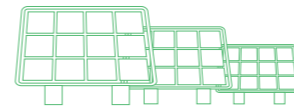


WENZHOU LONGQI NEW ENERGY TECHNOLOGY CO., LTD.

Add: Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province
Fax: 0577-62770833
Mobile: +86 13353398983 / +86 13353319123
E-mail: sales@cnlonq.com
Https://www.cnlonq.com



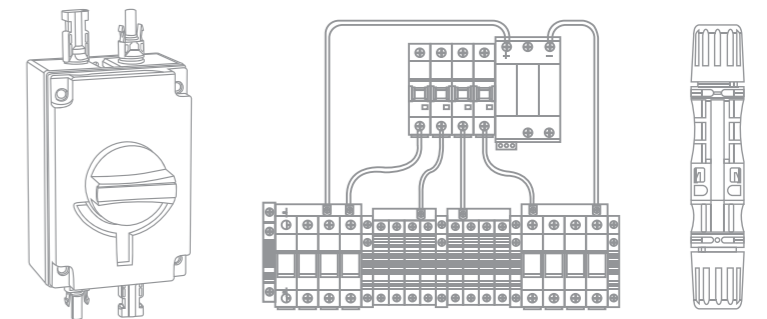
TECHNOLOGY SELECTION MANUAL

NEW *Longqi* ENERGY

TECHNOLOGY SELECTION MANUAL

Quick quality Bright and uniform Low power consumption Green

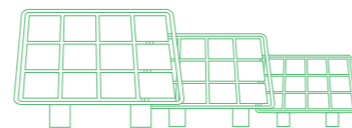
WENZHOU LONGQI NEW ENERGY TECHNOLOGY CO., LTD.



WENZHOU LONGQI NEW ENERGY TECHNOLOGY CO., LTD.



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Longqi

We light up the night sky for the city

We bring green into our lives

We leave a blue sky for the future



 CNLonQ.com

Wenzhou longqi new
Energy technology
Co., Ltd.



CORPORATE *Version*

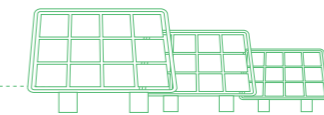
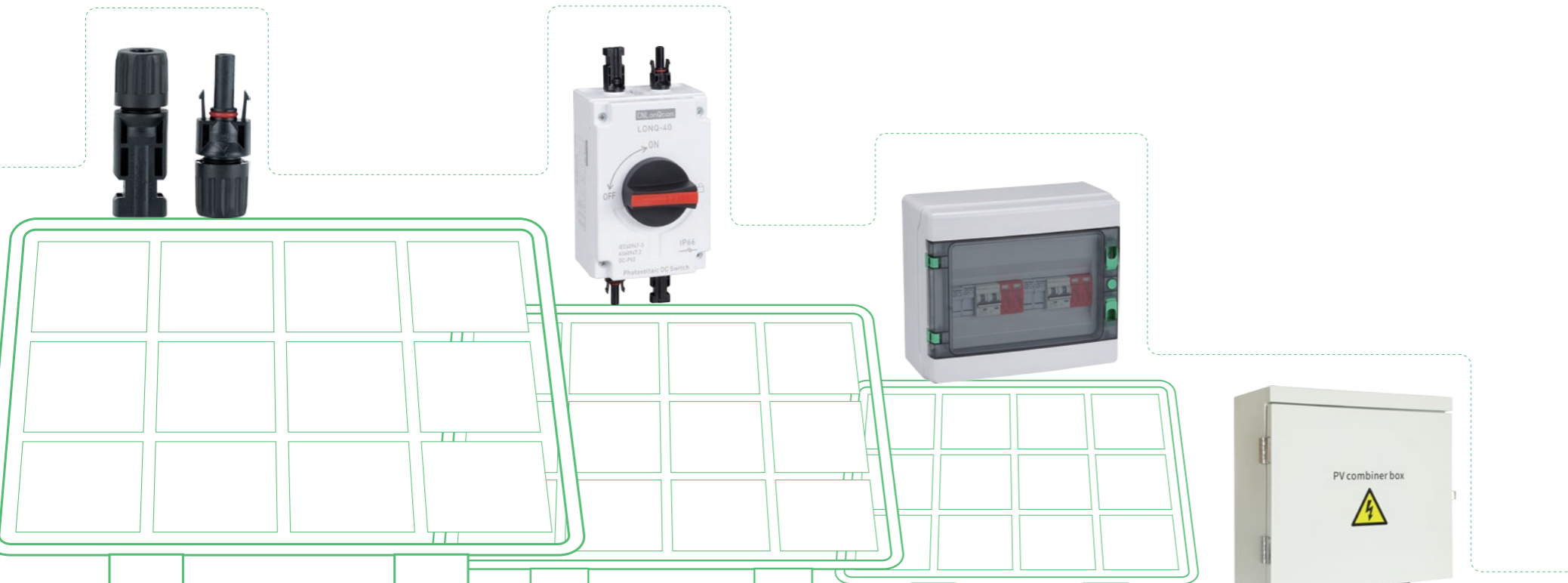
Emphasize customer needs
 At the fastest speed and appropriate price
 Provide high-quality and marketable new products
 Occupy the market
 And provide high-quality service to customers

A small step leads to a thousand miles
 With continuous enthusiasm
 Do every detail well
 Achieve brilliant footprints one by one
 Based on the present and leading the future
 We are full of confidence

ABOUT *Longqi*



Durable quality Bright and uniform Low power consumption Green



Wenzhou Longqi New Energy Technology Co., Ltd. is a professional manufacturer engaged in the research and development, production, sales, and service of photovoltaic DC isolation switches, solar DC connectors, solar DC series boxes, DC circuit breakers, DC surge protectors, DC fuses, conversion switches, and other products. We are located in Upstream Village, Liushi Town, Leqing City, Wenzhou City, Zhejiang Province, with convenient transportation. We are committed to strict quality control and attentive customer service, with experienced staff available to discuss your requirements at any time and ensure complete customer satisfaction.

In recent years, we have also obtained certifications such as CE/ROHS/TUV/CCC. Our products sell well in various provinces and cities in China and are also exported to customers in other countries and regions. We also welcome OEM and ODM orders. Whether you are selecting the current product from our catalog or seeking engineering assistance for your application, you can discuss your procurement requirements with our customer service center.

QUALIFICATION



To ensure the stability and reliability of product quality, we adhere to an international operating system and conduct strict testing and monitoring of our products. Our high standards are the perfect pursuit of the brand, and our many certifications are not only honors, but also the driving force for our progress!



CONTENT



Wenzhou longqi new
Energy technology
Co., Ltd.



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Component series

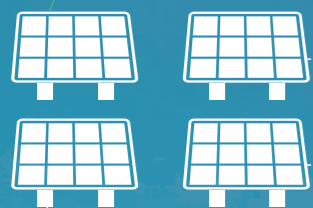
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Solar DC Connector series

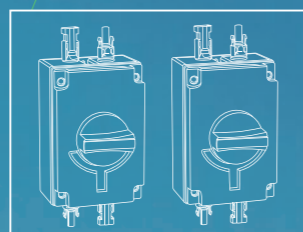
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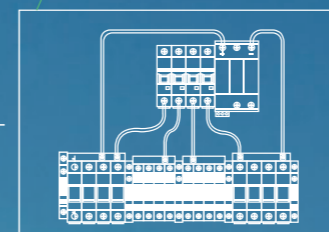
Solar DC Connector



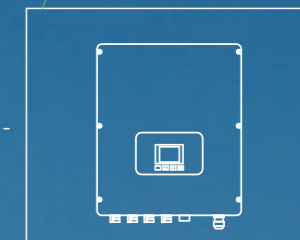
DC Isolated Switch



Solar combiner box



Inverter



LONQ-40

Details: DC Disconnect switch up to 1500V features an IP66 waterproof enclosure with excellent protection level, high-quality plastic material, UV resistance, and options for 2-4 poles, suitable for distribution boxes. The LONQ-40 series DC isolation switch comes with an air valve for improved air circulation and temperature reduction.

- which are suitable for residential or commercial photovoltaic systems ranging from 1 kW to 20 kW, placed between the photovoltaic modules and inverters.
- optional MC4 plugs with adapters or cable sealing glands, ensuring easy installation, operation, connection, and space savings.
- The arc-fault duration is less than 8ms, making the solar system safer.
- Please refer to the product parameter table for detailed specifications.



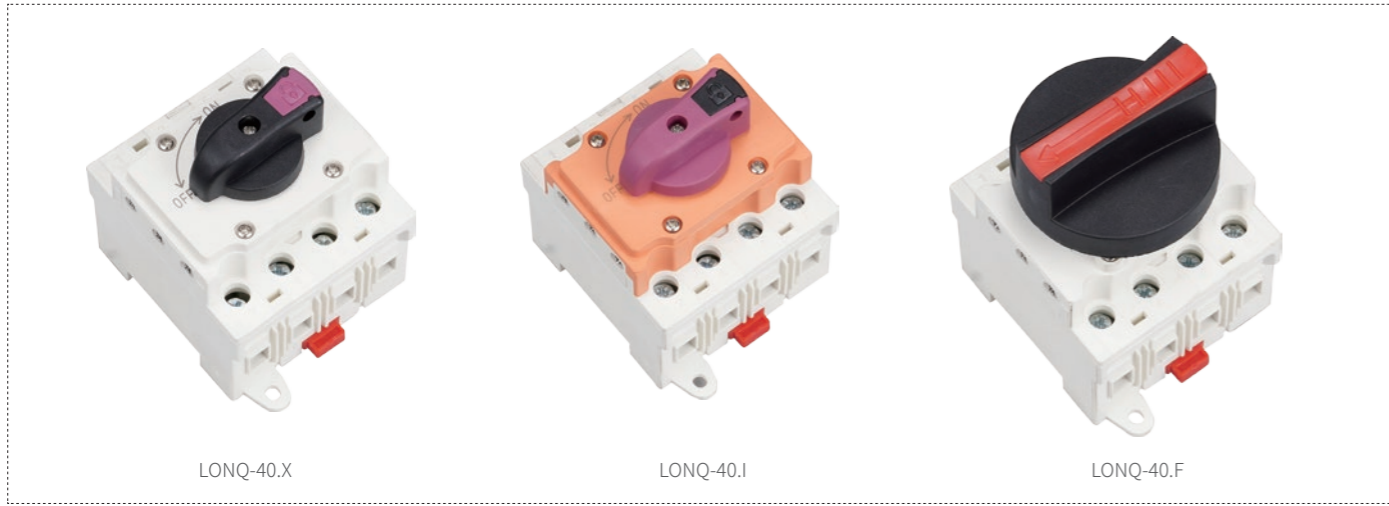
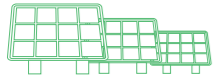
DC Isolated Switch



Technical Data

Testing Complies with AS 60947.3:2018, EN IEC 60947-3 :2021, Utilization Category: DC-PV2

Main Parameters		unit	LONQ-40
Rated insulation voltage	Ui	V	1500
Rated thermal current	Ith	A	32
Rated impulse withstand voltage	Uimp	V	8000
Rated short-circuit making capacity	Icw	A	1000
Maximum cable cross sections (incl. jumper)			
Solid or standard		mm ²	2.5-6
Flexible		mm ²	2.5-6
Flexible (+ multicore cable end)		mm ²	2.5-6
Torque			
Tightening torque terminal screws M4.		Nm	1.2-1.8
Tightening torque shell mounting screws		Nm	1.5-2.0
Tightening torque knob screws		Nm	0.5-0.7
Switching on or off Torque		Nm	0.9-1.3
The wiring Torque on Base		Nm	1.1-1.4
General parameters			
Knob positions			OFF at 9 hr, ON at 12 hr
Mechanical life			10000
Number of DC poles			2 or 4
Operation temperature			-40 to +85
Storage temperature			-40 to +85
Pollution degree		°C	2
Overvoltage category		°C	III
IP rating of shafte and mounting nul			IP66



High Craftsmanship AND High Standards



Small volume



Flame retardant material



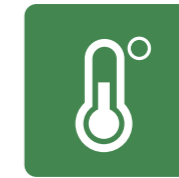
IP66



Flying Fox Short



Complete accessories

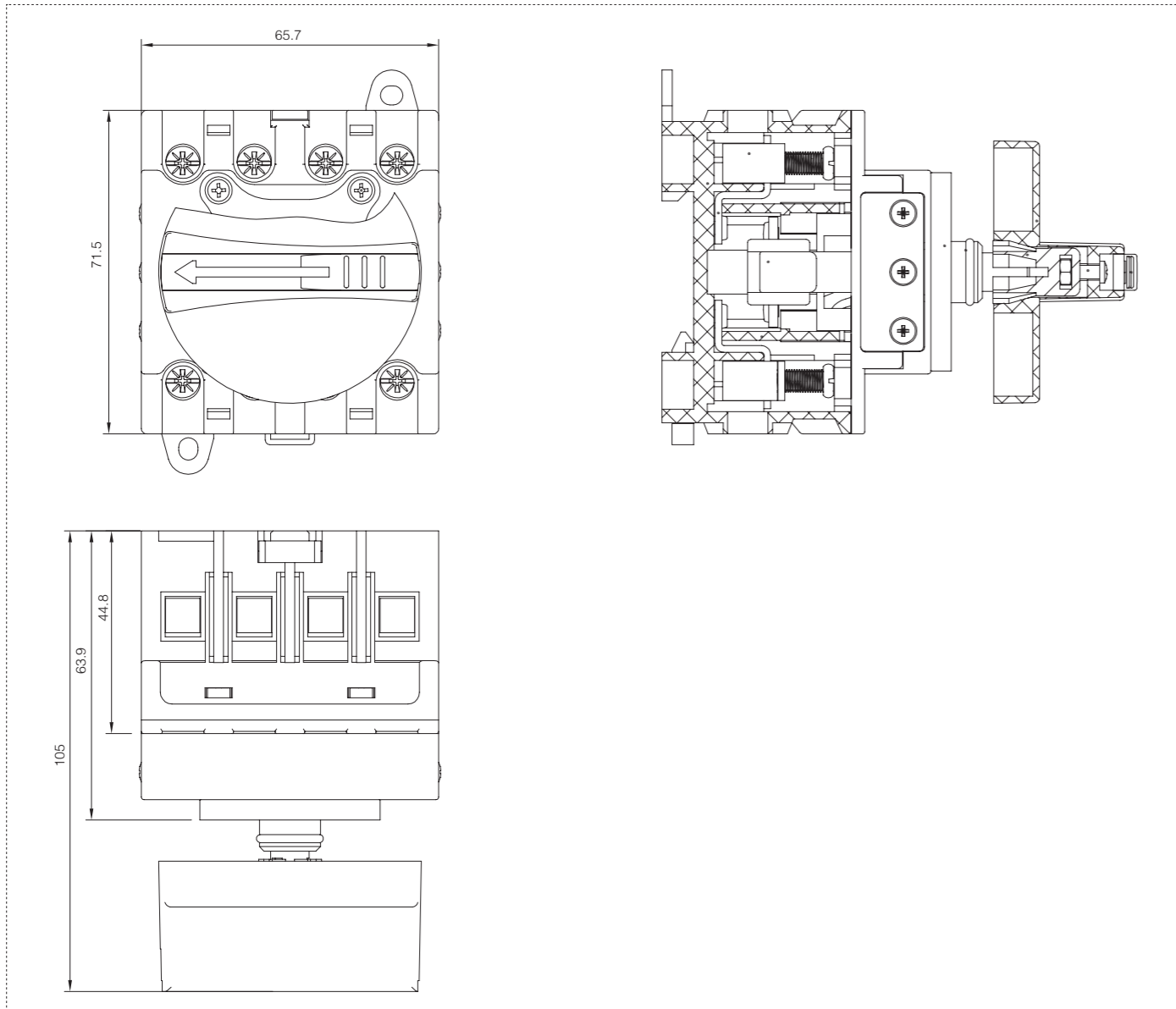


-40°C~+85°C
Ambient temperature range



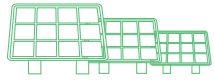
Non-polar design

DIMENSIONAL DRAWING(MM)



Testing Complies with AS 60947.3:2018, EN IEC 60947-3 :2021, Utilization Category: DC-PV2

600V	800V	1000V	1200V	1500V	Pole	No. of Strings	Part Number
PV2	PV2	PV2	PV2	PV2			
32	32	25	16	6	2	1	LONQ-40-2
32	32	25	16	6	4	1	LONQ-40-4
32	32	32	32	23	4	1	LONQ-40-4S
32	32	32	32	23	4	1	LONQ-40-4B
32	32	32	32	23	4	1	LQNQ-40-4T



Switching Configuration

Type	PEDSC100R/120R	Contacts Wiring graph	Switching example
2-Pole	2		
4-Pole	4		
4-Pole with Input and Output on top	4T		
4-Pole with Input and Output bottom	4B		
4-Pole with Input on top Output bottom	4S		

**DC Isolated Switch
LONQ-40**



SPECIFICATIONS

Rated Operating Voltage : DC0-1500V
 Poles: 2P/4P
 Max Current: 32A
 Mechanical Life: 10,000
 times IP Rating: IP66

Connection Type: M12,M20, MC4
 Solar connector Working Temperature: -5 ° C-+60 ° C
 Standard: IEC 60947-3,AS 60947-3
 Operating Temperature: -40°C to +85°C
 Operating Altitude: 2000 Meter

MAIN FUNCTIONS Quickly

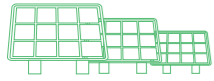
disconnect DC power from your solar array to the charge controller batteries and/or inverter during system installation or any maintenance. It is designed according to IEC60947-1&3 standard photovoltaic DC isolation switch for solar combiner box up to 1500VDC Used to install between the solar panel and the solar charge controller,between the solar panel and the inverter ,between the solar panel and solar panel.

SAFE ISOLATION

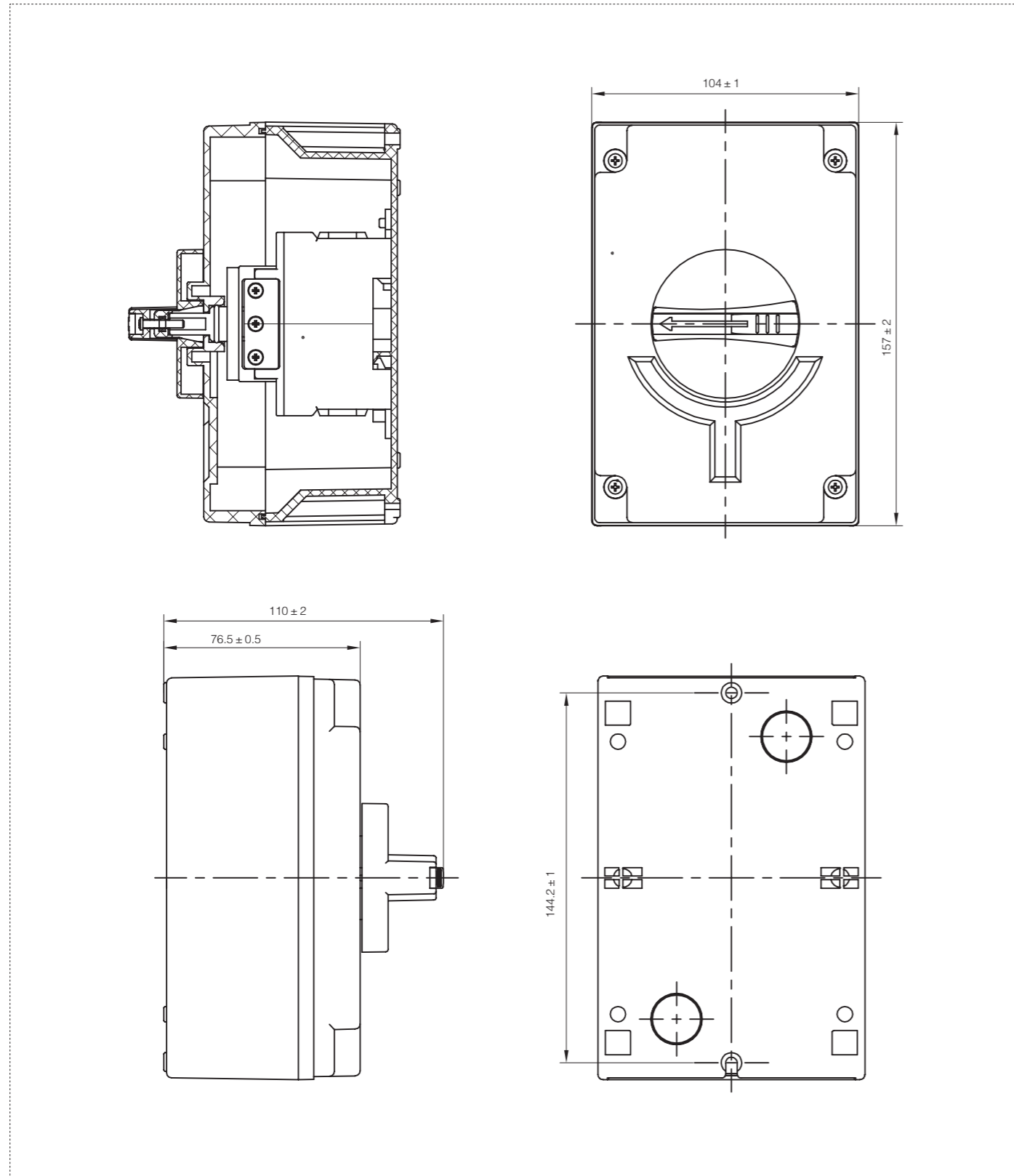
pre-wired DC isolator with MC4 connectors for faster and safer installation. The load is disconnected up to 8 times rated current which is ideal choice for any electrical isolation requirements such as repair, maintenance, inspection, installation, etc HIGH SECURITY This solar disconnect switch provide a Comprehensive Isolation Switch with independent and enclosed form and the padlock make it locks in OFF position and is tamper-proof. Compact design and does not take up too much space. IP 66 waterproof, durable construction excellent weather resistance (-40F-185F) UV resistance UL 746C Suitable for outdoor use Protect your PV DC isolator switch from rain and dust and other weather factors COMPATIBILITY The PV DC isolation switch with solar connector Suitable for solar power system RV, ship and OFF-grid/ON-grid solar system. Specially designed for home solar systems and commercial solar systems.

Product characteristics

Used to Install Between the Solar Panel and the Solar Charge Controller, Between the Solar Panel and the Inverter
 Safe Designed for Home Solar System, Commercial Solar System
 Free System Design and Technical Support Solar Off-Grid System and On-Grid System
 32 A DC Disconnect Switch

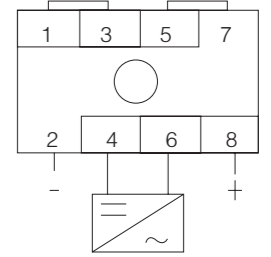
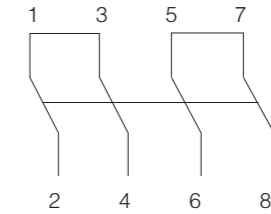


DIMENSIONAL DRAWING(MM)

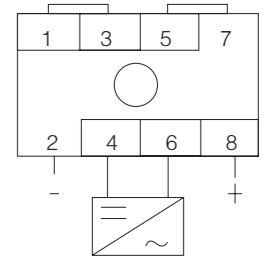
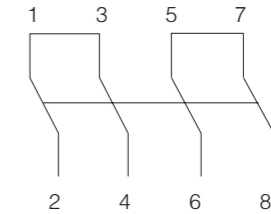


ENCLOSURE DC ISOLATOR

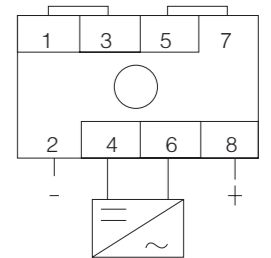
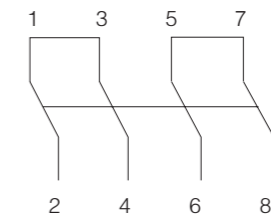
LONQ-40.FM20

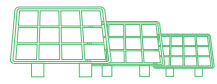


LONQ-40.M12

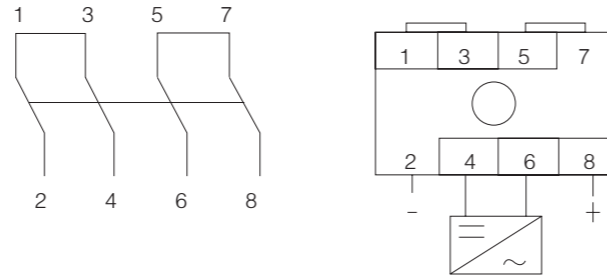


LONQ-40.MC4

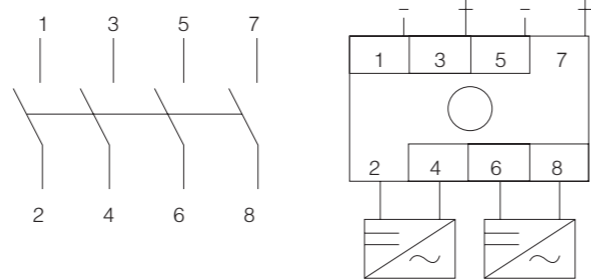




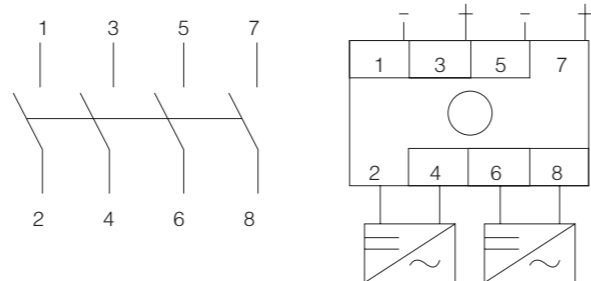
LONQ-40.M20



LONQ-40.2MC4



LONQ-40.2-2

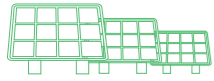


LQX 1/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring. The box body is made of cold rolled steel and other metal materials.
- Flexible
 - configuration Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.



Solar combiner box



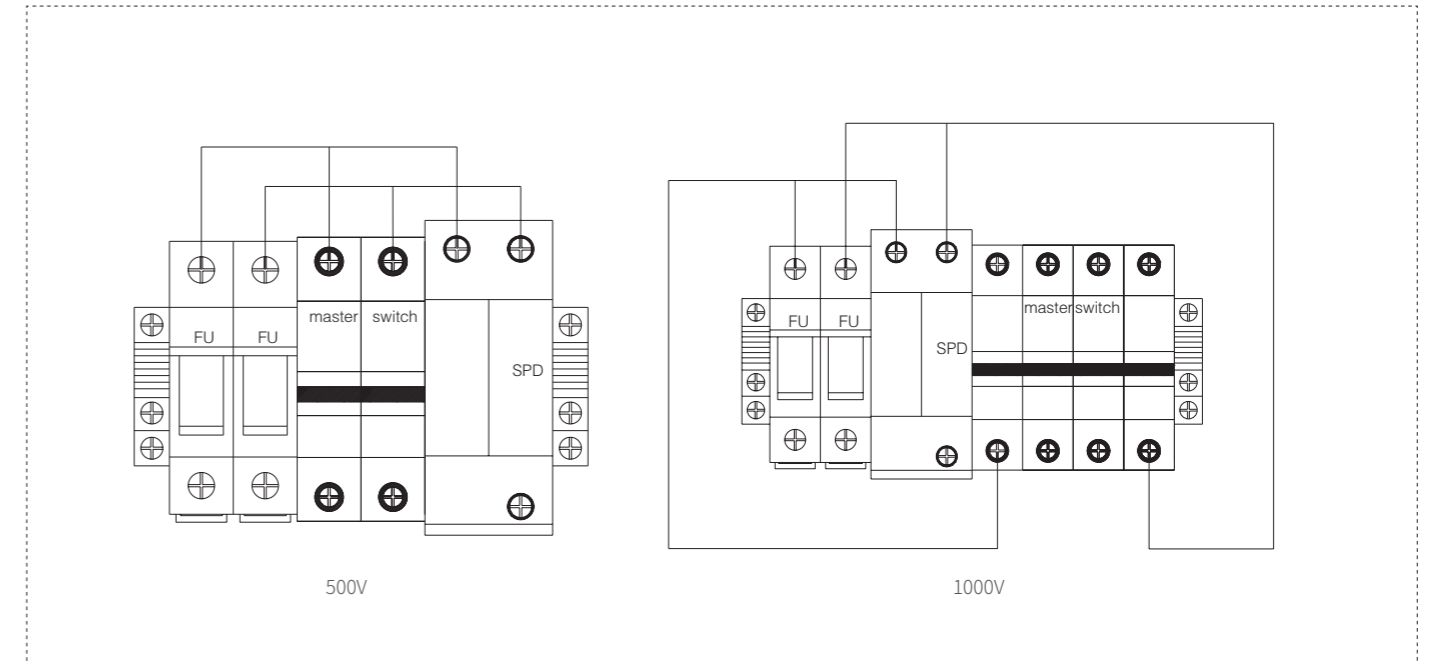
TECHNICAL PARAMETERS

Name	LQX 1/1 DC	
	Electric parameter	
System maximum dc voltage	500	1000
Maximum input current for each string	15A; 20A; 30A	
Maximum input strings	1	
Maximum output switch current	16A/20A/32A	
Number of inverter MPPT	1	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.0kV	3.6kV
Maximum continuous operating voltage U _c	500V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25° C~+55° C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	

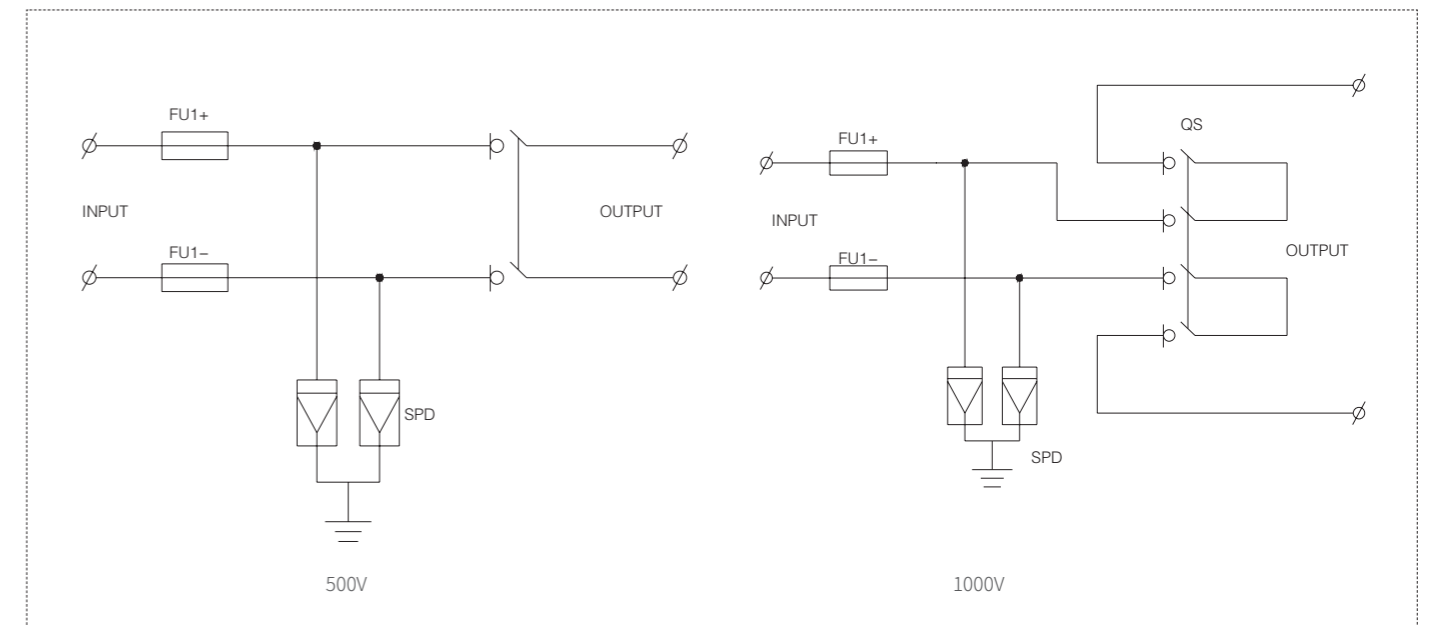
DESCRIPTION

LQX 1/1 DC combiner box is suitable for inverter (MAX input voltage DC500V/DC1000V, 1 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade. Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. Provide users with a safe. It is installed between the solar panels and the solar inverter, designed and customized with the most reliable DC components to provide maximum protection.

SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)



LQX 2/1 DC

- High reliability
With DC FUSE
With DC Surge Protection Device
With DC circuit breaker or DC load isolation switch.
- Strong adaptability
IP65 design, waterproof, anti dust and anti ultraviolet.
Strict test for high and low temperature, used widely.
The simple installation, the simplified system wiring, the convenient wiring. The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.

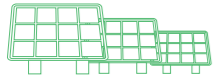


TECHNICAL PARAMETERS

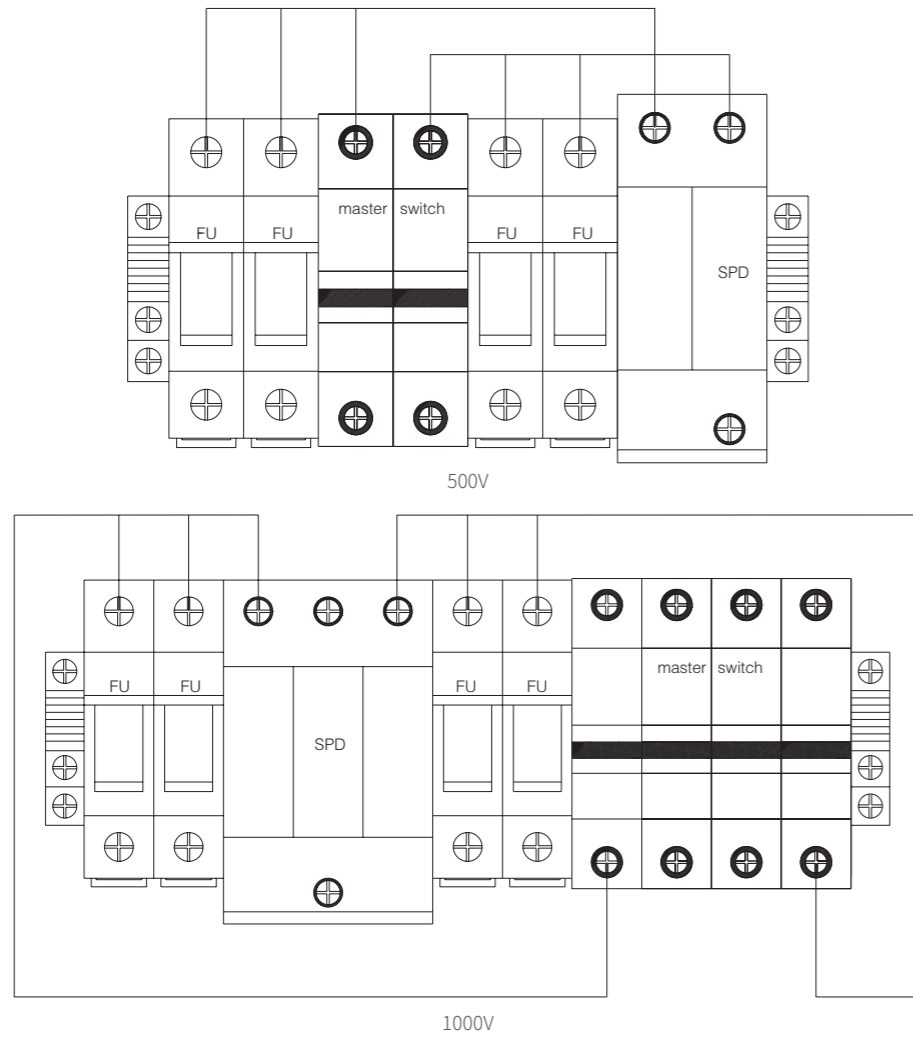
Name	LQX 2/1 DC	
	Electric parameter	
System maximum dc voltage	500	1000
Maximum input current for each string	15A; 20A; 30A	
Maximum input strings	2	
Maximum output switch current	32A/40A/50A/63A	
Number of inverter MPPT	1	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.0kV	3.6kV
Maximum continuous operating voltage U _c	500V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of Temperature	2km	
Permissible relative humidity	0-95%, no condensation	

DESCRIPTION

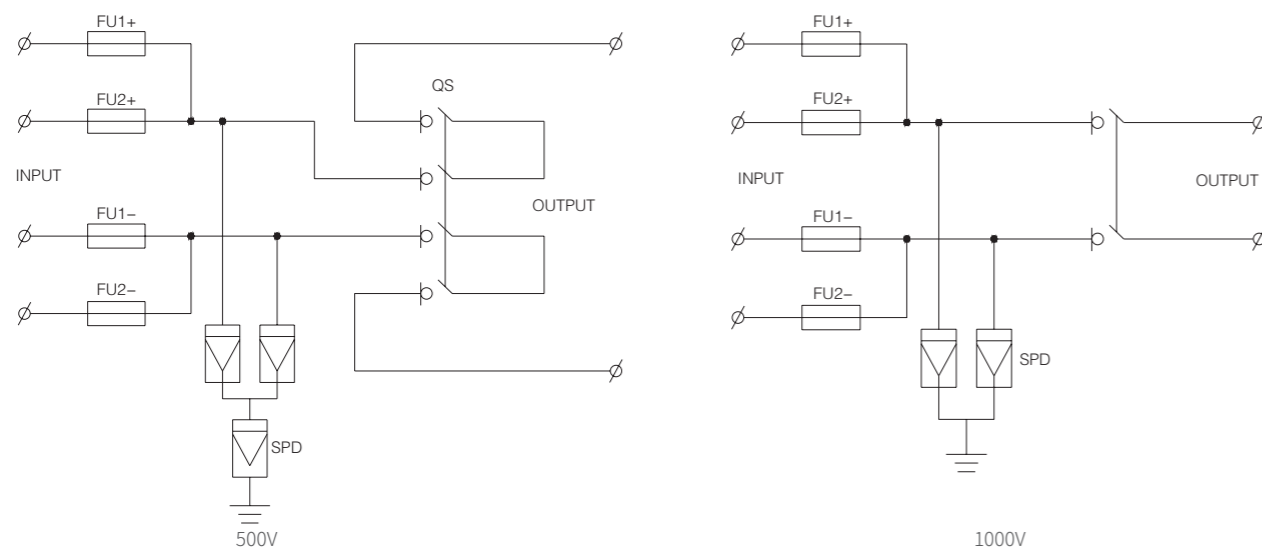
LQX 2/1 DC combiner box is suitable for inverter (MAX input voltage DC500V/DC1000V, 2 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade. Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. It is installed between the solar panels and the solar inverter, designed and customized with the most reliable DC components to provide maximum protection.



SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)

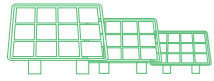


LQX 2/2 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring. The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.



Solar combiner box



TECHNICAL PARAMETERS

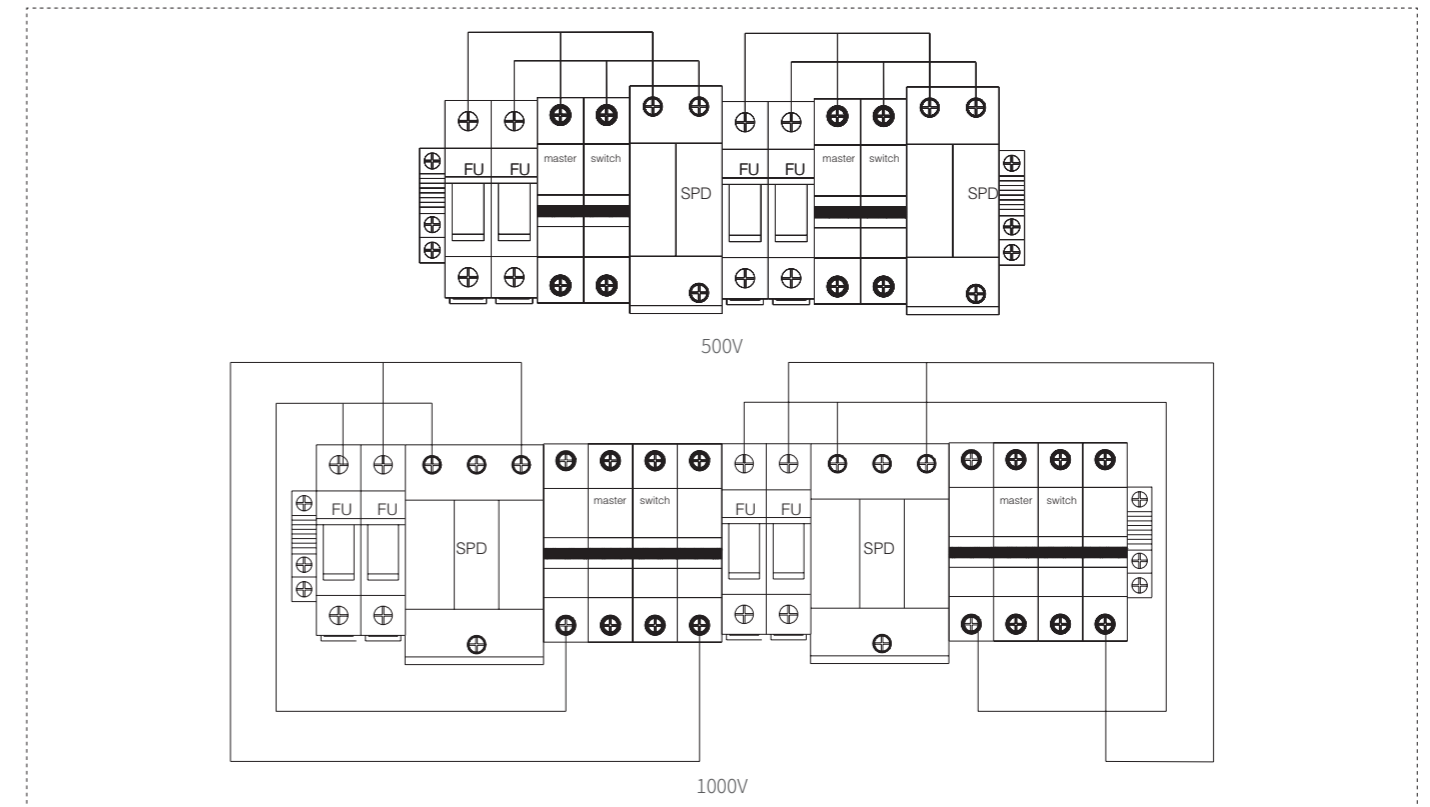
Name	LQX 2/2 DC	
Electric parameter		
System maximum dc voltage	500	1000
Maximum input current for each string	15A/20A/30A	
Maximum input strings	2	
Maximum output switch current	16A/20A/32A	
Number of inverter MPPT	2	
Number of Output strings	2	
Lightning protection		
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.0kV	3.6kV
Maximum continuous operating voltage Uc	500V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
System		
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	

DESCRIPTION

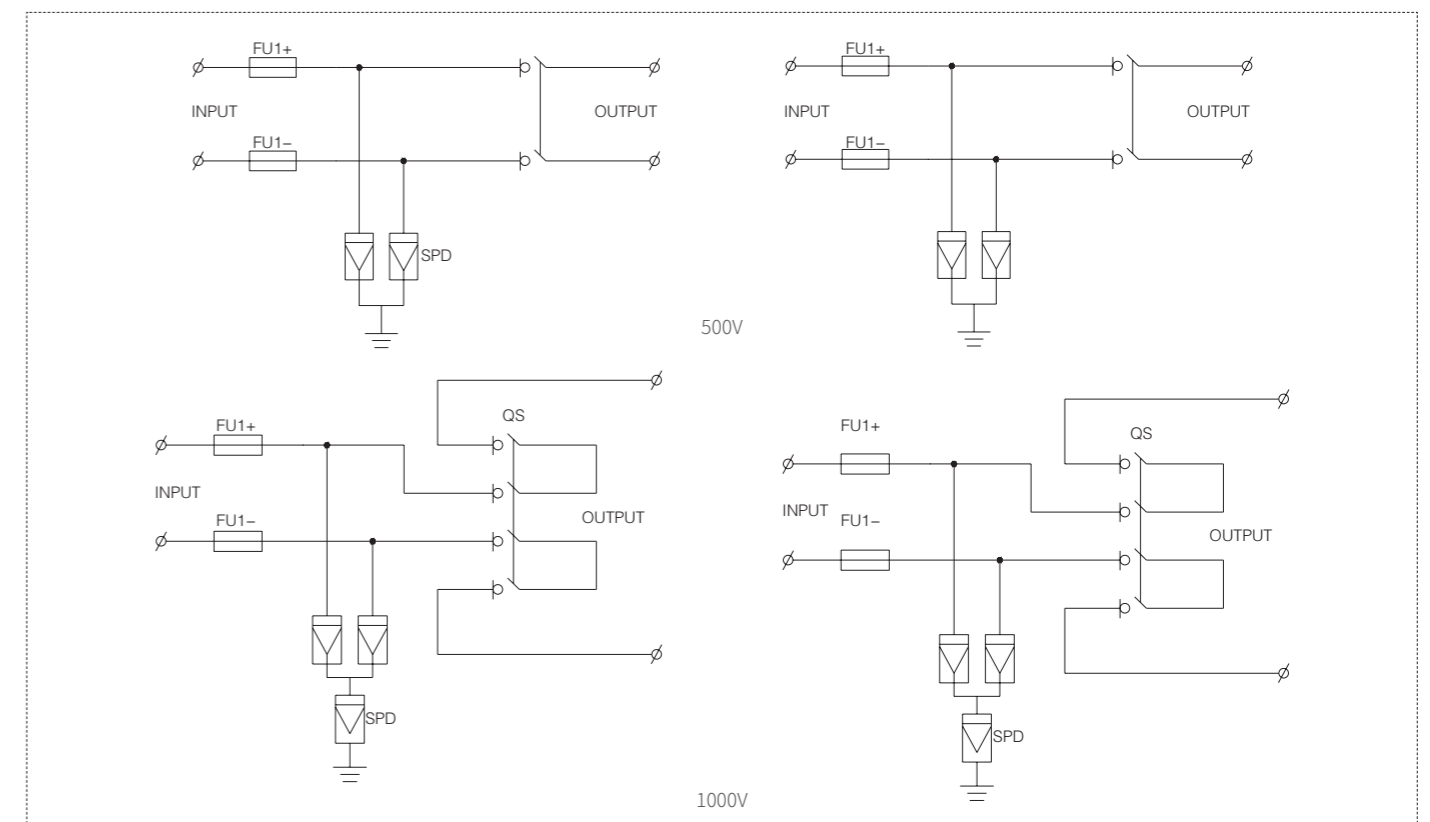
LQX 2/2 DC combiner box is suitable for inverter (MAX input voltage DC500V/DC1000V, 2 PV input channel, 2 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. Provide users with a safe. It is installed between the solar panels and the solar inverter, designed and customized with the most reliable DC components to provide maximum protection.

SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)



LQX 4/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring. The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.

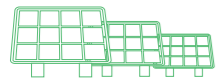


TECHNICAL PARAMETERS

Name	LQX 4/1 DC	
	Electric parameter	
System maximum dc voltage	500	1000
Maximum input current for each string	15A/20A	
Maximum input strings	4	
Maximum output switch current	63A/80A/100A	
Number of inverter MPPT	1	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.0kV	3.6kV
Maximum continuous operating voltage U _c	500V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%, no condensation	

DESCRIPTION

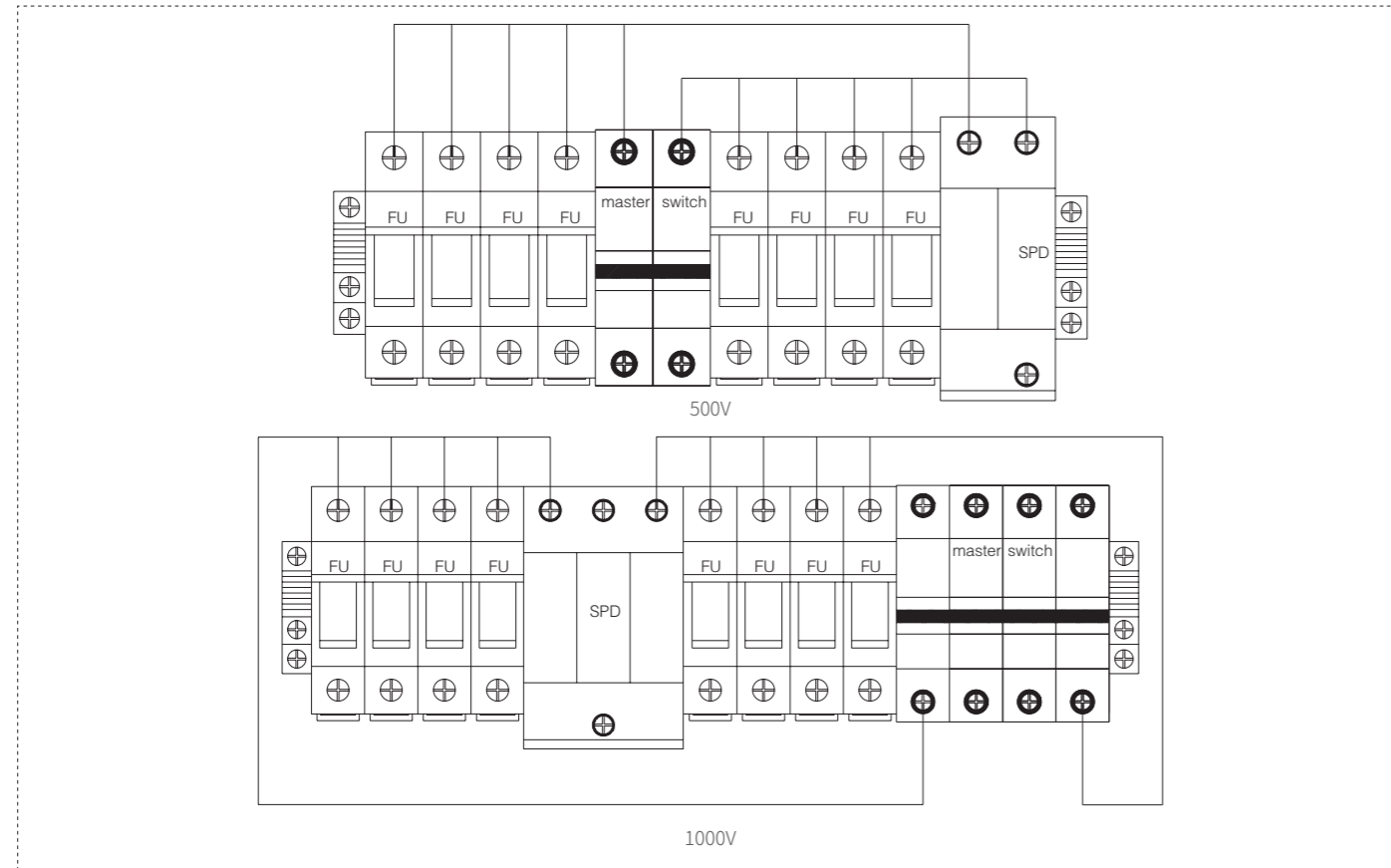
LQX 4/1 DC combiner box is suitable for inverter (MAX input voltage DC500V/DC1000V, 4 PV input channel, 1 output channel, single MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade. Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. Provide users with a safe. It is installed between the solar panels and the solar inverter, designed and customized with the most reliable DC components to provide maximum protection.



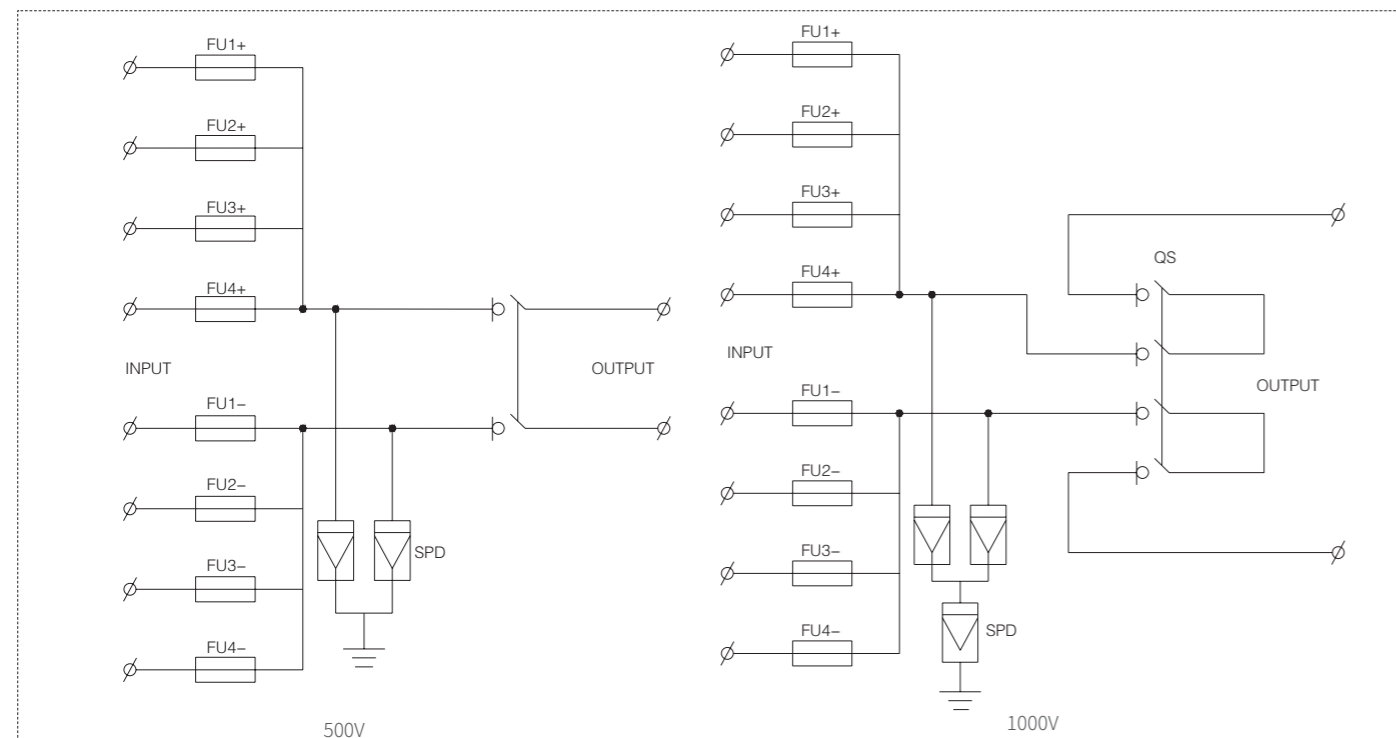
Durable quality

Bright and uniform

SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)

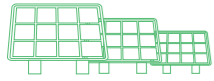


LQX 4/2 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring. The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.



Solar combiner box



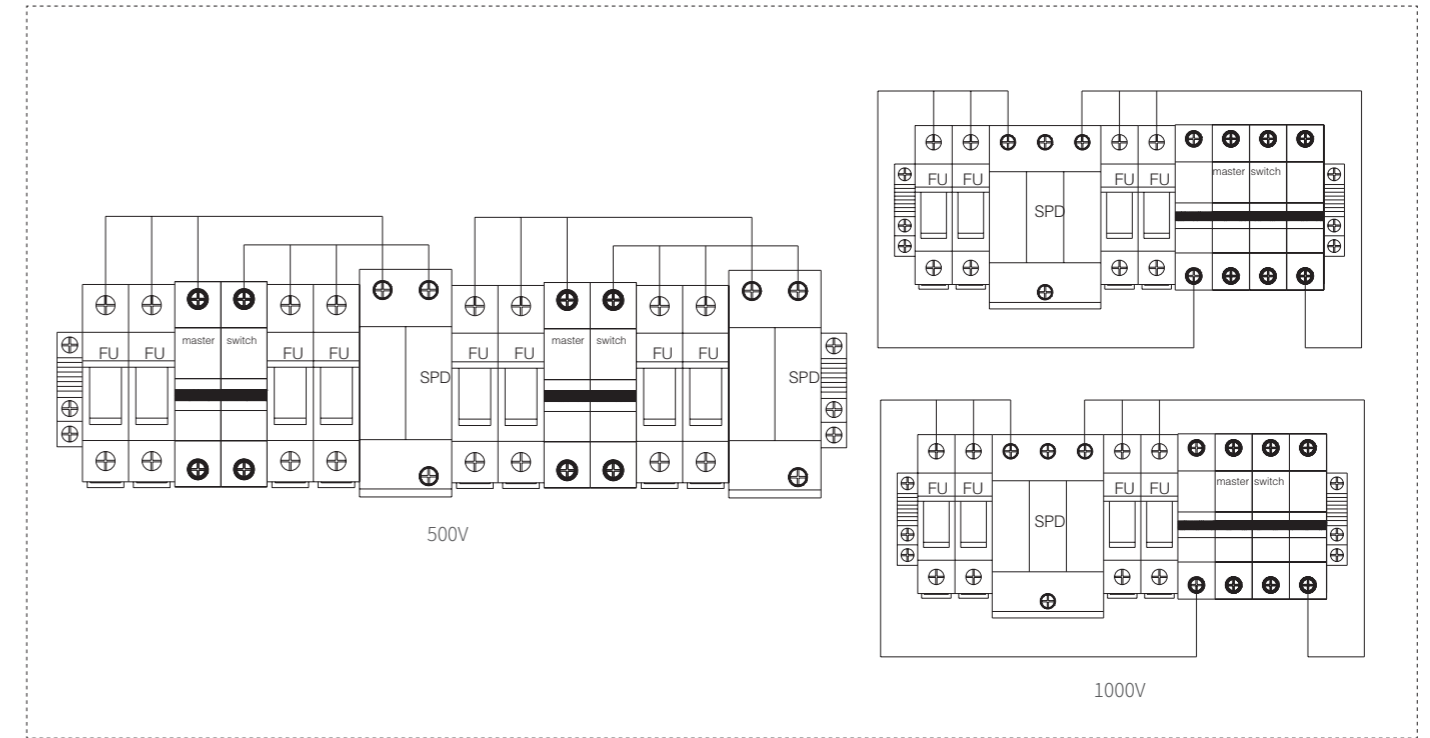
TECHNICAL PARAMETERS

Name	LQX 4/2 DC	
	Electric parameter	
System maximum dc voltage	500	1000
Maximum input current for each string	15A/20A/30A	
Maximum input strings	4	
Maximum output switch current	20A/32A	
Number of inverter MPPT	2	
Number of Output strings	2	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	2.0kV	3.6kV
Maximum continuous operating voltage U _c	500V	1050V
Poles	2P	3P
Structure characteristic	Plug-push module	
	System	
Protection grade	IP65	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	PVC	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no ondensation	

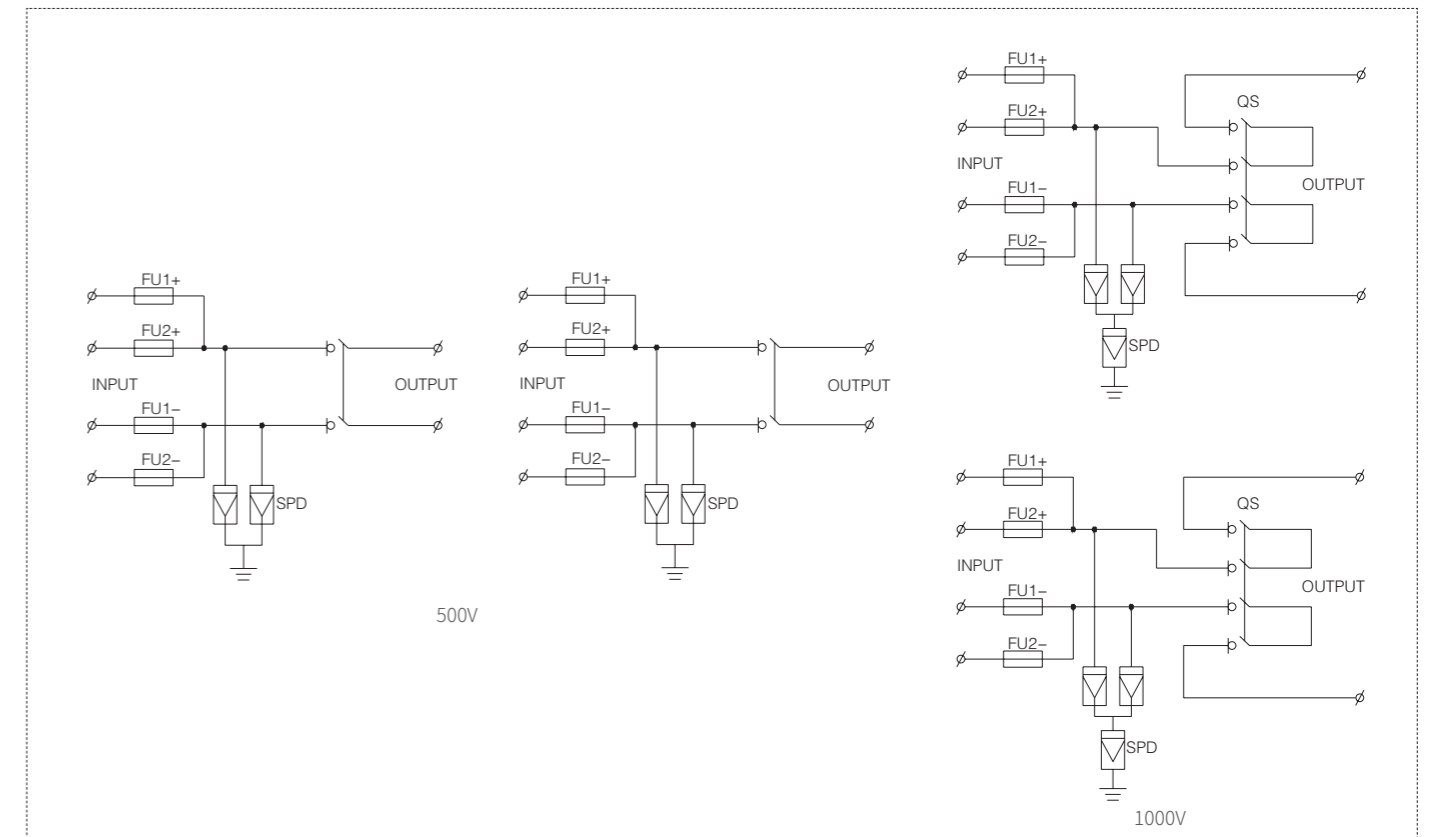
DESCRIPTION

LQX 4/2 DC combiner box is suitable for inverter (MAX input voltage DC500V/DC1000V, 4 PV input channel, 2 output channel, double MPPT inverter). Box body is made of PVC engineering materials, with test for fire retardant, temperature rise, anti impact, anti ultraviolet, and other testing. IP65 protection grade. Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. Provide users with a safe. It is installed between the solar panels and the solar inverter, designed and customized with the most reliable DC components to provide maximum protection.

SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)



LQX F4/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.

Solar combiner box



TECHNICAL PARAMETERS

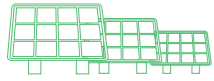
Name	LQX F4/1 DC	
	Electric parameter	
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	4	
Maximum output switch current	63A	
Number of inverter MPPT	N	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
	System	
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

DESCRIPTION

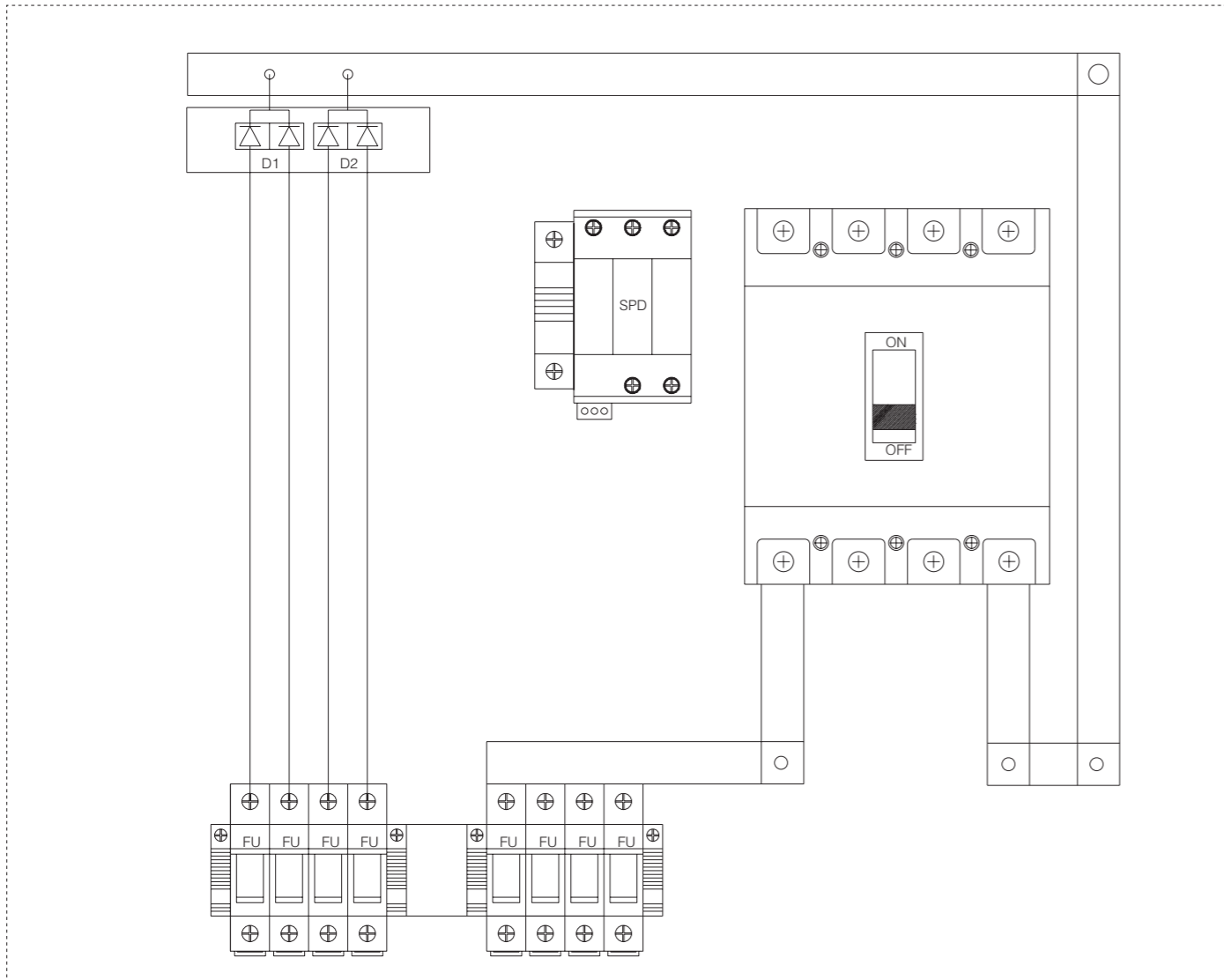
LQX F4/1 DC PV combiner box bus synthetic DC input of 4 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

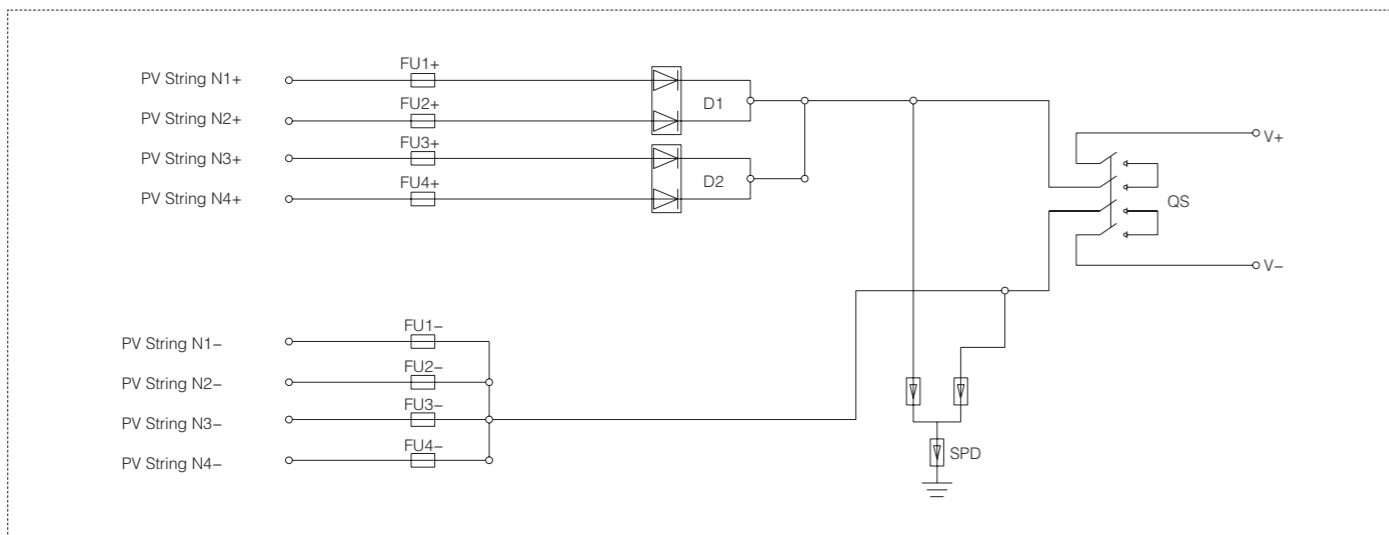
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)

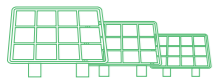


LQX F6/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



Solar combiner box



TECHNICAL PARAMETERS

Name	LQX F6/1 DC	
Electric parameter		
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	6	
Maximum output switch current	100A	
Number of inverter MPPT	N	
Number of Output strings	1	
Lightning protection		
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
System		
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

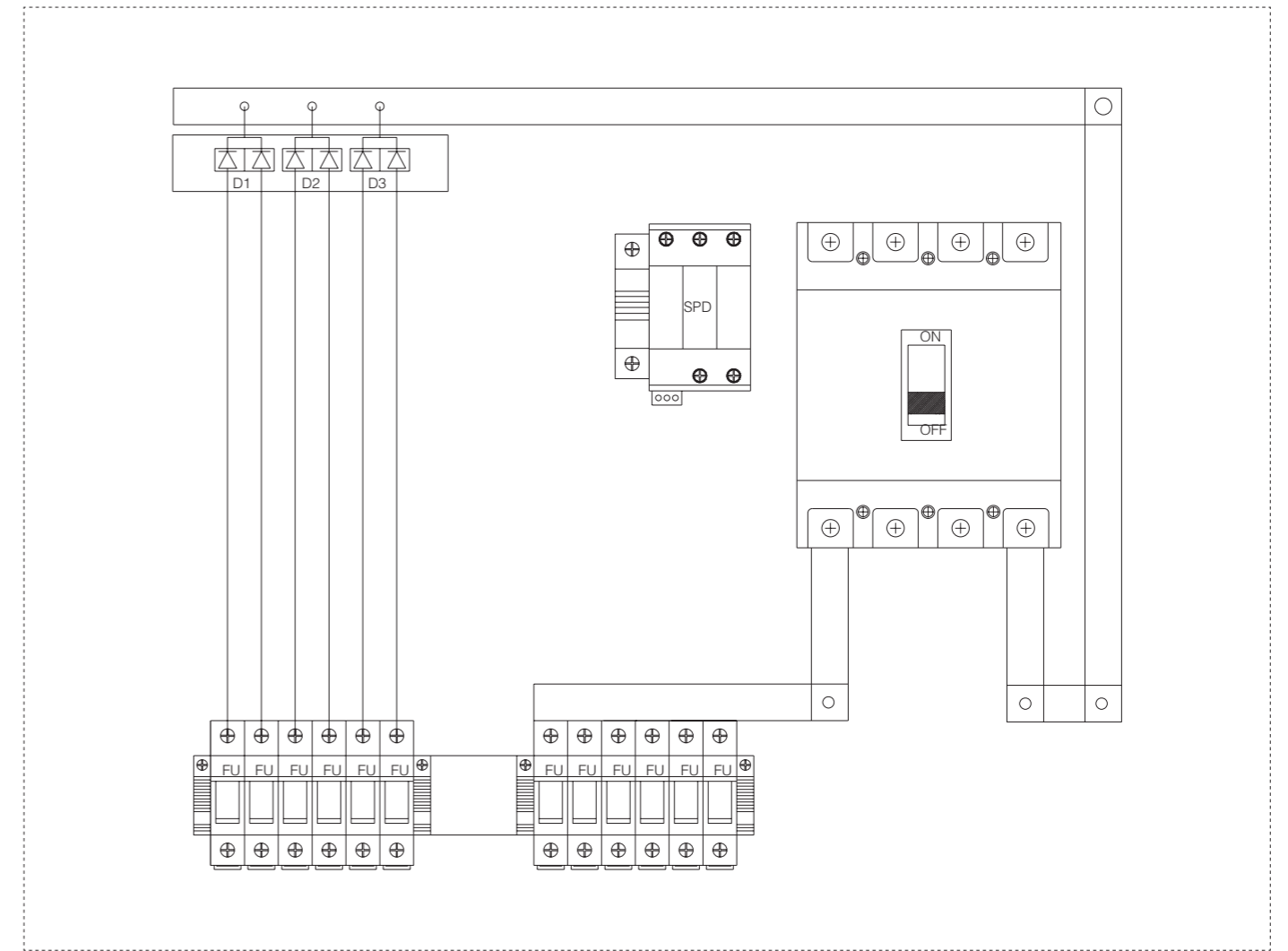
DESCRIPTION

LQX F6/1 DC PV combiner box bus synthetic DC input of 6 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

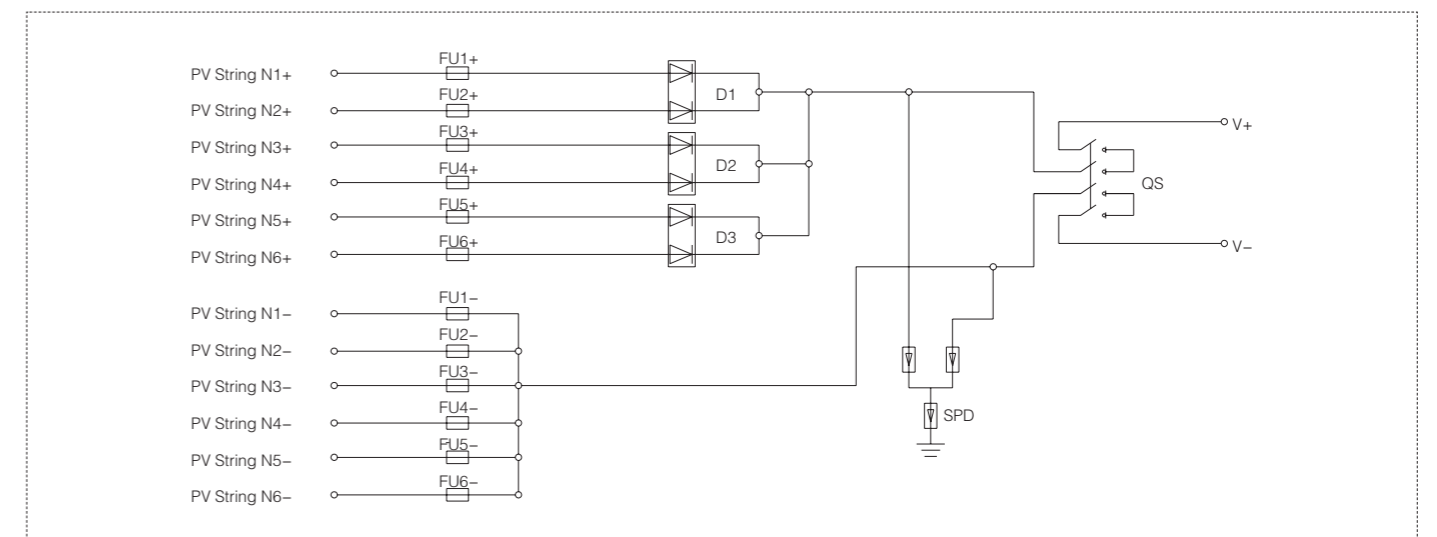
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)



LQX F8/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.

Solar combiner box



TECHNICAL PARAMETERS

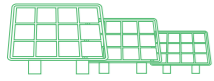
Name	LQX F8/1 DC	
Electric parameter		
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	8	
Maximum output switch current	125A	
Number of inverter MPPT	N	
Number of Output strings	1	
Lightning protection		
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
System		
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

DESCRIPTION

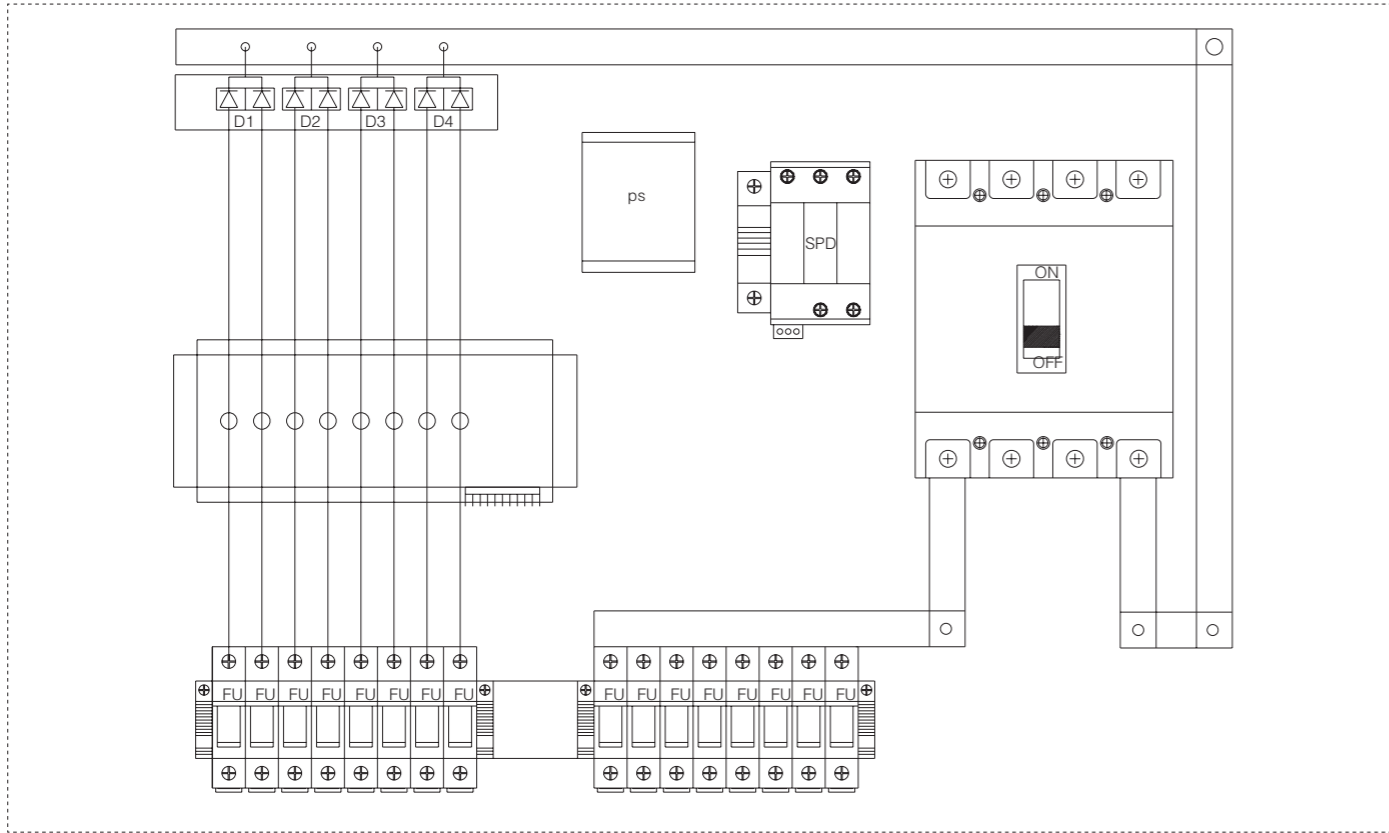
LQX F8/1 DC PV combiner box bus synthetic DC input of 8 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

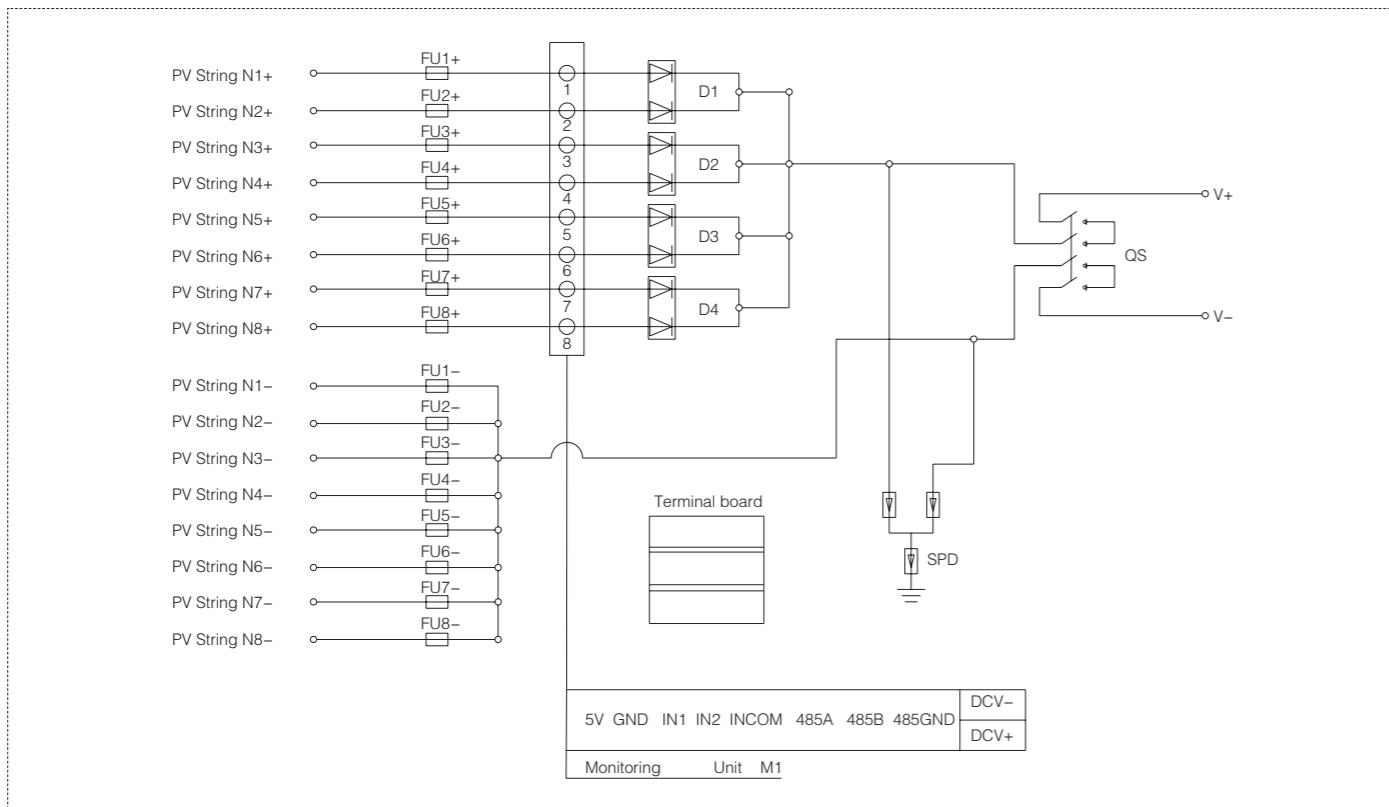
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)

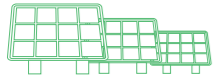


LQX F10/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



Solar combiner box



TECHNICAL PARAMETERS

Name	LQX F10/1 DC	
	Electric parameter	
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	10	
Maximum output switch current	160A	
Number of inverter MPPT	N	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
	System	
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

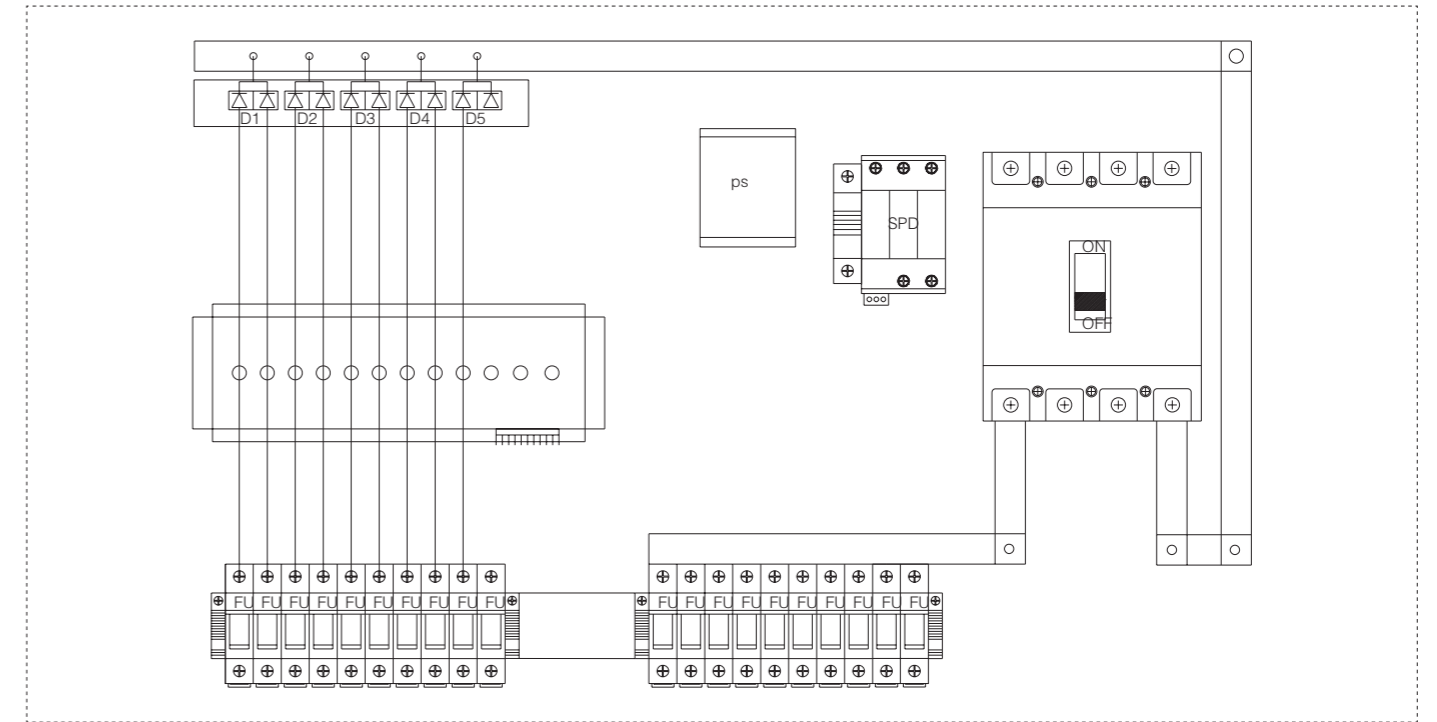
DESCRIPTION

LQX F10/1 DC PV combiner box bus synthetic DC input of 10 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

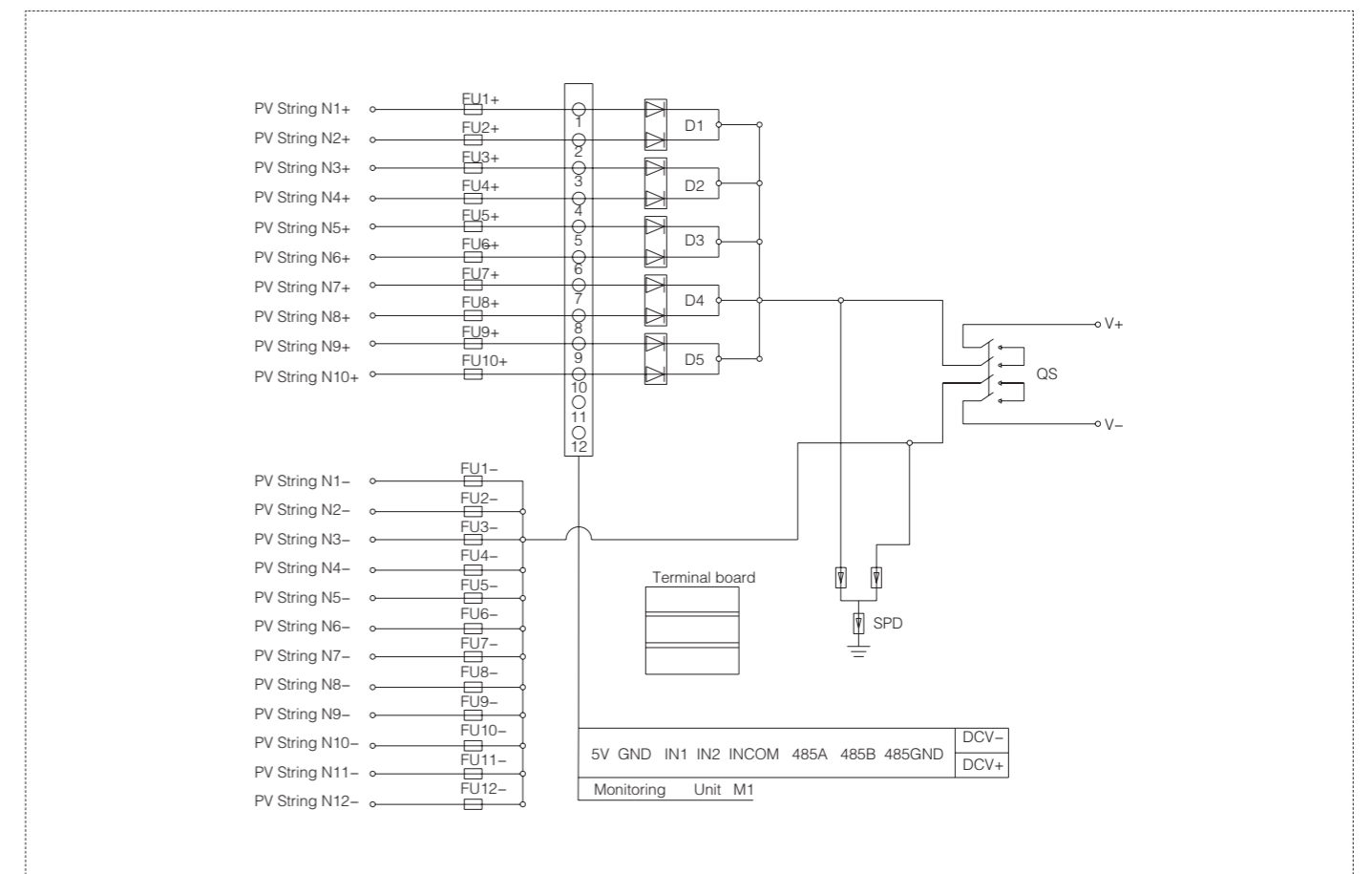
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)



LQX F12/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



Solar combiner box



TECHNICAL PARAMETERS

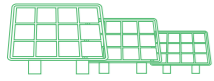
Name	LQX F12/1 DC	
Electric parameter		
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	12	
Maximum output switch current	200A	
Number of inverter MPPT	N	
Number of Output strings	1	
Lightning protection		
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
System		
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

DESCRIPTION

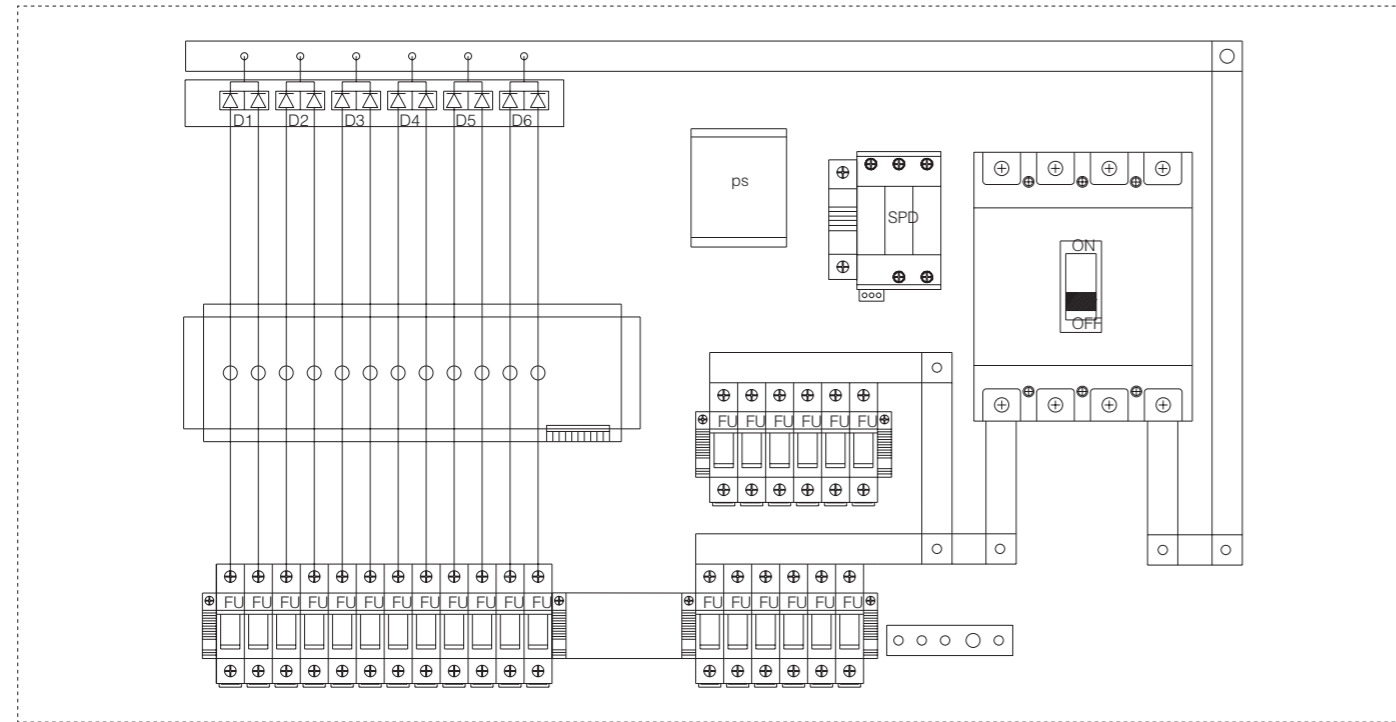
LQX F12/1 DC PV combiner box bus synthetic DC input of 12 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

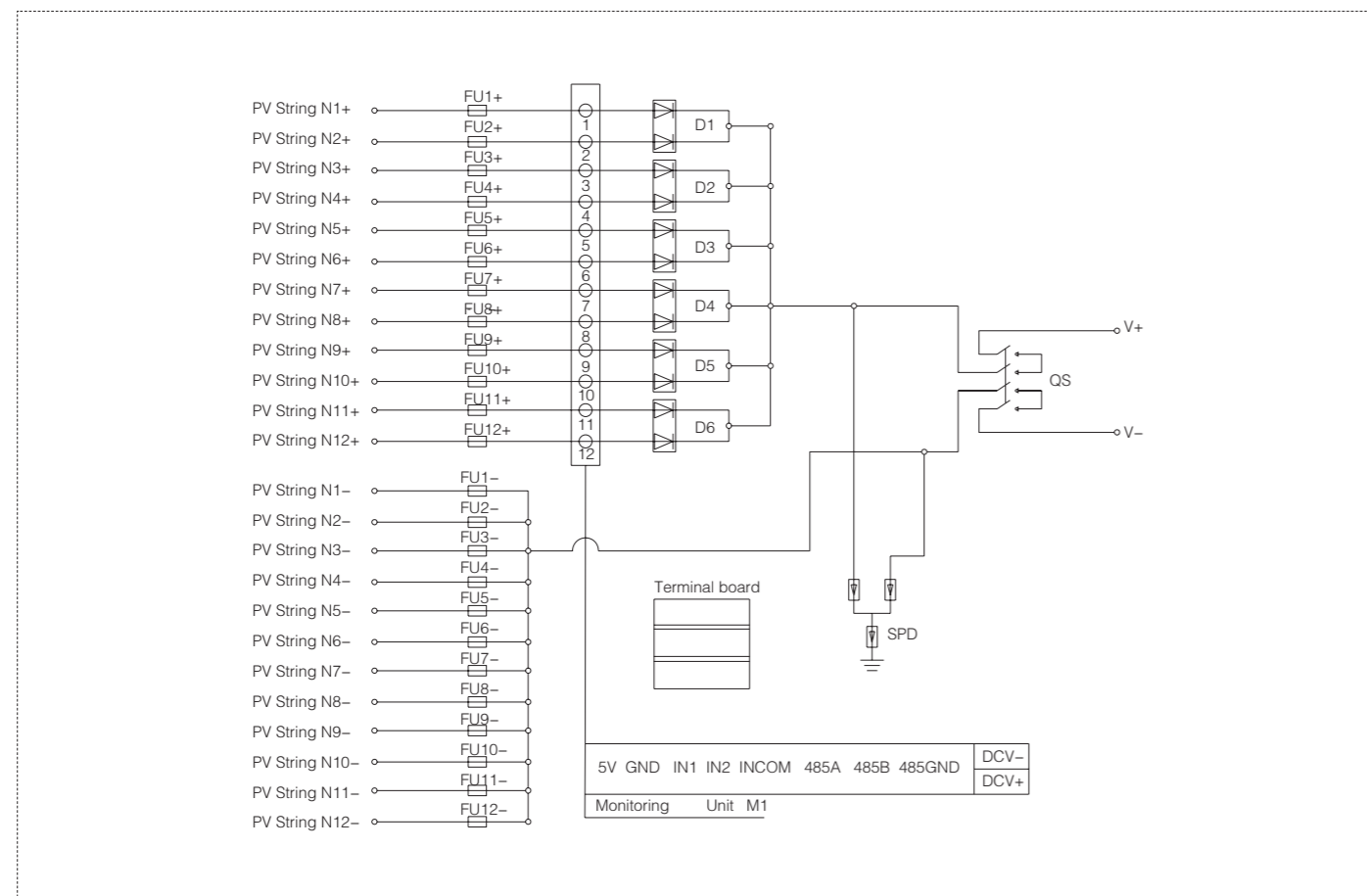
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



SCHEMATIC DIAGRAM



DIMENSIONAL DRAWING(MM)

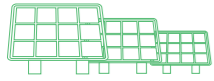


LQX F14/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



Solar combiner box



TECHNICAL PARAMETERS

Name	LQX F14/1 DC	
	Electric parameter	
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	14	
Maximum output switch current	225A	
Number of inverter MPPT	N	
Number of Output strings	1	
	Lightning protection	
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
	System	
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

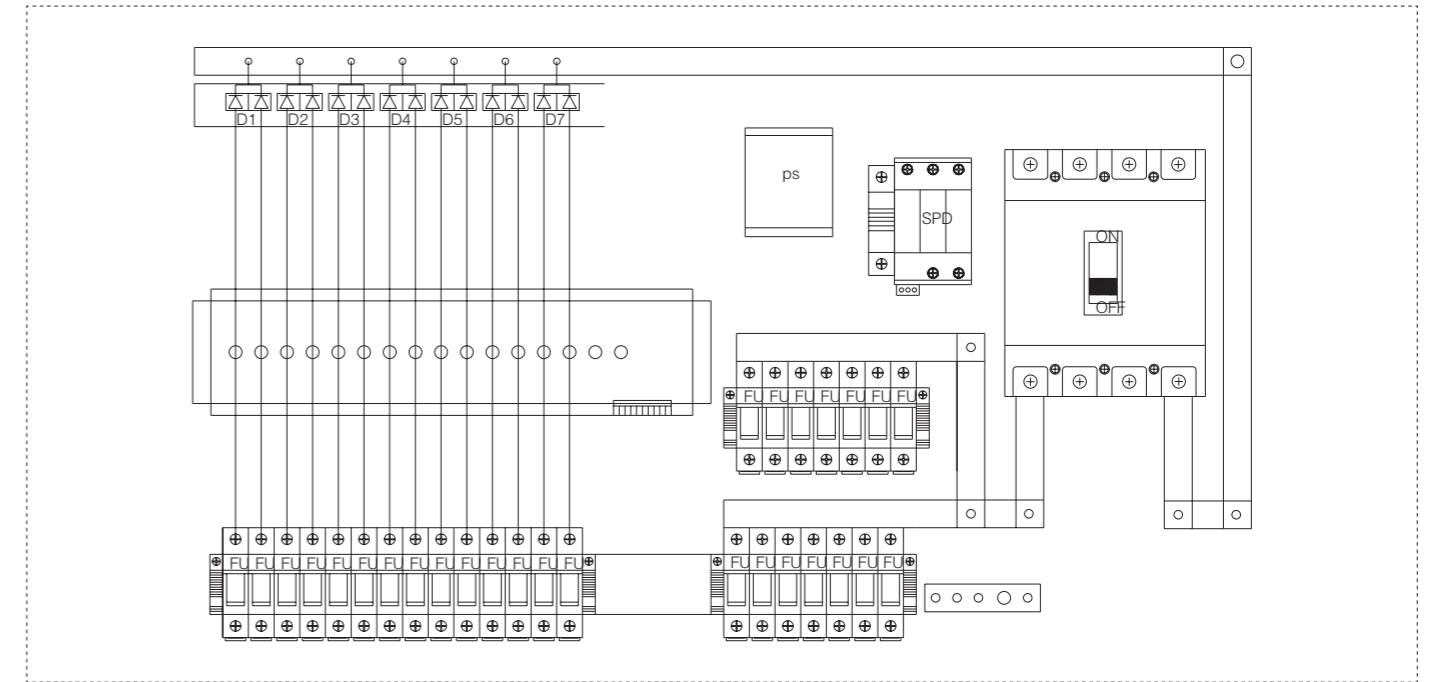
DESCRIPTION

LQX F14/1 DC PV combiner box bus synthetic DC input of 14 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

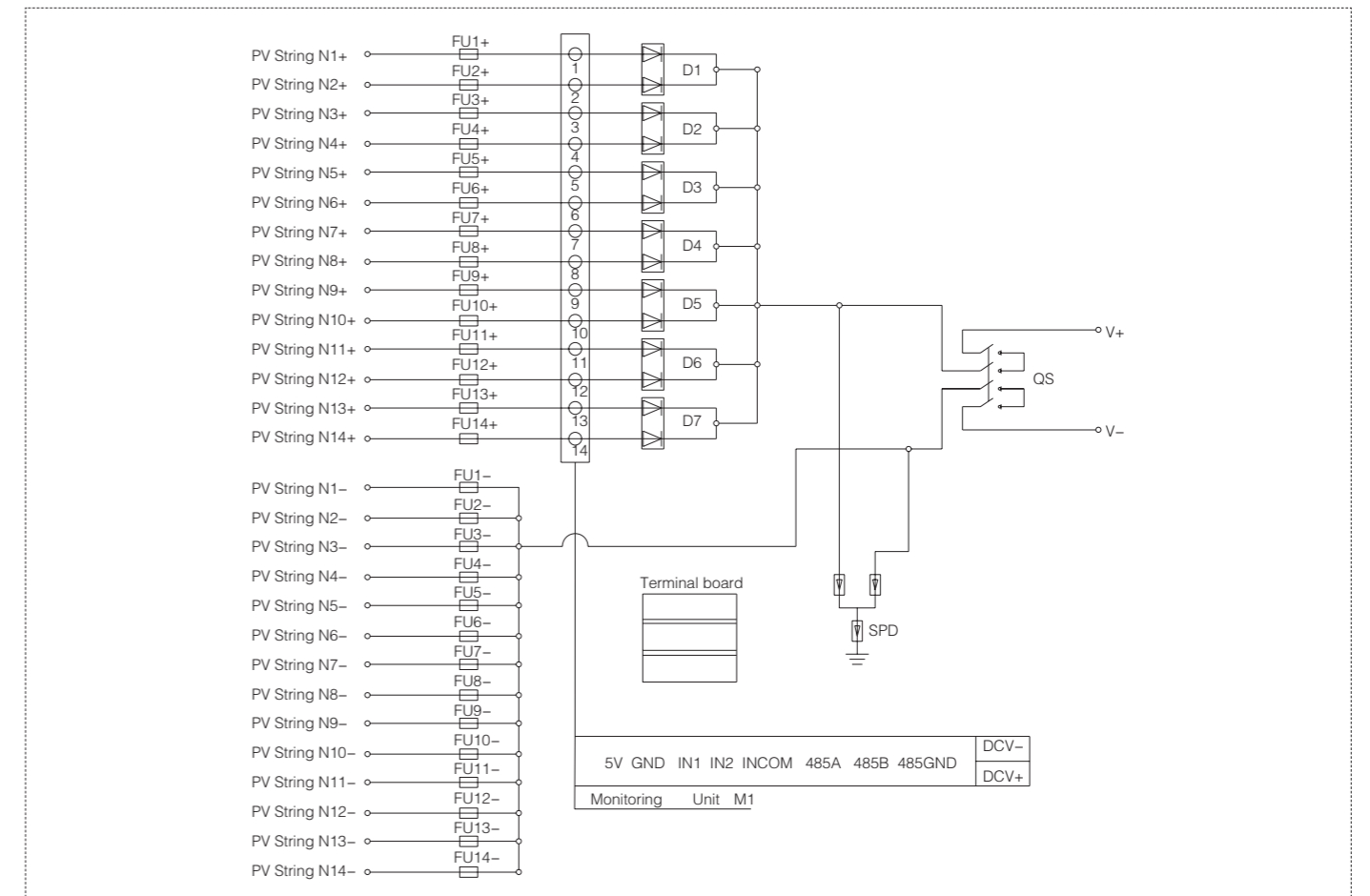
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)



LQX F16/1 DC

- High reliability
 - With DC FUSE
 - With DC Surge Protection Device
 - With DC circuit breaker or DC load isolation switch.
- Strong adaptability
 - IP65 design, waterproof, anti dust and anti ultraviolet.
 - Strict test for high and low temperature, used widely.
 - The simple installation, the simplified system wiring, the convenient wiring . The box body is made of cold rolled steel and other metal materials.
- Flexible configuration
 - Used for single crystal silicon solar modules, polycrystalline silicon solar modules, thin film solar modules.
 - Current rating of the photovoltaic fuse, circuit breaker, load isolation switch is modified.



Solar combiner box



TECHNICAL PARAMETERS

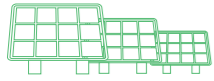
Name	LQX F16/1 DC	
Electric parameter		
System maximum dc voltage	1000	1500
Maximum input current for each string	15A	
Maximum input strings	16	
Maximum output switch current	250A	
Number of inverter MPPT	N	
Number of Output strings	1	
Lightning protection		
Category of test	II grade protection	
Nominal discharge current	20kA	
Maximum discharge current	40kA	
Voltage protection level	3.6kV	5.3kV
Maximum continuous operating voltage U _c	1050V	1500V
Poles	3P	
Structure characteristic	Plug-push module	
System		
Protection grade	IP66	
Output switch	DC isolation switch(standard)/DC circuit breaker(optional)	
SMC4 Waterproof Connectors	Standard	
PV dc fuse	Standard	
PV surge protector	Standard	
Monitoring module	Optional	
Preventing diode	Optional	
Box material	Metal	
Installation method	Wall mounting type	
Operating Temperature	-25°C ~+55°C	
Elevation of temperature	2km	
Permissible relative humidity	0-95%,no condensation	

DESCRIPTION

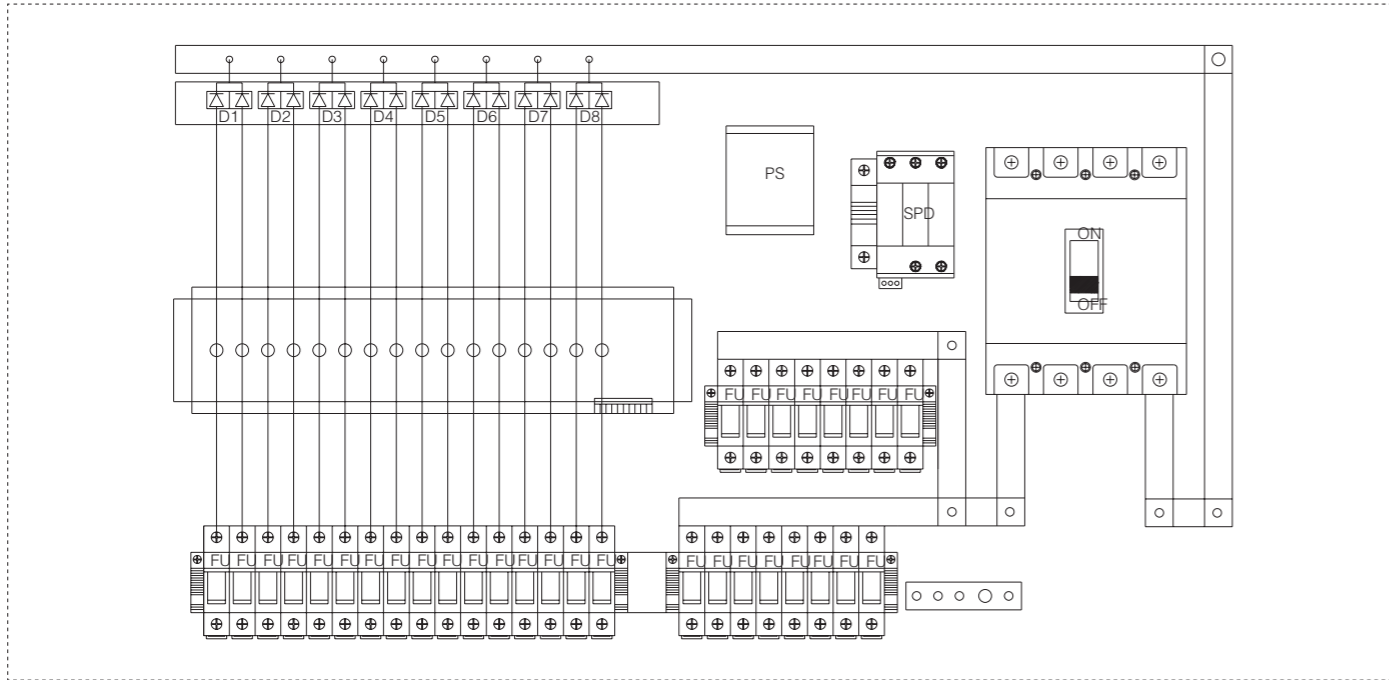
LQX F16/1 DC PV combiner box bus synthetic DC input of 16 PV components to 1 output. Each channel is with a fuse. Output side is equipped with lightning protection and circuit breaker. It greatly simplify input wiring of DC power distribution cabinet and inverter. Realize lightning protection, short circuit protection and grounding protection. PV combiner box divided into two types: intelligent box and non-intelligent box. Intelligent PV combiner box is equipped with monitoring unit, then detect input current of each string, detect inside temperature, detect lightning protection status, detect circuit breaker status and summarize output voltage and so on.

Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

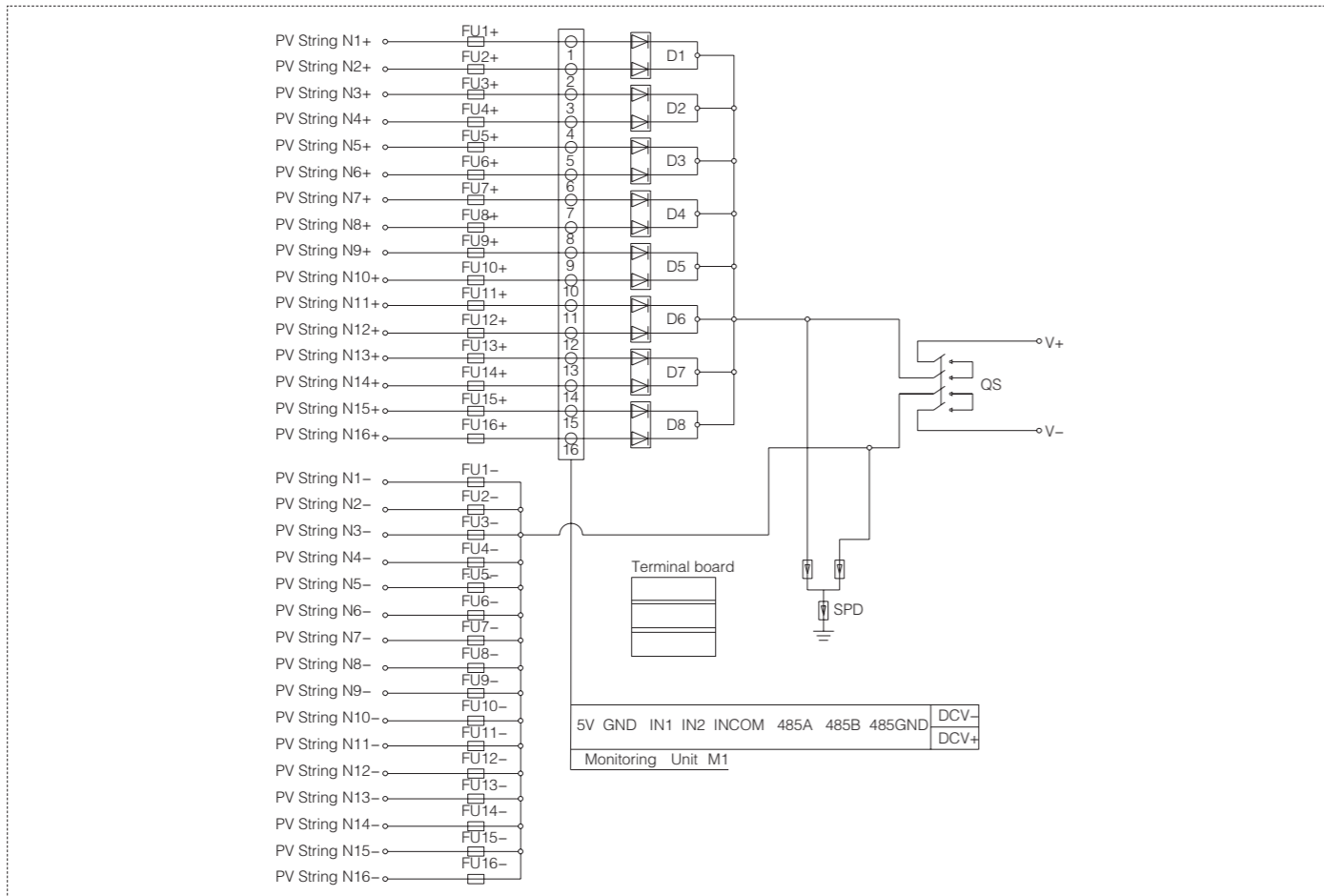
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.



SCHEMATIC DIAGRAM



DIM ENSIONAL DRAWING(MM)



LQL7-PV

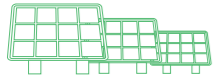
These circuit breakers are used for overcurrent protection and control in solar photovoltaic battery storage systems and DC circuits, They are available in various rated currents such.

DC circuit breakers which accept customized provide functions for circuit interruption, short circuit protection, adjustment, and protection, effectively extending the lifespan of electrical equipment.

They protect electrical equipment from damage caused by overloads, short circuits, or other electrical faults.



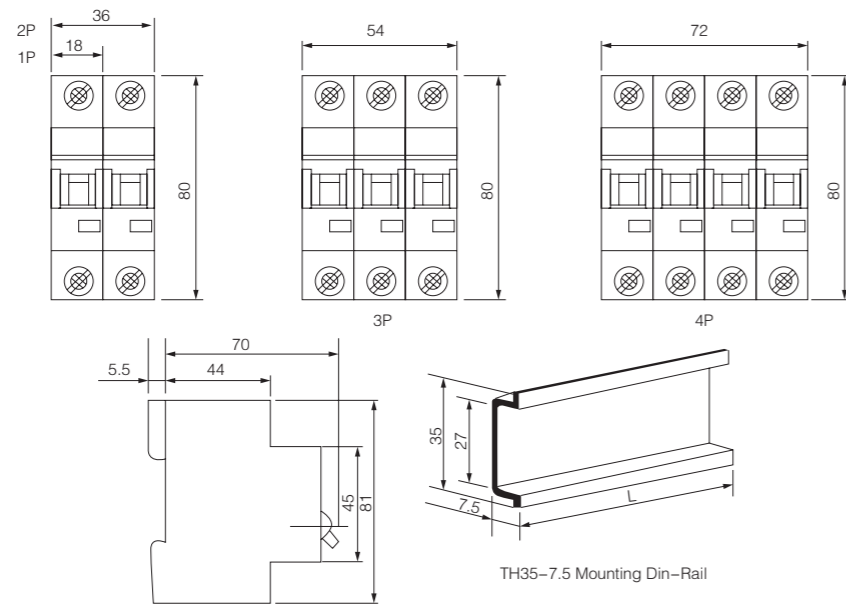
Non-Polarity DC circuit breaker



TECHNICAL PARAMETERS

LQL7-PV Series Circuit Breaker		LQL7-PV			
Frame degree rated current (A)		63			
Ue Rated operating voltage (V DC)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V			
Rated Current In (A)		6-10-16-20-25-32-40-50-63			
Rated insulation voltage Ui (V DC)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V			
Rated Impact voltage Uimp (kV)		4			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		75%	75%	75%	75%
Curve type		C			
Trip type		Thermal-magnetic			
MECHANICAL	Actual average value	20000			
	Standard value	8500			
ELECTRIC	Actual average value	2500			
	Standard value	1500			
Shunt release (SHT)		Option			
Undervoltage release (UNT)		Option			
Auxiliary contact (AX)		Option			
Alarm contact (AL)		Option			
Wiring capacity (mm ²)		In ≤ 32A, 1~25mm ² , I ≥ 40A, 10~35mm ²			
Ambient temperature (°C)		-20~70			
Altitude		≤ 2000			
Relative humidity		≤ 95%			
Pollution Level		3			
Installation Environment		No obvious shock and vibration			
Installation category		Class III			
Installation		DIN Standard rail			
Dimensions (W) × (H) × (Deep)	W	17.5	35	52.5	70
	H	80	80	80	80
	Deep	71	71	71	71
Weight (kg)		0.12	0.24	0.36	0.48

Dimensions(mm)

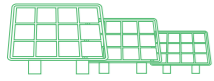


LQB1-63Z

LQB1-63Z DC breaker supplementary protectors are designed to provide overcurrent protection within appliances or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.



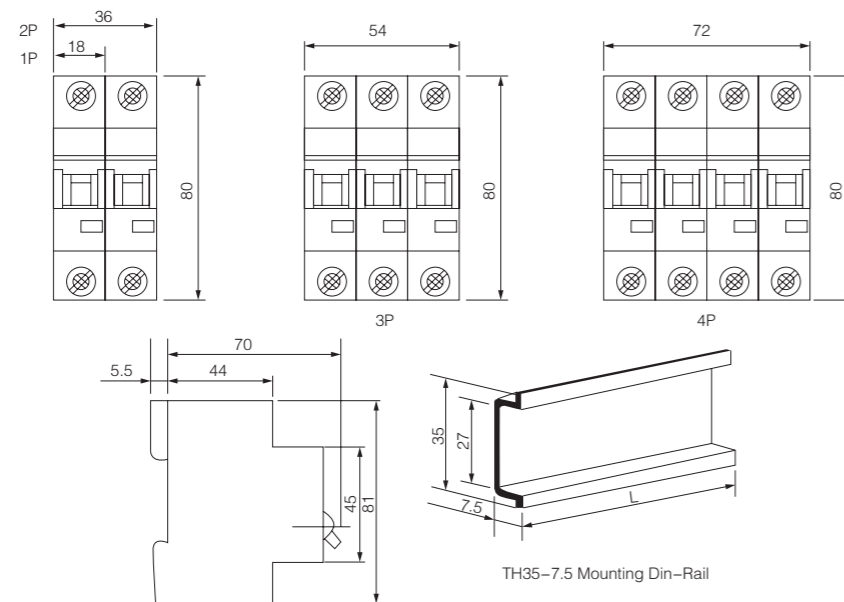
Polarity DC circuit breaker



TECHNICAL PARAMETERS

LQB1-63Z Series Circuit Breaker		LQB1-63Z			
Frame degree rated current (A)		63			
Ue rated operating voltage (V DC)		Electrical performance			
Rated Current In (A)		1P: DC250V 2P: DC550V 3P: DC750V 4P: DC1000V			
Rated insulation voltage Ui (V DC)		6-10-16-20-25-32-40-50-63			
Rated impact voltage Uimp (kV)		800V			
Ultimate breaking capacity Icu (kA)		6	6	6	6
Run breaking capacity Ics (%Icu)		75%	75%	75%	75%
Curve type		C			
Trip type		Thermal-magnetic			
Mechanical	Actual average value	20000			
	Standard value	8500			
Electric	Actual average value	2500			
	Standard value	1500			
Control and indication		Shunt release (SHT)			
Option		Undervoltage release (UNT)			
Option		Auxiliary contact (AX)			
Option		Alarm contact (AL)			
Connection and installation		Wiring capacity (mm ²)			
In ≤ 32A, 1~25mm ² , I ≥ 40A, 10~35mm ²		Ambient temperature (°C)			
-20-70		Altitude			
≤ 2000		Relative humidity			
≤ 95%		Pollution level			
3		Installation environment			
No obvious shock and vibration		Installation category			
Class III		Installation			
DIN Standard rail					

Dimensions(mm)



Durable quality



Bright and uniform

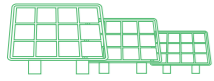
LQM1-PV

DC Breaker Non-Polarity

- Reliable protection at high ambient temperatures
- Loadable:string protection up to
 - 125 size: 63A, 80A, 100A, 125A
 - 250 size: 160A, 200A, 225A, 250A
 - 400 size: 315A, 400A
- Tested:Ultimate short circuit breaking capacity Icu of 25kA according to IEC IEC60947-2
- Fast: DC molded case circuit breakers effectively prevent arc faults and melting.
- Safe:DC molded case circuit breakers feature fast and accurate circuit interruption, short circuit protection, and adjustment functions, with good circuit interruption and short circuit performance.



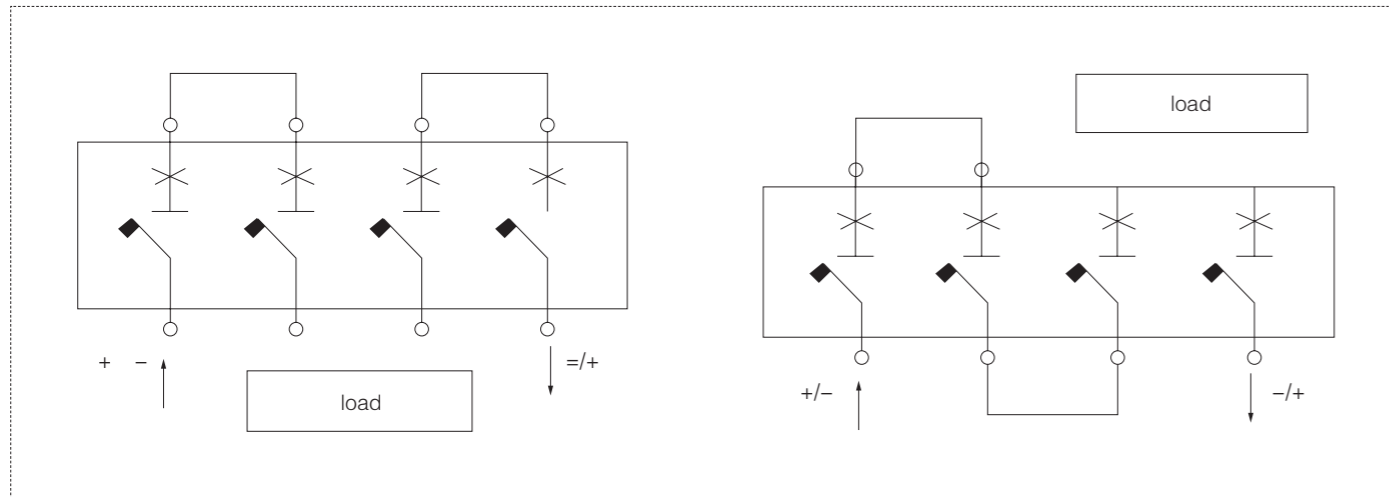
DC Breaker Non-Polarity



Specifications

Rated Current In (A)	125:63A,80A,100A,125A; 250:160A,200A,225A,250A; 400: 315A,400A
Ue Rated operating voltage (VDC)	1P: DC250V 2P: DC500V 3P: DC750V 4P: DC1000V
Rated insulation voltage Ui (VDC)	DC1000V
Rated Impact voltage Uimp (kV)	8KV
Ultimate breaking capacity Icu (kV)	25KV
Trip type	Thermal-magnetic
Ambient temperature (°C)	-20°C~ 70°C
Alfifude	2000M
Installation	Fixed,plug-in
Accessories	Auxiliary , Alarm,Shunt release Manually operated and electric operation

Wiring diagram

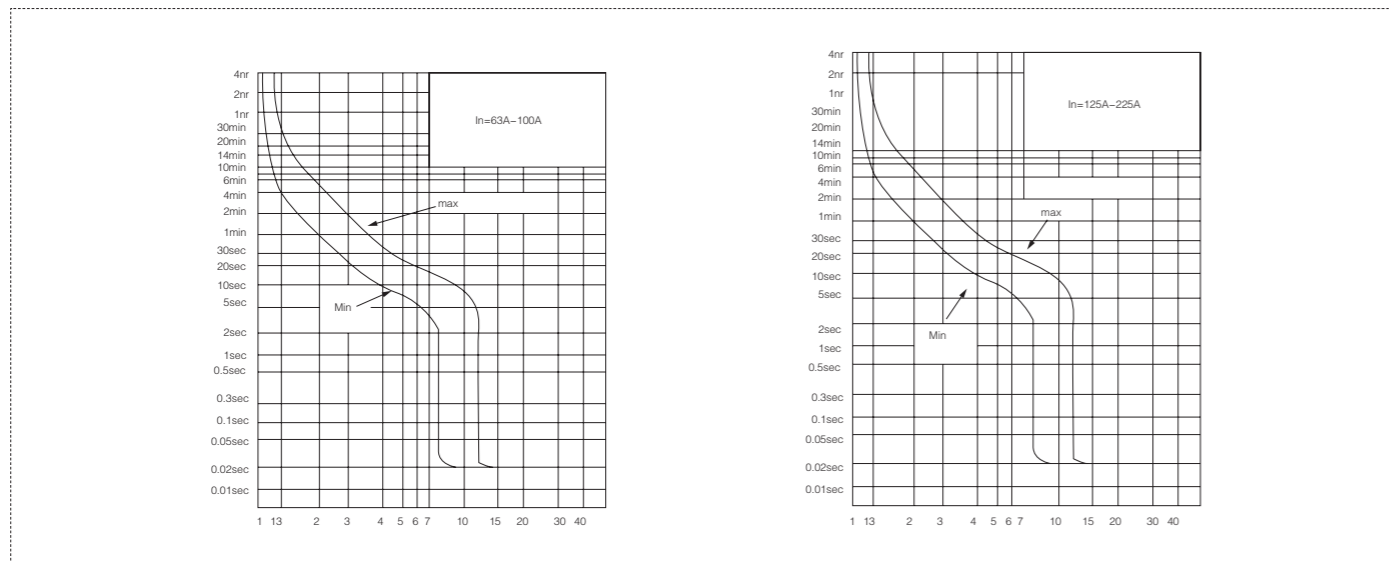


- Protection and Isolation wiring
- The load should be \leq DC1000V

The connection considered for anetwork in which the middle point of the supply source is earthed
In this case the breaker protects and isolates the load

- Protection and Isolation wiring
- The load should be \leq DC 1000V

The Negative pole (-) could be earthed, but in both cases the breaker protects and isolates the load



LD-40 PV

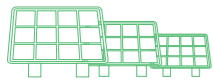
DC Surge Protective Device plays a crucial role in quickly and effectively protecting equipment in the event of overvoltage in DC circuits, preventing equipment damage and ensuring the safe operation of electronic and electrical devices.

- Prevents electric shock caused by electrostatic discharge.
- Protects electrical equipment from overvoltage damage.
- Prevents fires caused by static electricity accumulation.
- Suppresses interference caused by lightning strikes and induced lightning.

The green and red visual indicator flags show the module protective status (green =good, red = replace).



DC Surge Protector



Specifications

LD-40 Surge protector	LD-40				
PVDC - specific	EN50539-11				
Pole	2P	2P	3P	3P	2P (CUSTOMIZED)
Electrical parameter	/	/	/	/	/
Classified test	II	II	II	II	II
Uoc max (VDC)	600	800	1000	1500	12/24
Uc (VDC)	600	800	1000	1500	12/24
In (8/20)us (kA)	20	20	20	20	20
I _{max} (8/20)us (kA)	40	40	40	40	40
Up(kV)	2.0	2.5	3.8	5.3	2.0

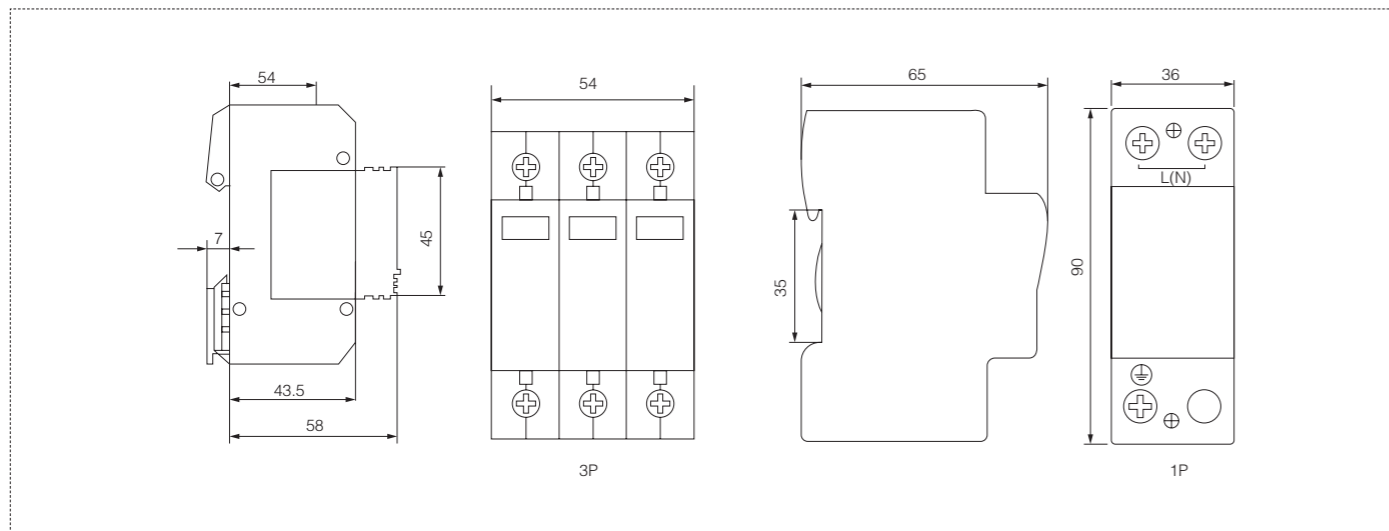
Remote Signal Contact

"Remote signal contact"	Maximum working voltage (V)	250VAC/30VDC	250VAC /30VDC
	Maximum working current (A) IA (250V/AC)	IA (250V/AC)	IA(250V/AC)
	IA (30V DC)	IA(30V/AC)	IA(30V/AC)

Installation and Dimensions

Wiring capacity (mm)	Hard wire	4~25	4~25
	Flexible wire	4~16	4~16
Stripping length (mm)		10	10
Terminals crwca		M5	M5
Torque (Nm)	Main circuit	3.5	3.5
	Remote signal contact	0.25	0.25
Protection class	All profile	IP40	IP40
	Connection port	IP20	IP20
Installation environment		No obvious shock and vibration	
Altitude (m)		≤ 2000	≤ 2000
Working Temperature		-30°C ~+70°C	-30°C ~+70°C
Relative humidity		30%~90 %	30%~90 %
How to install		Installed with H 35-7.5/DIN35 steel mounting rail	

Dimensions(mm)



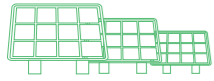
LQPV-1038(LQPV-32)

DC fuses for overcurrent protection in solar photovoltaic systems

This series of fuses is suitable for circuits with rated DC voltage up to 1000V and rated current up to 30A. They are connected in series and parallel with photovoltaic panels and batteries to provide short-circuit breaking protection for charging and converting systems; Simultaneously, for photovoltaic power plants, combiner inverter rectification systems, and short-circuit fault breaking protection; And for the rapid breaking protection of surge current and short-circuit fault overvoltage in photovoltaic power generation systems, with a rated breaking capacity of 20KA. Our company is currently conducting relevant tests to further improve the breaking capacity of the product. The product complies with the provisions of the International Electrotechnical Commission standard IEC60269.



Solar photovoltaic system overcurrent protection Dc fuse



Operational condition

The upper limit of ambient air temperature shall not exceed 90 °C ; The lower limit of ambient air temperature shall not be less than -40 °C ; The elevation of the installation site should not exceed 2000m (if it is to exceed this 2000m, the requirements need to be specified, and our company can design and develop according to customer requirements).

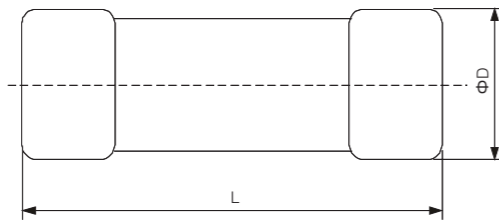
Utilization category

“gPV” refers to a DC fuse with full range breaking capacity used for overcurrent protection in solar photovoltaic systems.

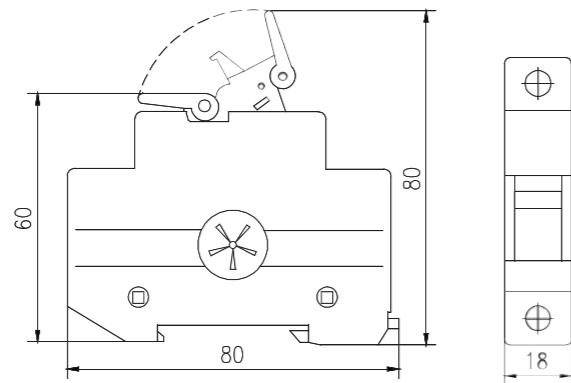
Structural characteristics

The variable cross-section melt made of pure silver sheets is encapsulated in a melt tube made of high-strength porcelain. The melt tube is filled with chemically treated high-purity quartz sand and specially treated chemical materials as the arc extinguishing medium. The two ends of the melt are firmly connected to the contact through spot welding.

Main technical parameters



Model of fuse link	rated voltage (V)	Rated current(A)	Overall dimensions (mm)		Dissipated power (W)
			Drawing No	D×L	
gPV	DC1000V	2、3、4、5、6、8、10、12、15、20、25、30	1	10.3±0.1×38±0.6	≤4.5
LQPV-1038	DC1000V	2、3、4、5、6、8、10、12、15、20、25、30	1	10.3±0.1×38±0.6	≤4.5



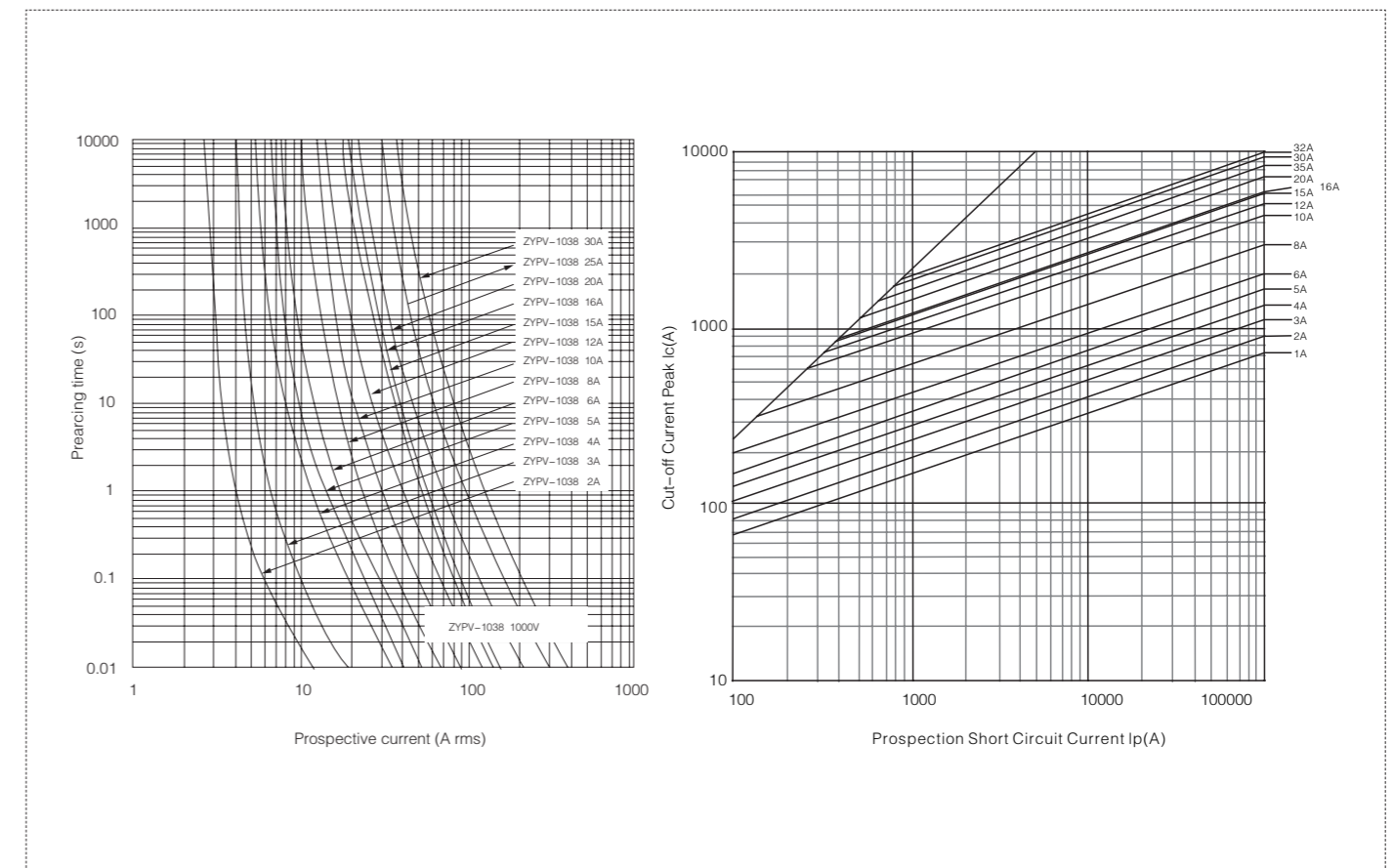
Fuse holder model	Fuse size	rated voltage Vdc	Rated current (A)	Overall dimensions (mm)					
				Drawing No	A1	A2	B	H1	H2
LQPV-32 Base	10×38	1000	32	2	Drawing No2				

Test method

“gPV” Fuse holder Agreed time, agreed current

“gPV” Rated current A	Agreed time h	agreed current	
		I _{nf}	I _f
I _n ≤ 63	1	1.13I _n	1.45I _n
63 < I _n ≤ 160	2		
160 < I _n ≤ 400	3		
I _n > 400	4		

Characteristics Curve:



LQPV-1085

This series of fuses is suitable for circuits with rated DC voltage up to 1500V and rated current up to 63A. They are connected in series and parallel with photovoltaic panels and batteries to provide short-circuit breaking protection for charging and converting systems; Simultaneously, for photovoltaic power plants, combiner inverter rectification systems, and short-circuit fault breaking protection; And for the rapid breaking protection of surge current and short-circuit fault overvoltage in photovoltaic power generation systems, with a rated breaking capacity of 20KA. Our company is currently conducting relevant tests to further improve the breaking capacity of the product. The product complies with the provisions of the International Electrotechnical Commission standard IEC60269.

**Solar photovoltaic system
overcurrent protection Dc fuse**



Operational condition

The upper limit of ambient air temperature shall not exceed 90 °C ; The lower limit of ambient air temperature shall not be less than -40 °C ; The elevation of the installation site should not exceed 2000m (if it is to exceed this 2000m, the requirements need to be specified, and our company can design and develop according to customer requirements).

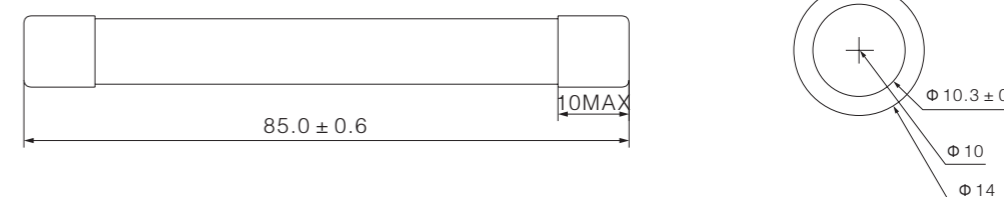
Utilization category

“gPV” refers to a DC fuse with full range breaking capacity used for overcurrent protection in solar photovoltaic systems.

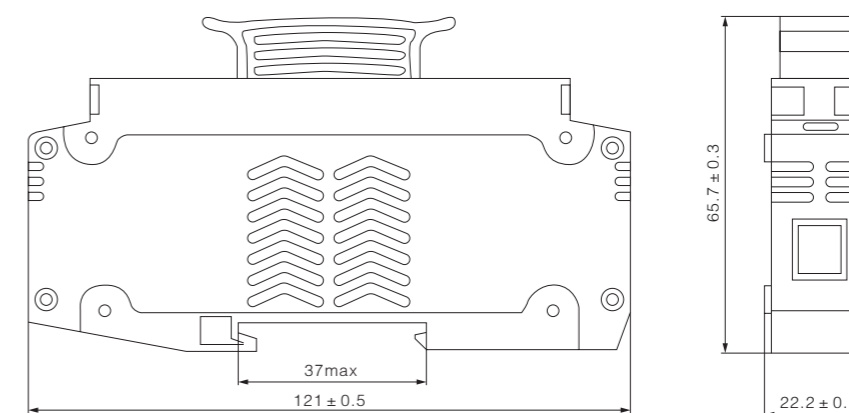
Structural characteristics

The variable cross-section melt made of pure silver sheets is encapsulated in a melt tube made of high-strength porcelain. The melt tube is filled with chemically treated high-purity quartz sand and specially treated chemical materials as the arc extinguishing medium. The two ends of the melt are firmly connected to the contact through spot welding.

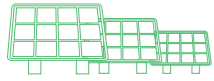
Main technical parameters



Model of fuse link	rated voltage(V)	Rated current(A)	Overall dimensions (mm)	
			Drawing No	Drawing No
gPV				
LQPV1085	DC1500V	2--30	1	Drawing No1.2
LQPV1485	DC1500V	8--50	2	



Model of fuse link	use size	rated voltageVdc	Rated current(A)	Overall dimensions (mm)	
				Drawing No	Drawing No
LQPV-1085 Base	10×85 14×85	1500	50	3	Drawing No 3

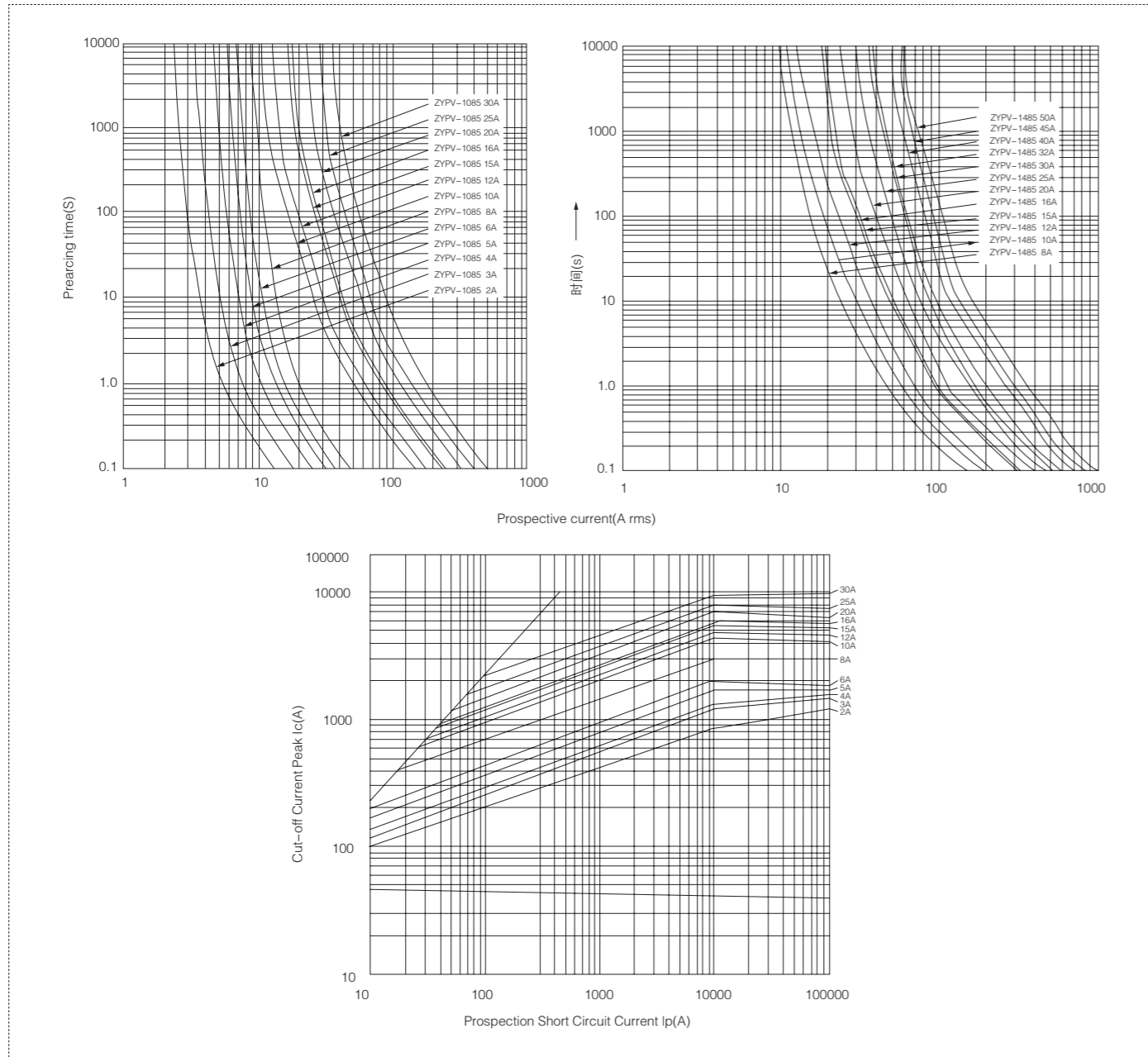


Test method

“gPV” Fuse holder Agreed time, agreed current

“gPV” Rated current A	Agreed time h	agreed current	
		I _{nf}	I _f
I _n ≤ 63	1	1.13I _n	1.45I _n
63 < I _n ≤ 160	2		
160 < I _n ≤ 400	3		
I _n > 400	4		

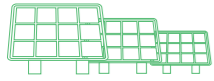
Characteristics Curve:



- They have low contact resistance and high reliability.
- solar connectors prevent the leakage of harmful substances and do not cause pollution to the environment.
- They effectively reduce losses in the wiring harness and improve system efficiency.
- They have comprehensive safety features that effectively prevent hazards such as short circuits, overloads, and overheating.



Solar DC Connector



Solar DC Connector

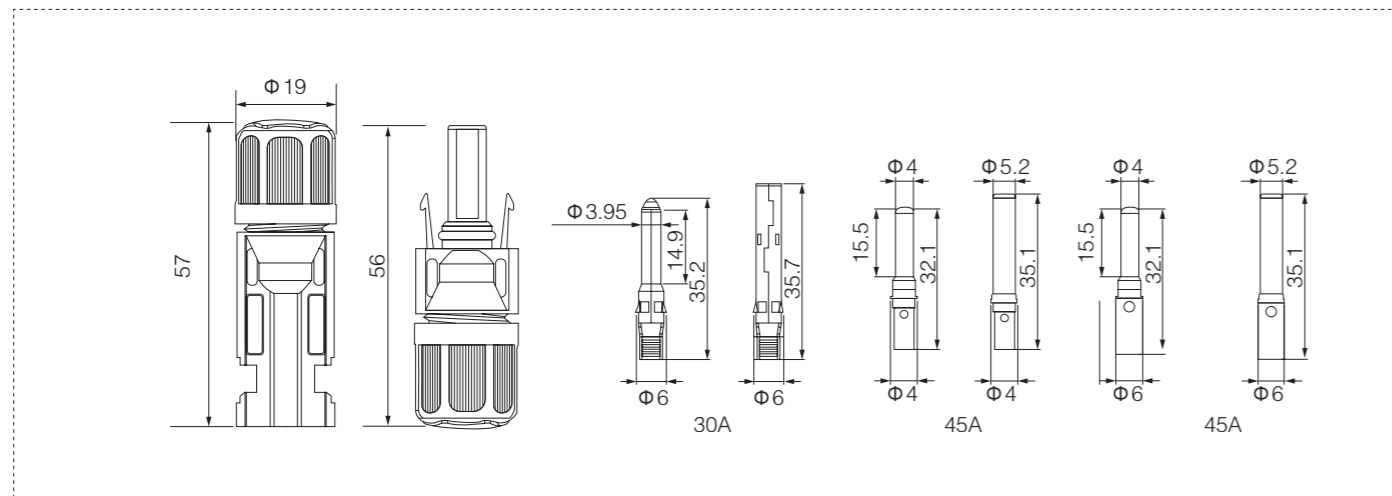
PV-30A(1000V) PV-45A(1000V)



TECHNICAL DATA

Connector system	Φ2.5mm; Φ4mm; Φ6mm
Rated voltage	1000V DC
Rated current	30A(2.5mm ² ;4mm ² ; 6mm ² ; 14AWG; 12AWG; 10AWG) 45A(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 resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-Vo
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)



Solar DC Connector

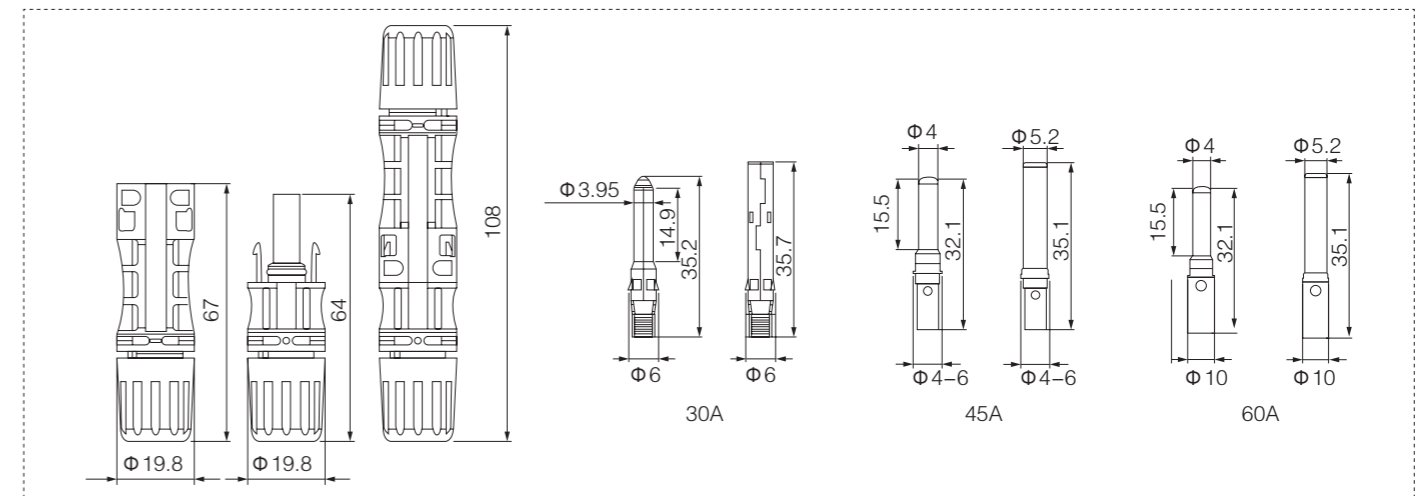
PV-30A(1500V) PV-45A(1500V) PV-60A(1500V)

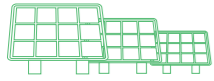


TECHNICAL DATA

Connector system	Φ2.5mm; Φ4mm; Φ6mm; Φ10mm
Rated voltage	1500V DC
Rated current	30A(2.5mm ² ;4mm ² ; 6mm ² ; 14AWG; 12AWG; 10AWG) 45A(4mm ² ; 6mm ² ; 12AWG;10AWG) 60A(10mm ² ; 8AWG)
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 resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PV
Locking system	Snap-in
Flame class	UL-94-V0
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)





Solar DC Connector

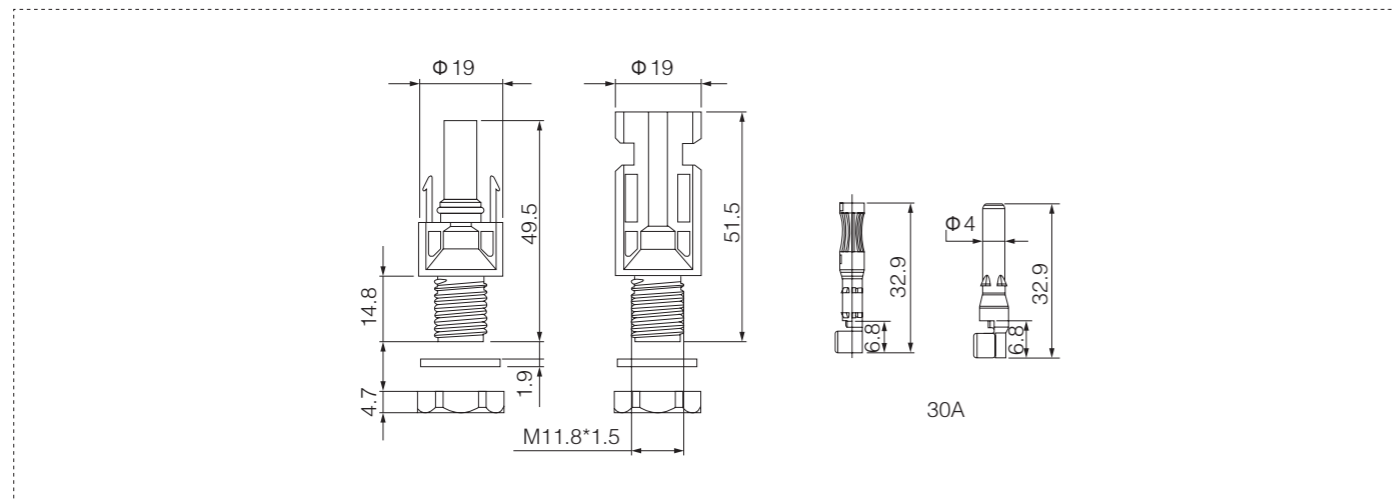
PV-30A(1000V)-BD



TECHNICAL DATA

Connector system	Φ2.5mm; Φ4mm; Φ6mm; Φ10mm
Rated voltage	1000V DC
Rated current	30A(2.5mm ² ;4mm ² ; 6mm ² ; 14AWG; 12AWG; 10AWG) 45A(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 temper ature	+105°C (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-Vo
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)



Solar DC Connector

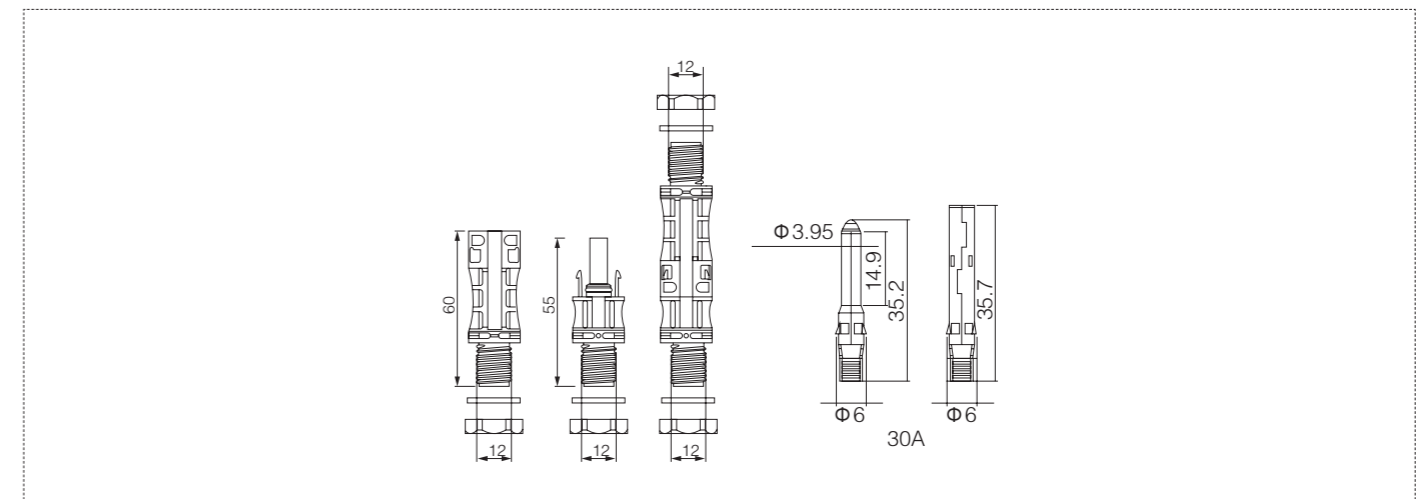
PV-30A(1500V)-BD

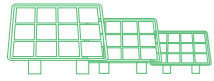


TECHNICAL DATA

Connector system	Φ2.5mm; Φ4mm; Φ6mm; Φ10mm
Rated voltage	1000V DC
Rated current	30A(2.5mm ² ;4mm ² ; 6mm ² ; 14AWG; 12AWG; 10AWG)
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C ...+90°C (IEC) -40°C ...+75°C (UL)
Upper limiting temper ature	+105°C (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Comtact resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PV
Locking system	Snap-in
Flame class	UL-94-V0
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)





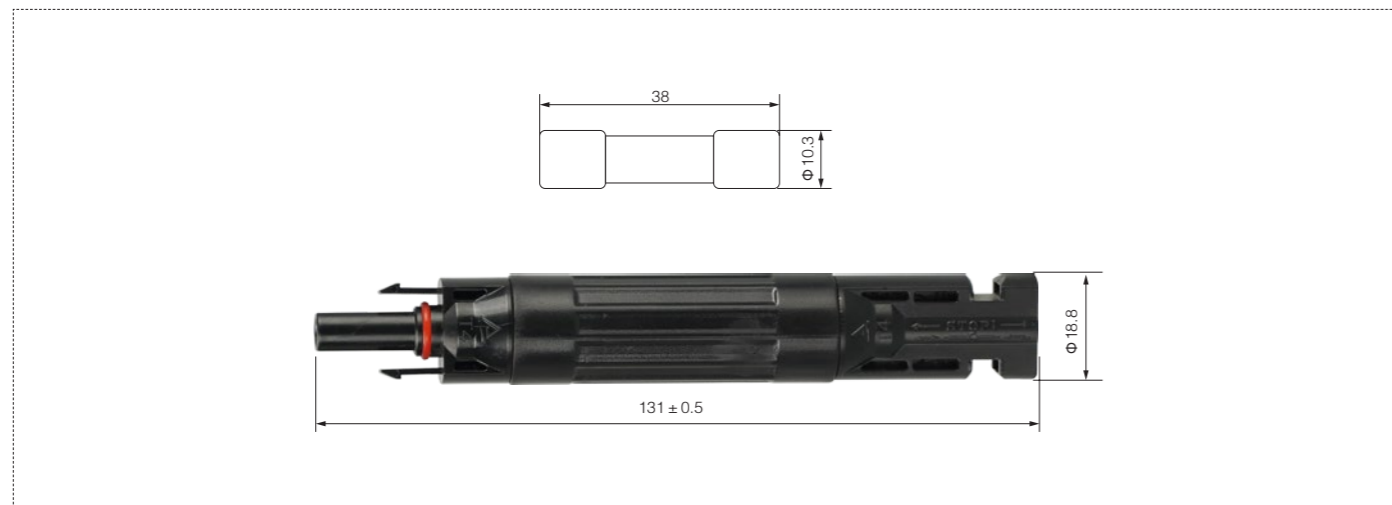
Solar DC Connector PV-30A(1000V)-FUSE



TECHNICAL DATA

Connector system	Φ4mm
Rated voltage	1000V DC
Rated current	10A 15A 20A 25A 30A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C ...+90°C (IEC)
Upper limiting temperature	+105°C (IEC)
Degree of protection,mated	IP67
unmated	IP2X
Contact resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-Vo
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)



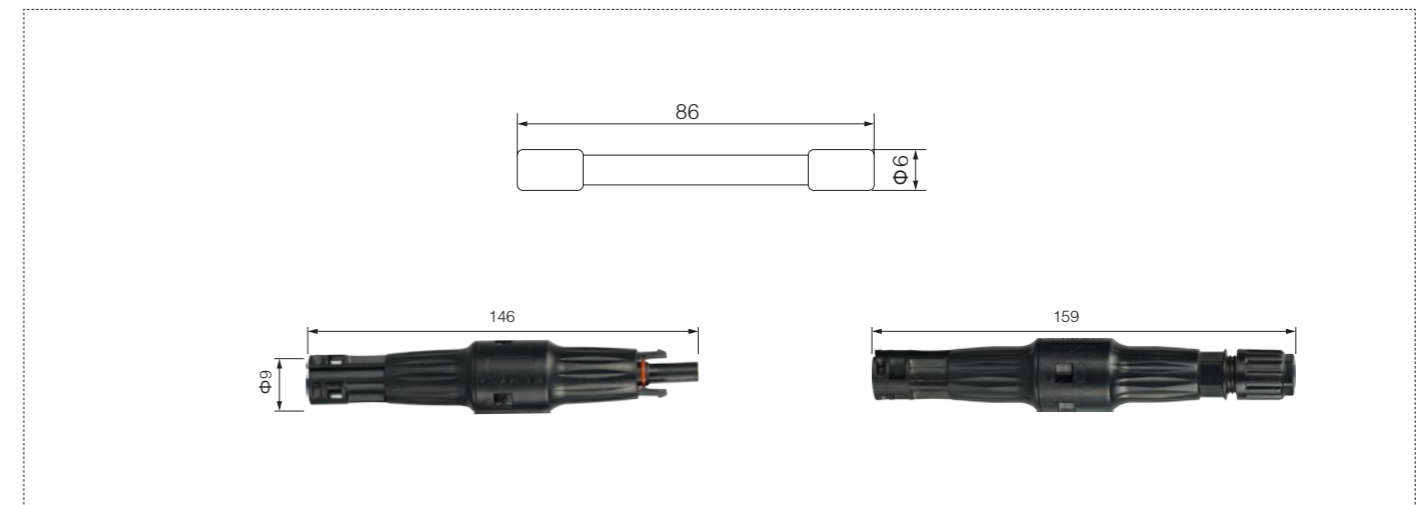
Solar DC Connector PV-30A(1500V)-FUSE

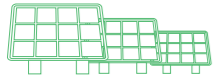


TECHNICAL DATA

Connector system	Φ4mm
Rated voltage	1500V DC
Rated current	10A 15A 20A 25A 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 resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PPO
Locking system	Snap-in
Flame class	UL-94-Vo
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)





Solar DC Connector

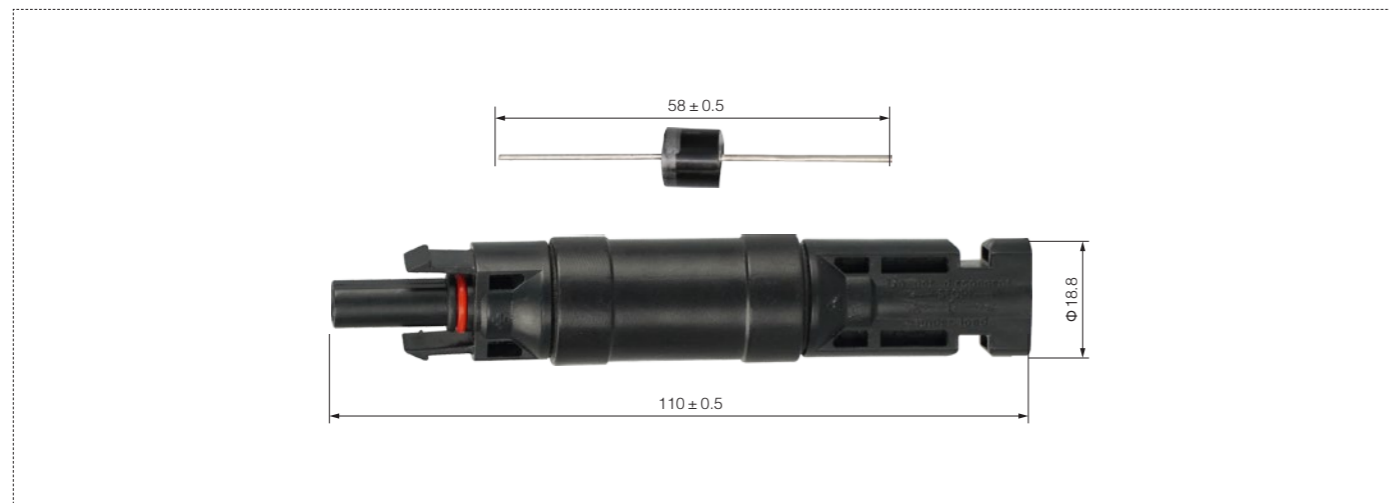
PV-30A(1000V)-diode



TECHNICAL DATA

Connector system	Φ4mm
Rated voltage	1000V DC
Rated current	10A 15A 20A 30A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40°C ...+90°C (IEC)
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/PPO
Locking system	Snap-in
Flame class	UL-94-Vo
Salt mist spray test, degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)



Solar DC Connector

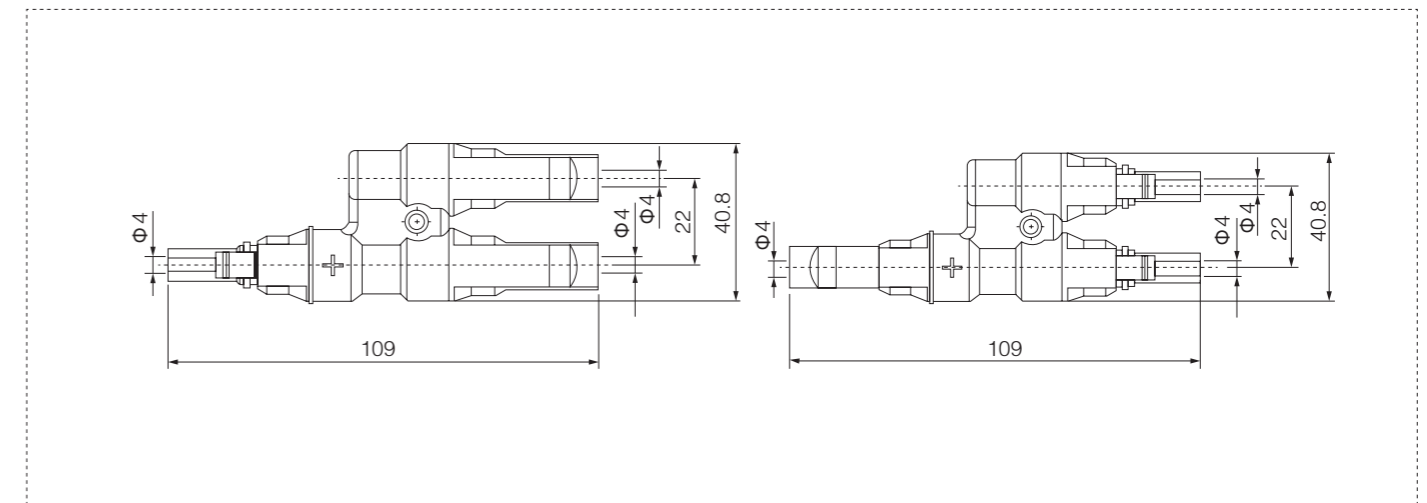
PV-T3

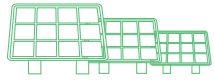


TECHNICAL DATA

Insulation Material	PPO
Contact Material	Copper, Tin plated
Suitable Current	50A
Rated Voltage	1000V DC
Test Voltage	6kV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~+85°C
Flame Class	UL94-VO
Safety Class	II
Pin Dimensions	Φ4mm

DIMENSIONAL DRAWING(MM)





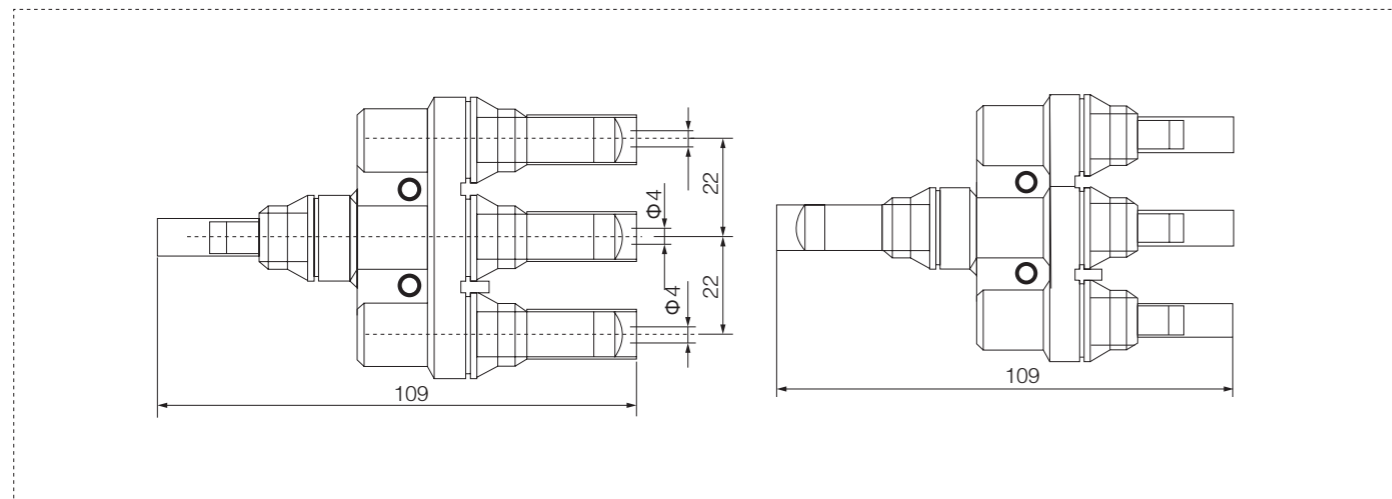
Solar DC Connector PV-T4



TECHNICAL DATA

Insulation Material	PPO
Contact Material	Copper,Tin plated
Suitable Current	50A
Rated Voltage	1000V DC
Test Voltage	6KV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~+85°C
Flame Class	UL94-VO
Safety Class	II
Pin Dimensions	Φ4mm

DIMENSIONAL DRAWING(MM)



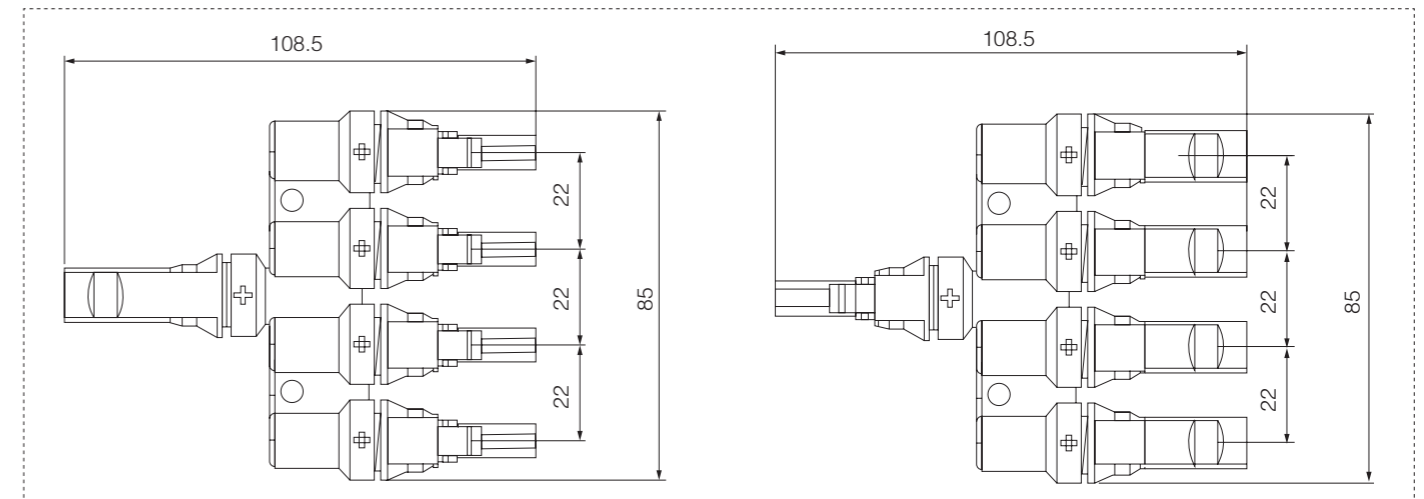
Solar DC Connector PV-T5

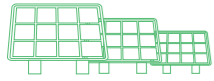


TECHNICAL DATA

Insulation Material	PPO
Contact Material	Copper,Tin plated
Suitable Current	50A
Rated Voltage	1000V DC
Test Voltage	6KV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~+85°C
Flame Class	UL94-VO
Safety Class	II
Pin Dimensions	Φ4mm

DIMENSIONAL DRAWING(MM)





Solar DC Connector

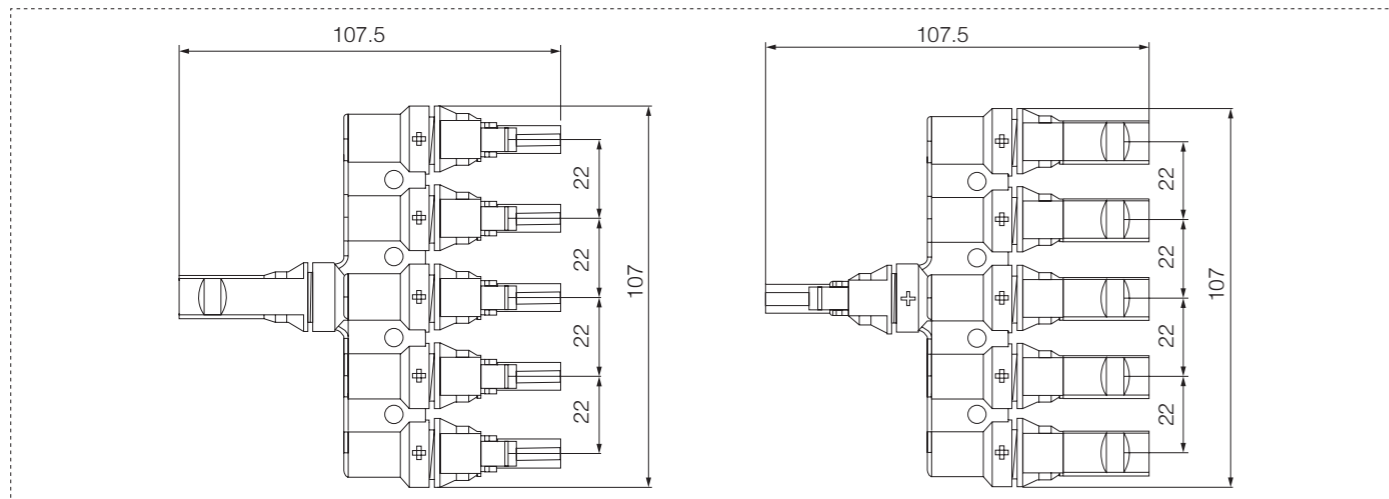
PV-T6



TECHNICAL DATA

Insulation Material	PPO
Contact Material	Copper,Tin plated
Suitable Current	50A
Rated Voltage	1000V DC
Test Voltage	6KV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~+85°C
Flame Class	UL 94-V0
Safety Class	II
Pin Dimensions	Φ4mm

DIMENSIONAL DRAWING(MM)



Solar DC Connector

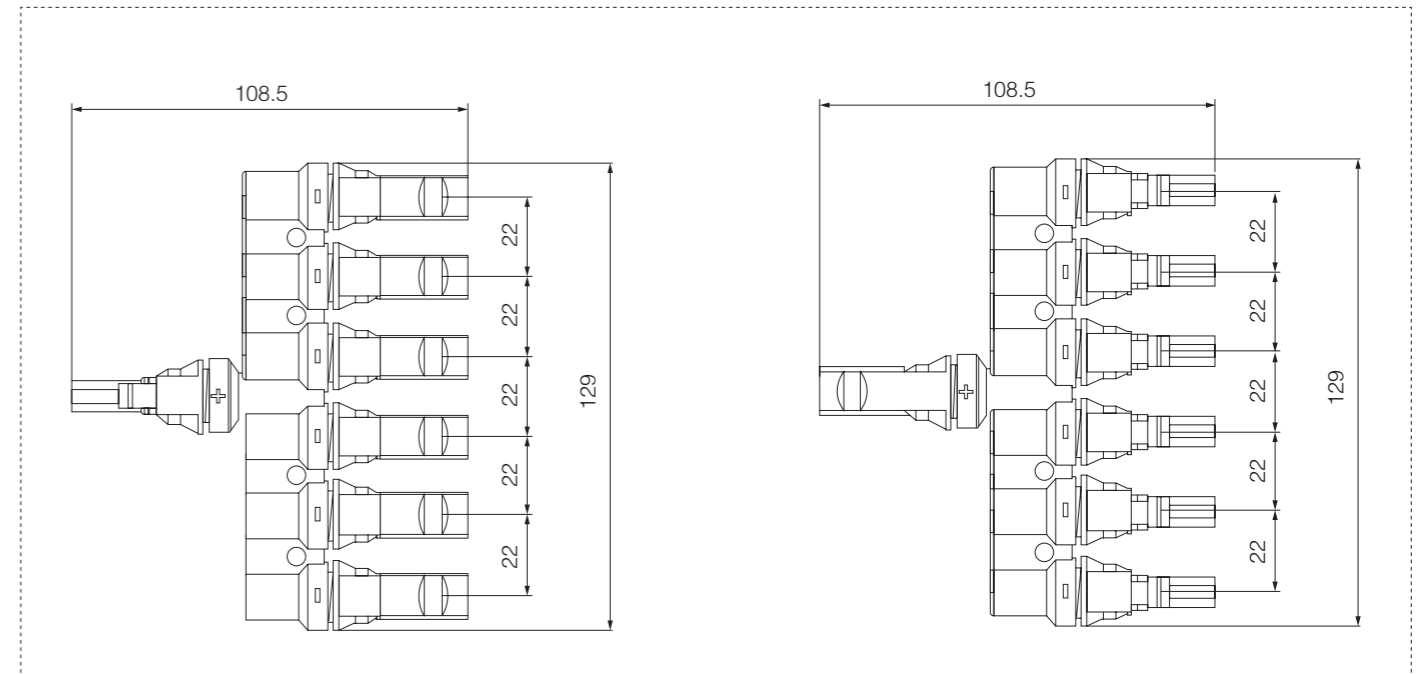
PV-T7

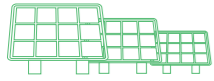


TECHNICAL DATA

Insulation Material	PPO
Contact Material	Copper,Tin plated
Suitable Current	50A
Rated Voltage	1000V DC
Test Voltage	6KV(TUV50HZ,1min)
Contact Resistance	<0.5mΩ
Degree Of Protection	IP67
Ambient Temperature Range	-40°C ~+85°C
Flame Class	UL 94-V0
Safety Class	II
Pin Dimensions	Φ4mm

DIMENSIONAL DRAWING(MM)





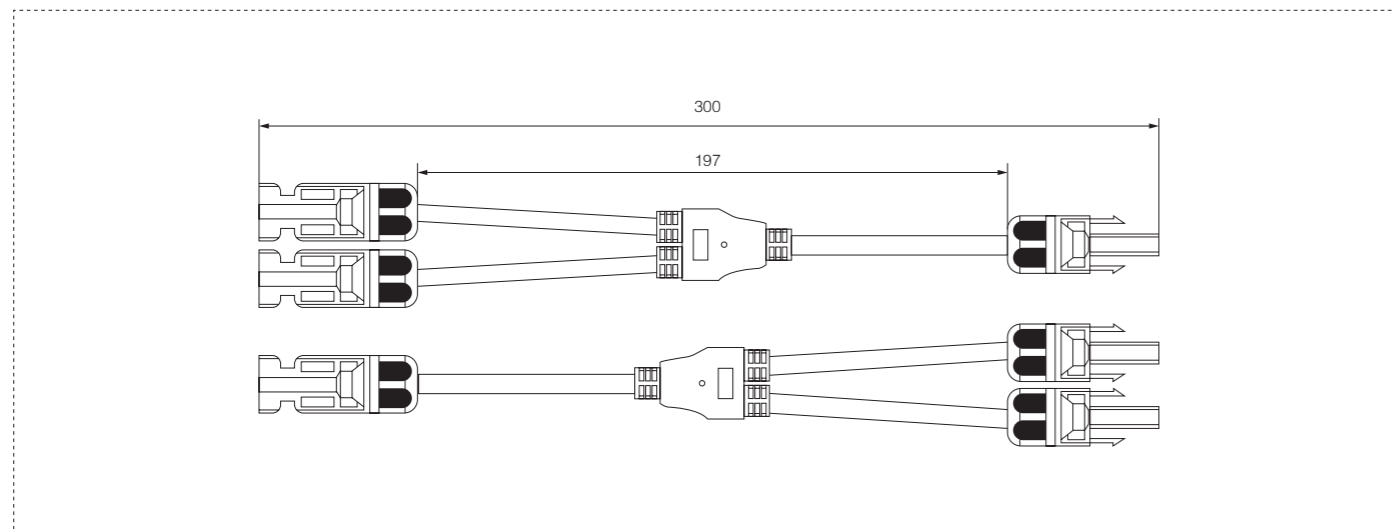
Branch Cable PV-Y3



TECHNICAL DATA

Connector system	Φ4mm; Φ6mm
Rated voltage	1000V DC
Rated current	30A
Test voltage	6kV(50HZ, 1min.)
Ambient temperature range	-40° ...+90°C (IEC) -40°C ...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Contact resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing, verzinkt Copper Alloy,tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)



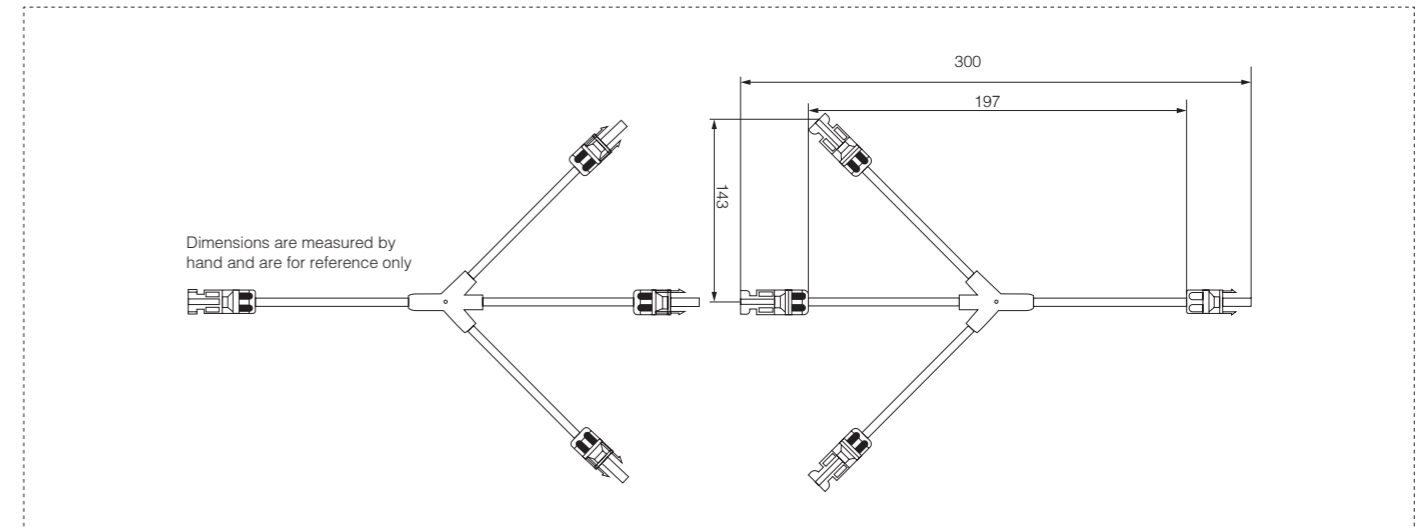
Branch Cable PV-Y4

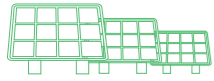


TECHNICAL DATA

Connector system	Φ4mm; Φ6mm
Rated voltage	1000V DC
Rated current	30A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40° ...+90°C (IEC) -40° ...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Contact resistanceof plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing, verzinkt Copper Alloy,tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-VO
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)





Branch Cable

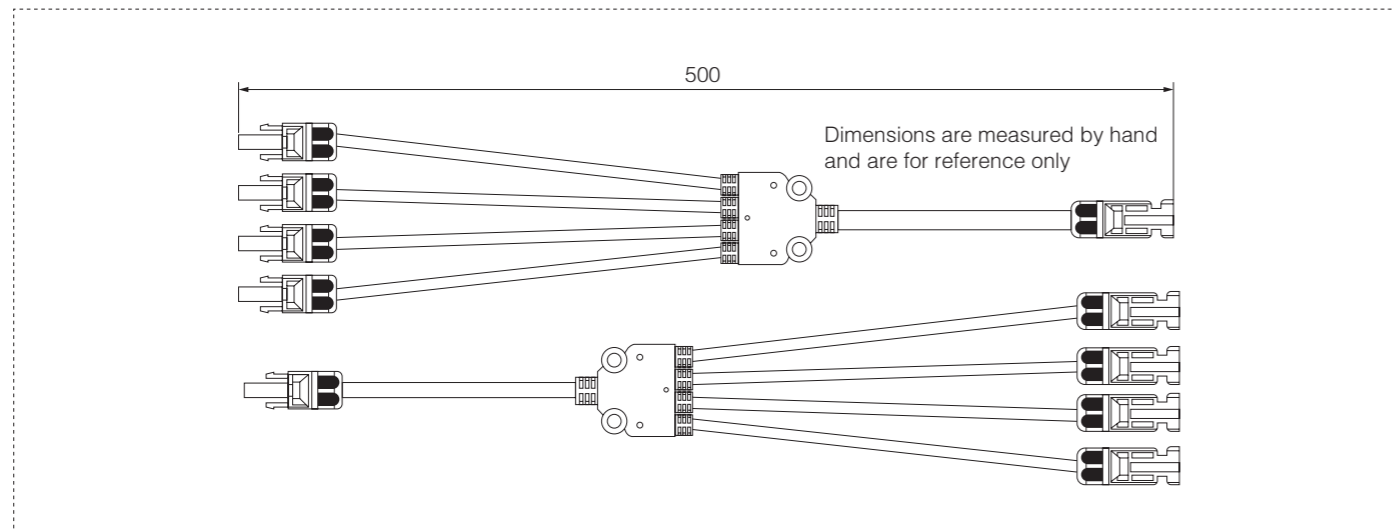
PV-Y5



TECHNICAL DATA

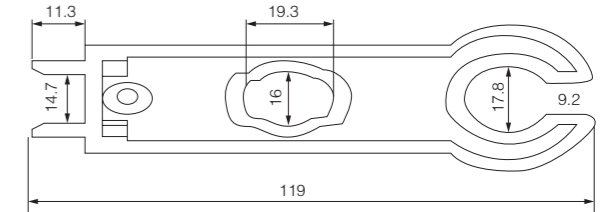
Connector system	Φ4mm; Φ6mm
Rated voltage	1000V DC
Rated current	30A
Test voltage	6kV(50HZ,1min.)
Ambient temperature range	-40° ...+90°C (IEC) -40°C ...+75°C (UL)
Upper limiting temperature	+105°C (IEC)
Degree of protection,mated	IP67
Unmated	IP2X
Contact resistance of plug connectors	0.5mΩ
Safetyclass	II
Contact material	Messing,verzinkt Copper Alloy,tin plated
Insulation material	PC/PA
Locking system	Snap-in
Flame class	UL-94-V0
Salt mist spray test,degree of severity 5	IEC 60068-2-52

DIMENSIONAL DRAWING(MM)

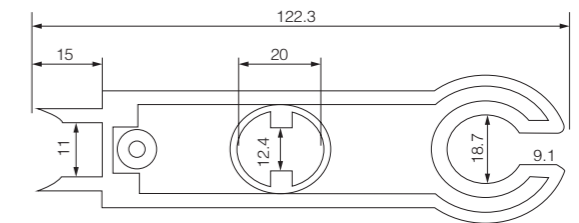


SPECIAL WRENCH

PV-1000V



PV-1500V



PV-Multifunction

