
# SM8-250HPV

## PV Specially Used DC molded case circuit breaker

SM8–250HPV series photovoltaic special DC molded case circuit breaker is suitable for DC grid circuit with rated voltage up to DC1500V and rated current of 250A. DC circuit breaker has overload long delay protection, short circuit instantaneous protection function, used to distribute electric energy and protect circuit and the power supply equipment is protected from the danger of overload, short circuit, etc.

The operating mechanism of the DC circuit breaker has the functions of quick closing and fast reading segmentation, compact structure, small size and convenient use.

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## Specifications

| name | model | Attachment code | Attachment installation location | Control voltage |
|---|---|---|---|---|
| Auxiliary contact | AX | 250PV | - | - |
| Alarm contact | AL | 250PV | - | - |
| Shunt release | SHT | 250HPV | right side installatio n | DC24V/AC230V/AC400V |

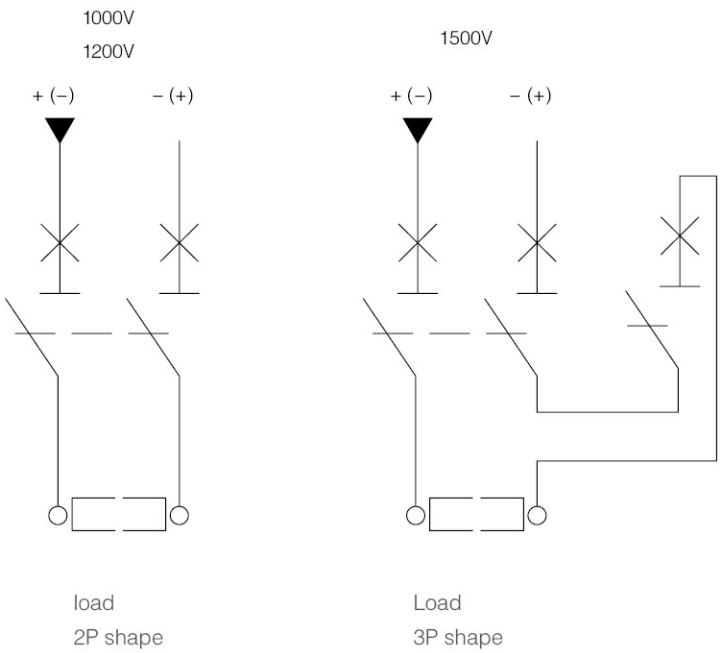
## The main technical parameters

| Product number | | SM8-250HPV /2 1000V<br>SM8-250HPV /2 1200V | SM8-250HPV /3 1500V |
|---|---|---|---|
| product name | | PV DC MCCB<br>PV DC MCCB | |
| Rated operating voltage Ue | | DC1000V<br>DC1200V | DC1500V |
| Rated insulation voltage Ui | | 1500V | 1500V |
| Rated impulse voltage Uimp | | 12kV | 12kV |
| Number of poles | | 2 | 3 |
| Trip unit type | | Thermomagnetic(Not adjustable), TMD Fixed | |
| Rated ultimate short-circuit segmentation capability Icu | | Ue1200v 10kA<br>Ue1000v 16kA | Ue1500v 20kA |
| Running segmentation capability Ics | | Ue1200v 7.5kA<br>Ue1000v 12kA | Ue1500v 15kA |
| Protective function | Long delay protection Ir | 1In | |
| | Instantaneous protection Ii | 5In | |
| Dimensions W×H×D | | 90×200×86mm | 135×200×86mm |

## Thermal protection

| Serial number | Experimental current | I/Ir | Appointed time | Initial state |
|---|---|---|---|---|
| 1 | Conventional non-tripping current | 1.05 | >1h(In≤63A) | Cold state |
| | | | >2h(In>63A) | |
| 2 | Conventional discharge current | 1.3 | ≤1h(In≤63A) | After the test according to the serial number 1 |
| | | | ≤2h(In> 63A) | |

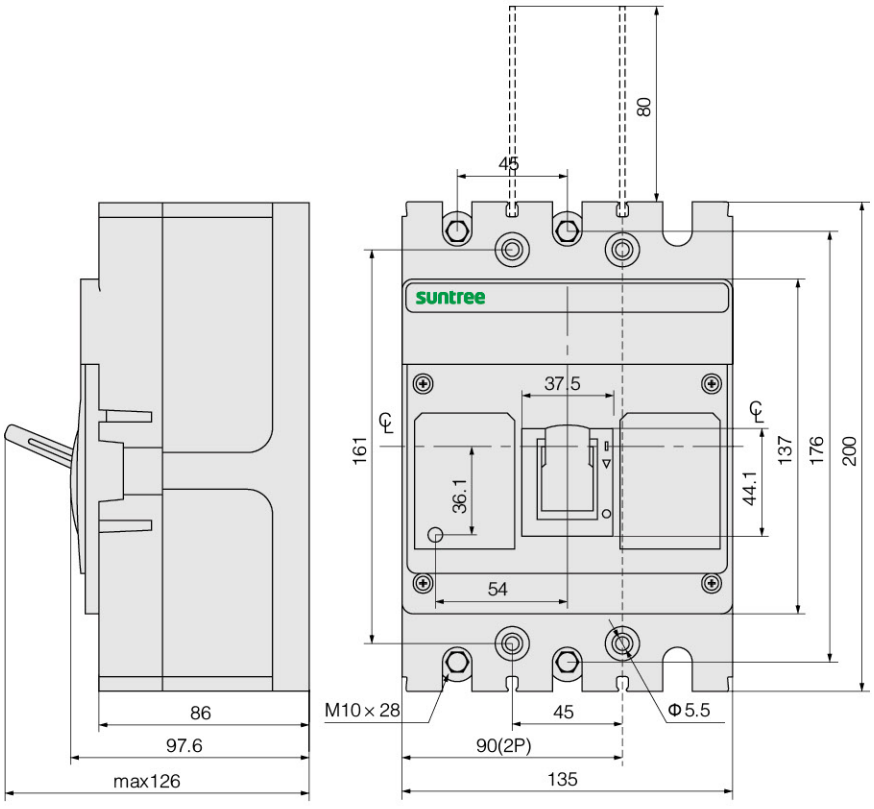
## Wiring diagram

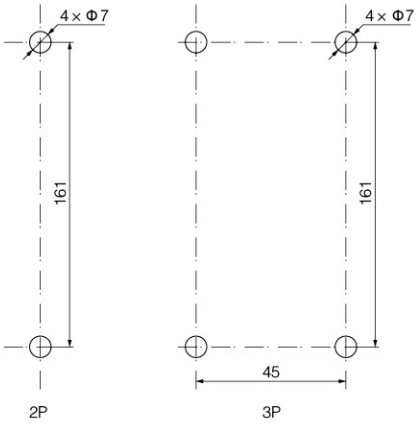



load
2P shape

Load
3P shape

## Shape and Installation Dimensions(mm)




Tolerance Table

| Base size | | Tolerance |
|---|---|---|
| > | < | range |
| 0 | 30 | ±0.2 |
| 30 | 50 | ±0.3 |
| 50 | 80 | ±0.5 |
| 80 | 120 | ±0.6 |
| 120 | 180 | ±0.7 |
| 180 | 250 | ±0.8 |
| 250 | 315 | ±1.0 |