

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



2905652

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Base element for type 1/2 arresters from the VALVETRAB MS T1/T2 product range, with remote indication contact. 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	2905652
Packing unit	12 pc
Minimum order quantity	12 pc
Sales key	CL18
Product key	CL1151
GTIN	4046356983372
Weight per piece (including packing)	101 g
Weight per piece (excluding packing)	87 g
Customs tariff number	85363030
Country of origin	US

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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.
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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	Remote indication contact

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

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact
Operating voltage	5 V AC ... 250 V AC 125 V AC (UL) 30 V DC
Operating current	5 mA AC ... 1 A 1 A (UL) 1 A

Connection data

Connection method	Biconnect terminal blocks
Screw thread	M5
Tightening torque	3 Nm ... 4.5 Nm (UL) 27 lb _F -in. ... 40 lb _F -in. (UL)
Stripping length	16 mm

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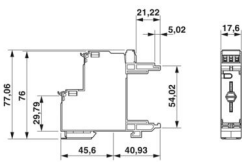
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Conductor cross-section flexible min.	1.5 mm ²
Conductor cross-section flexible max.	25 mm ²
Conductor cross-section, rigid min.	1.5 mm ²
Conductor cross-section, rigid max.	35 mm ²
Conductor cross-section AWG	15 ... 2 (IEC)
	10 ... 2 (UL)

Remote fault indicator contact

Connection method	Screw connection
Screw thread	M2
Tightening torque, min	0.25 Nm
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross-section flexible min.	0.14 mm ²
Conductor cross-section flexible max.	1.5 mm ²
Conductor cross-section, rigid min.	0.14 mm ²
Conductor cross-section, rigid max.	1.5 mm ²
Conductor cross-section AWG	28 ... 16 (IEC)

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
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Protective circuit

Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	600 V AC

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Rated load current I_L	80 A (with serial 16mm ² through wiring)
	80 A (with serial 16mm ² 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)
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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

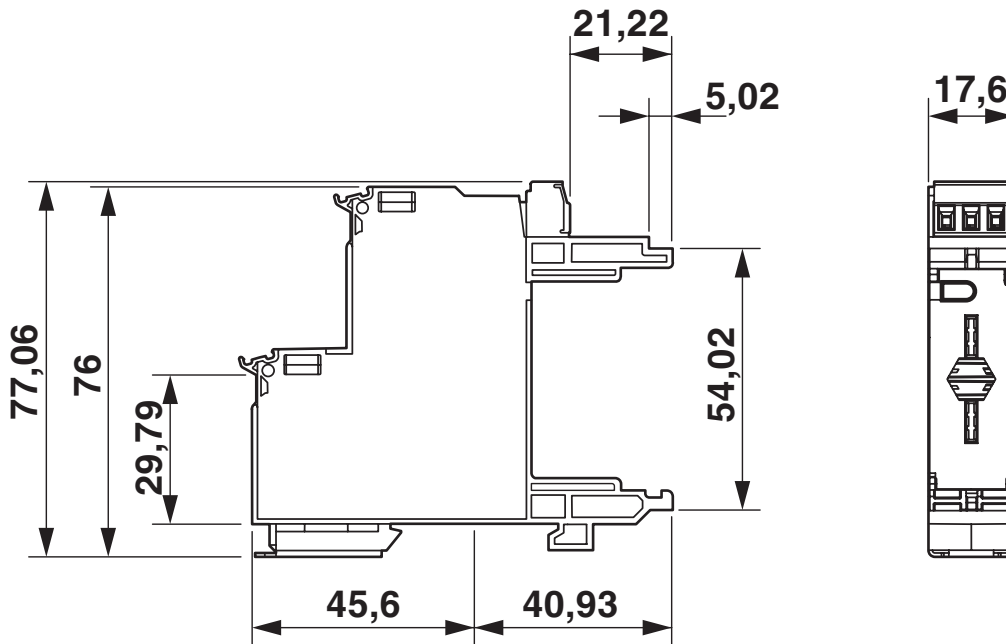
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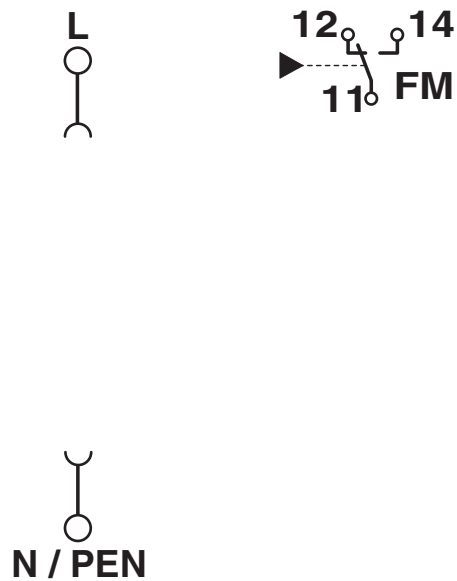
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Drawings

Dimensional drawing



Circuit diagram



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Approvals

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Classifications

ECLASS

ECLASS-13.0	27171292
ECLASS-15.0	27171292

ETIM

ETIM 10.0	EC002496
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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%
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