

# Technical data sheet

## Plug-in arrester V50 280 V

Item number: 5093508



Combination arrester, type 1+2

- For lightning protection equipotential bonding to VDE 0185-305 (IEC 62305)
- Lightning current discharge capacity of 12.5 kA (10/350) per pole
- Modular, plug-in arrester with dynamic cut-off unit and visual status display
- Locking mechanism with vibration protection and voltage keying
- Plastic (UL 94 V-0)



| Master data                        |                          |  |
|------------------------------------|--------------------------|--|
| Item number                        | 5093508                  |  |
| Type                               | V50-0-280                |  |
| Description 1                      | CombiController V50      |  |
| Description 2                      | plug-in arrester         |  |
| Manufacturer                       | OBO                      |  |
| Dimension                          | 280V                     |  |
| Smallest sales unit                | 1                        |  |
| Unit of quantity                   | Piece                    |  |
| Weight                             | 8.5 kg                   |  |
| Weight unit                        | kg/100 pc.               |  |
| CO2 Footprint (GWP) Cradle-to-Gate | 0,2165 kg CO2e / 1 Piece |  |

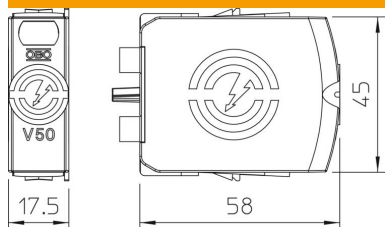
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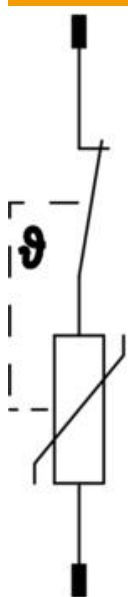
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### Dimensions



### Technical data



|                                                                     |                     |
|---------------------------------------------------------------------|---------------------|
| Connection cross-section (min.)                                     | 1.5 mm <sup>2</sup> |
| Connection cross-section, FM terminals, max.                        | 16 AWG              |
| Connection cross-section, FM terminals, max.                        | 1.5 mm <sup>2</sup> |
| Connection cross-section, FM terminals, min.                        | 21 AWG              |
| Connection cross-section, FM terminals, min.                        | 0.5 mm <sup>2</sup> |
| Response time                                                       | <25 ns              |
| Response time [L-N]                                                 | 25 ns               |
| Blow-out                                                            | no                  |
| Pole version                                                        | 1                   |
| Structural width in division units (division unit, 17.5 mm)         | 1                   |
| 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             |
| 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)                                    | 280 V               |
| Maximum continuous voltage AC                                       | 280 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 mm <sup>2</sup>  |
| 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> |

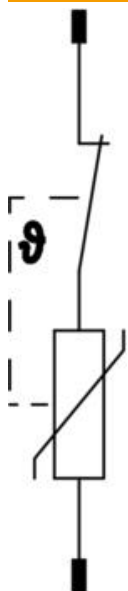
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|                                                              |                     |
|--------------------------------------------------------------|---------------------|
| Conductor cross-section, rigid (single-wire/multiwire), max. | 2 AWG               |
| 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)                                | 230 V               |
| Network form                                                 | All                 |
| Pole number                                                  | 1                   |
| Ports                                                        | One-Port SPD        |
| Residual voltage [L-N] @ 1 kA                                | 0.7 kV              |
| Residual voltage [L-N] @ 12.5 kA                             | 1 kV                |
| Residual voltage [L-N] @ 5 kA                                | 0.8 kV              |
| Residual voltage [L-N] @ 7 kA                                | 0.9 kV              |
| Protection rating                                            | IP20                |
| Protective conductor current                                 | < 800 µA            |
| Protection level                                             | ≤1,3                |
| Protection level [L-N]                                       | ≤1,3                |
| 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.                | 440 V               |
| TOV voltage [L-N] – withstand mode – 5 s                     | 335 V               |
| Approvals                                                    | VDE KEMA UL ÖVE     |