

# Box with Multi-Pole SPD for Photovoltaic Systems

## ProTec T2 PV-3Y-L(-x)MC-Box

### Class II • Type 2



Location of Use: Photovoltaic Systems  
 Mode of Protection: (+)-PE, (-)-PE, (+)-(-)  
 IEC/EN Category: Class II, Type 2  
 Housing: IP 67 Enclosure  
 Compliance: EN 61643-31:2019  
 IEC 61643-31:2018



### Technical Data

#### ProTec T2-xxxxPV-3Y-L-2MC-Box

1100

1500

#### EN Electrical

|                                           |             |          |          |
|-------------------------------------------|-------------|----------|----------|
| Maximum Continuous Operating Voltage (DC) | $U_{OPV}$   | 1100V    | 1500V    |
| Nominal Discharge Current (8/20 $\mu$ s)  | $I_n$       | 20 kA    | 15 kA    |
| Total Discharge Current (8/20 $\mu$ s)    | $I_{total}$ | 40 kA    | 40 kA    |
| Maximum Discharge Current (8/20 $\mu$ s)  | $I_{max}$   | 40 kA    | 40 kA    |
| Voltage Protection Level                  | $U_p$       | < 4.2 kV | < 4.8 kV |
| Rated Load Current                        | $I_L$       | 35 A     | 35 A     |
| Response Time                             | $t_A$       | < 25 ns  | < 25 ns  |
| Overvoltage Category                      |             | III      | III      |
| Short Circuit Current Rating              | $I_{SCPV}$  | 9 kA     | 9 kA     |
| Number of Strings per MPPT                |             | 1        |          |

#### Mechanical & Environmental

|                                                 |       |                                                    |  |
|-------------------------------------------------|-------|----------------------------------------------------|--|
| Temperature Range                               | $T_a$ | -40 °F to +185 °F [-40 °C to +85 °C]               |  |
| Permissible Humidity                            | RH    | 5%...95%                                           |  |
| Pollution Degree                                |       | 2                                                  |  |
| Altitude                                        |       | 13123 ft [4000 m]                                  |  |
| Type of Cable Entry                             |       | Cable Gland / MC4 Connectors                       |  |
| Wire Insulation Outer Diameter                  | (min) | .15" [4 mm] (stranded, flexible)                   |  |
|                                                 | (max) | .31" [8 mm] (stranded, flexible)                   |  |
| Conductor Cross Section Grounding [Cable Gland] | (min) | 24 AWG [0.2 mm <sup>2</sup> ] (stranded, flexible) |  |
|                                                 | (max) | 5 AWG [16 mm <sup>2</sup> ] (stranded, flexible)   |  |
| Degree of Protection                            |       | IP 67                                              |  |
| Thermal Protection                              |       | Yes                                                |  |
| Operating State / Fault Indication              |       | Green Flag / Not Green Flag                        |  |
| Housing Material                                |       | Polycarbonate with Semi-transparent                |  |
| Mounting                                        |       | Wall - Indoor/Outdoor                              |  |

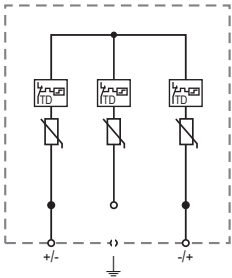
Internal Configuration

**Legend**

+/-, -/+      Terminal for +/-, -/+ Conductor

⏏      Terminal for PE/G Conductor

TD      Thermal Disconnect

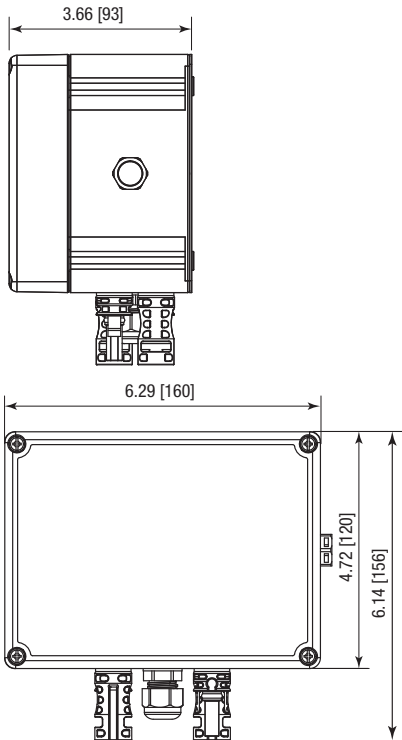


Order Information

| Order Code                    | 1100    | 1500    |
|-------------------------------|---------|---------|
| ProTec T2-xxxxPV-3Y-L-2MC-Box | 515 654 | 515 656 |

Dimensions & Packaging

inches [mm]



Complete Unit

ProTec T2-xxxxPV-3Y-L-2MC-Box

|                                  |                |                                       |            |
|----------------------------------|----------------|---------------------------------------|------------|
| Single Unit Weight               | pounds [grams] | 1.80 [821]                            | 1.86 [848] |
| Packaging Dimensions (H x W x L) |                | 4.1 x 6.9 x 7.8" [105 x 175 x 200 mm] |            |
| Minimum Package Quantity         |                | 1 Unit                                |            |