

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

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 protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 230 V AC (IT system)

Your advantages

- ✓ Single-channel, DIN-rail mountable protective devices
- ✓ Base element with/without floating remote indication contact
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Disconnect device on each individual plug
- ✓ Mechanical coding of all slots
- ✓ Consists of base element and plug



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 10 pc |
| GTIN | |
| GTIN | 4017918075286 |

Technical data

Dimensions

| | |
|------------------|---------|
| Height | 52.4 mm |
| Width | 17.5 mm |
| Depth | 55.3 mm |
| Horizontal pitch | 1 Div. |

Ambient conditions

| | |
|---|--|
| Degree of protection | IP20 |
| Ambient temperature (operation) | -40 °C ... 80 °C |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Altitude | ≤ 2000 m (amsl (above mean sea level)) |
| Permissible humidity (operation) | 5 % ... 95 % |

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Technical data

Ambient conditions

| | |
|-----------------------|---|
| Shock (operation) | 25g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z) |
| Vibration (operation) | 5g (10 ... 500 Hz / 2.5 h / X, Y, Z) |

General

| | |
|--|--------------------|
| IEC test classification | II |
| | T2 |
| EN type | T2 |
| IEC power supply system | TN |
| | TT |
| | IT |
| Mode of protection | L-N |
| | L-PE |
| | L-PEN |
| Mounting type | on base element |
| Color | jet black RAL 9005 |
| Housing material | PA 6.6 |
| Degree of pollution | 2 |
| Flammability rating according to UL 94 | V-0 |
| Type | Male |
| Number of positions | 1 |
| Arrester can be tested with CHECKMASTER from software version: | From SW rev. 1.10 |
| Surge protection fault message | optical |

Additional descriptions

| | |
|------|--|
| Note | Usable in all low-voltage systems between L-N or L-PEN. Only usable in IT Systems between L-PE, if the exposed-conductive-parts (bodies) of the equipment of the low-voltage installation is connected to the earthing arrangement of the transformer substation. (interconnected earthing arrangement of the HV-transformer substation with the bodies of the LV-installation. $R_E = R_A$ accordance to IEC 60364-4-442 / VDE 0100-442 Fig. 44D / Example a) |
|------|--|

Protective circuit

| | |
|--|-------------------|
| Nominal voltage U_N | 240/415 V AC (TN) |
| | 240/415 V AC (TT) |
| | 230 V AC (IT) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Maximum continuous voltage U_C | 385 V AC |
| Residual current I_{PE} | ≤ 0.45 mA |
| Standby power consumption P_C | ≤ 175 mVA |
| Nominal discharge current I_n (8/20) μ s | 20 kA |
| Maximum discharge current I_{max} (8/20) μ s | 40 kA |
| Short-circuit current rating I_{SCCR} | 25 kA |
| Voltage protection level U_p | ≤ 1.8 kV |

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Technical data

Protective circuit

| | |
|-------------------------------------|-------------------------------------|
| Residual voltage U_{res} | ≤ 1.8 kV (at I_n) |
| | ≤ 1.6 kV (at 10 kA) |
| | ≤ 1.4 kV (at 5 kA) |
| | ≤ 1.3 kV (at 3 kA) |
| TOV behavior at U_T | 415 V AC (5 s / withstand mode) |
| | 440 V AC (120 min / withstand mode) |
| Response time t_A | ≤ 25 ns |
| Max. backup fuse with branch wiring | 125 A (gG) |

Connection data

| | |
|-------------------|-----------|
| Connection method | pluggable |
|-------------------|-----------|

UL specifications

| | |
|---|--------------|
| SPD Type | 4CA |
| Maximum continuous operating voltage MCOV (L-N) | 385 V AC |
| Nom. voltage | 230 V AC |
| Mode of protection | L-N |
| Power distribution system | Single phase |
| Nominal frequency | 50/60 Hz |
| Measured limiting voltage MLV (L-N) | 2200 V |
| Nominal discharge current I_n (L-N) | 20 kA |

Standards and Regulations

| | |
|-----------------------|-------------------|
| Standards/regulations | IEC 61643-11 2011 |
| | EN 61643-11 2012 |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

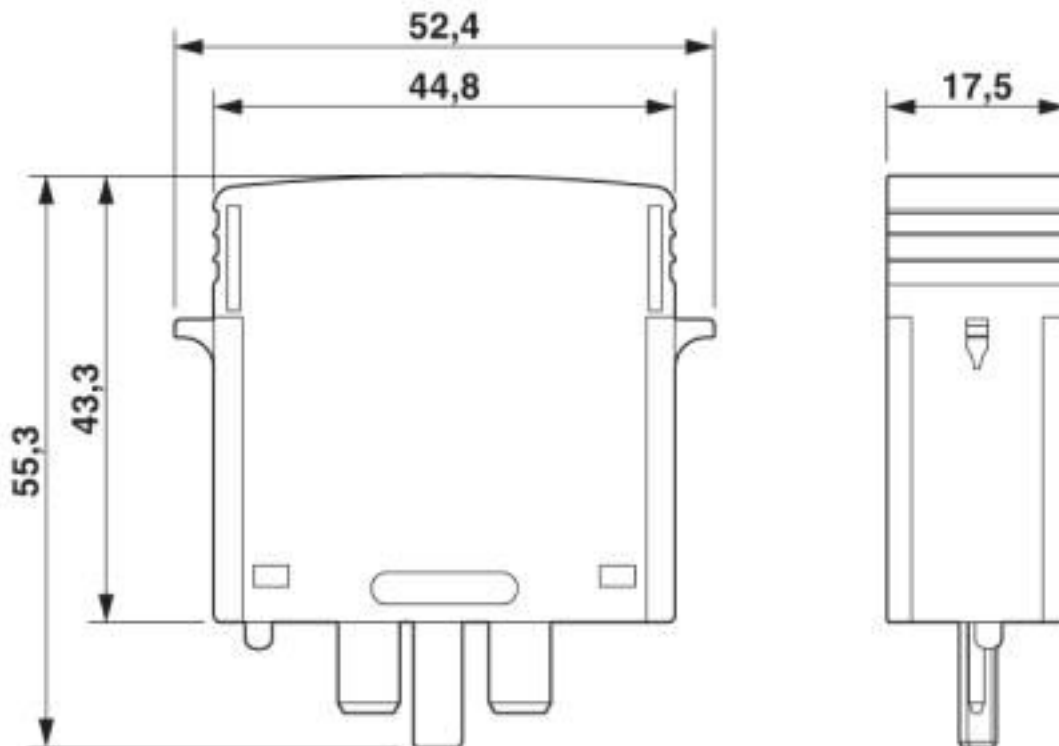
Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Circuit diagram



Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Dimensional drawing



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27130890 |
| eCl@ss 4.0 | 27130800 |
| eCl@ss 4.1 | 27130800 |
| eCl@ss 5.0 | 27130800 |
| eCl@ss 5.1 | 27130800 |
| eCl@ss 6.0 | 27130800 |
| eCl@ss 7.0 | 27130805 |
| eCl@ss 8.0 | 27130890 |
| eCl@ss 9.0 | 27130890 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000941 |
| ETIM 3.0 | EC000941 |
| ETIM 4.0 | EC000941 |
| ETIM 5.0 | EC002496 |
| ETIM 6.0 | EC000941 |
| ETIM 7.0 | EC000941 |

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Classifications

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11 | 39121610 |
| UNSPSC 12.01 | 39121610 |
| UNSPSC 13.2 | 39121620 |
| UNSPSC 18.0 | 39121620 |
| UNSPSC 19.0 | 39121620 |
| UNSPSC 20.0 | 39121620 |
| UNSPSC 21.0 | 39121620 |

Approvals

Approvals

Approvals

CSA / CCA / UL Recognized / KEMA-KEUR / cUL Recognized / IECCEB Scheme / ÖVE / EAC / cULus Recognized

Ex Approvals


Approval details

| | | | |
|-----|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
|-----|---|---|-------|

| | | | |
|-----|--|--|---------------|
| CCA | | | NTR-AT 1947-A |
|-----|--|--|---------------|

| | | | |
|---------------|---|---|---------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330181 |
|---------------|---|---|---------------|

| | | | |
|-----------|---|---|-----------|
| KEMA-KEUR |  | http://www.dekra-certification.com | 71-113273 |
|-----------|---|---|-----------|

| | | | |
|----------------|---|---|---------------|
| cUL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330181 |
|----------------|---|---|---------------|

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Approvals

| | | | |
|------------------|--|---|-------------------------|
| IECEE CB Scheme | | http://www.iecee.org/ | AT 2905/M1 |
| ÖVE | | https://www.ove.at/zertifizierung-pz/zertifizierungsregister/ | 18583-001-14 |
| EAC | | | RU C- DE.*09.B.00169 |
| cULus Recognized | | | |

Accessories

Accessories

Bridge

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

Wiring bridge - MPB 18/3- 6 - 2809241



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.

Wiring bridge - MPB 18/1-57 - 2809238



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Accessories

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Accessories

Wiring bridge - MPB 18/1- 2 - 2809209



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.

Wiring bridge - MPB 18/1-10/1.0.0 - 2830443



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 10 pitches with contact sequence 1-0-0

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Labeled device marker

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Accessories

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Additional products

Type 2 surge protection base element - VAL-MS BE - 2817741



Base element for type 2 arresters of the VALVETRAB MS series of products. Design: 1-channel

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

Accessories

Type 2 surge protection base element - VAL-MS BE/FM - 2817738



Base element for type 2 arresters of the VALVETRAB MS series of products, with remote indication contact. Design: 1-channel

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Surge Suppressors](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[GUS1](#) [GUS12](#) [BSPM1A600D600LVR](#) [2800521](#) [29-2053](#) [GUS11](#) [GUS2](#) [GUS3](#) [30460](#) [SRA64C060X](#) [PC642C015](#) [1810-15-A3](#) [2713175](#)
[4B06B-EC1-150LF](#) [SRA6LC](#) [BPMA75D100LV](#) [CX06M](#) [CCTV1](#) [GUS13](#) [GUS14](#) [GUS5](#) [GUS6](#) [VAL-MS 320/3+0-FM](#) [VAL-US-](#)
[120/40/1+1-FM](#) [VAL-US-120/65/1+1-FM](#) [VAL-US-480D/30/3+0-FM](#) [VAL-US-120/40/1+0-FM](#) [LP-BFDN-CW](#) [LP-STRL-NFF](#) [LP-STRL-](#)
[DFF](#) [GUS22](#) [0804111](#) [5053609](#) [5053201](#) [SPD2-150-1P0](#) [SPD2-550-1P0](#) [6720005416](#) [6720005417](#) [1-2191595-2](#) [STC-CAT6-P0E-I](#) [SPD2-](#)
[350-1P0](#) [FLT-CP-350-ST](#) [TTC-6P-3-HF-F-M-12DC-UT-I](#) [SMTPA200](#) [2800989](#) [2906776](#) [2906810](#) [2906847](#) [2906848](#) [2906851](#)