

Type 2 surge protection plug - VAL-MS 120 ST - 2807586

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Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 120 V AC

Why buy this product

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



Key commercial data

Packing unit	10 pc
GTIN	 4 017918 075279
Weight per Piece (excluding packing)	34.4 g
Custom tariff number	85363010
Country of origin	Germany

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

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Technical data

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25 g
Vibration (operation)	5 g

General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	II
	T2
EN type	T2
SPD design	Voltage-limiting type
Mode of protection	L-PEN
	L-N
Mounting type	On base element
Color	black
Housing material	PA 6.6
Pollution degree	2
Inflammability class according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	1
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
Surge protection fault message	Optical

Protective circuit

Nominal voltage U_N	120/208 V AC (TN)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	150 V AC
Residual current I_{PE}	≤ 0.45 mA
Standby power consumption P_C	≤ 70 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	≤ 0.9 kV
Residual voltage U_{res}	≤ 0.9 kV (at I_n)
	≤ 0.7 kV (at 10 kA)
	≤ 0.55 kV (at 5 kA)
	≤ 0.55 kV (at 3 kA)
TOV behavior at U_T	175 V AC (5 s / withstand mode)
	230 V AC (120 min / safe failure mode)

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Protective circuit

Response time t_A	≤ 25 ns
Max. required backup fuse with branch wiring	125 A AC (gG)

Connection data

Connection method	VALVETRAB plug-in system
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NEMA/UL protective circuit

UL class	Type 4 SPD for Type 2 applications
Maximum continuous operating voltage MCOV (L-N)	150 V AC
Nominal voltage U_N	120 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Voltage protection rating VPR (L-N)	0.7 kV
Nominal discharge current I_n (L-N)	20 kA

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 2.0	EC000941
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

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IECEE CB Scheme / CSA / UL Recognized / KEMA-KEUR / ÖVE / cUL Recognized / GOST / CCA / KEMA-KEUR / cULus Recognized

Ex Approvals

Approvals submitted

Approval details

IECEE CB Scheme

CSA

Nominal voltage UN	120 V
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UL Recognized

KEMA-KEUR

ÖVE

cUL Recognized

GOST

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CCA

KEMA-KEUR

cULus Recognized

Accessories

Accessories

Bridge

Wiring bridge - MPB F600X16/ 1GS - 2818355



Wiring bridge flexible, diameter: 16 mm², with a fork-type cable lug on one side, length: 600 mm

Wiring bridge - MPB F400X16/ 1GS - 2818342



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 400 mm

Wiring bridge - MPB F200X16/ 1GS - 2818339



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 200 mm

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

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Accessories

Wiring bridge - MPB 18/1-20/1.2.5 - 2830168



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 20 pitches with contact sequence 1-2-0-0-5

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

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.

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Accessories

Wiring bridge - MPB 18/1-12 - 2748593



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.

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.

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Accessories

Wiring bridge - MPB 18/1- 3 - 2809212



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

Wiring bridge - MPB 18/1- 2 - 2809209



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

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

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: 18 x 5 mm

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: 18 x 5 mm

Marker pen

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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

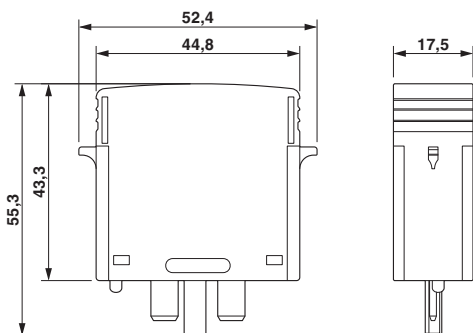
Type 2 surge protection base element - VAL-MS BE/FM - 2817738



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

Drawings

Dimensioned drawing



Circuit diagram

