MOREDAY

MORE THEN SOLAR

Contact us for brand new, refurbished or used MOREDAY Equipment

AGS-TECH Inc.

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Company renderings，subject to actual conditions

COMPANY PROFILE

Founded in 2009, Moreday Solar is a R&D and manufacturing company integrating photovoltaics and new energy industry. The original intention of Moreday Solar is to bring more clean energy to the world and enjoy a better life.

The company's main products: photovolta-ic convergence and grid-connected prod-ucts, low-voltage electrical, energy storage and application products, solar power transmission and distribution products and solar system manufacturing.

The company takes solar energy sharing as its vision, technological innovation as its driving force, customer-oriented, and has obtained more than 30 national patents. Its products have passed CQC, CE, CB, TUV, ROHS and other certifications, and IS09001 quality system certification, with more than 1,000 services. Customers, the products are exported to more than 50 countries in Europe, America, Southeast Asia, the Middle East and other regions.

We hope to work with more partners to bring solar energy to every region of the world, promote the widespread use of green and clean energy, and leave more day for the earth

President's thoughts

As we look back on 2020, I am proud of how we adapted to the challenges that came our way. We took care of our employees,provided for our customers and partners, and prospered along the way.

We are optimistic about our resilience, flexibility, and solid business processes, reflecting the best in sustainability.

Sustainability is at our core at MOREDAY and our purpose remains to advance a sustainable future for all. As part of our commitment, we released our Reports on the development of the photovoltaic field in the next five years and better sustainable approaches. As we work towards an equitable energy future for all, we are aware of the importance of mobilizing the world to reduce the carbon footprint and electrify the planet.

We will continue to work hard to deliver high quality products that produce clean energy, save our customers money, and provide them with complete energy independence. Looking forward in 2021, we are excited about the strength in worldwide demand for solar, the ramp of our solar systems and upcoming new products, the higher levels of customer service, and our ongoing digital transformation efforts.

As always, I thank our employees, customers, partners, and shareholders for their continued support.

we will continue with our mission to deliver technology solutions that make clean energy affordable, reliable and accessible to all.

To be continued,More than solar

Dedao Huang
President and CEO

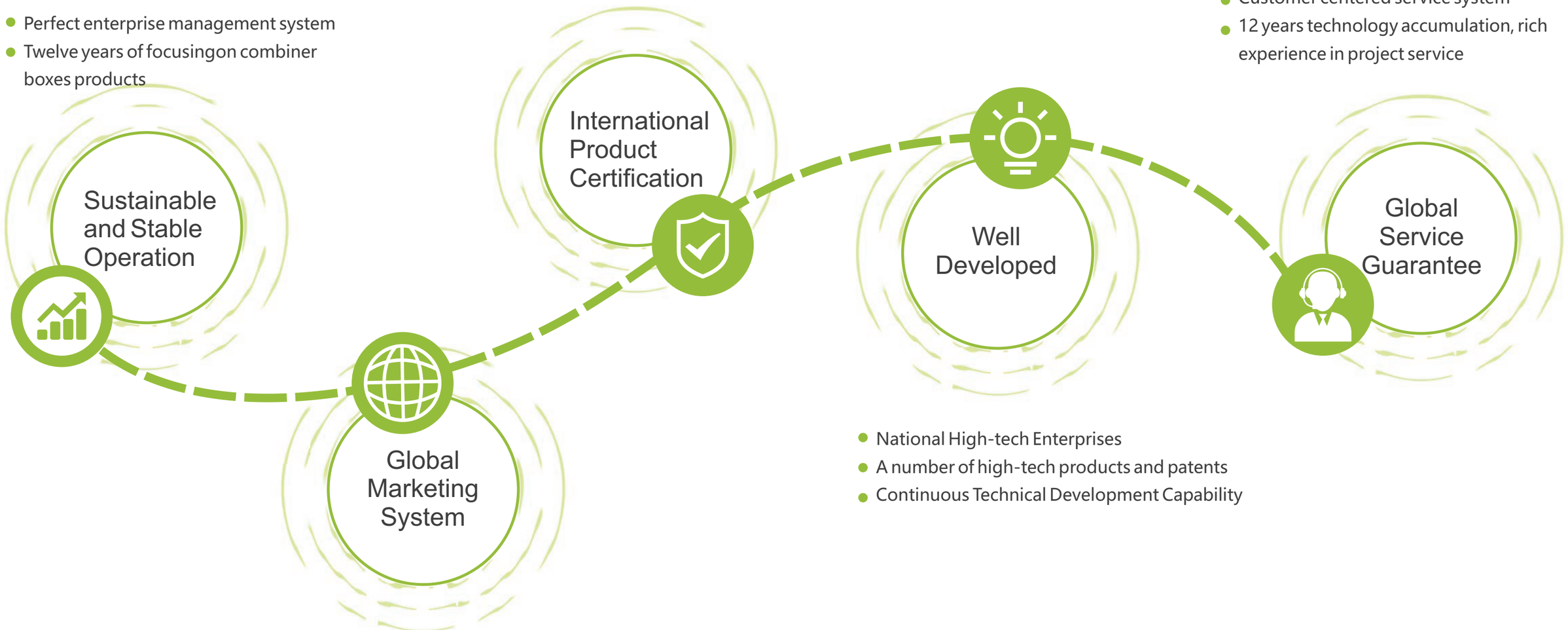
Oct.20, 2021

Corporate Advantage

- Perfect enterprise management system
- Twelve years of focusingon combiner boxes products

- Is09001 quality management system
- TUV, CE, CQC, CB, ROHS certifications

- Professional Life Cycle Management
- Tailor-made services to specific needs
- Customer centered service system
- 12 years technology accumulation, rich experience in project service



- Large-scale production, products shipment
- more than 5 GW capacity
- Exported to more than 50 countries and regions all over the world

- National High-tech Enterprises
- A number of high-tech products and patents
- Continuous Technical Development Capability

MOREDAY

Enterprise honor and qualification

- Member of Asian Photovoltaic Industry Association
- National high-tech enterprise
- Well-known brands in China’ s photovoltaic industry in 2019
- Caring for employees and caring enterprises in 2020
- 2019、2020 SNEC Megawatt jade Award
- 2020 Outstanding Photovoltaic Enterprise
- Chinese technology-based SMEs
- Zhejiang Promise-keeping 3A Enterprise

PATENT FOR INVENTION

UTILITY MODEL PATENT CERTIFICATE

DESIGN PATENT CERTIFICATE

TECHNOLOGY-BASED ENTERPRISE

ISO14001

ISO9001

ISO45001

CE

CQC

MOREDAY

Corporate partner

国家电网 STATE GRID

中国三峡新能源公司 China Three Gorges New Energy Corp.,

中国大唐集团公司 China Datang Corporation

中来股份 JOLYWOOD

阳光电源 SUNGROW

LONGi 隆基

中广核 CGN

国家能源集团 CHN ENERGY

中国电建 POWERCHINA

CHINT

Trinasolar 天合光能

HUAWEI

powering tomorrow Growatt

JinKO Solar Building Your Trust in Solar

JA SOLAR 晶澳太阳能

阿特斯

solis

GOODWE

Saudi Arabia Installed Capacity 7MW

Busan, South Korea Installed Capacity 11MW

Ontario, Canada project Installed Capacity 20MW

Mexico Installed Capacity 10MW

Netherlands Installed Capacity 6MW

Ho Chi Minh, Vietnam Installed Capacity 11MW

China Ji an project Installed Capacity 50MW

Santiago, Chile project Installed Capacity 8MW

Morocco Installed Capacity 5MW

Australian project Installed Capacity 16MW

50+
Exporting Countries

5GW+
Cumulative shipments

30+
Patents

12yrs
Industry experience

1000+
Global customers

www.agstech.net

Product

Catalogue

MDCDB PV Combiner And Distribution Box

MOREDAY

Overview

Suitable for household and industrial and commercial photovoltaic power generation systems;
Integrated DC junction box and AC distribution box;
Maximum suitable for 6kW single-phase photovoltaic power generation system;
Maximum applicable to 20kW three-phase photovoltaic power generation system;
Meet customer's customized needs.

Model	Voltage	Maximum system power	Optional
MDCDB-S3	600V	3kW	1. Meter
MDCDB-S6	600V	6kW	2. AC fuses
MDCDB-T10	1000V	10kW	3. Overvoltage protection device
MDCDB-T20	1000V	20kW	4. other

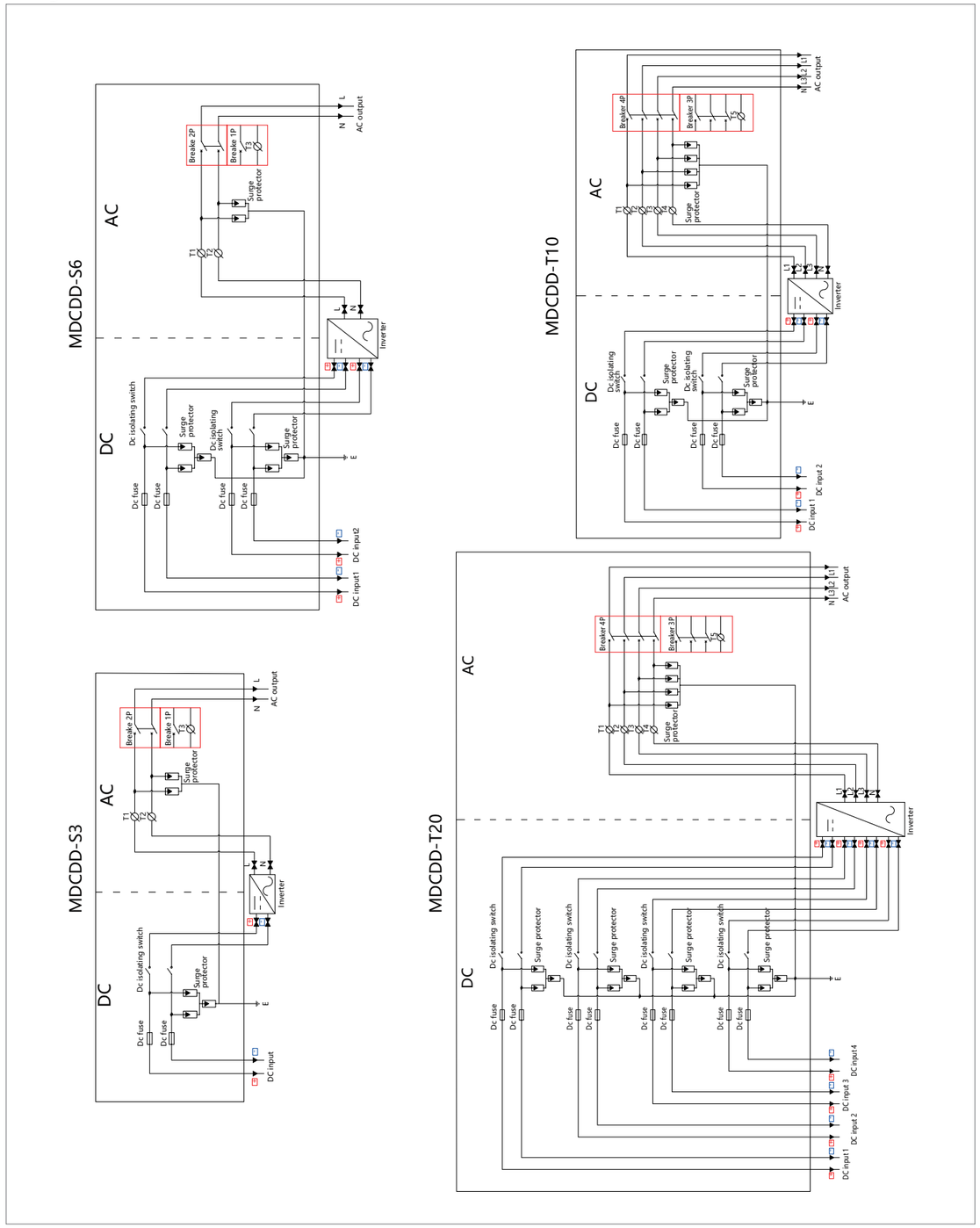
Technical Parameters

Model	MDCDB-1	MDCDB-2	MDCDB-3	MDCDB-4
Basic parameters				
DC input string	1 string	2 string	2 string	4 string
DC output string	1 string	2 string	2 string	4 string
Maximum DC input voltage	600V	600V	1000V	1000V
Maximum DC short-circuit current	15A to 32A (Optional)			
Maximum DC output current	32A			
Rated AC voltage	220 / 230 / 240V AC	220 / 230 / 240V AC	380 / 400 / 415V AC	380 / 400 / 415V AC
Rated AC current	13.6A/16A	27.3A/32A	15.2A/20A	30.4A/40A
Rated frequency	50/60 Hz			
Optional function				
Meter	Optional			
AC fuses	Optional			
Overvoltage protection device	Optional			
DC monitoring	Optional			
AC leakage protector	Optional			

Technical Parameters

Model	MDCDB-1	MDCDB-2	MDCDB-3	MDCDB-4
Enclosure				
Cabinet material	PC+ABS			
Anti-UV	Yes			
Foreign body protection level	IP65			
Collision protection level	IK10			
Dimensions (W*H*D)	Customized			
DC input port	PG09, 2.5 to 4mm²			
DC output port	PG09, 2.5 to 4mm²			
AC input port	PG25, 2.5 to 6mm²	PG25, 2.5 to 10mm²	PG25, 2.5 to 6mm²	PG25, 2.5 to 10mm²
AC output port	PG25, 2.5 to 6mm²	PG25, 2.5 to 10mm²	PG25, 2.5 to 6mm²	Pg25, 2.5 to 10mm²
DC isolated switch				
Rated insulation voltage	600V	600V	1000V	1000V
Rated current	32A			
Classification	DC-PV1/DC-PV2			
Executive Standard	IEC/EN 60947-3, UL508I			
Certification	CE, TUV, SAA, CB			
DC surge protection				
Maximum working voltage	1000V			
Maximum discharge current	40kA			
Executive Standard	EN 50539-11 Type 2			
Certification	CE, TUV, UL			
DC fuse				
Rated working voltage	1000 V			
Rated current	15 to 32A(Optional)			
Dimensions (W*H*D)	Φ10 * 38mm			
Executive Standard	UL, CE, CB			
AC surge protection				
Rated voltage	230V AC	230V AC	400V AC	400V AC
Maximum discharge current	40kA			
Executive Standard	IEC/EN 61643-11			
Certification	CE			
AC circuit breaker				
Circuit breaker type	1P/2P	1P/2P	3P/4P	3P/4P
Rated current	16A	32A	20A	20A
Rated voltage	220/230/240V AC	220/230/240V AC	380/400/415V AC	380/400/415V AC
Rated frequency	50/60Hz			
Environmental parameters				
Operating temperature	-20℃ to +60℃			
Humidity	99%			
Altitude	2000m (2000m Above derating)			
Installation method	Wall-mounted installation			

Diagram



Overview

Suitable for household and industrial and commercial photovoltaic power generation systems;
Maximum suitable for 6kW single-phase photovoltaic power generation system;
Maximum applicable to 20kW three-phase photovoltaic power generation system;
Meet customer's customized needs.

Model	Grid type	Maximum system power	Optional
MDDB-1	Single-phase grid	6kW	1. Electric energy meter 2. AC fuses
MDDB-2	Three-phase grid	16kW	3. Over-under voltage protection device 4. Others

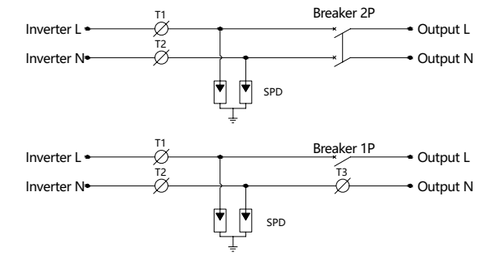
Technical Parameters

Model	MDDB-1	MDDB-2
Basic parameters		
Rated voltage	220/230/240V AC	380/400/415V AC
Rated current	32A	40A
Rated frequency	50/60Hz	
Enclosure		
Cabinet material	PC/ABS/Stainless steel (optional)	
Foreign body protection level	IP65	
Collision protection level	IK10	
Dimensions (W*H*D)	Customized	
AC input port	PG25, 2.5 to 10mm²	
AC output port	PG25, 2.5 to 10mm²	
AC circuit breaker		
Circuit breaker type	1P / 2P	3P / 4P
Rated current	50 A	50 A
Rated voltage	220 / 230 / 240V AC	380 / 400 / 415V AC
Rated frequency	50 / 60 Hz	
AC surge protection		
Rated voltage	230V AC	400V AC
Maximum discharge current	40 kA	
Executive Standard	IEC/EN 61643-11	
Certification	CE	
Environmental parameters		
Operating temperature	-20℃ to +60℃	
Humidity	99%	
Altitude	2000 m	
Installation method	Wall-mounted installation	
Optional function		
Meter	Optional	
AC fuses	Optional	
Overvoltage protection device	Optional	
AC leakage protector	Optional	

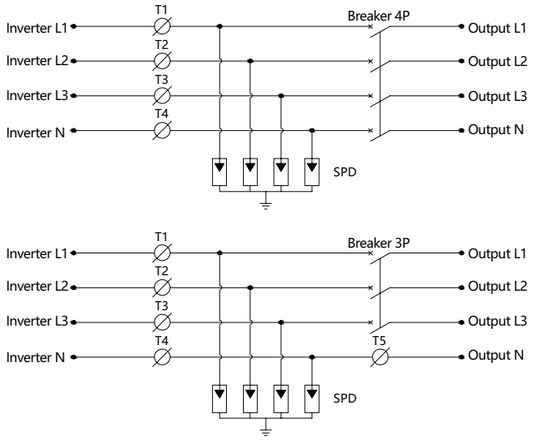
MDDB AC Distribution Box

Diagram

MDDB-1



MDDB-2




MDJB-A


MDJB-B

Overview

Suitable for PV system, equipped with a surge protector and isolator fuses, provid-ing isolation, leakage and grounding protection.

Specification

Model Number	1/1		2/1		2/2		3/1	
Input	1 string		2 string		2 string		3 string	
Output	1 string		1 string		2 string		1 string	
Max Voltage	600V	1000V	600V	1000V	600V	1000V	600V	1000V
Max Current Input (Eachstring)	30A	30A	30A	30A	30A	30A	30A	30A
Max Current Output (Eachstring)	30A	30A	63A	63A	30A	30A	63A	63A
Enclosure								
Material	PC/ABS							
Degree of Protection	IP65/IP66							
Impacts	Ik10							
Input Cable Glands	PG09, 2.5-16							
Output Cable Gland	PG21, 2.5-16							
Environment								
Operating temperature	-25℃~+60℃							

Model Number	3/3		4/2		6/2	6/3
Input	3 string		4 string		6 string	6 string
Output	1 string		2 string		2 string	3 string
Max Voltage	600V	1000V	600V	1000V	1000V	1000V
Max Current Input (Eachstring)	30A	30A	30A	30A	20A	30A
Max Current Output (Eachstring)	30A	30A	63A	63A	63A	63A
Enclosure						
Material	PC/ABS					
Degree of Protection	IP65/IP66					
Impacts	Ik10					
Input Cable Glands	PG09, 2.5-16					
Output Cable Gland	PG21, 2.5-16					
Environment						
Operating temperature	-25℃~+60℃					

Dimensions (unit:mm)

Distribution box (MDJB-A)	L*W*H
9 Ways	24.6*23.4*12.2
12 Ways	31.4*23.4*12.2
18 Ways	42.2*23.4*12.2
24 Ways	31.5*40.5*12.2

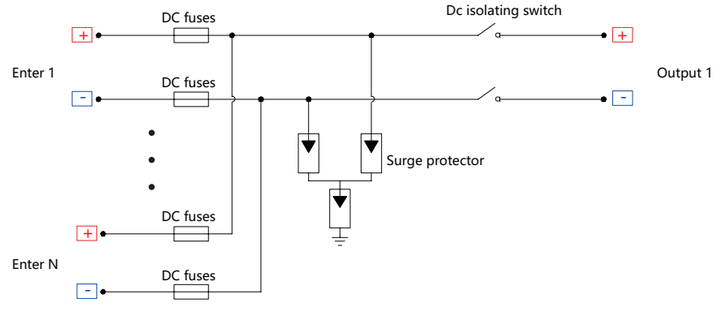
Distribution box (MDJB-B)	L*W*H
4 Ways	10.7*21*9.2
6 Ways	16.5*20*10
9 Ways	22*20*11
12 Ways	27*23*11
18 Ways	37.5*23*11
24 Ways	27*37.5*11
36 Ways	27*53*11

Technical Parameters

Model	MDJB-1/1	MDJB-2/1	MDJB-3/1	MDJB-4/1	MDJB-6/1
DC surge protection					
Maximum working voltage	1000 V				
Maximum discharge current	40 kA				
Executive Standard	EN 50539-11 Type 2				
Certification	CE, TUV				
DC isolated switch/DC MCB					
Rated insulation pad	1000V				
Rated current	32A	32A	32A	63A	63A/80A
Classification	DC-PV1/DC-PV2				
Executive Standard	IEC/EN 60947-3, UL508I				
Certification	CE, TUV, CB, TUV Australia Approval				
DC fuse					
Rated working voltage	1000V				
Rated current	15~32A(Optional)				
Dimensions (W*H*D)	Φ10 * 38 mm				
Executive Standard	TUV, CE, CB				
Environmental parameters					
Operating temperature	-20℃~+60℃				
Humidity	99%				
Altitude	2000m(2000m Above derating)				
Installation method	Wall-mounted installation				

Diagram

MDJB-N/1

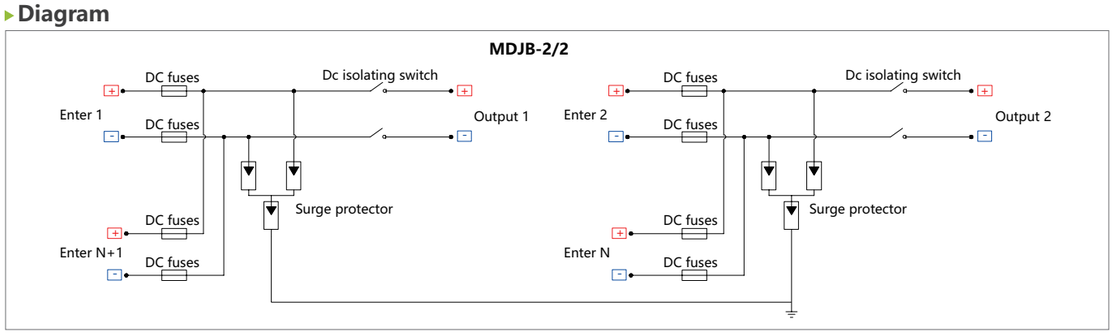


MDJB PV DC Combiner Box (2 Way/4 Way Output)

Technical Parameters

Model	MDJB-2/2	MDJB-4/2	MDJB-6/2
Basic parameters			
DC input string	2 String	4 String	6 String
DC output string	2 String	2 String	2 String
Maximum DC input voltage		1000V	
Maximum DC short-circuit current		15A~32A (Optional)	
Maximum DC output current	32A	32A	32A
DC monitoring		Optional	
Enclosure			
Cabinet material	PC/ABS	PC/ABS	PC/ABS
Anti-UV	Yes	Yes	Yes
Foreign body protection level		IK10	
Collision protection level		IP65	
Dimensions (W*H*D)		Customized	
DC input port		Pg09, 2.5~4 mm²	
DC output port	Pg25, 4~6 mm²	Pg25, 4~6 mm²	Pg25, 6~10 mm²
DC surge protection			
Maximum working voltage		1000V	
Maximum discharge current		40 kA	
Executive Standard		EN 50539-11 Type 2	
Certification		CE, TUV, CB	
DC isolated switch/DC MCB			
Rated insulation pad		1000V	
Rated current	32A	32A	40A
Classification		DC-PV1/DC-PV2	
Executive Standard		IEC/EN 60947-3, UL508I	
Certification		CE, TUV, CB	
DC fuse			
Rated working voltage		1000 V	
Rated current		15 A~32A (Optional)	
Dimensions (W*H*D)		Φ10 * 38 mm	
Executive Standard		CE, CB, TUV	
Environmental parameters			
Operating temperature		-20℃~+60℃	
Humidity		99%	
Altitude		2000m (2000m Above derating)	
Installation method		Wall-mounted installation	

Diagram



Overview

MDHL PV AC combiner box is an important part of PV series string power generation system, which is responsible for string inverter and AC power distribution cabinet or step-up transformer. The product can access up to 4/6/8 PV inverters. It can be customized according to user requirements.

Features

High reliability

Use photovoltaic special AC surge protector

The photovoltaic special AC circuit breaker is used, and the rated voltage can reach 690V AC.

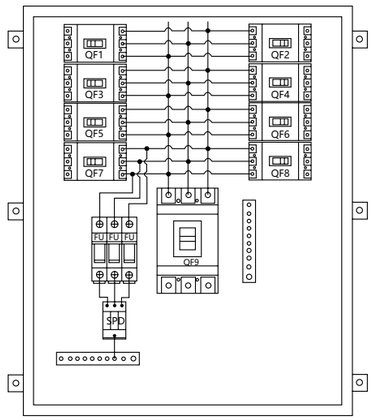
Strong adaptability

Ip65 protection, waterproof, dust proof and UV resistant.
Strict high and low temperature test, suitable for a wide area.
The installation is simple, the system wiring is simplified, and the wiring is convenient.
The box is made of a metal material such as cold rolled steel.

Flexible configuration

It is suitable for the AC output of 1~50KW PV string inverter. According to the capacity of the inverter, the current level of the circuit breaker can be modified.

Diagram

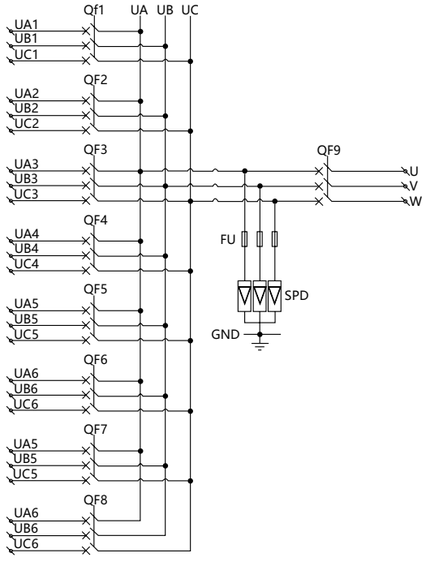


MDHL PV AC Combiner Box

Technical Parameters

Product number	MDHL-4/1	MDHL-6/1	MDHL-8/1
Number of input channels	4	6	8
Maximum input voltage	690V AC		
Input current per channel	0~250A	0~200A	0~100A
Highest output current	800A		
Un Rated working voltage Un	480V AC		
Up Voltage protection level Up	≤ 3.2kV		
Nominal flow capacity In (8/20μs)	20kA (Can be selected according to customer requirements)		
Maximum flow capacity Imax (8/20μs)	40kA (Can be selected according to customer requirements)		
Response time	<25ns		
Temperature and humidity	Working temperature: -40~+85℃, humidity 95%, no condensation, no corrosive gas		
Altitude	≤ 4000m		
Input and output switch	Breaker		
Surge protector	Standard		
Box material	Hot-dip galvanized steel sheet/stainless steel/cold rolled steel sheet/engineering plastic		
Box protection level	IP65		
Cable connector protection rating	IP66		
Volume (width × height × depth)	900mm×1000mm×200mm	700mm×1000mm×200mm	800mm×1000mm×200mm

Diagram



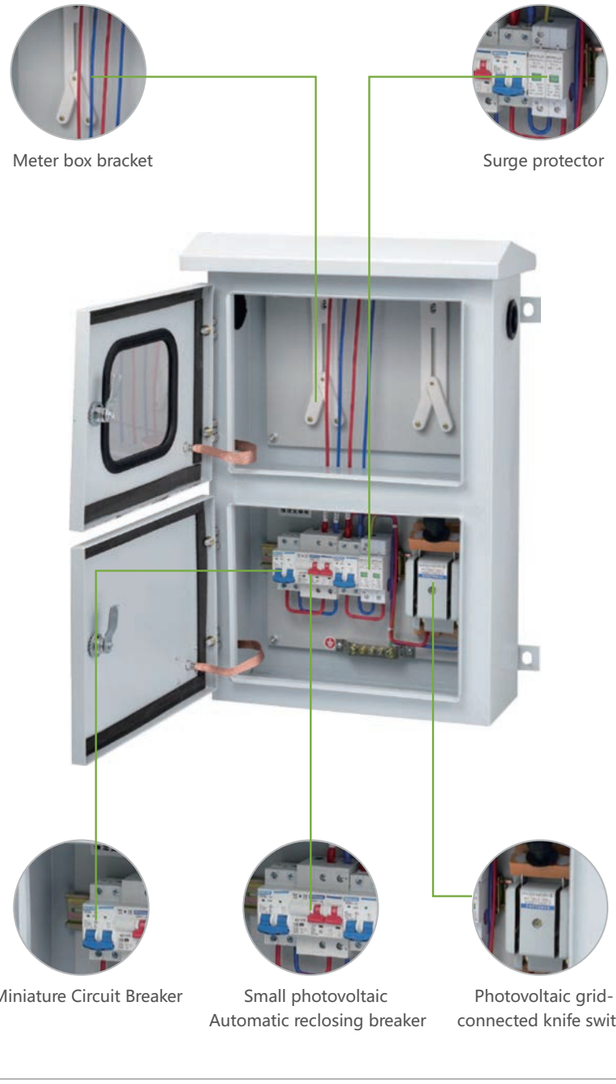
MDX-20 PV Grid-Connected Distribution Box

Features

Rainproof / waterproof / anti-corrosion
Size: 650×400×160mm
Power: 3~10KW

CE RoHS CB

Optional



MDX-200 PV Grid-Connected Distribution Box

Features

Rainproof / waterproof / anti-corrosion
Size：500×600×200mm
Power: 8~50KW

Optional


Miniature Circuit Breaker


Photovoltaic grid-connected knife switch


Surge protector


Photovoltaic plastic shell smart circuit breakers

MDXLD-4/1 6/1 12/1 PV DC Combiner Box

Overview

The MDXLD-4/1 6/1 12/1 lightning protection combiner box combines the DC input and sink of the 4/6/12-channel photovoltaic module string into one output, each line is equipped with a fuse, and the output is equipped with a lightning arrester and a circuit breaker, which greatly simplifies the DC power distribution cabinet and the reverse Input wiring for the transformer. It provides lightning protection, short circuit protection and grounding protection. The intelligent lightning protection combiner box is equipped with a flow monitoring unit, which can monitor the current input by each photovoltaic cell string, the summed output voltage, the temperature inside the box, the state of the lightning arrester, and the state of the circuit breaker.
It can be customized according to user requirements.

Features

High reliability

Use PV fuses.
Use PV surge protectors.
Use PV DC breaker or rotary isolation switch.
Technical Specifications for Photovoltaic Confluence Equipment" CGC/GF 037:2014.

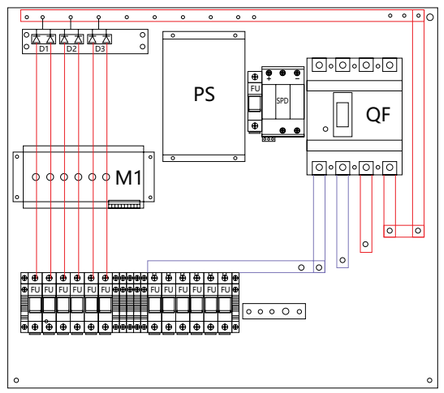
Strong adaptability

Ip65 protection, waterproof, dust proof and UV resistant.
Strict high and low temperature test, suitable for a wide area.
The installation is simple, the system wiring is simplified, and the wiring is convenient.
The box is made of metal materials such as cold rolled steel plate.

Flexible configuration

Applicable to monocrystalline silicon, polycrystalline silicon, thin film photovoltaic modules, can modify the current level of photovoltaic fuses, circuit breakers, rotary isolating switches.

Diagram



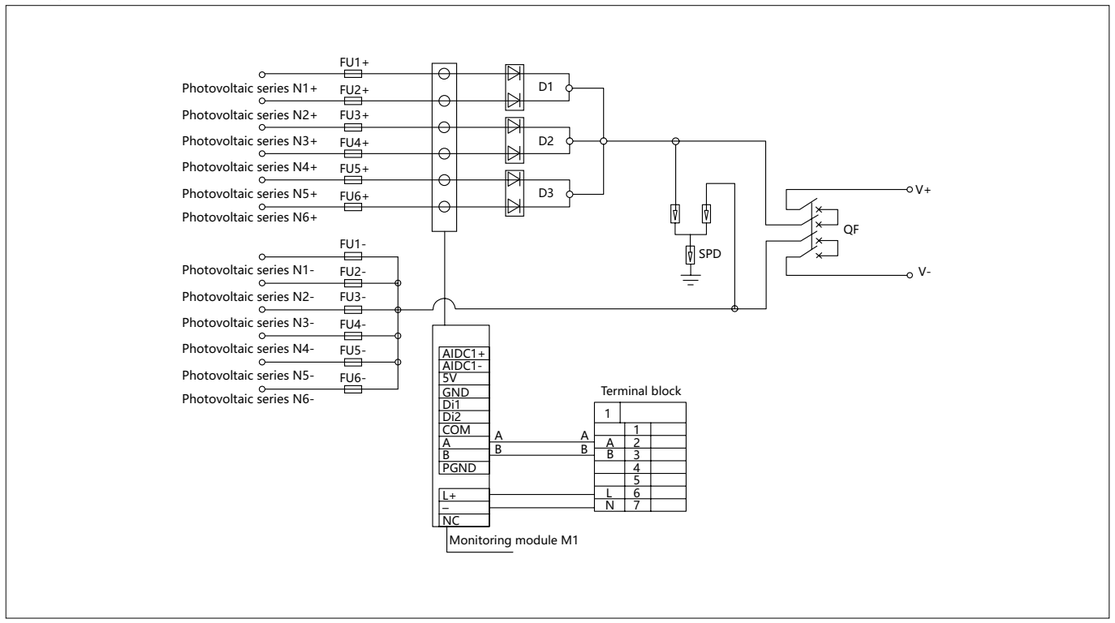
Technical Parameters

Name	MDXLD-4/1 6/1 12/1
Electrical parameters	
System maximum DC voltage	1500
Maximum input current per channel	15A
Maximum number of input channels	4/6/12
Maximum output switching current	100A
Number of inverter MPPT	N
Number of output channels	1
Lightning protection	
Test category	II pole protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage	1500V
Number of poles	3P
Structural features	Pluggable module

Technical Parameters

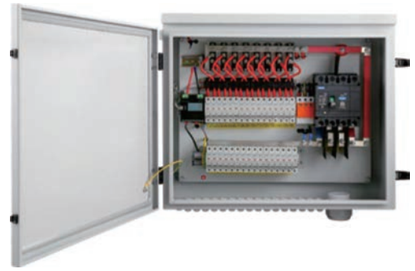
Name	MDXLD-4/1 6/1 12/1
System	
Protection level	IP65
Output switch	DC circuit breaker (standard) / DC rotary isolating switch (optional)
SMC4 waterproof connector	Standard
Photovoltaic DC fuse	Standard
Photovoltaic DC fuse	Standard
Monitoring module	Optional
Anti-reverse diode	Optional
Box material	Metal
Installation method	Wall-mounted
Operating temperature	-25℃~+ 55℃
Altitude	2000 meter
Allow relative humidity	0~95%, no condensation

Diagram



Overview

The MDXLD-PV16/1 lightning protection combiner box combines the DC input and sink of the 16-channel photovoltaic module string into one output, each line is equipped with a fuse, and the output is equipped with a lightning arrester and a circuit breaker, which greatly simplifies the DC power distribution cabinet and the reverse Input wiring for the transformer. It provides lightning protection, short circuit protection and grounding protection. The intelligent lightning protection combiner box is equipped with a flow monitoring unit, which can monitor the current input by each photovoltaic cell string, the summed output voltage, the temperature inside the box, the state of the lightning arrester, and the state of the circuit breaker.
It can be customized according to user requirements.



Features

High reliability

Use PV fuses.
Use PV surge protectors.
Use PV DC breaker or rotary isolation switch.
Technical Specifications for Photovoltaic Confluence Equipment" CGC/GF 037:2014.

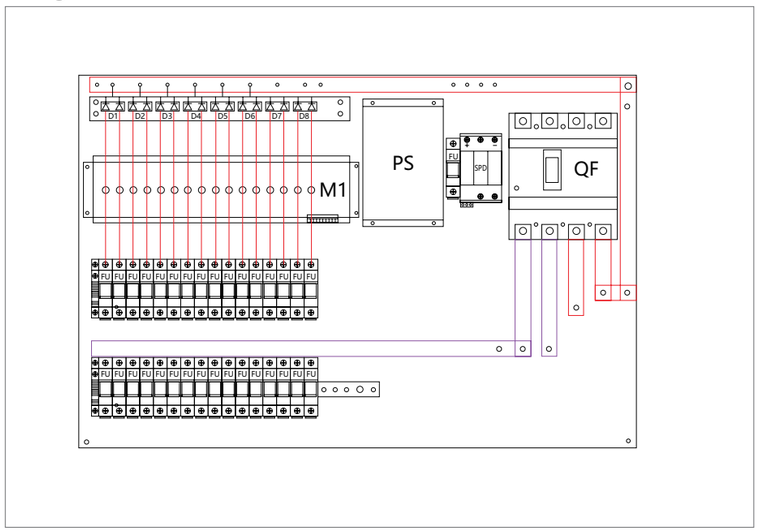
Strong adaptability

Ip65 protection, waterproof, dust proof and UV resistant.
Strict high and low temperature test, suitable for a wide area.
The installation is simple, the system wiring is simplified, and the wiring is convenient.
The box is made of metal materials such as cold rolled steel plate.

Flexible configuration

Applicable to monocrystalline silicon, polycrystalline silicon, thin film photovoltaic modules, can modify the current level of photovoltaic fuses, circuit breakers, rotary isolating switches.

Diagram

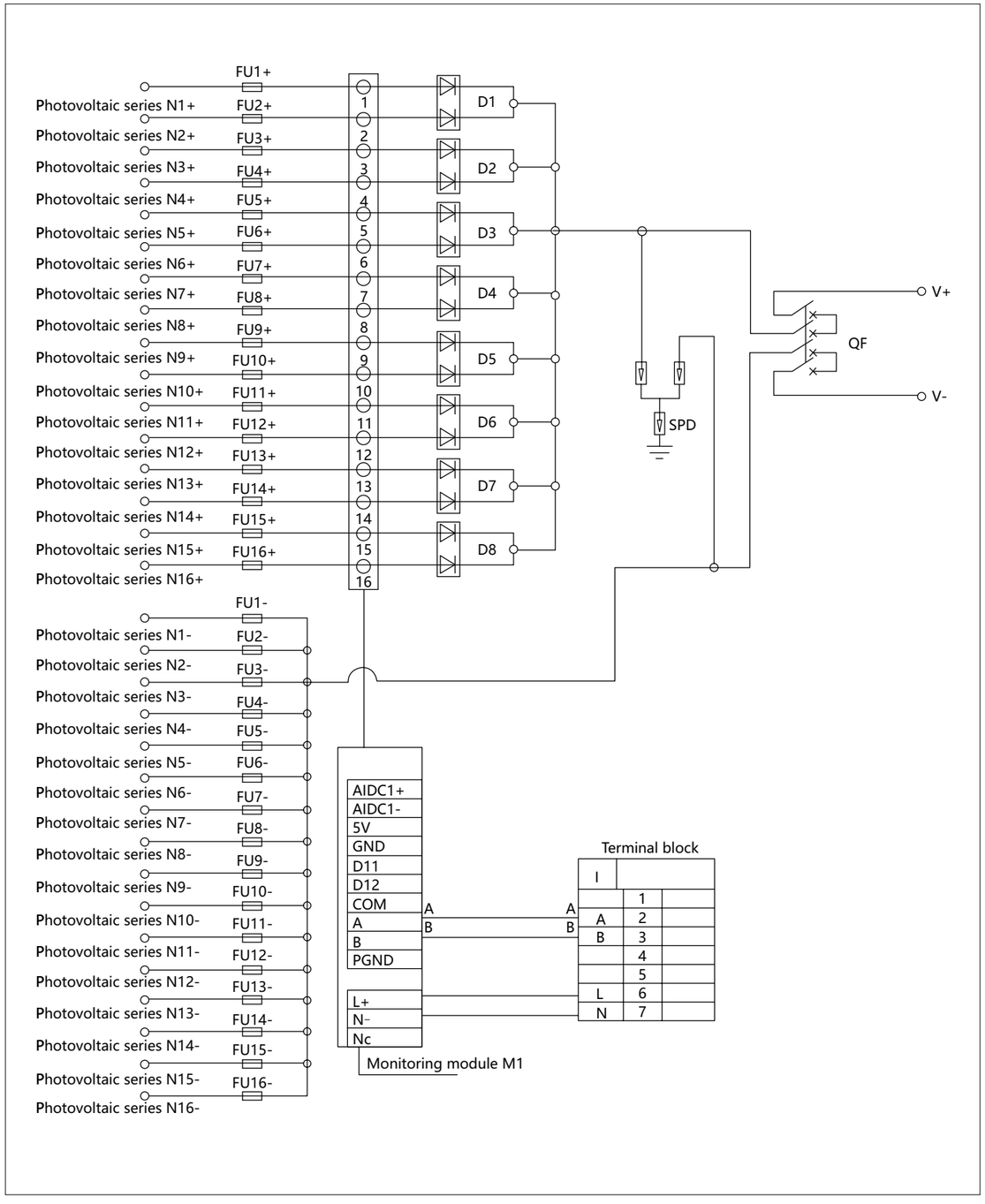


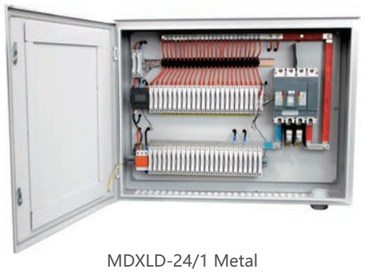
Technical Parameters

Name	MDXLD-PV16/1
Electrical parameters	
System maximum DC voltage	1500
Maximum input current per channel	15A
Maximum number of input channels	16
Maximum output switching current	200A
Number of inverter MPPT	N
Number of output channels	1
Lightning protection	
Test category	II pole protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage	1500V
Number of poles	3P
Structural features	Pluggable module
System	
Protection level	IP65
Output switch	DC circuit breaker (standard) / DC rotary isolating switch (optional)
SMC4 waterproof connector	Standard
Photovoltaic DC fuse	Standard
Photovoltaic DC surge protector	Standard
Monitoring module	Optional
Anti-reverse diode	Optional
Box material	Metal
Installation method	Wall-mounted
Operating temperature	-25℃~+ 55℃
Altitude	2000 meter
Allow relative humidity	0~95%, no condensation

MDXLD-16/1 PV DC Combiner Box MOREDAY

Diagram





MDXLD-24/1 Metal

MDXLD-24/1 SMC

Overview

The MDXLD-PV24/1 lightning protection combiner box combines the DC input and sink of the 24-channel photovoltaic module string into one output, each line is equipped with a fuse, and the output is equipped with a lightning arrester and a circuit breaker, which greatly simplifies the DC power distribution cabinet and the reverse Input wiring for the transformer. It provides lightning protection, short circuit protection and grounding protection. The intelligent lightning protection combiner box is equipped with a flow monitoring unit, which can monitor the current input by each photovoltaic cell string, the summed output voltage, the temperature inside the box, the state of the lightning arrester, and the state of the circuit breaker.
It can be customized according to user requirements.

Features

High reliability

Use PV fuses.
Use PV surge protectors.
Use PV DC breaker or rotary isolation switch.
Technical Specifications for Photovoltaic Confluence Equipment" CGC/GF 037:2014.

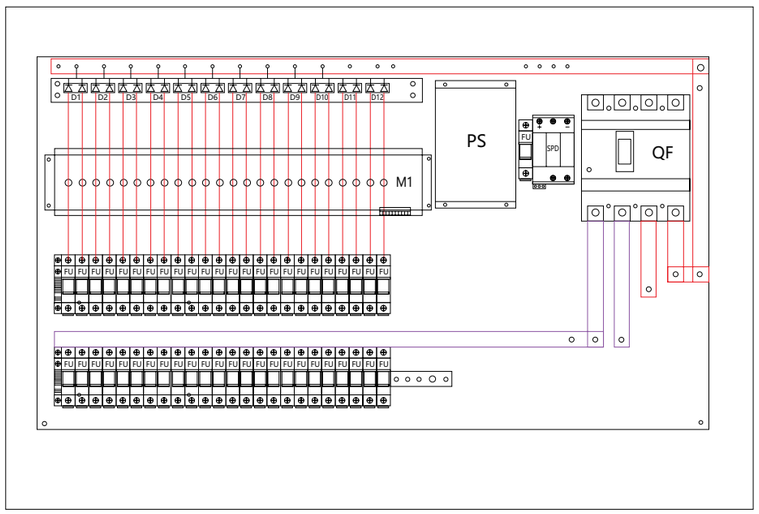
Strong adaptability

Ip65 protection, waterproof, dust proof and UV resistant.
Strict high and low temperature test, suitable for a wide area.
The installation is simple, the system wiring is simplified, and the wiring is convenient.
The box is made of metal materials such as cold rolled steel plate.

Flexible configuration

Applicable to monocrystalline silicon, polycrystalline silicon, thin film photovoltaic modules, can modify the current level of photovoltaic fuses, circuit breakers, rotary isolating switches.

Diagram

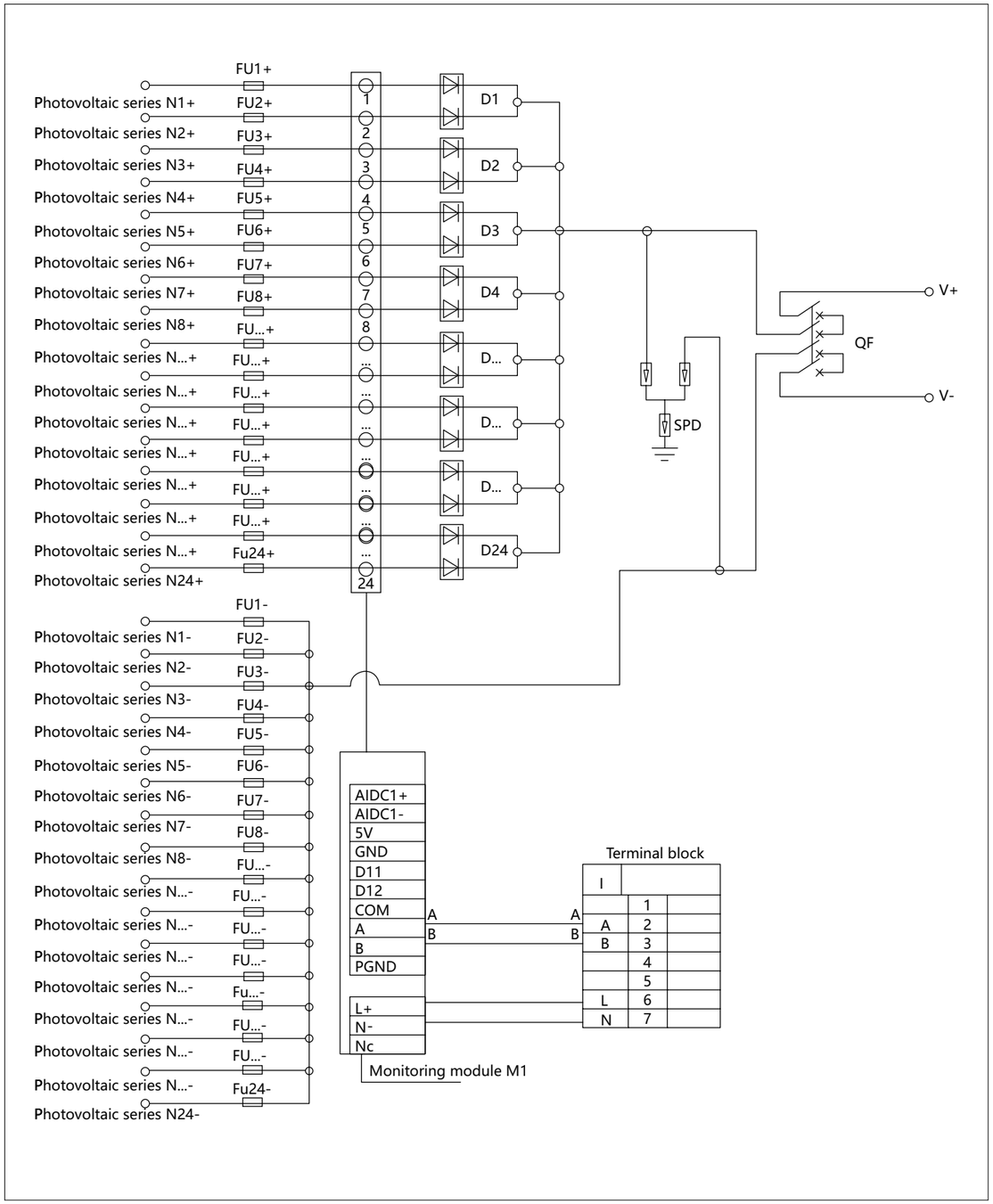


MDXLD-24/1 PV DC Combiner Box

Technical Parameters

Name	MDXLD-PV24/1
Electrical parameters	
System maximum DC voltage	1500
Maximum input current per channel	15A
Maximum number of input channels	24
Maximum output switching current	400A
Number of inverter MPPT	N
Number of output channels	1
Lightning protection	
Test category	II pole protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage	1500V
Number of poles	3P
Structural features	Pluggable module
System	
Protection level	IP65
Output switch	DC circuit breaker (standard) / DC rotary isolating switch (optional)
SMC4 waterproof connector	Standard
Photovoltaic DC fuse	Standard
Photovoltaic DC surge protector	Standard
Monitoring module	Optional
Anti-reverse diode	Optional
Box material	Metal/SMC
Installation method	Wall-mounted
Operating temperature	-25℃~+ 55℃
Altitude	2000 meter
Allow relative humidity	0~95%, no condensation

Diagram



Features

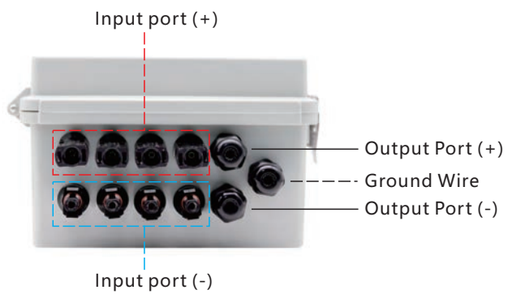
1.The PV combiner box is suitable for photovoltaic grid-connected and off-grid power generation systems.
2.It is configured with photovoltaic dedicated high-voltage lightning arrester, DC fuse and circuit breaker to provide short circuit fault protection and lightning protection.
3.It has protect function of over-voltage and over-current so as to avoid damage to photovoltaic panels and inverters when the fault occurs.
4.It' s also used to reduce the connection of the photovoltaic array to the inverter,optimize the system structure, improve the reliability and maintainability of the system, make the photovoltaic system at its best.
5.IP65 design, waterproof, anti dust and anti ultraviolet.
6.Strict test for high and low temperature, used widely.
7.The simple installation,the simplified system wiring, the convenient wiring

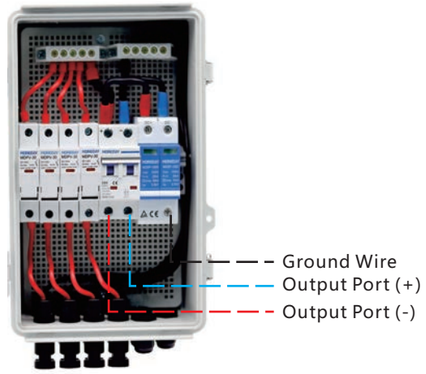
TechnicaL Specification

DC string box	
Product Name	**DC combiner box**
Model Code	MDJB-PV4/1
Rated Voltage	500V~600V
Operation	10A
Input	4strings
output	1string
Temperature range	-25℃~+60℃
Enclosure	
IP Protection Class (IEC60529)	IP65
Materials	Polycarbonate / ABS
Spec	UV resistance and Flame retardant
DC Circuit Breaker	
Rated Voltage	500V~600V
Rated Current	63A
DC SPD	
Max Operating Voltage	1000V
Max Discharge Current	40KA
Nominal discharge current	20KA
DC Fuse	
Rated Volitage	1000V
Fuse link	15A 10*38mm²
Finger safe touch	YES

MDJB-4B DC COMBINER BOX

Insatallation





Instruction

1. Box Input: Connect the panel connectors (module output and combiner input), make sure the negative wire of module output connected to the blue area (as the picture instructed); the positive wire of module output connected to the red area (as the picture instructed).
2. Box Output: Connect PV wires to the output terminals of DC circuit breaker (both “+” and “-”; as the picture instructed), connect the ground wire to the ground terminal of DC arrester. All the output wires separately pass through the cable glands, make sure all the cable glands properly tightened.

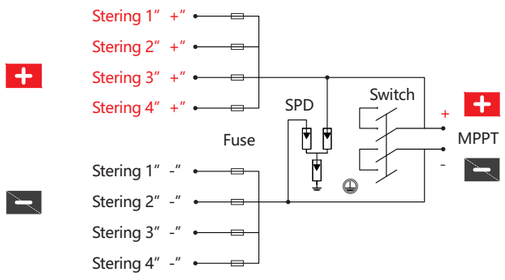
Notice:

1. All connections must be carried out under the state of power failure.
2. Let the professional electrical engineer carry on connecting line.
3. The flammable and explosive are forbidden in the installing concourse.

Warranty & Service

Standard Combiner Boxes come with 3 year warranty, except on the consumables such as fuses. If you have any question, just feel free tocontact me.

Wiring diagram



MDJB-6B DC COMBINER BOX

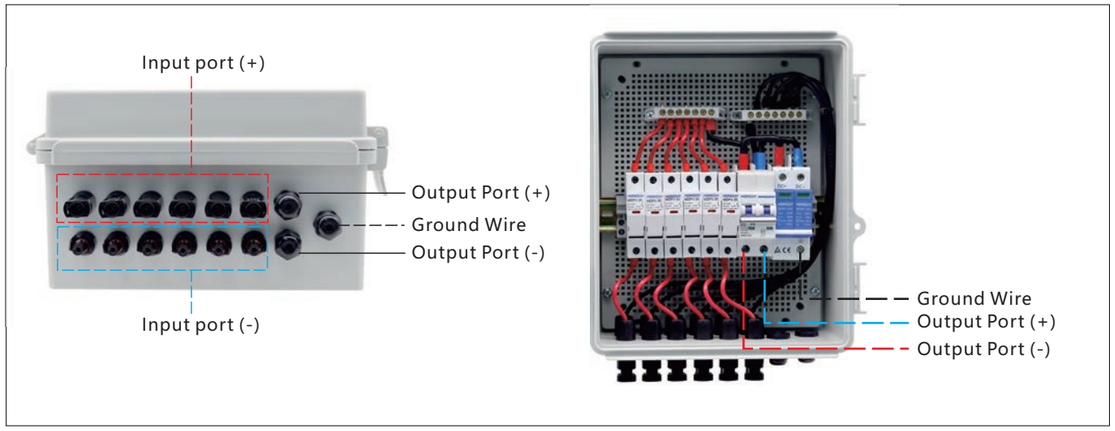
Features

1.The PV combiner box is suitable for photovoltaic grid-connected and off-grid power generation systems.
2.It is configured with photovoltaic dedicated high-voltage lightning arrester, DC fuse and circuit breaker to provide short circuit fault protection and lightning protection.
3.It has protect function of over-voltage and over-current so as to avoid damage to photovoltaic panels and inverters when the fault occurs.
4.It’ s also used to reduce the connection of the photovoltaic array to the inverter,optimize the system structure, improve the reliability and maintainability of the system, make the photovoltaic system at its best.
5.IP65 design, waterproof, anti dust and anti ultraviolet.
6.Strict test for high and low temperature, used widely.
7.The simple installation,the simplified system wiring, the convenient wiring

TechnicaL Specification

DC string box	
Product Name	**DC combiner box**
Model Code	MDJB-PV6/1
Rated Voltage	500V~600V
Operation	10A
Input	6trings
output	1string
Temperature range	-25℃~+60℃
Enclosure	
IP Protection Class (IEC60529)	IP65
Materials	Polycarbonate / ABS
Spec	UV resistance and Flame retardant
DC Circuit Breaker	
Rated Voltage	500V~600V
Rated Current	63A
DC SPD	
Max Operating Voltage	1000V
Max Discharge Current	40KA
Nominal discharge current	20KA
DC Fuse	
Rated Volitage	1000V
Fuse link	15A 10*38mm²
Finger safe touch	YES

Insatallation



Instruction

1. Box Input: Connect the panel connectors (module output and combiner input), make sure the negative wire of module output connected to the blue area (as the picture instructed); the positive wire of module output connected to the red area (as the picture instructed).
2. Box Output: Connect PV wires to the output terminals of DC circuit breaker (both "+" and "-"; as the picture instructed), connect the ground wire to the ground terminal of DC arrester. All the output wires separately pass through the cable glands, make sure all the cable glands properly tightened.

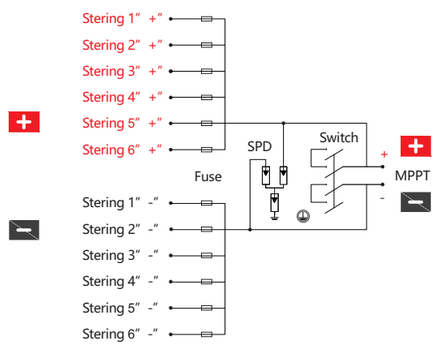
Notice:

1. All connections must be carried out under the state of power failure.
2. Let the professional electrical engineer carry on connecting line.
3. The flammable and explosive are forbidden in the installing concourse.

Warranty & Service

Standard Combiner Boxes come with 3 year warranty, except on the consumables such as fuses. If you have any question, just feel free tocontact me.

Wiring diagram



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.

MDB1Z-63

MDB1Z-100

TechnicaL Specification

MDB1Z-63

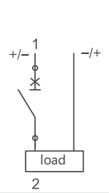
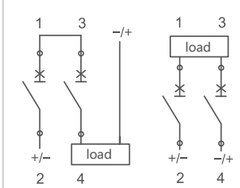
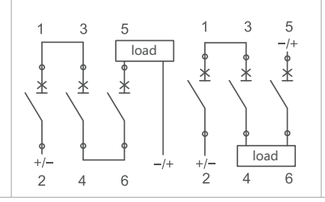
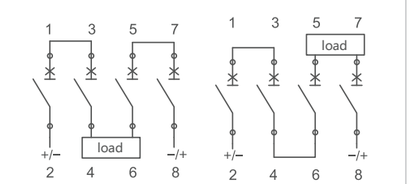
Pole		1P	2P	3P	4P
Rated Working Voltage Ue		250V DC	600V DC	800V DC	1000V DC
Frame Current		63A			
Rated Current In		63A, 50A, 40A, 32A, 25A, 20A,16A,10A			
Rated Insulation Voltage Ui		1000V			
Rated Impulse Withstand Voltage Uimp		6kV			
Tripping Characteristics		B/C			
Tripping Type		Thermal Magnetic			
Rated Ultimate Short-Circuit Breaking Capacity Icu		6kA			
Rated Service Short-Circuit Interrupting Capacity Ics		6kA			
Electrical Life	Actual	> 1500 Cycles			
	Standard	300 Cycles			
Mechanical Life	Actual	>10000 Cycles			
	Standard	9700 Cycles			
Overvoltage Category		III			
Pollution Degree		3			
Ingress Protection		IP40; Wiring port IP20			
Resistance to humidity and heat		Class 2			
Relative Humidity		≤ 95 %			
Vibration		acc. to IEC60068-2-6			
Shocks		acc. to IEC60068-2-27			
Terminal capacity		2.5~35mm?			
Fastening Torque of Terminals		2.0 ~ 3.5 Nm			
Ambient Temperature		-30℃~70℃			
Storage Temperature		-40℃~85℃			
Installation Method		DIN			
Elevation		≤2000m			
Dimension		Width:72mm			
		High: 87.5mm			
		Depth: 81mm			
Weight		0.12kg/Pole			

TechnicaL Specification

MDB1Z-100

Pole		2P	4P
Rated Working Voltage Ue		600V DC	1000V DC
Frame Current		100A	
Rated Current In		63A, 80A, 100A	
Rated Insulation Voltage Ui		1000V	
Rated Impulse Withstand Voltage Uimp		6kV	
Tripping Characteristics		B/C	
Tripping Type		Thermal Magnetic	
Rated Ultimate Short-Circuit Breaking Capacity Icu		15kA(In≤100A)	
Rated Service Short-Circuit Interrupting Capacity Ics		10kA(In≤100A)	
Electrical Life	Actual	> 1500 Cycles	
	Standard	300 Cycles	
Mechanical Life	Actual	>10000 Cycles	
	Standard	9700 Cycles	
Overvoltage Category		III	
Pollution Degree		3	
Ingress Protection		IP40; Wiring port IP20	
Resistance to humidity and heat		Class 2	
Relative Humidity		≤ 95 %	
Vibration		acc. to IEC60068-2-6	
Shocks		acc. to IEC60068-2-27	
Terminal capacity		2.5~35mm?	
Fastening Torque of Terminals		2.0～3.5 Nm	
Ambient Temperature		-30℃~70℃	
Storage Temperature		-40℃~85℃	
Installation Method		DIN	
Elevation		≤2000m	
Dimension		Width:72mm	
		High: 87.5mm	
		Depth: 81mm	
Weight		0.12kg/Pole	

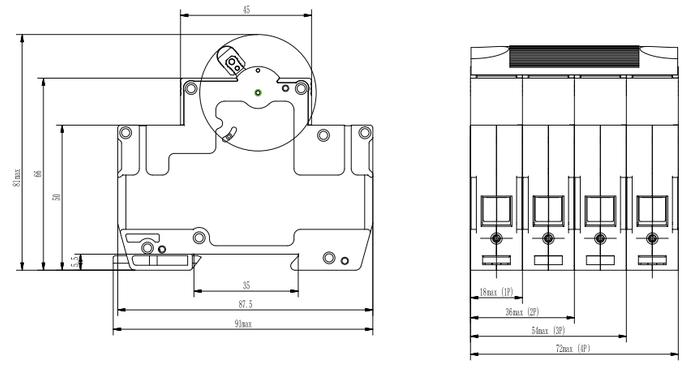
Contact Configuration

1P	2P	3P	4P
			

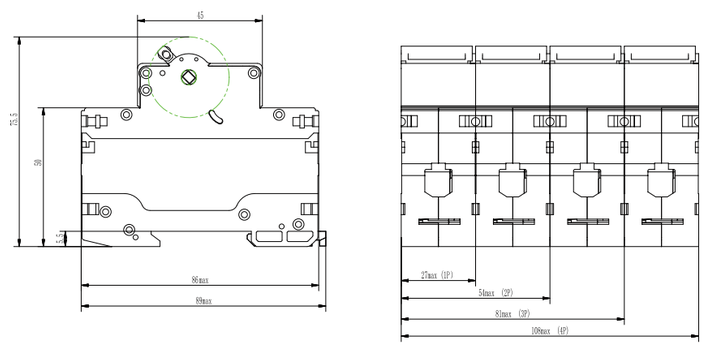
Standard time-current band

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(In≤ 63A)	No tripping	/
b	B、C	1.45In	Followed by a test	t < 1h(In≤ 63A)	Tripping	The current rises steadily within 5S
c	B、C	2.55In	Cold state	1s < t < 60s(In≤ 63A) 1s < t < 60s(In≤ 63A)	Tripping	/
d	B、C	4In	Cold state	0.1s < t < 45s(In≤ 32A) 0.1s < t < 90s(In≤ 32A)	Tripping	Close the auxiliary switch to turn on the power
		7In		0.1s < t < 15s(In≤ 32A) 0.1s < t < 30s(In≤ 32A)		
e	B、C	7In	Cold state	t < 0.1s	Tripping	
		15In				

Dimensions(unit:mm)



MDB1-63



MDB1-100

MDB2Z-63 DC Miniature Circuit Breaker

Overview

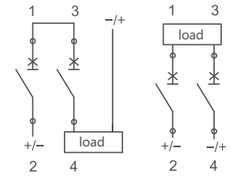
Dc circuit breaker limited current performance, can accurately protect relay protection, automatic device from overload, short circuit and other faults. Advantages of current limiting and arc extinguishing capabilities of dc circuit breakers.

TechnicaL Specification

Pole		2P
Rated Working Voltage Ue		800V/1000V DC
Frame Current		63A
Rated Current In		63A, 50A, 40A, 32A, 25A, 20A,16A,10A
Rated Insulation Voltage Ui		800V/1000V
Rated Impulse Withstand Voltage Uimp		6kV
Tripping Characteristics		B/C
Tripping Type		Thermal Magnetic
Rated Ultimate Short-Circuit Breaking Capacity Icu		6kA
Rated Service Short-Circuit Interrupting Capacity Ics		6kA
Electrical Life	Actual	> 1500 Cycles
	Standard	300 Cycles
Mechanical Life	Actual	>10000 Cycles
	Standard	9700 Cycles
Overvoltage Category		III
Pollution Degree		3
Ingress Protection		IP40; Wiring port IP20
Resistance to humidity and heat		Class 2
Relative Humidity		≤ 95 %
Vibration		acc. to IEC60068-2-6
Shocks		acc. to IEC60068-2-27
Terminal capacity		2.5~35mm?
Fastening Torque of Terminals		2.0～3.5 Nm
Ambient Temperature		-30℃~70℃
Storage Temperature		-40℃~85℃
Installation Method		DIN
Elevation		≤2000m
Dimension		Width:72mm
		High: 87.5mm
		Depth: 81mm
Weight		0.12kg/Pole

Contact Configuration

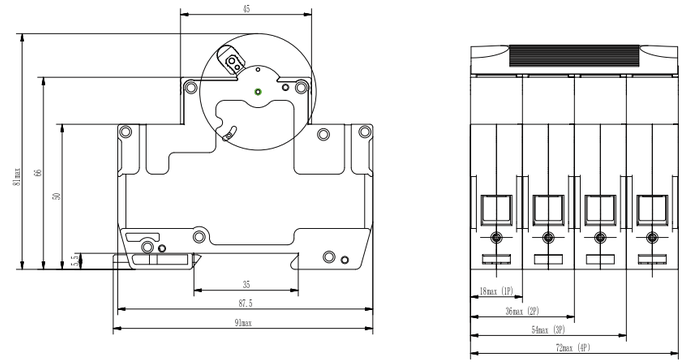
2P



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(In≤ 63A)	No tripping	/
b	B、C	1.45In	Followed by a test	t < 1h(In≤ 63A)	Tripping	The current rises steadily within 5S
c	B、C	2.55In	Cold state	1s < t < 60s(In≤ 63A) 1s < t < 60s(In≤ 63A)	Tripping	/
d	B、C	4In	Cold state	0.1s < t < 45s(In≤ 32A) 0.1s < t < 90s(In≤ 32A)	Tripping	Close the auxiliary switch to turn on the power
		7In		0.1s < t < 15s(In≤ 32A) 0.1s < t < 30s(In≤ 32A)		
e	B、C	7In	Cold state	t < 0.1s	Tripping	
		15In				

Dimensions(unit:mm)



MDB2Z-63

Overview

Suitable for industrial, commercial, high-rise and civil residences circuit protection.

Features

- Up to 63A current rating
- Current limiting design
- Three levels of short-circuit protection ,categorized by B、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	Ip20
Overvoltage category	Ⅱ
Standards	IEC60898 -1、GB/T10963 . 1
Compliant certification	CCC

Wiring Diagram

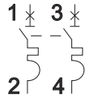
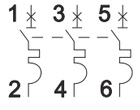
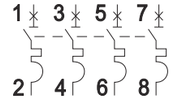
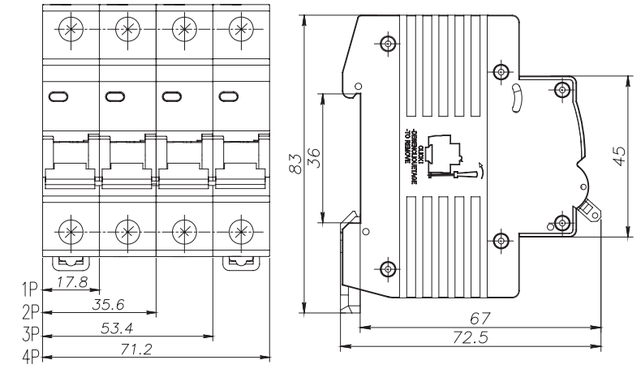
1P	2P	3P	4P
			

Table 1: Tripping characteristics (Reference temp.30℃)

Item	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	Tripping	
Delay	＞32	Cold	2.55In	1＜t＜120s	Tripping	
Instantaneous	Any value	Cold	3、5、10In	≤0.1s	Non-tripping	B、C、D
Instantaneous	Any value	Cold	5、10、20In	＜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)



Overview

Suitable for industrial, commercial, high-rise and civil residences circuit protection.

Features

- Up to 63A current rating
- Current limiting design
- Three levels of short-circuit protection ,categorized by B、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)	230V(1P)、400V(2~4P)
Rated current(A)	63A、80A、100A
Poles	1P、2P、3P、4P
Rated breaking capacity Icn(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	Ⅱ&Ⅲ
Standards	IEC 60947-2 、GB/T14048.2
Compliant certification	CCC

Wiring Diagram

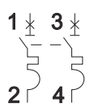
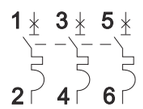
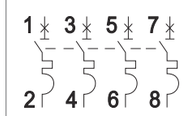
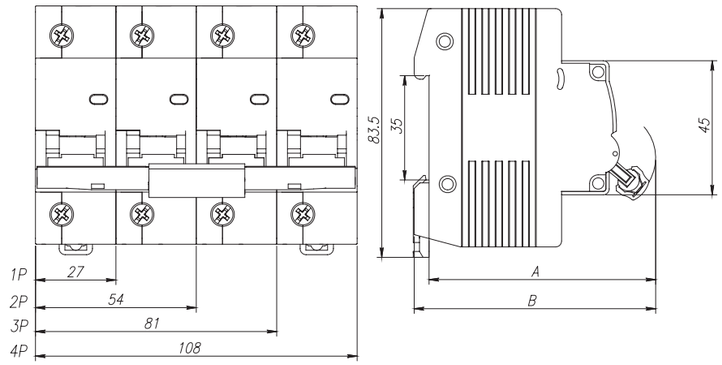
1P	2P	3P	4P
			

Table 1: Tripping characteristics (Reference temp.30℃)

Item	Test current In(A)	Initial status	Time limit for tripping or non-tripping	Expected result	Remarks
a	1.05In	Cold	t≤1h (In≤63A) t≤2h (In≥63A)	Non-tripping	
b	1.3In	Following Item a test	t<1h (In≤63A) t<2h(（In≥63A)	Tripping	Current smoothly rises to specified value within 5s
c	2In	Cold	0<t<300s	Tripping	
d	8In	Cold	t≤0.2s	Non-tripping	
e	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 Miniature Automatic Reclosing Circuit Breakers

Overview

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, long-distance 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	C
Features	Short circuit protection, overload protection, isolated, remote split/ close control	Rated short-circuit breaking capacity	Ics=Icn=6000A
Rack rated current value Inm	100A	Mechanical life	10000
Rack rated current value Inm	230V AC(2P)/400V AC(4P)	Electrical life	6000
Rated current In	32A, 40A, 50A, 63A, 80A,100A	Overcurrent tripping characteristics	See Table 1 and Figure 1
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	Ic≤1mA	Feedback signal	Have
Closing module power take-off mode	Take power before the control line meter, take power after closing/ opening the short timetable	Split/close operation mode	Built-in shaft drive

MDM8L PV Plastic Smart Circuit Breakers

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 Ir (standard type)	40、63、80、100、125	100、160 200、250	250、315 350、400	400、500、630	630、700、800
Rated current Ir (electronic)	(0.4-1.0) xIn+off (can be adjusted every 0.1In)				
Rated ultimate short-circuit breaking capacity Ieu (kA)	30	35	50	65	65
Rated operating short-circuit breaking capacity Ies (kA)	15	22	35	42	42
Rated residual short-circuiting (breaking) capability I△m (kA)	7.5	8.75	12.5	16.25	16.25
Rated residual operating current I△n (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/100mA/300mA/500m A/800mA/1000mA/leakage alarm, automatic tracking				
Rated residual non-operating current	0.5 I△n				
Residual current breaking time	≤ 0.2S S-type 0.5S 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)				
Overvoltage action value (standard type)	280V±5% (automatically close after voltage recovery)				


MDM1Z-125


MDM5Z-400

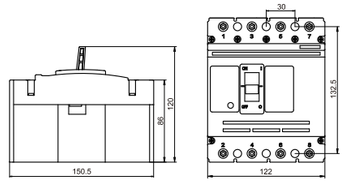
Overview

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.

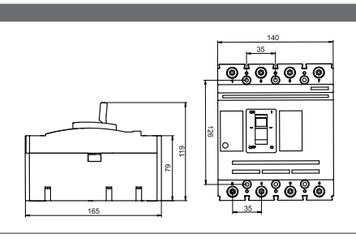
- High Shot- Circuit/Breaking Capacity
- Protection Functions: Overload, Short circuit , Unfrequent Operation
- Rated Voltage up to 1000V DC
- Rated Current 125A,250A.400A,630A
- IEC60947-2, GB14048-2
- Easy Installation

Dimensions(unit:mm)

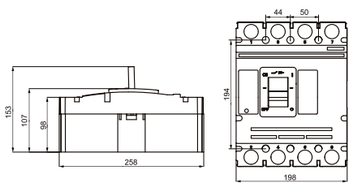
125A



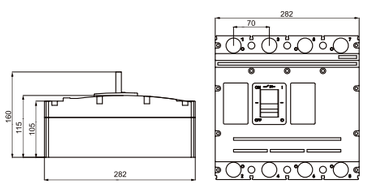
250A



400A



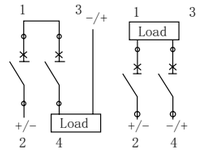
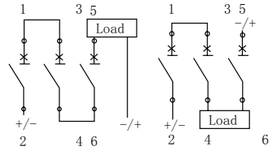
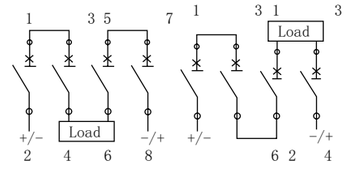
630A



TechnicaL Specification

BD series PV DC MCCB					
Type			MDM1Z-125	MDM1Z-250	MDM5Z-400	MDM5Z-630
Pole			4P	4P	4P	4P
Max Rated Current			125A	250A	400A	630A
Electrical Characteristics						
Rated Working Voltage		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 Voltage		Ui	1000V DC			
Rated Impulsed Voltage		Uimp	8kV			
1 Min Power Frequency Withstand Voltage			3.8 KV	3.8 KV	3.8 KV	3.8 KV
Utimate Breaking Capacity		Icu	20 KA	20 KA	20 KA	20 KA
Run Breaking Capacity		Ics	15 KA	15 KA	15 KA	15 KA
Protection						
Tripping Type			Thermal Magnetic Type			
Control And Indication						
ControlMode	Manual	Direct (RHD)	Optional			
		Extended(ERH)	Optional			
	MOD		Optional			
Shunt Release (SHT)			Optional			
Auxiliary Release			Optional			
Terminal End Cover			Yes			
Interphase Barriers			Yes			
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 ,Connection Terminal IP20			
Installation Environment						
Comply With			IE C60947-2/GB14048.2			
Storage Temperature			-40°C~+85°C			

Wiring Diagram

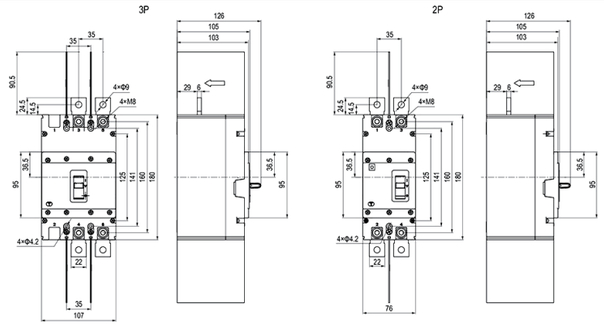
2P	3P	4P
		

Overview

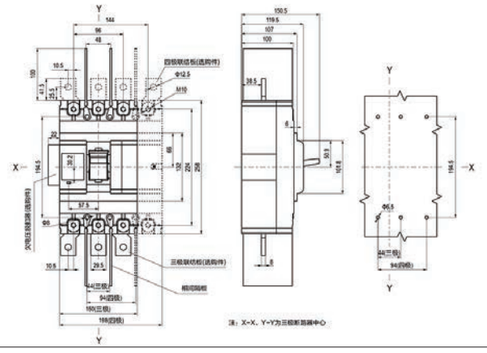
MDM6Z series molded case circuit breaker, rated voltage up to DC1500V, current up to 400A. The breaking capacity of DC1500V is up to 10kA, which can reliably protect the system against short circuit.

Dimensions(unit:mm)

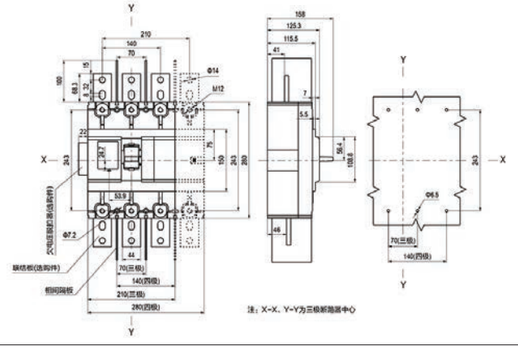
MDM6Z-250/320



MDM6Z-400



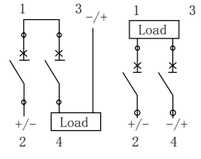
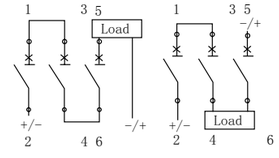
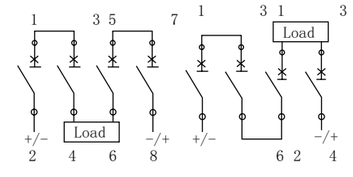
MDM6Z-630/800



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、140、160、180、200、225、250			280、315、320			315、350、400			400、500、630			630、700、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	1250	1500
Rated insulation voltage Ui (V)	1000	1500	1500	1000	1500	1500	1500			1500			1500		
Rated impact withstand voltage Uimp (kV)	12														
Ultimate short-circuit breaking capacity LCU (kA)	20														
Operating short circuit breaking capacity Ics (kA)	20														
Connection mode	Top down out			Top down 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 60947-2-. GB/T 14048.2.														
Permissible ambient temperature	-40~+70* C														
Protection grade	Ip20														
Quality certification	CCC、CE、CB、T0V														
But with attachments	Auxiliary, alarm, shunt, manual operation, electric operation														
Arc distance (mm)	≥50(zero arc with arc mask)														
Instantaneous action value	10In														
Overall dimension LxWxH(mm)	180x76x126(2P)/180x107x126(3P)						258x200x107			280x280x115.5			280x280x115.5		
installation	Fixed type, plug-in type														

Wiring Diagram

2P	3P	4P
		

Overview

MDM1 series plastic case circuit breakers (hereinafter referred to as circuit breakers) are theIt 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 800AIt 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 (Icu): 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).

Table 3 (for power distribution)

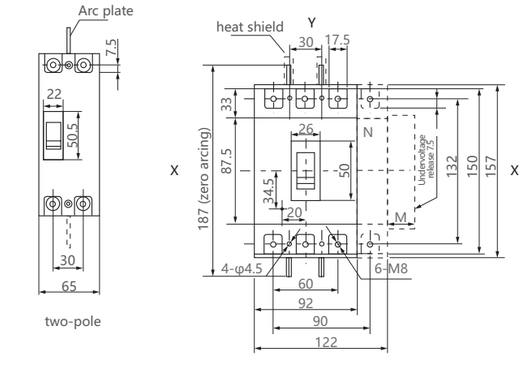
Rated operating current of release (A)	Thermal release (reference temperature 40°C)		Electromagnetic release operating current (A)
	1.05In (cold state) non-action time (h)	1.30In (hot state) operating time (h)	
10<In≤63	≥1	<1	10In±20%
63<In≤100	≥2	<2	10In±20%
100<In≤800	≥2	<2	5In±20% 10In±20%

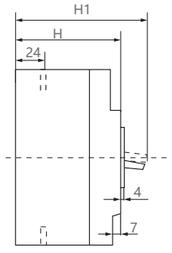
Note: There is no 5In electromagnetic trip unit in the 100A and 125A specifications of SHRM1-250.

Table 4 (for motor protection)

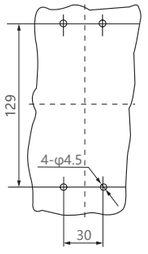
Rated operating current of release (A)	Thermal release (reference temperature 40°C)				Electromagnetic release operating current (A)
	1.0In (cold state) non-action time (h)	1.20In (hot state) operating time (h)	1.50In (cold state) non-action time (h)	7.20In (hot state) operating time (h)	
10≤In≤205	≥2	≤2	4min	4s<T≤10s	12In±20%
225<In≤800			8min	6s<T≤20s	

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)





Thickness of undervoltage release: for A, B type m=12 C type m=21



Hole size of front wiring installation board

Model	H	H1
MDM1-125L	68	86
MDM1-125M、H	86	104
MDM1-125 four-pole		

Main technical performance indicators

Frame current (A)		63			125(100)				250				400			
model		MDM1 -63L	MDM1 -63M		MDM1 -125L	MDM1 -125M	MDM1 -125H		MDM1 -250L	MDM1 -250M	MDM1 -250H		MDM1 -400L	MDM1 -400M	MDM1 -400H	
Rated current In(A)		(6)、10、16、20、25、32、40、50、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	4	3	3	3	4	4	3	3	4	4
Rated insulation voltage Ui(V)		AC500			AC1000				AC1000				AC800			
Rated impulse withstand voltage Uimp(V)		6000			8000				8000				8000			
Rated working voltage Ue(V)		AC400			AC400	AC400 AC690		AC400	AC400	AC400 AC690		AC400	AC400	AC400 AC690		AC400
Arc distance(mm)		0			0(≥50)				≥50				≥100			
Rated ultimate short-circuit breaking capacity Lcu(kA)	AC400V AC690V	25	50		35	50	80		35	50	80		50	65	100	
Rated operating short-circuit breaking capacity Lcs(KA)	AC400V AC690V	18	35		22	35	50		25	35	50		35	42.5	65	
Operational performance (times)	power ups	6000							3000				2000			
	no power	8500							7000				4000			
Dimensions (mm)	W	78	78	103	92	92	122	92	107	107	142	107	150	198	150	
	L	135	135		150	150			165	165			257			
	H	73.5	81.5		68	86			86	103			106.5			

Frame current (A)		630			800			1250		
model		MDM1 -630L	MDM1 -630M	MDM1 -630H	MDM1 -800L		MDM1 -800H	MDM1 -1250L	MDM1 -1250M	MDM1 -1250H
Rated current In(A)		400、500、630			630、700、800			800、1000、1250		
Number of poles (P)		3	3	4	3	3	4	3	3	4	3
Rated insulation voltage Ui(V)		AC800			AC800			AC800		
Rated impulse withstand voltage Uimp(V)		8000			8000			8000		
Rated working voltage Ue(V)		AC400	AC400 AC690	AC400	AC400 AC690		AC400	AC400	AC400 AC690	AC400
Arc distance(mm)		≥100			≥100			≥100		
Rated ultimate short-circuit breaking capacity Lcu(kA)	AC690V AC400V	50	65	100	85 30		100	85 30		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	1500			1000			1500		
	no power	4000			2500			4000		
Dimensions (mm)	W	182	240	182	210	280	210	210	280	210
	L	270			280	280	280	470		
	H	110			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.

MDM1 AC Moulded Case Circuit Breaker MOREDAY

MDSP 1000/1500V PV DC Surge Protection Device

MDSP-600

MDSP-1000

Overview

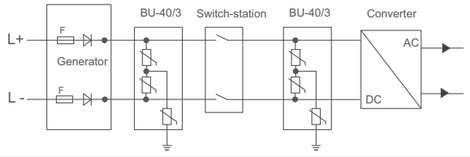
DC Surge Arrester BUD-40/3 is a Type 2 DC Surge Protection Device forDC side to protect the terminal devices in PV system from over voltage, like solarpanels or inverters. Available for 600Vdc ,1000Vdc,1500Vdc.

- 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

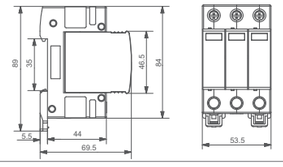
Technical parameters

PV DC Surge Protection Device		
Modules		3 modules
Standard		EN 50539-11
Electrical Characteristics		
Open Voltage	Uoc Max	1000V/1500V
Max Continuous Operational Voltage	Uc	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 mm² stranded I 25 mm² flexible
Connection	mm²	By screw terminal 4-25 mm²
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		Ip20
Installation Environment		
Operating Temperature Range	TU	-40°C+80°C
Relative Humidity		30%~90%
Weight kg		0.36

Principal Drawing



Dimensions(unit:mm)



MD1-40 AC Surge Protection Device

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.

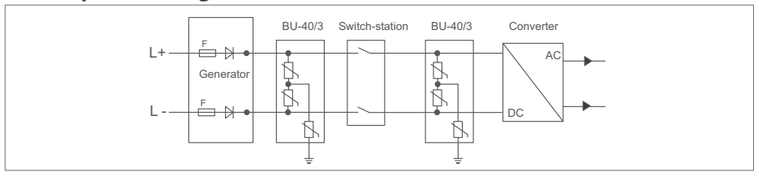
MD1-40 2P

MD1-40 4P

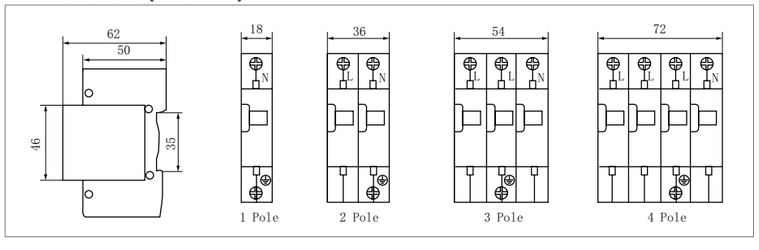
Technical parameters

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 IImax(8/20s)kA						
Response Time (ns)	<25					
Test Standard	IEC61643.1, GB1 8802.1					
Operating Environment(centigrade)	-40℃ ~+85℃					
Max Connection Line	35mm² hard wire/35mm² strand wire copper line					
Recommended Connection L ine	16mm² hard wire/25mm² strand wire copper line					
Installation	Standard Rail 35mm					
Material of Outer Covering	Burning-proof Nylon					

Principal Drawing



Dimensions(unit:mm)



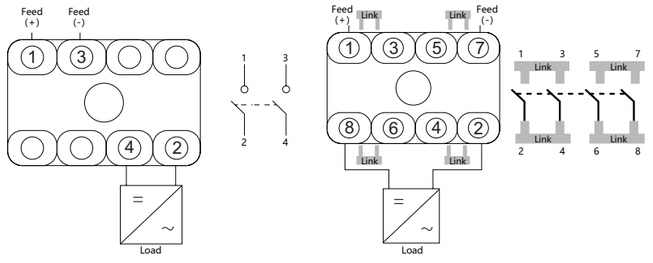
MDIS-40/40A PV DC Isolation Switch

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



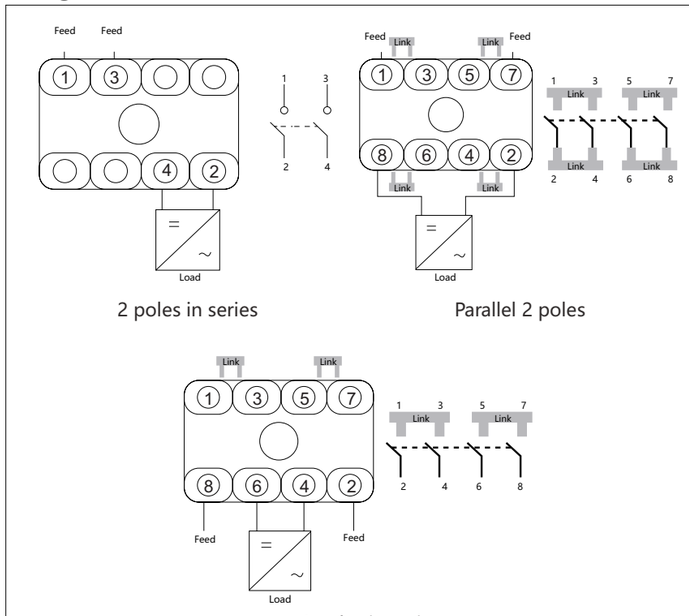
MDIS-40MD PV DC Isolation Switch

2 Poles connected in series	Ratings (DC21)	500V	600V	800V	900V	1000V	1200V
	MDIS-40MD-16A DC	16A	16A	16A	13A	9A	
	MDIS-40MD-25A DC	25A	25A	13A	13A	11A	
	MDIS-40MD-32A DC	32A	32A	13A	13A	13A	
2 Poles in parallel connected in series with 2Poles in parallel	Ratings (DC21)	500V	600V	800V	900V	1000V	1200V
	MDIS-40MD-16A DC	35A	29A	13A	16A	16A	16A
	MDIS-40MD-25A DC	40A	25A	25A	25A	25A	25A
	MDIS-40MD-32A DC	45A	32A	32A	32A	32A	32A
4 poles connected in series	Ratings (DC21)	500V	600V	800V	900V	1000V	1200V
	MDIS-40MD-16A DC	16A	16A	16A	16A	16A	16A
	MDIS-40MD-25A DC	25A	25A	25A	25A	25A	25A
	MDIS-40MD-32A DC	32A	32A	32A	32A	32A	32A

The main technical 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℃~40℃	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



MDIS-40MD With breathing valve

MDIS-40MD

MDIS-40MD
With MC4

Overview

AC Isolator Switch with super waterproof and dustproof function,can effectively prevent entry of dust, oil, in the rain or strong water will notaffect the use of product performance; have anti-corrosive, 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

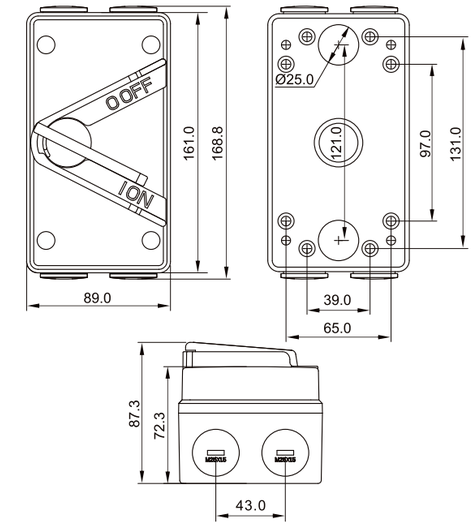
- High visibility ON/OFF indication
- 4pcs screws for high strength locking
- IP66 & UV Resistance
- Conduit entries on top and bottom
- Pad-lockable handle

Technical parameters

Type	MDF1								
Pole	1Pole			2Pole			3Pole		
Rated operational current (Ie)	20A	35A	63A	20A	35A	63A	20A	35A	63A
Rated operational voltage (Ue)	250V	250V	250V	440V	440V	440V	440V	440V	440V
Standard	IEC60947.3 AC-22A								
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 (Icm)	1.98kA								
Free air thermal current (1th)	Same as Ie								
Enclosed thermal current (Ithe)	Same as Ie								
Dielectric properties	800V								
Mechanical life	10000								
Electrical life	1500								
Protection degree	IP66								
UV Resistance	Yes								
Color	Gray								
Conduit entries	4xM25								4xM32
P adlock max diameter	6mm								
Max. cable size (Mains)	25mm²								
Max. cable size (N/E)	16mm²								
Approved	SAA, RCM, CE								

Rated operation current (AS3133)	Locked rotor 3 Ø,"M" rating	Locked rotor 1 Ø,"M" rating
	120A for 20A	140A for 20A
	160A for 35A	180A for 35A
	200A for 63A	200A for 63A

Dimensions(unit:mm)



1Pole 250V
20A, 35A, 63A

2Pole 440V
20A, 35A, 63A

3Pole 440V
20A, 35A, 63A

3Pole 440V
63A

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℃, and the lower limit of air temperature is not lower than -40℃;
The altitude of the installation site does not exceed 3000m;
At a maximum temperature of +40℃, the relative humidity of the air does not exceed 50%, allowing higher humidity at lower temperatures, for example, up to 90% at +25℃. 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: 2.5mm²-6mm², Copper type; hard wire: 2.5mm²-6mm²	
Connectable conductors ISO(mm2) or AWG number metric equivalent (mm2)	2.5mm²-6mm²	2.5mm²-6mm²
Number of conductors per terminal	1	1
Required preparation of the conductor	Example： No prepared conductor	
Max. Stripping length (mm)	8 mm	8 mm
Tightening torque (N•m)	2Nm, M5	2Nm, M5

MDPV-30/32 PV Fuses MOREDAY

Technical Parameters

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 Ie	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
Short circuit protective device	Tested with fuse-link: YRPV-32 (SOLAR, gPV, 10x85, DC 1500V, 32A, Interrupting Capacity: 25kA)	Tested with fuse-link:YRPV-30 (SOLAR, gPV, 10x38, DC 1000V, 30A, Interrupting Capacity: 20kA)
IP code	Ip20	Ip20
Pollution degree	3	3
Suitability for isolation	-	-

MD-MC4(1000V) Solar DC Panel Connector

CE RoHS CB

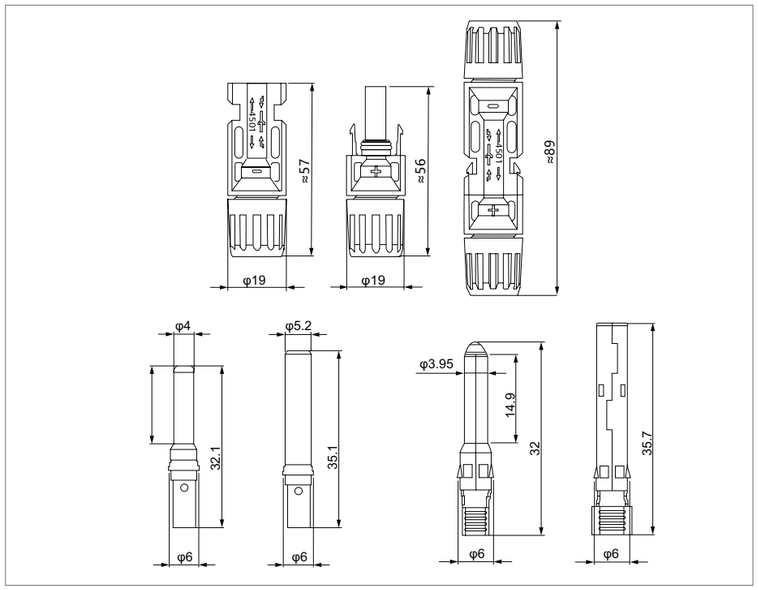
Overview

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	17A,22A,30A(1.5mm²,2.5mm²; 14AWG,4mm²; 6mm²; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90°(IEC) -40℃...+75℃(UL)
Upper Temperature Limit	+105℃ (IEC)
Degree of protection,mated	IP67
unmaied	IP2X
Comtact reastanceof plug conrwtors	0.5mΩ
Safety class	Ⅱ
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)



MD-MC4(1500V) Solar DC Panel Connector

Overview

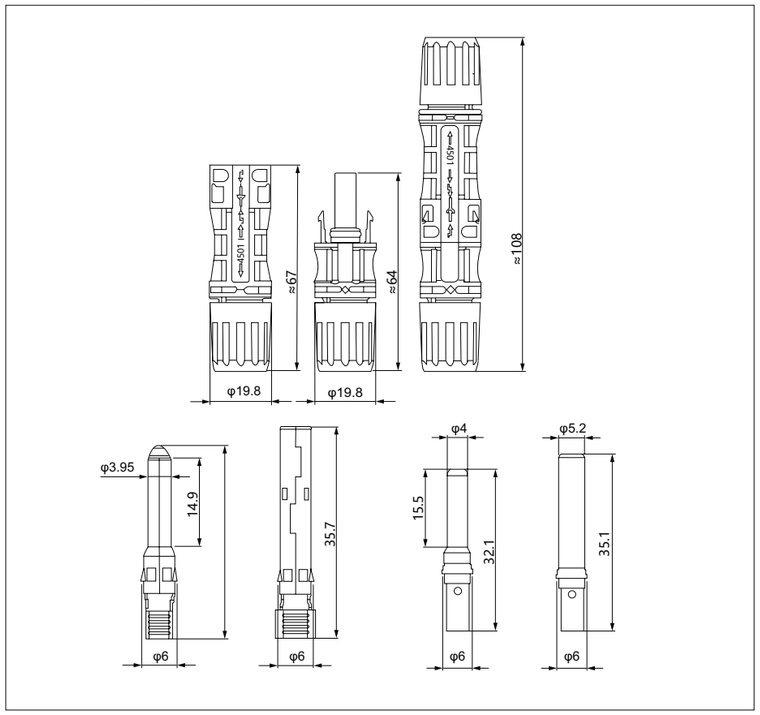
DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection,can meet quick connection and anti vibration function. rainproof,moisture-proof,dust-proof 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℃...+90℃(IEC)-40℃...+75℃(UL)
Upper Temperature Limit	+105℃(IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safety class	Ⅱ
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

CE RoHS CB

Dimensions(mm)



PV-MD-MC4-S Solar DC Panel Connector

CE RoHS CB

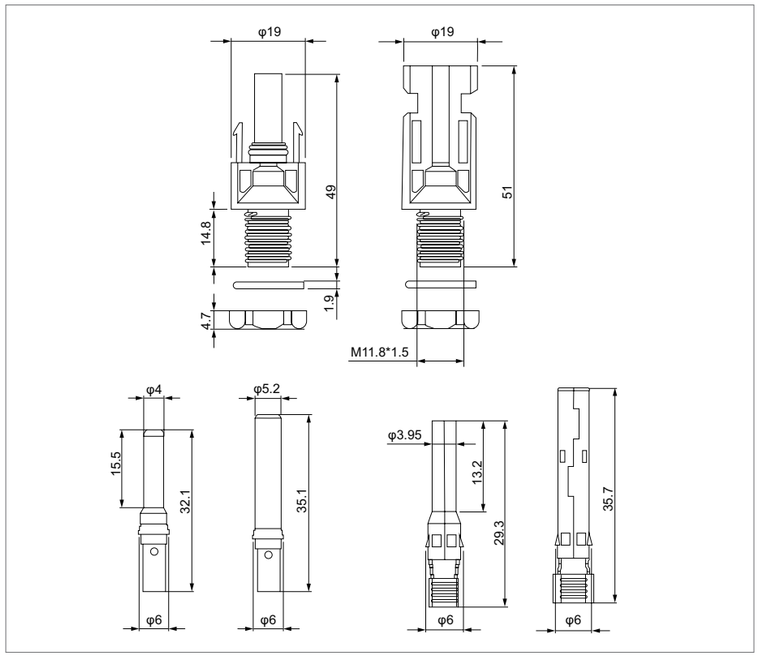
Overview

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/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℃...+90°(IEC) -40℃...+75℃(UL)
Upper Temperature Limit	+105℃ (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safety class	Ⅱ
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

Dimensions(mm)



10A/15A/20A Solar Panel Connector With Diode

Overview

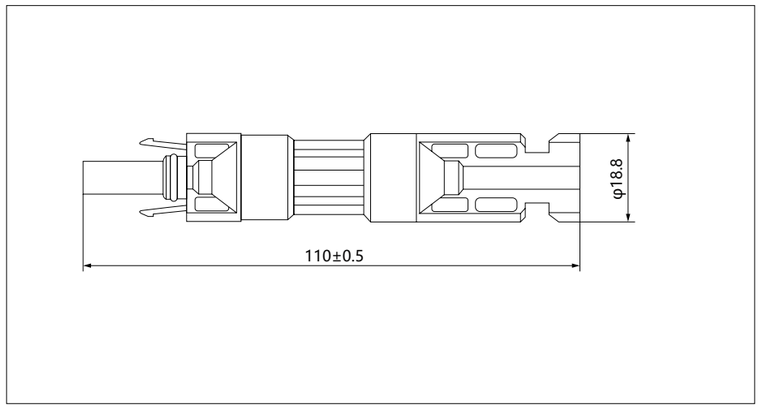
DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection,can meet quick connection and anti vibration function. rainproof,moisture-proof,dust-proof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

CE RoHS CB

Technical data

Connector system	Φ4mm
Rated voltage	1000V DC(IEC)[1]
Rated current	10A,15A,20A(1.5mm²,2.5mm²; 14AWG,4mm²; 6mm²; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90°(IEC) -40℃...+75℃(UL)
Upper Temperature Limit	+105℃ (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safety class	Ⅱ
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

Dimensions(mm)



10A/15A/20A/30A Solar Panel Connector With PV Fuse

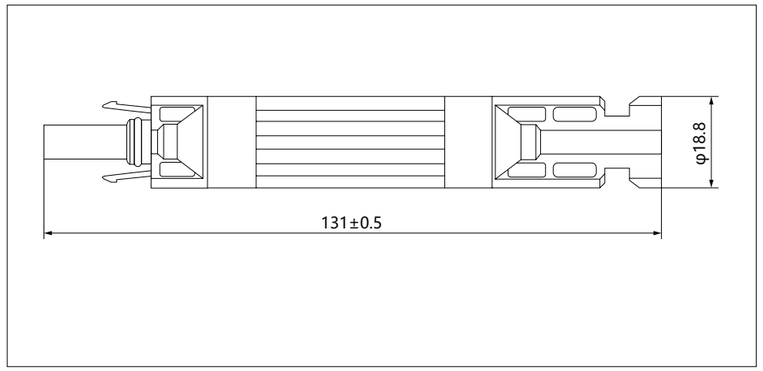
Overview

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/1500V DC(IEC)[1]
Rated current	10A,15A,20A,30A(1.5mm²,2.5mm²; 14AWG,4mm²; 6mm²; 12AWG,10AWG)
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90°(IEC) -40℃...+75℃(UL)
Upper Temperature Limit	+105℃ (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safety class	Ⅱ
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

Dimensions(mm)



PV-MDT2 Panel Branch Connector

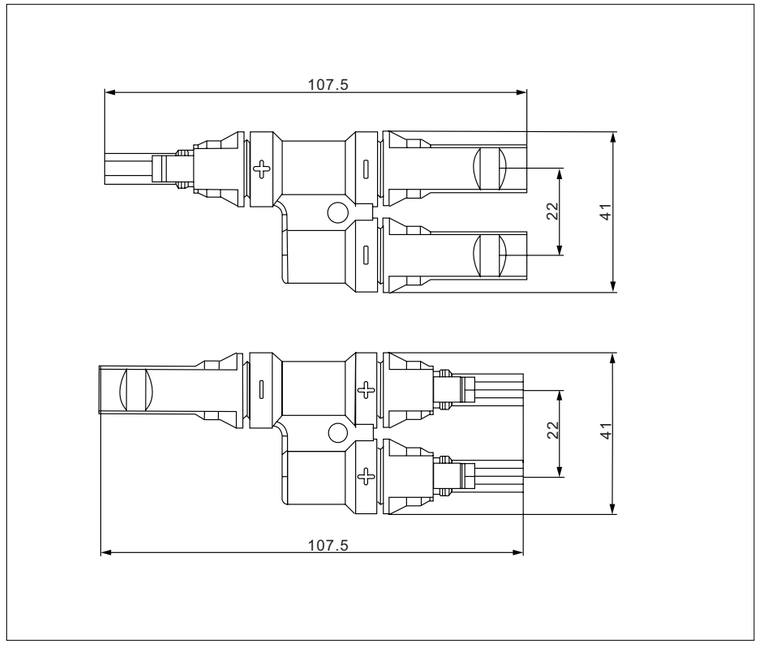
Overview

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

Insulation Material	PPO
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℃~+ 85℃
Flame Class	UL94-V0
Safety Class	Ⅱ
Pin Dimensions	Φ4mm

Dimensions(mm)



PV-MDT3 Panel Branch Connector

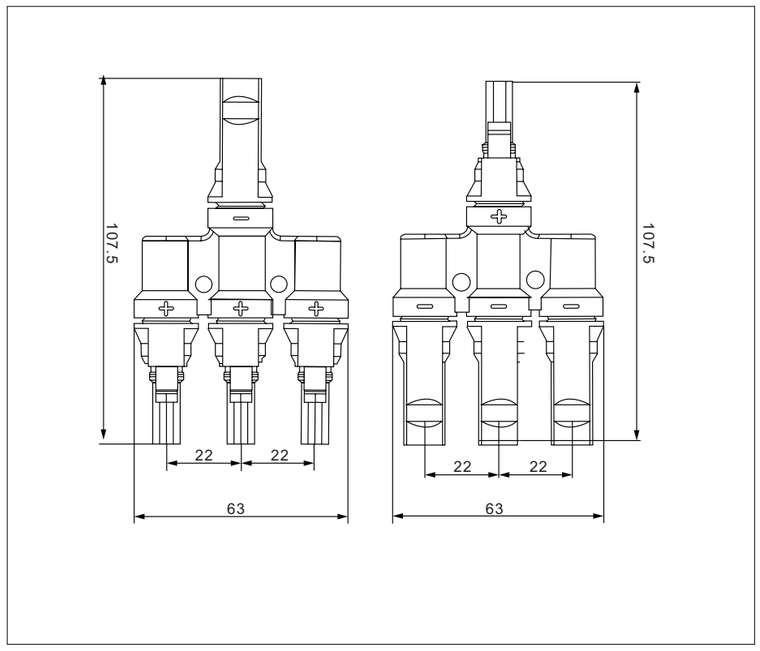
Overview

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

Insulation Material	PPO
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℃~ + 85℃
Flame Class	UL94-V0
Safety Class	Ⅱ
Pin Dimensions	Φ4mm

Dimensions(mm)



PV-MDT4 Panel Branch Connector

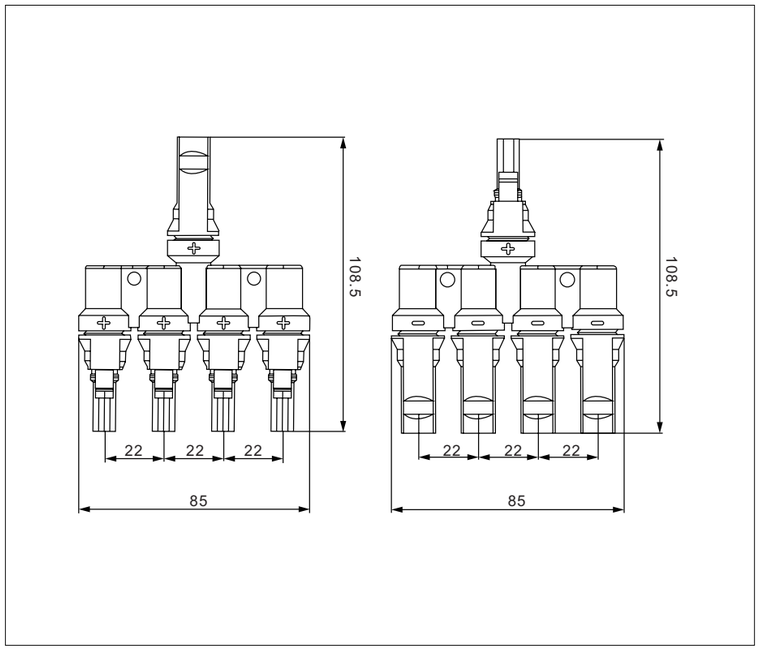
Overview

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

Insulation Material	PPO
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℃~ + 85℃
Flame Class	UL94-V0
Safety Class	Ⅱ
Pin Dimensions	Φ4mm

Dimensions(mm)



PV-MDT5 Panel Branch Connector

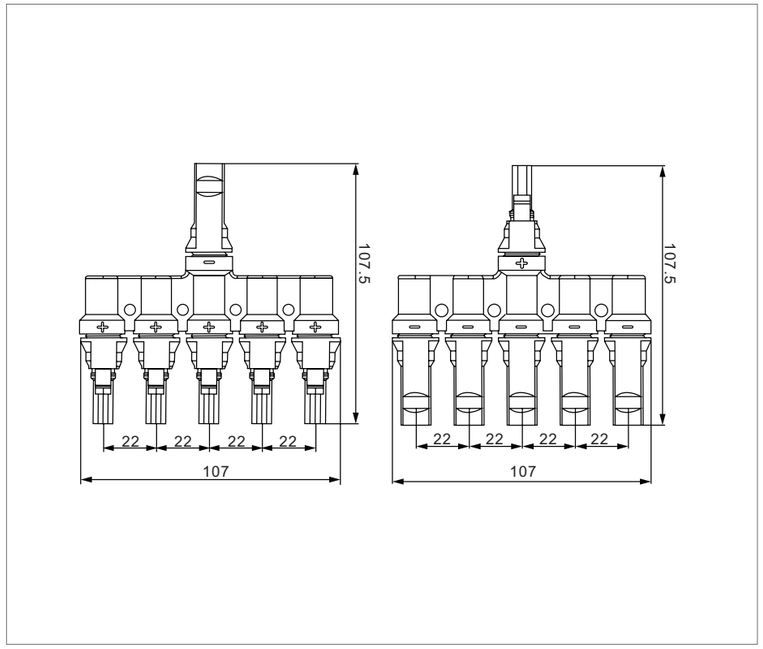
Overview

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

Insulation Material	PPO
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℃~ + 85℃
Flame Class	UL94-V0
Safety Class	Ⅱ
Pin Dimensions	Φ4mm

Dimensions(mm)



PV-MDT6 Panel Branch Connector

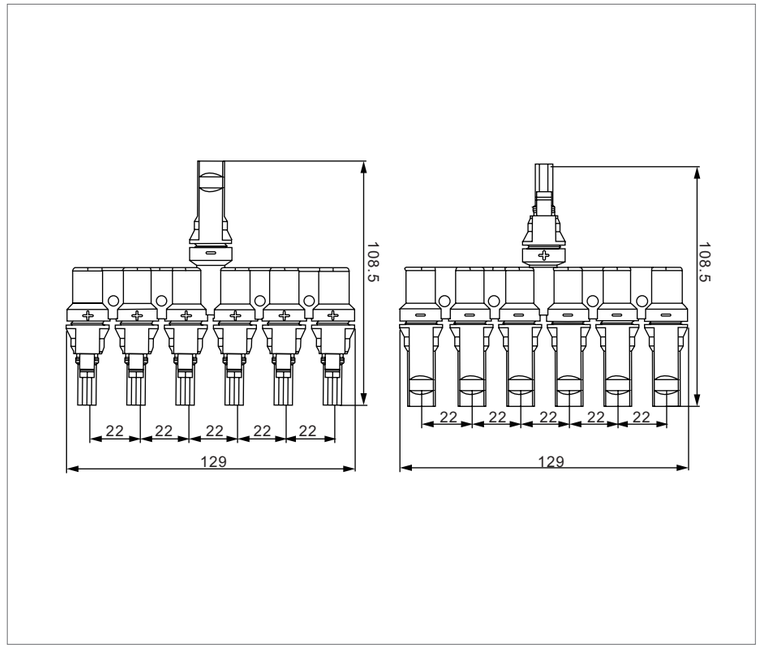
Overview

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

Insulation Material	PPO
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℃~ + 85℃
Flame Class	UL94-V0
Safety Class	Ⅱ
Pin Dimensions	Φ4mm

Dimensions(mm)



PV-MDY2 Panel Branch Connector

CE RoHS CB

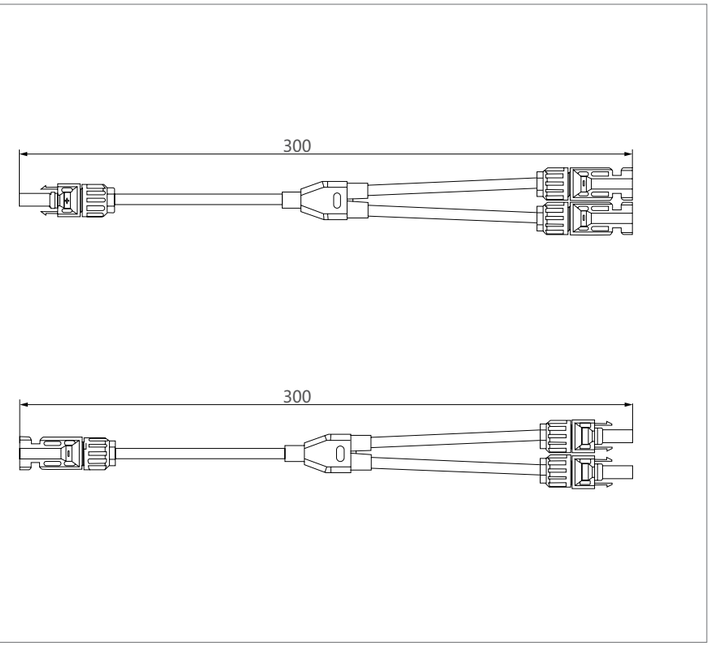
Overview

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	30A
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90℃(IEC)-40℃...+75℃(UL)
Upper Temperature Limit	+105℃(IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safetyclass	Ⅱ
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)



PV-MDY3 Panel Branch Connector

Overview

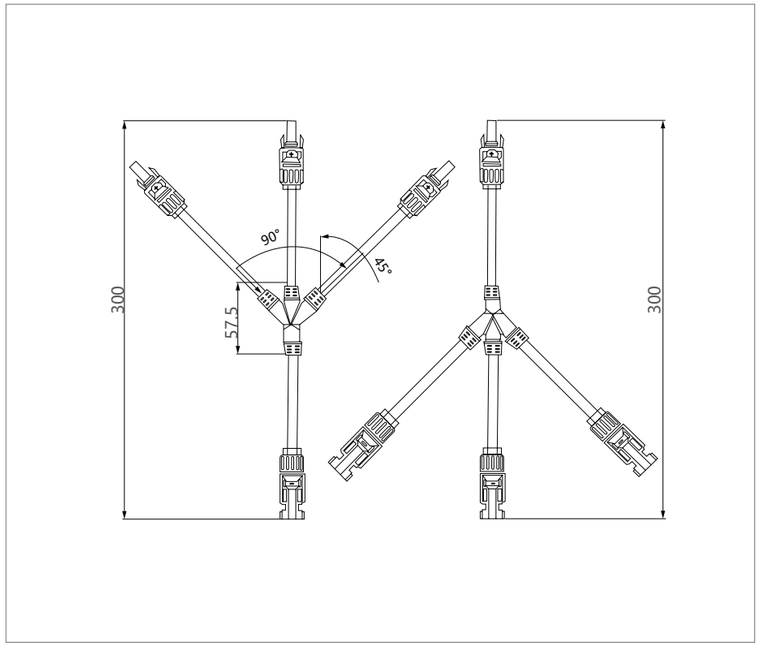
DC connector MD-MC4 series are applicable for use in connection for photovoltaic devices like DC combiner box, Inverters, String Combiner Boxes, etc ,double electric shock free protection for load closure and disconnection,can meet quick connection and anti vibration function. rainproof,moisture-proof,dust-proof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

CE RoHS CB

Technical data

Connector system	Φ4mm
Rated voltage	1000V DC(IEC)[1]
Rated current	30A
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90℃(IEC)-40℃...+75℃(UL)
Upper Temperature Limit	+105℃(IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safetyclass	Ⅱ
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)



CE RoHS CB

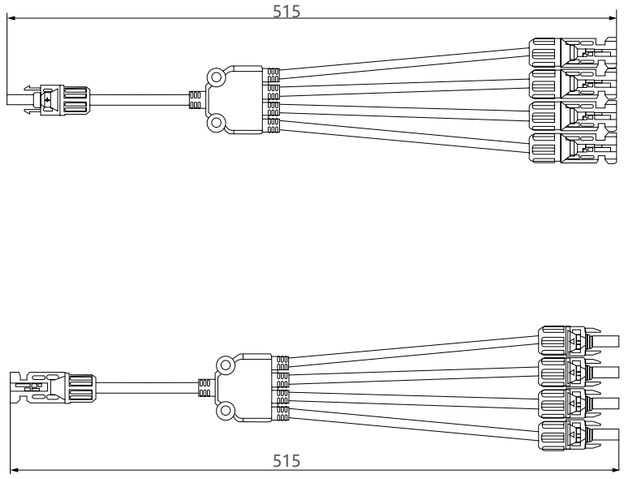
Overview

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	30A
Test voltage	6kV(50Hz,1min.)
Temperature Range	-40℃...+90℃(IEC)-40℃...+75℃(UL)
Upper Temperature Limit	+105℃(IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Comtact rcsistanccof plug connectors	0.5mΩ
Safetyclass	Ⅱ
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)



Customization

Extension cord processing customization

2.5m²

4m²

6m²

PV-MDT1

PV-MDT2

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

PV-MDS Tow-set spanners

MD-MC4(1500V)Specidized	MD-MC4(1000V)Specidized	MD-MC4(1000V)
		
PV-MDS1	PV-MDS2	PV-MDS3

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

PV-MDT4 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-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、2500A、3150A
Nominal function	Overload and short circuit protection, loss of voltage tripping protection, isolated island protection,fault disassembly, power quality monitoring, 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 "low-voltage 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 voltage trip protection, significant isolation disconnect point, lightning protection
Optional function	Anti-island protection

Integrated photovoltaic substation

Overview

The integrated photovoltaic power station integrates the box-type inverter station and the box-type 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℃ ~ +85℃;
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℃ ~ +85℃;
The outdoor wind speed does not exceed 35m/s;
Shockproof: horizontal acceleration 0.3m/s²; vertical acceleration is not more than 0.15m/s²;
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The Main Technical Parameter

Voltage
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

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