

# RSP-E12.5-40

4-pole lighting and surge arresters,  $I_{imp}=12,5 \text{ kA/pole}$



- Surge arresters class I+II / type 1+2 per IEC/EN 61643-11 standard.
- Single pole SPD for multi-purpose surge protection.
- 18 mm narrow model design, pluggable module for easy replacement without the need to remove system wiring.
- Unique thermal disconnecter design provides quick thermal response and secure disconnection.
- Lightning current capacity up to 12.5 kA 10/350  $\mu\text{s}$ .
- Surge current capability up to 80 kA 8/20  $\mu\text{s}$ .
- Low voltage protection level.
- High short-circuit current rating up to 50 kA $_{rms}$ , suitable for application in most AC power systems.
- Degradation failure indication and optional remote signal contact.
- Wide operating temperature  $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ .
- 35 mm DIN-rail mounting.

The is class I & class II (or T1+T2) SPD designed for low-voltage power system lightning current & surge protection, especially for location of high risk exposure or LPZ 0-2 building entrances ( IEC 62305-4) to against the damage from direct or close lightning strikes.

With built in high energy MOV, ensures remarkable lightning current discharge capacity up to 12.5kA 10/350 $\mu\text{s}$ . The unique design of thermal protection provides quick thermal response and secure disconnection. Series are ideal protection for environments with frequent switching operations or lightning strikes.

## Electrical data

|  |            |                            |
|--|------------|----------------------------|
| Number of poles  |            | 4                          |
| Nominal voltage (50/60 Hz)                               | $U_n$      | 230 V AC                   |
| Max. continuous operating voltage<br>275 V AC / 255 V AC | $U_c$      | 275 V AC                   |
| Nom. discharge current (8/20 $\mu\text{s}$ )             | $I_n$      | 25 kA                      |
| Max. discharge current (8/20 $\mu\text{s}$ )             | $I_{max}$  | 80 kA                      |
| Impulse discharge current (10/350 $\mu\text{s}$ )        | $I_{imp}$  | 12,5 kA                    |
| Voltage protection level                                 | $U_p$      | 1,2 kV                     |
| Response time  | $t_A$      | $\leq 25 \text{ ns}$       |
| Backup fuse  |            | $\leq 315 \text{ A gL/gG}$ |
| Short-circuit current rating                             | $I_{scrr}$ | 50 kA $_{rms}$             |
| Leakage current  | $I_{pe}$   | 0,1 mA                     |
| TOV withstand (5 s)                                      | $U_T$      | 335 V / 5s                 |

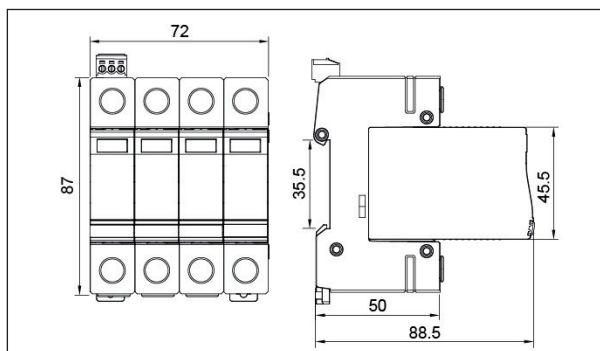
## General data

|  |       |  |
|--|-------|--|
| Ambient temperature (operating)                | $T_a$ | $-40 \dots +85^{\circ}\text{C}$                    |
| Cross section of cables connected to terminals |       | 35 mm $^2$ (single core) / 25 mm $^2$ (multi-core) |
| Terminal tightening moment                     |       | max. 4,5 Nm  |
| Mounting                                       |       | direct mounting on 35 mm rail mount (EN 60715)     |
| Cover protection category                      |       | IP20 (built-iny, PN-EN 60529)                      |
| Cover material                                 |       | thermoplastic; extinguishing degree V-0 (UL 94)    |
| Dimensions (L x W x H) [mm]                    |       | 87 x 72 x 88.5                                     |
| Weight   |       | 1296 g   |

## Remote fault signalisation

|  |  |   |
|--|--|---|
| Type of contact                                |  | potential-free (isolated contact 1 CO)                                |
| Switching capability of contact                |  | 0,5 A / 250 V AC; 0,1 A / 250 V DC; 0,2 A / 125 V DC; 0,5 A / 75 V DC |
| Cross section of cables connected to terminals |  | 1,5 mm $^2$ (wire single core)  |

## Dimensions



## Schematic Diagram

