

Technical data sheet

Combination arrester V50, 3-pole with FS 280 V

Item no. 5093516

OBO
BETTERMANN



Lightning current combination arrester, type 1+2

- For lightning current equipotential bonding to VDE 0185-305 (IEC 62305)
- Lightning current arresting capacity of 12.5 kA (10/350) per pole and up to 50 kA (10/350) in total
- Modular, plug-in arrester with cut-off unit and visual status display
- Locking mechanism with vibration protection and voltage keying
- Plastic to UL 94 V-0
- The remote signalling (FS) variants have a potential-free changeover contact for remote signalling

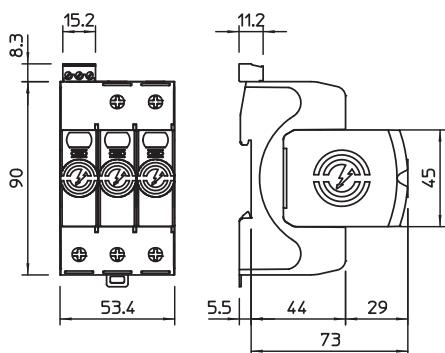
Application: Lightning current equipotential bonding for buildings of class III and IV.



Additional product text 1

* Complete = Plug-in arrester and base

Dimensions



Master data

| | |
|--------------------------|---------------------|
| Item no. | 5093516 |
| Type | V50-3+FS-280 |
| Description 1 | CombiController V50 |
| Description 2 | 3-pole with RS |
| Dimension | 280V |
| Smallest sales unit (VG) | 1,00 Piece |
| Weight | 46,90 kg/100 pc. |

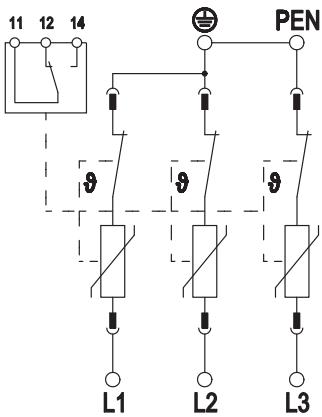
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|--|-----------------------|
| SPD to EN 61643-11 | Type 1+2 |
| SPD to IEC 61643-11 | Class I+II |
| SPD to UL 1449 | Type 4 |
| Nominal voltage AC (50/60 Hz) | 230,00 V |
| Maximum continuous voltage AC | 280,00 V |
| Maximum continuous voltage (L-N) | 280,00 V |
| Nominal frequency | 50,00 Hz |
| Nominal discharge current (8/20 µs) | 30,00 kA |
| Nominal discharge current (8/20 µs) [L-N] | 30,00 kA |
| Maximum discharge current (8/20 µs) | 50,00 kA |
| Maximum discharge current (8/20 µs) [L-N] | 50,00 kA |
| Lightning surge current (10/350 µs) | 12,50 kA |
| Lightning surge current (10/350 µs) [L-N/PE] | 12,50 kA |
| Lightning surge current (10/350) | 37,50 kA |
| Arrestor surge current (8/20 µs) [total] | 120,00 kA |
| Protection level | 1,30 kV |
| Protection level [L-N] | 1,30 kV |
| Residual voltage [L-N] @ 1 kA | 0,7 kV |
| Residual voltage [L-N] @ 5 kA | 0,8 kV |
| Residual voltage [L-N] @ 7 kA | 0,9 kV |
| Residual voltage [L-N] @ 12.5 kA | 1,0 kV |
| Response time | 25 ns |
| Response time [L-N] | 25 ns |
| Max. mains-side overcurrent protection | 160 A gL/gG |
| Short-circuit withstand for max. mains-side overcurrent protection | 50 kA eff |
| TOV voltage [L-N] – fail safe mode – 120 min. | 440,00 V |
| TOV voltage [L-N] – withstand mode – 5 s | 335,00 V |
| Operating temperature range | -40+80 °C |
| Humidity | 5,00 - 95,00 % |
| Function/defect display | Optical |
| Ports | One-Port SPD |
| Pole version | 3 |
| Pole number | 3,00 |
| Connection cross-section (min.) | 1,50 mm ² |
| Connection cross-section (max.) | 35,00 mm ² |
| Connection cross-section (min.) | 16,00 AWG |
| Connection cross-section (max.) | 2,00 AWG |
| Torque | 4,00 Nm |
| Torque | 35,00 Lbs |
| Mounting type | Hat rail 35 mm |
| Housing material | PA UL 94 V-0 |
| Installation location | Interior |

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| Protection rating | IP20 |
| Installation dimensions (LxWxH) | 90x53,4x78,5 mm |
| Minimum distance | 1,50 mm |
| Approvals | UL |
| FM contacts | Changeover |
| Switching power AC | 230 V; 0,5 A |
| Switching power DC | 230 V; 0,1 A / 75 V; 0,5 A |
| Connection cross-section, FM terminals | 0,5-1,5 mm ² |
| Connection cross-section, FM terminals | 21-16 AWG |
| Torque for FM terminal | 0,20 Nm |
| Torque for FM terminal | 1,70 Lbs |
| Protective conductor current | < 100 µA |
| Blow-out | <input type="checkbox"/> |
| Size | 3 part units |
| Remote signalling | <input checked="" type="checkbox"/> |
| Integrated back-up fuse | <input type="checkbox"/> |
| Max. cable cross-section flexible (fine-wire) | 35,00 mm ² |
| Max. cable cross-section rigid (single wire/multi-wire) | 35,00 mm ² |
| Conductor cross-section, flexible (fine-wire) | 1,50 - 35,00 mm ² |
| Conductor cross-section, flexible (fine-wire) | 16,00 - 2,00 AWG |
| Conductor cross-section, rigid (single wire/multi-wire) | 16,00 - 2,00 AWG |
| Conductor cross-section, rigid (single wire/multi-wire) | 1,50 - 35,00 mm ² |
| Signalling on device | Visual |