

PHOTOVOLTAIC FUSE SERIES



APPLICATION

This series of fuses are suitable for lines with rated DC voltage up to 1500V and rated current up to 50A. They are connected in series and parallel with photovoltaic panels and batteries to provide short-circuit protection for the charging and converter system; at the same time, for photovoltaic power plants, the confluence inverter Short-circuit fault breaking protection; and for photovoltaic power generation system surge current and short-circuit fault over-voltage rapid breaking protection, rated breaking capacity up to 50kA, the product meets the requirements of the International Electrotechnical Commission standard IEC60269-6.

STRUCTURE

The variable cross-section melt made of silver flakes is encapsulated in a melt tube made of high-strength porcelain. The melt tube is filled with chemically treated high-purity quartz sand and special treatment chemicals as the arc extinguishing medium. The two ends of the melt are used The spot welding and the contact are firmly electrically connected.

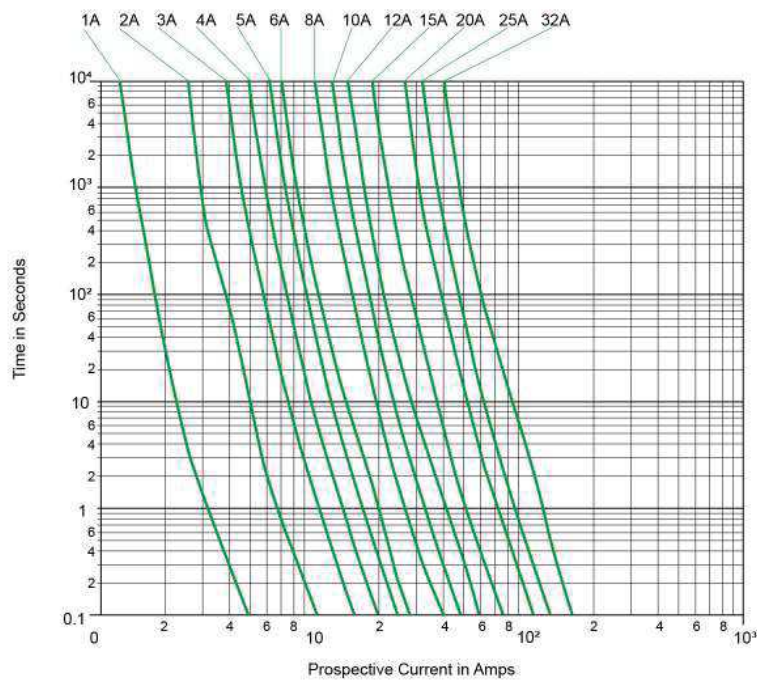


PARAMETERS AND FEATURES



- Standard: IEC60269-6
- Rated Voltage: DC1000V
- Rated current: 1A、 2A、 3A、 4A、 5A、 6A、 8A、 10A、 12A、 15A、 16A、 20A、 25A、 32A
- Breaking capacity: 33kA
- Protection object: It is used in the photovoltaic combiner box to provide safe and reliable protection for overload and short-circuit current faults of PV modules and PV arrays.
- Operating class: gPV
- Applicable environment: Temperature, $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$; Humidity, less than 90%.

TIME CURRENT CHARACTERISTIC CURVE

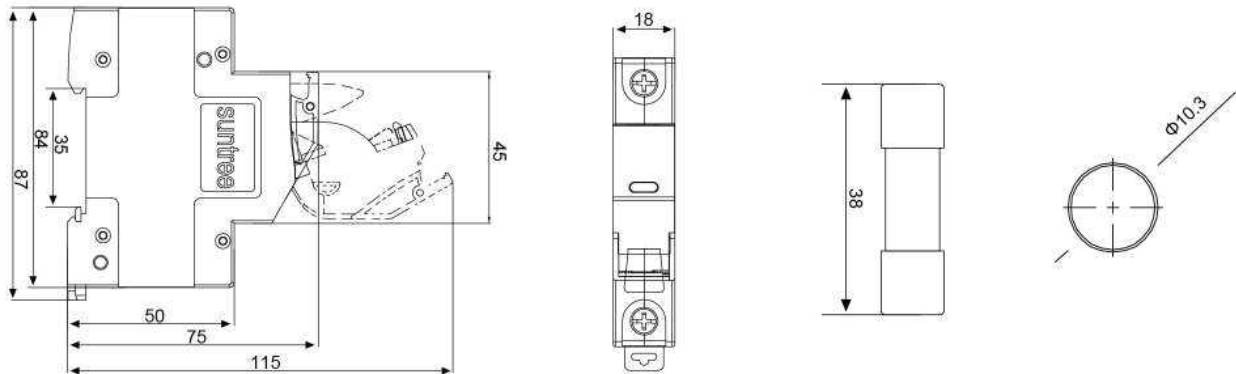


ELECTRICAL TECHNICAL REFERENCE



| | |
|---|--|
| Product Model | SRD-30/SRF-30 |
| Citation standards | IEC/EN60947-1 IEC/EN 60947-3 |
| Rated insulation voltage U_i | 1200V |
| Rated service voltage U_e | DC1100V |
| Rated service current (I_e) | 1/2/3/4/5/6/8/10/12/15/16/20/25/30/32A |
| Rated impulse withstand voltage U_{imp} | 6kV |
| Rated acceptable power dissipation | 4w |
| Numbers of poles | 1P |
| Rated limiting short circuit current | 30kA |
| Fuse dimensions for use | 10mm×38mm |
| Ingress protection | IP20 |
| Use category | PV-O |

DIMENSIONS (mm)



ELECTRICAL TECHNICAL REFERENCE

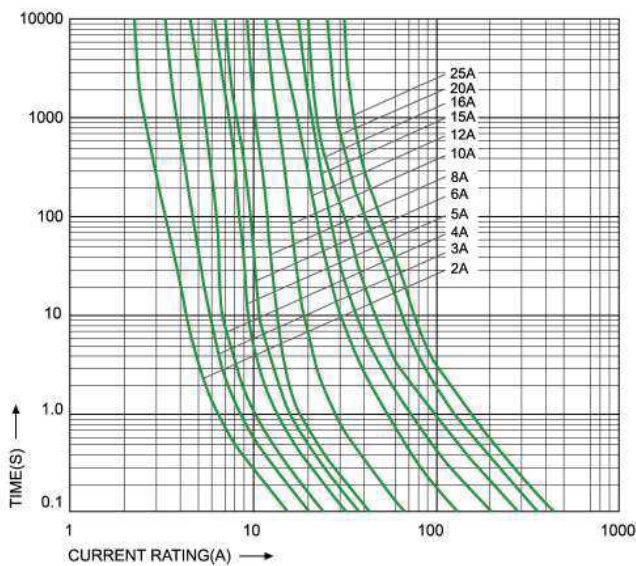
| Product model | Rated current (A) | I^2t (A ² s) | | Power loss (w) 1.0 In | Net weight |
|---------------|-------------------|---------------------------|----------|--------------------------|------------|
| | | Melting | Clearing | | |
| SRF-30 | 1A | 5 | 16 | 0.9 | 10g |
| SRF-30 | 2A | 8 | 32 | 1.0 | |
| SRF-30 | 3A | 10 | 48 | 1.3 | |
| SRF-30 | 4A | 13 | 65 | 1.5 | |
| SRF-30 | 5A | 22 | 86 | 1.6 | |
| SRF-30 | 6A | 32 | 100 | 1.8 | |
| SRF-30 | 8A | 42 | 135 | 2.1 | |
| SRF-30 | 10A | 50 | 152 | 2.3 | |
| SRF-30 | 12A | 57 | 188 | 2.7 | |
| SRF-30 | 15A | 60 | 230 | 3.0 | |
| SRF-30 | 20A | 80 | 310 | 3.6 | |
| SRF-30 | 25A | 120 | 420 | 4.5 | |
| SRF-30 | 32A | 185 | 660 | 5.0 | |

PARAMETERS AND FEATURES

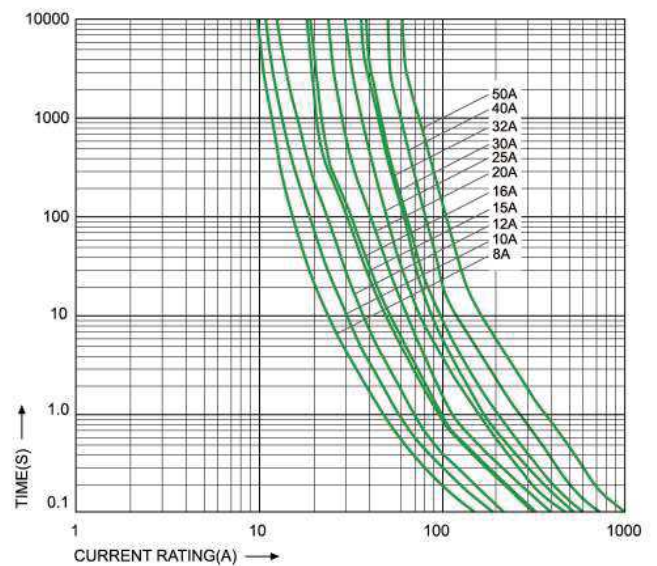


- Standard: IEC60269-1 & IEC60947
- Rated Voltage: DC1500V
- Rated current: 50A
- Breaking capacity: 25 kA
- Protection object: It is used in the photovoltaic combiner box to provide safe and reliable protection for overload and short-circuit current faults of PV modules and PV arrays.
- Operating class: gPV
- Applicable environment: Temperature, $-5\text{ }^{\circ}\text{C} \sim +40\text{ }^{\circ}\text{C}$; Humidity, less than 90%.

TIME CURRENT CHARACTERISTIC CURVE



SRF-25H(10×85) Time current Curve

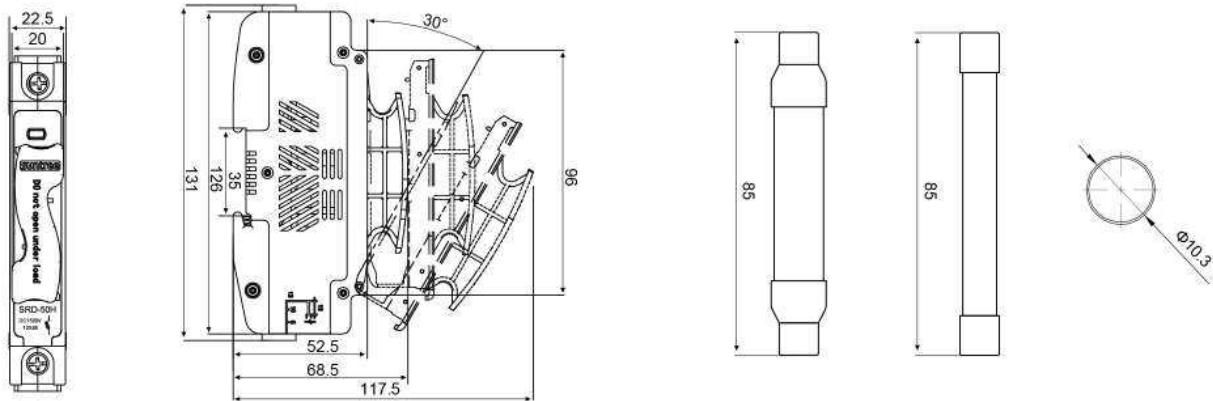


SRF-50H(14×85) Time current Curve

ELECTRICAL TECHNICAL REFERENCE

| | | | |
|--|--|--------------------------------|----------------------------------|
|  | Product Model | SRF-25H | SRF-50H |
| | Rated voltage | 1500VDC | 1500VDC |
| | Rated service current (Ie) | 2/3/4/5/6/8/10/12/15/16/20/25A | 8/10/12/15/16/20/25/30/32/40/50A |
| | Rated accepted power dissipation | 2.5W | 2.5W |
| | Size | 10mmx85mm | 14mmx85mm |
| | Rated ultimate short circuit breaking capacity | 25kA | 25kA |
| | Reference Standard | EN 60269-1 / EN 60269-6 | EN 60269-1 / EN 60269-6 |
| | Protection level | IP20 | IP20 |
| | Use category | PV-0 | PV-0 |
| | Fuse dimensions for use | 10mm×38mm | 10mm×38mm |
| | Ingress protection | IP20 | IP20 |

DIMENSIONS (MM)



SRD-35/50 DERATING FACTOR

| Pole | Cabinet temperature (reference, volume) | Derating factor |
|------|---|-----------------|
| 1~4 | 20 | 1 |
| 1~4 | 30 | 0.96 |
| 1~4 | 40 | 0.93 |
| 1~4 | 50 | 0.9 |
| 1~4 | 60 | 0.85 |
| 1~4 | 65 | 0.8 |
| 1~4 | 70 | 0.75 |
| 1~4 | 75 | 0.7 |
| 5~24 | 20 | 0.96 |
| 5~24 | 30 | 0.9 |
| 5~24 | 40 | 0.85 |
| 5~24 | 50 | 0.75 |
| 5~24 | 60 | 0.6 |
| 5~24 | 65 | 0.5 |
| 5~24 | 70 | 0.45 |
| 5~24 | 75 | 0.4 |

>5P is the data measured when 24P is powered on at the same time