

# Technical data sheet

## Combination arrester V50, 3-pole 385 V

Item number: 5093574



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.

\* Complete = Plug-in arrester and base



PA Polyamide

### Master data

|                                    |                         |
|------------------------------------|-------------------------|
| Item number                        | 5093574                 |
| Type                               | V50-3-385               |
| Description 1                      | CombiController V50     |
| Description 2                      | 3-pole                  |
| Manufacturer                       | OBO                     |
| Dimension                          | 385V                    |
| Material                           | Polyamide               |
| Smallest sales unit                | 1                       |
| Unit of quantity                   | Piece                   |
| Weight                             | 52.2 kg                 |
| Weight unit                        | kg/100 pc.              |
| CO2 Footprint (GWP) Cradle-to-Gate | 0,8929 kg COe / 1 Piece |

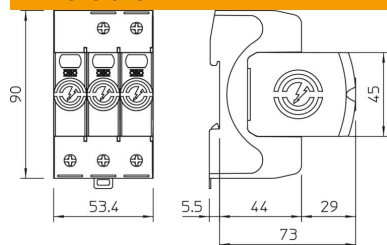
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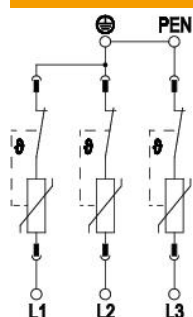
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### Dimensions



### Technical data



|                                                                     |              |
|---------------------------------------------------------------------|--------------|
| Arrester surge current (8/20 µs) [total]                            | 120 kA       |
| Connection cross-section (min.)                                     | 1.5 mm²      |
| Connection cross-section, FM terminals, max.                        | 16 AWG       |
| Connection cross-section, FM terminals, max.                        | 1.5 mm²      |
| Connection cross-section, FM terminals, min.                        | 21 AWG       |
| Connection cross-section, FM terminals, min.                        | 0.5 mm²      |
| Response time                                                       | <25 ns       |
| Response time [L-N]                                                 | 25 ns        |
| Response time [N-PE]                                                | 100 ns       |
| Blow-out                                                            | no           |
| Pole version                                                        | 3            |
| Structural width in division units (division unit, 17.5 mm)         | 3            |
| Operating temperature, max.                                         | 80 °C        |
| Operating temperature, min.                                         | -40 °C       |
| Lightning surge current (10/350 µs)                                 | 12.5 kA      |
| Lightning surge current (10/350 µs) [L-N/PE]                        | 12.5 kA      |
| Lightning surge current (10/350 µs) [N/PE]                          | 50 kA        |
| Lightning surge current (10/350)                                    | 37.5 kA      |
| Torque                                                              | 35 Lbs       |
| Torque                                                              | 4 Nm         |
| Torque for FM terminal                                              | 1.7 Lbs      |
| Torque for FM terminal                                              | 0.2 Nm       |
| Installation location                                               | Interior     |
| Remote signalling                                                   | no           |
| Function/defect display                                             | Visual       |
| Housing material surge protection components                        | PA UL 94 V-0 |
| Maximum continuous voltage (L-N)                                    | 385 V        |
| Maximum continuous voltage AC                                       | 385 V        |
| Integrated back-up fuse                                             | no           |
| Short-circuit resistance for max. mains-side overcurrent protection | 50 kA eff    |
| Conductor cross-section, flexible (fine-wire), max.                 | 35 mm²       |

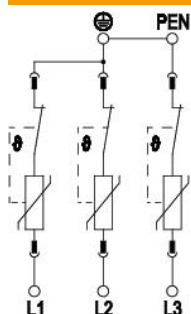
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|                                                              |                            |
|--------------------------------------------------------------|----------------------------|
| Conductor cross-section, flexible (fine-wire), max.          | 2 AWG                      |
| Conductor cross-section, flexible (fine-wire), min.          | 16 AWG                     |
| Conductor cross-section, flexible (fine-wire), min.          | 1.5 mm <sup>2</sup>        |
| Conductor cross-section, rigid (single-wire/multiwire), max. | 2 AWG                      |
| Conductor cross-section, rigid (single-wire/multiwire), max. | 35 mm <sup>2</sup>         |
| Conductor cross-section, rigid (single-wire/multiwire), min. | 16 AWG                     |
| Conductor cross-section, rigid (single-wire/multiwire), min. | 1.5 mm <sup>2</sup>        |
| Humidity, max.                                               | 95 %                       |
| Humidity, min.                                               | 5 %                        |
| Max. mains-side overcurrent protection                       | 160 A gL/gG                |
| Maximum back-up fuse                                         | 160 A                      |
| Maximum discharge current (8/20 µs)                          | 50 kA                      |
| Maximum discharge current (8/20 µs) [L-N]                    | 50 kA                      |
| Minimum distance                                             | 1.5 mm                     |
| Installation type                                            | DIN rail 35 mm             |
| Nominal discharge current (8/20 µs)                          | 30 kA                      |
| Nominal discharge current (8/20 µs) [L-N]                    | 30 kA                      |
| Nominal frequency                                            | 50 Hz                      |
| Nominal voltage AC (50/60 Hz)                                | 350 V                      |
| Network form                                                 | TN-C                       |
| TN network form                                              | yes                        |
| TN-C network form                                            | yes                        |
| Pole number                                                  | 3                          |
| Ports                                                        | One-Port SPD               |
| Residual voltage [L-N] @ 1 kA                                | 1.1 kV                     |
| Residual voltage [L-N] @ 12.5 kA                             | 1.4 kV                     |
| Residual voltage [L-N] @ 5 kA                                | 1.2 kV                     |
| Residual voltage [L-N] @ 7 kA                                | 1.3 kV                     |
| Switching power AC                                           | 230 V; 0,5 A               |
| Switching power DC                                           | 230 V; 0,1 A / 75 V; 0,5 A |
| Protection rating                                            | IP20                       |
| Protective conductor current                                 | < 100 µA                   |
| Protection level                                             | ≤1,7                       |
| Protection level [L-N]                                       | ≤1,7                       |
| Signalling on device                                         | Visual                     |
| SPD to EN 61643-11                                           | Type 1+2                   |
| SPD to IEC 61643-1                                           | Class I+II                 |
| SPD to UL 1449                                               | Type 4                     |
| Permitted temperature range, max.                            | 80 °C                      |
| Permitted temperature range, min.                            | -40 °C                     |
| TOV voltage [L-N] – fail safe mode – 120 min.                | 670 V                      |

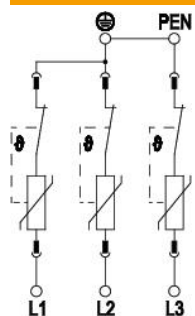
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TOV voltage [L-N] – withstand  
mode – 5 s

510 V

Approvals

VDE KEMA UL ÖVE