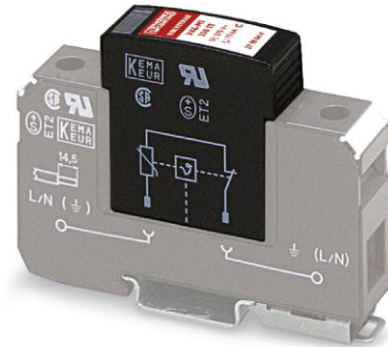


# VAL-MS 320-UD ST

Order No.: 2858315


The illustration shows version VAL-MS 120-DU ST



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2858315>


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



Commercial data	
GTIN (EAN)	 4 017918 878054
Note	Made-to-order
sales group	J022
Pack	10 pcs.
Customs tariff	85363030
Catalog page information	Page 31 (TT-2009)

**Product notes**

WEEE/RoHS-compliant since: 05/10/2006



<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	
<b>Standards</b>	
Housing material	PA 6.6-FR
Inflammability class acc. to UL 94	V0
Color	black

Standards for air and creepage distances	DIN VDE 0110-1
	IEC 60664-1: 1992-10
	IEC 61643-1
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.

**Protective circuit**

IEC category	II
	T2
EN type	T2
Nominal voltage $U_N$	320 V AC
Arrester rated voltage $U_C$	335 V
	420 V DC
Ground conductor current $I_{PE}$	$\leq 0.32$ mA
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)	640 J
Protection level $U_p$	$\leq 1.5$ kV
Residual voltage	$\leq 1.2$ kV (at 5 kA)
	$\leq 1.4$ kV (at 15 kA)
	$\leq 1.3$ kV (at 10 kA)
	$\leq 1.5$ kV (at $I_n$ )
	$\leq 1.1$ kV (at 3 kA)
SVR clamp voltage	$\leq 1$ kV (in acc. with UL 1449)

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	2.3 nF (typical)

#### Connection, protective circuit

Connection type IN	FLASHTRAB/VALVETRAB plug-in system
Connection type OUT	FLASHTRAB/VALVETRAB plug-in system

#### Standards

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

#### Certificates / Approvals



Certification

CUL, GOST, KEMA, 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.
2856278	MPB 18/1- 7 BU	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 7-pos., color: Blue
2748577	MPB 18/1- 8	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

2858470	MPB 18/1- 8 BU	Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos., color: Blue
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.
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.
2809254	MPB 18/3- 9	Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 9-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

**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

**Address**

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<http://www.phoenixcon.com>



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