

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

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 series of products. Design: 1-channel



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	2817741
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CL18
Product key	CL1321
GTIN	4017918148164
Weight per piece (including packing)	72.52 g
Weight per piece (excluding packing)	66.5 g
Customs tariff number	85366990
Country of origin	TR

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

Technical data

Notes

General

Note	For installation into a touch protected cabinet. For applications with $U_C > 500$ V distances at the side and distances at the connection area must be minimum of 5 mm between different active parts including earthed parts.
------	---

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	1
Surge protection fault message	none

Insulation characteristics

Overvoltage category	III
Pollution degree	2

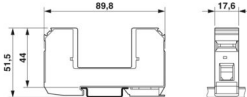
Electrical properties

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	17.6 mm

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

Height	89.8 mm
Depth	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6
Material group	I
Housing material	PA 6.6

Mechanical properties

Mechanical data

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

Protective circuit

Direction of action	1L-N/PE
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	600 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	125 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

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

Standards and regulations

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

Mounting

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

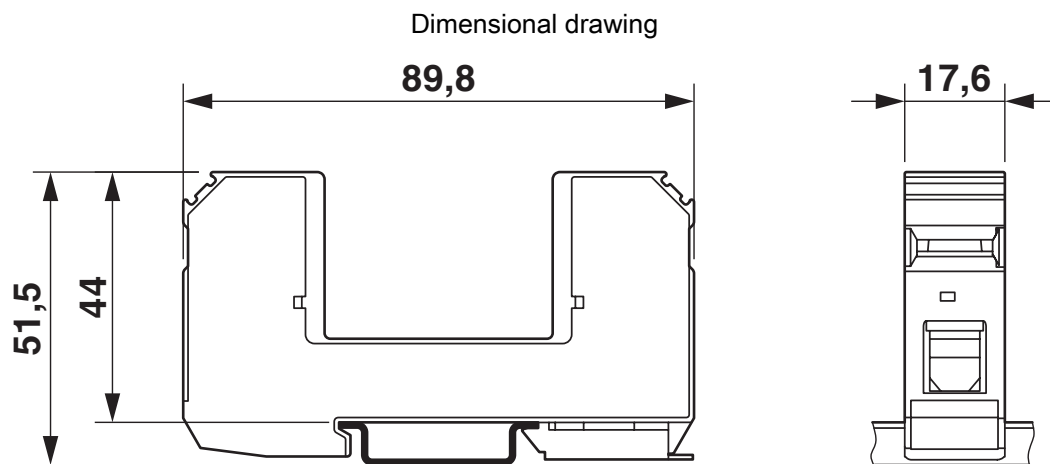
VAL-MS BE - Type 2 surge protection base element

2817741

<https://www.phoenixcontact.com/us/products/2817741>



Drawings



Circuit diagram



VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2817741>



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



KEMA-KEUR
Approval ID: 71-148002



DNV GL
Approval ID: TAE000041M



CSA
Approval ID: 13631



ÖVE
Approval ID: 18583-001-17

UAE-RoHS

Approval ID: 22-09-51251

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

Classifications

ECLASS

ECLASS-13.0	27171292
ECLASS-15.0	27171292

ETIM

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

UNSPSC

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

VAL-MS BE - Type 2 surge protection base element



2817741

<https://www.phoenixcontact.com/us/products/2817741>

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%

Phoenix Contact 2025 © - 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