in t	уре				

Wiring Diagram







Overview

MDM1 series plastic case circuit breakers (hereinafter referred to as circuit breakers) are thelt is one of the new circuit breakers researched and developed by international advanced design and manufacturing technology. its rated insulationThe voltage is 1000V, suitable for AC 50Hz, the rated working voltage is 690V and below, (SHRM1-63 is 400V), infrequent operation in circuits with rated working current up to 800Alt is used for switching and infrequent starting of the motor. Circuit breaker with overload, short circuit and undervoltage protectionfunction, can protect the circuit and power supply equipment from damage.

Features

- The insulating parts are made of high-strength DMC unsaturated polyester glass fiber plastic, and the proportion of aluminum hydroxide content is appropriately increased to improve the flame retardant performance of the product.
- The conductive system adopts advanced silver-plating process, increasing the thickness of silver-plating to improve the current-carrying capacity and heat dissipation of the product.
- The accessories of circuit breakers are selected from professional manufacturers that meet national standards. Further improve product reliability.
- The operating mechanism "three buckles" (locking, rebuckling, and jumping) adopts advanced professional technology to ensure the hardness and toughness of the "three buckles".
- Further improve the reliability and stability of the product.
- The metal parts of the product adopt the environmental protection electroplating process, which conforms to the EU environmental protection standards.
- Circuit breakers are classified into three types according to their rated ultimate short-circuit breaking capacity (lcu): L type (standard type), M type (higher breaking type), and H type (high breaking type). The circuit breaker has the advantages of small size, high breaking, Short arcing (zero arcing in some specifications), anti-vibration and other characteristics.
- This circuit breaker can be installed vertically (ie vertical installation) or horizontally (ie horizontal installation).
- This circuit breaker has isolation function, and its corresponding symbols are:

Normal working conditions

- Ambient medium temperature: not higher than +40°C (+45°C for common products) and not lower than -5°C, and the average value of 24h does not exceed +35°C (+40°C for common products);
- Installation site: the altitude does not exceed 2000m;
- Installation site: The relative humidity of the air does not exceed 50% when the maximum temperature is +40°C, and can have a higher relative humidity at lower temperatures, such as 90% at 20°C;
- Condensation should take special measures;
- Pollution level: Level 3;
- Installation category: The installation category of the main circuit of the circuit breaker and the undervoltage release is III, and the installation category of the other auxiliary circuits and control circuits is II;
- The circuit breaker can withstand the influence of humid air, salt mist, oil mist, mold and nuclear radiation:
- The maximum inclination of the circuit breaker installation is ±22.5°;
- The circuit breaker can work reliably under earthquake conditions (4g); The circuit breaker should be installed in a place where there is no explosion hazard, no conductive dust, and no enough to corrode metals and damage insulation;
- The circuit breaker should be installed in a place free from rain and snow.

Protection features

The thermal release of the circuit breaker has inverse time characteristics; the electromagnetic release is instantaneous, and the characteristics are shown in Table 3 (for power distribution) and Table 4 (for motor protection).

Rated operating	Thermal release (referen	Electromagnetic release			
current of release (A)	1.05In (cold state) non-action time (h)	1.30In (hot state) operating time (h)	operating current (A)		
10 <in≤63< td=""><td>≥1</td><td><1</td><td>10In±20%</td></in≤63<>	≥1	<1	10In±20%		
63 <in≤100< td=""><td>≥2</td><td><2</td><td>10In±20%</td></in≤100<>	≥2	<2	10In±20%		
100 <in≤800< td=""><td>≥2 </td><td><2</td><td>5In±20% 10In±20%</td></in≤800<>	≥2	<2	5In±20% 10In±20%		

Note: There is no 5In electromagnetic trip unit in the 100A and 125A specifications of SHRM1-250.

Rated operating	Therr	nal release (referen			
current of release (A)	1.0In (cold state) non-action time (h)	1.20In (hot state) operating time (h)	1.50In (cold state) non-action time (h)	7.20In (hot state) operating time (h)	Electromagnetic release operating current (A)
10≤In≤205				4s <t≤10s< td=""><td>1215+209/</td></t≤10s<>	1215+209/
225 <in≤800< td=""><td>22</td><td>52</td><td>8min</td><td>6s<t≤20s< td=""><td>12111_20%</td></t≤20s<></td></in≤800<>	22	52	8min	6s <t≤20s< td=""><td>12111_20%</td></t≤20s<>	12111_20%

MDM1-125 (L, M, H) front wiring (two-pole, three-pole, four-pole) (X-X, Y-Y are the center of the three-pole circuit breaker)



Model	н
MDM1-125L	68
MDM1-125M、H	96
MDM1-125 four-pole	00



Table 3 (for power distribution)

Table 4 (for motor protection)

Main technical performance indicators

Frame current (A)	6	3		125(100)			250				400			
model		MDM1 -63L	MD -63	M1 3M	MDM1 -125L	MD -12	M1 5M	MDM1 -125H	MDM1 -250L	MD -25	M1 0M	MDM1 -250H	MDM1 -400L	MDM1 -400M	MDM1 -400H
Rated current In(A	()	(6)、1 20、2 40、	0、10 5、32 50、6	6. 2. 53	(10)、1 3 63、	(10)、10、16、20、25、 32、40、50、 63、80、100、125			100、125、140、160、180、 200、225、250			225、250、315、350、400			
Number of poles (P)	3	3	4	3	3 3 4 3			3	3	4	4	3	3 4	4
Rated insulation voltage Ui(V)		AC	500			AC1000			AC1000			AC800			
Rated impulse wi voltage Uimp(V)	thstand	60	000			80	00			80	00		8000		
Rated working vol Ue(V)	ltage	AC	400		AC400	AC4 AC6	400 590	AC400	AC400	AC AC	400 690	AC400	AC400	AC400 AC690	AC400
Arc distance(mm)		1	0		0(≯50)			>50				>100			
Rated ultimate short-circuit breaking capacity Lcu(kA)	AC400V AC690V	25		50	35	5	0	80	35	5	0	80	50	65	100
Rated operating short-circuit breaking capacity Lcs(KA)	AC400V AC690V	18		35	22	22 35		50	25	25 35 50		50	35	42.5	65
Operational performance (times)	power ups no power				6000 8500					30 70	00		2000 4000		
	w	78	78	103	92	92	122	92.	107	107	142	107 .	150	198	150
ensions	Þ L	135	1	35	150		15	0	165	165 165		5	257		
	н	73.5	8	1.5	68		86	5	86		10	3		106.5	

		_	_									
Frame current (A))		63	0			800		1250			
model		MDM1 -630L	MDI -630	М1)М	MDM1 -630H	MDM1 -800L		MDM1 -800H	MDM1 -1250L	MDM1 -1250M	MDM1 -1250H	
Rated current In(A)	Rated current In(A) 400、500、630			30	630、700、800			800、1000、1250				
Number of poles (F))	3	3	4	3	3	4	3	3	3 4	3	
Rated insulation voltage Ui(V)	ated insulation AC800					AC800		AC800				
Rated impulse with voltage Uimp(V)	withstand 8000 V)					8000		8000				
Rated working volt Ue(V)	age	AC400	AC4 AC6	00 90	AC400	AC400 AC690		AC400	AC400 AC400 AC690		AC400	
Arc distance(mm)	distance(mm) ⇒100				≯100	≯100						
Rated ultimate short-circuit breaking capacity Lcu(kA)	AC690V AC400V	50	65	5	100	85 30 10		100	85 30 10		100	
Rated operating short-circuit breaking capacity Lcs(KA)	AC690V AC400V	35	42.	.5	65	50 20)	80	50 20		65	
Operational performance (times)	power ups no power		150 400	00 00			1000 2500		1500 4000			
	w	182	24	0	182	210	280	210	210	280	210	
rensions (⊳ L		27	0		280	280	280		470		
Ë I-W-I I-H-I	н		11	0		115.5	115.5	115.5	191			

Note: The limit breaking and arcing distance includes horizontal and vertical installation.

*MDM1-125 arcing distance is divided into "0" arcing and 50mm, which should be specified when ordering.

There is no "0" arcing in the 690V specification of the four-pole circuit breaker.



MD1-40 AC Surge Protection Device



MDSP-600



Overview

- DC Surge Arrester BUD-40/3 is a Type 2 DC Surge Protection Device for DC side to protect the terminal devices in PV system from over voltage, like solarpanels or inverters. Available for 600Vdc ,1000Vdc,1500Vdc.
- Suitable For Use in All Photovoltaic Systems
- Prewired Modular Complete Unit, Consisting of A Base Part and Plug-in Protection Modules
- Plug-in Protection Module, Easily Installation and Maintainance
- High Energy Varistor, Response Time Less Than 25 Nanosecond
- Optional Remote Signalling Contac(FM) for Monitoring Device (Floating Changeover Contact) • Din Rail Mounting TH35-7.5/DIN35
- Comply with :EN 50539-11

Technical parameters

PV DC Surge Protection Device		
Modules		3 modules
Standard	EN 50539-11	
Electrical Characteristics		
Open Voltage	Uoc Max	600/1000V/1500V
Max Continuous Operational Voltage	Uc	600/1000V/1500V
Nominal Discharge Current	In(8/20)µs	20KA
Maximum Discharge Curent	Imax(8/20)µs	40KA
Voltage Protection Level Up	Up	≤3.8KV
Response Time	tA	≤25ns
Indication		
Operating State/fault Indication		Green/Red
Plug-in Protection Module		YES
Type of remote signalling contact	changeover contact	
Remote Signalling Max Working Voltage	30V DC	
Remote Signalling Max Working Current		1A
Connection And Installation		
Cross sectional area	min	1.5 mm² solid / flexible
Cross sectional area	max	35 mm ² stranded I 25 mm ² flexible
Connection	mm ²	By screw terminal 4-25 mm ²
Torque(Nm)	Main Circuit	2.5
	Remote Contact	0.25
For mounting on 35 mm DIN rails		
Place of installation		indoor installation
Degree of Protection	lp20	
Installation Environment		
Operating Temperature Range	TU	-40°C+80°C
Relative Humidity		30%~90%
Weight kg		0.36

Principal Drawing



Dimensions(unit:mm)



MORE THAN SOLAR

Overview

Surge protection device (in short SPD, alias: surge suppressor surge arrester) is suitable for TN-S, TN-C-S, TT, IT etc, power supply system of AC 50/60Hz, <380V, installed on the joint of LPZ1 or LPZ2 and LPZ3. It's designed according to IEC61643-1, GB18802.1, it adopts 35mm standard rail, there is a failure release mounted on the module of surge protection device, When the SPD fails in breakdown for over heat and over-current, the failure rlease will help electric equipments separate from the power supply system and give the indication signal, green means normal, red means abnormal, it also could be replaced for the module when has operating voltage.

- Inside over-current and over-heat protection, temperature control open circuit.
- Module design, convenient installation, could be replaced online.
- Time of response <25ns.
- The color of visible window shows operating status, green means normal, red means abnormal.

Technical parameters

PV DC Surge Protection Device								
Technical Parameters		380V/220V 0.36						
Rated Operating Voltage Un(V~)	275V	320V	385V	385V	385V	420V		
Maximum Continuous Operating Voltage Uc(V~)	≤1.0	≤1.2	≤1.8	≤2.0	≤2.2	≤2.8		
Voltage protection Level Up(V~)kV	5	10	20	30	40	60		
Nominal Discharge Current In (8/20s)kA	10	20	40	60	80	100		
Maximum Discharge Current Ilmax(8/20s)kA								
Response Time (ns)	<25							
Test Standard	IEC61643.1, GB1 8802.1							
Operating Environment(centigrade)	-40°C ~+85°C							
Max Connection Line	35mm ² hard wire/35mm ² strand wire copper line							
Recommended Connection Line	16mm ² hard wire/25mm ² strand wire copper line							
Installation	Standard Rail 35mm							
Material of Outer Covering	Burning-proof Nylon							

Principal Drawing



Dimensions(unit:mm)













MD1-40 4P



MDIS-40/40A PV DC Isolation Switch

MDIS-40MD PV DC Isolation Switch



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2 Poles	Ratings (DC21)	600V	700V	800V	900V	1000V	1200V
	MDIS-40-16A DC	16A	16A	16A	13A	9A	
in corioc	MDIS-40-25A DC	25A	23A	20A	16A	11A	
in series	MDIS-40-32A DC	32A	27A	23A	20A	13A	
2 Poles in parallel	Ratings (DC21)	600V	700V	800V	900V	1000V	1200V
connected in	MDIS-40-16A DC	35A	16A	16A	16A	16A	16A
series with	MDIS-40-25A DC	40A	25A	25A	25A	25A	25A
2Poles in parallel	MDIS-40-32A DC	45A	32A	32A	32A	32A	32A
1 polos	Ratings (DC21)	600V	700V	800V	900V	1000V	1200V
4 poles connected in series	MDIS-40-16A DC	16A	16A	16A	16A	16A	16A
	MDIS-40-25A DC	25A	25A	25A	25A	25A	25A
	MDIS-40-32A DC	32A	32A	32A	32A	32A	32A

The main technical parameters

Photovoltaic DC isolated switch	Rated current 16A 25A 32A
Product number MDIS-40-16/25/32A DC	Rated voltage 1200V
Opening method Handle 90° Rotary switch	Dimensions 83mm*61mm*46mm
Ambient temperature -5°C~40°C	Installation method Rail mounting inside the distribution box
Switch body plastic part nylon	VO Switch body plastic flame retardant VO
Switch body energized part copper	The handle is connected to the main body

Diagram



600V 800V Ratings (DC21) 500V MDIS-40MD-16A DC 16A 16A 16A MDIS-40MD-25A DC 25A 25A 13A MDIS-40MD-32A DC 32A 32A 13A 2 Poles in paralle 600V 800V Ratings (DC21) 500V MDIS-40MD-16A DC 35A 29A 13A connected in MDIS-40MD-25A DC 40A 25A 25A eries with MDIS-40MD-32A DC 45A 32A 32A 2Poles in paralle Ratings (DC21) 500V 600V 800V MDIS-40MD-16A DC 16A 16A 16A connected MDIS-40MD-25A DC 25A 25A 25A in series MDIS-40MD-32A DC 32A 32A 32A

The main technical parameters

The main teeninear parameters	
Photovoltaic DC isolated switch	Rated current 16A 25A 32A
Product number MDIS-40MD-16/25/32A DC	Rated voltage 1200V
Opening method Handle 90° Rotary switch	Housing material PC+ABS
Ambient temperature -5°C~40°C	Shell waterproof rating IP66NW
Shell flame rating V1	Housing environment Outdoor UV (UV)
Switch body energized part copper	Inlet hole size M20 knockout hole
Switch body plastic part nylon	Switch body plastic flame retardant VO

Diagram Feed Feed 3 (1)(3)(5)(7)1 \bigcirc Q 8 6 4 2 (4)(2)O \bigcirc Link = 2 poles in series Parallel 2 poles (5)1 3 $\overline{7}$ Link Link 8 6 4 2 4 poles in series

900V	1000V	1200V
13A	9A	
13A	11A	
13A	13A	
900V	1000V	1200V
16A	16A	16A
25A	25A	25A
32A	32A	32A
900V	1000V	1200V
16A	16A	16A
25A	25A	25A
32A	32A	32A







MDIS-40MD With breathing valve



MDIS-40MD



MDIS-40MD With MC4



MDF1 AC Isolation Switch





Overview

AC Isolator Switch with super waterproof and dustproof function, can effectively prevent entry of dust, oil, in the rain or strong water will not affect the use of product performance; have anticorrosive, UV protection, cold resistant, high temperature resistant, anti-aging characteristics.Included in the range is single, double and triple pole switches from 20A to63A. The base mounted mechanism provides for easier termination andmore wiring room.

► Features

- High visibility ON/OFF indication
- 4pcs screws for high strength locking
- IP66 & UV Resistance
- Conduit entries on top and bottom
- Pad-lockable handle

Technical parameters

Туре	MDF1								
Pole	1Pole		2Pole		3Pole		e		
Rated operational current (le)	20A	35A	63A	20A	35A	63A	20A	35A	63A
Rated operational voltage (Ue)	250V	250V	250V	440V	440V	440V	440V	440V	440V
Standard				IEC609	947.3 A	C-22A	1		
Rated frequency		50Hz							
Rated insulation volateg (U)					1000V	/			
Rated impulse withstand voltage (Uimp)					2.5kV				
Short time withstand current (1cw)					750A				
Short circuit making capacity (lcm)					1.98kA	4			
Free air thermal current (1th)				Sa	ameas	le			
Enclosed thermal current (Ithe)	Same as le								
Dielectric properties	800V								
Mechanical life	10000								
Electrical life	1500								
Protection degree	IP66								
UV Resistance	Yes								
Color	Gray								
Conduit entries	4xM25 4xt		4xM32						
P adlock max diameter	6mm								
Max. cable size (Mains)	25mm²								
Max. cable size (N/E)	16mm²								
Approved	SAA, RCM, CE								
	Locked rotor 3 Ø,"M" rating Locked rotor 1 Ø,"M" ratin		rating						
Rated operation current		120A	A for 20	A(14	40A foi	r 20A	
(AS3133)		160A	A for 35	λ		18	30A foi	r 35A	
		200A	A for 63	A		20	00A foi	r 63A	









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MDPV-30/32 PV Fuses

Technical Parameters



MDPV-30(1000V)



MDPV-32(1500V)



Overview

The MDPV-30/32 series of photovoltaic fuses are mainly used in the solar photovoltaic power generation DC combiner box to break the line overload and short-circuit current generated by the current feedback of the solar panel photovoltaic modules and inverters that may generate solar energy, thereby protecting For the use of solar photovoltaic panels, fuses can also be optionally used in any other DC circuit for line overload and short circuit protection of electrical components.

Use environment

The upper limit of ambient air temperature does not exceed +90°C, and the lower limit of air temperature is not lower than -40°C;

The altitude of the installation site does not exceed 3000m;

At a maximum temperature of +40°C, the relative humidity of the air does not exceed 50%, allowing higher humidity at lower temperatures, for example, up to 90% at +25°C. Special measures should be taken for condensation that occasionally occurs due to temperature changes;

In a medium free of explosion hazard, and where there is no sufficient gas or conductive dust to corrode the metal and destroy the insulation; Pollution degree 3.

Terminals /connection

-		
Type designation	MDPV-32	MDPV-30
Type designation		
Type of Terminal	Pillar terminal	Pillar terminal
Material/plating of the terminal	Zinc plated Steel	Zinc plated Steel
Material/plating of the washer	Zinc plated Copper	Zinc plated Copper
Material/plating of the screw	Zinc plated Iron	Zinc plated Iron
Type of conductor	Flexible: 2.5m Copper type; hard wi	m²-6mm², re: 2.5mm²-6mm²
Connectable conductors	2.5mm ² -6mm ²	2.5mm ² -6mm ²
ISO(mm2) or AWG number		
metric equivalent (mm2)		
Number of conductors per terminal	1	1
Required preparation of the conductor	Example: No prep	ared conductor
Max. Stripping length (mm)	8 mm	8 mm
Tightening torque (N•m)	2Nm, M5	2Nm, M5

Type designation	MDPV-32	MDPV-30
Ambient temperature	-5C~+40C	-5C~+40C
Contact material	Copper (T2Y)	Copper (T2Y)
Contact form	Form U	Form U
Interrupting medium	Air	Air
- method of operation:		
- suitability for isolation	suitable	suitable
- degree of protection		
- kind of current	DC	DC
in the case of a.c., number of phases and		
rated frequency		
-breaking arrangement for fused devices	Double Break	Double Break
Rated and limiting values, main circuit	/	/
- rated operational voltage Ue (V):	1500V DC	1000V DC
- rated insulation voltage Ui (V):	1800V DC	1200V DC
- rated impulse withstand voltage Uimp (kV):	8kV	6kV
Rated operational voltage Ue	1500 V DC	1000 V DC
Rated operational current le	32 A	30 A
Insulation voltage	1800 V	1200 V
Conventional free air thermal current(Ith)	32A	30A
Conventional enclosed thermal current(Ithe)	32A	30A
Utilization category	DC-20A	DC-20A
Rated short-time withstand current		
Rated short-circuit making current		
Conditional short-circuit current	25 kA	20 kA
	Tested with fuse-link: YRPV-32	Tested with fuse-link:YRPV-30
Short circuit protective device	(SOLAR, gPV, 10x85, DC 1500V,	(SOLAR, gPV, 10x38, DC 1000V,
	32A, Interrupting Capacity: 25kA)	30A, Interrupting Capacity: 20kA)
IP code	lp20	Ip20
Pollution degree	3	3
Suitability for isolation	-	-

ype designation	MDPV-32	MDPV-30
mbient temperature	-5C~+40C	-5C~+40C
Contact material	Copper (T2Y)	Copper (T2Y)
Contact form	Form U	Form U
nterrupting medium	Air	Air
method of operation:		
suitability for isolation	suitable	suitable
degree of protection:		
kind of current	DC	DC
n the case of a.c., number of phases and		
ated frequency		
breaking arrangement for fused devices	Double Break	Double Break
ated and limiting values, main circuit	/	/
rated operational voltage Ue (V):	1500V DC	1000V DC
rated insulation voltage Ui (V):	1800V DC	1200V DC
rated impulse withstand voltage Uimp (kV):	8kV	6kV
ated operational voltage Ue	1500 V DC	1000 V DC
ated operational current le	32 A	30 A
nsulation voltage	1800 V	1200 V
Conventional free air thermal current(Ith)	32A	30A
Conventional enclosed thermal current(Ithe)	32A	30A
Itilization category	DC-20A	DC-20A
ated short-time withstand current		
ated short-circuit making current		
Conditional short-circuit current	25 kA	20 kA
	Tested with fuse-link: YRPV-32	Tested with fuse-link:YRPV-30
hort circuit protective device	(SOLAR, gPV, 10x85, DC 1500V,	(SOLAR, gPV, 10x38, DC 1000V,
	32A, Interrupting Capacity: 25kA)	30A, Interrupting Capacity: 20kA)
2 code	lp20	lp20
ollution degree	3	3
uitability for isolation	-	

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DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection, can meet quick connection and antivibration function. rainproof, moisture-proof, dust-proof and durable .waterproof grade IP67.high heat resistance, wear resistance, durability, corrosion resistance, thick copper inner core, high quality material selection.

► Technical data

Connector system	Φ4mm	
Rated voltage	1000V DC(IEC)	
Rated current	17A,22A,30A(1.5mm ² ,2.5mm ² ; 14AWG,4mm ² ; 6mm ² ; 12AWG,10AWG)	
Test voltage	6kV(50Hz,1min.)	
Temperature Range	-40°C+90°(IEC) -40°C+75°C(UL)	
Upper Temperature Limit	+105°C (IEC)	
Degree of protection,mated	IP67	
unmaied	IP2X	
Comtact reastanceof plug conrwtors	0.5mΩ	
Safety class	П	
Contact matenal	Messing,verzinnt Copper Alloy,tin plated	
Insulation matenal	PC/PPO	
Lockirg system	Snap-in	
Flane class	UL-94-V0	
Salt mist spray test,degree of sevenity 5	IEC 60068-2-52	

Dimensions(mm)



Overview

DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection, can meet quick connection and anti vibration function. rainproof,moisture-proof,dust-proof and durable .waterproof grade IP67.high heat resistance,wear resistance,durability, corrosion resistance, thick copper inner core,high quality material selection

► Technical data

Connector system	Φ4mm
Rated voltage	1500V DC(IEC) ¹
Rated current	17A,22A,30A,45A(1.5mm²,2.5mm²; 14AWG,4mm²; 6mm²; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40°C+90°C(IEC)-40°C+75°C(UL)
Upper Temperature Limit	+105°C(IEC)
Degree of protection, mated	IP67
unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safety class	П
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation material	PC/PV
Locking system	Snap-in
Flams class	UL-94-V0
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Dimensions(mm)



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Technical data	
Connector system	Φ4mm
Rated voltage	1000V/1500V DC(IEC)1
Rated current	17A,22A,30A(1.5mm²,2.5mm²; 14AWG,4mm²; 6mm²; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40°C+90°(IEC) -40°C+75°C(UL)
Upper Temperature Limit	+105°C (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safety class	П
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation mtacenal	PC/PPO
Locking system	Snap-in
Fameclass	UL-94-V0
Salt mist spray test, degree of severity 5	IEC 60068-2-52

DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like

resistance, wear resistance, durability, corrosion resistance, thick copper inner core, high quality

load closure and disconnection, can meet quick connection and anti vibration function. rainproof, moisture-proof, dust-proof and durable .waterproof grade IP67.high heat

DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for

Dimensions(mm)

Overview

material selection.



Overview

DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load $closure and \, disconnection, can \, meet \, quick \, connection \, and \, anti \, vibration \, function.$ rainproof, moisture-proof, dust-proof and durable .waterproof grade IP67.high heat resistance, wear resistance, durability, corrosion resistance, thick copper inner core, high quality material selection.

► Technical data

Connector system	Φ4mm
Rated voltage	1000V DC(IEC) ¹
Rated current	10A,15A,20A(1.5mm ² ,2.5mm ² ; 14AWG,4mm ² 6mm ² ; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40°C+90°(IEC) -40°C+75°C(UL)
Upper Temperature Limit	+105°C (IEC)
Degree of protection, mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
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Locking system	Snap-in
Fameclass	UL-94-V0
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Dimensions(mm)









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PV-MDT2 Panel Branch Connector





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Overview

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Connector system	Φ4mm
Rated voltage	1000V/1500V DC(IEC) ¹
Rated current	10A,15A,20A,30A(1.5mm ² ,2.5mm ² ; 14AWG,4mm ² ; 6mm ² ; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40°C+90°(IEC) -40°C+75°C(UL)
Upper Temperature Limit	+105°C (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safety class	Ш
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation mtacenal	PC/PPO
Locking system	Snap-in
Fameclass	UL-94-V0
Salt mist spray test,degree of severity 5	IEC 60068-2-52

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Technical data

Insulation Material	PPO
Contact Material	Copper,Tin pl
Suitable Current	30A
Rated Voltage	1000V (TUV) 60
Test Voltage	6KV (TUV50Hz
Contact Resistance	<0.5mΩ
Degree Of Protection	IP 67
Temperature Range	-40°C~+ 85
Flame Class	UL94-V0
Safety Class	П
Pin Dimensions	Φ4mm

Dimensions(mm)



Dimensions(mm)



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600V (UL)

Hz,1min)

nΩ

85℃

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Contact Material	Copper,Tin plated
Suitable Current	30A
Rated Voltage	1000V (TUV) 600V (UL)
Test Voltage	6KV (TUV50Hz,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP 67
Temperature Range	-40°C~ + 85°C
Flame Class	UL94-V0
Safety Class	П
Pin Dimensions	Φ4mm

Dimensions(mm)



Overview

DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection, can meet quick connection and anti vibration function. rainproof, moisture-proof, dust-proof and durable .waterproof grade IP67.high heat resistance, wear resistance, durability, corrosion resistance, thick copper inner core, high quality material selection.

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Pin Dimensions	Φ4mm

Dimensions(mm)



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Pin Dimensions	Φ4mm

Dimensions(mm)



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Insulation Material	PPO
Contact Material	Copper,Tin pl
Suitable Current	30A
Rated Voltage	1000V (TUV) 60
Test Voltage	6KV (TUV50Hz
Contact Resistance	<0.5mΩ
Degree Of Protection	IP 67
Temperature Range	-40°C~ + 8
Flame Class	UL94-V0
Safety Class	П
Pin Dimensions	Φ4mm

Dimensions(mm)









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00V (UL)

z,1min)

85℃



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DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc, double electric shock free protection for load closure and disconnection, can meet quick connection and anti vibration function. rainproof, moisture-proof, dust-proof and durable .waterproof grade IP67.high heat resistance, wear resistance, durability, corrosion resistance, thick copper inner core, high quality material selection.





► Technical data

Connector system	Φ4mm
Rated voltage	1000V DC(IEC) ¹
Rated current	30A
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40°C+90°C(IEC)-40°C+75°C(UL)
Upper Temperature Limit	+105°C(IEC)
Degree of protection, mated	IP67
unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safetyclass	П
Contact material	Messing,verzinnt Copper Alloy,tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flams class	UL-94-V0
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Dimensions(mm)



Overview

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Dimensions(mm)



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Locking system	Snap-in
Flams class	UL-94-V0
Salt mist spray test, degree of severity 5	IEC 60068-2-52

Customization









Dimensions(mm)









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WM PV MDC Cable	ΜΰREDΔΥ



Extension cord processing customization







PV-MDS Tow-set spanners





PV-MDT3 Crimping Tool

Main Specoality

Suitable for crimping the cable of 2.5~6.0mm²(AWG10-14);Suitable for solar system installation site,flexible application



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PV-MDT2





The inner core of the connector can be placed in a small bag on the side.



Main Specoality

Suitable for crimping the cable of 2.5~6.0mm²(AWG10-14); Suitable for solar system installation site,flexible application



PV-MDT5 Crimping Tool

Main Specoality

Suitable for crimping the cable of 2.5~6.0mm²(AWG10-14); Suitable for solar system installation site,flexible application



PV-MDT6 Stripping Tool

Main Specoality

Suitable for crimping the cable of 2.5~6.0mm²(AWG10-14);Suitable for solar system installation site,flexible application



Modular Intelligent Prefabricated Cabin Features

The cabin provides a fully modular pre-installed solution for the substation, reducing floor space by 30% and reducing system design, installation and commissioning cycles by 70%. It adopts all-metal prefabrication cabin and is equipped with intelligent environmental control system, which can be applied to complex climate and geographical environment such as high temperature, high humidity and sand dust.

eCloud energy cloud platform access, remote health diagnosis, fault analysis, maintenance guidance and other functions to achieve unattended substation and equipment life cycle management.

Application Field

Wind power station, photovoltaic power generation, offshore wind power, distributed; photovoltaic power generation and other new energy field booster stations; Power grid 11kV~40.5kV substation;

Large-scale factory and mine enterprise self-use substation.

KYN High voltage grid-connected cabinet

Overview

The product meets the design specifications "," photovoltaic "distributed power grid technology" and "provisions of 3.6kV~40.5kV switch equipment and control equipment" and other relevant national standards, suitable for distributed photovoltaic power generation and ground high side switch station access equipment (also called high voltage switchgear with grid).

The main technical parameters

Project	Parameter
Rated voltage	12kV、24kV、35kV
Rated current	630A、1250A、1600A、2000A、250
Nominal function	Overload and short circuit protection, loss of volt. isolated island protection,fault disassembly, pow lightning protection

MDXGGD Low voltage grid-connected cabinet

Overview

The product meets the technical requirements of the national standard "PV power design specifications", "distributed power access to the power grid technical regulations" and "lowvoltage switchgear and control equipment" and other related standards, applicable to distributed and ground-based photovoltaic power generation low-voltage side access Switchgear (also known as low-voltage power grid cabinet).

The main technical parameters

	•
Project	Parameter
Rated voltage	380V
Rated current	1600A
Standard features	Overload and short circuit protection, loss of v significant isolation disconnect point, lig
Optional function	Anti-island protection





00A、3150A

tage tripping protection, ver quality monitoring,

voltage trip protection, htning protection



The integrated photovoltaic power station integrates the box-type inverter station and the boxtype booster station. The photovoltaic DC input to the three-phase high-voltage AC output can be completed in one box. The function is more perfect, the volume is smaller, the equipment is all factory construction and debugging, and the cables and cable trenches between the original box-type inverter station and the box-type booster station are omitted, benefits for owners. This type of substation can be called "substation with inverter function", which is divided into 35kV European-style integrated photovoltaic substation and 35kV American integrated photovoltaic power station.



► Features

Integrated ceiling, high-grade products.

Integrated air duct, large ventilation volume, safer and more efficient inverter operation. The cabinet is integrated, the modules of the cabinet change are integrated with the cabinet, and the appearance is high-grade.

The space is optimized, and the space in the box is fully utilized, which is convenient for inspection and maintenance.

European-Style Photovoltaic Substation

Overview

The box is divided into three parts: the high pressure chamber, the low voltage chamber and the transformer, which can be arranged according to the "mesh" type.

The inner and outer surfaces of the box are flat, free of rust, coating peeling and bumping damage, The coating layer is firm no obvious contrast reflection.

The base of the cabinet and all exposed metal parts are treated with anti-corrosion, anti-rust and sprayed with a durable protective layer.

The top cover of the cabinet is provided with a rainproof sealing cover and a rain cover, and the double-layered cover of the box can prevent heat radiation.

The cabinet is made of stainless steel, and the paint is imported automobile paint. All of them are made of enamel paint, anti-smoke, anti-humidity, anti-mold, and outdoor weather resistance. The temperature of the photovoltaic power station is low.

Use Of Environmental Conditions

Altitude: ≤3000m;

Ambient temperature: -40°C ~ +85°C;

The outdoor wind speed does not exceed 35m/s;

Shockproof: horizontal acceleration 0.3m/s²; vertical acceleration is not more than 0.15m/s²;

Flood control level: Level III;

Installation location: outdoor;

When the above normal use environment conditions are exceeded, the company can personalize the design according to the user'srequirements.

The Main Technical Parameter

Voltage

High voltage side rated voltage: 6kV, 12kV, 24kV, 35kV, 36.75kV, 38.5kV Low voltage side rated voltage: 0.27kV, 0.3kV, 0.315kV, 0.4kV Rated frequency: 50Hz Phase number: three phase

Overview

The box variable structure is divided into six parts: the transformer body, the high pressure chamber, the low pressure chamber, the detection chamber, the switch operation room and the fuse chamber, which can be arranged according to the "mesh" type. The high-voltage side is protected by a terminal type load switch plus a fuse, and the fuse is a full-range current limiting type fuse.

The load switch and the fuse are installed in the transformer oil tank, and the insulating oil of the transformer is used as the insulating medium and the heat dissipating medium, With the advantages of compact structure and good heat dissipation performance. The high-pressure side outlet adopts a high-pressure dry casing to support the Tongan busbar structure, which is convenient for connecting multiple cable wires. The low-voltage side outlet can be directly routed or configured according to user requirements. The box changing door adopts a windproof hinge, and all the doors on the box are opened outward, the opening angle is not less than 90°, and a positioning device is provided. The doors are sealed, equipped with door seals, cushioning, and equipped with handles that protect against rain, blockage, rust and vandal. The box body is sealed by anti-theft structure. It is sealed with high-strength bolts and oil-resistant rubber gaskets. The whole box has no exposed detachable bolts.

The box body is made of stainless steel plate, the paint is imported car paint, all adopt the enamel paint method, anti-smoke, anti-humid heat, anti-mold, outdoor weather resistance.

Use Of Environmental Conditions

Altitude: ≤3000m;

Ambient temperature: -40°C ~ +85°C;

The outdoor wind speed does not exceed 35m/s; Shockproof: horizontal acceleration 0.3m/s²; vertical acceleration is not more than 0.15m/s²; Flood control level: Level III:

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High voltage side rated voltage: 6kV, 12kV, 35kV, 36.75kV, 38.5kV Low voltage side rated voltage: 0.27kV, 0.3kV, 0.315kV, 0.4kV

Rated frequency: 50Hz

Phase number: three phase

Protection level: fuel tank IP68, high and low pressure room IP54, high voltage room door open IP3X









Everyone can have clean energy Do you have it?



