



Specifications and technical data are subject to change without notice.
Please contact to confirm relevant information on ordering.

PHOTOVOLTAIC PRODUCT



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COMPANY PROFILE

As a leading supplier in the low voltage electrical industry, our products have been used for residential, commercial and industrial applications. Our brand is recognized for its quality and reliability in an ever-increasing number of markets worldwide. So far, our products have been testified by international labs including BV, TUV, Intertek, with KEMA, CB, SEMKO, RoHS, CE, and CCC etc.

With qualified raw materials and components supply, all products are manufactured by our defined international specifications. We have 4 semi-auto production lines, up-to-date quality control facilities, well-trained and experienced workers. Moreover, with a technical R & D team and fully equipped CNAS laboratory, our factory can carry out efficient new products development, daily production and QC.

We have a wide range of cooperations with world leading companies in new products development, OEM and ODM cooperation. Meanwhile, we process the idea of green and smart energy, working with universities such as Xi'an Jiao Tong University to get more intelligent and environmental-friendly electric solutions.

We are focused on achieving growth through the success of worldwide partners. Guided by the philosophy of "customer-oriented", powered by the idea of "quick response and flexible supply", we support our worldwide partners to compete against established players, to deliver the most systematic and cost-effective products and service in the market.

01 Verified Custom Manufacturer

02 Supplier of Fortune 500 Companies

03 Registered Trademarks

Contents

PV Combiner Box



BX-P-03	Plastic style 1 in 1 out-6 in 1 out	001-005
BX-P-02	Plastic style 6 in 1 out-8 in 2 out	006-009
BX-T-01	Metal style 6 in 1 out-24 in 1 out	010-013

DC Miniature Circuit Breaker



EBS1Z-63	1/2/3/4P 6-63A	014-018
EBS1Z-125	1/2/3/4P 80-125A	019-023
BX9Z	1/2/3/4P 6-63A	024-028

DC Moulded Case Circuit Breaker



EBS1MZ	1/2/3/4P 10-250A	029-035
BX2MZ	2/3P 63A-800A	036-041

DC Fuse



RT18Z-32X	1/2/3/4P 1-32A	042-044
BXPV-63T	1/2/3P 2-63A	045-046

DC Surge Protector Device



EBS7UZ	2/3P 500VDC-1500VDC	047-050
BX1UZ	2/3P 500VDC-1000VDC	051-053

DC Waterproof Isolator Switch



BXPV-ELR2	2P/4P 300VDC-1200VDC	054-057
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Solar Panel Connectors & Installation Tools

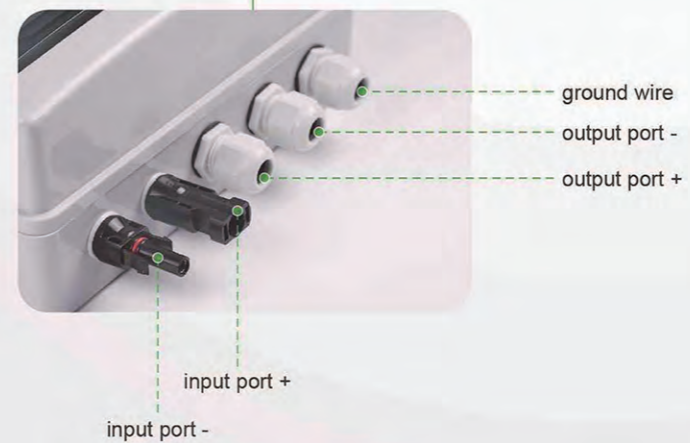
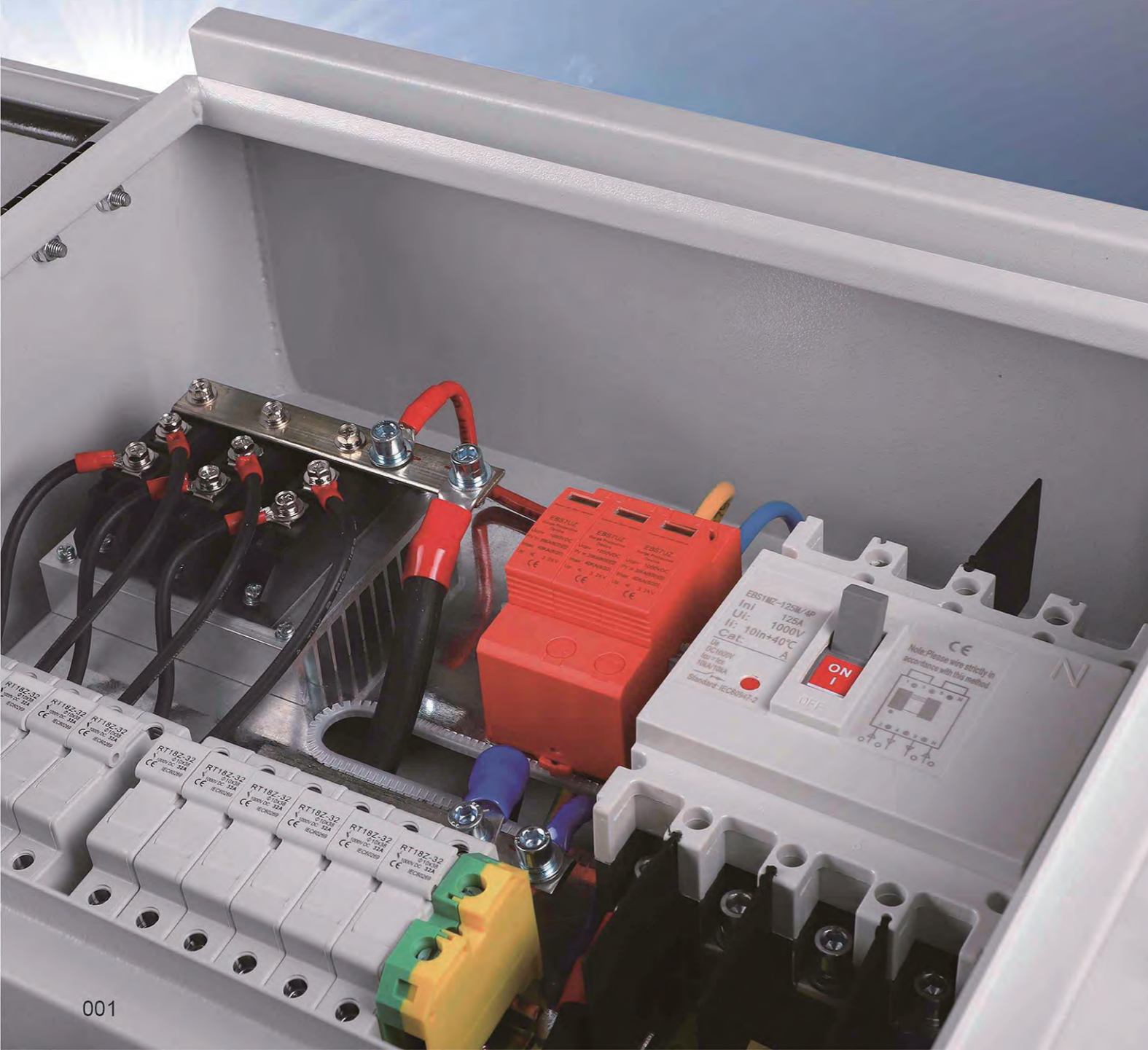


MC4	T branch/Y branch	058-064
Solar Tools	Spanners/Pilers	065-067

Combiner Box Series

For Solar System

- 550VDC and 1000VDC are available
- Plastic style and metal style for selection
- Support customization based on requirements



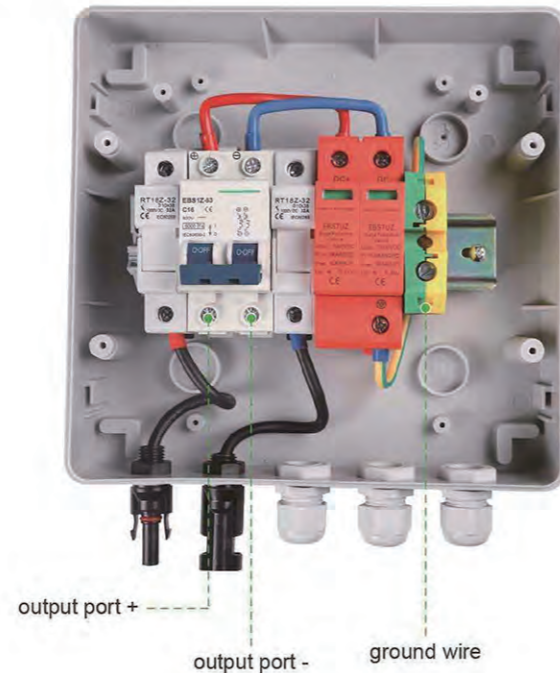
Use high-strength springs
to make box easy to open
and close.

1.General

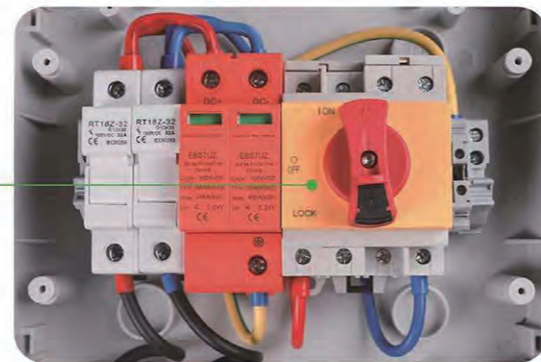
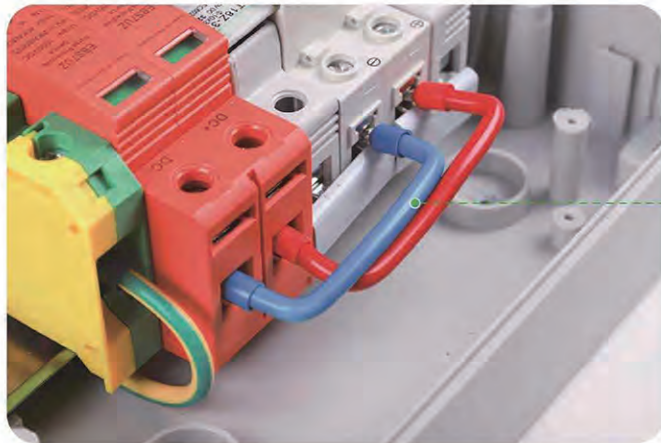
BX-P-03 series PV combiner box can be organized as 1 to 6 input and is designed for providing overcurrent and overvoltage protection to enhance the protection and reliability of the inverter operating in MAX input voltage DC550V and DC1000V solar system.

The design and configuration of the BX-P-03 series PV combiner box strictly comply with CGC/GF 037:2014 standard, is made of ABS bottom & PVC cover, waterproof grade up to IP65, and flame retardant, temperature rise, impact resistance, UV resistance, etc., will be strictly tested before delivery.

Can be specially customized according to user requirements.



To save user time & bring convenience, pre-installed cables are approved!



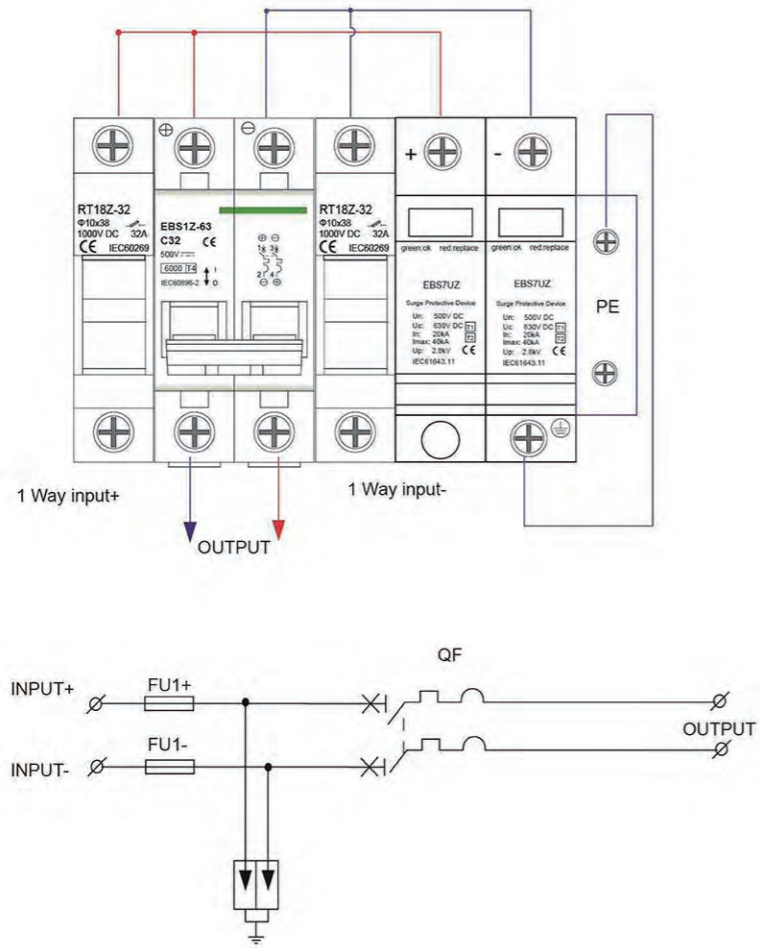
Another solution:
DC circuit breaker can be replaced by DC isolation switch.

2.Specifications

Model	1/1		2/1		4/1		4/2		6/1
Electric Parameter									
Number of inputs strings	1		2		4		4		6
Max.Rated voltage DC	550V	1000V	550V	1000V	550V	1000V	550V	1000V	1000V
Material of box	ABS/PVC								
Maximum input current for each string	15A								
Maximum output switch current	16/20A	16/20A	20/32A	20/32A	50/63A	50/63A	20/32A	20/32A	63A
Number of outputs strings	1	1	1	1	1	1	2	2	1
Lightning Protection									
Category of test	II grade protection								
Nominal discharge current	20kA								
Maximum discharge current	40kA								
Poles of DC surge protector	2Poles	3Poles	2Poles	3Poles	2Poles	3Poles	2Poles	3Poles	3Poles
Voltage protection level Up	2.8kV	3.8kV	2.8kV	3.8kV	2.8kV	3.8kV	2.8kV	3.8kV	3.8kV
Maximum continuous operating voltage Uc	630V	1050V	630V	1050V	630V	1050V	630V	1050V	1050V
Structure characteristic	Plug-push module								
Product system									
Protection grade	IP65								
Solar connector EMC4	Standard								
PG gland	Standard								
DC fuse	Standard								
DC SPD	Standard								
DC circuit breaker	Option 1								
DC isolation switch	Option 2								
Installation method	Surface mounting type								
Ambient temperature range	-25°C~+55°C								
Altitude	2000m								
Permissible relative humidity	0-95% no condensation								

3.Connection Diagram

Model 1/1: 550V DC



Please contact us for other models' wiring diagram.

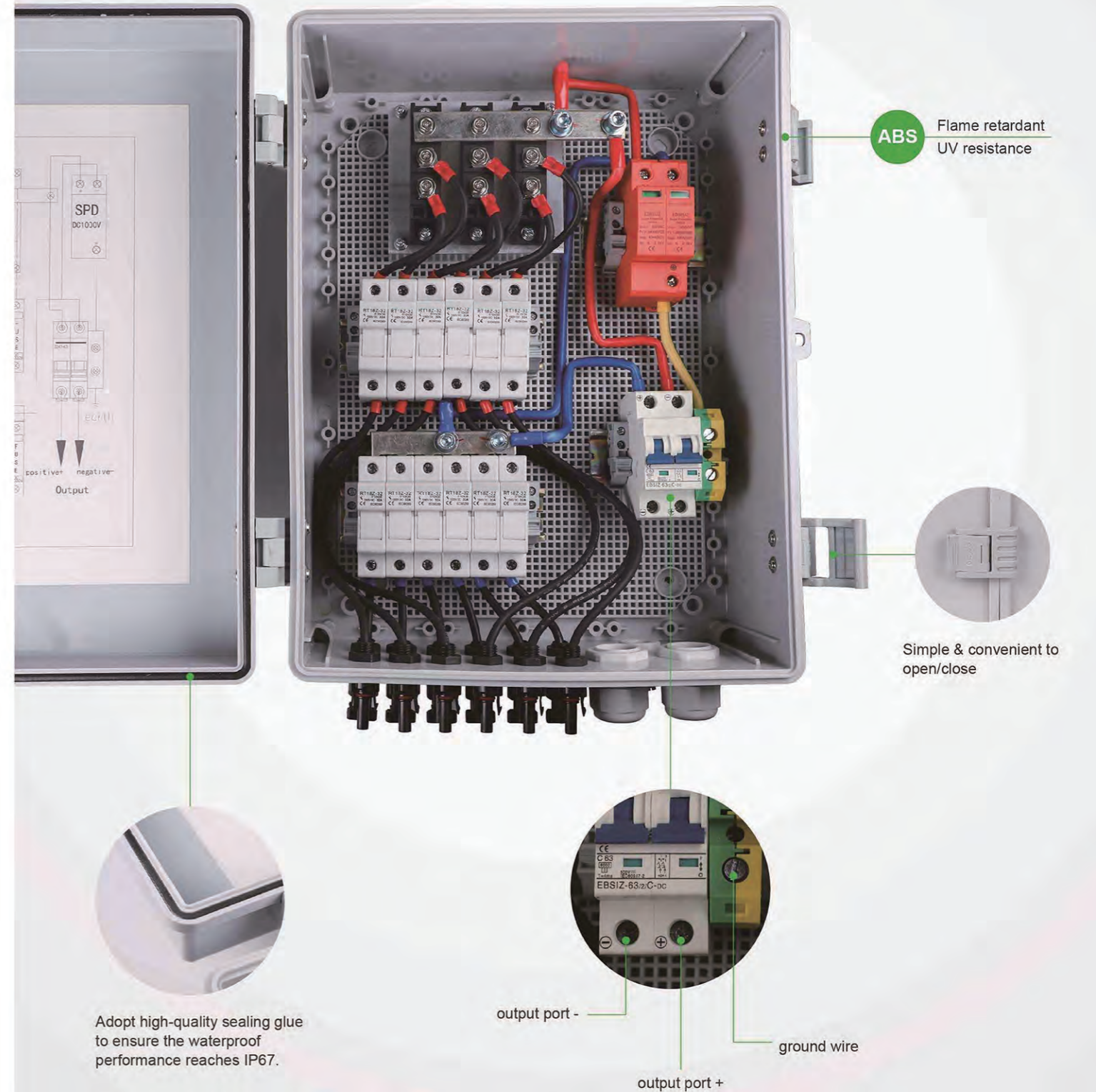
4.Order Note

Following items should be marked when ordering

Product name, code & model
Max.Rated Voltage DC
Quantity

Ordering sample

To order the BX-P-03 DC Combiner Box, 1 input 1 output, Max.Rated Voltage DC is 550VDC,and quantity is 100pieces, if you prefer option 1 DC circuit breaker as output, should be marked:
DC combiner box BX-P-03/1in1out/550VDC, DC circuit breaker as output, 100PCS.



1. General

BX-P-02 series PV combiner box normally will be organized as 8 input at largest is designed for providing overcurrent and overvoltage protection to enhance the protection and reliability of the inverter operating in MAX input voltage DC1000V solar system.

The design and configuration of the BX-P-02 series PV combiner box strictly comply with CGC/GF 037:2014 standard, is made of ABS, waterproof grade up to IP67, and flame retardant, temperature rise, impact resistance, UV resistance, etc., will be strictly tested before delivery.

Can be specially customized according to user requirements.

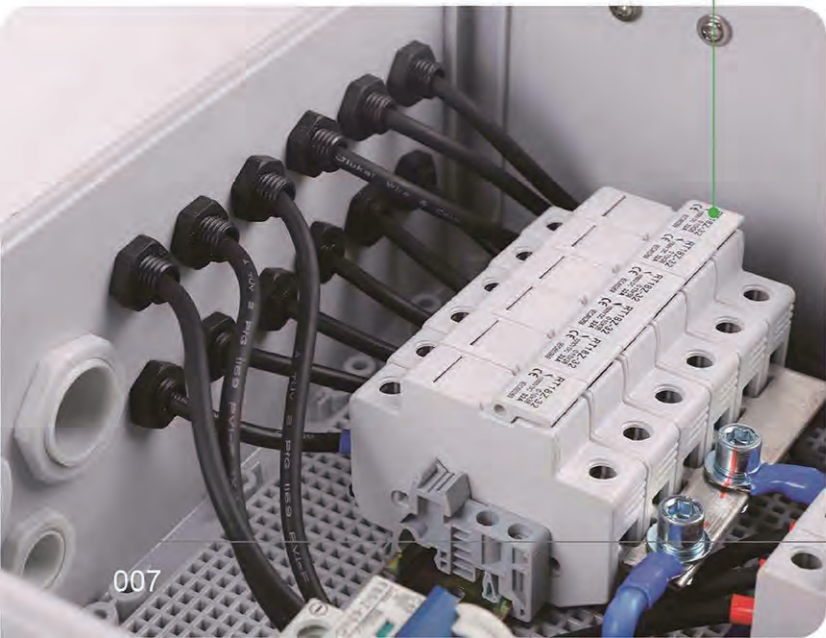


output port +
output port -
ground wire

input port +
input port -



Another solution:
Fuses with indicator are also available.

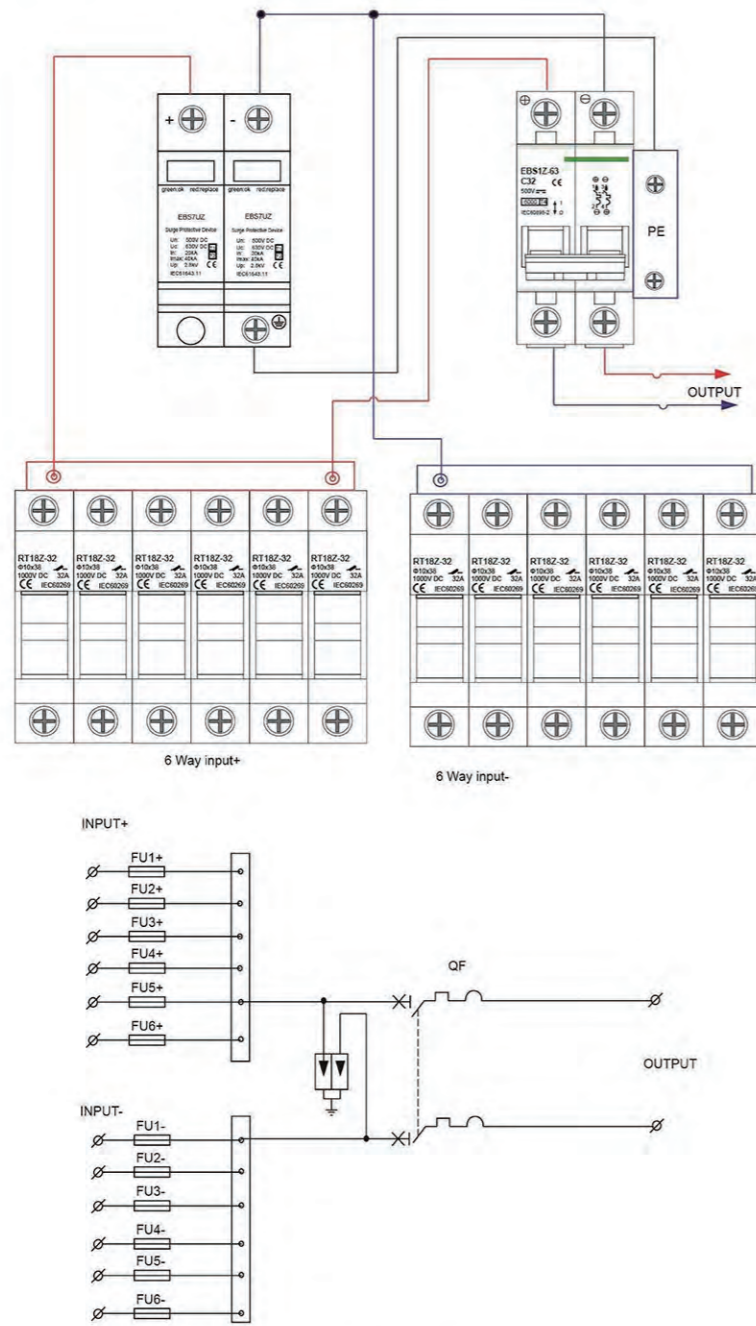


2. Specifications

Model	6/1	6/2	6/3	8/2
Electric Parameter				
Number of inputs strings	6	6	6	8
Max. Rated voltage DC	500V	1000V	1000V	
Material of box	PVC			
Maximum input current for each string	15A			
Maximum output switch current	63A	63A	32/40A	20/32A
Number of outputs strings	1	1	2	3
Lightening Protection				
Category of test	II grade protection			
Nominal discharge current	20kA			
Maximum discharge current	40kA			
Poles of DC surge protector	2Poles	3Poles	3Poles	
Voltage protection level Up	2.8kV	3.8kV	3.8kV	
Maximum continuous operating voltage U _c	630V	1050V	1050V	
Structure characteristic	Plug-push module			
Product system				
Protection grade	IP65			
Solar connector EMC4	Standard			
PG gland	Standard			
DC fuse	Standard			
DC SPD	Standard			
DC circuit breaker	Standard			
Installation method	Surface mounting type			
Ambient temperature range	-25°C~+55°C			
Altitude	2000m			
Permissible relative humidity	0-95% no condensation			

3.Connection Diagram

Model 6/1: 500V DC



Please contact us for other models' wiring diagram.

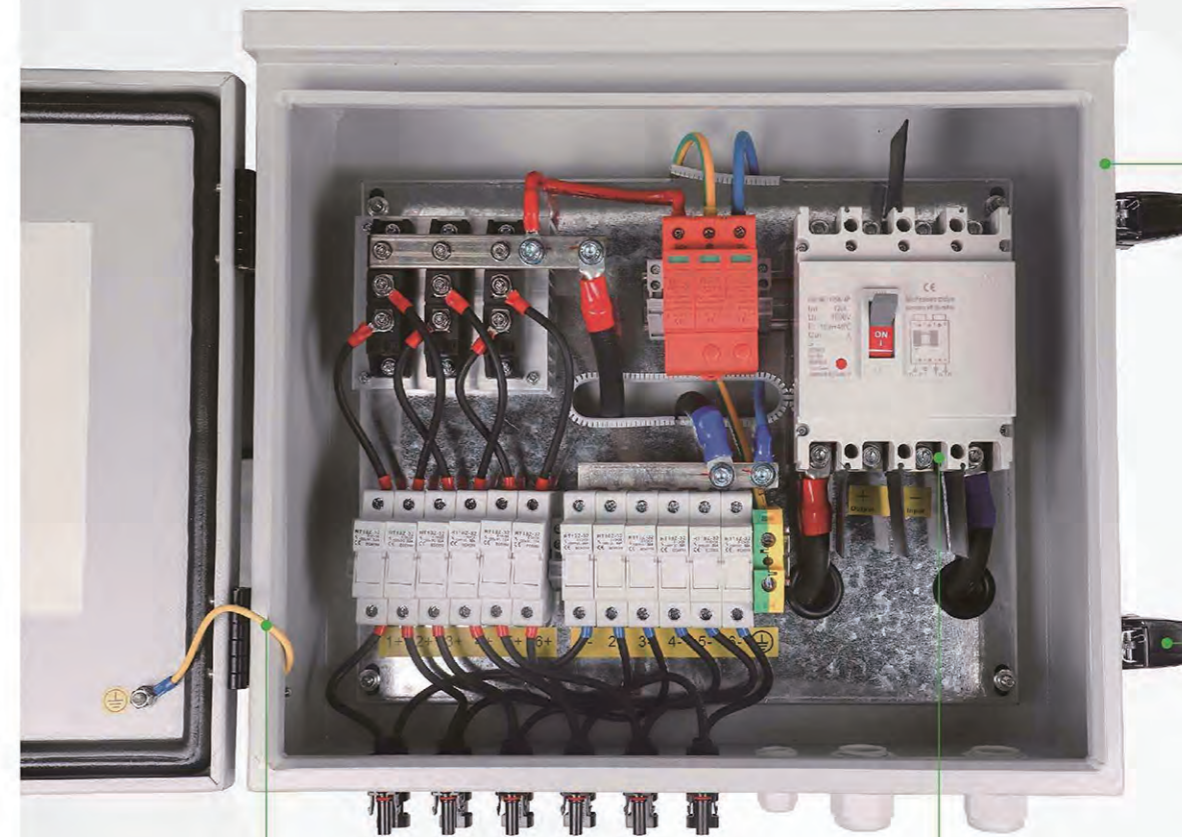
4.Order Note

Following items should be marked when ordering

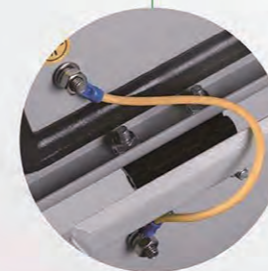
- Product name, code & model
- Max.Rated Voltage DC
- Quantity

Ordering sample

To order the BX-P-02 DC Combiner Box, 6 input 1 output, 500VDC, and quantity is 100pieces, should be marked:
DC combiner box BX-P-02/6in1out, 500VDC, 100PCS.



Metal Cold rolled steel
Anti dust

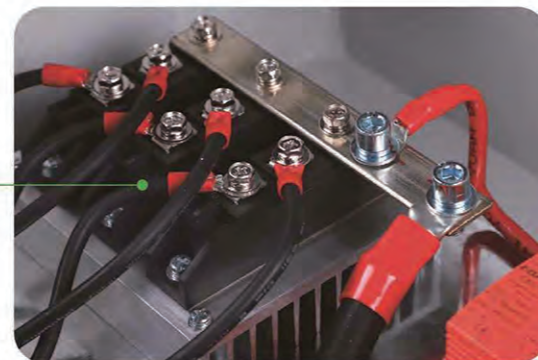
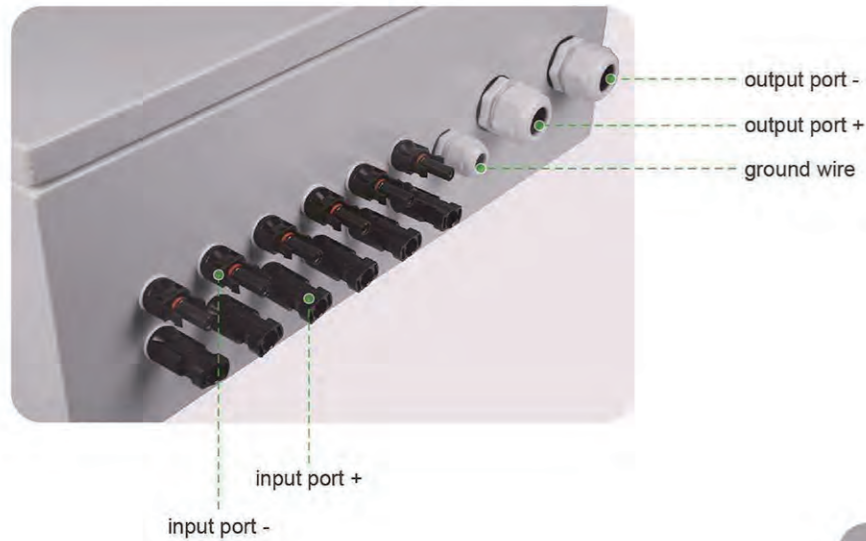


1.General

BX-T-01 series PV combiner box normally will be organized as 24 input at largest is designed for providing overcurrent and overvoltage protection to enhance the protection and reliability of the inverter operating in MAX input voltage DC1000V solar system.

The design and configuration of the BX-T-01 series PV combiner box strictly comply with CGC/GF 037:2014 standard, is made of Cold rolled steel, waterproof grade up to IP65, temperature rise, impact resistance, UV resistance, etc., will be strictly tested before delivery.

Can be specially customized according to user requirements.



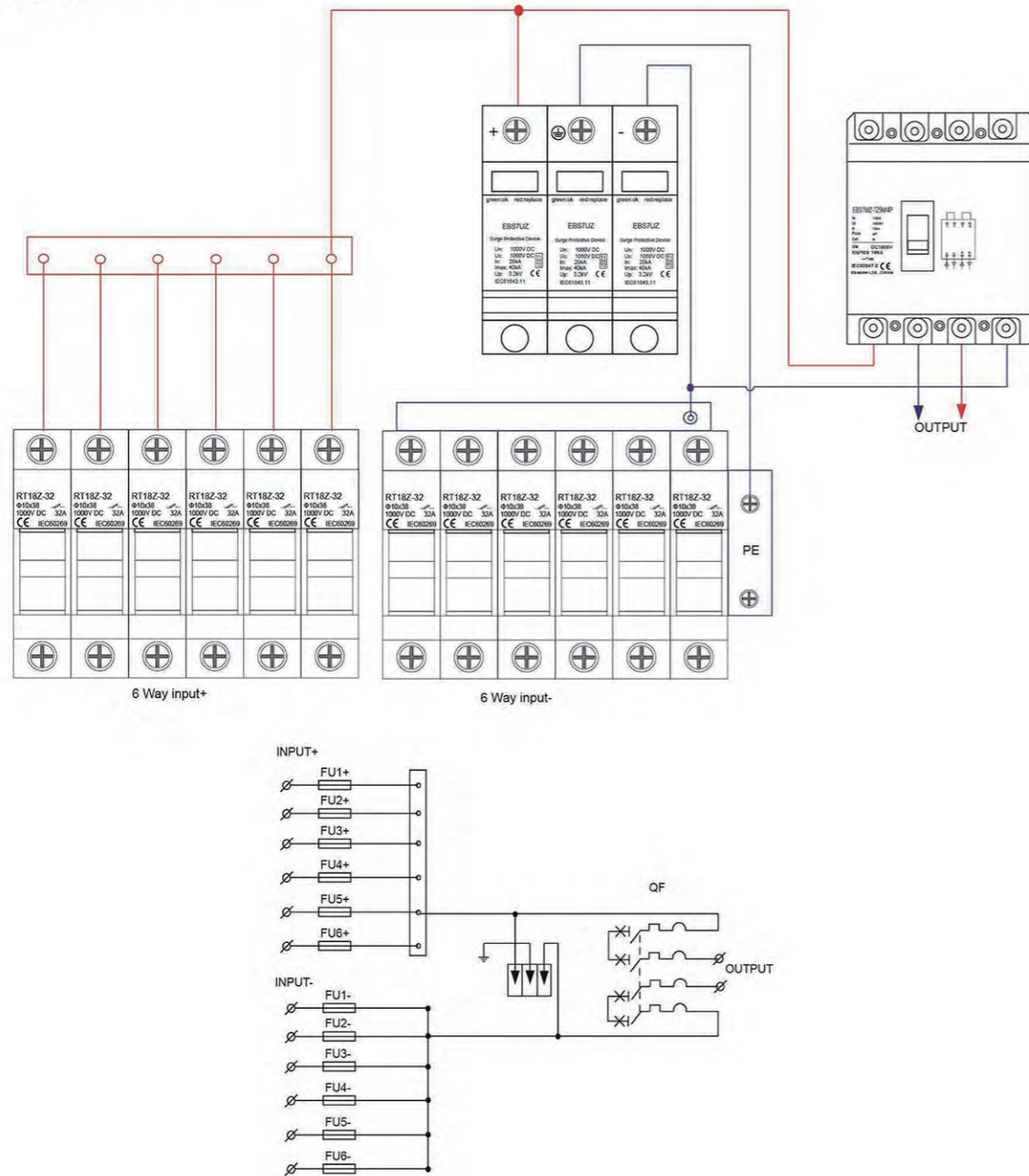
Another solution:
Equipped with diodes with Anti-reflux function.

2.Specifications

Model	6/1	8/1	10/1	12/1	14/1	16/1	18/1	20/1	22/1	24/1
Electric Parameter										
Number of Inputs strings	6	8	10	12	14	16	18	20	22	24
Max.Rated Voltage DC	1000V									
Material of Box	Metal									
Maximum input current for each string	15A									
Maximum output switch current	20A/32A	125A	125A	160A	225A	250A	275A	300A	315A	350A
Number of Outputs strings	1	1	1	1	1	1	1	1	1	1
Lightening Protection										
Category of test	II grade protection									
Nominal discharge current	20kA									
Maximum discharge current	40kA									
Poles of DC surge protector	3Poles									
Voltage protection level Up	3.8kV									
Maximum continuous operating voltage U _c	1050V									
Structure Characteristic	Plug-push module									
Product system										
Protection grade	IP65									
Solar connector EMC4	Standard									
PG gland	Standard									
DC fuse	Standard									
DC SPD	Standard									
DC circuit breaker	Standard									
Monitoring module	Optional									
Anti reverse diode	Standard									
Installation method	Surface mounting type									
Ambient temperature range	-25°C~+55°C									
Altitude	2000m									
Permissible relative humidity	0-95% no condensation									

3.Connection Diagram

Model 6/1: 1000V DC



Please contact us for other models' wiring diagram.

4.Order Note

Following items should be marked when ordering

Product name, code & model
Max.Rated Voltage DC
Quantity

Ordering sample

To order the BX-T-01 DC Combiner Box, 24 input 1 output, and quantity is 100pieces, should be marked:
DC combiner box BX-T-01/24in1out, 100PCS.

MCB Series



DC Miniature Circuit Breaker

- Up to 125A & 1500VDC
- 1pole to 4poles are available
- 6kA and 10kA for selection





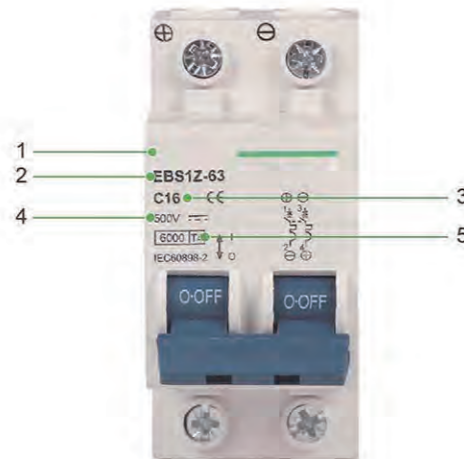
1.General

EBS1Z series DC mini Circuit Breaker is suitable in normal current 63A and below, directly-current rated voltage DC 250V-1000V, uses for carries on the overload, short-circuit protection to the current electrical power distribution system's facility and the electrical equipment, and used in professional electric power, posts and telecommunications transportation, industrial and mining establishments, and so on.

It comply with IEC60898-2 standards.

2.Nomenclature

1. Company code
2. Design Code
3. Rated current
4. Rated voltage
5. Breaking capacity



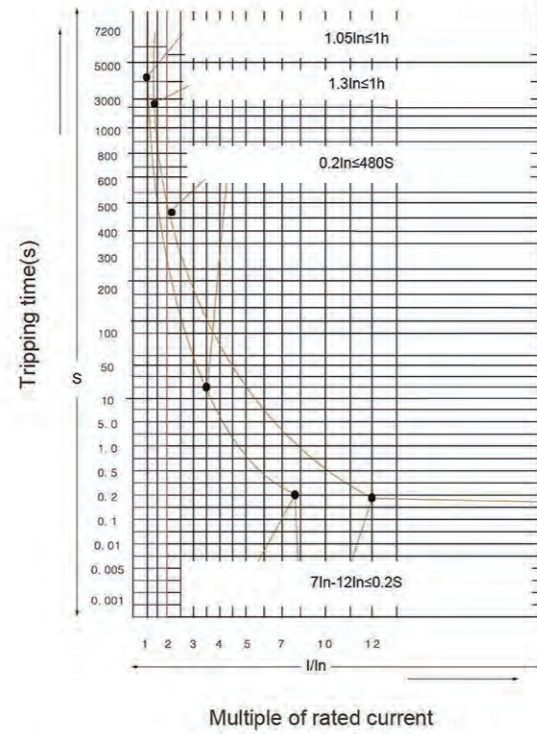
Note:

1. Air Temperature: Operating temperature range is -5°C to +40°C, and storage temperature range is -25°C to +75°C.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at +40°C, and it should not exceed 90% at an average temperature of the most humid month (+20°C).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Method: Install using standard TH35-7.5 type mounting rail.
7. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5°. The installation location should be free from significant impacts and vibrations.
8. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

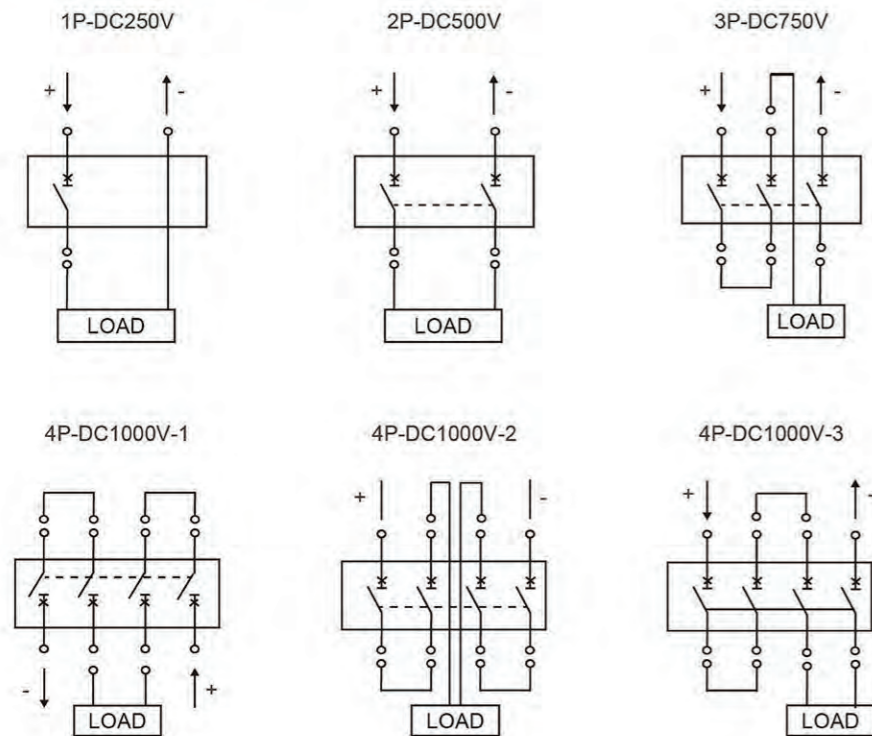
3.Specifications

Standard	IEC 60898-2			
Number of poles	1P	2P	3P	4P
Rated working voltage (V DC)	250	500	750	1000
Frame level	63A			
Rated current (In) (A)	6, 10, 16, 20, 25, 32, 40, 50, 63			
Rated insulation voltage Ui (V DC)	1000/1200			
Tripping characteristics	C			
Tripping type	Thermal-magnetic			
Rated ultimate short-circuit breaking capacity (Icu)	6kA			
Rated service short-circuit interrupting capacity (Ics)	6kA			
Mechanical life (times)	Actual	20000 times		
	Standard	9700 times		
Electric life (times)	Actual	Average 1000 times		
	Standard	300 times		
Overvoltage category	III			
Pollution degree	2			
Ingress protection	IP20			
Relative humidity	≤95%			
Vibration	Acc.to IEC60068-2-6			
Shocks	Acc.to IEC60068-2-27			
Terminal capacity	2.5-35mm ²			
Fastening torque fo teminals	2.0-2.5N·m			
Ambient temperature	-5°C~+40°C			
Storage temperature	-25°C~+75°C			
Installation method	DIN35mm			
Elevation	≤2000m			

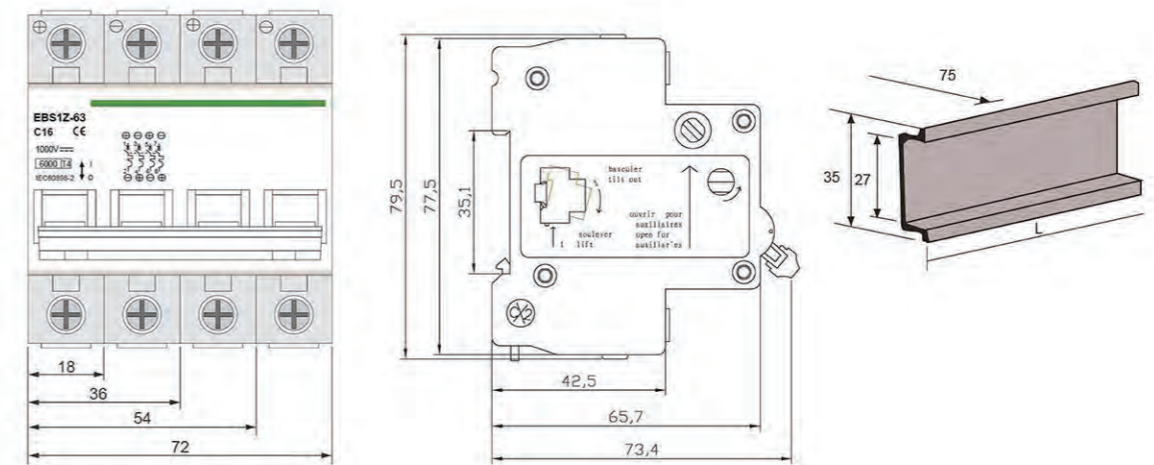
4. Tripping Characteristic



5. Connection Diagram



6. Dimensions



7. Order Note

Following items should be marked when ordering

- Product name, model & frame level
- Poles
- Tripping characteristic and rated current
- Quantity

Ordering sample

To order the EBS1Z-63 Miniature Circuit Breaker, 1P, curve C, rated current is 63A, and quantity is 100 pieces, should be marked:
MCB EBS1Z-63/1PC63, 100 PCS.



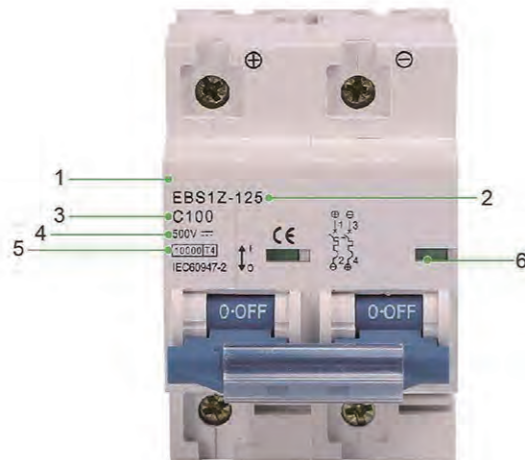
1.General

EBS1Z series DC mini Circuit Breaker is suitable in normal current 125A and below, directly-current rated voltage DC 250V-1000V, uses for carries on the overload, short-circuit protection to the current electrical power distribution system's facility and the electrical equipment, and used in professional electric power, posts and telecommunications transportation, industrial and mining establishments, and so on.

It comply with IEC60947-2 standards.

2.Nomenclature

1. Company code
2. Design code
3. Rated current
4. Rated voltage
5. Breaking capacity
6. ON/OFF Indicator



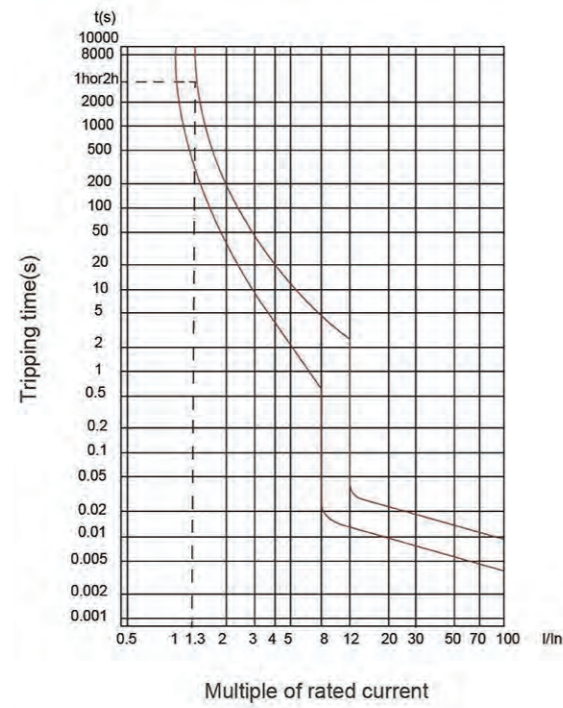
Note:

1. Air Temperature: Operating temperature range is -5°C to +40°C, and storage temperature range is -25°C to +75°C.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at +40°C, and it should not exceed 90% at an average temperature of the most humid month (+20°C).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Method: Install using standard TH35-7.5 type mounting rail.
7. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5°. The installation location should be free from significant impacts and vibrations.
8. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

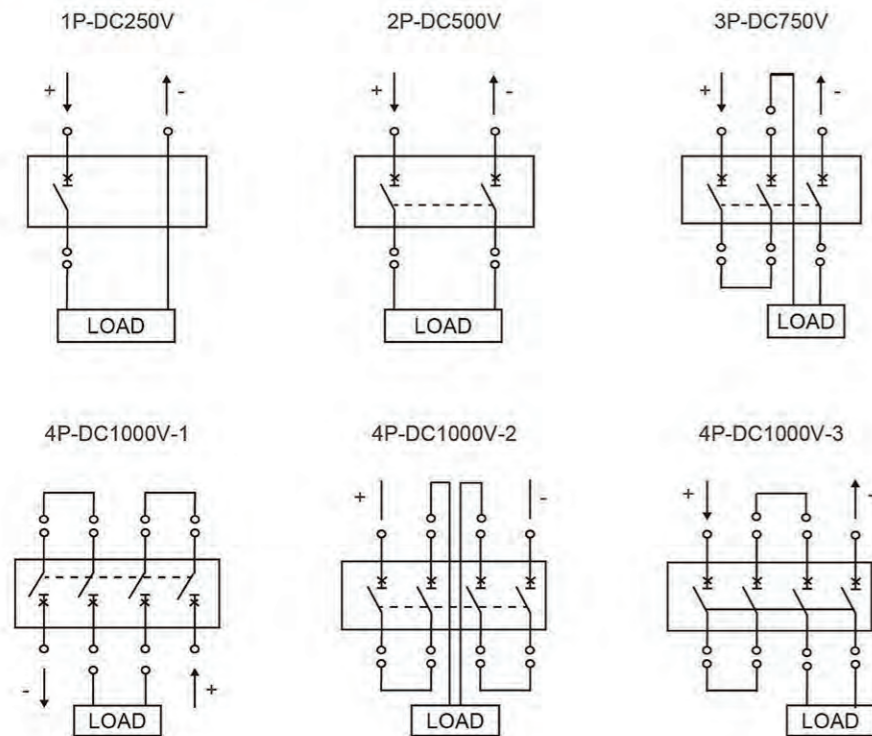
3.Specifications

Standard	IEC 60898-2			
Number of poles	1P	2P	3P	4P
Rated working voltage (V DC)	250	500	750	1000
Frame level	125A			
Rated current (In) (A)	80, 100, 125			
Rated insulation voltage Ui (V DC)	1000/1200			
Tripping characteristics	C			
Tripping type	Thermal-magnetic			
Rated ultimate short-circuit breaking capacity (Icu)	10kA			
Rated service short-circuit interrupting capacity (Ics)	10kA			
Mechanical life (times)	Actual	20000 times		
	Standard	9700 times		
Electric life (times)	Actual	Average 1000 times		
	Standard	300 times		
Overvoltage category	III			
Pollution degree	2			
Ingress protection	IP40.wiring port IP20			
Relative humidity	≤95%			
Vibration	Acc.to IEC60068-2-6			
Shocks	Acc.to IEC60068-2-27			
Terminal capacity	2.5-35mm ²			
Fastening torque fo teminals	2.0-2.5N·m			
Ambient temperature	-5°C~+40°C			
Storage temperature	-25°C~+75°C			
Installation method	DIN35mm			
Elevation	≤2000m			

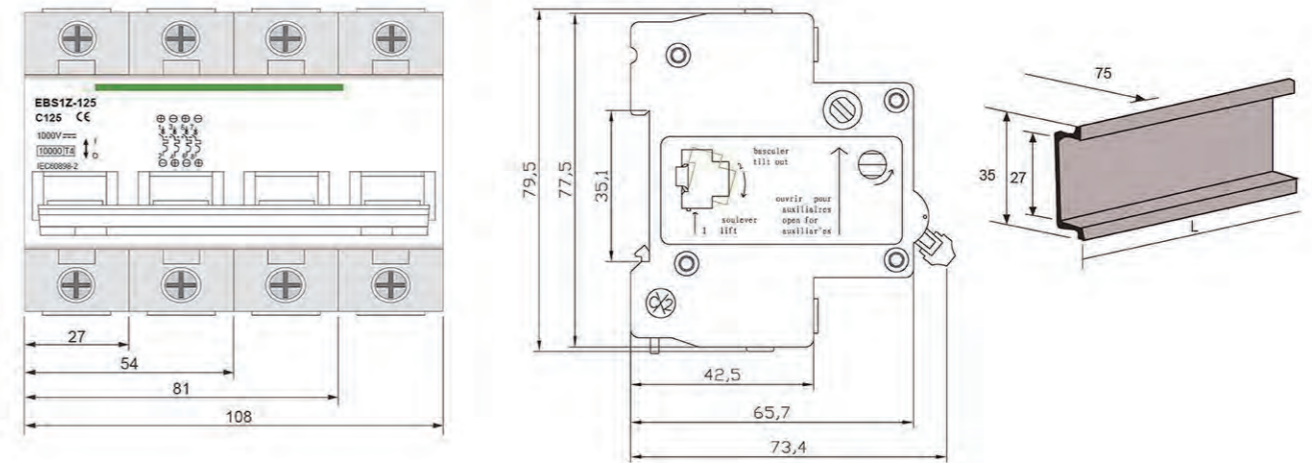
4. Tripping Characteristic



5. Connection Diagram



6. Dimensions



7. Order Note

Following items should be marked when ordering

- Product name, model & frame level
- Poles
- Tripping characteristic and rated current
- Quantity

Ordering sample

To order the EBS1Z-125 miniature circuit breaker, 1P, Curve C, rated current is 100A, and quantity is 100 pieces, should be marked:
MCB EBS1Z-125/1PC-100, 100 PCS.

8.Accessories

Standard	Rated voltage	Dielectric strength (1min)	Endurance	Application category	Connection capacity (max.)	Pollution degree	Installation category	Ambient temperature	Altitude (max.)
IEC62019	230V	2000V	4000(Time)	DC14	2.5mm ²	2	3	-5 to+40 C	2000(meter)

Auxiliary Contact



EBS1Z-OF



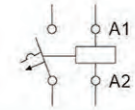
Rated voltage	230V DC	400V DC	24V DC	48V DC
Rated current	6A	3A	6A	2A

Mounted on the left side of EBS1Z MCBs
Indicate the status of making or breaking of EBS1Z MCBs
Width: 9 mm

Shunt Release



EBS1Z-MX



Rated voltage	230V DC	400V DC	24V DC	48V DC
Rated current	6A	3A	6A	2A

Mounted on the right side of EBS1Z MCBs
To control the EBS1Z MCBs from long distance
Width: 18 mm

Auxiliary Alarm



EBS1Z-SD



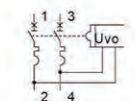
Rated voltage	230V DC	400V DC	24V DC	48V DC
Rated current	6A	3A	6A	2A

Mounted on the left side of EBS1Z MCBs
Indicate the status of making or breaking of EBS1Z MCBs
Width: 9 mm

Under/over Voltage Release



EBS1Z-U2+O2



Rated voltage	230V DC	400V DC	24V DC	48V DC
Rated current	6A	3A	6A	2A

Mounted on the right side of EBS1Z MCBs
Make the EBS1Z MCBs trip when voltage is over or under the rated voltage
Width: 18 mm

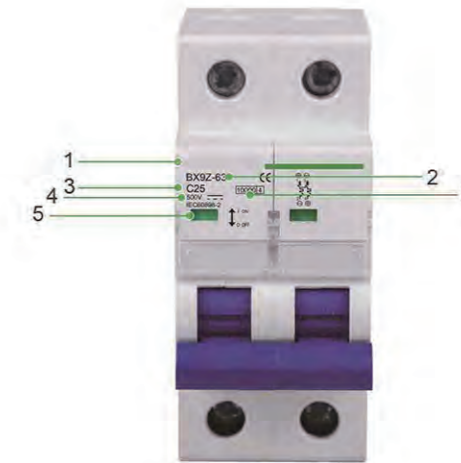


1.General

BX9Z series DC Mini breaker is suitable in normal current 63A and below, directly-current, rated voltage DC 250V-1000V, uses for carries on the overload short-circuit protection to the current electrical power distribution systems facility and the electrical equipment, and used in professional electric power, postes and telecommunications transportation, industrial and mining establishments, and so on. It comply with IEC 60898-2 standards.

2.Nomenclature

1. Company code
2. Design code
3. Rated current
4. Rated voltage
5. ON/OFF indicator
6. Breaking capacity



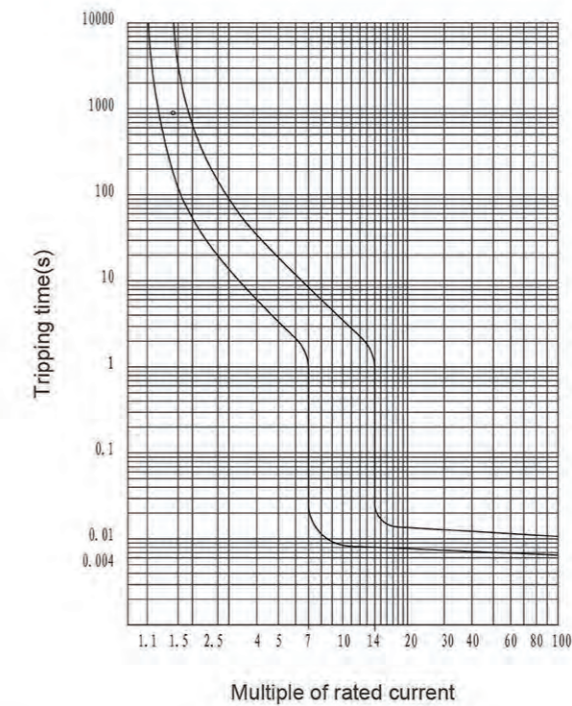
Note:

1. Air Temperature: Operating temperature range is -5°C to +40°C, and storage temperature range is -25°C to +75°C.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at +40°C, and it should not exceed 90% at an average temperature of the most humid month (+20°C).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Method: Install using standard TH35-7.5 type mounting rail.
7. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5°. The installation location should be free from significant impacts and vibrations.
8. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

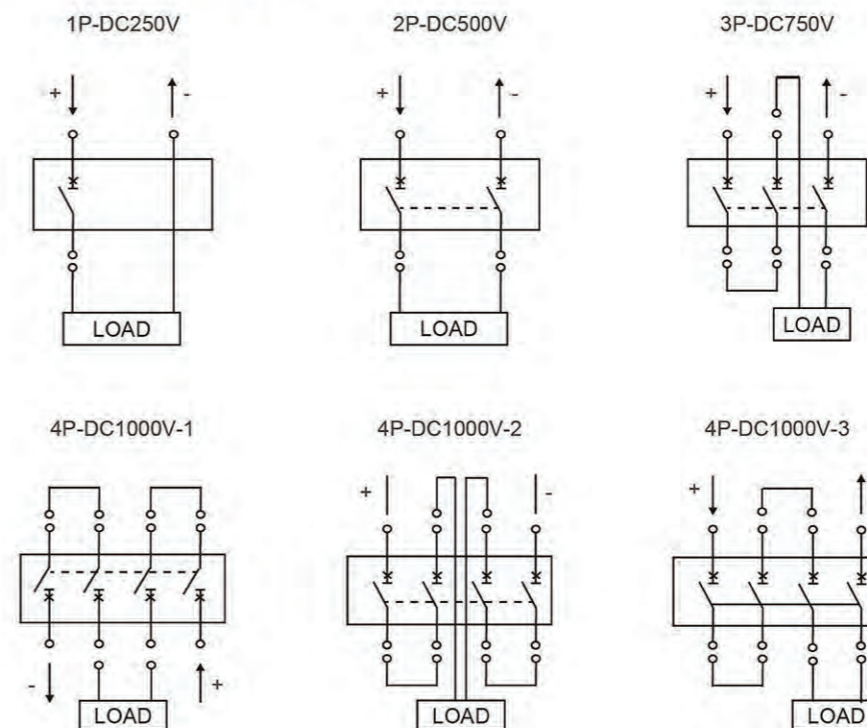
3.Specifications

Standard	IEC 60898-2			
Number of poles	1P	2P	3P	4P
Rated working voltage (V DC)	250	500	750	1000
Frame level	63A			
Rated current (In) (A)	6, 10, 16, 20, 25, 32, 40, 50, 63			
Rated insulation voltage Ui (V DC)	1000/1200			
Tripping characteristics	C			
Tripping type	Thermal-magnetic			
Rated ultimate short-circuit breaking capacity (Icu)	10kA			
Rated service short-circuit interrupting capacity (Ics)	10kA			
Mechanical life (times)	Actual	20000 times		
	Standard	9700 times		
Electric life (times)	Actual	Average 1000 times		
	Standard	300 times		
Overvoltage category	III			
Pollution degree	2			
Ingress protection	IP20			
Relative humidity	≤95%			
Vibration	Acc.to IEC60068-2-6			
Shocks	Acc.to IEC60068-2-27			
Terminal capacity	2.5-35mm ²			
Fastening torque fo teminals	2.0-2.5N·m			
Ambient temperature	-5°C~+45°C			
Storage temperature	-25°C~+75°C			
Installation method	DIN35mm			
Elevation	≤2000m			

4.Tripping Characteristic



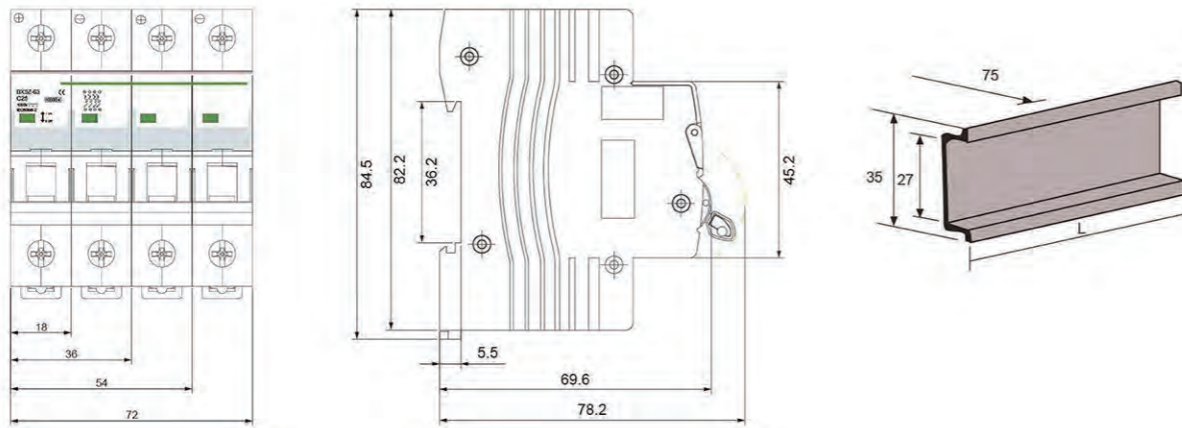
5.Connection Diagram



Note:

Non-Polarized DC Circuit Breaker is convenient for users to connect, avoiding accidents caused by polarity errors in DC systems. Please contact us for details if you need non-polarized DC Circuit Breaker.

6. Dimensions



7. Order Note

Following items should be marked when ordering

Product name, model & frame level
Poles
Tripping characteristic and rated current
Quantity

Ordering sample

To order the BX9Z-63 Miniature Circuit Breaker, 1P, curve C, rated current is 63A, and quantity is 100 pieces, should be marked:
MCB BX9Z-63/1PC63, 100 PCS.

8. Accessories

OF Auxiliary Contact



Rated insulating voltage (Ui)	500V
Rated power voltage (Us)	DC 400V, 230V, 125V
Operate voltage range	70%~100% Us
Contact capacity	DC: 3A/400V DC: 6A/230V DC: 9A/125V
Dielectric strength	2kV/1min
Electro-mechanical endurance	≥ 4000

Mounted on the left side of BX9Z MCBs
Indicate the status of making or breaking of BX9Z MCBs
Width: 9 mm

SD Alarm Switch



Rated insulating voltage (Ui)	500V
Rated power voltage (Us)	DC 400V, 230V, 125V
Operate voltage range	70~100% Us
Contact capacity	DC: 3A/400V DC: 6A/230V DC: 9A/125V
Dielectric strength	2kV/1min
Electro-mechanical endurance	≥ 4000

Mounted on the left side of BX9Z MCBs
Indicate the status of making or breaking of BX9Z MCBs
Width: 9 mm

MV+MN Over/Under-voltage Tripper



Rated voltage (Ue)	DC 230V
Rated insulating voltage (Ui)	500V
Over-voltage tripping range	280V±5%
Under-voltage tripping range	170V±5%
Electro-mechanical endurance	≥4000

Mounted on the right side of BX9Z MCBs
Make the BX9Z MCBs trip when voltage is over or under the rated voltage
Width: 18 mm

MCCB series

DC Moulded Case Circuit Breaker

- Up to 800A 1500VDC
- 2poles to 4poles are available
- Full series auxiliaries supported



EBS1MZ DC Moulded Case Circuit Breaker

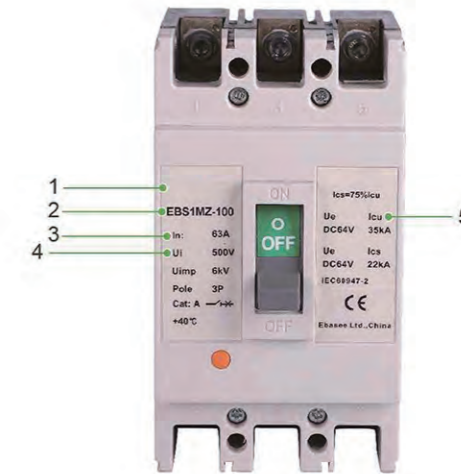
1.General

EBS1MZ series DC moulded case circuit breaker is developed by advanced design and manufacturing technology, suitable for rated voltage is DC250V, DC500V, DC750V and DC 1000V, rated current up to 250A, the circuit breaker have function of short circuit, overload and under-voltage protection to protect circuit and power equipment against damage. The breaker are comply with the IEC60947-1 and IEC60947-2.



2.Nomenclature

1. Company code
2. Design code
3. Rated current
4. Rated insulation voltage
5. Breaking capacity



Note

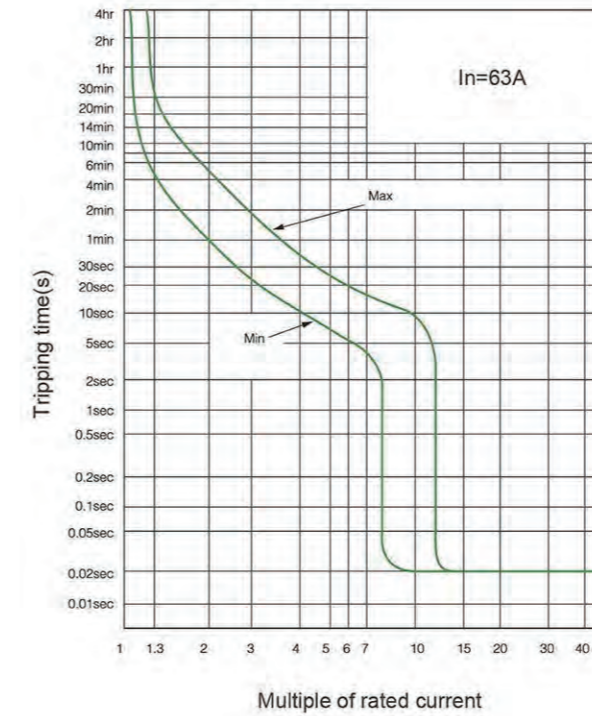
1. Air Temperature: Operating temperature range is -5°C to $+40^{\circ}\text{C}$, and storage temperature range is -25°C to $+75^{\circ}\text{C}$.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at $+40^{\circ}\text{C}$, and it should not exceed 90% at an average temperature of the most humid month ($+20^{\circ}\text{C}$).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5° . The installation location should be free from significant impacts and vibrations.
7. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

3. Specifications

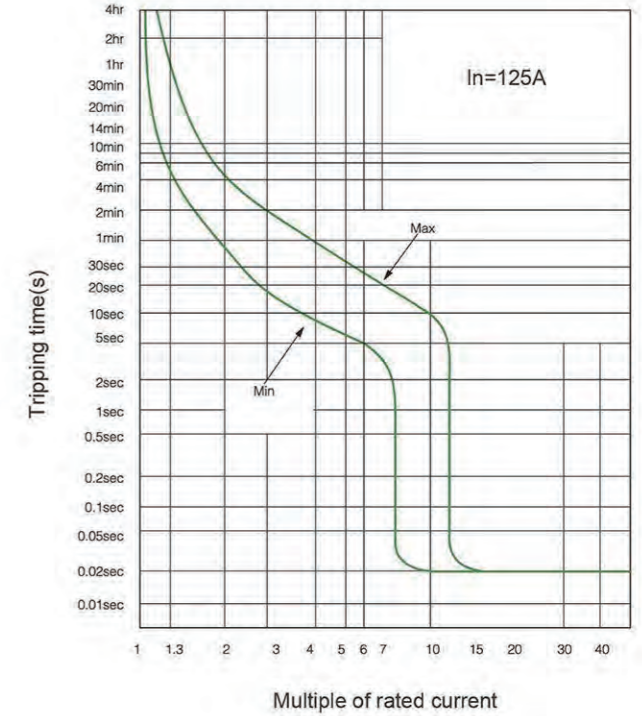
Standard	IEC60947-1 and IEC60947-2						
Type	EBS1MZ-100			EBS1MZ-225			
Frame level In (A)	100			225			
Rated current In (A)	10, 16, 20, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125			16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 140, 160, 180, 200, 225, 250			
Pole number	2	3	4	2	3	4	
Rated insulation voltage Ui (V)	1000						
Rated impulse withstanding voltage Uimp (V)	8000						
Rated working voltage Ue(V)	DC250 DC500	DC500 DC750	DC750 DC1000	DC250 DC500	DC500 DC750	DC750 DC1000	
Using category	A						
Arcing distance (mm)	≤50						
Rated short time making capacity Icm (kA)	100% Icu						
Rated limiting short-circuit breaking capacity Icu (kA)	DC 250V	35		35			
	DC 500V	20	35	20	35		
	DC 750V		20	35	20	35	
	DC 1000V			20		20	
Rated service short-circuit breaking capacity Ics (kA)	75%Icu						
Electrical life (times)	5000			5000			
Mechanical life (times)	Without maintenance	10000			10000		
	With maintenance	20000			20000		

4. Tripping Characteristic

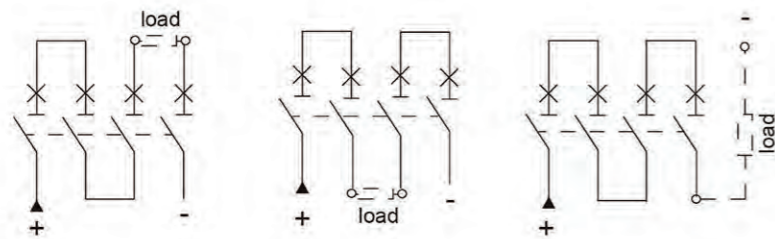
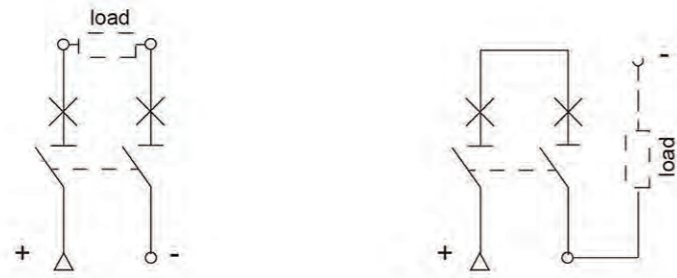
EBS1MZ-100



EBS1MZ-225

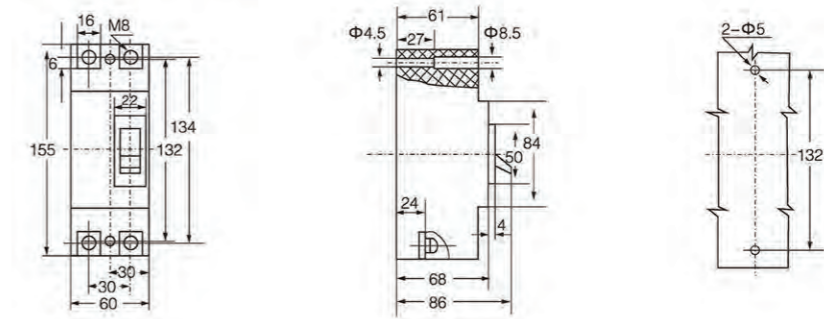


5.Connection Diagram

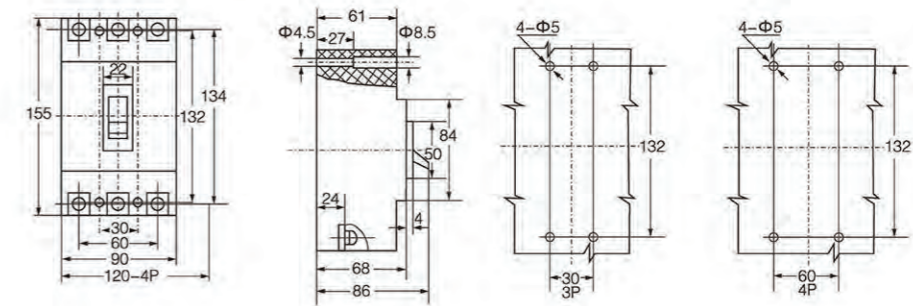


6.Dimensions

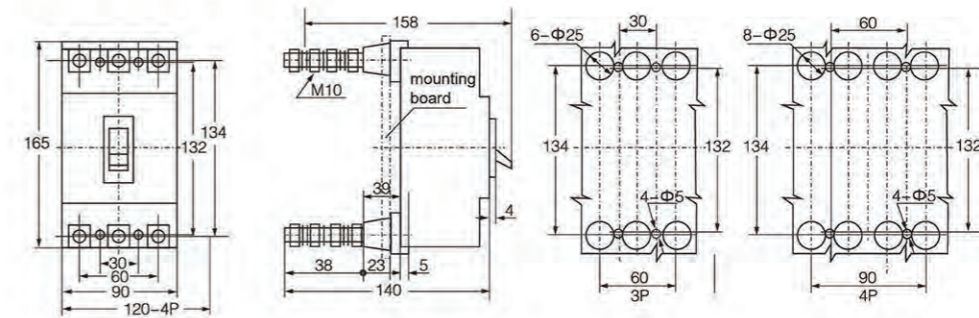
EBS1MZ-100 Front board wiring (small frame)



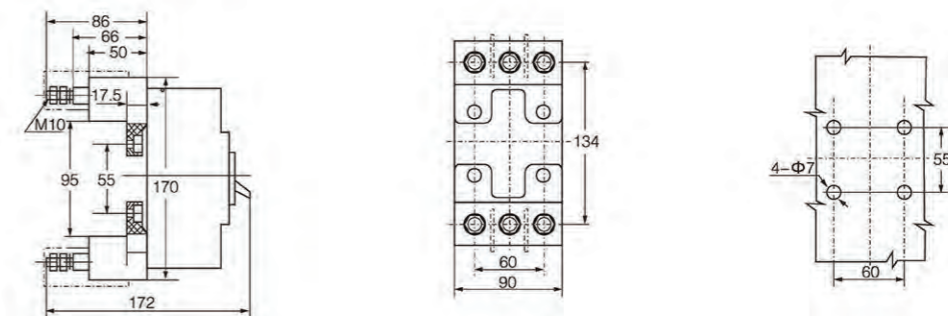
EBS1MZ-100 Front board wiring (big frame)



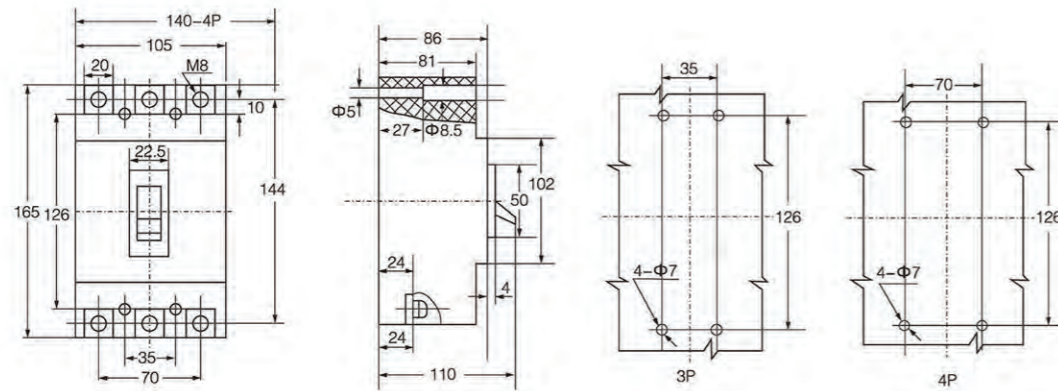
EBS1MZ-100 Back board wiring (big frame)



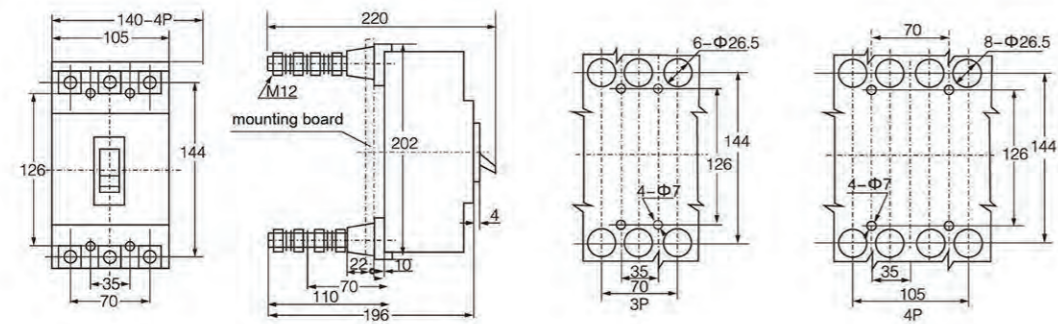
EBS1MZ-100 Plug-in wiring (big frame)



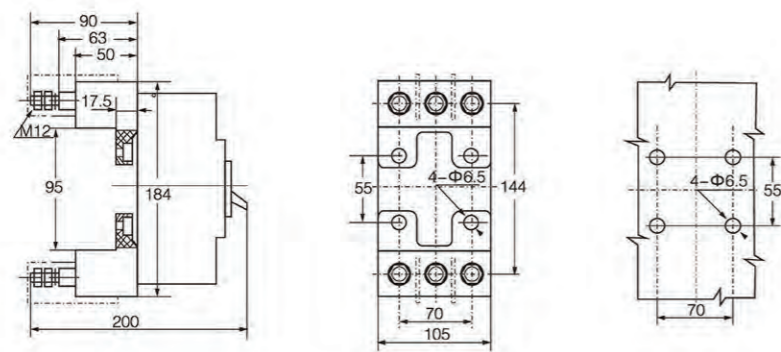
EBS1MZ-225 Front board wiring



EBS1MZ-225 Back board wiring



EBS1MZ-225 Plug-in board wiring



7. Order Note

Following items should be marked when ordering

Product name and model
Frame current
Rated current
Poles
Quantity

Ordering sample

To order EBS1MZ-225 DC MCCB, rated current is 225A, 3poles, quantity is 100 pieces, should be marked:
DC Moulded Case Circuit Breaker EBS1MZ-225/225A/3P, 100PCS.

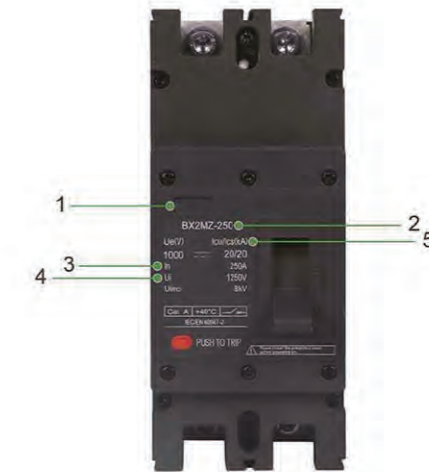


1. General

BX2MZ series DC moulded case circuit breaker is developed by advanced design and manufacturing technology, suitable for rated voltage is DC250V, DC500V, DC750V and DC 1000V, rated current up to 800A, the circuit breaker have function of short circuit, overload and under-voltage protection to protect circuit and power equipment against damage. The breaker are comply with the IEC60947-1 and IEC60947-2.

2. Nomenclature

1. Company code
2. Design code
3. Rated current
4. Rated insulation voltage
5. Breaking capacity



Note

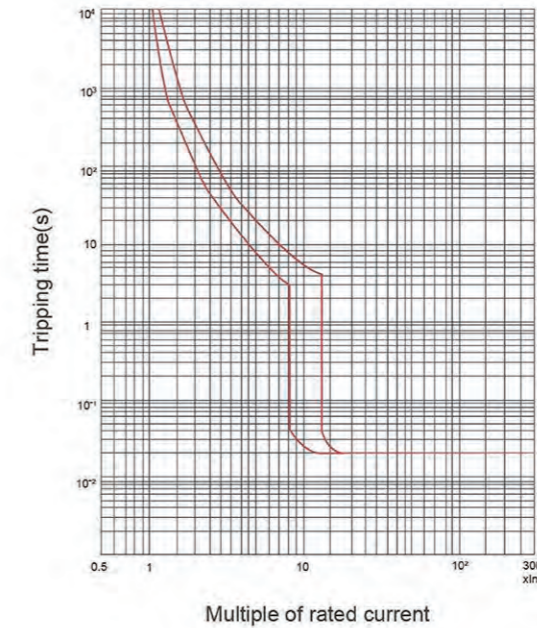
1. Air Temperature: Operating temperature range is -5°C to +40°C, and storage temperature range is -25°C to +70°C.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at +40°C, and it should not exceed 90% at an average temperature of the most humid month (+20°C).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5°. The installation location should be free from significant impacts and vibrations.
7. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

3.Specifications

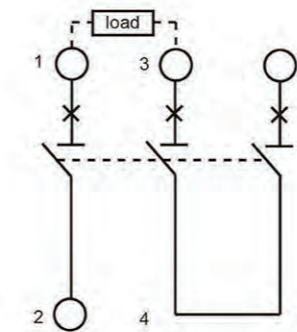
Standard		IEC60947-1 and IEC60947-2						
Type		BX2MZ-250			BX2MZ-400			
Pole		2		3	2		3	
Rated working voltage U _e (V)		DC500	DC1000	DC1500	DC250 /500	DC750 /1000	DC1250 /1500	DC1250 /1500
Rated insulation voltage U _i (V)		DC1250		DC1500	DC1500			
Rated impulse withstand voltage U _{imp} (kV)		8		12	12			
Rated current I _n (A)		63, 80, 100, 125, 140, 160, 180, 200, 225, 250			225, 250, 315, 350, 400			
Rated ultimate short-circuit breaking capacity I _{cu} (kA)	H	50	20	20	65	35	15	15(2P connection) 20(3P connection)
	R	55	25	25	70	40	20	20(2P connection) 25(3P connection)
Rated operating short-circuit breaking capacity I _{cs} (kA)		I _{cs} =100%I _{cu}						
Wiring		2 in 2 out						
Category		A						
Isolation function		Yes						
Ambient temperature		-35°C~+70°C						
Mechanical life (times)		20000			10000			
Electrical life (times)		3000	2000	1500	1000	1000	700	500
Standards compliant		IEC/EN 60947-2						
Accessory		shunt, auxiliary, alarm, manual operation, electric operation						

Standard		IEC60947-1 and IEC60947-2							
Type		BX2MZ-630			BX2MZ-800				
Pole		2		3	2		3		
Rated working voltage U _e (V)		DC250 /500	DC750 /1000	DC1250 /1500	DC1250/1500	DC250 /500	DC750 /1000	DC1250 /1500	
Rated insulation voltage U _i (V)		DC1500			DC1500				
Rated impulse withstand voltage U _{imp} (kV)		12			12				
Rated current I _n (A)		500, 600			700, 800				
Rated ultimate short-circuit breaking capacity I _{cu} (kA)	H	65	35	15	15(2P connection) 20(3P connection)	65	35	15	15(2P connection) 20(3P connection)
	R	70	40	20	20(2P connection) 25(3P connection)	70	40	20	20(2P connection) 25(3P connection)
Rated operating short-circuit breaking capacity I _{cs} (kA)		I _{cs} =100%I _{cu}							
Wiring		2 in 2 out							
Category		A							
Isolation function		Yes							
Ambient temperature		-35°C~+70°C							
Mechanical life (times)		5000			5000				
Electrical life (times)		1000	1000	700	500	1000	1000	700	500
Standards compliant		IEC/EN 60947-2							
Accessory		shunt, auxiliary, alarm, manual operation, electric operation							

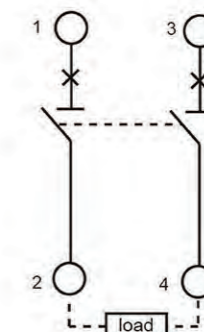
4.Tripping Characteristic



5.Connection Diagram

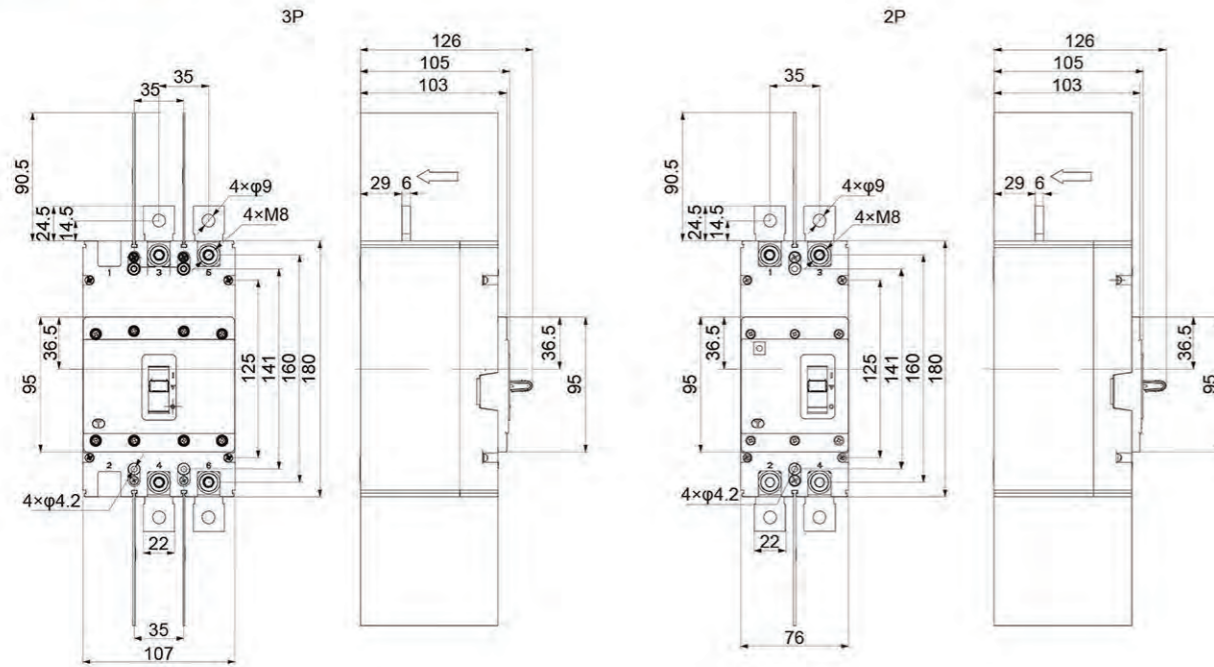


3P (three-pole connection)

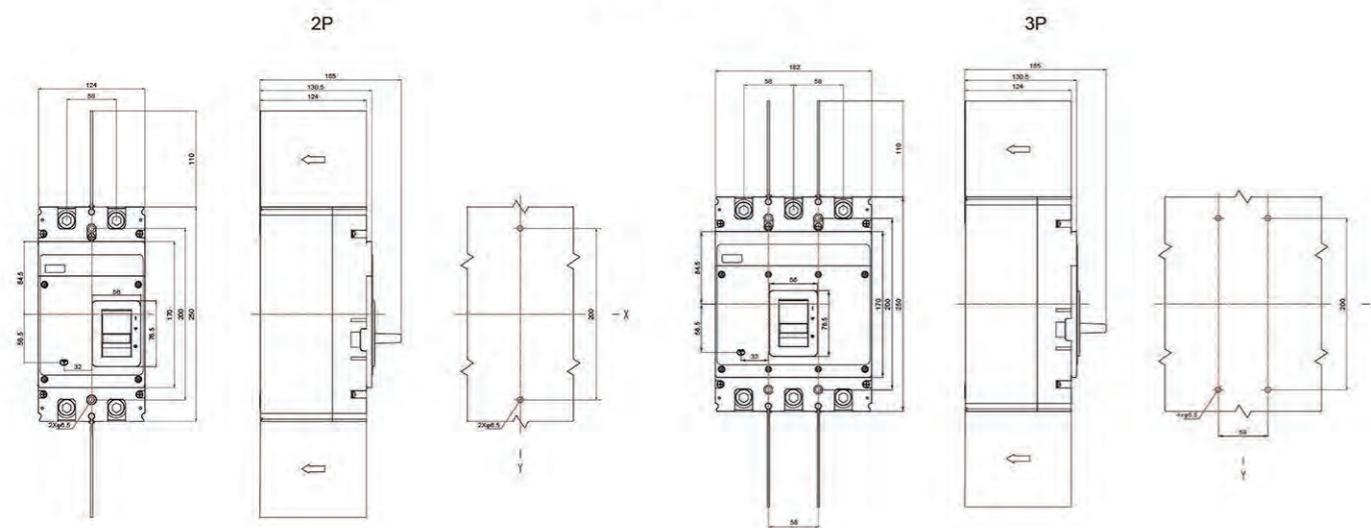


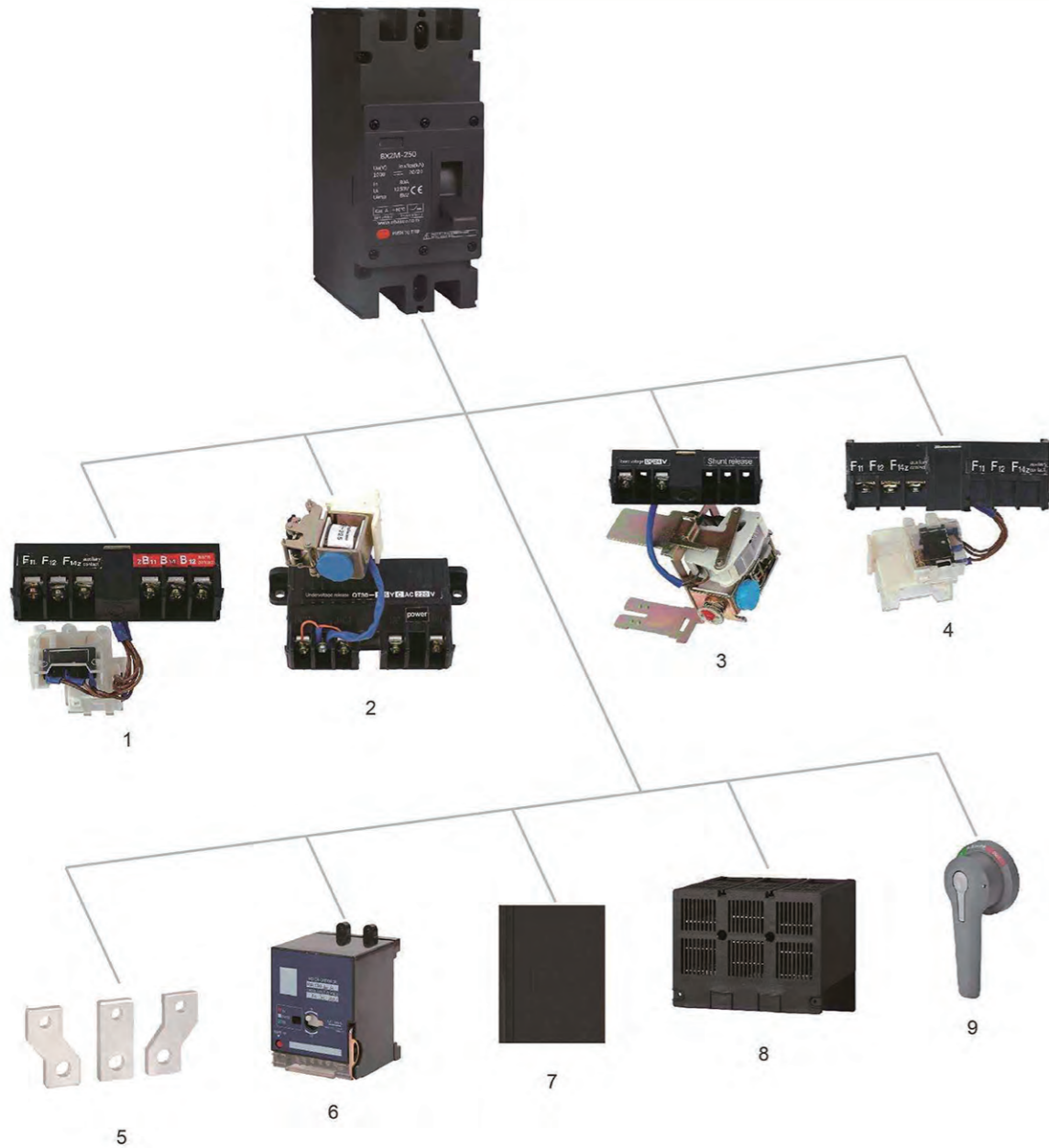
2P (two-pole connection)
3P (two-pole connection)

6. Dimensions



BX2MZ-250/320





- | | |
|-------------------------|---------------------|
| 1. Alarm contact | 6. Motor operator |
| 2. Undervoltage release | 7. Arc baffle |
| 3. Shunt release | 8. Insulation cover |
| 4. Auxiliary contact | 9. Handle |
| 5. Extend terminal | |

Fuse Series

DC Fuse Holder & Links

- Up to 63A & 1500VDC
- 1 pole to 4poles are available
- Support with or without indicators





1.General

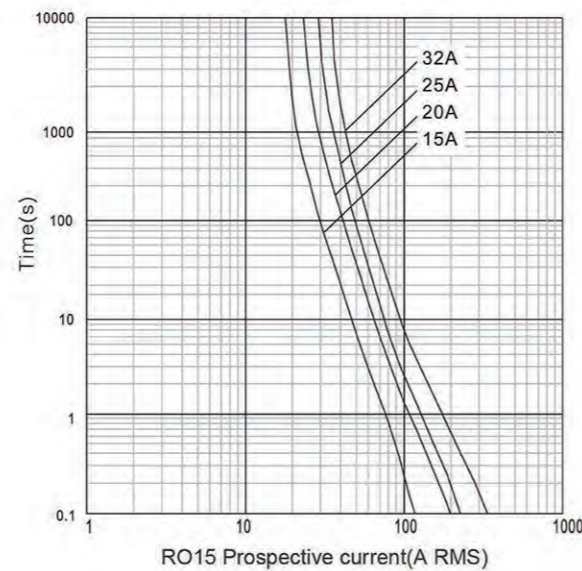
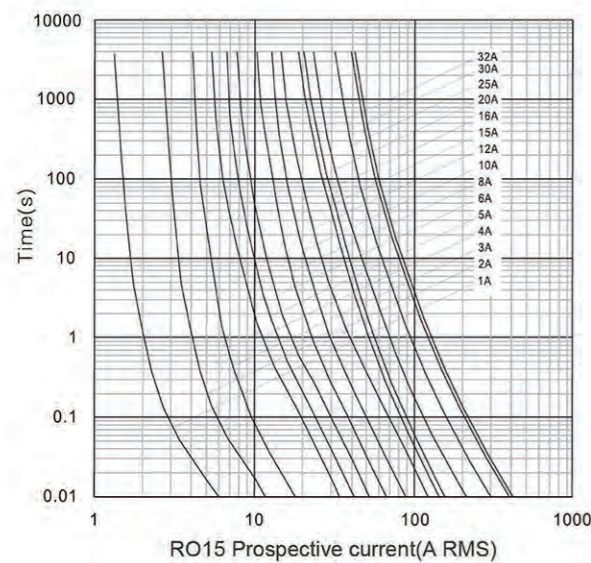
A range of 10x38mm fuse links specifically designed for protecting photovoltaic strings, these fuse links are capable of interrupting low overcurrents associated with faulted photovoltaic string arrays (reverse current, multi-array fault) rated insulated voltage up to 690V, conventional free air thermal current up to 32A; compliant with IEC60269-1 and IEC60269-6.



2.Specification

Standard	IEC60269-1, IEC60269-6
Fuse base	RT18Z-32/RT18Z-32X
Fuse link	10X38mm
Pole	1P, 2P, 3P, 4P
Class of operation	gPV
Time constant	1-3ms
Rated voltage Ue(V DC)	1000
Rated Current In(A)	1-32A
Biggest block ability(kA)	20
The most high power consumption(W)	3.5

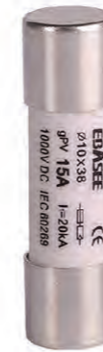
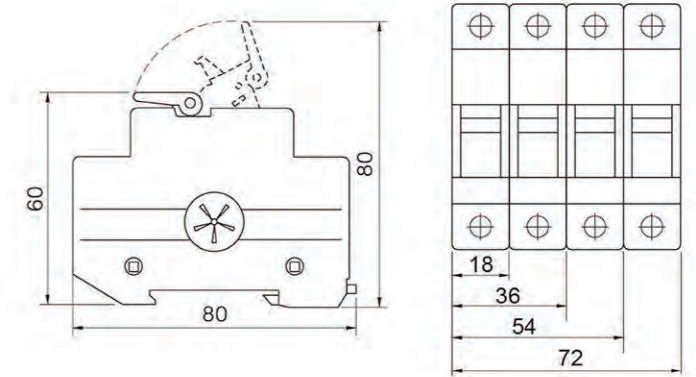
3.Tripping Characteristic



4.Dimensions

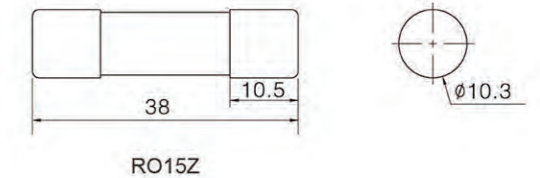
RT18Z-32/RT18Z-32X 32A 1000VDC 10X38

- Rated voltage: 1000VDC
- Class of operation: gPV
- Standard: IEC 60269-6



RO15Z 10X38 1-32A 1000VDC

- Fuse size: 10X38mm
- Class of operation: gPV
- Standard: IEC 60269-6
- Breaking capacity: 20kA
- Time constant: 1-3ms



5.Order Note

Following items should be marked when ordering	Ordering sample
Product name, poles	To order the RT18Z-32 Fuse, 1P, rated current is 32A, and quantity is
Rated current	100pcs, should be marked:
With indicator or without	Fuse RT18Z-32 1P 32A, 100PCS.
Quantity	



1.General

These fuse holders are supporters for fuses with size up to 14*85mm. They are capable of working under heat caused by rated current and expected short impacting current up to 20kA. It can also function as a fuse disconnecting switch by multi-phase combination. There are two in/out lines at the BXPV fuse base, providing a power cut function.

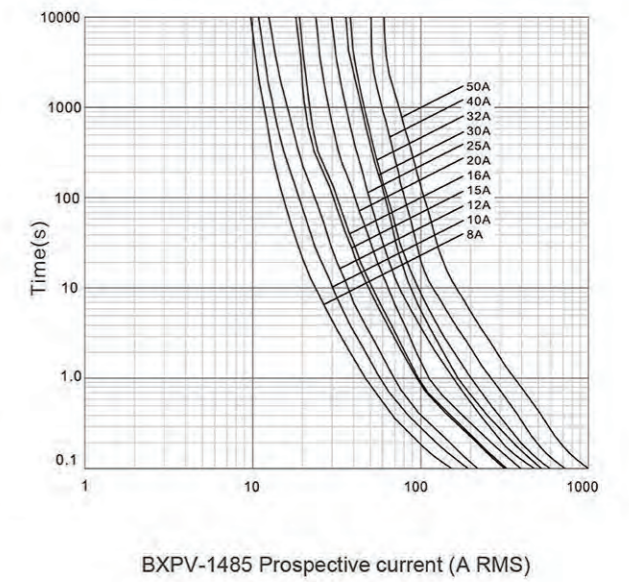
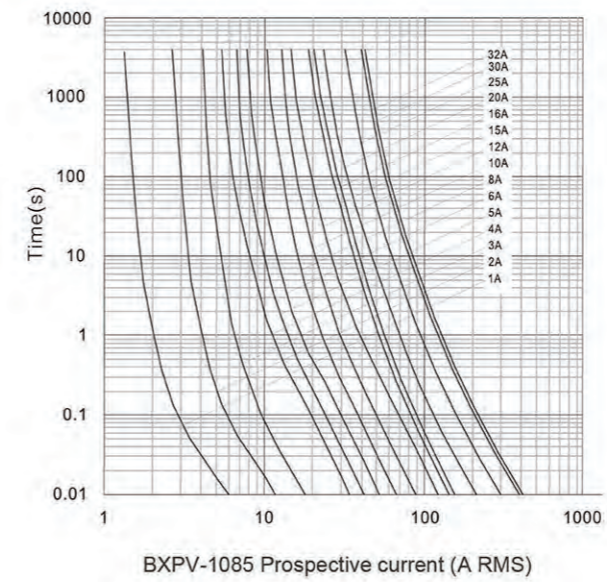
Rated voltage up to 1500V; Conventional free air thermal current up to 63A; Compliant with IEC602696.

2.Specification

Standard	IEC60269-6	
Fuse base	BXPV-63T	
Fuse link	10x85mm	14x85mm
Class of operation	gPV	
Time constant	1-3ms	
Rated voltage Ue(V DC)	1500	
Rated Current In(A)	2-32A	8-50A
Biggest block ability(KA)	20	
The most high power consumption(W)	3.5	

Type	Voltage	Current (A)	Dimensions(mm)	
			Chart	
BXPV1085	DC1500V	2-32	1	see figure 1, 2
BXPV1485	DC1500V	8-50	2	

3.Tripping Characteristic



4.Dimensions

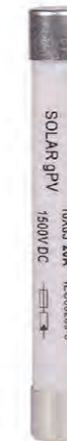


Figure 1

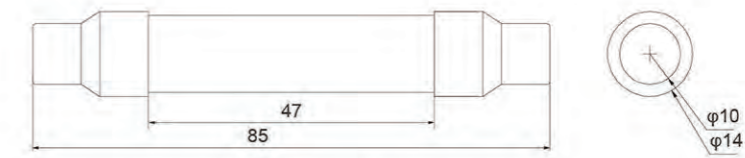


Figure 2

5.Order Note

Following items should be marked when ordering

Product name, poles
Rated current
With indicator or without
Quantity

Ordering sample

To order the BXPV-63T Fuse, 1P, rated current is 32A, and quantity is 100pcs, should be marked:
Fuse BXPV-63T 1P 32A, 100PCS.

SPD Series

DC Surge Protector Device

- Up to 1500VDC
- 2poles and 3poles are available
- Support replace surge protection module

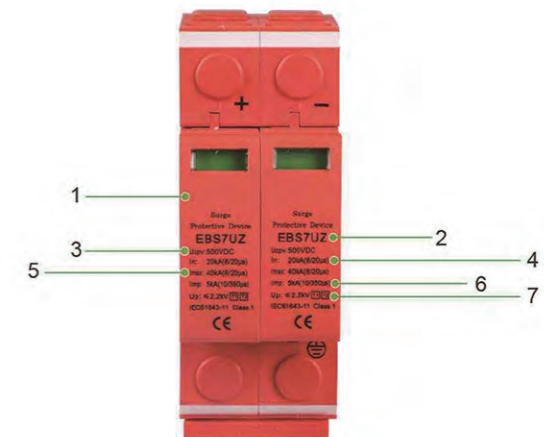


1.General

The EBS7UZ series DC surge protectors are designed to prevent damage caused by lightning surges and transient overvoltages to DC power supply systems and electrical equipment, ensuring the safety of both the devices and users. They are widely used for DC power protection in various systems, including photovoltaic power generation systems, mobile communication base stations, microwave communication stations, telecommunication rooms, factories, civil aviation, finance, securities, and other DC power supply systems.

2.Nomenclature

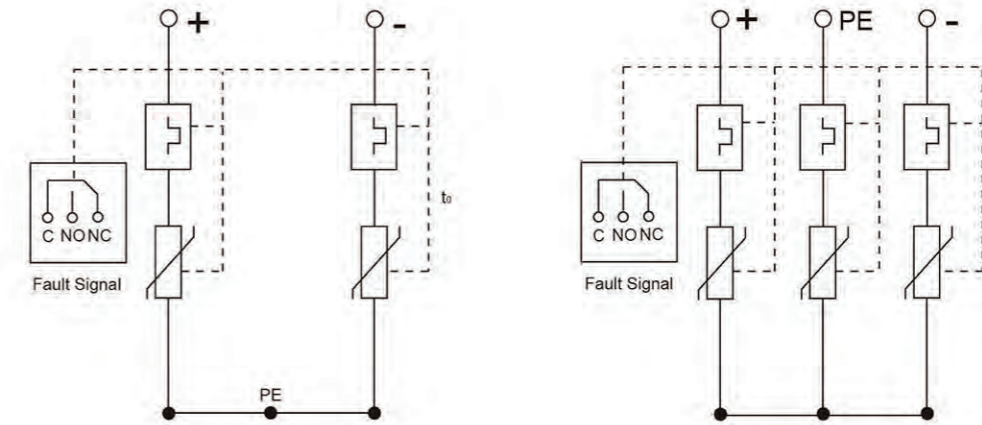
1. Company code
2. Design code
3. Maximum continuous operating voltage
4. Nominal discharge current
5. Maximum discharge current
6. Lightning impulse current
7. Protection level



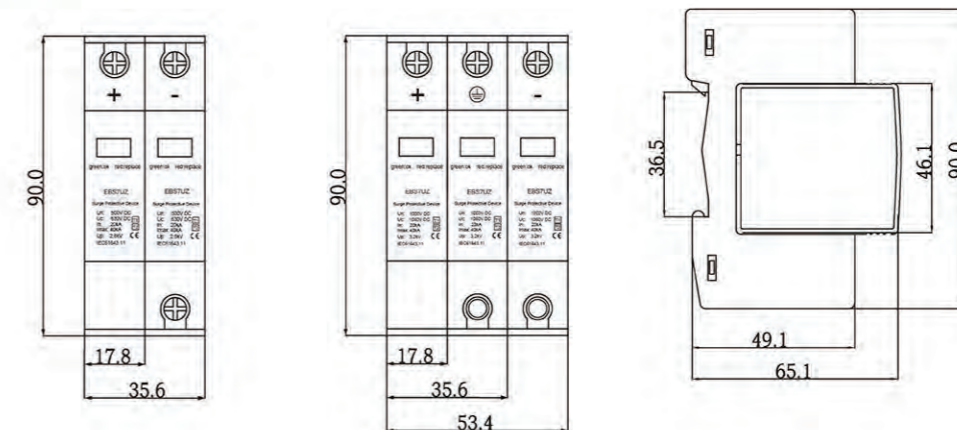
3.Specifications

Standard	IEC61643-1	
Poles	2P	3P
Rated Operating Voltage	DC500V 600V 800V 1000V 1200V 1500V	
Maximum Continuous Operating Voltage (Uc(L-N))	DC1500V	
Maximum Discharge Current (Imax8/20μs)	40kA	
Rated Discharge Current (Ln(L-N)(8/20μs))	20kA	
Voltage Protection Level (Up(L-N)(8/20μs))	≤3.8kV	
Recommended Series Overcurrent Protection Device	63A/25kA	
Response Time (tA(L-N))	≤25ns	
Altitude	≤2000m	
Installation Conductor Cross-Section	4-35mm ²	
Installation Method	35mm Standard Rail	
Operating Environment	-40°C~+70°C	
Enclosure Material	Plastic, UL94 V-0 compliant	
Protection Level	IP20	
Remote Signal Alarm	Normally Open or Closed Terminal (optional)	
Remote Signal Interface Wire Capacity	Maximum 1.5mm ²	
Terminal size top/ bottom for cable	mm ²	25
	AWG	18-3
Terminal size top/ bottom for busbar	mm ²	25
	AWG	18-3
Tightening torque	N*m	2.5
	In-lbs	18

4.Connection Diagram



5.Dimensions



6.Order Note

Following items should be marked when ordering	Ordering sample
Product name, model & protection level	To order the EBS7UZ Surge Protector, I _{max} =40kA I _n =10kA,
Poles	protection level is type2, 1 Poles, U _c =1000 and quantity is 100
Max.release current	pieces, should be marked:
Max.continuous working voltage	Surge protector EBS7UZ-40/10/1P/1000, 100PCS.
Quantity	

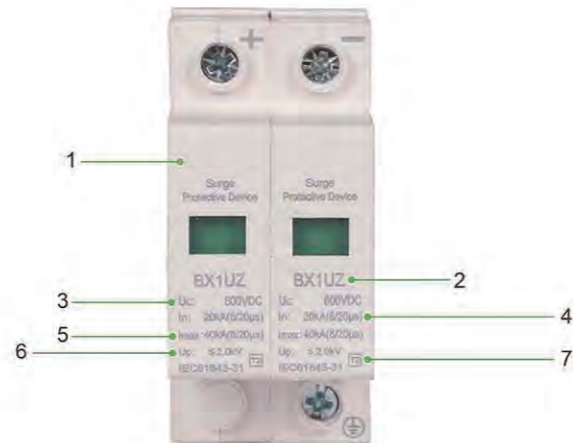


1.General

BX1UZ DC surge protector is to be installed in 1000V DC system for PV application and other DC application. The product is to be installed in lightning protection zone between LPZ1 to LPZ2 for PV system DC side and other DC distribution box. It will provide surge protection against lightning strike and other surge current.

2.Nomenclature

1. Company code
2. Design code
3. Maximum continuous operating voltage
4. Nominal discharge current
5. Maximum discharge current
6. Voltage protection level
7. Protection level

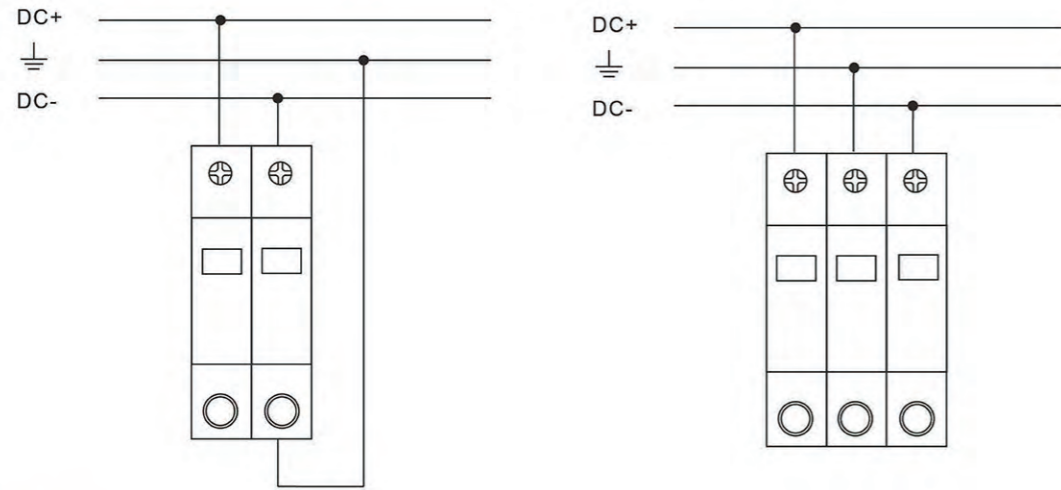


3.Specifications

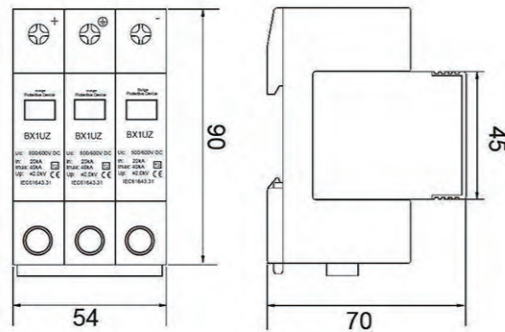
Standard	IEC61643-1, IEC61643-31	
Poles	2P	3P
Rated Operating Voltage	DC500V 600V 800V 1000V 1200V 1500V	
Maximum Continuous Operating Voltage (Uc(L-N))	DC1500V	
Maximum Discharge Current (Imax8/20μs)	40kA	
Rated Discharge Current (In(L-N)(8/20μs))	20kA	
Voltage Protection Level (Up(L-N)(8/20μs))	≤3.8kV	
Recommended Series Overcurrent Protection Device	63A/25kA	
Response Time (tA(L-N))	≤25ns	
Altitude	≤2000m	
Installation Conductor Cross-Section	4-35mm ²	
Installation Method	35mm Standard Rail	
Operating Environment	-40°C~+70°C	
Enclosure Material	PA-6V0	
Protection Level	IP20	
Remote Signal Alarm	Normally Open or Closed Terminal (optional)	
Remote Signal Interface Wire Capacity	Maximum 1.5mm ²	
Terminal size top/ bottom for cable	mm ²	25
	AWG	18-3
Terminal size top/ bottom for busbar	mm ²	25
	AWG	18-3
Tightening torque	N*m	2.5
	In-lbs	18

4.Connection Diagram

BX1UZ should be installed as following in 1000V DC PV system or other DC system:



5.Dimensions



6.Order Note

Following items should be marked when ordering

- Product name, model & protection level
- Poles
- Max.release current
- Max.continuous working voltage
- Quantity

Ordering sample

To order the BX1UZ Surge Protector, $I_{max}=40kA$ $I_n=20kA$, protection level is type2, 3 Poles, $U_c=1000VDC$ and quantity is 100 pieces, should be marked:
Surge protector BX1UZ-20/40/T2/3P/1000VDC, 100PCS.

Isolator Series



DC Waterproof Isolator Switch

- Up to 45A & 1200VDC
- Various wiring types are available
- Support with or without enclosure





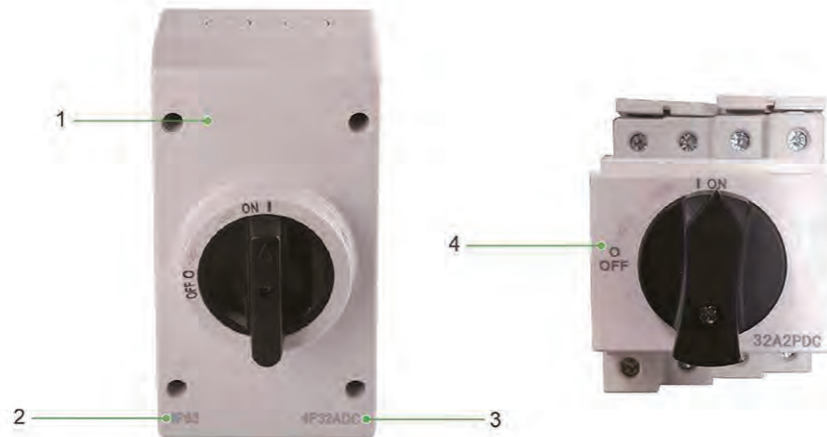
1.General

ELR2 Series DC Isolator Switch in plastic enclosure is applied to 1~20KW residential or commercial photovoltaic system, placed between photovoltaic modules and inverters. Arcing time is less than 8ms, that keeps solar system more safe. To ensure its stability and long service life, our products are made by components with optimum quality. Max voltage is up to 1200V DC. It holds a safe lead among similar products.

- IP66 rated enclosure, UV Resistant
- 4 x M20 knock holes
- The handle can be padlocked in the "OFF" position
- MC4 plugs can be selected for convenient connection and space saving
- 2 Poles, 4Poles are available (Single | Double String)
- Standard: IEC60947-3, AS60947.3
- DC-PV2, DC-PV1, DC-21B
- 16A, 25A, 32A, DC1200V

2.Nomenclature

1. Company code
2. Ingress protection
3. Wiring type/rated current
4. NO enclosure style



Note

1. Air Temperature: Operating temperature range is -30°C to +70°C, and storage temperature range is -40°C to +70°C.
2. Altitude: The installation location's altitude should not exceed 2000 meters. If it's above 2000 meters, the equipment's capacity should be derated.
3. Atmospheric Conditions: The relative humidity of the air at the installation location should not exceed 50% at +40°C, and it should not exceed 90% at an average temperature of the most humid month (+20°C).
4. Installation Category: Installation falls under Category II and III.
5. Pollution Degree: Pollution degree is 2.
6. Installation Conditions: The inclination between the installation surface and the vertical plane should not exceed 5°. The installation location should be free from significant impacts and vibrations.
7. Wiring Method: Utilize screw clamping connections to ensure a fast and secure connection of conductors.

3.Specifications

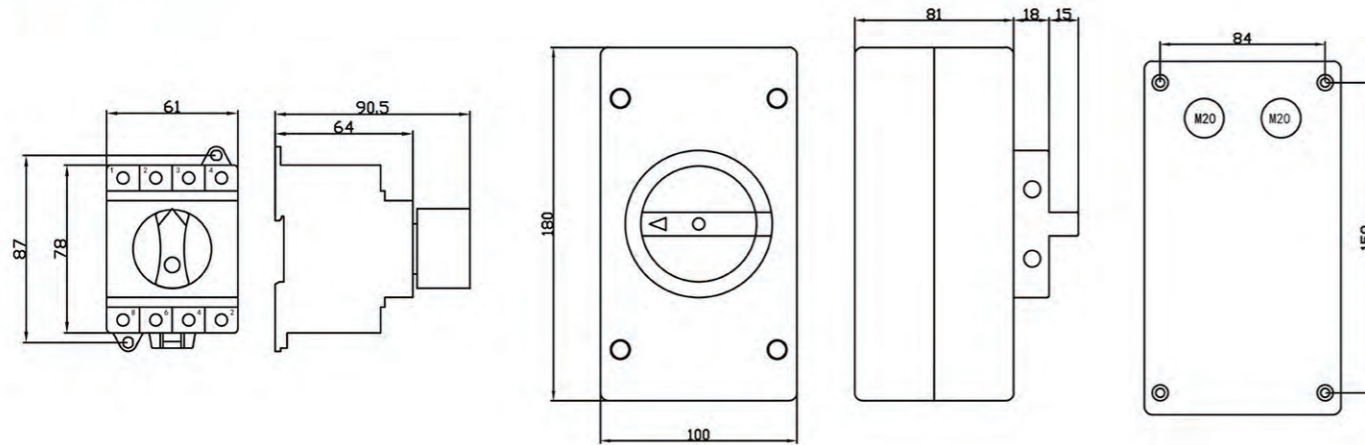
Type	Standard	IEC/EN 60947-3, AS60947.3	
Electrical features	Function	Isolator, Control	
	Poles	P	
	Utilization category	DC-PV2/DC-PV1/DC-21B	
	Rated frequency	DC	
	Rated operational voltage(Ue)	V	300, 600, 800, 1000, 1200
	Rated operational current(Ie)		see below table
	Rated insulation voltage(Ui)	V	1200
	Conventional free air thermal current(Ithe)		//
	Conventional enclosed thermal current(Ithe)		same as Ie
	Rated short-time withstand current(Icw)		1kA, 1s
	Rated impuled withstand voltage(Uimp)	kV	8
	Overvoltage category	t	II
	Suitability for isolation		Yes
	Polarity		NO polarity, "+"and "-" polarities could be interchanged
Mechanical features	Electrical life	t	2000
	Mechanical life	t	18000
Installation	Ingress protection		IP66
	Storage temperature	°C	-40~+85
	Mounting		Vertically or horizontally
	Pollution degree		3

Wiring	Type	300V	600V	800V	1000V	1200V
2P/4P	BXPV-ELR2 16	16A	16A	12A	8A	6A
	BXPV-ELR2 25	25A	25A	15A	9A	7A
	BXPV-ELR2 32	32A	27A	17A	10A	8A
4T/4B/4S	BXPV-ELR2 16	16A	16A	16A	16A	16A
	BXPV-ELR2 25	25A	25A	25A	25A	25A
	BXPV-ELR2 32	32A	32A	32A	32A	32A
2H	BXPV-ELR2 16	35A	35A	/	/	/
	BXPV-ELR2 25	40A	40A	/	/	/
	BXPV-ELR2 32	45A	40A	/	/	/

4.Connection Diagram

Type	2-pole	4-pole	2-pole 4-pole in series Input and Output bottom	2-pole 4-pole in series Input and Output on top	2-pole 4-pole in series Input on top and Output bottom	2-pole 4 paralleled poles
/	2P	4P	4T	4B	4S	2H
Contacts wiring graph	5 7 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8	1 3 5 7 2 4 6 8
Switching example						

5.Dimensions



6.Order Note

Following items should be marked when ordering

Product name, model
Poles
Rated current
Quantity

Ordering sample

To order the DC Isolator Switch BXPV-ELR2, 4P, rated current is 32A, Rated operational voltage is 600V, and quantity is 100 pieces, should be marked:
BXPV-ELR2 4P 32A 600V, 100 PCS.

Accessory Series

MC4 Connectors & Installation Tools

- MC4 Connectors up to 30A & 1000VDC
- T branch and Y branch Connectors for selection
- One-stop-solution for tools



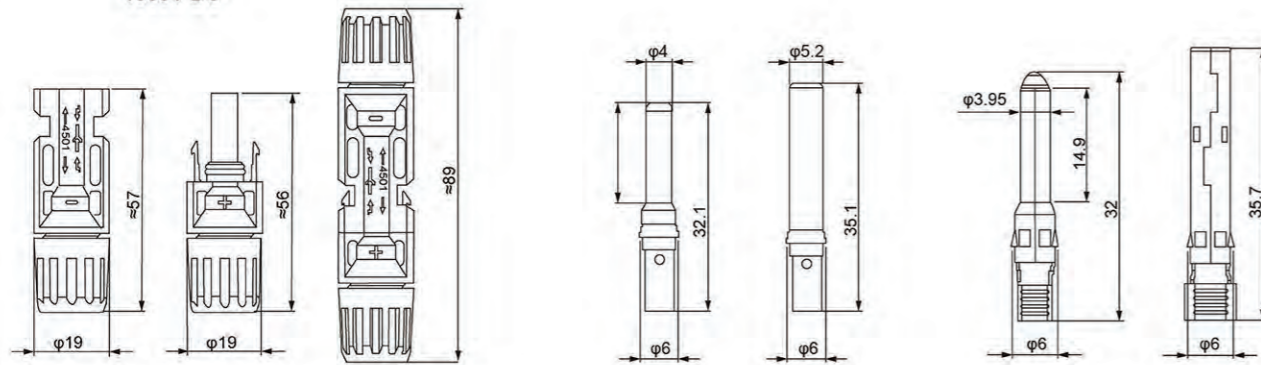


1.General

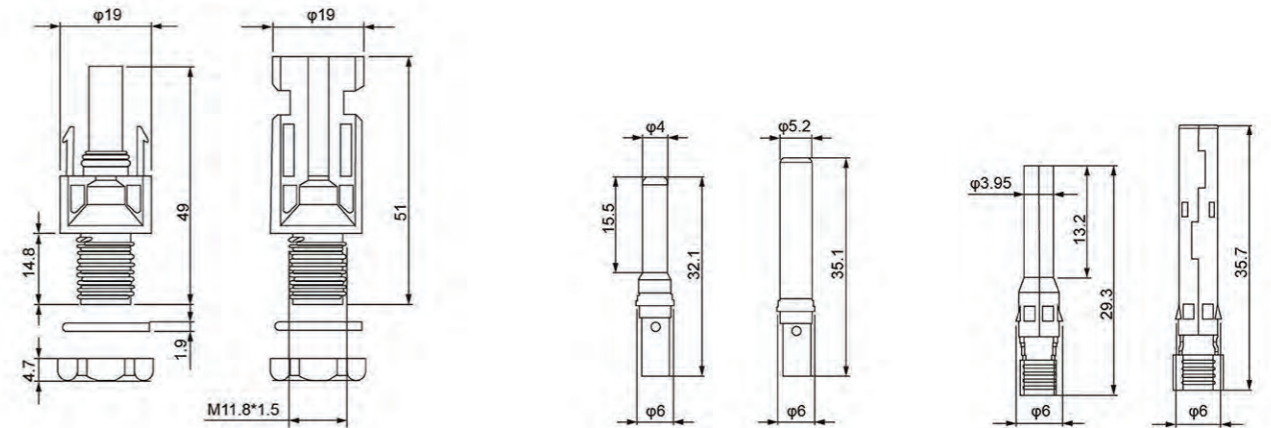
MC4 connector is typically made from copper, with a tin plating to enhance their conductivity and corrosion resistance, it is specialized electrical connectors designed specifically for solar panels, inverters, DC combiner boxes, and other components in a photovoltaic (PV) system.

MC4 connectors have become the industry standard due to their reliability, weather resistance, compatibility, cost-effectiveness, and easy installation and maintenance.

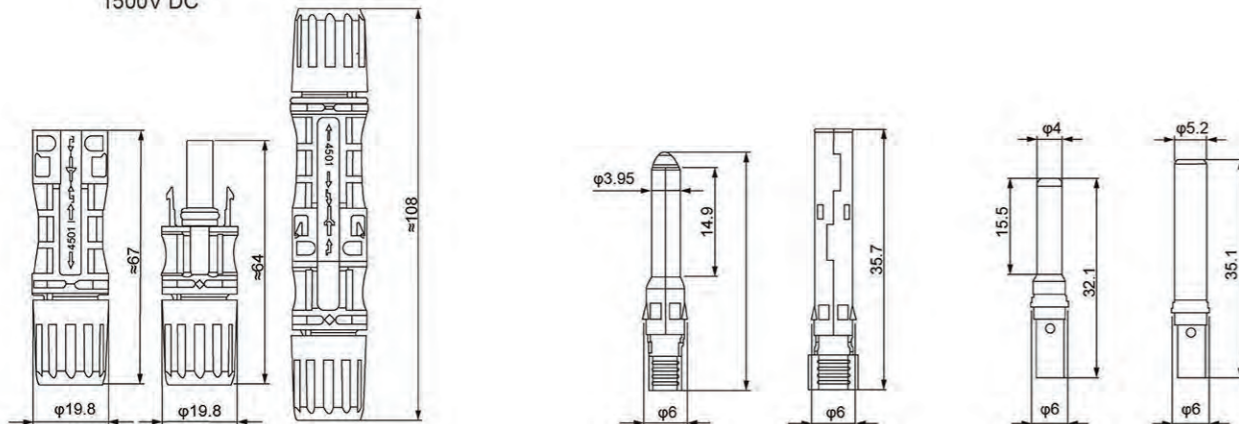
1000V DC



MC4-1 1000V DC



1500V DC

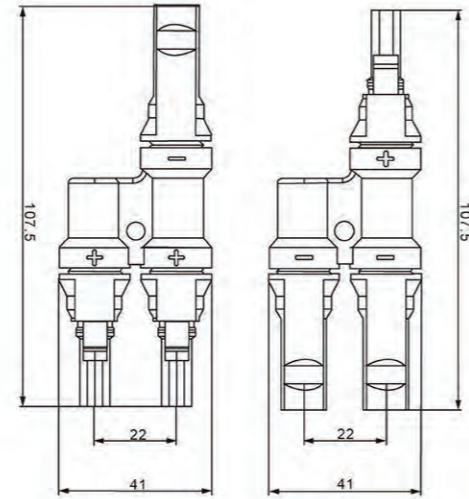


2.MC4 Specifications

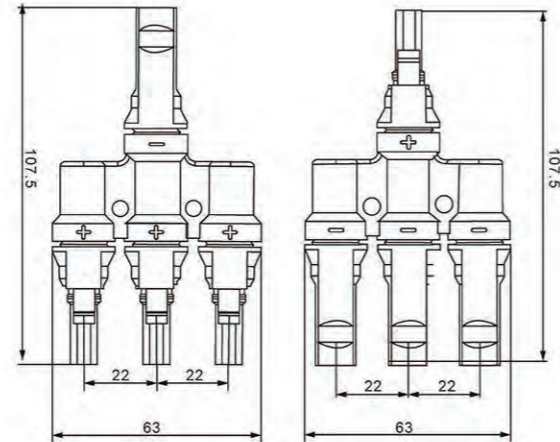
Connector system	$\Phi 4$ mm
Rated voltage	1000V/1500V DC
Rated current	17A(1.5mm ²) 22A(2.5mm ² ,14AWG), 30A(4mm ² , 6mm ² , 12AWG, 10AWG)
Test voltage	6kV(50Hz, 1min)
Ambient temperature range	-40°C...+90°C(IEC) -40°C...+75°C(UL)
Upper limiting temperature	+105°C(IEC)
Degree of protection, mated	IP67
Unmated	IP2X
Contact resistance of plug connectors	0.5m Ω
Safety class	II
Contact material	Messing, verzinkt Copper Alloy, tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-90-V0
Salt mist spray test, degree of severity 5	IEC60068-2-52



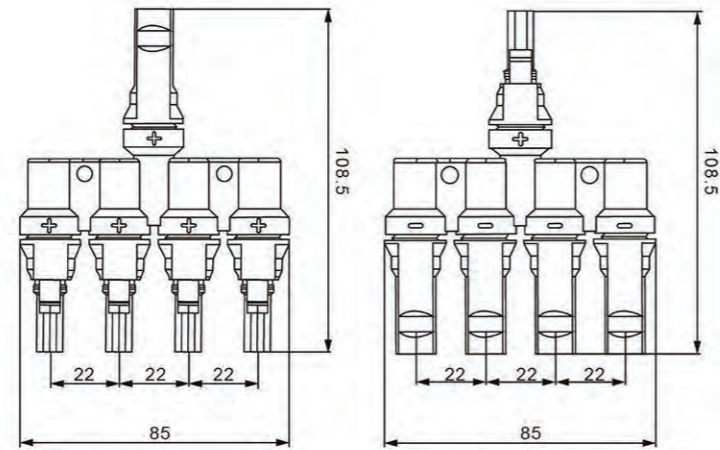
PV-MC4-T2



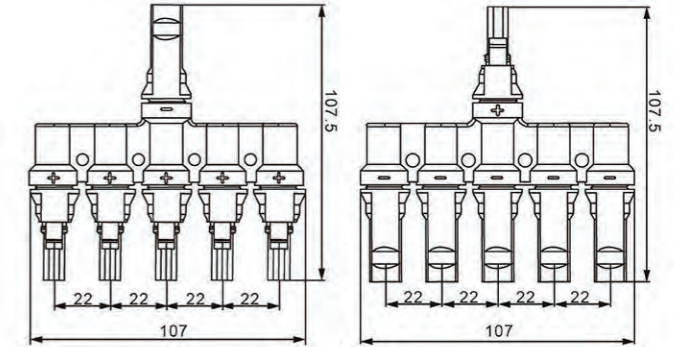
PV-MC4-T3



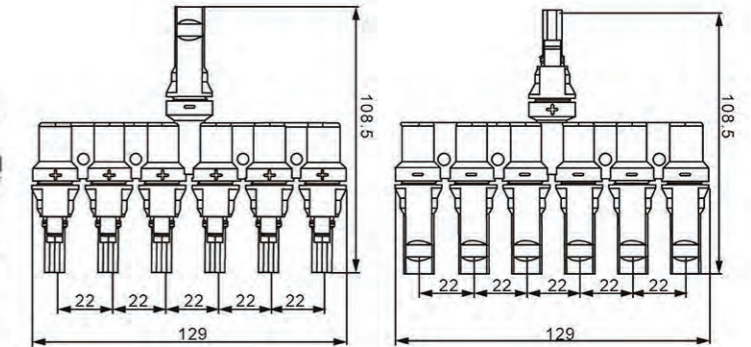
PV-MC4-T4



PV-MC4-T5



PV-MC4-T6

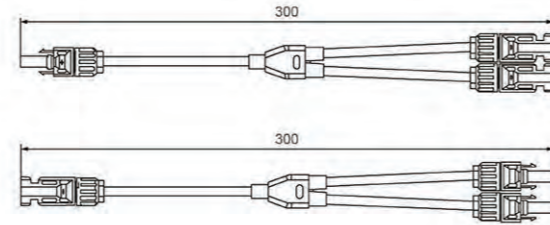


3.MC4-T Series Specifications

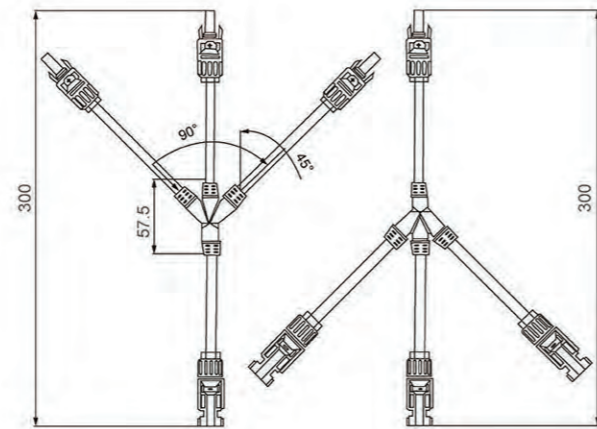
Insulation material	PPO
Contact material	Copper, Tin plated
Suitable current	30A
Rated voltage	1000VDC(TUV) 600VDC(UL)
Test voltage	6kV(TUV50Hz, 1min)
Contact resistance	<0.5mΩ
Degree of protection	IP67
Ambient temperature range	-40°C~+85°C
Flame class	UL94-V0
Safety class	II
Pin dimensions	Φ4mm



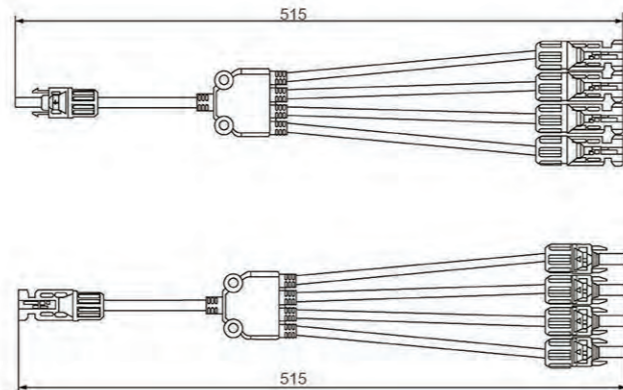
PV-MC4-Y2



PV-MC4-Y3



PV-MC4-Y4



4.MC4-Y Series Specifications

Connector system	Φ4mm
Rated voltage	1000V DC
Rated current	30A
Test voltage	6kV(50Hz, 1min)
Ambient temperature range	-40°C...+90°C (IEC) -40°C...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Degree of protection, mated	IP67
Unmated	IP2X
Contact resistance of plug connectors	0.5mΩ
Safety class	II
Contact material	Messing, verzinkt Copper Alloy, tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-90-V0
Salt mist spray test, degree of severity 5	IEC60068-2-52

5.Solar Tools

Solar Tools Kit



EK1



EK2



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

Tow-set Spanners

1500V



ES1

1000V



ES2

1000V



ES3

Crimping tool

EP1

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



EP2

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



EP3

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



Solar Installation Tools

EP4

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



6.Order Note

Following items should be marked when ordering	Ordering sample
Product name, model	To order the Solar Panel Connectors PV-MC4-T2, quantity is 100
Quantity	pieces, should be marked: Solar Panel Connectors PV-MC4-T2, 100 PCS.