



DC Fuse Holder EDFH Series Fuse

Leading Manufacturer Protects Solar Power Safety

Rev2.0 2023/02/02



EDFH series DC Fuse 1000V



Product Application

EDFH series fuse holder is made of refractory material, and meets the standard of IEC 60947-3. The maximum rated voltage is 1000V and the maximum current is 30A. As a short circuit and over-current protector, it is widely used in the high and low voltage distribution system, control system, and electrical equipments, like distribution box and inverter.

Product Benefits

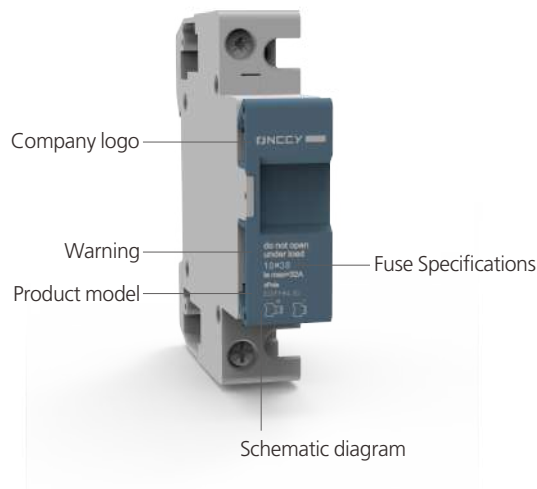
- DIN35 Rail Installation, Easy to Install
- Adjustable terminal block, Wiring firm
- Fire-retardant shell, high temperature resistance
- Flexible installation, Easy to replace

Select Code

E	D	FH	□	-	□	/	□
1	2	3	4		5		6

Code	Name	Description
1	NCCY brand	E
2	DC	D
3	Product Code	FH: Fuse Holder
4	Rated voltage	N: 1000VDC
5	Rated current	30: 30A
6	Pole	1:1P Nil:2P

Appearance Introduction



DC FUSE HOLDER

EDFH series Fuse 1000V

Technical Data

PV DC EDFH Fuse Holder Pole	1P
According to	IEC60947-3
Electrical Characteristics	
Rated Working Voltage	1000V DC
Rated Current	30A
Breaking Capacity	20kA
Max Power Dissipation	3W

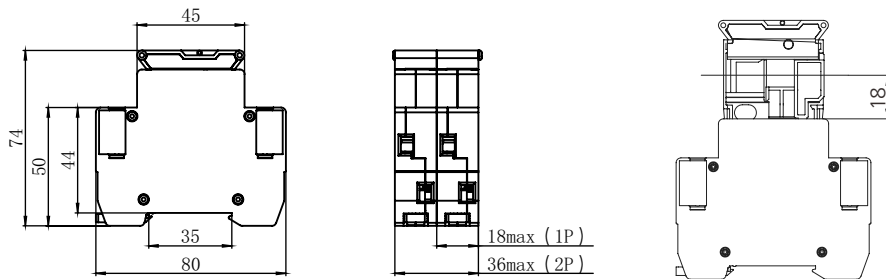
Control and Indication

Connection and Installation Wire	2.5mm ² - 6.0mm ²
Terminal Screws	M3.5
Torque	0.8~1.2N·m
Degree of Protection	IP20

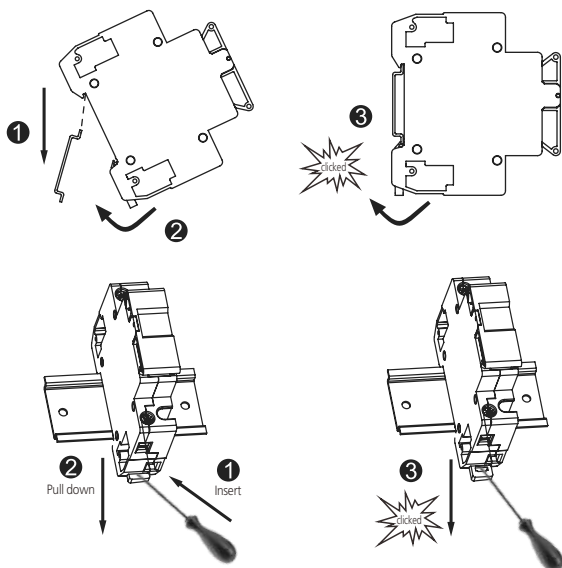
Installation Environment

Fuse Size	10x38mm
Operating Temperature Range	-30°C~+70°C
Mounting	DIN rail IEC/EN 60715
Pollution Degree	3
Relative Humidity	+20°C ≤95%, +40°C ≤50%
Installation Class	III
Weight	0.07kg Per pole

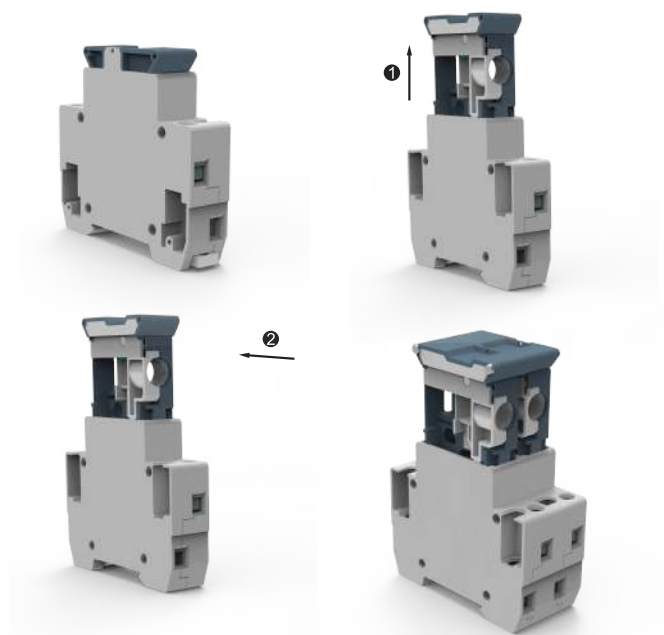
Dimensions



Installation



Replacement Fuse



10x38mm Photovoltaic Fuses



Product Benefits

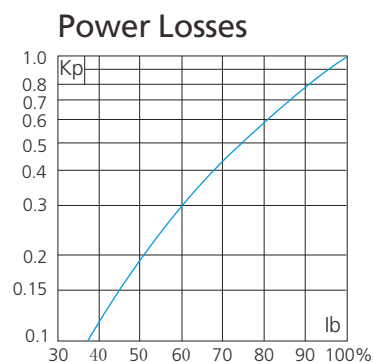
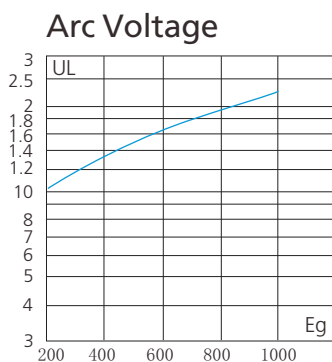
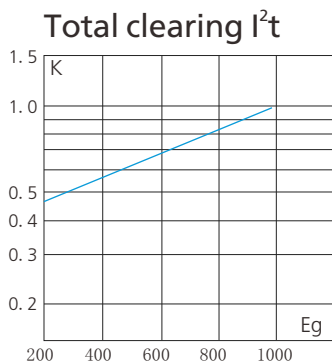
- Amps: 1~32A Volts: 1000VDC Breaking Capacity: 30kA @1000DC
- Compact design. Low power loss. Excellent DC performance
- Low arc voltage and low energy let-through(I₂t)
- Product storage temperature: -40°C~120°C. At 40°C, the relative humidity is not more than 70%, below 30°C, not more than 80%, below 20°C, not more than 90%
- Packaging and storage temperature: -40°C~80°C. The relative humidity is not more than 90%, and there is no condensation

Altitude

- 2000 - 4500m
- Higher altitude mainly leads to insulation deterioration, heat dissipation condition deterioration and air pressure change.
 - A) The temperature rise of the fuse increases by 0.1-0.5k every 100m above sea level.
 - B) For every 100m increase in altitude, the average ambient temperature decreases by about 0.5K.
 - C) In open environment, the influence of altitude on rated current can be ignored.
 - D) When used in a closed environment, if the air temperature or box temperature does not decrease with the increase of altitude and still reaches more than 40°C, the rated current needs to be reduced. The rated current shall be reduced by 2%-5% for every 1000m increase in altitude.
- Effect of altitude on air insulation strength (breakdown strength)
 - A) Within 2000-4500m, the insulation strength decreases by 12-15% for every 1000m increase in altitude
 - B) the insulation gap between the fuse and other live structures and to the ground shall be considered by the user.

Vibration and Shock Resistance

- It has good resistance to vibration and impact, and can withstand more than 20g. Comply with the IT application environment of rail transit and the use of general motor vehicles.
- In the application environment with strong vibration, the corresponding test can be negotiated, which generally needs a long period.



DC FUSE HOLDER

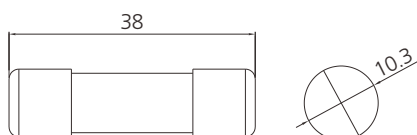
10x38mm Photovoltaic Fuses

Electrical Characteristics

Designed to: UL248-19/IEC60269-6 GB/T13539-6

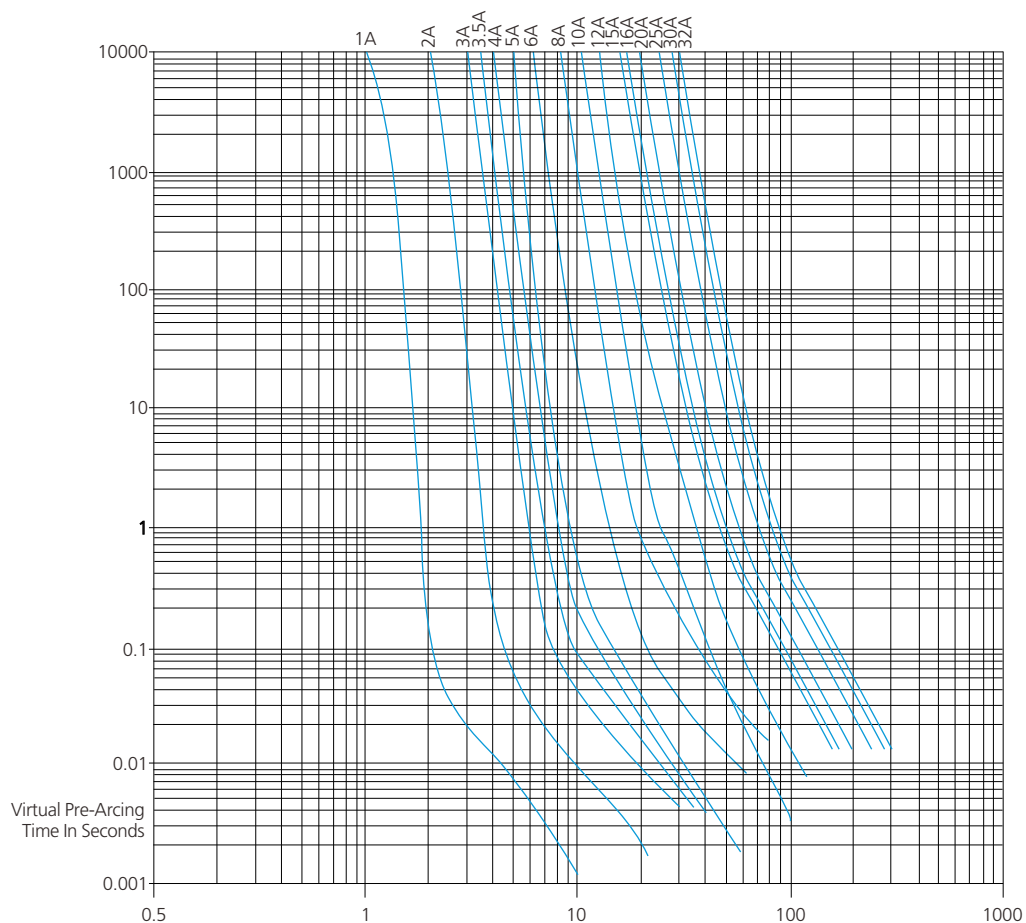
Serial number	Part Number	Rated Current(A)	Energy Integrals I ² t		Watts Loss		Use bolts	Installation torque
			Pre-Arcing	Clearing at 1000V	0.8In	1In		
1	1000VDC/10X38/1A	1	0.15	0.4	0.6	1.0	-	-
2	1000VDC/10X38/2A	2	1.3	3.4	0.7	1.1	-	-
3	1000VDC/10X38/3A	3	4	12	0.8	1.3	-	-
4	1000VDC/10X38/3.5A	3.5	6.5	20	0.9	1.4	-	-
5	1000VDC/10X38/4A	4	10	28	1.1	1.4	-	-
6	1000VDC/10X38/5A	5	19	50	1.1	1.4	-	-
7	1000VDC/10X38/6A	6	28	85	1.2	1.8	-	-
8	1000VDC/10X38/8A	8	32	93	1.2	2.2	-	-
9	1000VDC/10X38/10A	10	57	100	1.3	2.3	-	-
10	1000VDC/10X38/12A	12	60	150	1.5	2.8	-	-
11	1000VDC/10X38/15A	15	149	230	1.8	3	-	-
12	1000VDC/10X38/16A	16	155	260	2.0	3.2	-	-
13	1000VDC/10X38/20A	20	230	360	2.5	3.8	-	-
14	1000VDC/10X38/25A	25	400	500	3.2	4	-	-
15	1000VDC/10X38/30A	30	550	780	3.3	4.5	-	-
16	1000VDC/10X38/32A	32	612	940	3.5	5.5	-	-

Dimension(mm)



10x38mm Photovoltaic Fuses

Prospective Current In Amps RMS



Operating conditions

- When the fuse exceeds the service conditions, some parameters may need to be corrected, and our company should be consulted.
- It is recommended that the current value of long-term through current shall not be greater than 75% of the rated current.
- Normal service conditions: $-5^{\circ}\text{C} \sim 40^{\circ}\text{C}$, allowable service conditions: $-40^{\circ}\text{C} \sim 80^{\circ}\text{C}$.
- Parameters of air temperature change: when working below -5°C , the pre arc time of low times overload current of fuse is slightly prolonged and the rated current is slightly increased. Unless the working range is above -5°C , it is generally necessary to increase the rated current of fuse
- When the fuse works above 40°C , the rated current needs additional correction, and the correction factor is -KT

Ambient air temperature

