

DC FUSE 1500V



Application

This series of fuse is suitable for solar photovoltaic power generation system, rated voltage to 1500V, rated current to 630A, used in photovoltaic power generation equipment as a photovoltaic module string and photovoltaic array for over current protection, and photovoltaic panels, and batteries connected in series and parallel, to charge variable flow system for short circuit breaking protection, in photovoltaic station and inverter rectifier system for short-circuit breaking protection, as well as photovoltaic power generation system inrush current and short circuit fault voltage for quick break protection, rated breaking capacity to 10-50kA products confirms to IEC 60629.1 and 60629.6.

Normal service Conditions

Ambient Temperature: -40 °C ~+90 °C Equipment installation height: less than 2000m (If exceeding this value, please specify the requirements, and company will design according to the requirements) Relative air humidity: less than 90%

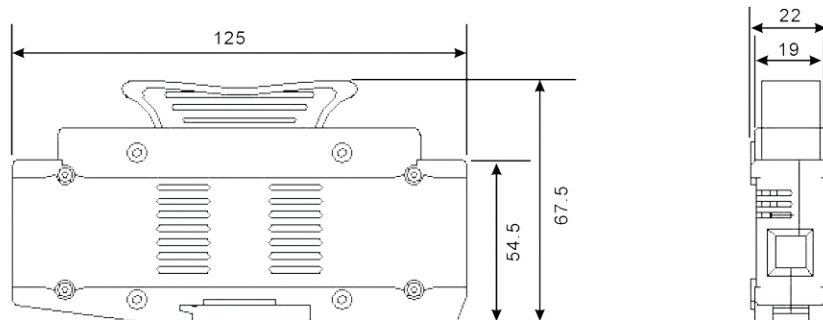
Use category

gPV means all range DC Fuse used for breaking protection in solar photovoltaic power generation system

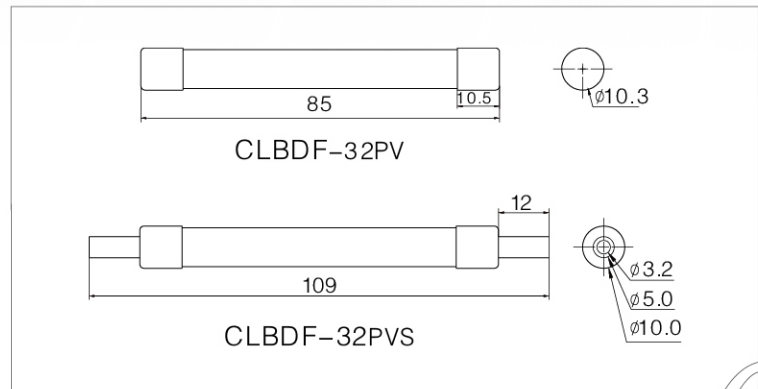
Structure

Fuse link is made of pure silver (or made of silver strings), welding low tin and encapsulated in the melt tube made of high-strength porcelain, the fuse tube filled with high pure quartz sand chemically processed as the arc medium, fuse body is connected with contacting terminals by spot welding Fuse base suppressed by the plastic casing fitted with contacts and contains the fusion pieces, the connection made by riveting as the support of the appropriate size fuse body parts. This series fuse has a compact and convenient device, use security, beautiful appearance, etc.

CLBDF-32LA	2A-32A	1500V DC	Fuse Size: 10 X 85mm:	Class of Operation: gPV
CLBDF-32LB	2A-32A	1500V DC	Breaking Capacity: 33(20) kA	Standard: GB/T 13539.6 IEC 60269-6
			Time Constant: 1-3ms	



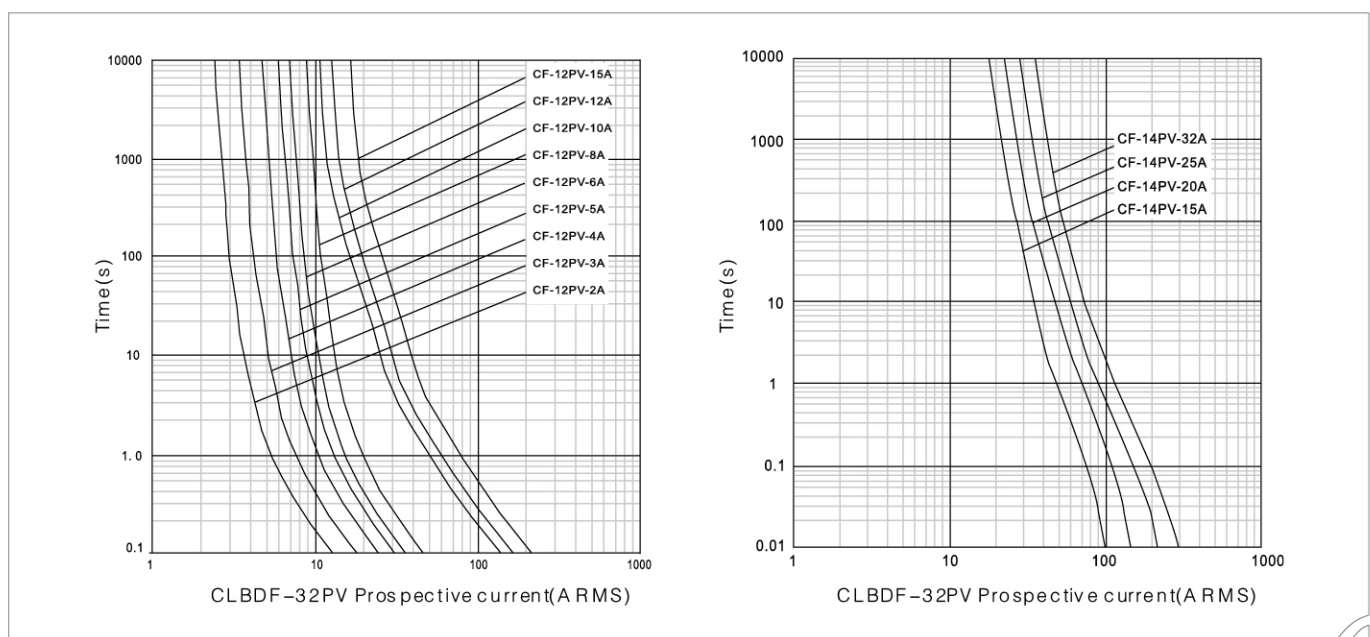
Dimensions-mm



Specifications

Model	Rated current (A)	$I^2 T (A^2 S)$	
		Pre-arcing	Total
CLBDF-32PV (CLBPV-32L)	2	4	8
CLBDF-32PV (CLBPV-32L)	3	6	11
CLBDF-32PV (CLBPV-32L)	4	8	14
CLBDF-32PV (CLBPV-32L)	5	11	22
CLBDF-32PV (CLBPV-32L)	6	15	30
CLBDF-32PV (CLBPV-32L)	8	9	35
CLBDF-32PV (CLBPV-32L)	10	10	98
CLBDF-32PV (CLBPV-32L)	12	12	120
CLBDF-32PV (CLBPV-32L)	15	14	170
CLBDF-32PV (CLBPV-32L)	20	34	400
CLBDF-32PV (CLBPV-32L)	25	65	550
CLBDF-32PV (CLBPV-32L)	30	85	680
CLBDF-32PV (CLBPV-32L)	32	90	720

Time current Curve



Temperature environment

Pv fuse product temperature derating coefficient table

Since the ambient temperature has an influence on the thermal tripping characteristics and temperature rise of the fuse, the fuse needs to be derated in a high-temperature environment

	10℃	20℃	30℃	40℃	50℃	60℃	70℃
CLBDF-32LB	1.16In	1.05In	In	0.94In	0.85In	0.8In	0.75In

Product advantage

Why do circuit breakers and fuses need to be derated in plateau areas?

The characteristics of the plateau area are: air pressure, temperature, and humidity decrease with the increase of altitude, and the solar radiation increases with the increase of altitude. Therefore, the use of plateau areas must pay attention to the following effects:

1. The insulation resistance and power frequency withstand voltage of the product must be increased;
2. Due to the deterioration of heat dissipation conditions, the thermal overload release should be operated early and should be used as an adjustment body for the working distance;
3. Due to the thin air in the plateau area, it is difficult to extinguish the arc, and the breaking capacity has declined. Therefore, the circuit breaker should be reduced in capacity or use a circuit breaker with a higher level of short-circuit breaking capacity.

Technical parameters

Altitude / m	2000	3000	4000	5000
	500	400	350	300
	750	600	525	450
Rated working voltage / V	1000	800	700	600
	1250	1000	875	750
	1500	1200	1050	900
Rated working current	In	0.96In	0.93In	0.9In

Pv product IP65 junction box using rated dispersion coefficient table

Number of main circuits	Rated dispersion coefficient
2、3	*0.9
4、5	*0.85
6~9	*0.8
> 10	*0.8

Note *: The above data will change depending on the size and material of the junction box. The values provided are for reference only.