

# OVR PV T1-T2 10-1500 P QS (2CTB812100R1500)

EAN: 4053546034684

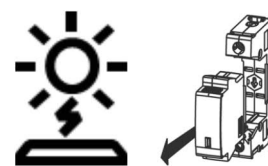


IEC 61643-31 Type 1 + type 2 SPDs for Photovoltaic applications are capable of discharging the lightning currents within an electrical system resulting from direct lightning events.

They have effective voltage protection ratings keeping damaging voltage peaks from exceeding the withstand voltages of the protected equipment.

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 10 meters.



## Key features

|                           |                                    |       |
|---------------------------|------------------------------------|-------|
| Protection mode           | L+ to L / L+ to G / L- to G        |       |
| Number of protected lines | 2                                  |       |
| End of life indicator     | Green = functional / Red = replace |       |
| Technology                | Thermally protected varistor       |       |
| Packing quantity          | 1                                  | Piece |

## Electrical performances

|  |                              |      |         |
|--|------------------------------|------|---------|
| Total Impulse discharge current        | $I_{total}$ (10/350 $\mu$ s) | 10   |         |
| Impulse discharge current              | $I_{imp}$ (10/350 $\mu$ s)   | 5    | kA      |
| Maximal discharge current              | $I_{max}$ (8/20 $\mu$ s)     | 30   | kA      |
| Nominal discharge current              | $I_n$ (8/20 $\mu$ s)         | 20   | kA      |
| Maximal continuous operating voltage   | UCPV                         | 1500 | VDC     |
| Intended power system application (UL) | VPVDC                        | 1500 | VDC     |
| Maximal continuous operating voltage   | MCOV                         | -    | VDC     |
| Voltage protection level               | $U_p$ +/-, +/-G, -/G         | 5    | kV      |
| Voltage protection rating(UL)          | VPR VPK                      | 4    | kV      |
| Surge circuit current rating           | $I_{scpv}$                   | 11   | kA      |
| Surge circuit current rating(UL)       | SCCR                         | 65   | kA      |
| Back up protection                     | Not needed up to $I_{scpv}$  |      |         |
| Leakage current                        | $I_{cpv}$ , $I_{pc}$         | 50   | $\mu$ A |
| Leakage current (UL)                   | $I_q$                        | -    | $\mu$ A |
| Response time                          |                              | < 25 | ns      |

## Mechanical features

|                                     |           |                           |                 |
|-------------------------------------|-----------|---------------------------|-----------------|
| Dimensions                          | L x W x D | 95 x 54 x 86              | mm              |
| Max. Solid/ Stranded wire (max)     |           | 35 / 25                   | mm <sup>2</sup> |
| Stripping length                    |           | 12,5                      | mm              |
| Tightening torque                   |           | 4.5                       | Nm              |
| Maximal altitude                    |           | 4000                      | m               |
| Operating temperature               |           | -40 to +85                | °C              |
| Relative humidity                   |           | 95 (non condensing)       | %HR             |
| Degree of protection                |           | IP 20                     |                 |
| Enclosure material rating and color |           | UL 94 V-0 / Grey RAL 7035 |                 |
| Weight                              |           | 488                       | g               |

## Replacement cartridge

|                       |                             |                 |
|-----------------------|-----------------------------|-----------------|
| Product ID / Model no | OVR PV T1-T2 10-1500 C QS   | 2CTB812102R1500 |
| Product ID / Model no | OVR PV T1-T2 10-1500 M C QS | 2CTB812102R1501 |

## Auxiliary contact (TS)

|                              |                 |
|------------------------------|-----------------|
| Contacts information         |                 |
| Min. & Max load              |                 |
| Connection cross-section max | mm <sup>2</sup> |
| Tightening torque            | Nm              |
| Stripping length             | mm              |

**T** Type 1 + type 2 (Type 1 CA)

$I_{total}$  : 10 kA ( $I_{max}$  : 30 kA)

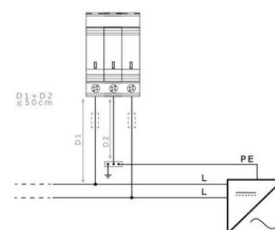
$U_p$  < 5 kV (VPR < 4 kV)

EN 50539  
IEC 61643-31

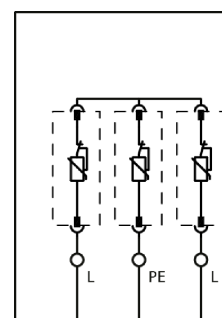
**UL**  
VZCA2.E322885

UL 1449 4ed

## Installation wiring



## Internal diagram



## Physical dimensions

