

Type 2 surge protection plug - VAL-MS 320 ST - 2838843

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Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 320 V AC

Product Features

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



Key commercial data

package_quantity	10
GTIN	4017918170813

Technical data

Dimensions

Height	52.4 mm
Width	17.7 mm
Depth	54.5 mm
Pitch unit	1 Div.

Ambient conditions

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

General

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	DIN VDE 0110-1
Standards for air and creepage distances	IEC 60664-1

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Technical data

General

Standards for air and creepage distances	IEC 61643-1
Surge voltage category	III
Pollution degree	2
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Number of positions	1
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
Message: Surge protection fault	Optical
Direction of action	1L-N/PE

Protective circuit

IEC test classification	II
IEC test classification	T2
EN type	T2
Nominal voltage U_N	230 V AC
Nominal voltage U_N	277 V AC
Maximum continuous operating voltage U_c	335 V AC
U_T (TOV-proof)	415 V AC (5 s)
Nominal frequency f_N	50 Hz (60 Hz)
Residual current I_{PE}	≤ 0.32 mA
Standby power consumption P_c	≤ 110 mW
Max. discharge current I_{max} (8/20) μ s	40 kA
Nominal discharge current I_n (8/20) μ s	20 kA
Impulse discharge current (10/350) μ s, peak value I_{imp}	3 kA
Max. energy absorption (2 ms)	640 J
Voltage protection level U_p	≤ 1.5 kV
Residual voltage	≤ 1.2 kV (at 5 kA)
Residual voltage	≤ 1.4 kV (at 15 kA)
Residual voltage	≤ 1.3 kV (at 10 kA)
Residual voltage	≤ 1.5 kV (at I_n)
Residual voltage	≤ 1.1 kV (at 3 kA)
Response time	≤ 25 ns
Max. required backup fuse with branch wiring	125 A (gG)
Short-circuit resistance I_p with max. backup fuse (effective)	25 kA
Capacity	2.3 nF (typical)

Standards and Regulations

Standards/regulations	IEC 61643-1 1998
Standards/regulations	DIN EN 61643-11 2002
Standards/regulations	UL 1449 ed. 2
Standards/regulations	IEEE C62.1 / C62.34 / C62.45

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Technical data

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

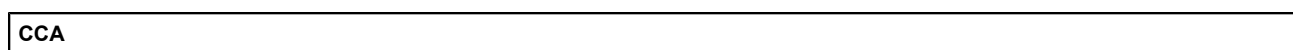
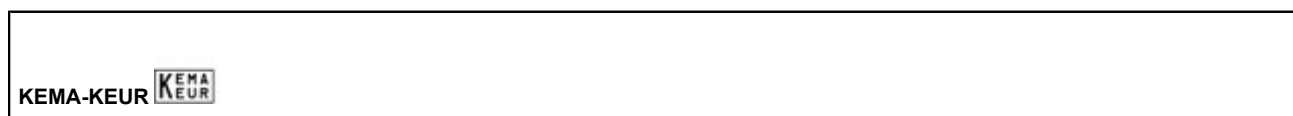
UNSPSC

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

approvals

KEMA-KEUR / ÖVE / CCA / IEC EE CB Scheme / UL Recognized / cUL Recognized / GOST / GL / KEMA-KEUR / ÖVE / CCA / IEC EE
CB Scheme / cULus Recognized /

Approval details



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approvals

UL Recognized 

cUL Recognized 

GOST 

GL







cULus Recognized 

accessories

Labeled device marker

ZBN 18,LGS:ERDE - 2749589



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accessories

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



Device marking

ZBN 18:UNBEDRUCKT - 2809128



Marker pen

B-STIFT - 1051993



Bridge

MPB F600X16/ 1GS - 2818355



MPB F400X16/ 1GS - 2818342



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accessories

MPB F200X16/ 1GS - 2818339



MPB 18/1-10/1.0.0 - 2830443



MPB 18/1-20/1.2.5 - 2830168



MPB 18/4-12 - 2809296



MPB 18/4- 8 - 2809283



MPB 18/3- 6 - 2809241



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accessories

MPB 18/1-57 - 2809238



MPB 18/1-12 - 2748593



MPB 18/1- 9 - 2748580



MPB 18/1- 8 - 2748577



MPB 18/1- 6 - 2748564



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accessories

MPB 18/1- 4 - 2809225



MPB 18/1- 3 - 2809212



MPB 18/1- 2 - 2809209



accessories

ZBN 18:SO/CMS - 0800763



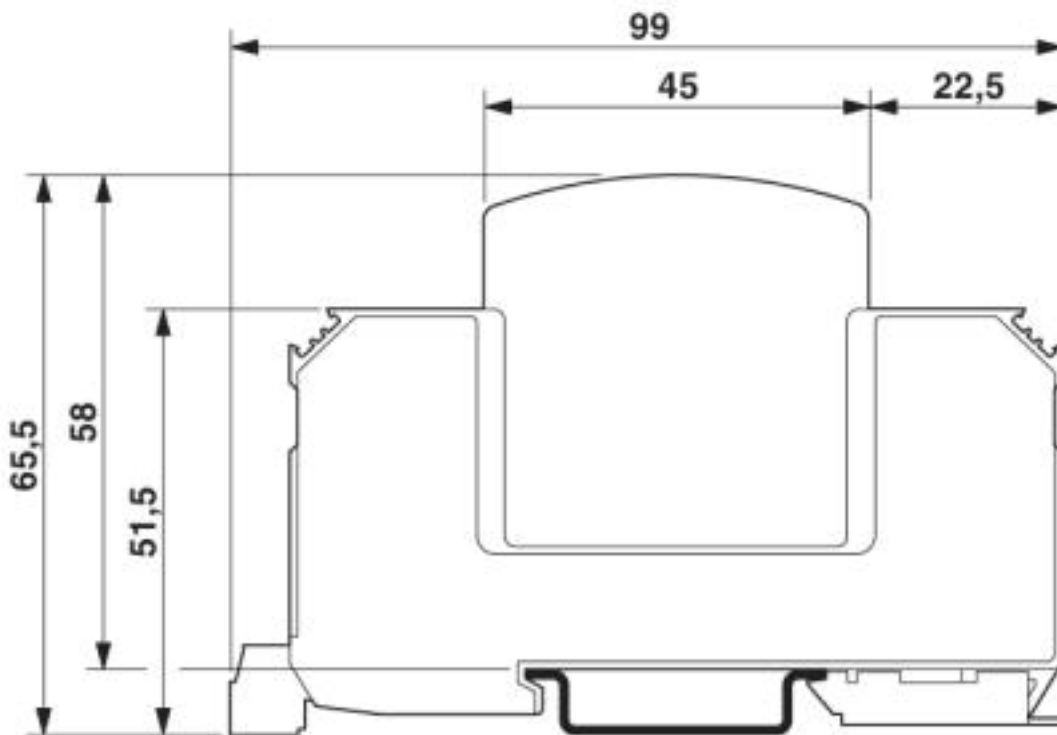
ZBN 18,LGS:L1-N,ERDE - 2830469



Drawings

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Dimensioned drawing



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Circuit diagram

