

Type 2 surge protection plug - VAL-MS 500 ST - 2807609

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Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 500 V AC

Product Features

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



Key commercial data

package_quantity	10
GTIN	4017918075293

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)	25 g
Vibration (operation)	5 g

General

Standards/specifications	IEC 61643-11 2011
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Technical data

General

Standards/specifications	EN 61643-11 2012
IEC test classification	II
IEC test classification	T2
EN type	T2
Number of ports	One
SPD design	Voltage-limiting type
Mode of protection	L-PEN
Mode of protection	L-PE
Mounting type	On base element
Color	black
Housing material	PA 6.6
Pollution degree	2
Distance between live and grounded parts	5 mm
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

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)
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Protective circuit

Nominal voltage U_N	400/690 V AC (TN)
Nominal voltage U_N	500 V AC (IT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	600 V AC
Residual current I_{PE}	≤ 0.3 mA
Standby power consumption P_C	≤ 180 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	≤ 2.7 kV
Residual voltage U_{res}	≤ 2.7 kV (at I_n)
Residual voltage U_{res}	≤ 2.5 kV (at 10 kA)
Residual voltage U_{res}	≤ 2.3 kV (at 5 kA)

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Protective circuit

Residual voltage U_{res}	≤ 2.2 kV (at 3 kA)
TOV behavior at U_T	690 V AC (5 s / withstand mode)
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)	600 V AC
Nominal voltage U_N	500 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Voltage protection rating VPR (L-N)	2.5 kV
Nominal discharge current I_n (L-N)	10 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

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approvals

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

Approval details

IECEE CB Scheme

CSA

Nominal voltage UN	600 V
Nominal current IN	
mm ² /AWG/kcmil	

UL Recognized

KEMA-KEUR

ÖVE

cUL Recognized

GOST

GL

CCA

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approvals



accessories

Labeled device marker

ZBN 18,LGS:ERDE - 2749589



ZBN 18,LGS:L1-N,ERDE - 2749576



Device marking

ZBN 18:UNBEDRUCKT - 2809128



Marker pen

B-STIFT - 1051993



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accessories

Bridge

MPB F600X16/ 1GS - 2818355



MPB F400X16/ 1GS - 2818342



MPB F200X16/ 1GS - 2818339



MPB 18/1-10/1.0.0 - 2830443



MPB 18/1-20/1.2.5 - 2830168



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accessories

MPB 18/4-12 - 2809296



MPB 18/4- 8 - 2809283



MPB 18/3- 6 - 2809241



MPB 18/1-57 - 2809238



MPB 18/1-12 - 2748593



MPB 18/1- 9 - 2748580



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accessories

MPB 18/1- 8 - 2748577



MPB 18/1- 6 - 2748564



MPB 18/1- 4 - 2809225



MPB 18/1- 3 - 2809212



MPB 18/1- 2 - 2809209



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accessories

ZBN 18:SO/CMS - 0800763

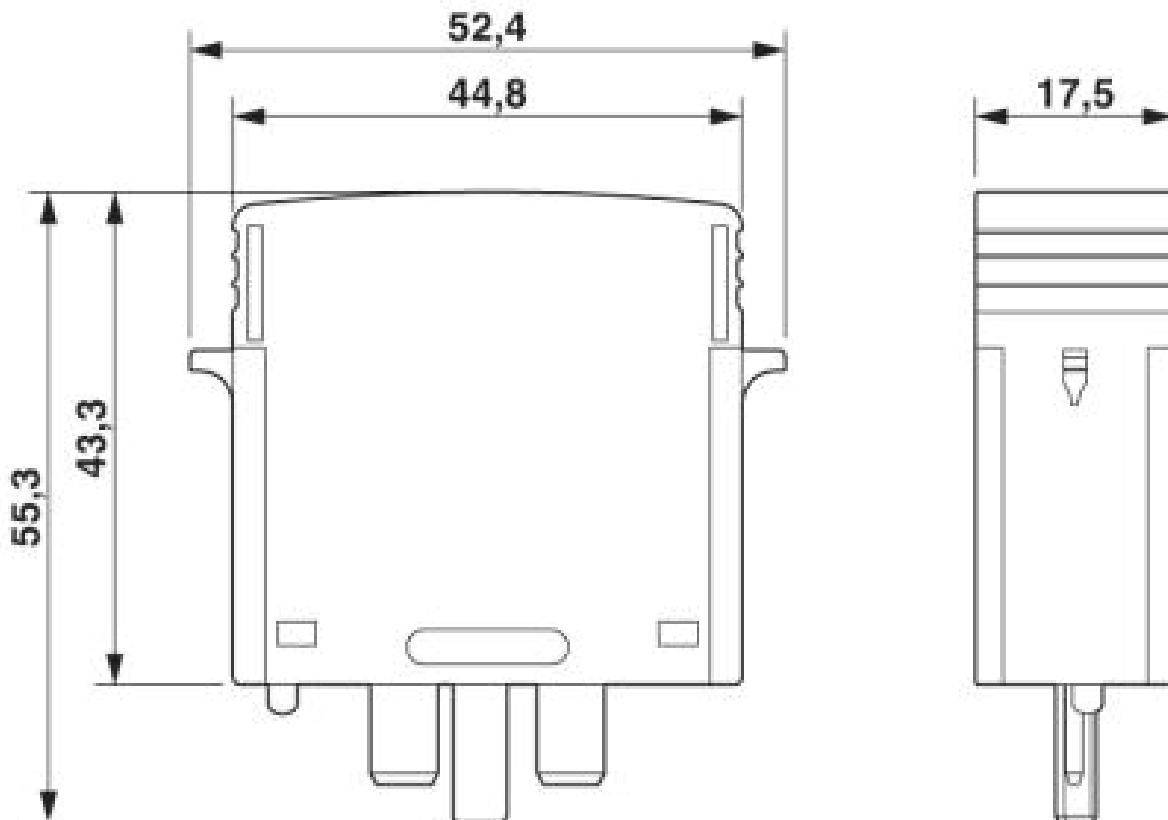


ZBN 18,LGS:L1-N,ERDE - 2830469



Drawings

Dimensioned drawing



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Circuit diagram

