

Type 2 surge protection device - VAL-MS 600DC-PV/2+V - 2800642

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Surge arrester for 2-pos. isolated 600 V DC voltage systems, for DIN rail mounting, 3-pos. base element, three plug-in temperature-monitored protective elements, status message on each plug.

Product Features

- ✓ Increased safety, thanks to compliance with standard EN 50539-11
- ✓ Reliable contact, thanks to integrated rotating latch
- ✓ Easy replacement, thanks to plug-in arresters
- ✓ Optimum inverter protection, thanks to low protection level
- ✓ Efficient replacement of defective plugs, thanks to visual status indicator
- ✓ Optimized maintenance planning, thanks to remote signaling
- ✓ Protection against mismatching, thanks to keyed plugs and base elements
- ✓ Always the right arrester, thanks to universal type 1/type 2 protective components



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 320.0 GRM |
| Custom tariff number | 85363010 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|------------------|---------|
| Height | 99 mm |
| Width | 53.4 mm |
| Depth | 65.5 mm |
| Horizontal pitch | 3 Div. |

Type 2 surge protection device - VAL-MS 600DC-PV/2+V - 2800642

Technical data

Ambient conditions

| | |
|----------------------------------|------------------|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Altitude | ≤ 2000 m |
| Permissible humidity (operation) | 5 % ... 95 % |

General

| | |
|---|-----------------|
| Standards/specifications | EN 50539-11 |
| IEC test classification | PV T2 |
| SPD failure behavior | OCM |
| Mounting type | DIN rail: 35 mm |
| Housing material | PBT / PA |
| Pollution degree | 2 |
| Inflammability class according to UL 94 | V0 |
| Surge protection fault message | Optical |

Protective circuit DC voltage side (DC)

| | |
|--|-------------------------------|
| Maximum continuous operating voltage U_{CPV} | 800 V DC |
| Open circuit voltage U_{OCSTC} | ≤ 670 V DC |
| Short-circuit current rating I_{SCPV} | 300 A |
| Rated load current I_L | 80 A DC |
| Residual current I_{PE} | ≤ 20 μA (DC) ≤ 300 μA (AC) |
| Standby power consumption P_C | ≤ 20 mVA |
| Nominal discharge current (8/20) μs | 15 kA |
| Maximum discharge current I_{max} (8/20) μs | 40 kA |
| Total discharge current I_{Total} (8/20) μs | 40 kA |
| Voltage protection level U_p (L+) - (L-) | ≤ 2.7 kV |
| Voltage protection level U_p (L+/L-) - PE | ≤ 2.7 kV |
| Response time t_A | ≤ 25 ns |
| Max. required backup fuse with branch wiring | Not required |

Connection data

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section stranded min. | 1.5 mm ² |
| Conductor cross section stranded max. | 25 mm ² |
| Conductor cross section solid min. | 1.5 mm ² |
| Conductor cross section solid max. | 35 mm ² |
| Screw thread | M5 |

Type 2 surge protection device - VAL-MS 600DC-PV/2+V - 2800642

Technical data

Connection data

| | |
|---------------------------------------|---------------------------|
| Tightening torque | 4.5 Nm |
| Stripping length | 16 mm |
| Connection method | Biconnect terminal blocks |
| Conductor cross section stranded min. | 1.5 mm ² |
| Conductor cross section stranded max. | 16 mm ² |
| Screw thread | M6 |
| Tightening torque | 30 lb _F -in. |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27140201 |
| eCl@ss 4.1 | 27130801 |
| eCl@ss 5.0 | 27130801 |
| eCl@ss 5.1 | 27130801 |
| eCl@ss 6.0 | 27130805 |
| eCl@ss 7.0 | 27130805 |
| eCl@ss 8.0 | 27130805 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC000941 |
| ETIM 4.0 | EC000941 |
| ETIM 5.0 | EC000941 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11 | 39121610 |
| UNSPSC 12.01 | 39121610 |
| UNSPSC 13.2 | 39121620 |

Approvals

Approvals

Approvals

UL Recognized / KEMA-KEUR / cUL Recognized / cULus Recognized

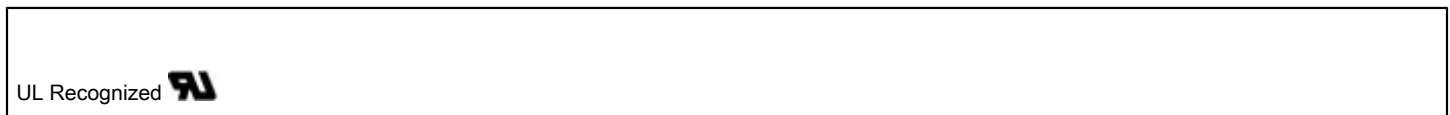
Type 2 surge protection device - VAL-MS 600DC-PV/2+V - 2800642

Approvals

Ex Approvals

Approvals submitted

Approval details



Drawings

Circuit diagram

