VAL-MS-T1/T2 BE/O - Type 2 surge protection base element

2905650

https://www.phoenixcontact.com/us/products/2905650

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 1/2 arresters from the VALVETRAB MS T1/T2 product range. Version: 1-channel

Your advantages

- Rack-mount 2U panel applications
- Plug-in direction parallel to the conductor axis
- Versions with and without floating remote indication contact
- DIN rail mounting
- Accepts Type 1 and Type 2 VAL-MS plugs
- Coding when protective plug is inserted for the first time

Commercial data

Item number	2905650
Packing unit	12 pc
Minimum order quantity	12 pc
Sales key	CL18
Product key	CL1151
GTIN	4046356983006
Weight per piece (including packing)	95 g
Weight per piece (excluding packing)	81 g
Customs tariff number	85363030
Country of origin	US

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	I / II
	T1 / T2
EN type	T1 / T2
Type	Base element, DIN rail mounting
Number of positions	1
Surge protection fault message	none

Insulation characteristics

Overvoltage category	III
Pollution degree	2

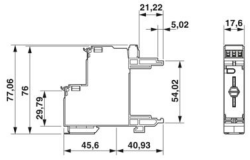
Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
Nominal voltage U_N	500 V AC

Connection data

Connection method	Biconnect terminal blocks
Screw thread	M5
Tightening torque	30 lb_f-in. (UL)
Stripping length	16 mm
Conductor cross-section flexible min.	1.5 mm²
Conductor cross-section flexible max.	25 mm²
Conductor cross-section, rigid min.	1.5 mm²
Conductor cross-section, rigid max.	35 mm²
Conductor cross-section AWG	15 ... 2 (IEC)
	10 ... 2 (UL)

Dimensions

Dimensional drawing	
Width	17.6 mm
Height	77.1 mm
Depth	89.2 mm

Material specifications

Color	black (RAL 9005)
	gray (RAL 7042)
Flammability rating according to UL 94	V0
Housing material	PBT

Mechanical properties

Mechanical data

Open side panel	No

Protective circuit

Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	600 V AC
Rated load current I_L	80 A (with serial 16mm² through wiring)
	80 A (with serial 16mm² through wiring)
Short-circuit current rating I_{SCCR}	25 kA
Max. backup fuse with V-type through wiring	80 A AC (gL/gG)
Max. backup fuse with branch wiring	160 A (gL/gG)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	max. 2000 m
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g
Vibration (operation)	5g

Approvals

UL specifications

SPD Type	4 (for Type 2 applications)

Standards and regulations

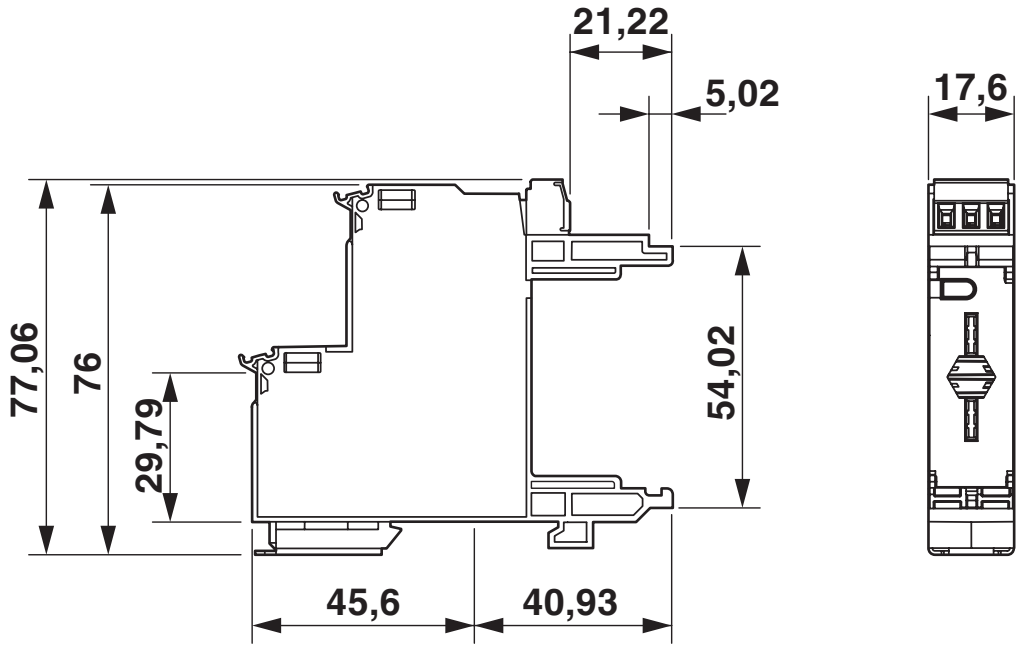
Standards/specifications	IEC 61643-1
Note	2005
Standards/specifications	EN 61643-11/A11
Note	2007

Mounting

Mounting type	DIN rail: 35 mm
Mounting position	Horizontal, flat-mounted DIN rail, NS 35

Drawings

Dimensional drawing



FM version shown

Circuit diagram





FM version shown

Classifications

ECLASS

ECLASS-13.0	27171292
ECLASS-15.0	27171292

ETIM

ETIM 10.0	EC002496

UNSPSC

UNSPSC 21.0	39121600

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 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