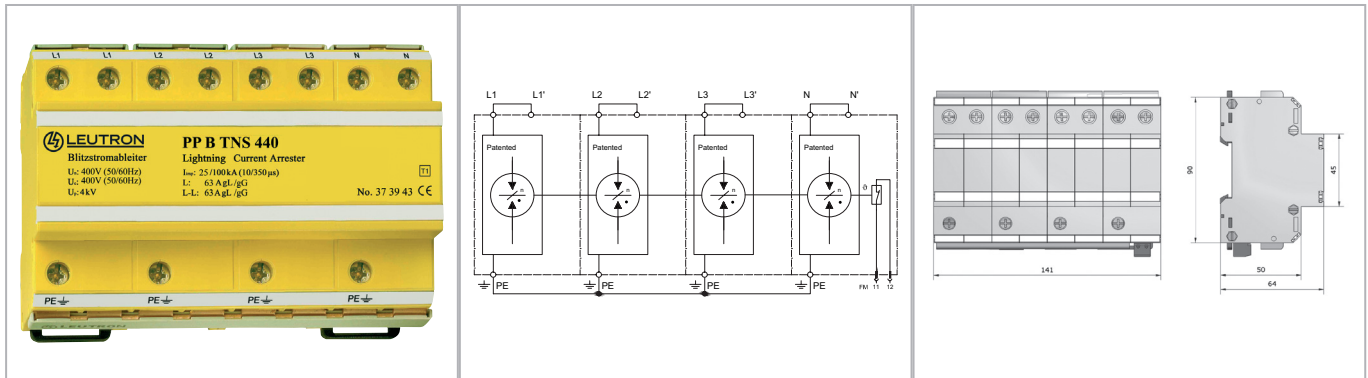


## Surge protection of power supply

### Lightning current arrester Type 1 for AC power supplies / PowerPro



**Multi-pole lightning current arrester type 1 (class I) for 3-phase TN-S systems.** The arresters can be installed at the transition OA to 1 according to the lightning protection zones concept. The SPDs of the series PowerPro B feature a high thermal resistance and an outstanding discharge capability for lightning impulse currents of 50 kA (10/350  $\mu$ s) per pole. Therefore, they can be applied according to DIN EN 62305 (VDE 0185-305).

- Test standard: IEC 61643-11 / EN 61643-11
- Discharge capacity up to 100 kA (10/350  $\mu$ s)
- High insulation resistance
- High TOV resistance
- High quenching of follow-on short-circuit currents
- Operates independently of atmospheric air pressure and ambient humidity
- Degree of protection according to IEC EN 60529: IP 20
- Mounting on 35 mm DIN rail (EN 60715)
- EAC certification
- Remote signalling contact: break contact

| Technical Data   |                    | PP B TNS 440/FM                                       |
|--|--------------------|---|
| IEC category   |                    | Type 1  |
| Nominal voltage AC   | UN                 | 400/690 V~  |
| Max. continuous operating voltage AC (50/60Hz)                           | Uc                 | 440 V~  |
| Insulation resistance  | Risol              | >10 G $\Omega$  |
| Protection level at 100% lightn. imp. sparkover voltage (1.2/50 $\mu$ s) | Up                 | $\leq$ 4,0 kV   |
| Protection level   | Up                 | $\leq$ 4,0 kV   |
| Response time  | tA                 | <50 ns  |
| Lightning impulse current (10/350 $\mu$ s) total                         | I <sub>total</sub> | 100 kA  |
| Lightning impulse current (10/350 $\mu$ s) L-N/N-PE/L-PEN                | I <sub>imp</sub>   | 25 / - / - kA   |
| Follow-on current extinguishing capability at U <sub>c</sub> (50/60 Hz)  | I <sub>fi</sub>    | 0,75 kA   |
| Short-circuit withstand capability at max. back-up fuse                  | I <sub>k</sub>     | 50 kA <sub>eff</sub>                                  |
| Max. acceptable back-up fuse F2 (spur wiring)                            |                    | 63 A gG   |
| Max. acceptable back-up fuse F1 (serial wiring)                          |                    | 63 A gG   |
| Operating temperature range  | TU                 | -40 - +80 °C  |
| Max. conductor cross section   |                    | 50mm <sup>2</sup> stranded/35mm <sup>2</sup> flexible |
| Recommended conductor cross section                                      |                    | 25 mm <sup>2</sup>                                    |
| Max. connection torque for terminals                                     |                    | 4,0 Nm  |
| Enclosure material / colour  |                    | polycarbonate (halogen-free) UL 94-V0 / yellow        |
| Switching capacity FM  |                    | 250 V/2 A   |
| Max. conductor cross section FM  |                    | 1,5 mm <sup>2</sup>                                   |

### Order Data

|             |                |
|-------------|----------------|
| Product     | PP BTNS 440/FM |
| Article-No. | 37 39 44       |