

## SOLAR ENERGY ACCESSORIES





# CERTIFICATE

# CATALOGUE

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**PV DC Isolator 18**

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# PV Solar Dedicated Circuit Breaker



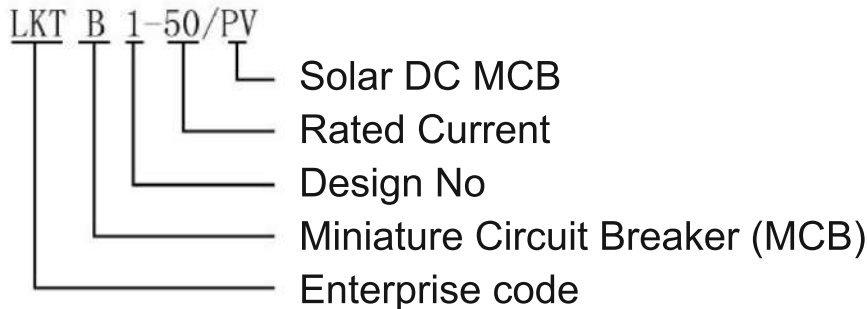
PV DC breaker supplementary protectors are designed to provide overcurrent protection within appliance or electrical equipment, where a branch circuit protection is already provided or not required. Devices are designed for direct current (DC) control circuit applications.

## PV Solar Circuit Breaker

### □ Product Introduction

LKTB1-50/PV series photovoltaic DC circuit breaker (non-polarity) is mainly used in solar photovoltaic power generation systems. The working voltage is up to DC1000V, and the rated current is up to 63A. It can be used for overload and short-circuit protection. It can quickly disconnect the DC power distribution system. The fault current protects the important components in the solar power generation system-photovoltaic modules from the harm of the DC side reverse current and the AC side feedback current caused by the inverter fault, and ensures the reliable operation of the solar photovoltaic power generation system.

### □ Model and Signification



### □ Features

PV series of photovoltaic DC fuses can realize non-polar connection, which can ensure safety of equipment

### □ Specification

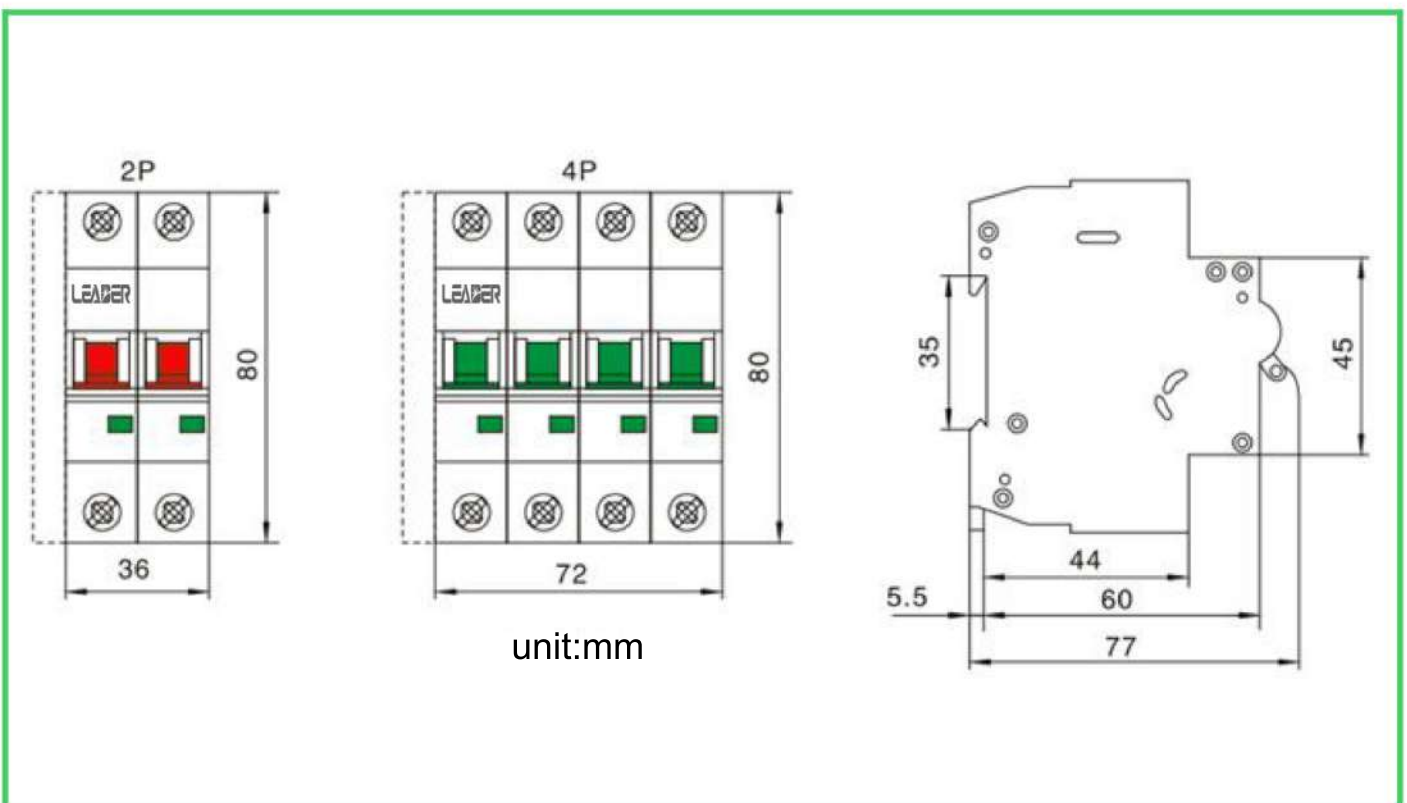
Model	LEADER-50/PV	
Product Picture		
Pole	2P	4P
Rated Voltage(V)	DC500	DC1000
Rated Current(A)	6, 10, 16, 20, 25, 32, 40, 50, 63	
Rated Insulation Voltage (V)	1000	
Rated Impact Voltage (V)	6	
Biggest Block Ability(KA)	6	
Instantaneous Tripping Characteristics	C	

# PV Solar Circuit Breaker

## □ Wiring Diagram

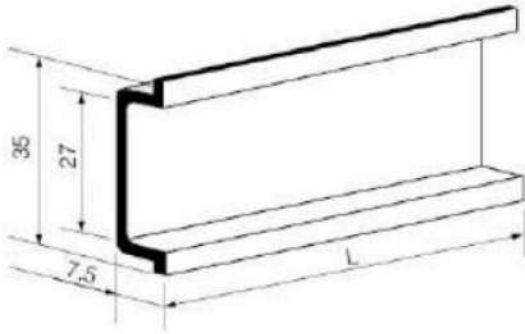
Model	LKTB1-50/PV	LKTB1-50/PV
Connection	<p style="text-align: center;"><b>2P</b></p>	<p style="text-align: center;"><b>4P</b></p>
Life	Mechanical :actual average value 20000 Electric :standard value 1500	
Working Temperature(°C)	-25~40	
Wiring Capacity Connection	In≤32A 1-25mm <sup>2</sup> , In≥40A 10-35mm <sup>2</sup>	
DIN rail(mm)	35HX80WX71D	
Weight (g)	234	465
Standard	IEC60947-2 GB14048.2	

## □ Dimensions(mm)

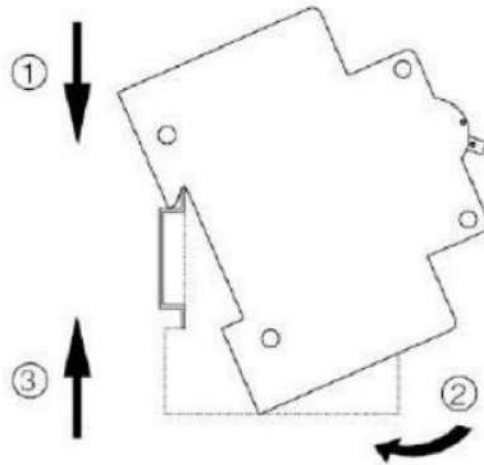


## PV Solar Circuit Breaker

### □ Installation Diagram



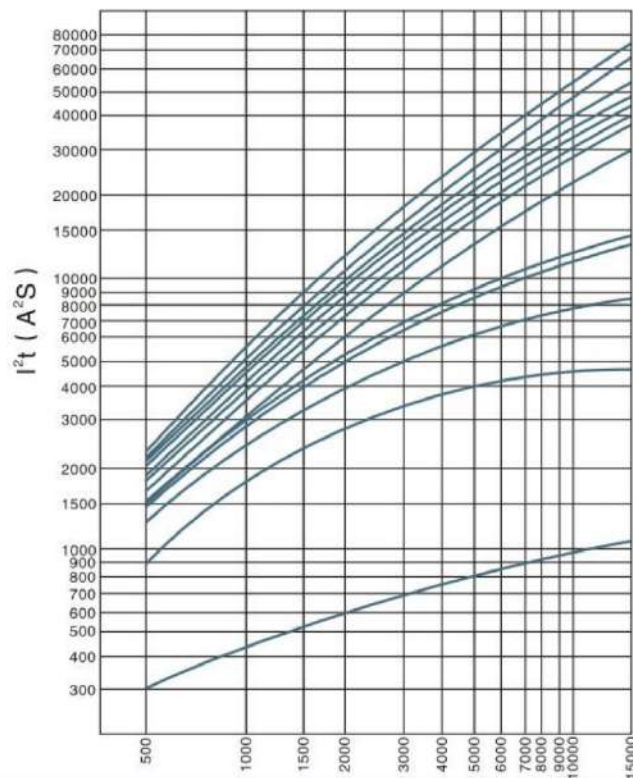
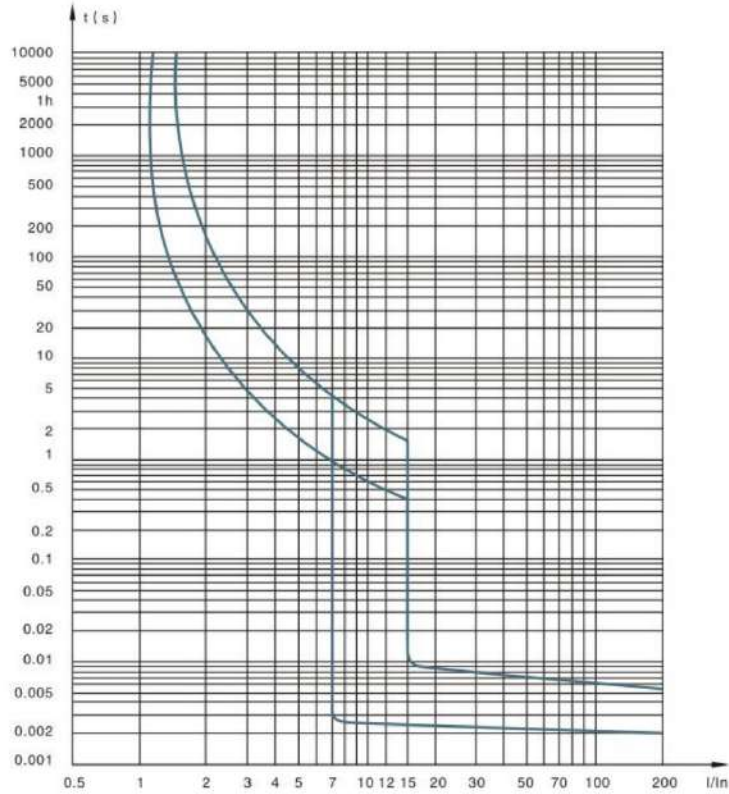
TH35-7.5 Mounting Din-Rail



# PV Solar Circuit Breaker

## Characteristics Curve

**Characteristic Curve**





## PV SURGE PROTECTOR

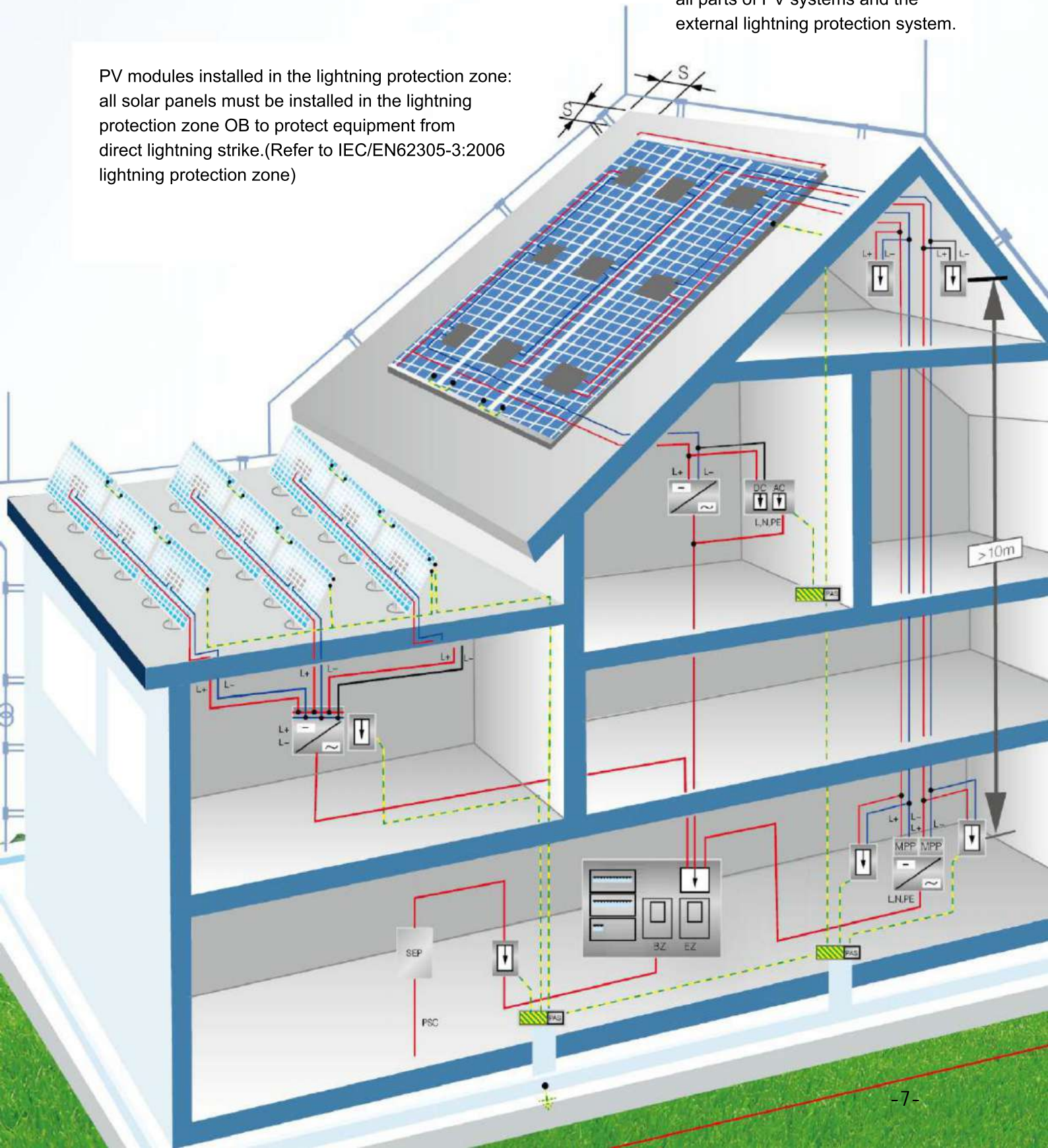
PV surge protective device, protect against lightning surge voltages in solar system (photovoltaic power supply system). These units must be installed in parallel on the DC networks to be protected and provide common and different modes protection. The installed location are recommended at both ends of the DC power supply line (solar panel side and inverter/converter side).

The handle connecting rod material you can choose stainless steel, or plastic materials



safe distance(S):  
must keep a safe distance between  
all parts of PV systems and the  
external lightning protection system.

PV modules installed in the lightning protection zone:  
all solar panels must be installed in the lightning  
protection zone OB to protect equipment from  
direct lightning strike.(Refer to IEC/EN62305-3:2006  
lightning protection zone)

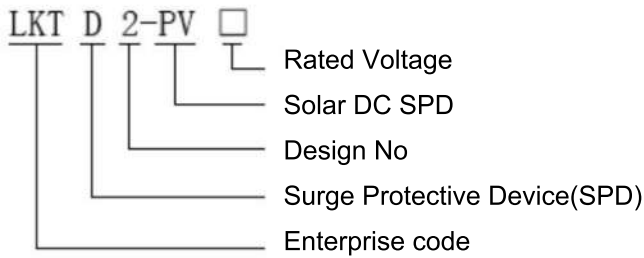


## PV Surge Protector

### Product Introduction

LKTD2 series surge protectors are mainly used for lightning protection of photovoltaic low-voltage DC power distribution systems, which can effectively prevent lightning current from damaging solar panels, photovoltaic combiner boxes, DC power distribution cabinets and inverters and other photovoltaic supporting facilities. LKTD2 series SPD has common mode (MC) and differential mode (MD) protection modes. The product complies with IEC61643-1 and GB18802.1 standards.

### Model and Signification



### Technical Parameter

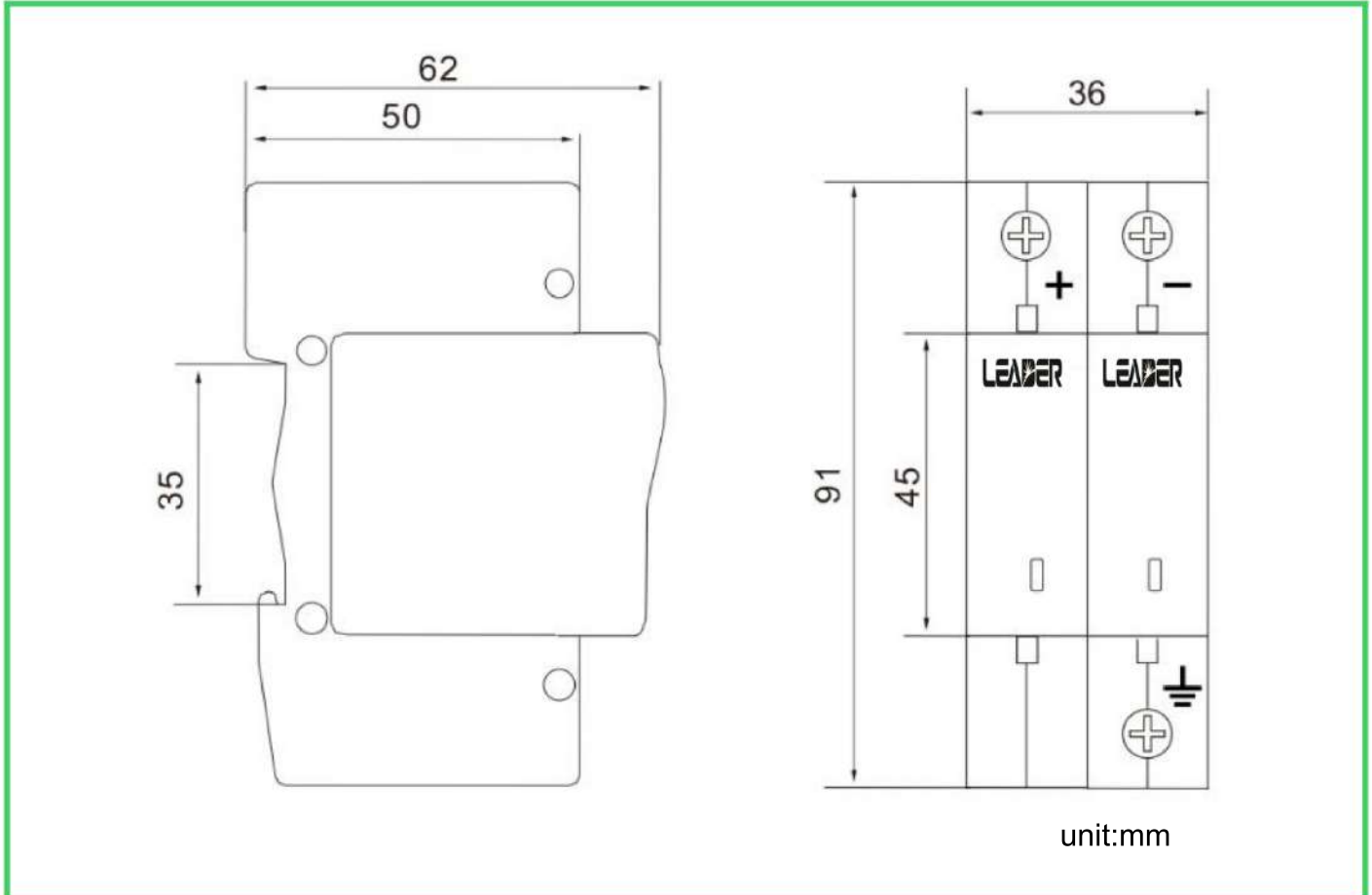
Model	LKTD2-PV1000	
Product Picture		
Pole	2P	2P
Maxi Continuous Operating Voltage	DC670	DC1300
Voltage Protective Level $U_p$ (kV) $\leq$	2.5	4.0
Maxi Discharging Current (8/20 $\mu$ s) $I_{max}$ (kA)	40	
Nominal Discharging Current (8/20 $\mu$ s) $I_n$ (kA)	20	
Response Time(ns)	< 25	
Protection Grade	IP20	
Indication of Invalidation	White: Normal, Red: Invalidation	
Application	Secondary Protection For In Line	
Remote Signal Function	Not Available	

## PV Surge Protector

### □ Technical Parameter

<b>Connection</b>	
<b>DIN rail(mm)</b>	35
<b>Weight(g)</b>	244
<b>Standard</b>	IEC61643-1 GB18802.1
<b>Installation Environment</b>	No obvious shock and vibration
<b>Altitude(m)</b>	≤2000
<b>Working Temperature</b>	-3.0℃~+70℃
<b>Relative Humidity</b>	30%-90%

### □ Dimension Drawing

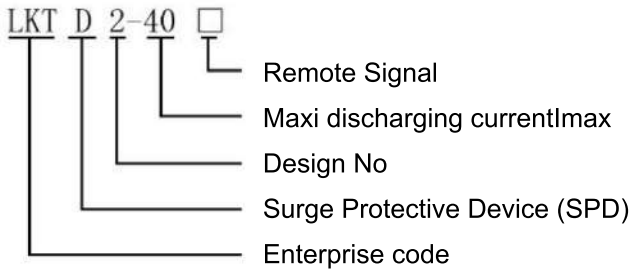


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## Model and Signification



## Technical Parameter

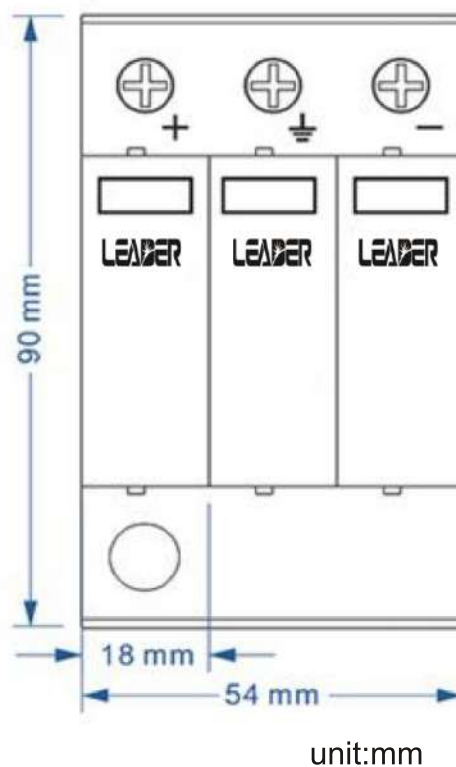
Model	LKTD2-40	LKTD2-40F
Product Picture		
Pole	3	
Maxi Continuous Operating Voltage UC(V)	DC1000	
Voltage Protective Level Up(kV)≤	4.5	
Maxi Discharging Current (8/20μs)Imax(kA)	40	
Nominal Discharging Current (8/20μs)In(kA)	20	
Response Time(ns)	< 25	
Protection Grade	IP20	
Indication of Invalidation	Green: Normal, Red: Invalidation	
Application	Secondary Protection For In Line	
Remote Signal Function	Not Available	Available

## PV Surge Protector

### □ Technical Parameter

Model	LKTD2-40	LKTD2-40F
Connection		
DIN rail (mm)	35mm steel mounting rail	
Weight(g)	305	312
Standard	IEC61643-1 GB18802.1	
Installation Environment	No obvious shock and vibration	
Altitude(m)	≤2000	
Working Temperature	-3.0℃~+70℃	
Relative Humidity	30%-90%	

### □ Dimension Drawing



# PV DC FUSE

DC Fuse and fuse holder mainly used in DC Combiner box in solar pv system, when PV panel or inverter causes overload or short circuit, it trip off immediately to protect PV panels. DC fuse also used to protect other electrical parts in DC circuit, when overload or short circuit.



## PV DC Fuse

### □ 型号及含义 Model and Signification

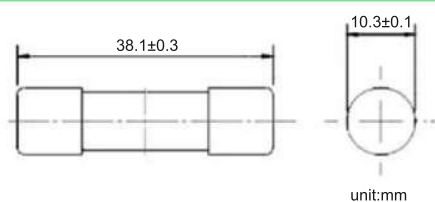
ZTPV-25



### □ Technical Parameter

Model	ZTPV-25			
Product Picture				
Size(mm)	10×38			
Rated Voltage(V)	DC1000			
Rated Current(A)	1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 16, 20, 25, 30, 32			
Rated Breaking Capacity(KA)	33			
Class of Operation	gPV			
Working Temperature(°C)	-50~105			
Altitude(m)	≤2000			
Weight((g)	10			
Standard	IEC60269.6			
Material Details				
Part Name	Cap	Body	Fuse Element	Arc-extinguishing Agent
Material	Red Copper	Aluminium Oxide	Silver	Silica

### □ Dimension Drawing



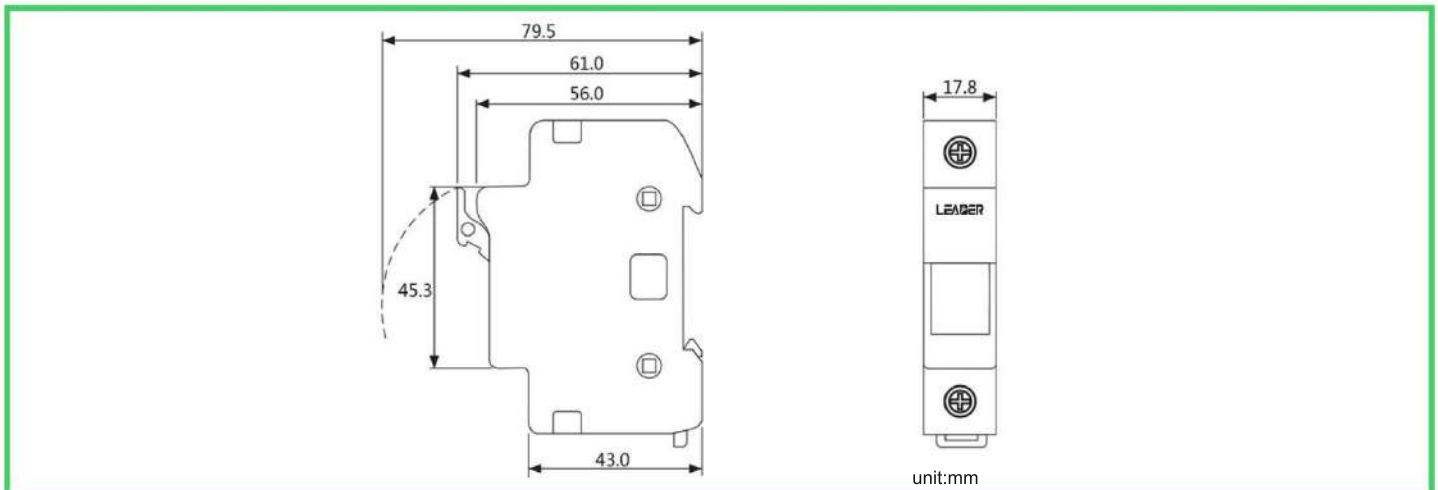


## PV DC Fuse

### □ Technical Parameter

Model	ZTPV-25B	ZTPV-25X
Product Picture		
Pole	1P	
Fuse Link Size(mm)	10×38	
Rated Voltage(V)	DC1000	
Rated Current(A)	32	
DIN Rail(mm)	35	
Weight(g)	60	61
Standard	IEC60269.6	
<b>Material Details</b>		
Part Name	Plastic Cement	Copper
Material	PBT(V-0)	Red Copper

### □ Dimension Drawing

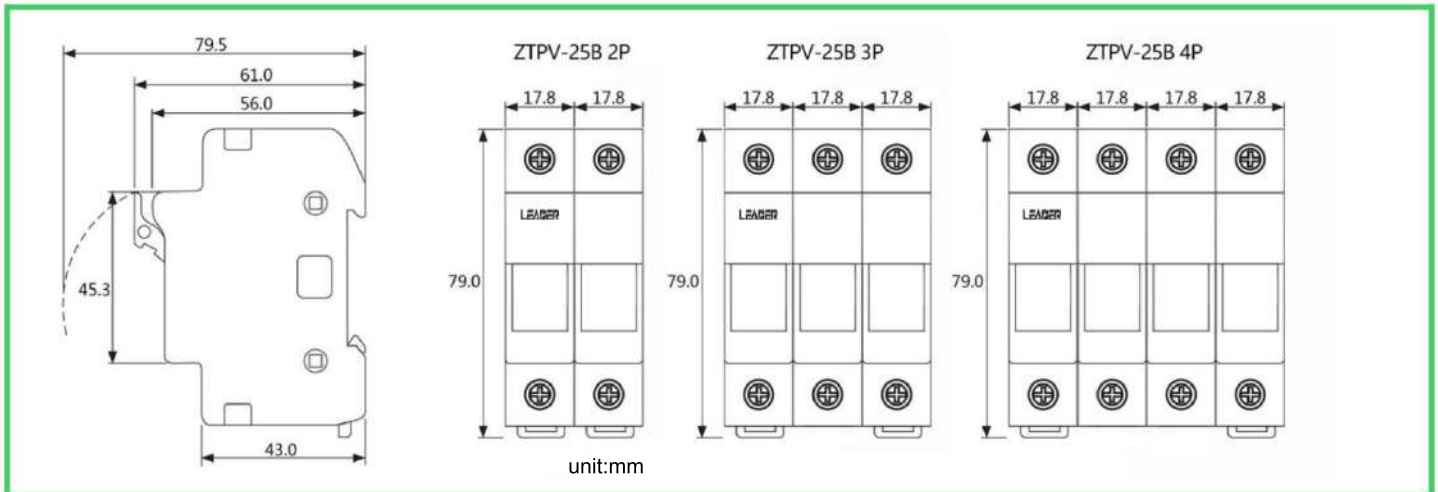


# PV DC Fuse

## □ Technical Parameter

Model	ZTPV-25B		
Product Picture			
Pole	2P	3P	4P
Fuse Link Size(mm)	10×38		
Rated Voltage(V)	DC1000		
Rated Current(A)	32		
DIN Rail(mm)	35		
Weight(g)	120	182	243
Standard	IEC60269.6		
Material Details			
Part Name	Plastic Cement		Copper
Material	PBT(V-0)		Red Copper

## □ Dimension Drawing



## PV DC Fuse

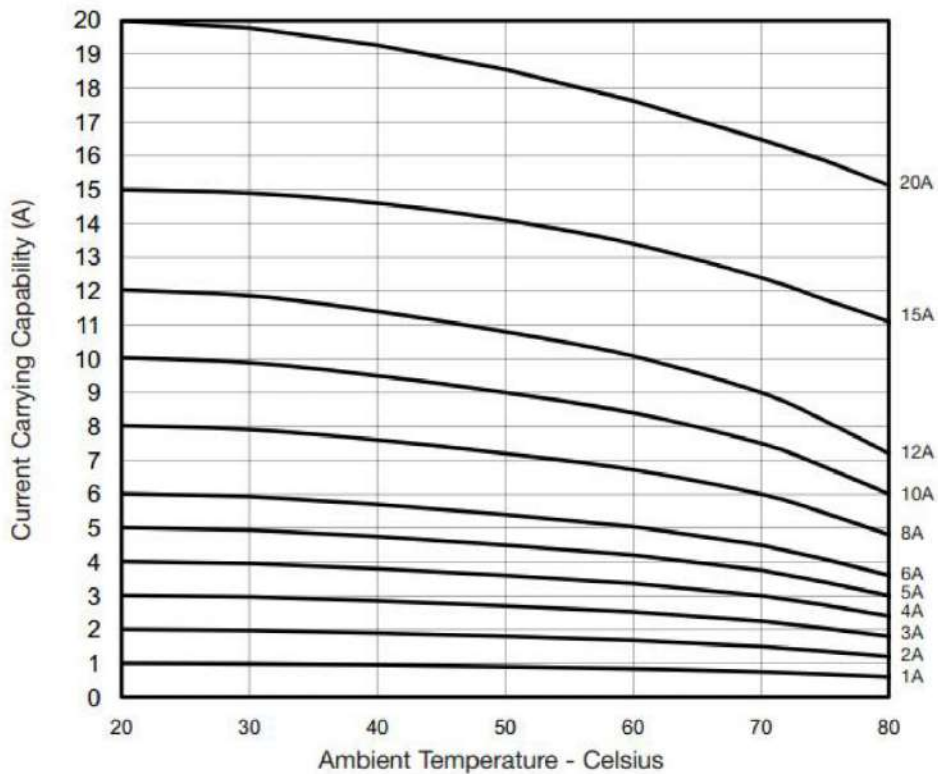
### □ Power Loss

Model	Rated Current (Amps)	Joule Integral I <sup>2</sup> t (A <sup>2</sup> s)		Power Loss(W)	
		Pre-Arcing	Total at 1000V	0.8I <sub>n</sub>	1.0I <sub>n</sub>
ZTPV-25	1	0.15	0.4	0.8	1.5
	2	1.2	3.4	0.6	1.0
	3	4	11	0.8	1.3
	4	9.5	26	1.0	1.5
	5	19	50	1.0	1.6
	6	30	90	1.1	1.8
	8	3	32	1.2	2.1
	10	7	70	1.2	2.3
	12	12	120	1.5	2.7
	15	22	220	1.7	2.9
	20	34	350	2.1	3.6

### □ Characteristics Curve

Environmental Temperature and Fuse Reduction Coefficient Characteristics

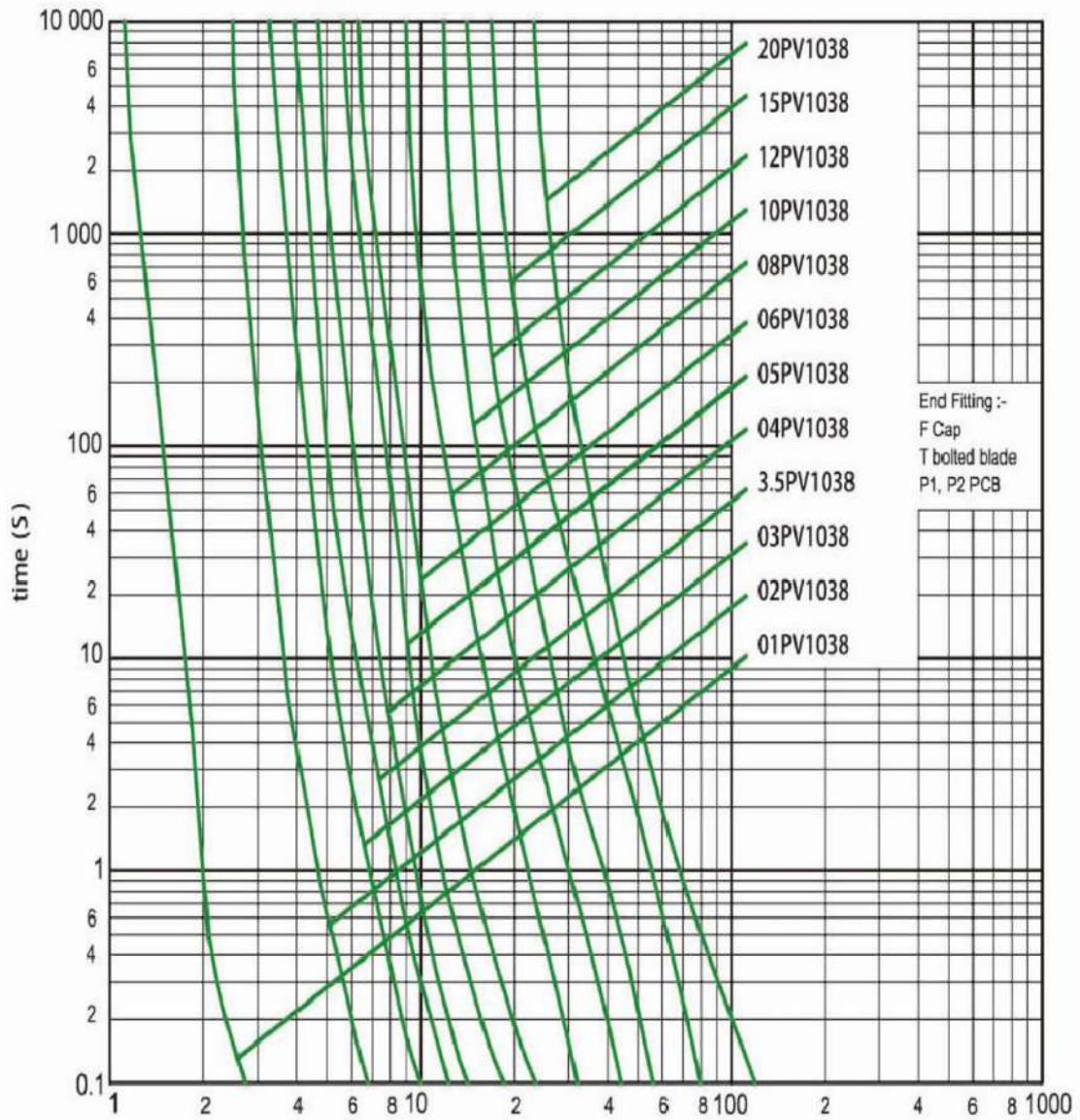
Temperature Derating



**PV DC Fuse**

□ **Characteristics Curve**

**Time-Current Characteristics**



Perspective current, DC-time constant < 1ms(Amp)

Each pole contact equipped with arc extinguish system , can eliminate arc immediately when switch off

## DC ISOLATOR



Rational Operational design prevents, reverse/ incorrect rotation

## DC Isolator Switth



SISO-40



SISO-40

### DC ISOLATING SWITCH

- UV Resistant IP66 Enclosure
- Extremely Short Power Shut Off Time Of Approx.2ms
- Lid Only Removable In "off" Position
- Earth Terminal
- IEC60947-3,AS/NZS60947.3: 2015
- DC-PV1 DC-PV2 DC-21B
- 10A To 32A UP To DC1000v
- Easy To Install



### Specifications

Rated Voltage	1000VDC
IP Rating	IP66
Connection Type	M20 M25 MC4
Rated Current	10A, 16A, 20A, 25A, 32A
Working Temperature	-25°C~+85°C
Standard	IEC60947-3, AS/NZS60947.3:2015

This product passed IEC authorized Lab IP66 waterproof testing. Also our company will take simulation tests irregularly, similar to customer's using environment, to make sure this product completely conforms to IP66 protection grade



# DC Isolator Switth

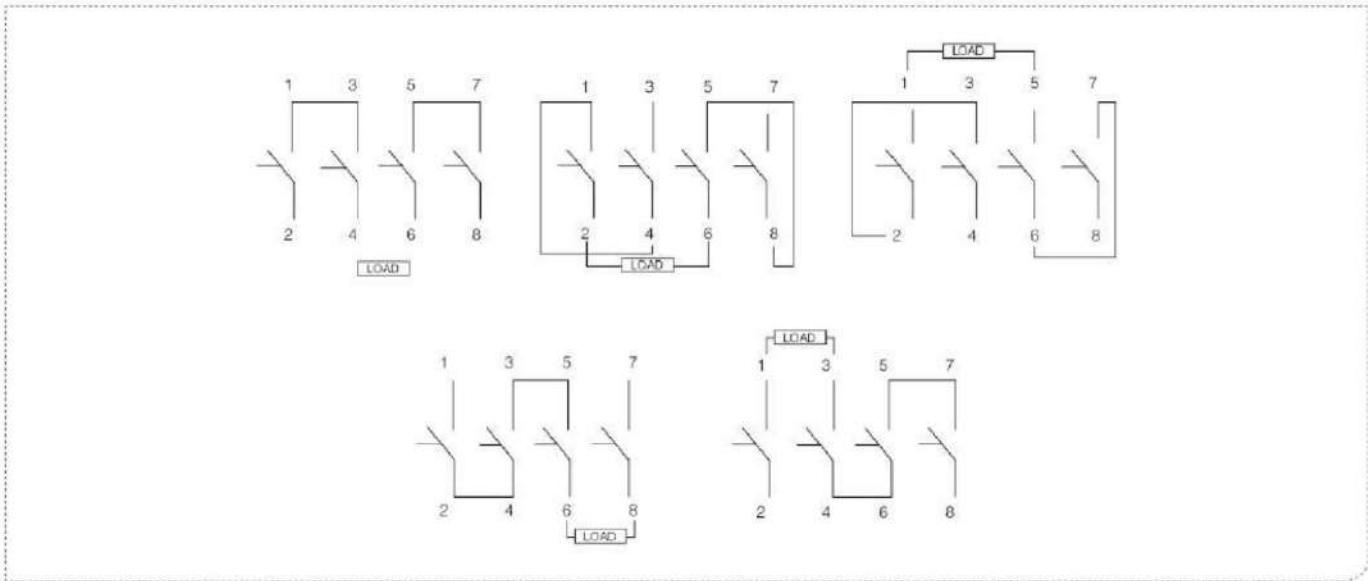
## Specifications

Contact configuration	600V	800V	1000V	1200V	Poles in series	Number of strings	Type Number
	16A	16A	9A	9A	2	1	SISO-16P2
	25A	20A	11A	11A	2	1	SISO-25P2
	32A	23A	13A	13A	2	1	SISO-32P2
	29A	16A	9A	9A	2	1	SISO-16P2H
	45A	20A	11A	11A	2	1	SISO-25P2H
	50A	23A	13A	13A	2	1	SISO-132P2H
	16A	16A	9A	9A	2	2	SISO-16P4
	25A	20A	11A	11A	2	2	SISO-125P4
	32A	23A	13A	13A	2	2	SISO-32P4
	16A	16A	16A	16A	4	1	SISO-16P4S
	25A	25A	25A	25A	4	1	SISO-25P4S
	32A	32A	32A	32A	4	1	SISO-32P4S
	16A	16A	16A	16A	4	1	SISO-16P4B
	25A	25A	25A	25A	4	1	SISO-25P4B
	32A	32A	32A	32A	4	1	SISO-32P4B
	16A	16A	16A	16A	4	1	SISO-16P4T
	25A	25A	25A	25A	4	1	SISO-25P4T
	32A	32A	32A	32A	4	1	SISO-32P4T

1500V DC voltage require customized

# DC Isolator Swithch

## Contact Configuration



## Dimensions(mm)

Flat Head Screwdriver: 8mm  
0.2N.M / 1.8in-lbs

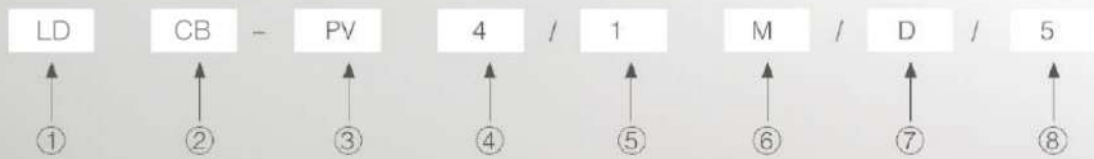
Cross screwdriver: PH2  
1.5N.M / 13.3in-lbs

- Be sure number(1,3,5,7) on switch and "IP66NWR" on cover are not inverted.
- Rotate Handel to the "OFF" position and locate shaft into switch body.
- Tighten screw 1,3,2,4::IN THAT ORDER::
- Make sure that number(5) is assembled on cover.



# PV Combiner Box

## DC COMBINER BOX TYPE



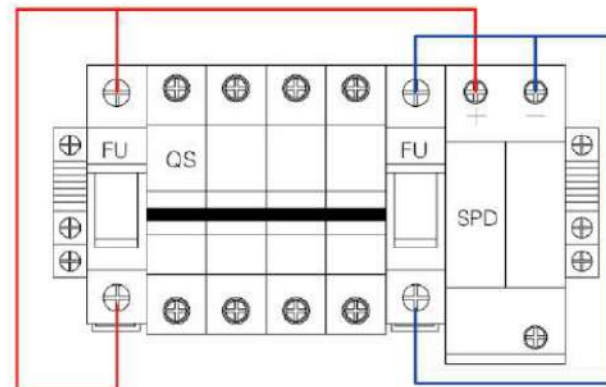
- ① LEADER electric
- ② Product model (combiner box)
- ③ PV
- ④ Input channel (1-12)
- ⑤ No. of output channel of MPPT
- ⑥ Monitoring unit
- ⑦ Diode
- ⑧ DC550V/DC1000V



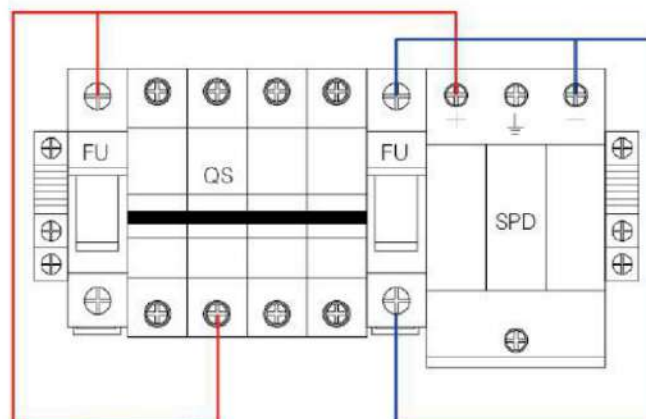
## PV Combiner Box

# LDCB-PV1/1 DC COMBINER BOX

- 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.



DC550V



DC1000V

## DESCRIPTION

LDCB-PV1/1 combiner box is suitable for inverter (MAX input voltage DC550V/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.

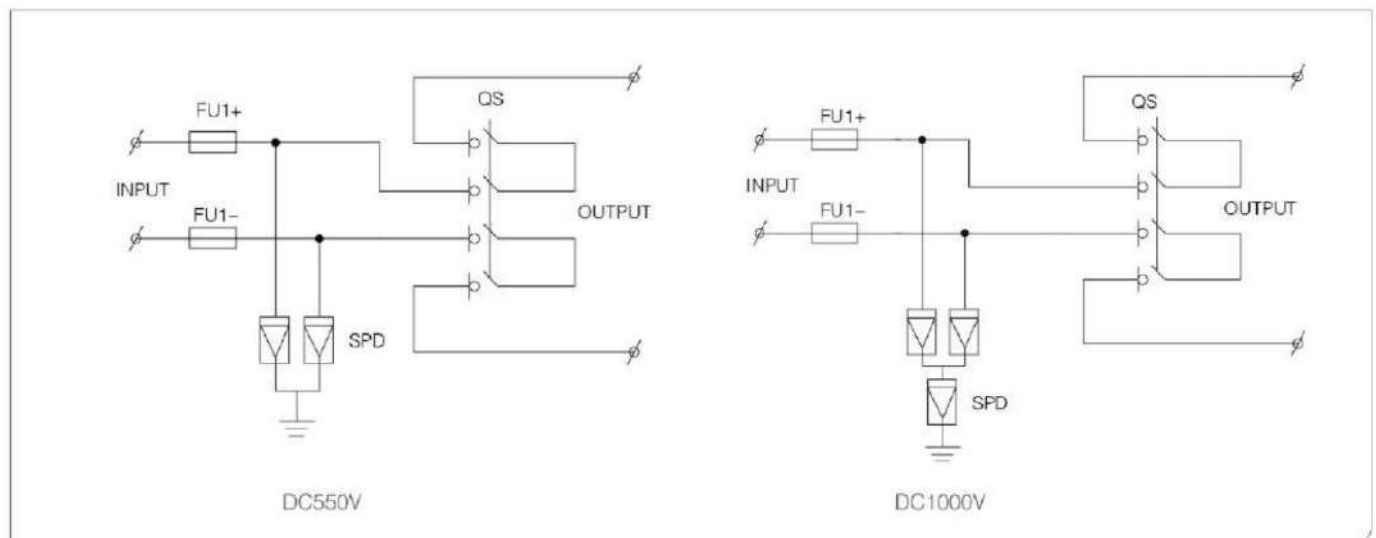
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037:2014.Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

## PV Combiner Box

### TECHNICAL PARAMETERS

Name	LDCB-PV1/1	
	Electric parameter	
System maximum dc voltage	550	1000
Maximum input current for each string	15A	
Maximum input strings	1	
Maximum output switch current	16A/20A	
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	2.8kV	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	630V	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	
	Mechanical parameter	
Width×High×Depth	300×260×140	

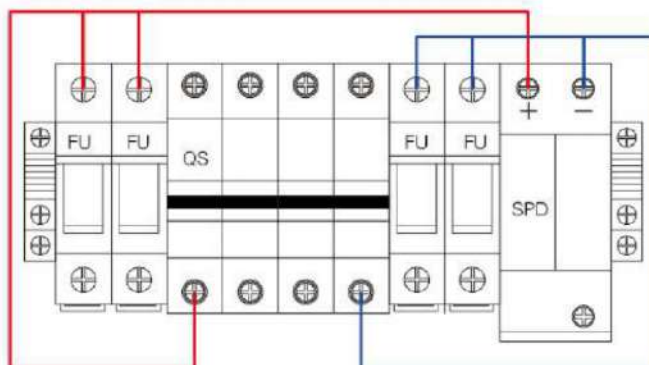
### SCHEMATIC DIAGRAM



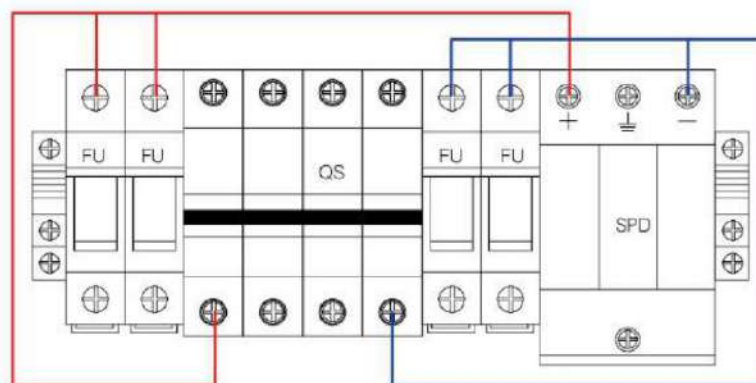
## PV Combiner Box

### LDCB-PV2/1 DC COMBINER BOX

- 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.



DC550V



DC1000V

#### DESCRIPTION

LDCB-PV2/1 combiner box is suitable for inverter (MAX input voltage DC550V/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 impac, anti ultraviolet, and other testing.IP65 protection grade.

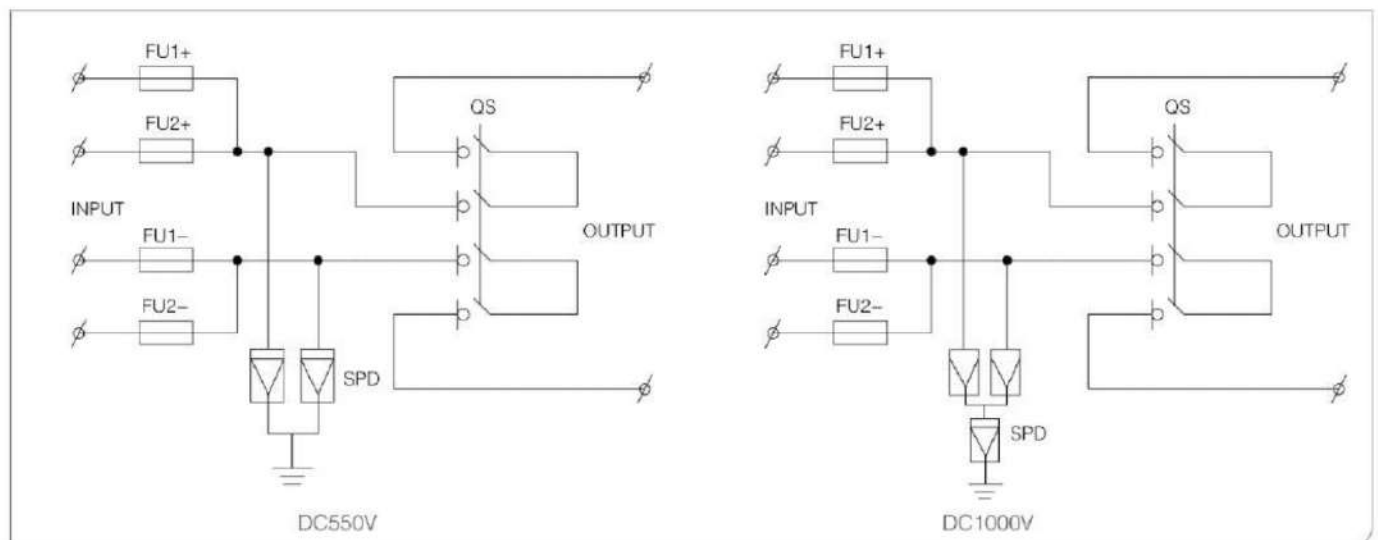
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment " CGC/GF 037.2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

# PV Combiner Box

## TECHNICAL PARAMETERS

Name		LDCB-PV2/1	
Electric parameter			
System maximum dc voltage	550	1000	
Maximum input current for each string	15A		
Maximum input strings	2		
Maximum output switch current	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	2.8kV	3.8kV	
Maximum continuous operating voltage U <sub>c</sub>	630V	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		
Mechanical parameter			
Width×High×Depth	300×260×140		

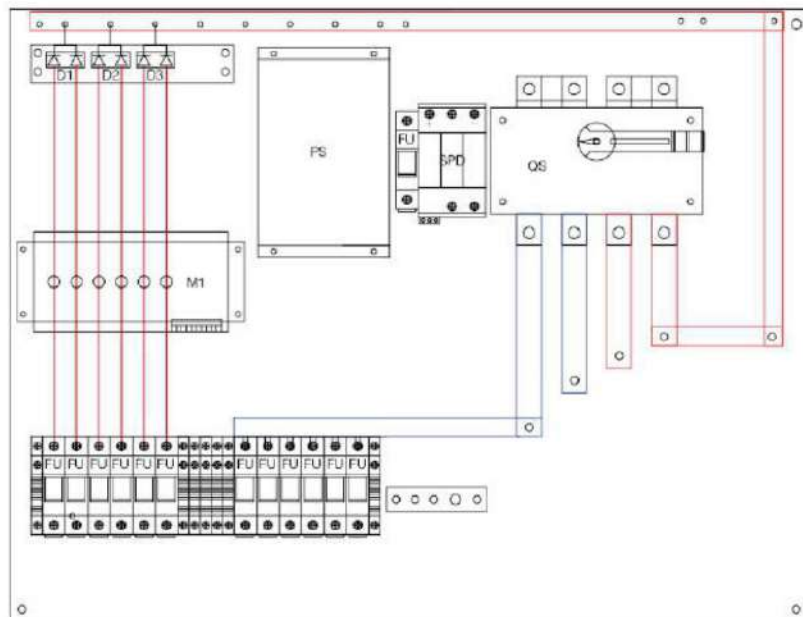
## SCHEMATIC DIAGRAM



## PV Combiner Box

# LDCB-PV6/1 DC COMBINER BOX

- 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.



## DESCRIPTION

LDCB-PV6/1 PV combiner box bus synthetic DC input of 6 PV components to 1 output. Each channel is with a fuse. Outout 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.

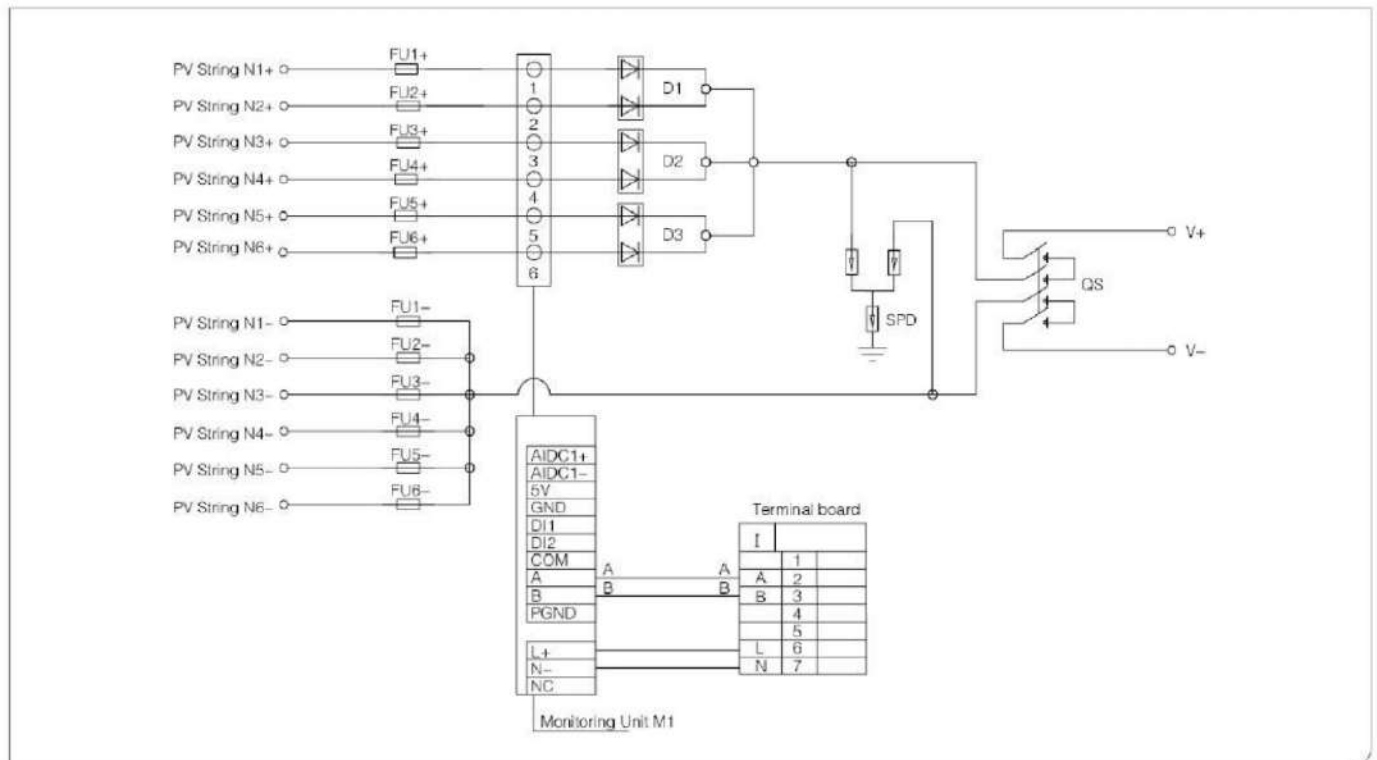
The product adopts outdoor wall mounted type, which adapt to the harsh environment. In addition to the core components, the other can be customized by user requirements.

# PV Combiner Box

## TECHNICAL PARAMETERS

Name	LDCB-PV6/1
	<b>Electric parameter</b>
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	20A/32A
Number of inverter MPPT	N
Number of Output strings	1
	<b>Lightning protection</b>
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	<b>System</b>
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	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2km
Permissible relative humidity	0~95% , no condensation

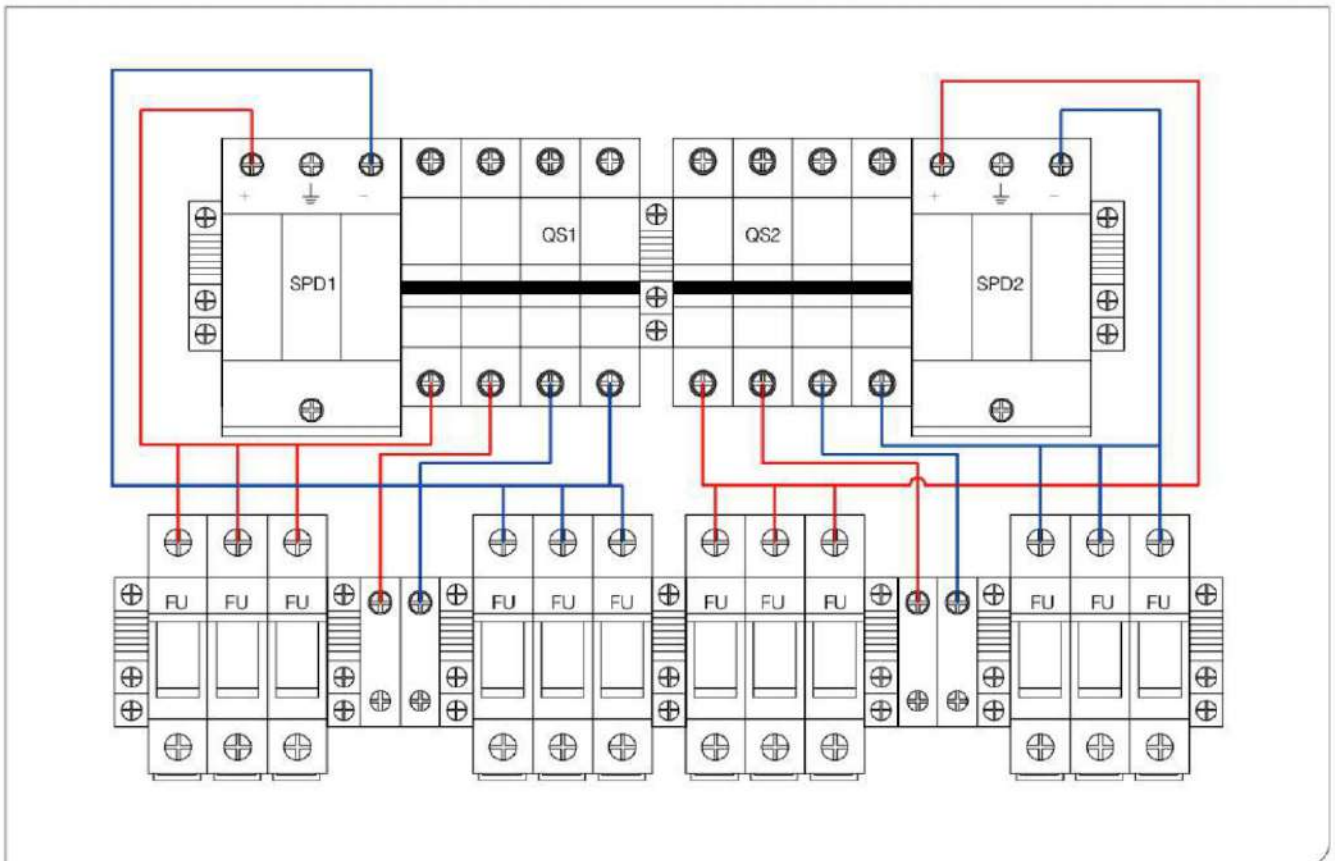
## SCHEMATIC DIAGRAM



## PV Combiner Box

# LDCB-PV6/2 DC COMBINER BOX

- 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.



## DESCRIPTION

LDCB-PV6/2 combiner box is suitable for inverter (MAX input voltage DC1000V,6 PV input channel, 2 output channel, double MPPT inverter).Box body is made of PVC engineering materials, with test for fire retardant,temperature rise, ant 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, brief, beautiful and applicable photovoltaic system products.

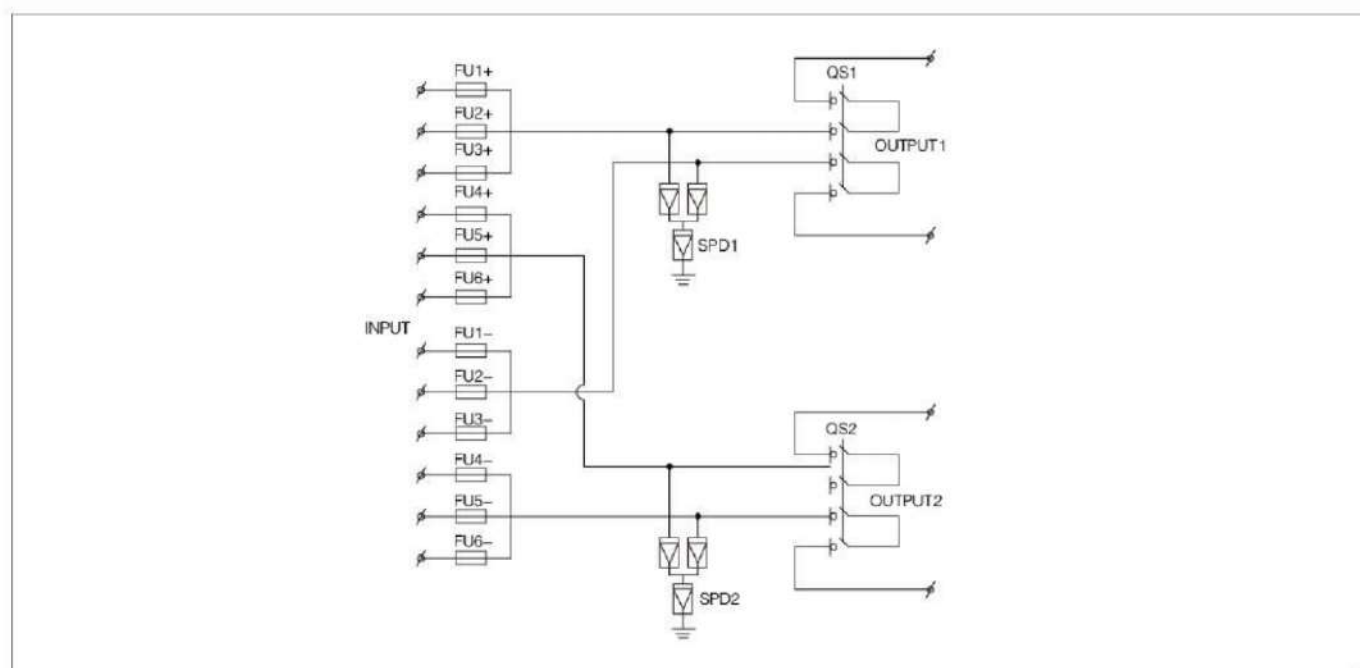


## PV Combiner Box

### TECHNICAL PARAMETERS

Name	LDCB-PV6/2
<b>Electric parameter</b>	
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	6
Maximum output switch current	32A/40A
Number of inverter MPPT	2
Number of Output strings	2
<b>Lightning protection</b>	
<b>II grade protection</b>	
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
<b>System</b>	
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
<b>Mechanical parameter</b>	
Width×High×Depth	400×300×160

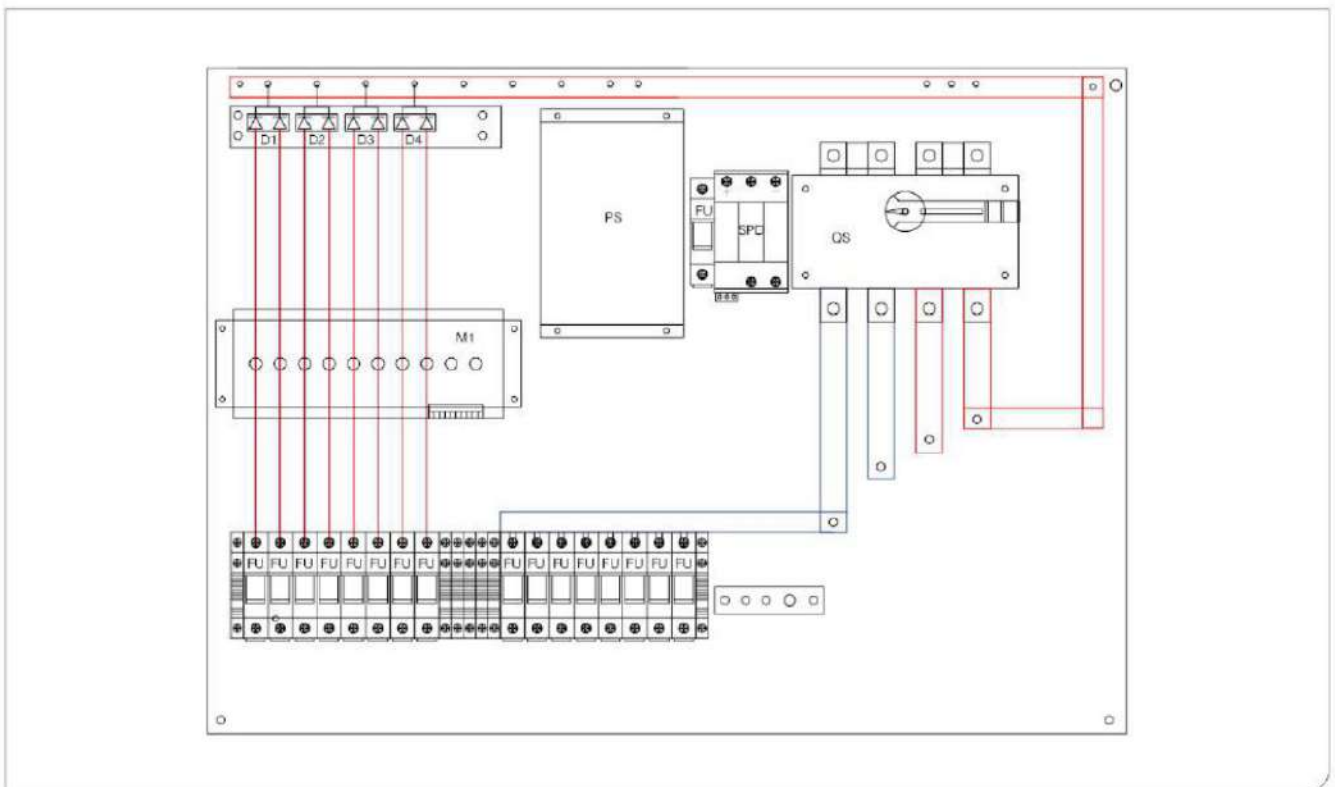
### SCHEMATIC DIAGRAM



## PV Combiner Box

# LDCB-PV8/1 DC COMBINER BOX

- 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.



## DESCRIPTION

LDCB-PV8/1 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 simplifies input wiring of DC power distribution cabinet and inverter. Realizes 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.

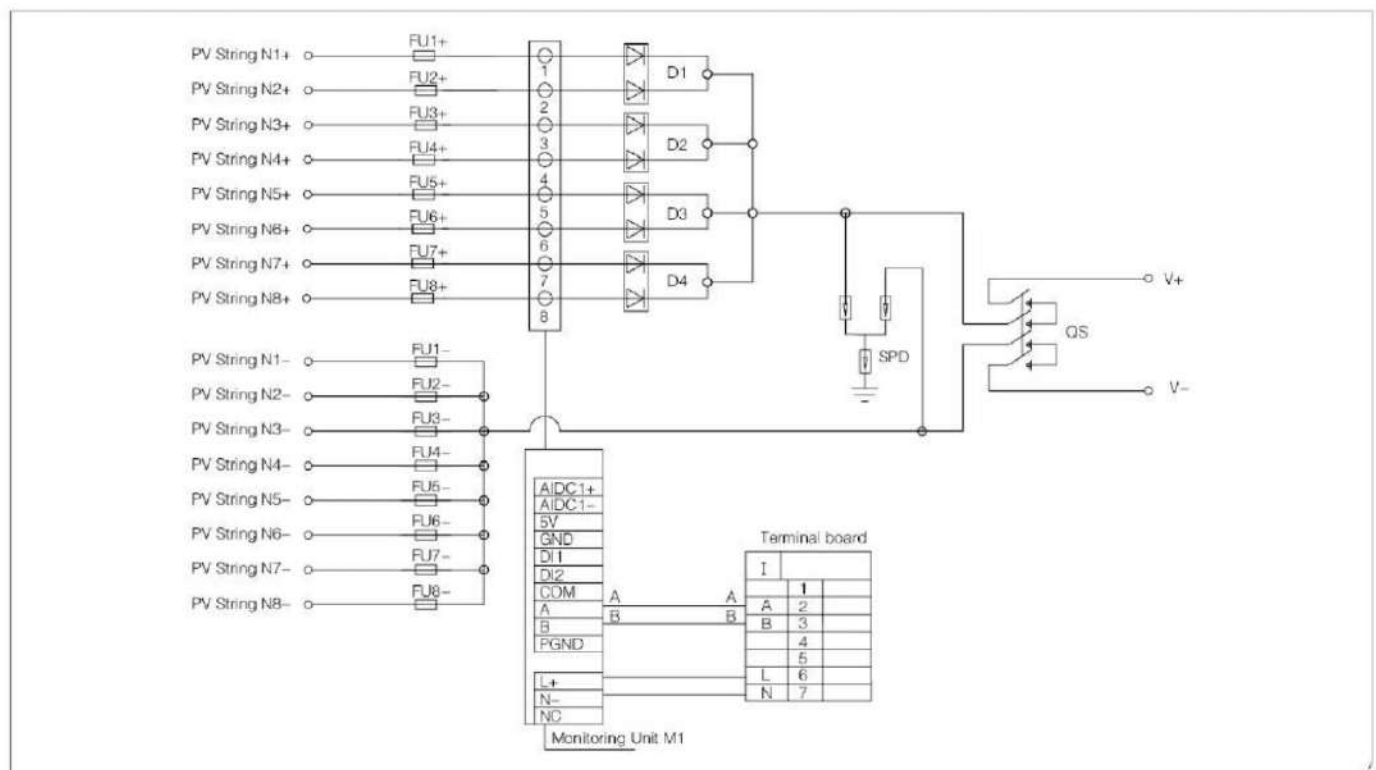
The product adopts outdoor wall mounted type, which adapts to the harsh environment. In addition to the core components, the other can be customized by user requirements.

## PV Combiner Box

### TECHNICAL PARAMETERS

Name	LDCB-PV8/1
	<b>Electric parameter</b>
System maximum dc voltage	1000
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
	<b>Lightning protection</b>
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	<b>System</b>
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	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C~+55°C
Elevation of temperature	2km
Permissible relative humidity	0~95% , no condensation

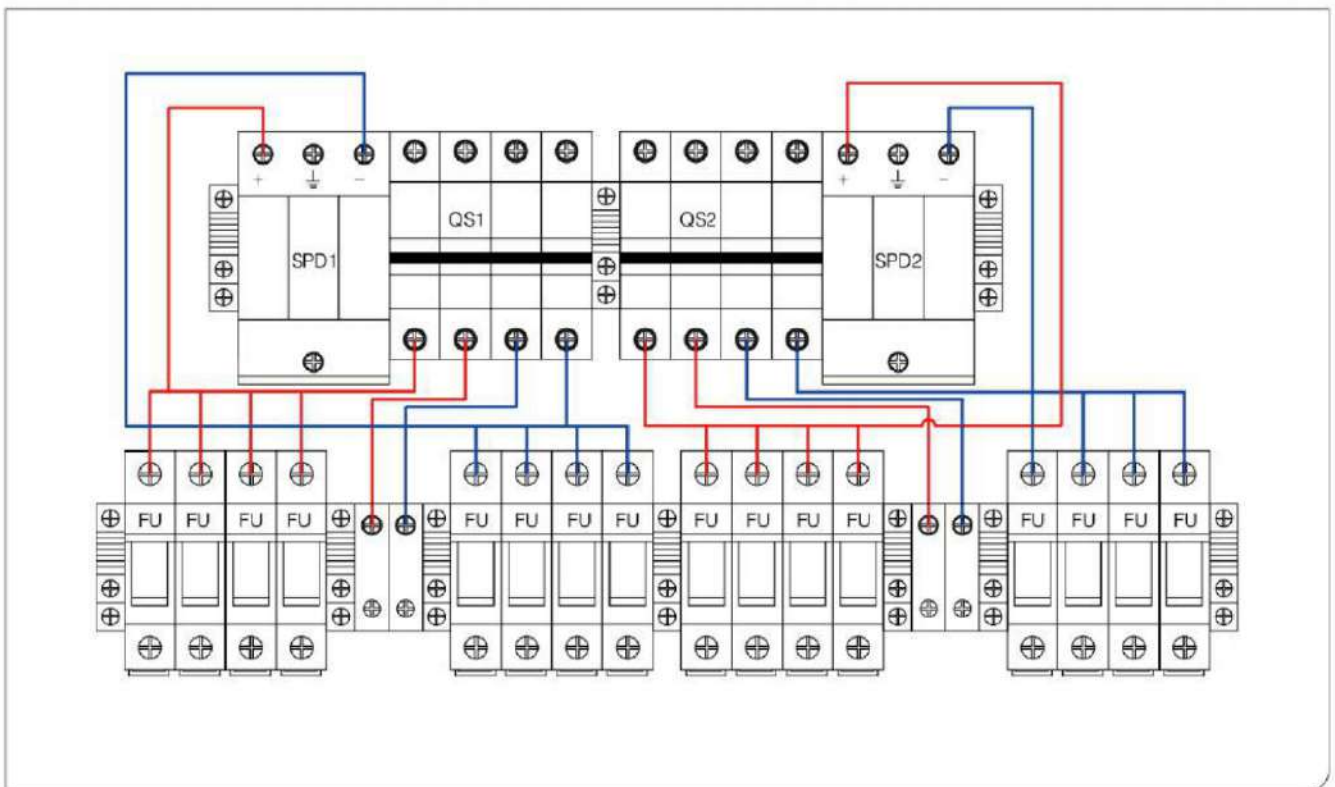
### SCHEMATIC DIAGRAM



## PV Combiner Box

### LDCB-PV8/2 DC COMBINER BOX

- 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.



#### DESCRIPTION

LDCB-PV8/2 combiner box is suitable for inverter (MAX input voltage DC1000V,8 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, ant ultraviolet, and other testing. IP65 protection grade.

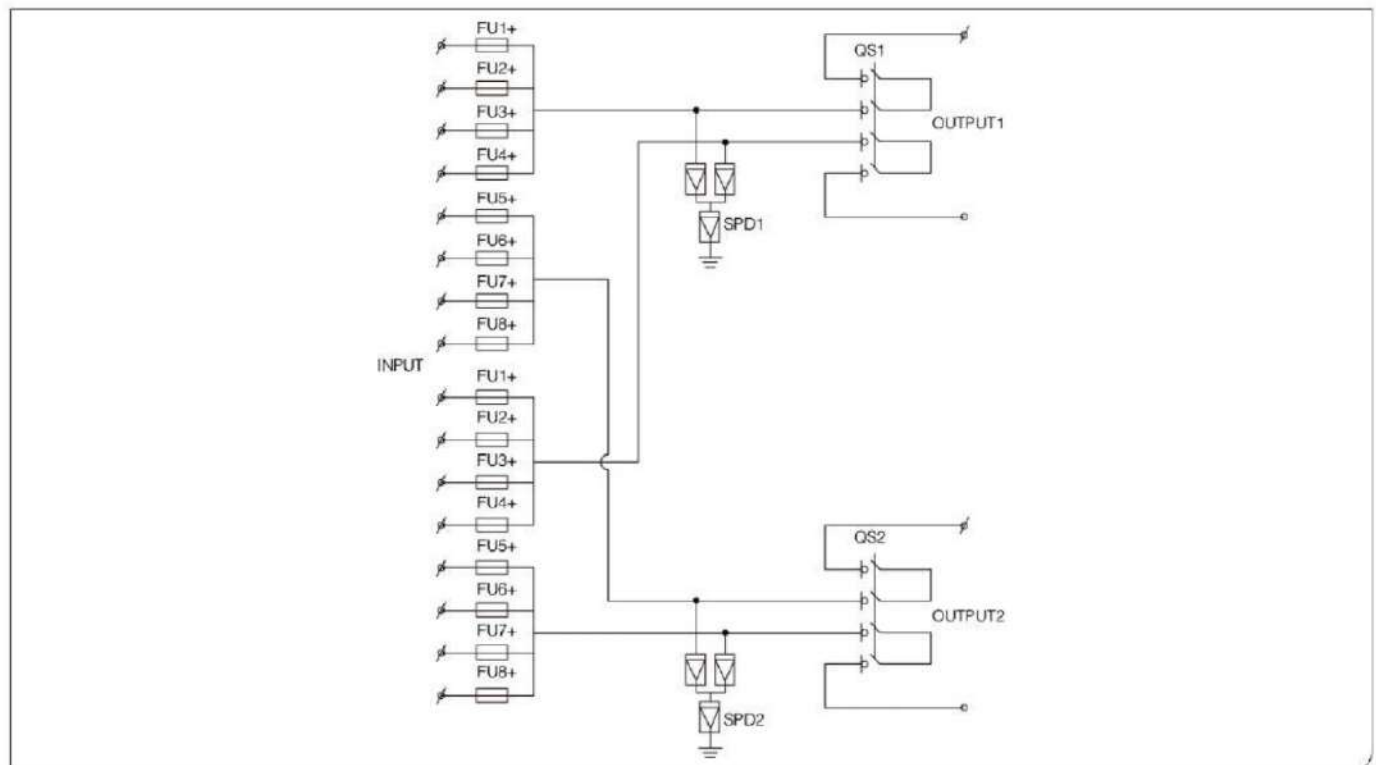
Design and configuration strictly accordance with the "Technical specification for photovoltaic junction equipment" CGC/GF 037:2014. Provide users with a safe, brief, beautiful and applicable photovoltaic system products.

## PV Combiner Box

### TECHNICAL PARAMETERS

Name	LDCB-PV8/2
	<b>Electric parameter</b>
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	8
Maximum output switch current	20A/32A
Number of inverter MPPT	2
Number of Output strings	2
	<b>Lightning protection</b>
Category of test	II grade protection
Nominal discharge current	20kA
Maximum discharge current	40kA
Voltage protection level	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	3P
Structure characteristic	Plug-push module
	<b>System</b>
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
	<b>Mechanical parameter</b>
Width×High×Depth	500×400×190

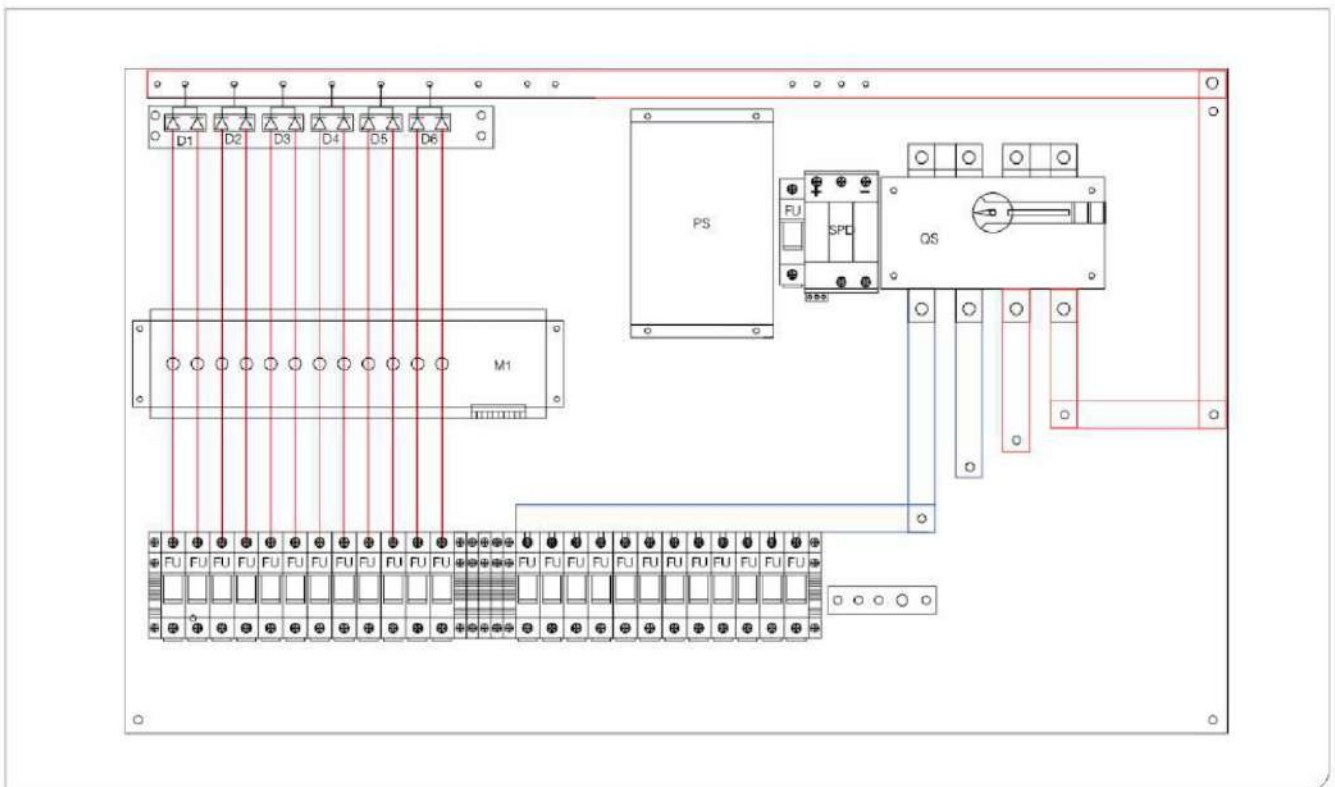
### SCHEMATIC DIAGRAM



## PV Combiner Box

# LDCB-PV12/1 DC COMBINER BOX

- 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.



## DESCRIPTION

LDCB-PV12/1 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 equipmet " 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.

## PV Combiner Box

### TECHNICAL PARAMETERS

Name	LDCB-PV12/1
	Electric parameter
System maximum dc voltage	1000
Maximum input current for each string	15A
Maximum input strings	12
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	3.8kV
Maximum continuous operating voltage U <sub>c</sub>	1050V
Poles	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	Metal
Installation method	Wall mounting type
Operating Temperature	-25°C ~ +55°C
Elevation of temperature	2km
Permissible relative humidity	0~95% , no condensation

### SCHEMATIC DIAGRAM

