

# 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

## Product Features

- 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

<b>package_quantity</b>	10
<b>GTIN</b>	4017918075279

## Technical data

### Dimensions

<b>Height</b>	52.4 mm
<b>Width</b>	17.7 mm
<b>Depth</b>	54.5 mm
<b>Pitch unit</b>	1 Div.

### Ambient conditions

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

### General

<b>Housing material</b>	PA
<b>Inflammability class according to UL 94</b>	V0
<b>Color</b>	black
<b>Standards for air and creepage distances</b>	IEC 664-1
<b>Standards for air and creepage distances</b>	VDE 0675-6

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## Technical data

### General

Standards for air and creepage distances	DIN VDE 0110-1
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 $U_N$	120 V AC
Maximum continuous operating voltage $U_C$	150 V AC
$U_T$ (TOV-proof)	175 V AC (5 s)
Nominal frequency $f_N$	50 Hz (60 Hz)
Residual current $I_{PE}$	$\leq 0.45$ mA
Standby power consumption $P_C$	$\leq 70$ mVA
Max. discharge current $I_{max}$ (8/20) $\mu$ s	40 kA
Nominal discharge current $I_n$ (8/20) $\mu$ s	20 kA
Impulse discharge current (10/350) $\mu$ s, peak value $I_{imp}$	3 kA
Max. energy absorption (2 ms)	360 J
Voltage protection level $U_p$	$\leq 800$ V
Residual voltage	$\leq 800$ V
Residual voltage	$\leq 550$ V (at 5 kA)
Residual voltage	$\leq 550$ V (at 3 kA)
Response time	$\leq 25$ ns
Max. required backup fuse with branch wiring	125 A (gG)
Short-circuit resistance $I_p$ with max. backup fuse (effective)	25 kA
Capacity	5.5 nF $\pm 30$ %

### Standards and Regulations

Standards/regulations	IEC 61643-1 2005
Standards/regulations	EN 61643-11/A11 2007
Standards/regulations	UL 1449
Standards/regulations	IEEE C62.1 / C62.34 / C62.45

### classifications

#### eCl@ss

eCl@ss 4.0	27140201
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## classifications

### eCl@ss

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

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

### Approval details

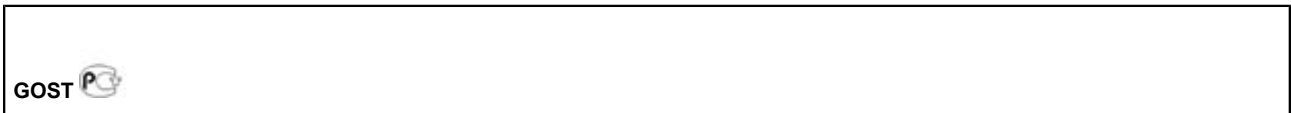
IECEE CB Scheme

CSA	
Nominal voltage UN	120 V
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	

UL Recognized

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## approvals



## accessories

### Labeled device marker

ZBN 18,LGS:ERDE - 2749589



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



## Device marking

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

accessories

ZBN 18:UNBEDRUCKT - 2809128



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### Marker pen

B-STIFT - 1051993



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### Bridge

MPB F600X16/ 1GS - 2818355



MPB F400X16/ 1GS - 2818342



MPB F200X16/ 1GS - 2818339



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### accessories

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



MPB 18/1-57 - 2809238



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

accessories

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MPB 18/1-12 - 2748593



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MPB 18/1- 9 - 2748580



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MPB 18/1- 8 - 2748577



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MPB 18/1- 6 - 2748564



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MPB 18/1- 4 - 2809225



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

### accessories

MPB 18/1- 3 - 2809212



MPB 18/1- 2 - 2809209



### accessories

ZBN 18:SO/CMS - 0800763



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

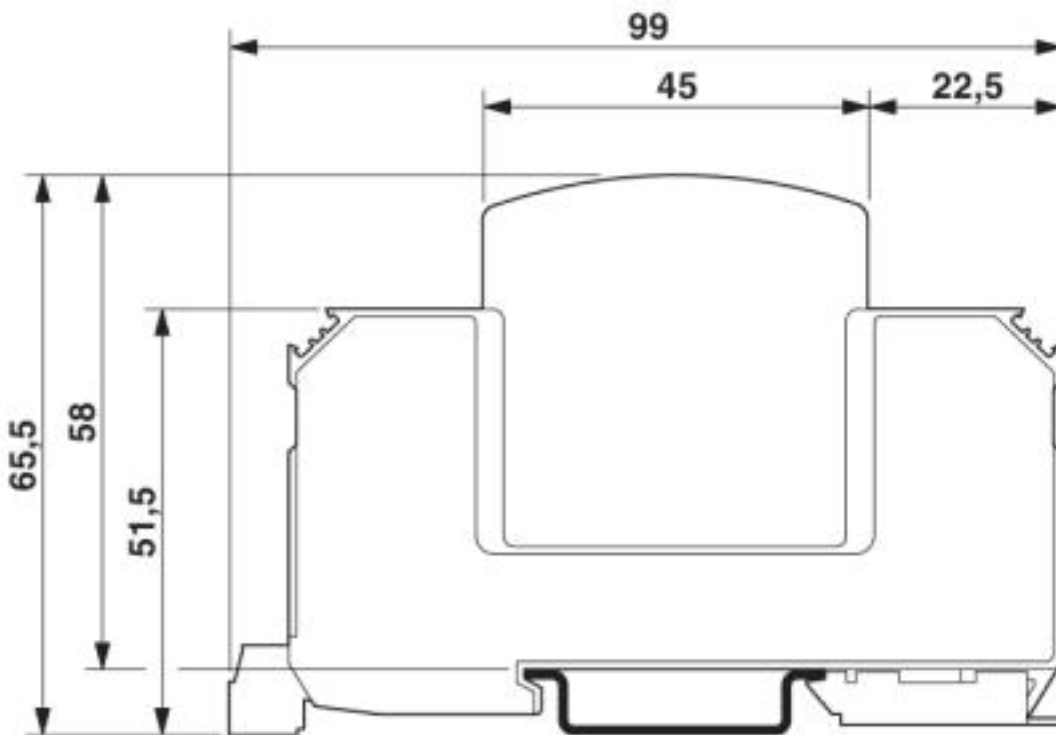


### Drawings



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

Dimensioned drawing



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

Circuit diagram

