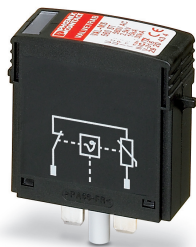


Type 2 surge protection plug - VAL-MS 580-ST - 2920434

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Type 2 surge protection plug with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 580 V AC

Your advantages

- ✓ Quality proven millions of times over in the widest range of applications
- ✓ Rapid installation with bridges, thanks to industry-standard overall width of 1 HP
- ✓ Easy testing and insulation measurement, thanks to pluggable protection modules
- ✓ Wide range of applications due to various nominal voltages
- ✓ High degree of modularity provides individual solutions for every application



Key Commercial Data

Packing unit	10 pc
GTIN	 4 046356 163682
GTIN	4046356163682

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 %
Shock (operation)	25g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)

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Technical data

Ambient conditions

Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)
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General

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN
	IT
Mode of protection	L-PE
	L-PEN
Mounting type	on base element
Color	jet black RAL 9005
Housing material	PA 6.6
Degree of pollution	2
Distance between live and grounded parts	5 mm
Flammability rating according to UL 94	V-0
Type	Male
Number of positions	1
Surge protection fault message	optical

Additional descriptions

Note	For use in all low-voltage systems between L-PEN. Only for use in IT systems between L-PE if the bodies of the equipment in the low-voltage system are connected to the grounding system of the transformer station. (common grounding of the HV transformer station and the bodies of the LV consumer's installation. $R_E = R_A$ according to IEC 60364-4-442/VDE 0100-442 Figure 44D/example a)
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Protective circuit

Nominal voltage U_N	400/690 V AC (TN)
	500 V AC (IT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	580 V AC
Residual current I_{PE}	≤ 0.25 mA
Standby power consumption P_C	≤ 150 mVA
Nominal discharge current I_n (8/20) μ s	15 kA
Maximum discharge current I_{max} (8/20) μ s	30 kA
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	≤ 2.5 kV
Residual voltage U_{res}	≤ 2.5 kV (at I_n)
	≤ 2.3 kV (at 10 kA)
	≤ 2.1 kV (at 5 kA)
	≤ 1.9 kV (at 3 kA)

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Technical data

Protective circuit

TOV behavior at U_T	690 V AC (5 s / withstand mode)
	762 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
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UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L-N)	580 V AC
Nom. voltage	400 V AC
Mode of protection	L-N
Power distribution system	Single phase
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	2310 V
Nominal discharge current I_n (L-N)	10 kA

Standards and Regulations

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

Environmental Product Compliance

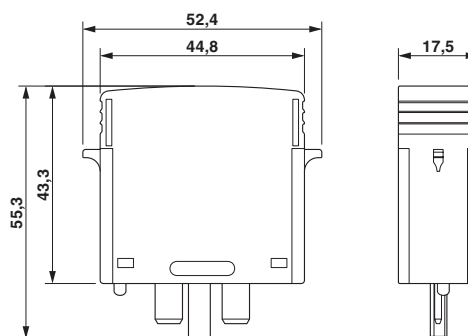
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Circuit diagram



Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27130890
eCl@ss 11.0	27130890

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Classifications

eCl@ss

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 9.0	27130890

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 6.0	EC000941
ETIM 7.0	EC002496

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 / IECCE CB Scheme / ÖVE / EAC / cULus Recognized

Ex Approvals

Approval details

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

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
IECEE CB Scheme		http://www.iecee.org/	AT 2905/M1
ÖVE		https://www.ove.at/zertifizierung-pz/zertifizierungsregister/	18583-001-15
EAC			RU C-DE.*09.B.00169
cULus Recognized			

Accessories

Accessories

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



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

Labeled device marker

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Accessories

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 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

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