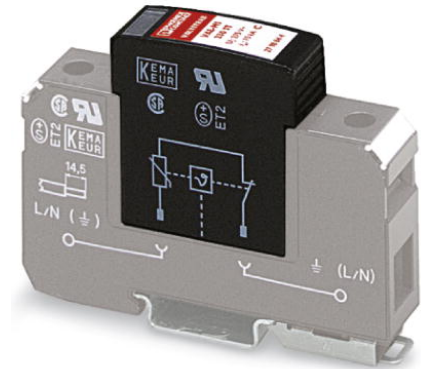


# VAL-MS 120 ST

Order No.: 2807586


The illustration shows the version VAL-MS 230 ST



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2807586>

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



Commercial data	
GTIN (EAN)	 4 017918 075279
sales group	J022
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 39 (TT-2011)

#### Product notes

WEEE/RoHS-compliant since:  
05/03/2006



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

## Technical data

Standards	
Housing material	PA
Inflammability class acc. to UL 94	V0
Color	black

Standards for air and creepage distances	IEC 664-1
	VDE 0675-6
	DIN VDE 0110-1
Degree of protection	IP20
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Number of positions	1
Ambient temperature (operation)	-40 °C ... 80 °C
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
Width	17.70 mm
Height	54.50 mm
Length	52.40 mm
Pitch unit	1 Div.
<b>Protective circuit</b>	
IEC category	II
	T2
EN type	T2
Nominal voltage $U_N$	120 V AC
Arrester rated voltage $U_C$	150 V AC
	200 V DC
Nominal frequency $f_N$	50 Hz
	60 Hz
Ground conductor current $I_{PE}$	$\leq 0.45$ mA
Standby power consumption $P_C$	$\leq 70$ mVA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s	40 kA
Nominal discharge surge current $I_n$ (8/20) $\mu$ s	20 kA
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	3 kA
Max. energy absorption (2 ms)	360 J
Protection level $U_p$	$\leq 800$ V
Residual voltage	$\leq 800$ V
	$\leq 550$ V (at 5 kA)
	$\leq 550$ V (at 3 kA)

Response time	≤ 25 ns
Max. required backup fuse with branch wiring	125 A (gL)
Short-circuit resistance I <sub>p</sub> with max. backup fuse (effective)	25 kA
Capacity	5.5 nF ±30 %

#### Standards

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

#### Certificates / Approvals



Certification

CB, CCA, CSA, CUL, GOST, KEMA, OEVE, UL

#### Accessories

Item	Designation	Description
<b>Bridges</b>		
2809209	MPB 18/1- 2	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.
2809212	MPB 18/1- 3	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.
2809225	MPB 18/1- 4	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.
2748564	MPB 18/1- 6	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.
2748577	MPB 18/1- 8	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.
2748580	MPB 18/1- 9	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.
2748593	MPB 18/1-12	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.
2830168	MPB 18/1-20/1.2.5	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 20 pitches with contact sequence 1-2-0-0-5

2809238	MPB 18/1-57	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.
2809241	MPB 18/3- 6	Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.
2809283	MPB 18/4- 8	Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.
2809296	MPB 18/4-12	Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.
2818339	MPB F200X16/ 1GS	Wiring bridge flexible, diameter 16 mm <sup>2</sup> , with a fork-type cable lug on one side, length: 200 mm
2818342	MPB F400X16/ 1GS	Wiring bridge flexible, diameter 16 mm <sup>2</sup> , with a fork-type cable lug on one side, length: 400 mm
2818355	MPB F600X16/ 1GS	Wiring bridge flexible, diameter: 16 mm <sup>2</sup> , with a fork-type cable lug on one side, length: 600 mm

**General**

2830443	MPB 18/1-10/1.0.0	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 10 pitches with contact sequence 1-0-0
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**Marking**

1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
2749589	ZBN 18,LGS:ERDE	Marking labels, printed horizontally, strips with 5 labels, GND (grounding symbol), color: White
2749576	ZBN 18,LGS:L1-N,ERDE	Marker labels, printed horizontally, strips with 5 labels, L1, L2, L3, N, GND, color: white
0800763	ZBN 18:SO/CMS	Marker labels, 5-section, special printing, labeled according to customer requirements (Please specify the required marking with order), for terminal width: 17.5 mm, color: White
2809128	ZBN 18:UNBEDRUCKT	Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White

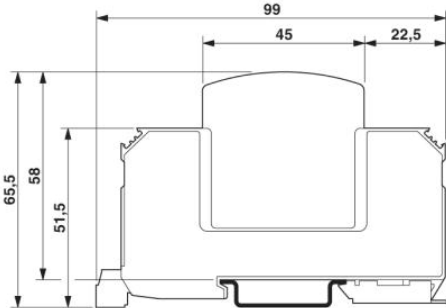
**Additional products**

Item	Designation	Description
<b>General</b>		
2817741	VAL-MS BE	Base element for type 2 arresters of the VALVETRAB MS series of products. Design: 1-channel
2817738	VAL-MS BE/FM	Base element for type 2 arresters of the VALVETRAB MS series of products, with remote indication contact. Design: 1-channel

**Diagrams/Drawings**

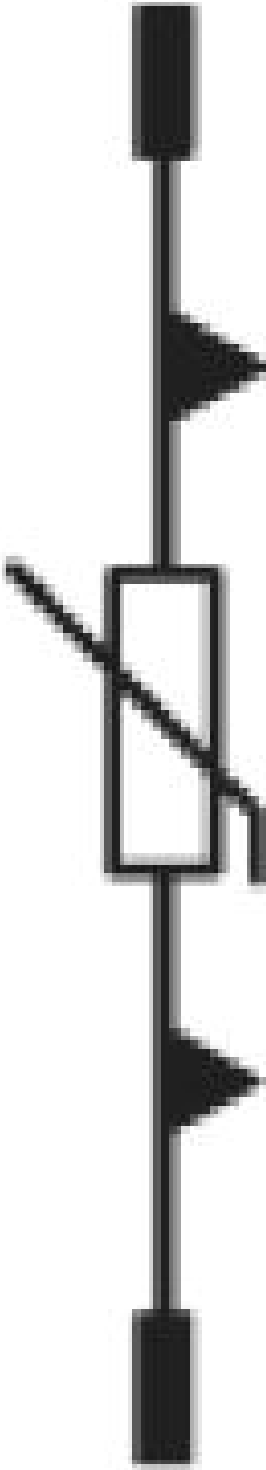
Dimensioned drawing

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Circuit diagram

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