

# Technical data sheet

## Surge arrester V20, 1-pole, 280 V

Item no. 5095161



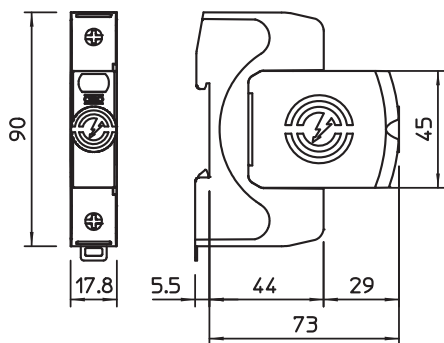
Surge arrester, type 2

- For surge voltage protection equipotential bonding to VDE 0100-443 (IEC 60364-4-44)
- Discharge capacity to 40 kA (8/20) per pole through high-performance varistors
- 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.



### Dimensions



### Master data

|                          |                     |
|--------------------------|---------------------|
| Item no.                 | 5095161             |
| Type                     | V20-1-280           |
| Description 1            | SurgeController V20 |
| Description 2            | 1-pole              |
| Dimension                | 280V                |
| Smallest sales unit (VG) | 1 Piece             |
| Weight                   | 12,90 kg/100 pc.    |

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|  |                                     |
|--|-------------------------------------|
| SPD to EN 61643-11   | Type 2                              |
| SPD to IEC 61643-11  | Class II                            |
| SPD to UL 1449   | Type 4                              |
| Test class, type 2   | <input checked="" type="checkbox"/> |
| 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 discharge current (8/20 µs)                                | 20,00 kA                            |
| Nominal discharge current (8/20 µs) [L-N]                          | 20,00 kA                            |
| Maximum discharge current (8/20 µs)                                | 40,00 kA                            |
| Maximum discharge current (8/20 µs) [L-N]                          | 40,00 kA                            |
| Arrester surge current (8/20 µs) [total]                           | 40,00 kA                            |
| Protection level   | 1,30 kV                             |
| Protection level [L-N]   | 1,30 kV                             |
| Residual voltage [L-N] @ 1 kA                                      | 0,8 kV                              |
| Residual voltage [L-N] @ 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                           |
| Short-circuit resistant  | <input checked="" type="checkbox"/> |
| 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   | 1                                   |
| Pole number  | 1                                   |
| Connection cross-section (min.)                                    | 1,50 mm <sup>2</sup>                |
| Connection cross-section (max.)                                    | 35,00 mm <sup>2</sup>               |
| 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                            |
| Protection rating  | IP20                                |
| Installation dimensions (LxWxH)                                    | 90x17,8x78,5 mm                     |
| Minimum distance   | 1,50 mm                             |
| Approvals  |                                     |
| Protective conductor current                                       | < 250 µA                            |
| Blow-out   | <input type="checkbox"/>            |
| Size   | 1 part unit                         |
| Remote signalling  | <input type="checkbox"/>            |
| Integrated back-up fuse  | <input type="checkbox"/>            |

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|   |                              |
|---|------------------------------|
| Max. cable cross-section flexible (fine-wire)           | 35,00 mm <sup>2</sup>        |
| Max. cable cross-section rigid (single wire/multi-wire) | 35,00 mm <sup>2</sup>        |
| Conductor cross-section, flexible (fine-wire)           | 1,50 - 35,00 mm <sup>2</sup> |
| 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 <sup>2</sup> |
| Signalling on device                                    | Visual                       |