

**DATASHEET**

# Combined Lightning Current and Surge Arrester

## ProTec 60 T2 3+1

### Class II • Type 2



Location of Use: Main Distribution Boards,  
60 mm Busbar Systems

Network Systems: TT, TN-S

Mode of Protection: L-N, N-PE

IEC/EN: Class II / Type 2

Housing: Pluggable design

Compliance: IEC 61643-11:2011

EN 61643-11:2012 + A11:2018



### Technical Data

ProTec 60 T2-xxx-3+1(-R)

300

#### IEC Electrical

|                                           |                        |                    |
|-------------------------------------------|------------------------|--------------------|
| Nominal AC Voltage (50/60Hz)              | $U_o / U_n$            | 240 V              |
| Maximum Continuous Operating Voltage (AC) | (L-N) $U_c$            | 300 V              |
|                                           | (N-PE) $U_c$           | 305 V              |
| Nominal Discharge Current (8/20 $\mu$ s)  | (L-N)/(N-PE) $I_n$     | 20 kA / 40 kA      |
| Maximum Discharge Current (8/20 $\mu$ s)  | (L-N)/(N-PE) $I_{max}$ | 50 kA / 65 kA      |
| Voltage Protection Level                  | (L-N)/(N-PE) $U_p$     | 1500 V / 1500 V    |
| Follow Current Interrupt Rating           | (N-PE) $I_{fi}$        | 100 A              |
| Response Time                             | (L-N)/(N-PE) $t_A$     | < 25 ns / < 100 ns |
| Overvoltage Category                      |                        | III                |
| Maximum Backup fuse, if required          |                        | 315 A gG           |
| Short-Circuit Current Rating (AC)         | $I_{SCCR}$             | 25 kA              |
| TOV Withstand 5s                          | (L-N) $U_T$            | 337 V              |
| TOV SafeFail 120min                       | (L-N) $U_T$            | 442 V              |
| TOV Withstand 200ms                       | (N-PE) $U_T$           | 1200 V             |
| Number of Ports                           |                        | 1                  |

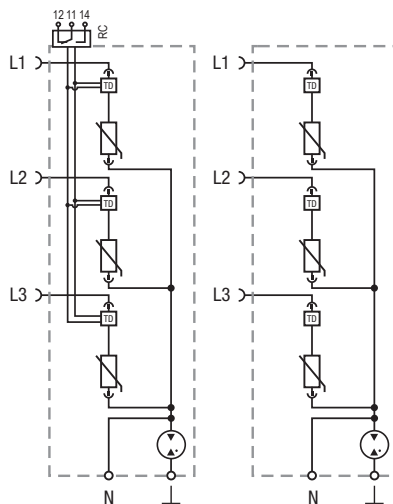
#### Mechanical & Environmental

|                                    |           |                                                                      |
|------------------------------------|-----------|----------------------------------------------------------------------|
| Operating Temperature Range        | $T_a$     | -40 °F to +185 °F [-40 °C to +85 °C]                                 |
| Permissible Operating Humidity     | RH        | 5%...95%                                                             |
| Pollution Degree                   |           | 2                                                                    |
| Altitude (max)                     |           | 13123 ft [4000m]                                                     |
| Terminal Screw Torque              | $M_{max}$ | PH2 / 40 lbf-in [4.5 Nm]                                             |
| Conductor Cross Section (max)      |           | 2 AWG (Solid, Stranded) / 4 AWG (Flexible)                           |
|                                    |           | 35 mm <sup>2</sup> (Solid, Stranded) / 25 mm <sup>2</sup> (Flexible) |
| Mounting                           |           | 60 mm Busbar Systems                                                 |
|                                    |           | Width: 12, 15, 20, 25, 30 mm                                         |
|                                    |           | Thickness: 5 mm, 10 mm (with removed spacers)                        |
| Degree Of Protection               |           | IP 20*                                                               |
| Housing Material                   |           | Thermoplastic: Extinguishing Degree UL 94 V-0                        |
| Operating State / Fault Indication |           | Green Flag / Not Green Flag                                          |
| Remote Contacts (RC)               |           | Optional                                                             |
| RC Switching Capacity              |           | AC: 250V/1 A, 125V/1 A; DC: 48V/0.5 A, 24V/0.5 A, 12V/0.5 A          |
| RC Conductor Cross Section (max)   |           | 16 AWG (Solid) / 1.5 mm <sup>2</sup> (Solid)                         |
| Overvoltage Category               |           | III                                                                  |

\*IP 40 (in combination with cover)

### Legend

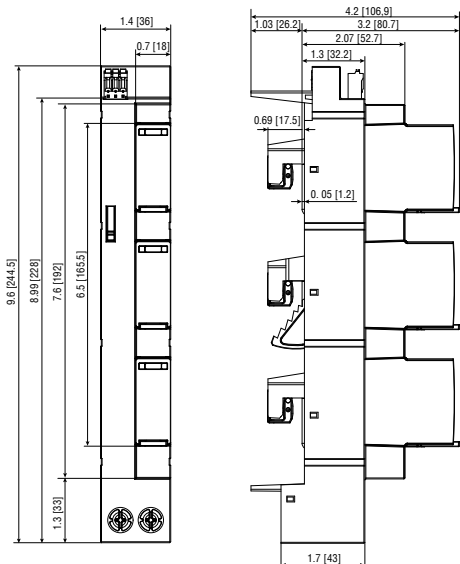
|                                                                                   |                                     |
|-----------------------------------------------------------------------------------|-------------------------------------|
| <i>L</i>                                                                          | Line Busbar Terminal                |
| <i>N</i>                                                                          | Neutral Conductor Terminal          |
|  | PE Conductor Terminal               |
| <i>RC</i>                                                                         | Remote Contacts Terminal (Optional) |
| <i>TD</i>                                                                         | Thermal Disconnect                  |



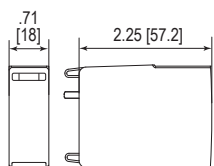
### Order Information

|                                               |            |
|-----------------------------------------------|------------|
| Order Code                                    | <b>300</b> |
| ProTec 60 T2-xxx-3+1                          | 515 947    |
| ProTec 60 T2-xxx-3+1-R (with remote contacts) | 515 948    |
| ProTec T2-xxx-P (plug)                        | 59.C346    |

### Complete Unit



### Spare Unit



### Complete Unit Dimensions & Packaging

|                               |                                          |
|-------------------------------|------------------------------------------|
| <b>ProTec 60 T2-xxx-3+1</b>   | <b>300</b>                               |
| Weight                        | pounds [grams] 1.034 [469]               |
| Packaging Dimensions (HxWxL)  | 270 x 375 x 395" [10.6 x 14.8 x 15.5 mm] |
| <b>ProTec 60 T2-xxx-3+1-R</b> | <b>300</b>                               |
| Weight                        | pounds [grams] 1.052 [477]               |
| Packaging Dimensions (HxWxL)  | 270 x 375 x 395" [10.6 x 14.8 x 15.5 mm] |
| Standard Order Quantity       | 20 Units                                 |

### Single Unit

|                              |                                     |
|------------------------------|-------------------------------------|
| <b>ProTec T2-xxx-P</b>       | <b>300</b>                          |
| Weight                       | pounds [grams] .130 [59]            |
| DIN 43880 Dimension          | 1 TE / .71" [18 mm]                 |
| Packaging Dimensions (HxWxL) | 3.2 x 4.5 x 12" [83 x 116 x 305 mm] |
| Standard Order Quantity      | 24 Units                            |