

VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



2905683

<https://www.phoenixcontact.com/us/products/2905683>

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.

Equalizer surge protective device assembly, 3-mode, type 2 arresters for 2-wire signals up to 75 V with field disconnect terminals



Your advantages

- Versions with and without floating remote indication contact
- Field wire disconnect
- 3-Mode equalizer protection

Commercial data

Item number	2905683
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL18
Product key	CL1151
GTIN	4055626025872
Weight per piece (including packing)	222.222 g
Weight per piece (excluding packing)	222.222 g
Country of origin	DE

VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



2905683

<https://www.phoenixcontact.com/us/products/2905683>

Technical data

Product properties

Product type	Surge arrester
Product family	VALVETRAB MS
IEC test classification	II
	T2
EN type	T2
	T2
Type	DIN rail module, two-section, divisible and terminal block with disconnect and test point
Number of positions	3
Surge protection fault message	Optical, remote indicator contact

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
Nominal voltage U_N	48 V AC/DC
	5 V AC ... 48 V AC
Nominal current I_N	76 A

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact, 1-pos.
Maximum operating voltage U_{max} AC	250 V AC
Maximum operating voltage U_{max} DC	30 V DC
Max. operating current I_{max}	1.5 A AC (250 V AC)
	1.5 A DC (125 V AC)
	1.5 A DC (30 V DC)

Connection data

House (L0)

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 mm ² ... 35 mm ² (16 mm strip length)
	0.5 mm ² ... 15 mm ² (10 mm strip length)
	1.5 mm ² ... 25 mm ² (14 mm strip length)
Conductor cross-section rigid	1.5 mm ² ... 35 mm ² (16 mm strip length)
	0.5 mm ² ... 15 mm ² (10 mm strip length)
	1.5 mm ² ... 25 mm ² (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)

VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



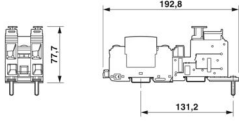
2905683

<https://www.phoenixcontact.com/us/products/2905683>

Remote fault indicator contact

Connection method	MC 1,5/3
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 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

Dimensions

Dimensional drawing	
Width	53.4 mm
Height	184 mm
Depth	78 mm

Material specifications

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

Protective circuit

Direction of action	(L+)-PE & (L-)-PE & (L+)-(L-)
	(L+)-PE & (L-)-PE & (L+)-(L-)
Nominal voltage U_N	5 V AC ... 48 V AC
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	60 V
	60 V
Maximum continuous operating voltage U_C (L-L)	60 V
Maximum continuous operating voltage U_C (L-PE)	230 V
	230 V
Rated load current I_L	80 A (Serial through wiring at 16 mm ²)
	80 A (Serial through wiring at 16 mm ²)
Protective conductor current I_{PE}	≤ 5 μA
Nominal discharge current I_n (8/20) μs (L-L)	10 kA
Nominal discharge current I_n (8/20) μs (L-PE)	10 kA
Maximum discharge current I_{max} (8/20) μs (L-L)	20 kA
Maximum discharge current I_{max} (8/20) μs (L-PE)	20 kA

VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



2905683

<https://www.phoenixcontact.com/us/products/2905683>

Short-circuit current rating I_{SCCR}	10 kA (L-L)
	25 kA (L-PE)
Voltage protection level U_p (L-L)	≤ 1.4 kV
Voltage protection level U_p (L-PE)	≤ 1.5 kV
Response time t_A	≤ 25 ns
Max. backup fuse with V-type through wiring	200 A (gL/gG)
	80 A (gL/gG)
Max. backup fuse with branch wiring	200 A (gL/gG)
	200 A (gL/gG)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

Air clearances and creepage distances

Standards/regulations	EN 60664-1 / EN 61643-1
-----------------------	-------------------------

Mounting

Mounting type	DIN rail mounting with additional retaining screw
---------------	---

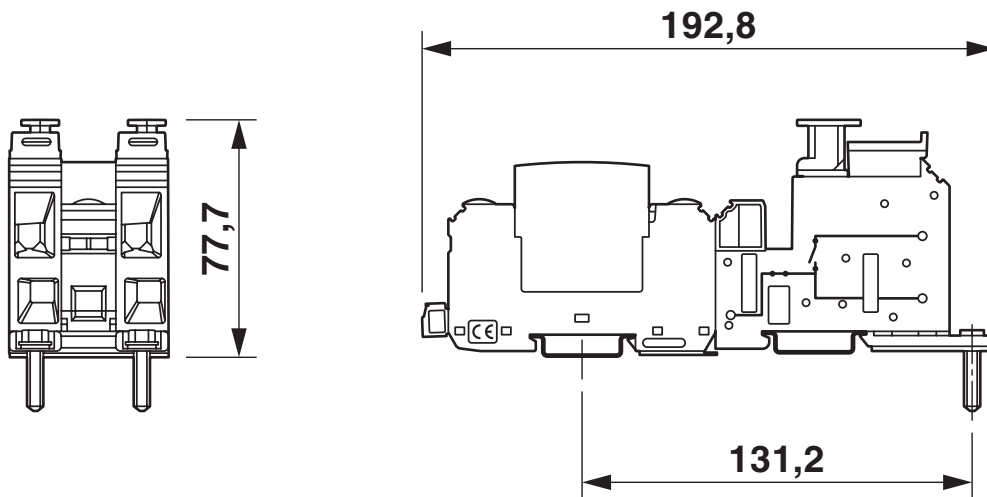
VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device

2905683

<https://www.phoenixcontact.com/us/products/2905683>

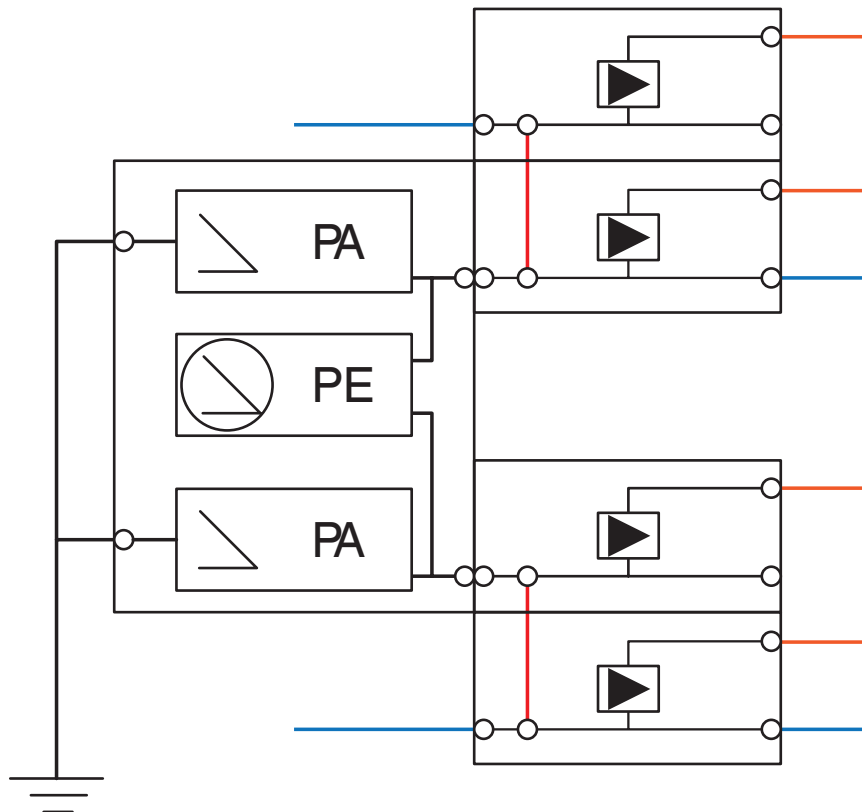
Drawings

Dimensional drawing



FM version shown

Circuit diagram



VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



2905683

<https://www.phoenixcontact.com/us/products/2905683>

Classifications

ECLASS

ECLASS-13.0

27171201

UNSPSC

UNSPSC 21.0

39121620

VAL-MS TE-AR/75X350/3EQ - Type 2 surge protection device



2905683

<https://www.phoenixcontact.com/us/products/2905683>

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 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