VAL-MS-AR-T1/T2 75/FM - Lightning/surge arrester type 1/2

2801492

https://www.phoenixcontact.com/us/products/2801492

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.

The VAL-MS-AR T1/T2 75/FM is a high-capacity SPD for Type 1 lightning as well as Type 2 switching surge currents, ideal for applications with high load currents and high surge risk.
The VAL-MS BE-AR/FM base provides a disconnect that separates the field wire from the protected mode for field diagnosis and dry contacts for remote function monitoring. The base has independent input and output terminals on the same side with ground terminals on the opposite end. All terminals are high-current screw clamping for stripped or ferruled, solid or stranded wires.

Your advantages

- Separate field and house wire termination
- Tool-free field wire disconnect and test point
- IP20 touch safe when connected
- T1/T2 plugs provide lightning and surge current class protection

Commercial data

Item number	2801492
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	CL18
Product key	CL1151
Catalog page	Page 47 (C-6-2015)
GTIN	4046356879521
Weight per piece (including packing)	259.1 g
Weight per piece (excluding packing)	259.1 g
Customs tariff number	85363010
Country of origin	DE

Technical data

Product properties

Product type	Surge protection for NEMA power supply units
Product family	VALVETRAB MS
IEC test classification	I / II
	T1 / T2
	T1
	I
EN type	T1 / T2
	T1
Type	DIN rail module, two-section, divisible
Surge protection fault message	Optical, remote indicator contact

Data management status

Article revision	11

Electrical properties

Nominal voltage U_N	60 V DC
Nominal current I_N	76 A (at 30°C ambient temperature)

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact, 1-pos.
Maximum operating voltage $U_{max.}$ AC	250 V AC
Max. operating current I_{max}	1.5 A AC (250 V AC)
	1.5 A DC (30 V DC)

Connection data

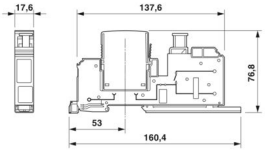
Connection method	Screw terminal block
Tightening torque	3 Nm ... 4.5 Nm (Ground)
	1.5 Nm ... 1.8 Nm (House)
	2.5 Nm ... 3 Nm (Field)
Conductor cross section flexible	1.5 mm² ... 35 mm² (16 mm strip length)
	0.5 mm² ... 15 mm² (10 mm strip length)
	1.5 mm² ... 25 mm² (14 mm strip length)
Conductor cross section rigid	1.5 mm² ... 35 mm² (16 mm strip length)
	0.5 mm² ... 15 mm² (10 mm strip length)
	1.5 mm² ... 25 mm² (14 mm strip length)
Conductor cross section AWG	15 ... 2 (16 mm strip length)
	20 ... 6 (10 mm strip length)
	12 ... 4 (14 mm strip length)

Remote fault indicator contact

Connection method	Screw connection

Screw thread	M2
Tightening torque, min	0.25 Nm
Tightening torque	2 lb_f-in. ... 4 lb_f-in. (UL)
Stripping length	7 mm
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	1.5 mm²
Conductor cross section, rigid min.	0.14 mm²
Conductor cross section, rigid max.	1.5 mm²

Dimensions

Dimensional drawing	
Width	17.7 mm
Height	160 mm
Depth	77.5 mm

Material specifications

Color	black (RAL 9005)
	black (RAL 9005)
Flammability rating according to UL 94	V0
Housing material	PA

Protective circuit

Direction of action	L-L / L-PE
Maximum continuous voltage U_C	75 V DC
Maximum continuous operating voltage U_C (L-N)	75 V DC
Rated load current I_L	55 A (with 6 AWG)
Nominal discharge current I_n (8/20) µs	12.5 kA
Maximum discharge current I_{max} (8/20) µs	50 kA
Total discharge current I_{total} (8/20) µs	50 kA
Total discharge current I_{total} (10/350) µs	12.5 kA
Voltage protection level U_p	≤ 0.7 kV
Total surge current (10/350) µs	15 kA
Total surge current (8/20) µs	50 kA
Max. backup fuse with branch wiring	160 A
	160 A

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (when disconnect closed)

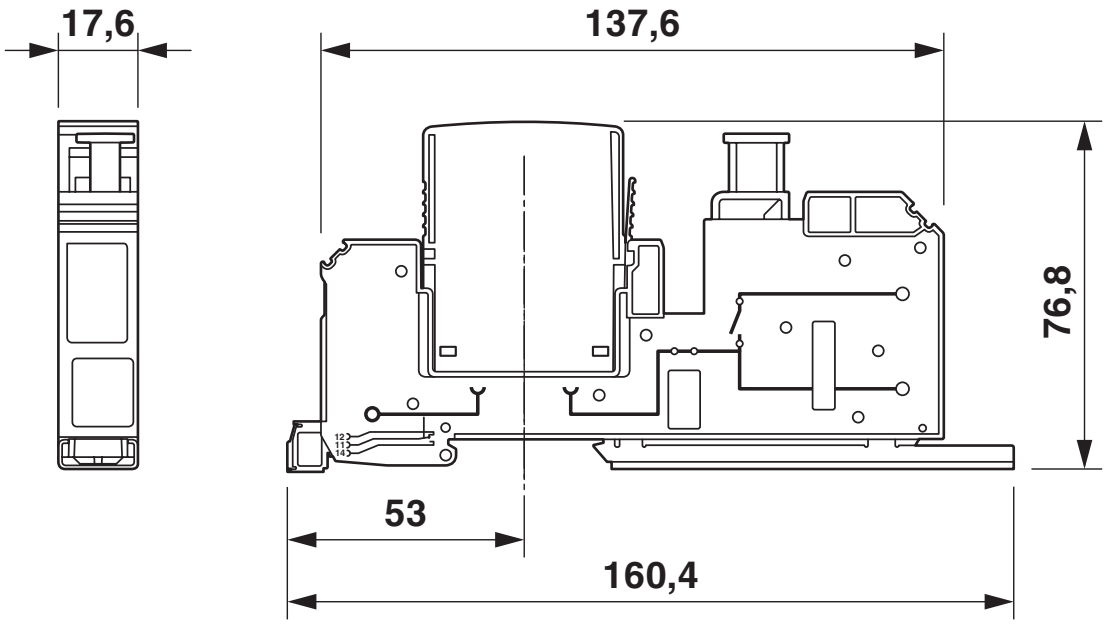
	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	max. 3000 m
Permissible humidity (operation)	5 % ... 95 %
Permissible humidity (storage/transport)	5 % ... 95 %
Shock (operation)	10g
Vibration (operation)	2g (0 Hz ... 200 Hz)

Mounting

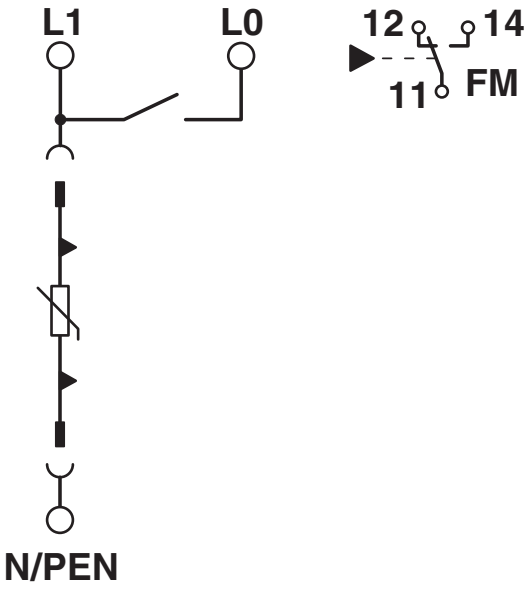
Mounting type	DIN rail mounting with additional retaining screw

Drawings

Dimensional drawing



Circuit diagram



Classifications

ECLASS

ECLASS-11.0	27130802
ECLASS-13.0	27171201

ETIM

ETIM 9.0	EC000381

UNSPSC

UNSPSC 21.0	39121620

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Not applicable, Not qualified for the European market

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)

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