

## Surge Protection Datasheet

### CPN-T1SP325 Type I Class I Surge Arrester

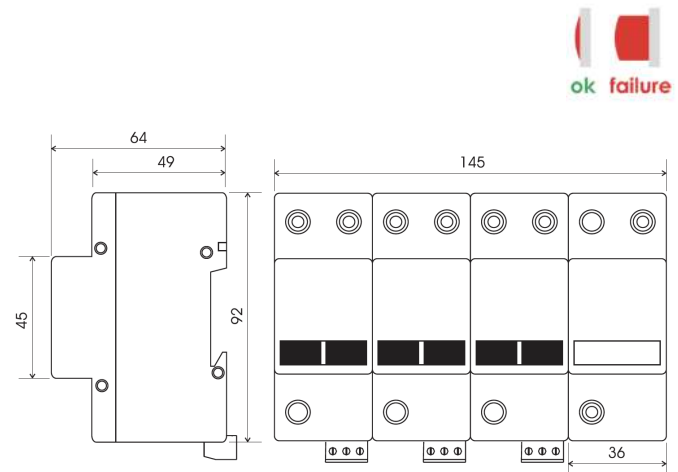
The T1SP3 is a three phase, type 1 & 2\* surge arrester, designed for use on the boundary between LPZs 0 & 1\*\* in structures using TNS, TNC-S and TT earthing systems.

The CPN-T1SP325 is designed for use in structures of LPL II, such as hospitals, banks, mobile operator stations, water-works, power plants, airport buildings for air traffic control and all structures with an explosive risk.

\* EN 61643-1: \*\* IEC 1312 & EN 62305



| Specification  |             |                                |
|--|-------------|--------------------------------|
| Max. continuous operating voltage                              | $U_c$       | 275 V AC                       |
| Temporary overvoltage (TOV), L/N                               | $U_t$       | 335 V/5 sec.                   |
| Temporary overvoltage (TOV), N/PE                              | $U_t$       | 1200 V/0.2 sec.                |
| Response time L/N  | tA          | <25 ns                         |
| Response time N/PE   | tA          | <100 ns                        |
| Max back-up fuse   |             | 160 A gL/gG                    |
| Max back-up fuse (when 'V' connected)                          |             | 63 A gL/gG                     |
| Short-circuit with stand capability at max. back-up fuse       | $I_p$       | 80 kA rms                      |
| Lightning impulse current (10/350 $\mu$ s) L/N                 | $I_{imp}$   | 12.5 kA                        |
| - charge   | Q           | 6 As                           |
| - Specific energy  | W/R         | 36 kJ/ $\Omega$                |
| Lightning impulse current (10/350 $\mu$ s) N/PE                | $I_{imp}$   | 25 kA                          |
| - charge   | Q           | 12.5 As                        |
| - Specific energy  | W/R         | 156 kJ/ $\Omega$               |
| Total lightning current (10/350 $\mu$ s) L1+N $\rightarrow$ PE | $I_{total}$ | 25 kA                          |
| Max. discharge current (8/20 $\mu$ s)                          | $I_{max}$   | 90 kA(L/N)<br>50kA N/PE        |
| Nominal discharge current (8/20 $\mu$ s)                       | $I_n$       | 25 kA                          |
| Voltage protection level at $I_{imp}$                          | $U_p$       | <1.2 kV                        |
| Terminals  |             | 10-35mm <sup>2</sup>           |
| Type according to BS EN 61643-11                               |             | SPD Type 1/2 (Test Class I/II) |
| Weight   | m           | 370g                           |
| Part Code  |             | CPN-T1SP325                    |



#### Remote Monitor Terminals (RMT)

The CPN-T1SP325 is fitted with 0v remote terminals for connection to a building management or other indication system.

Under normal operating conditions, remote terminal pins 1-2 are closed and 2-3 are open. If the internal varistor component is damaged as a result of thermal overloading, terminations 1-2 will then be open and 2-3 closed.

|  |                        |
|--|------------------------|
| Electrical strength - Surrounding circuits | 3750 V rms             |
| Electrical strength - Network circuits     | 3750 V rms             |
| Insulation resistance                      | $2 \times 10^7 \Omega$ |
| Max switching current                      | $\sim 0.5$ A           |
| Max switching voltage                      | $\sim 250$ V           |

