

# Technical data sheet

## V20 surge arrester, leakage current-free, 4-pole

Item number: 5095529



### Surge arrester, type 2

- For surge voltage protection equipotential bonding to VDE 0100-443 (IEC 60364-4-44)
- Discharge capacity to 30 kA (8/20) per pole through a high-performance series connection of varistor and spark gap
- Modular connectable 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 variants (FS) have a potential-free changeover contact for remote signalling

Application: Equipotential bonding in main and sub-distributions.



### Master data

|                                    |                             |
|------------------------------------|-----------------------------|
| Item number                        | 5095529                     |
| Type                               | V20-LCF-4-280               |
| Description 1                      | SurgeController V20         |
| Description 2                      | leakage current-free 4-pole |
| Manufacturer                       | OBO                         |
| Dimension                          | 280V                        |
| Smallest sales unit                | 1                           |
| Unit of quantity                   | Piece                       |
| Weight                             | 61.2 kg                     |
| Weight unit                        | kg/100 pc.                  |
| CO2 Footprint (GWP) Cradle-to-Gate | 2,2788 kg CO2e / 1 Piece    |

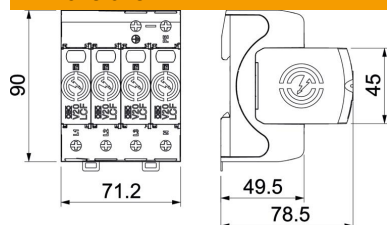
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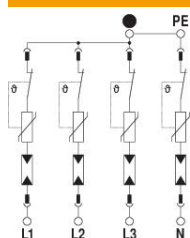
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### Dimensions



### Technical data



|                                                                     |                     |
|---------------------------------------------------------------------|---------------------|
| Arrester surge current (8/20 $\mu$ s) [total]                       | 120 kA              |
| Connection cross-section (min.)                                     | 1.5 mm <sup>2</sup> |
| Response time [L-N]                                                 | 100 ns              |
| Response time [N-PE]                                                | 100 ns              |
| Blow-out                                                            | no                  |
| Pole version                                                        | 4                   |
| Operating temperature, max.                                         | 80 °C               |
| Operating temperature, min.                                         | -40 °C              |
| Torque                                                              | 35 Lbs              |
| Torque                                                              | 4 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 resistant                                             | yes                 |
| 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> |
| 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, min.                                                      | 5 %                 |
| Humidity, max.                                                      | 95 %                |
| Max. mains-side overcurrent protection                              | 160 A gL/gG         |
| Maximum back-up fuse                                                | 160 A               |

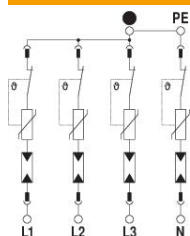
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|                                               |                |
|-----------------------------------------------|----------------|
| Maximum discharge current (8/20 µs)           | 30 kA          |
| Maximum discharge current (8/20 µs) [L-N]     | 30 kA          |
| Minimum distance                              | 1.5 mm         |
| Installation type                             | DIN rail 35 mm |
| Nominal discharge current (8/20 µs)           | 20 kA          |
| Nominal discharge current (8/20 µs) [L-N]     | 20 kA          |
| Nominal voltage AC (50/60 Hz)                 | 230 V          |
| DC network form                               | no             |
| IT network form                               | no             |
| Other network form                            | no             |
| TN network form                               | yes            |
| TN-C network form                             | no             |
| TN-C-S network form                           | yes            |
| TN-S network form                             | yes            |
| TT network form                               | no             |
| Ports                                         | One-Port SPD   |
| Test class, type 2                            | yes            |
| Residual voltage [L-N] @ 1 kA                 | 0.8 kV         |
| Residual voltage [L-N] @ 5 kA                 | 1 kV           |
| ROHS-conformant                               | yes            |
| Protection rating                             | IP20           |
| Protective conductor current                  | < 500 µA       |
| Protection level                              | ≤1,5 kV        |
| Protection level [L-N]                        | ≤1,5           |
| Signalling on device                          | Visual         |
| SPD to EN 61643-11                            | Type 2+3       |
| SPD to IEC 61643-11                           | Class II+III   |
| 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          |
| TOV voltage [N-PE] – withstand mode – 200 ms  | 1200 V         |