

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Base element for type 2 arresters of the VALVETRAB MS product range. Version for 1-phase power supply with separate installation of N and PE conductors.



Your advantages

- Quality proven millions of times over in the widest range of applications
- Rapid installation with bridges, thanks to industry-standard overall width of 1 HP
- Easy testing and insulation measurement, thanks to pluggable protection modules
- Wide range of applications due to various nominal voltages
- High degree of modularity provides individual solutions for every application

Commercial data

Item number	2920528
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL18
Product key	CL1321
Catalog page	Page 66 (C-4-2019)
GTIN	4046356298988
Weight per piece (including packing)	172.1 g
Weight per piece (excluding packing)	159.4 g
Customs tariff number	85366990
Country of origin	DE

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

Technical data

Product properties

IEC test classification	II
	T2
EN type	T2
Type	Base element, DIN rail mounting
Product type	Base element
Product family	VALVETRAB MS
Number of positions	2
Surge protection fault message	none

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
-------------------------	---------------

Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm (1.5 mm ² ... 16 mm ²) 4.5 Nm (25 mm ² ... 35 mm ²)
Stripping length	16 mm
Conductor cross section flexible	1.5 mm ² ... 25 mm ²
Conductor cross section rigid	1.5 mm ² ... 35 mm ²
Conductor cross section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm ² ... 16 mm ²

Dimensions

Dimensional drawing	
Width	35.6 mm
Height	89.8 mm
Depth	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	2 Div.

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V-0

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

CTI value of material	600
Insulating material	PBT
Material group	I
Housing material	PBT

Mechanical properties

Mechanical data

Open side panel	No
-----------------	----

Protective circuit

Direction of action	1L-N & N-PE
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	500 V AC
Rated load current I_L	80 A
Short-circuit current rating I_{SCCR}	25 kA
Max. backup fuse with V-type through wiring	80 A (gG)
Max. backup fuse with branch wiring	200 A (gG)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (only when all terminal points are used)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Approvals

UL specifications

Nominal voltage	690 V AC
SPD Type	4CA

UL connection data

Tightening torque	30 lb _F ·in.
Conductor cross section AWG	14 ... 2

Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012

Mounting

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

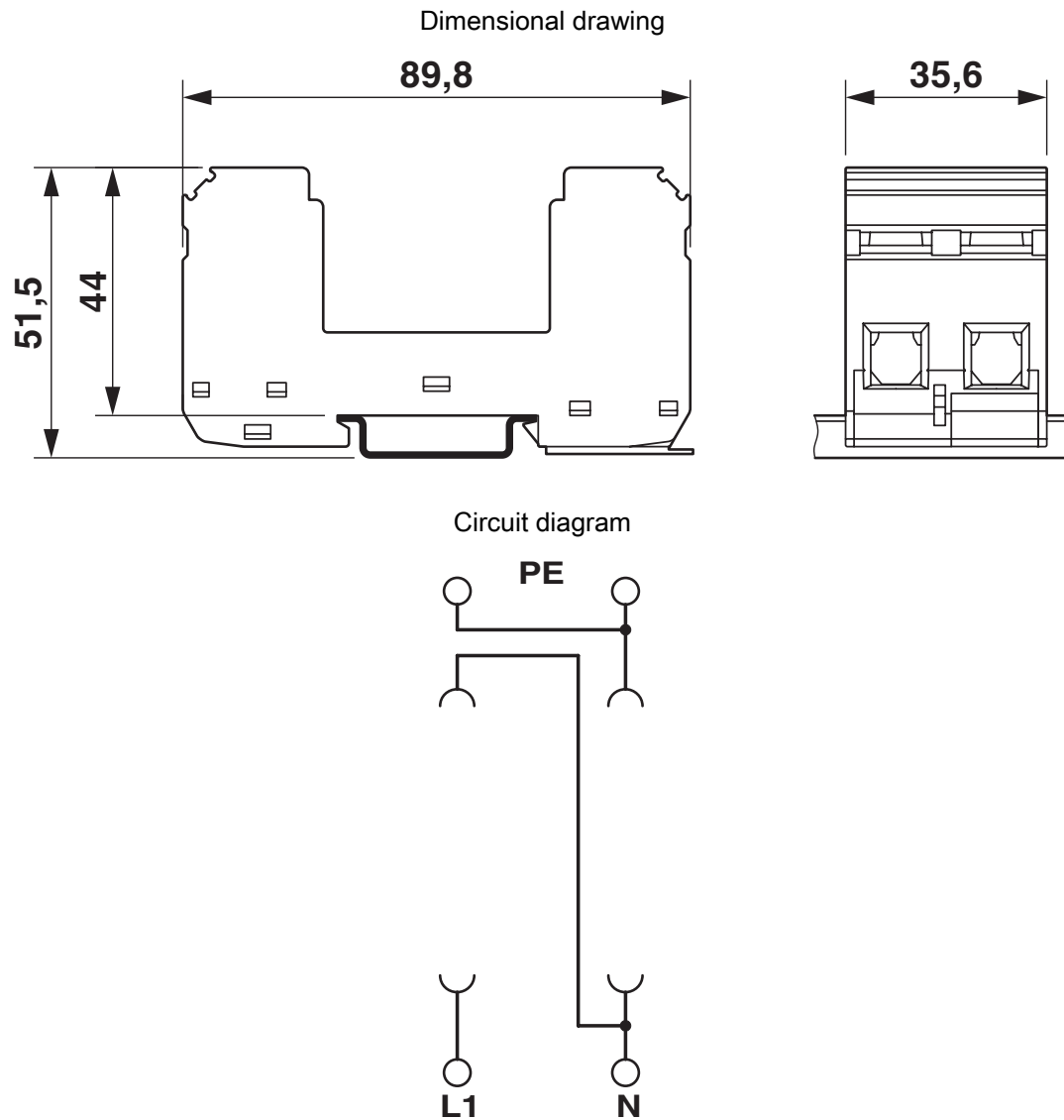
Mounting type	DIN rail: 35 mm
---------------	-----------------

VAL-MS/1+1-BE - Type 2 surge protection base element

2920528

<https://www.phoenixcontact.com/us/products/2920528>

Drawings



VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2920528>



cUL Recognized
Approval ID: FILE E 330181



UL Recognized
Approval ID: FILE E 330181



IECEE CB Scheme
Approval ID: AT 2905/M1



EAC
Approval ID: RU C-DE.*09.B.00169

CCA

Approval ID: NTR-AT 1947-A



KEMA-KEUR
Approval ID: 71-113273 REV.1



DNV GL
Approval ID: TAE000041M



CSA
Approval ID: 13631



ÖVE
Approval ID: 18583-001-17

UAE-RoHS

Approval ID: 22-09-51251

cULus Recognized

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528
<https://www.phoenixcontact.com/us/products/2920528>

Classifications

ECLASS

ECLASS-11.0	27130803
ECLASS-13.0	27171292

ETIM

ETIM 9.0	EC002496
----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528
<https://www.phoenixcontact.com/us/products/2920528>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

Accessories

ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

<https://www.phoenixcontact.com/us/products/2749589>



Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

ZBN 18,LGS:L1-N,ERDE - Marker for terminal blocks

2749576

<https://www.phoenixcontact.com/us/products/2749576>



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

<https://www.phoenixcontact.com/us/products/2809128>



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

DK-BIC-35 - Feed-through terminal block

2749880

<https://www.phoenixcontact.com/us/products/2749880>



Feed-through terminal block for VAL and FLT applications

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

ZBN 18 CUS - Zack marker strip

0825059

<https://www.phoenixcontact.com/us/products/0825059>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

VAL-MS/1+1-BE - Type 2 surge protection base element



2920528

<https://www.phoenixcontact.com/us/products/2920528>

SZK PZ2 VDE - Screwdriver

1206463

<https://www.phoenixcontact.com/us/products/1206463>



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com