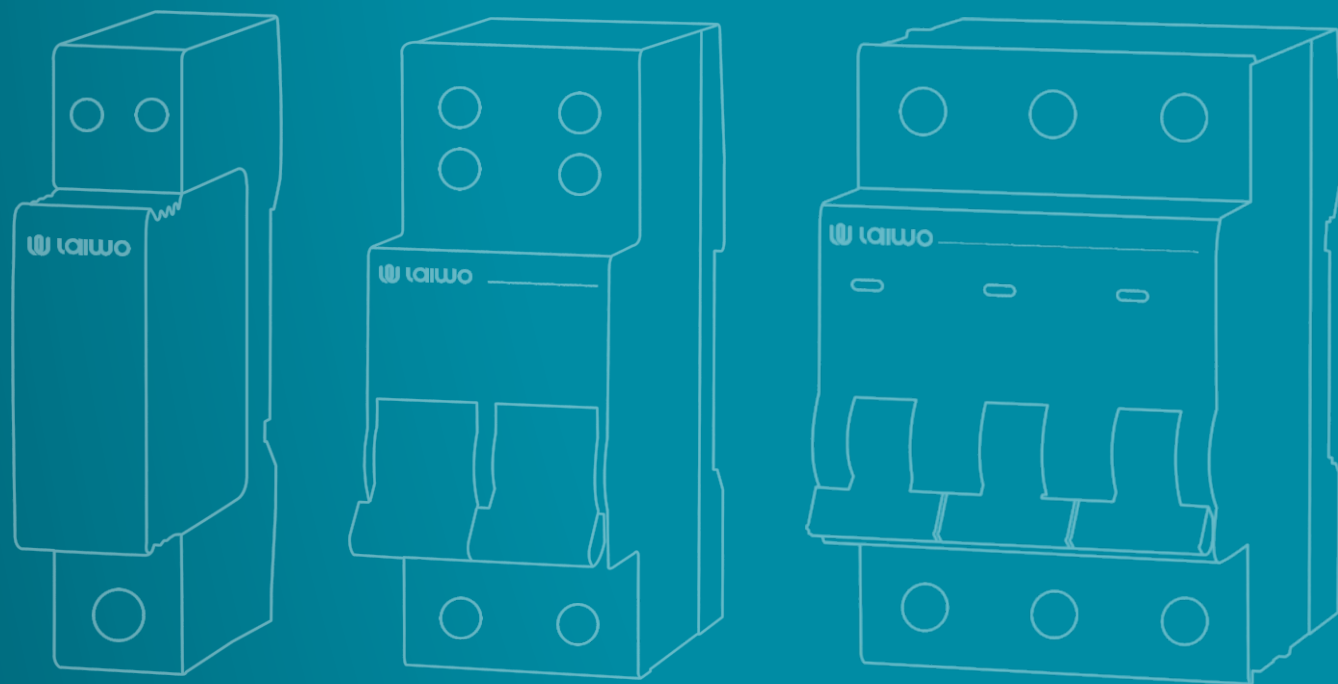




laiwo

WENZHOU LAIWO ELECTRICAL TECHNOLOGY CO., LTD

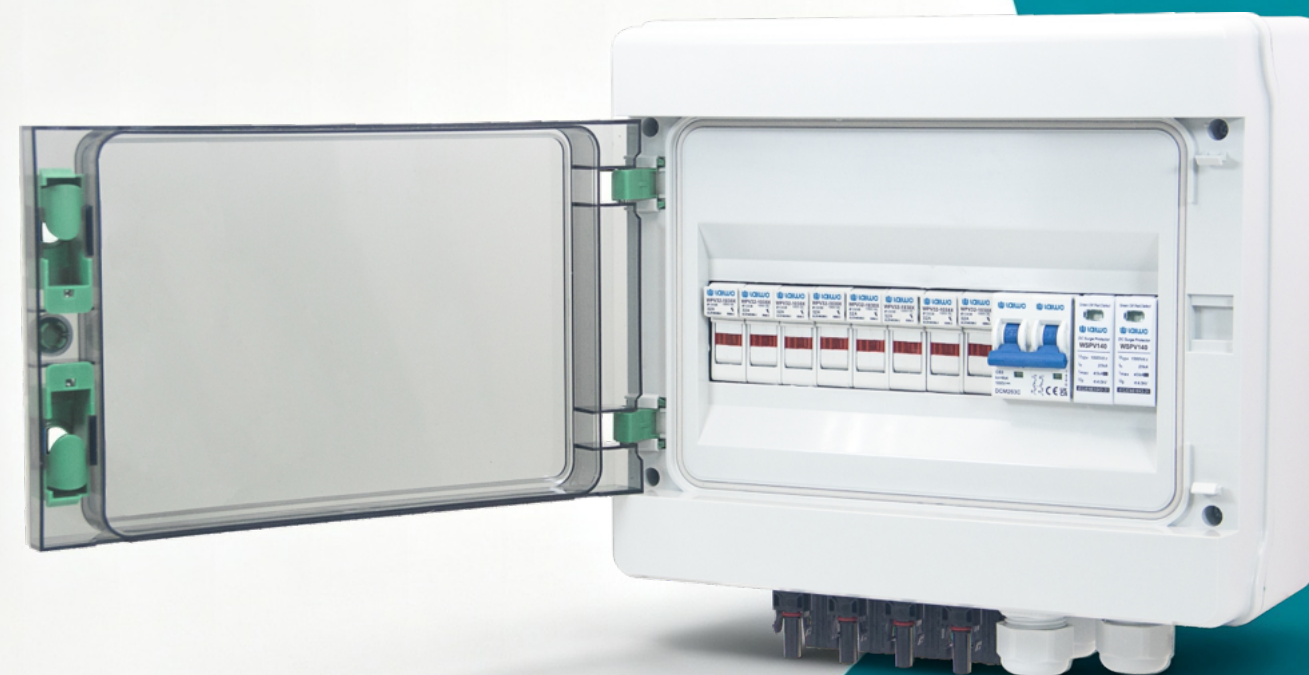
Whatsapp: +86-15067706272

E-mail: sales2@wosom.cn

Tel: +86-15067706272

Address: Unit 10, No.115, Xinguang Avenue, Liushi, Wenzhou, P.R.China

laiwo



PRODUCT SELECTION MANUAL



COMPANY PROFILE



NUMBER OF
EXPORTING COUNTRIES

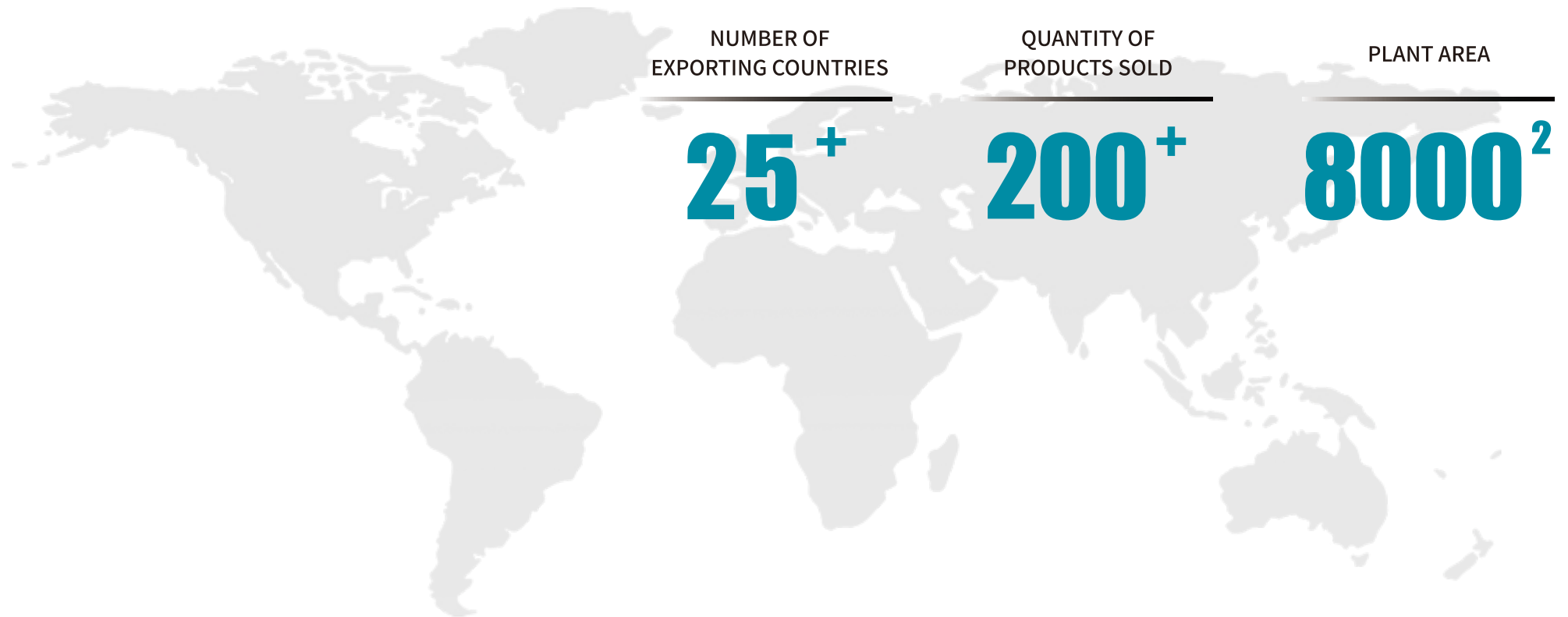
25⁺

QUANTITY OF
PRODUCTS SOLD

200⁺

PLANT AREA

8000²



One-stop
marketing
service

LAIWO ELECTRICAL TECHNOLOGY CO., LTD was established in 2002, headquartered in the global reputation of Liushi electric capital. As a company specializing in the development, production and sales of electrical products, we are committed to providing customers with high quality and reliable electrical solutions. The company's main products cover circuit breakers, isolating switches, surge protectors, fuses and other fields, these products play a vital role in a variety of electrical systems, can effectively protect equipment from power fluctuations and overload, to ensure the safe and stable operation of electrical systems. All products have passed the ISO9001 quality system certification, as well as CCC, CE, UKCA, TUV, C B, SEMKO and other certifications, to provide customers with high quality assurance. It owns the Levo Watson brand.

The company has always been adhering to the "customer first, quality first" business philosophy, committed to providing customers with high quality, reliable electrical solutions. We will also continue to optimize the service system, establish a perfect pre-sale, sale and after-sales service mechanism, fully meet customer needs, to provide you with a more convenient and efficient service experience. We are willing to listen to customers' opinions and suggestions, constantly improve and innovate, and grow together with you.

HONOR AND QUALIFICATION



Patent support, quality worry free

The company has a number of patent certificates, more surge products test report, as well as isolation switch, leakage circuit breaker, fuse, distribution box and other qualification certificates for quality escort. With innovative technology, Levo is the place for you to experience excellence.



30⁺

NUMBER OF CERTIFICATES



- CCC certification
- Quality management system certification
- Back protector test report
- Surge form test report
- CE certification
- SEMKO certification
- UKCA certification
- TUV certification



ENTERPRISE HISTORY



SET UP

June 2002

Wenzhou laiwo electrical technology co., ltd was established in dongfeng industrial zone of liushi city

DEVELOP

February 2009

Has a production base, established a modern factory located in Taizhou Sanmen

LEAP

November 2010

Expand overseas markets, set up a subsidiary in the UK, and enhance international competitiveness

OPTIMIZE

February 2020

The company launched the "laiwo" brand, focusing on brand building and marketing

CREATE

December 2021

Through the unremitting efforts of all employees, the company achieved a high performance in 2021

INNOVATE

Continuous innovation and progress, to provide customers with better products and services.

08 PHOTOVOLTAIC / DC ELECTRICALS

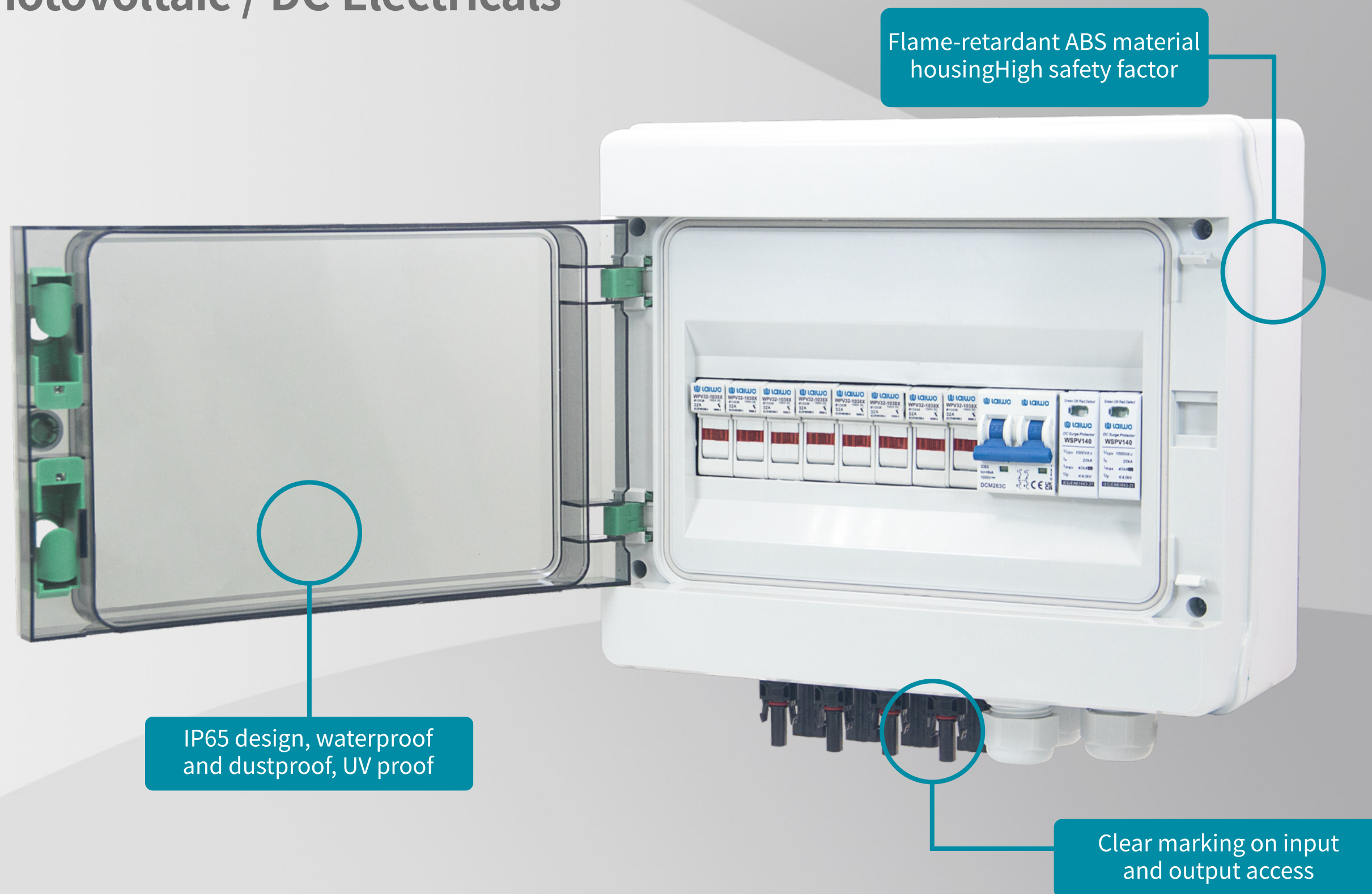
Photovoltaic / DC Distribution Box	03
Photovoltaic Fuse Link	04
Photovoltaic Fuse Holder	05
Photovoltaic Fuse Base	07
DC MCB WDCM-63	03
DC Surge Protection Device	04
DC Surge Protection Device	05
DC Rotary Isolator	07
DC Rotary Isolator Switch	
SPM Meter	
TPM Meter	
Photovoltaic Gland Connector	
Photovoltaic Cable Connector	
Fuse Connector	
Type-T Branch Connector	
Type-T Branch Connector	
Type-T Branch Connector	
Type-Y Photovoltaic Branch Connector	
Type-Y Photovoltaic Branch Connector	
Type-Y Photovoltaic Branch Connector	
Diode Connector	

PRODUCT CATALOG

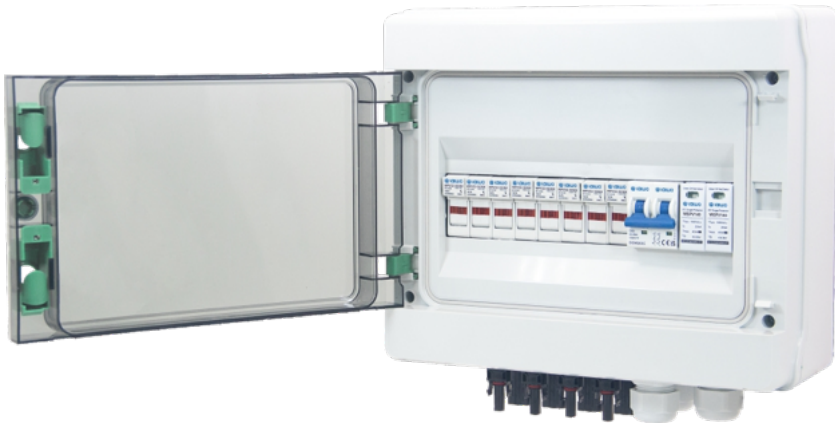




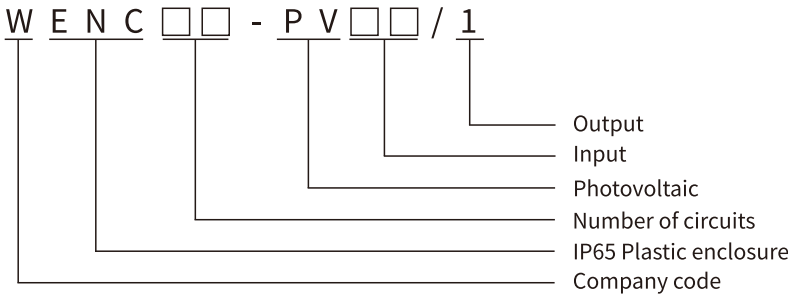
Photovoltaic / DC Electricals



Photovoltaic/DC Distribution Box



Product model meaning



Product characteristics

- IP65 design,waterproof,anti dust and anti ultraviolet.
- Strict test for high and low temperature,used widely .
- Flexible connection and simple installation.
- The simplified system wiring.

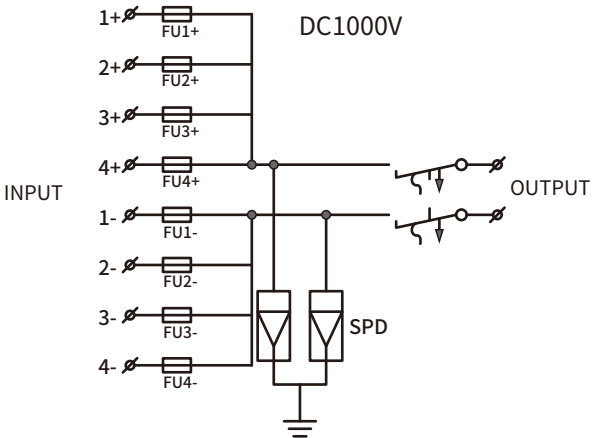
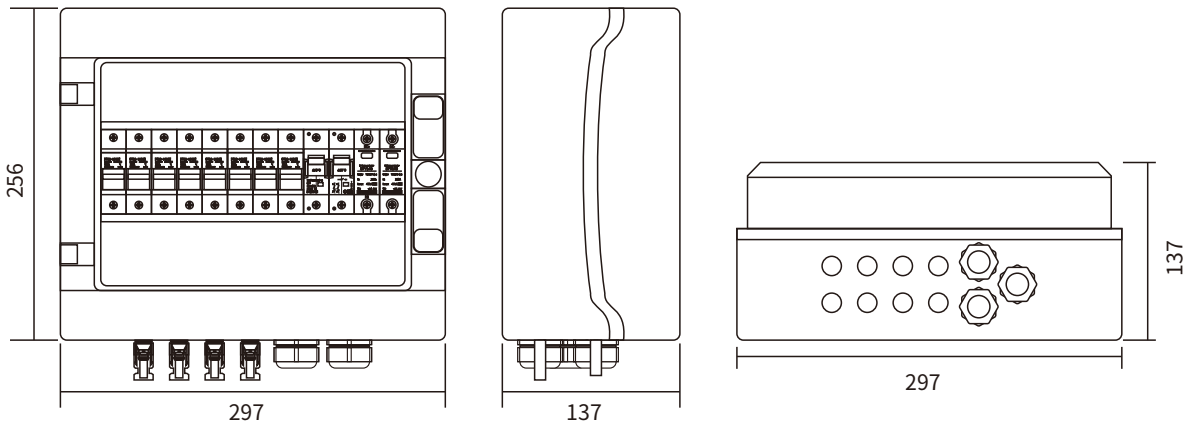
Product function

- DC Fuse Both Protection Of Positive And Negative Poles
- DC Circuit Breaker For Isolating Circuits And Maintenance
- DC 1000V Surge Protector
- Method A: Solar Connector Wiring (Replaceable + and -)
- Method B: Direct Wiring With Fuse

Product configuration

- Fitted with 10x38 15A Photovoltaic Fuse
- Fitted with 32A 1000VDC Photovoltaic Fuse Holder with light
- Fitted with 2P 63A DC1000V Circuit Breaker
- Fitted with 2P/20-40KA DC 1000V Surge Protector
- Fitted with 1000VDC Photovoltaic Gland Connector

Product selection

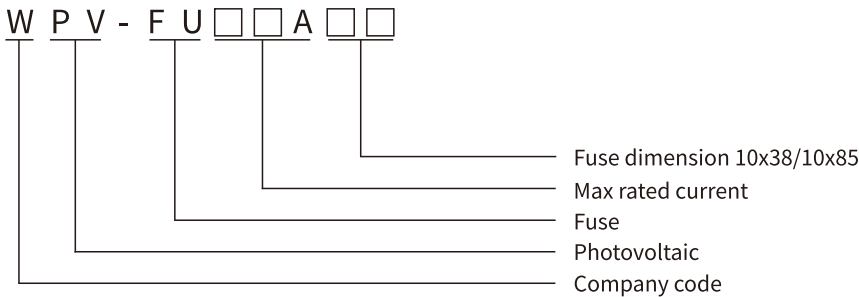


Product model	Description	Box Qty
WENC08-PV2/1	8 way solar consumer unit DC1000V ,2 input 1 output	6
WENC12-PV4/1	12 way solar consumer unit DC1000V ,4 input 1 output	4
WENC18-PV7/1	18 way solar consumer unit DC1000V ,7 input 1 output	2
WENC24-PV10/1	24 way solar consumer unit DC1000V 10 input 1 output	2

Photovoltaic Fuse Link



Product model meaning



Product characteristics

Photovoltaic fuses provide superior protection for solar power generation equipment

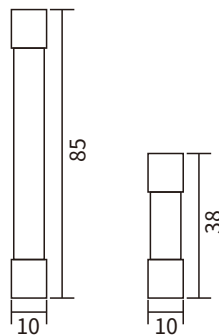
1: comprehensive protection: photovoltaic fuses are especially suitable for thin film batteries and 4",5",6" crystalline silicon panels.

2:environmental protection, recyclable: photovoltaic fuse fully consider the photovoltaic panel system operation and environmental impact.

3:1000Vdc capacity: photovoltaic fuse is suitable for typical photovoltaic panel system, operating conditions can reach 1000Vdc, fuse reaction time is less than 1ms.

4:10×38mm international standard specifications: suitable for a variety of different current ranges, there are standard metal rings, bolts and multi-purpose circuit board mounting methods to choose from.

Product selection



10X38 1000VDC photovoltaic fuse

Product model	Description	Function class	Breaking Capacity(kA)
WPV-FU2A10	2A 10x38 1000vDC Photovoltaic Fuse	gPV	20
WPV-FU4A10	4A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU6A10	6A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU8A10	8A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU10A10	10A 10×38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU12A10	12A 10×38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU15A10	15A 10×38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU16A10	16A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU20A10	20A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU25A10	25A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU30A10	30A 10x38 1000VDC Photovoltaic Fuse	gPV	20
WPV-FU32A10	32A 10x38 1000VDC Photovoltaic Fuse	gPV	20

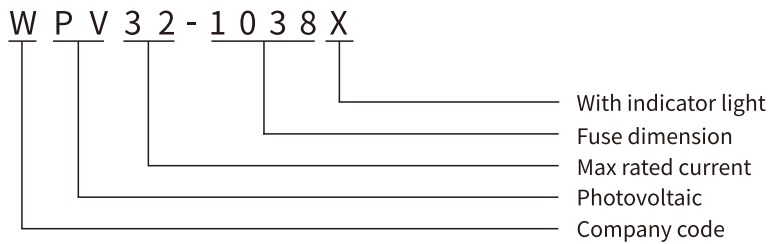
10X85 1500VDC photovoltaic fuse

Product model	Description	Function class	Breaking Capacity(kA)
WPV-FU2A15	2A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU4A15	4A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU6A15	6A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU8A15	8A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU10A15	10A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU12A15	12A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU16A15	16A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU20A15	20A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU25A15	25A 10x85 1500VDC Photovoltaic Fuse	gPV	20
WPV-FU32A15	32A 10x85 1500VDC Photovoltaic Fuse	gPV	20

Photovoltaic Fuse Holder



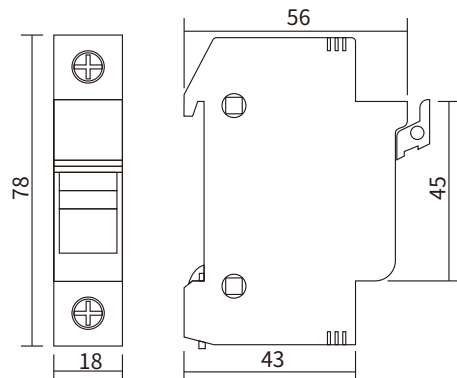
Product model meaning



Product characteristics

- Rated Voltage:DC1000V
- Rated Current:32A
- Standard:IEC/EN60269-3,BS88-3

Product selection

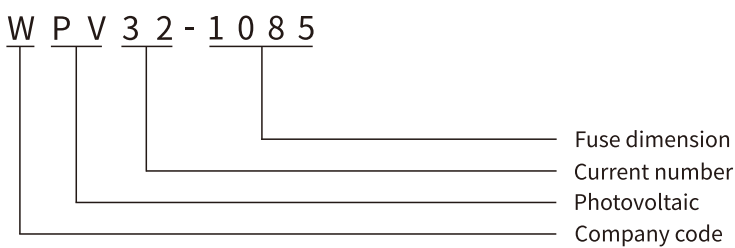


Product model	Description	Dimension	Maximum rated current	Function class
WPV32-1038X	32A 1000VDC Photovoltaic Fuse Holder with light Without Fuse	10X38	32A	gPV

Photovoltaic Fuse Base



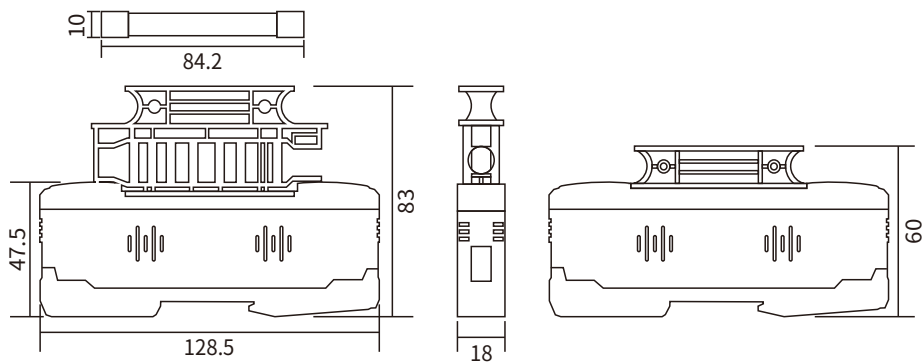
Product model meaning



Product characteristics

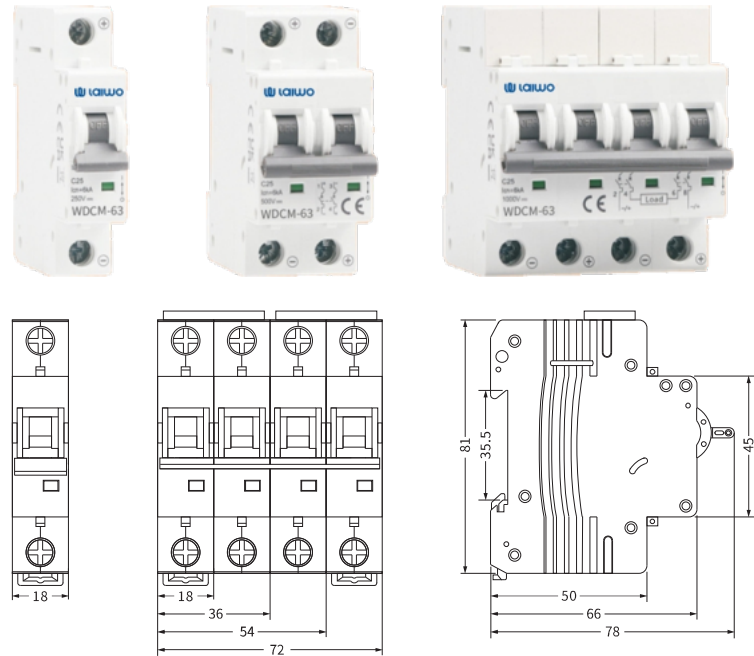
- Rated Voltage:DC1500V
- Rated Current:32A
- Standard:IEC/EN60269-3,BS88-3

Product selection

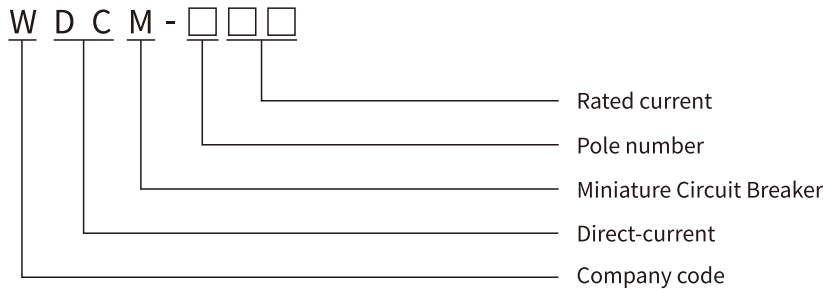


Product model	Description	Dimension	Maximum rated current	Function class
WPV32-1085	32A 1500VDC Photovoltaic Fuse Holder Without Fuse	10X85	32A	gPV

DC MCB WDCM-63



Product model meaning



Product characteristics

- Protection: Overcurrent and short circuit
- No. of poles: 1P, 2P, 4P
- Rated currents I_n : 1, 2, 3, 4, 5, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63A
- Rated voltage U_e : 1P(250VDC), 2P(500VDC), 4P(1000VDC)
- Rated impulse withstand voltage (1.5/50) U_{imp} : 4,000V
- Dielectric test voltage at Ind. Freq. for 1 min: 3kV
- Thermal release characteristic: $(1.05-1.30) \times I_n$
- Magnetic release characteristic: $10I_n \pm 20\%$
- Max. terminal size for cable: 25mm²
- Terminal connection type: Cable/Pin-type busbar/Fork-type busbar
- Type of trip: Thermo-magnetic
- Rated breaking capacity: 6,000A
- Electrical life: 4,000 Cycles
- Mechanical life: 10,000 Cycles
- Protection degree: IP20
- Ambient temperature: -5°C to +40°C Max. 95% humidity
- Max. tightening torque: 2.5N.m
- Standard: IEC/EN60947-2

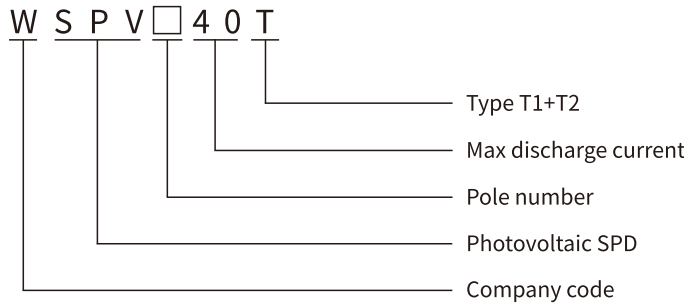
Product selection

Product model	Description	Box Qty
WDCM106-163	1Pole 6Amps~63Amps DC Curve 6KA MCB	120
WDCM206-263	2Pole 6Amps~63Amps DC Curve 6KA MCB	60
WDCM406-463	4Pole 6Amps~63Amps DC Curve 6KA MCB	30

DC Surge Protection Device



Product model meaning

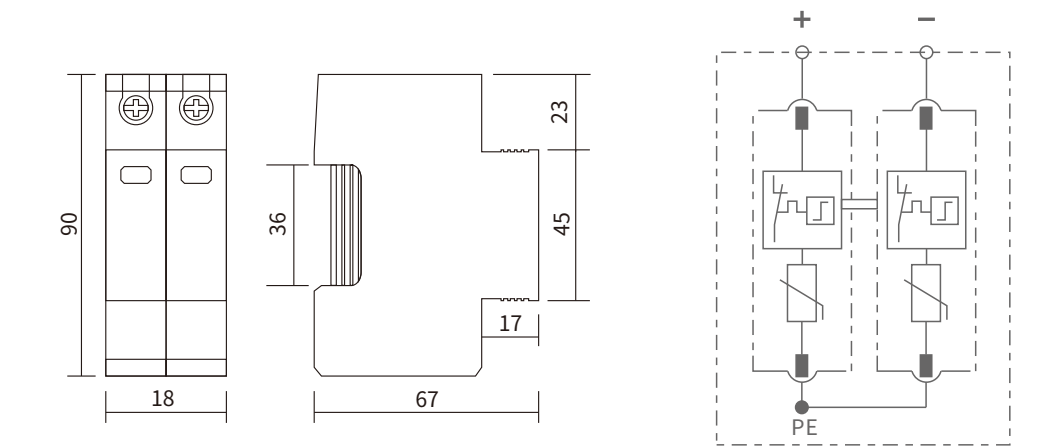


Product characteristics

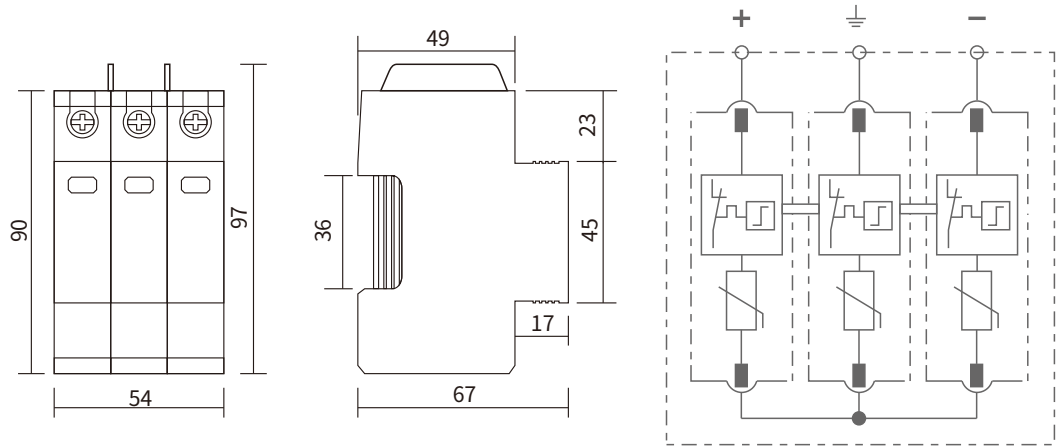
Developed in line with recent advancements, the DC SPD 1000V series of surge arresters are designed to have a continuous maximum operating voltage of 1000V. The surge arresters are packed with high-pressure sensors to detect failures and are made from high-quality materials that prevent damage from weather. They comply with BS EN61643-31.

- Open Voltage (U_{oc} Max) : 600VDC, 1000VDC, 1500VDC
- Type: Type1+2
- Lightning pulse current (I_{imp}): 12.5kA
- Max Continuous Operational Voltage (U_c) : 1300VDC
- Nominal discharge current (I_n): 20kA
- Maximum discharge current (I_{max}): 40kA
- Voltage protection level (U_p): $\leq 4.0kV$
- Protection degree: IP20
- Ambient Temperature: -40°C~+80°C
- Number of Poles: 2Poles, 3Poles
- Optional Remote Signalling

Product selection



WSPV240T



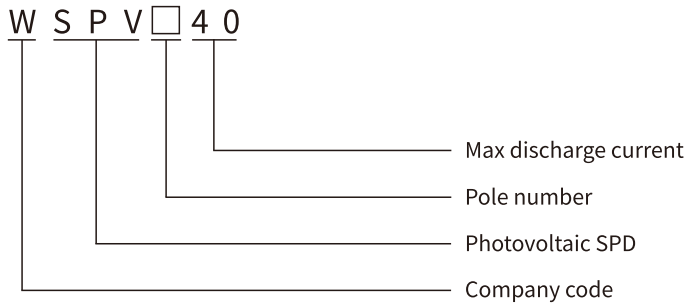
WSPV340T

Product model	Description	Box Qty
WSPV240T	2Pole 20KA/40KA Type1+2 DC Surge Protection Device Up To 1000V	48
WSPV340T	3Pole 20KA/40KA Type1+2 DC Surge Protection Device Up To 1500V	32

DC Surge Protection Device



Product model meaning

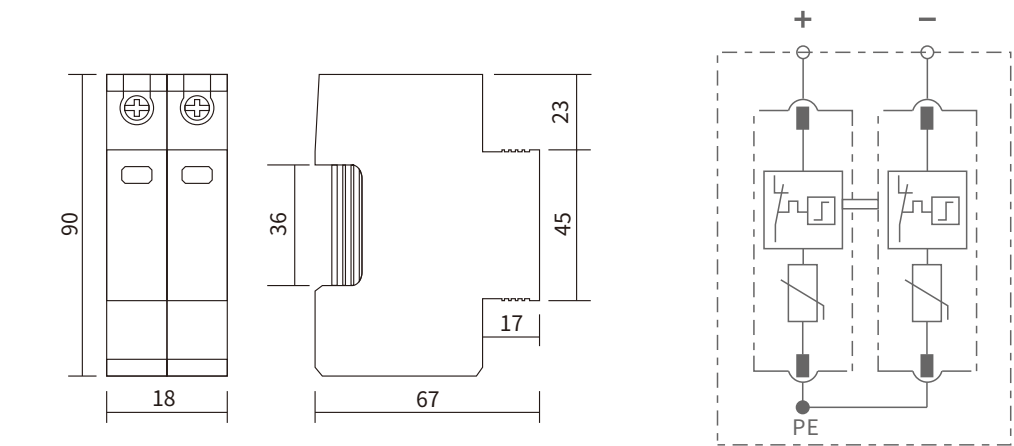


Product characteristics

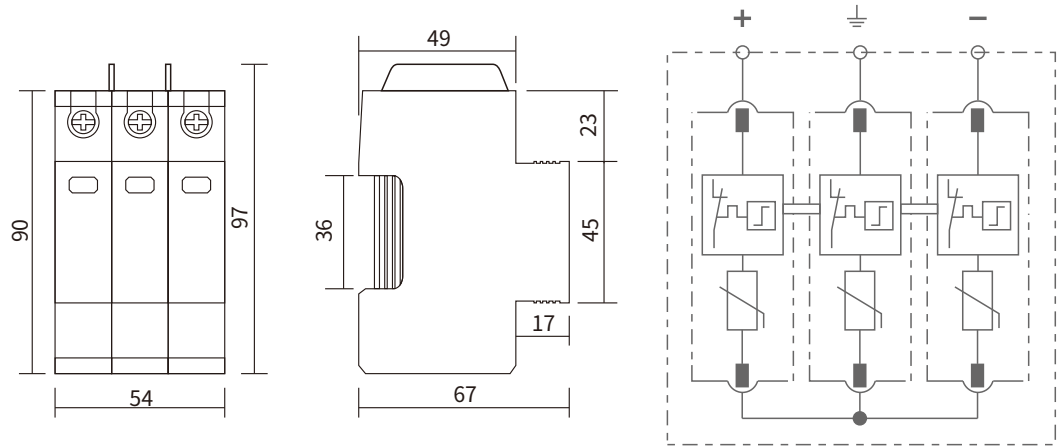
Developed in line with recent advancements, the DC SPD 1000V series of surge arresters are designed to have a continuous maximum operating voltage of 1000V. The surge arresters are packed with high-pressure sensors to detect failures and are made from high-quality materials that prevent damage from weather .They comply with BS EN61643-31.

- Open Voltage (Uoc Max) :600VDC,1000VDC,1500VDC
- Type:Type 2
- Lightning pulse current (Iimp):12.5kA
- Max Continuous Operational Voltage (Uc) :1300VDC
- Nominal discharge current (In):20kA
- Maximum discharge current(Imax):40kA
- Voltage protection level (Up): ≤4.0kV
- Protection degree:IP20
- Ambient Temperature:-40°C~+80°C
- Number of Poles:2Poles,3Poles
- Optional Remote Signalling

Product selection



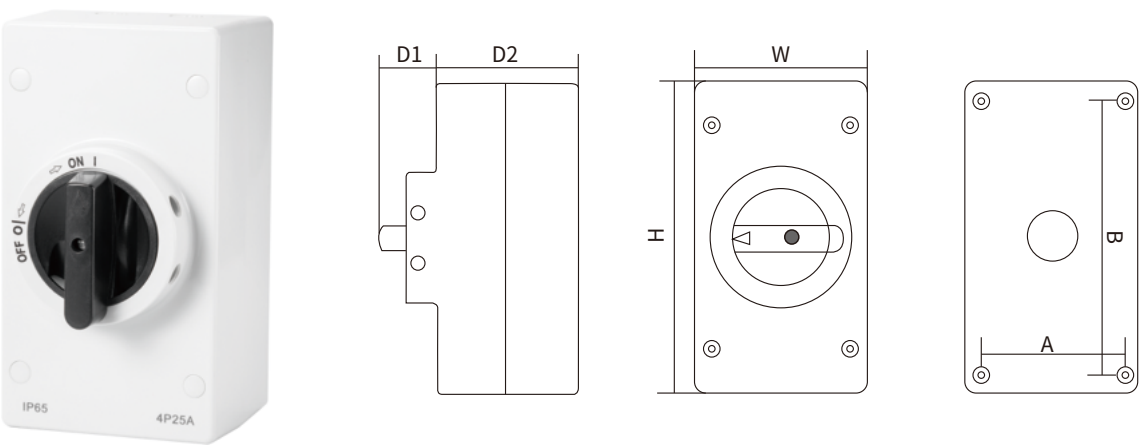
WSPV240



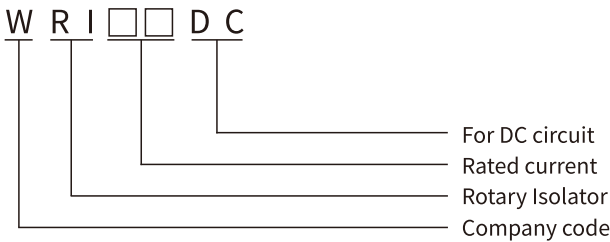
WSPV340

Product model	Description	Box Qty
WSPV240	2Pole 20KA/40KA Type 2 DC Surge Protection Device Up To 1000V	48
WSPV340	3Pole 20KA/40KA Type 2 DC Surge Protection Device Up To 1500V	32

DC Rotary Isolator



Product model meaning



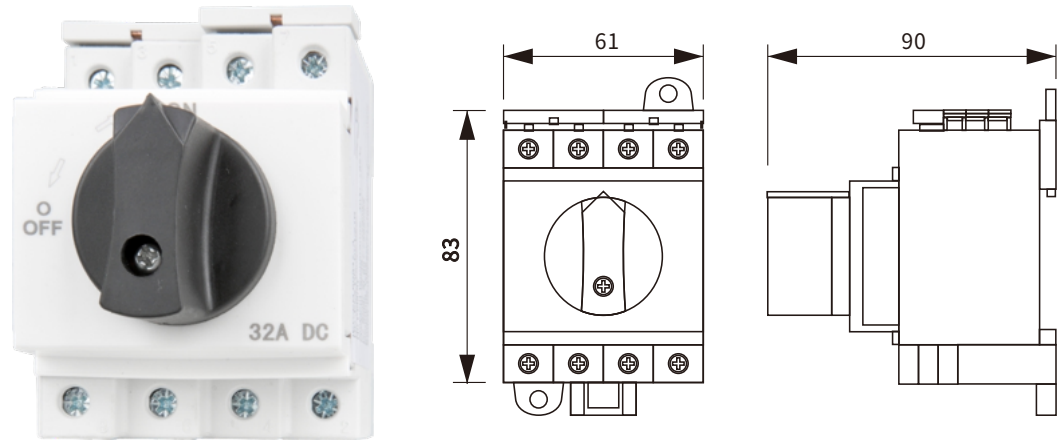
Product characteristics

- The DC rotary isolator switch range is manufactured from tough, durable thermoplastic. all rated for installation and use as switch-disconnectors and all with options allowing for “lockable off” operation.
- IP Rating Ip65
 - Tough durable thermoplastic construction
 - Interlock front cover can only be removed when in the OFF position
 - Manufactured to BS EN 60947-3
 - Operating Voltage: 600V/1000V DC
 - Cable entry knockout on enclosures

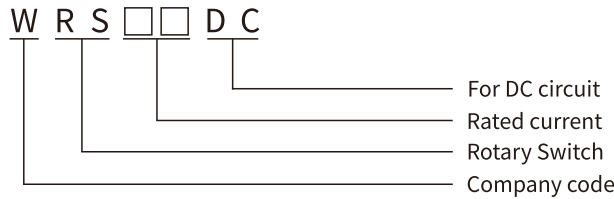
Product selection

Product model	Description	Box Qty	W	H	D1	D2	A	B
WRI16DC	4 Pole 16A DC Rotary Isolator	20	100	180	114	81	84	158
WRI20DC	4 Pole 20A DC Rotary Isolator	20	100	180	114	81	84	158
WRI25DC	4 Pole 25A DC Rotary Isolator	20	100	180	114	81	84	158
WRI32DC	4 Pole 32A DC Rotary Isolator	20	100	180	114	81	84	158

DC Rotary Isolator Switch



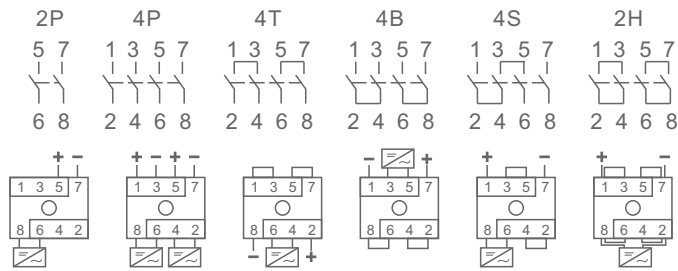
Product model meaning



Product characteristics

- IEC / EN 60947-3
- DC -PV2 DC -PV1/21B
- $U_i=1200V$ $U_{imp}=8kV$
- Ambient Temperature: $-40^{\circ}C \sim +85^{\circ}C$
- $I_{the\ Solar}$ at $40^{\circ}C=32Amps$
- $I_{the\ Solar}$ at $60^{\circ}C=29Amps$
- Mounting Type
- Switch body :IP20

Product selection

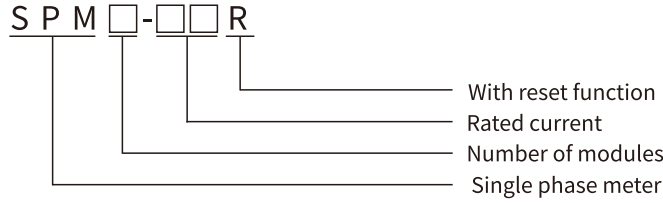


Product model	Description	Box Qty
WRS16DC	4Pole 16A Dc Rotary Isolator Switch	40
WRS20DC	4Pole 20A Dc Rotary Isolator Switch	40
WRS25DC	4Pole 25A Dc Rotary Isolator Switch	40
WRS32DC	4Pole 32A Dc Rotary Isolator Switch	40

SPM Meter



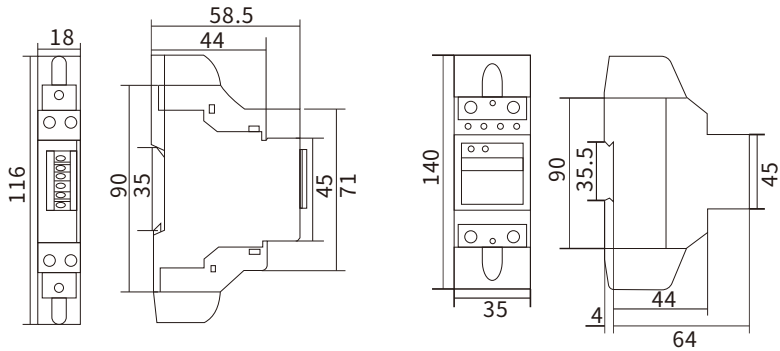
Product model meaning



Product characteristics

- 35mm standard DIN rail installation, complying with standard DIN EN50022.
- Single pole width (Modules 18mm), complying with standard DIN43880.
- Standard configuration 6+1 digits display(999999.1kWh) by step and machinery counter, May select 5+10 digits display (99999.1kWh).
- Standard configuration pulse output with no power complying with standard EC62053-31 and DIN 43864.
- Communication protocol: DL/T645-1997, DL/T645-2007, Modbus RTU (optional).
- Resettable.

Product selection

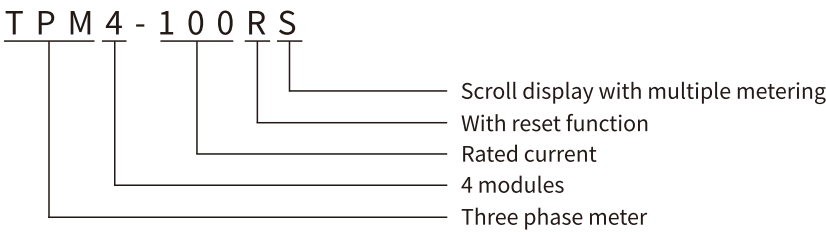


Product model	Description	Box Qty
SPM1-32	Single phase 1 module 32A	100
SPM1-32R	Single phase 1 module 32A resettable	100
SPM2-80R	Single phase 2 modules 80A resettable	80

TPM Meter



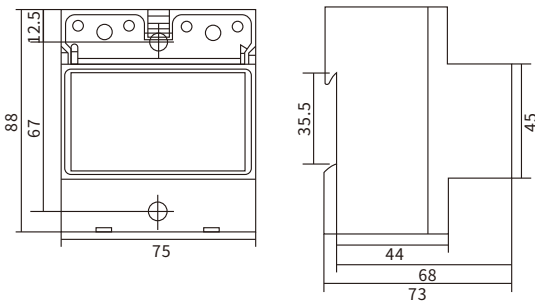
Product model meaning



Product characteristics

- Optional 35mm DIN rail or plate front mounting.
- Optional infrared and Rs485 interface data communication.
- Passive pulse output, in line with din 43864 standard.
- Communication protocol: DL/T645-1997,DL/T645-2007,Modbus RTU (optional).
- It can display the total electricity, positive phase electricity, reverse phase electricity and two-phase metering.
- It can display total power, positive phase power and reverse phase power.
- The total power, positive phase power and reverse phase power used each time can be reset and cleared, and the total power remains unchanged.

Product selection

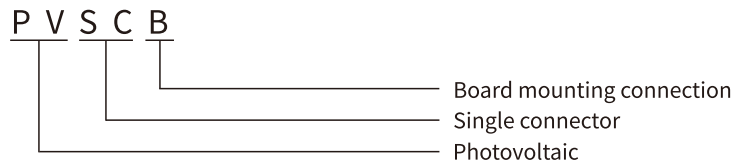


Product model	Description	Box Qty
TPM4-100	Three phase 4 modules 100A	40
TPM4-100R	Three phase 4 modules 100A resettable	40
TPM4-100RS	Three phase 4 modules 100A resettable scroll display	40

Photovoltaic Gland Connector



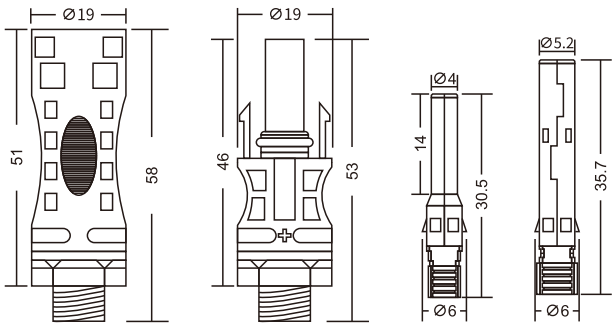
Product model meaning



Product characteristics

- Rated voltage: 1500V DC.
- Rated current: 30A.
- Test voltage: 6kV(50HZ,1min).
- Ambient temperature range: -40°C...+90°C.
- Upper limiting temperature: +105°C.
- IP Rating: IP67.
- Contact resistance of plug connector :0.5mΩ.
- Safety Class: II.
- Insulation material: PC/PPO.
- Corrosion test grade: IEC 60068-2-52.

Product selection

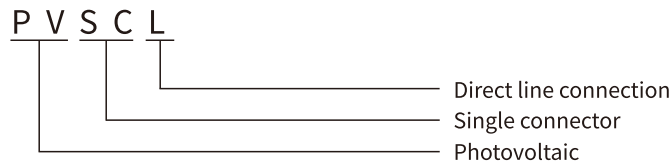


Product model	Description	Box Qty
PV-SCB	1500V Solar photovoltaic Connector	1000

Photovoltaic Cable Connector



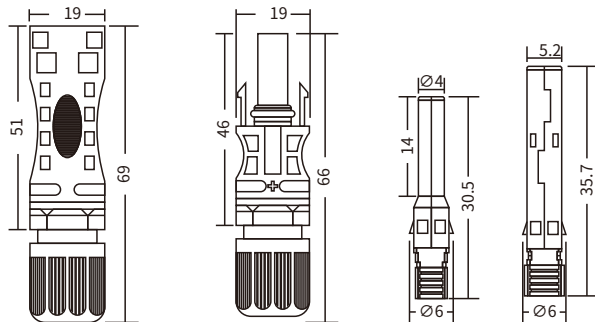
Product model meaning



Product characteristics

- Rated voltage: 1500V DC.
- Rated current: $\leq 35A$.
- Test voltage: 6kV(50HZ,1min).
- Ambient temperature range: -40°C...+90°C.
- Upper limiting temperature: +105°C.
- IP Rating: IP67.
- Contact resistance of plug connector: 0.5mΩ.
- Safety Class: II.
- Insulation material: PC/PPO.
- Corrosion test grade: IEC 60068-2-52.

Product selection

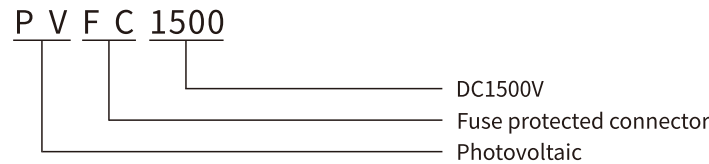


Product model	Description	Box Qty
PV-SCL	1500V Solar photovoltaic Connector	500

Fuse Connector



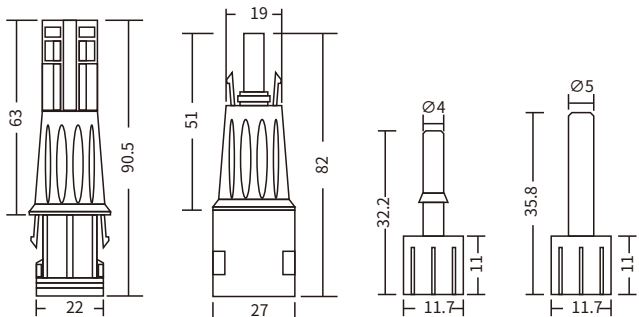
Product model meaning



Product characteristics

- Rated voltage: 1500V DC.
- Suitable fuse: $\leq 30A$, 10X85 Fuse.
- Ambient temperature range: -40°C...+85°C.
- IP Rating: IP67.
- Contact material: Tin plated copper.
- Insulation material: PPO.
- Corrosion test Grade: IEC 62852.

Product selection

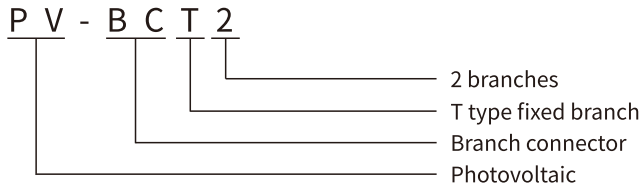


Product model	Description	Box Qty
PV-FC1500	1500V fuse connector without fuse	500

Type -T Branch Connector



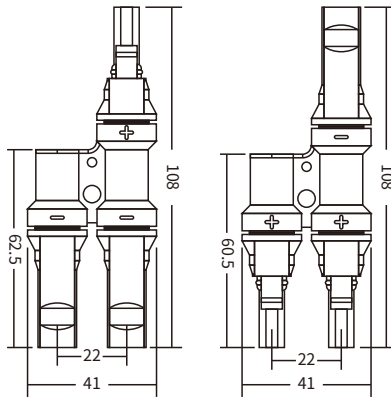
Product model meaning



Product characteristics

- Insulation Material: PPO.
- Contact Material: Copper,Tin plated.
- Suitable Current:30A.
- Rated Voltage:1000V.
- Test Voltage:6KV.
- Contact Resistance:<0.5mΩ.
- IP Rating:IP67.
- Ambient Temperature Range:-40°C~+85°C.
- Pin Dimensions:φ4mm.

Product selection



Product model	Description	Box Qty
PV-BCT2	1000V Type-T Branch Connector,Two branches	200

Type -T Branch Connector



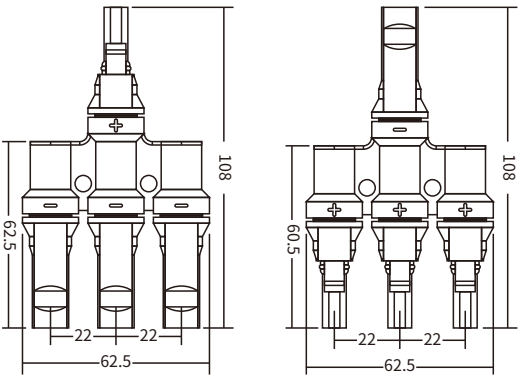
Product model meaning



Product characteristics

- Insulation Material: PPO.
- Contact Material: Copper,Tin plated.
- Suitable Current:30A.
- Rated Voltage:1000V.
- Test Voltage:6KV.
- Contact Resistance:<0.5mΩ.
- IP Rating:IP67.
- Ambient Temperature Range:-40°C~+85°C.
- Safety Class: II .
- Pin Dimensions:φ4mm.

Product selection

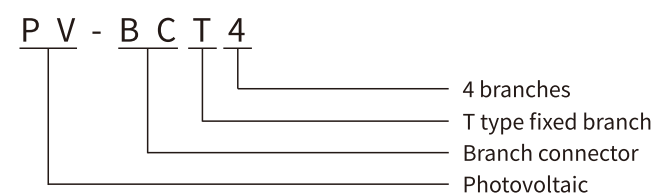


Product model	Description	Box Qty
PV-BCT3	1000V Type-T Branch Connector,Three branches	150

Type -T Branch Connector



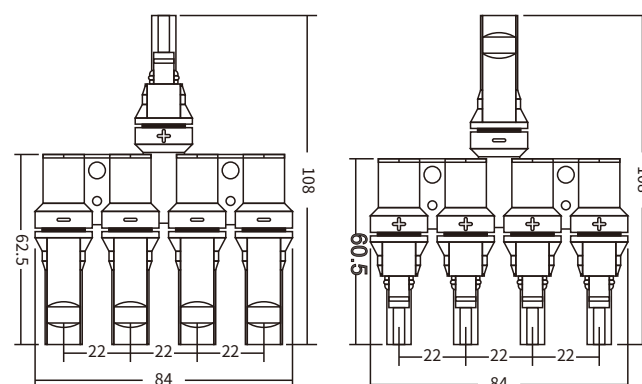
Product model meaning



Product characteristics

- Insulation Material: PPO.
- Contact Material: Copper,Tin plated.
- Suitable Current:30A.
- Rated Voltage:1000V.
- Test Voltage:6KV.
- Contact Resistance:<0.5mΩ.
- IP Rating:IP67.
- Ambient Temperature Range:-40°C~+85°C.
- Safety Class: II.
- Pin Dimensions:φ4mm.

Product selection

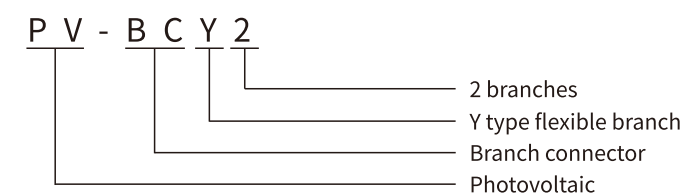


Product model	Description	Box Qty
PV-BCT4	1000V Type-T Branch Connector,Four branches	100

Type -Y Photovoltaic Branch Connector



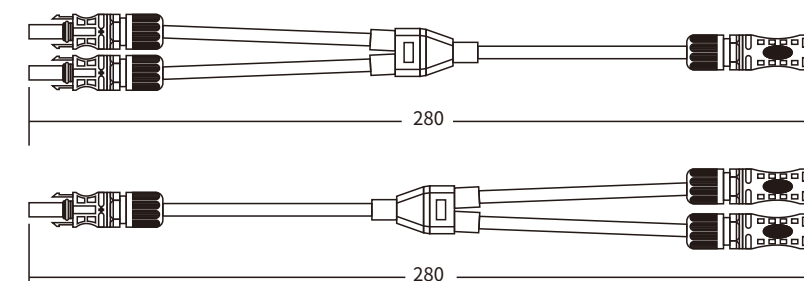
Product model meaning



Product characteristics

- Connector system:φ4mm.
- Rated voltage:1500VDC.
- Rated current:30A.
- Test voltage:6kV(50HZ,1min).
- Ambient temperature range:-40°C...+90°C.
- Upper limiting temperature:+105°C.
- IP Rating:IP67.
- Contact resistance of plug connector:0.5mΩ.
- Safety Class: II.
- Insulation material:PC/PA.
- Corrosion test grade:IEC 60068-2-52.

Product selection

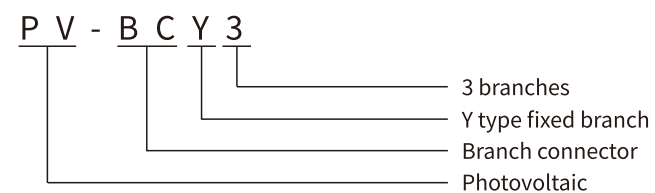


Product model	Description	Box Qty
PV-BCY2	1500VDC Type-Y Branch Connector,Two Branches	100

Type -Y Photovoltaic Branch Connector



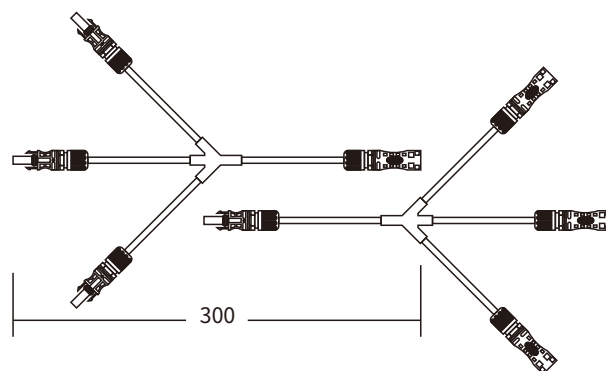
Product model meaning



Product characteristics

- Connector system: $\phi 4\text{mm}$.
- Rated voltage: 1500VDC.
- Rated current: 30A.
- Test voltage: 6kV(50HZ, 1min).
- Ambient temperature range: $-40^{\circ}\text{C} \dots +90^{\circ}\text{C}$.
- Upper limiting temperature: $+105^{\circ}\text{C}$.
- IP Rating: IP67.
- Contact resistance of plug connector: $0.5\text{m}\Omega$.
- Safety Class: II.
- Insulation material: PC/PA.
- Corrosion test grade: IEC 60068-2-52.

Product selection

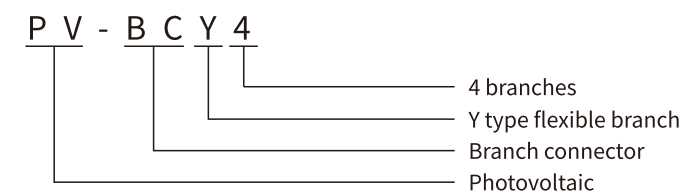


Product model	Description	Box Qty
PV-BCY3	1500VDC Type-Y Branch Connector, Three Branches	50

Type -Y Photovoltaic Branch Connector



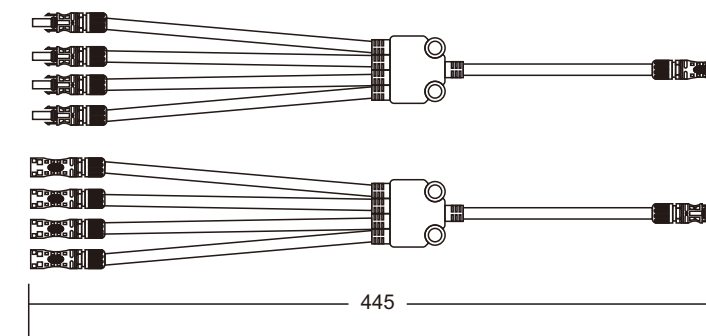
Product model meaning



Product characteristics

- Connector system: $\phi 4\text{mm}$.
- Rated voltage: 1500VDC.
- Rated current: 30A.
- Test voltage: 6kV(50HZ, 1min).
- Ambient temperature range: $-40^{\circ}\text{C} \dots +90^{\circ}\text{C}$.
- Upper limiting temperature: $+105^{\circ}\text{C}$.
- IP Rating: IP67.
- Contact resistance of plug connector: $0.5\text{m}\Omega$.
- Safety Class: II.
- Insulation material: PC/PA.
- Corrosion test grade: IEC 60068-2-52.

Product selection

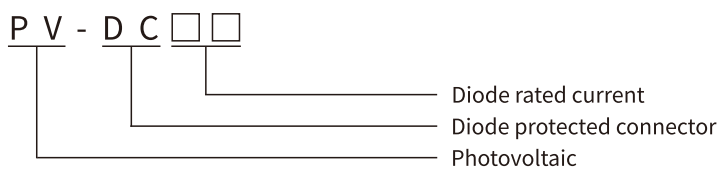


Product model	Description	Box Qty
PV-BCY4	1500VDC Type-Y Branch Connector, Four Branches	40

Diode Connector



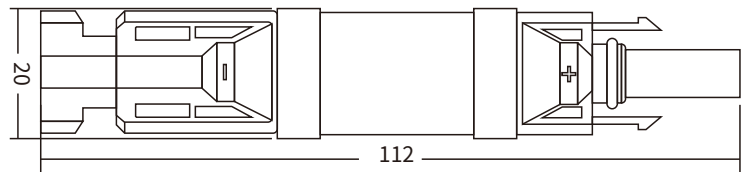
Product model meaning



Product characteristics

- Rated Voltage: 1000V DC.
 - Contact materials: Tin plated copper.
 - Rated Current: 10A/15A/20A.
 - Standard: IEC 62852.
- IP Rating: IP67.
 - Contact Resistance: $\leq 0.5\text{m}\Omega$.
 - Ambient Temperature: $-40^{\circ}\text{C}\sim 85^{\circ}\text{C}$.
 - Insulation Material: PPO.

Product selection



Product model	Description	Box Qty
PV-DC10	10A 1000VDC Diode connector	500
PV-DC15	15A 1000VDC Diode connector	500
PV-DC20	20A 1000VDC Diode connector	500