

# VAL-MS/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

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 2-phase power supply with PEN conductor.



## 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	2804584
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL18
Product key	CL1321
GTIN	4046356345491
Weight per piece (including packing)	172.4 g
Weight per piece (excluding packing)	151.89 g
Customs tariff number	85366990
Country of origin	DE

# VAL-MS/2+0-BE - Type 2 surge protection base element

2804584

<https://www.phoenixcontact.com/us/products/2804584>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

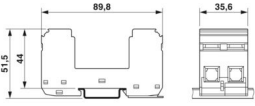
### Electrical properties

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

### Connection data

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

### 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/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

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	2L-PEN
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous operating 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 <sub>F</sub> -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/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

Mounting type

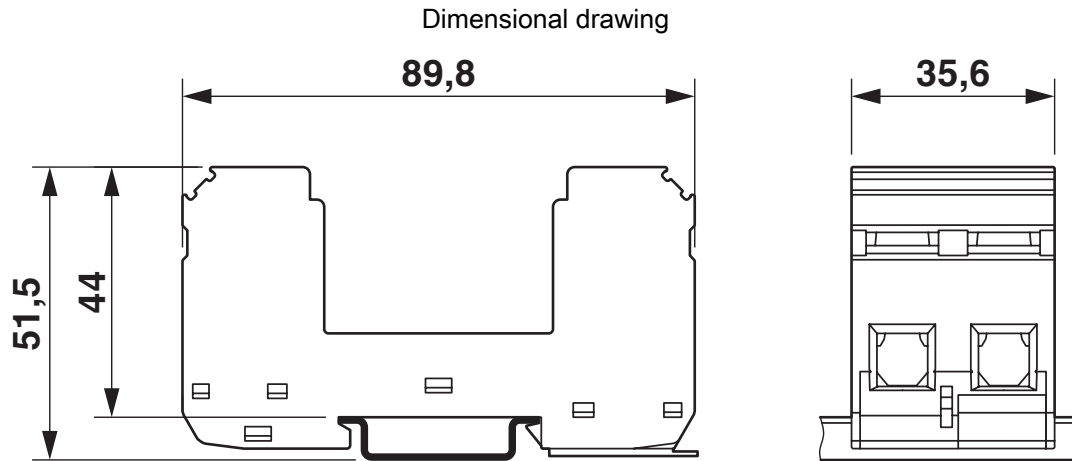
DIN rail: 35 mm

# VAL-MS/2+0-BE - Type 2 surge protection base element

2804584

<https://www.phoenixcontact.com/us/products/2804584>

## Drawings

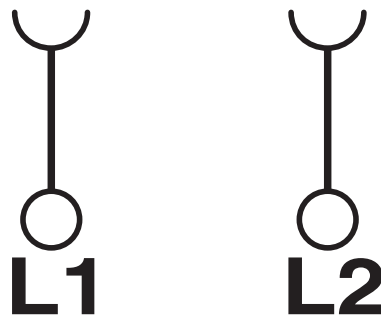
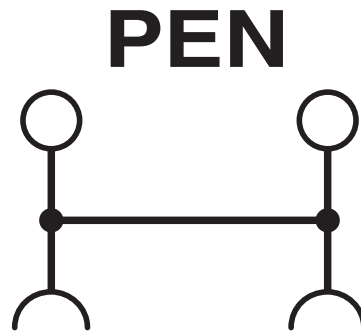


# VAL-MS/2+0-BE - Type 2 surge protection base element

2804584

<https://www.phoenixcontact.com/us/products/2804584>

Circuit diagram



# VAL-MS/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2804584>



**cUL Recognized**  
Approval ID: FILE E 330181



**UL Recognized**  
Approval ID: FILE E 330181



**IECEE CB Scheme**  
Approval ID: AT 2905/M1

**CCA**

Approval ID: NTR-AT 1947-A



**CSA**  
Approval ID: 13631



**ÖVE**  
Approval ID: 18583-001-17

**UAE-RoHS**

Approval ID: 22-09-51251



**ÖVE**  
Approval ID: 18583-001-18

# VAL-MS/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

## Classifications

### ECLASS

ECLASS-13.0	27171292
ECLASS-15.0	27171292

### ETIM

ETIM 10.0	EC002496
-----------	----------

### UNSPSC

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

# VAL-MS/2+0-BE - Type 2 surge protection base element



2804584

<https://www.phoenixcontact.com/us/products/2804584>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.425 kg CO2e
---------	---------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)