



gPV

# SAFE AND RELIABLE ENERGY CONSERVATION



Located in the foot of Mount Yandang, Zhejiang Mingrong Electrical Protection Co., Ltd is one of the earliest professional companies in China specializing in the manufacture and sales of electrical products. Covering an area of 1200m<sup>2</sup>, Mingrong has 450 employees.

With over 30 years of electrical protection experience and continuous technological innovation, Mingrong boasts most complete fuse product series. Its manufacturing center provides you variety of fuse and switches in the fields of electrical power, machinery, oil, shipping building, transportation, automation etc. Our products meet a number of international, national and regional standards, with international and regional accreditation of CCC, CE, CB, TUV, and DIN etc. Our numbers of patents and R&D team enable us to guarantee total customer satisfaction. MRO brand as the China Popular Trade Mark enjoys reputation home and abroad, we have gained over 300 national agent and franchise stores and a global sales network reaching over 50 countries and regions.

**MINGRONG**  
ELECTRICAL PROTECTION

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## PV fuses: PV10

N.o.	Rated voltage (V)	Rated current (A)	70%In Power consumption = (W)	100%In Power consumption = (W)	Breaking capacity	The minimum packing(Only)	Each Box(Only)
1	DC 1000	2	0.62	1.75	DC1000V/10kA	10	400
2		3	0.75	2.10			
3		4	0.51	1.20			
4		5	0.62	1.40			
5		6	0.65	1.50			
6		8	0.72	1.73			
7		10	0.85	1.94			
8		12	1.10	2.56			
9		15	1.70	3.15			
10		20	1.72	3.28			
11		25	2.85	4.32			
12		30	3.20	5.30			

To obtain the use of categories and certification

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## PV support pieces: PVH-30(X)

Type	Working voltage	Resistive current Ith	Rated power acceptance (W)	Use categories	Protection grade	Rated short-circuit current limitation
PVH-30	DC1000V	30A(max)	5.3(max)	DC-20B	IP20	DC1000V/10KA
PVH-30(X)						
Product packaging parameters	The minimum package: 12 / box FCL: 192 / box					
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## PV contact clip: PCB-20

Type	Working voltage	Resistive current Ith	Rated power acceptance (W)	The type of installation	Terminal type	Rated short-circuit current limitation
PCB-20	DC1000V	20A(max)	3.5W	The PCB circuit board	PC pinout	DC1000V/10KA
Product packaging parameters	Minimum packaging: 1000 / bag (can also accept the customer requirements packaging)					

## Guide for Application

### Selection of rated voltage:

The rated DC voltage of fuse link shall exceed the maximum value of open circuit voltage (Voc) of PV module string. That is, for the rated voltage selection of fuse link, it is required to consider the Voc of PV module string at the lowest application temperature. For example, at -25°C, the open circuit voltage rises to 1.2 times of Voc STC. Thus, the rated voltage of fuse link should be  $\geq 1.2V_{oc\ STC}$ .

### Selection of rated current:

The rated DC current of fuse link shall exceed the maximum value of current generated by PV module. For the rated current selection of fuse link, it is required to consider the Isc at ambient temperature and the cyclic load. For example, at 45°C and 1200W/m<sup>2</sup> irradiation peak value, the rated current of fuse link should be  $\geq 1.4I_{sc}$ .

If the ambient temperature is relatively high or the outer casing is internally provided with several fuses, it is recommended to negotiate with the manufacturer and carry out the capacity-reducing process & fuses.

