

DATASHEET

# OVR PV T2 40-1000 P TS

## Surge Protective Devices



Type 2 SPDs for Photovoltaic applications are capable of discharging the lightning currents within an electrical system resulting from indirect lightning events. They have effective voltage protection ratings keeping damaging voltage peaks from exceeding the withstand voltages of the protected equipment.

### Application

They are typically installed inside the string/combiner boxes or inside the PV Inverter. Additional PV SPDs may be required for an optimal protection if cable lengths between SPDs are greater than 32ft.

### Technical specifications and standards



Type 2 / UL Type 1 C.A



Imax : 40 kA



Up < 4 kV



IEC 61643-31  
UL 1449 5th ed

| Key features              |                                    |
|---------------------------|------------------------------------|
| Protection mode           | DC+ to DC- / DC+ to G / DC- to G   |
| Number of protected lines | 2                                  |
| End of life indicator     | Green = functional / Red = replace |
| Technology                | Thermally protected varistor       |

| Electrical performances                |                                       |                            |      |
|--|---------------------------------------|----------------------------|------|
| Maximal discharge current              | Imax (8/20μs)                         | 40                         | kA   |
| Nominal discharge current              | In (8/20μs)                           | 20                         | kA   |
| Maximal continuous operating voltage   | UCPV                                  | 1000                       | VDC  |
| Intended power system application (UL) | VPVDC                                 | 1000                       | VDC  |
| Voltage protection level               | Up (DC+ to DC- / DC+ to G / DC- to G) | 4                          | kV   |
| Voltage protection rating (UL)         | VPR                                   | 3                          | kV   |
| Surge circuit current rating           | Iscpv                                 | 10                         | kA   |
| Surge circuit current rating (UL)      | SCCR                                  | 10                         | kAIC |
| Back up protection                     |                                       | Not needed up to Iscpv     |      |
| Leakage current                        | Icpv, Ipe                             | Check Installation Leaflet |      |
| Response time                          |                                       | < 25                       | ns   |

### Mechanical features

| Dimensions                          | L x W x D | 3.54 x 2.12 x 2.87        | in  |
|-------------------------------------|-----------|---------------------------|-----|
| Max. Solid/ Stranded wire (max)     |           | 4 - 2                     | AWG |
| Stripping length                    |           | 0.47                      | in  |
| Tightening torque                   |           | 35.4                      | lbs |
| Maximal altitude                    |           | 6561                      | ft  |
| Operating temperature               |           | -40 to +176               | F   |
| Relative humidity                   |           | 95 (non condensing)       | %HR |
| Degree of protection                |           | IP 20                     |     |
| Enclosure material rating and color |           | UL 94 V-0 / Grey RAL 7035 |     |
| Weight                              |           | .66 (300g)                | lbs |

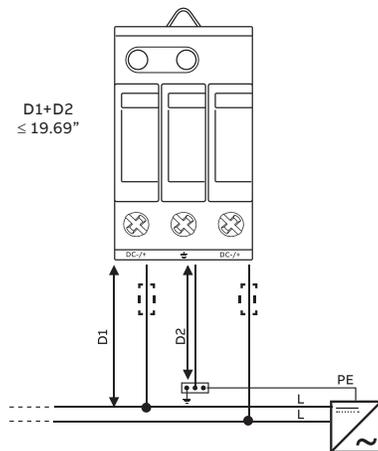
### Replacement cartridge

|                       |                     |                 |
|-----------------------|---------------------|-----------------|
| Product ID / Model no | OVR PV T2 40-1000 C | 2CTB802402R1000 |
|-----------------------|---------------------|-----------------|

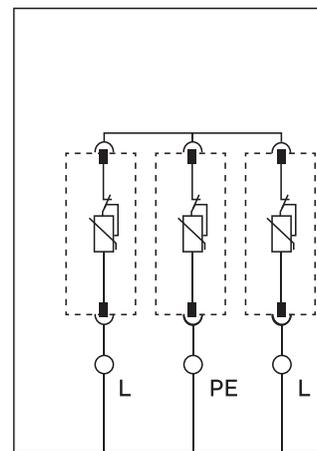
### Auxiliary contact (TS)

|                              |      |  |
|------------------------------|------|--|
| Contacts information         |      | 1 NO - 1 NC                                |
| Min. & Max load d.c          |      | 250 V / 0.1 A; 125 V / 0.2 A; 75 V / 0.5 A |
| Connection cross-section max | 16   | AWG  |
| Tightening torque            | 1.77 | lbs  |
| Stripping length             | 0.47 | inches                                     |

### Installation wiring



### Internal diagram



### Physical dimensions

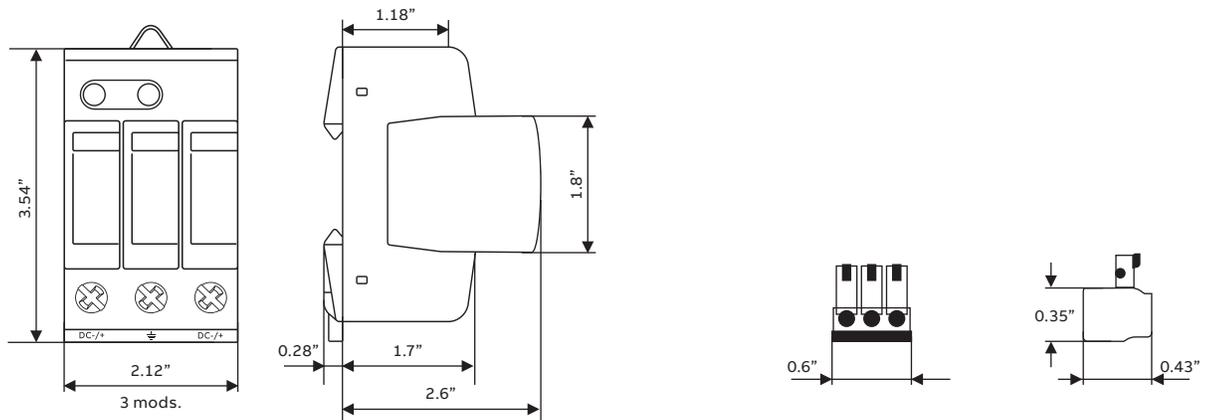


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