

VAL-MS BE-AR/FM - Surge protection base-element

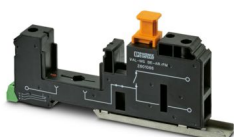


2801066

<https://www.phoenixcontact.com/us/products/2801066>

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Base element for Type 1 and Type 2 surge arresters of the VAL-MS series, with separate field and house termination, tool-free isolation disconnect, test point, and remote indication contacts. Design: 1-channel, bridgeable.



Your advantages

- Separate field and house wire termination
- Tool-free field wire disconnect and test point
- IP20 touch safe when connected
- Coding when protective plug is inserted for the first time

Commercial data

Item number	2801066
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	4046356725521
Weight per piece (including packing)	146.37 g
Weight per piece (excluding packing)	146.37 g
Customs tariff number	85363010
Country of origin	US

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Technical data

Product properties

Product type	Base element
Product family	VALVETRAB MS
Type	DIN rail module, two-section, divisible
Number of positions	1
Surge protection fault message	Optical, remote indicator contact

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
Nominal voltage U_N	500 V AC
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 A AC (250 V AC) 1 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 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)

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 mm ²
Conductor cross section flexible max.	1.5 mm ²

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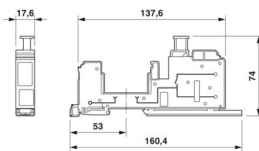


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Conductor cross section, rigid min.	0.14 mm ²
Conductor cross section, rigid max.	1.5 mm ²

Dimensions

Dimensional drawing	
Width	17.7 mm
Height	160 mm
Depth	75 mm

Material specifications

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

Mechanical properties

Mechanical data	
Open side panel	No

Protective circuit

Direction of action	1L-N/PE
Nominal frequency f_N	50 Hz (60 Hz)
Rated load current I_L	55 A (with 6 AWG)
Total surge current (10/350) μ s	15 kA
Total surge current (8/20) μ s	100 kA

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)

Approvals

UL specifications	
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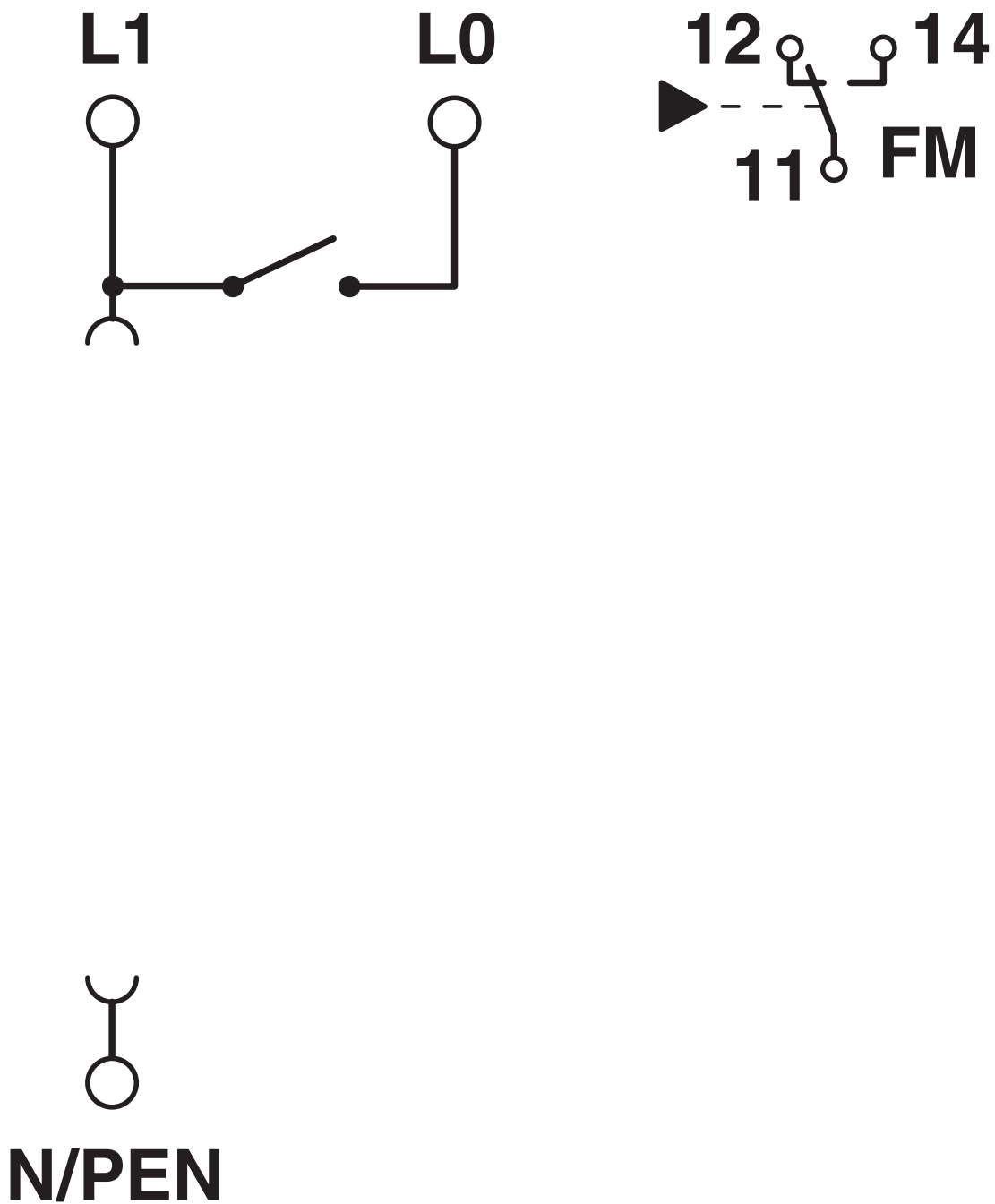
Maximum Surge Current per Phase	100 kA
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Mounting

Mounting type	DIN rail mounting with additional retaining screw
Mounting position	As desired on 35 mm DIN rail in acc. with EN 60715

Drawings

Circuit diagram



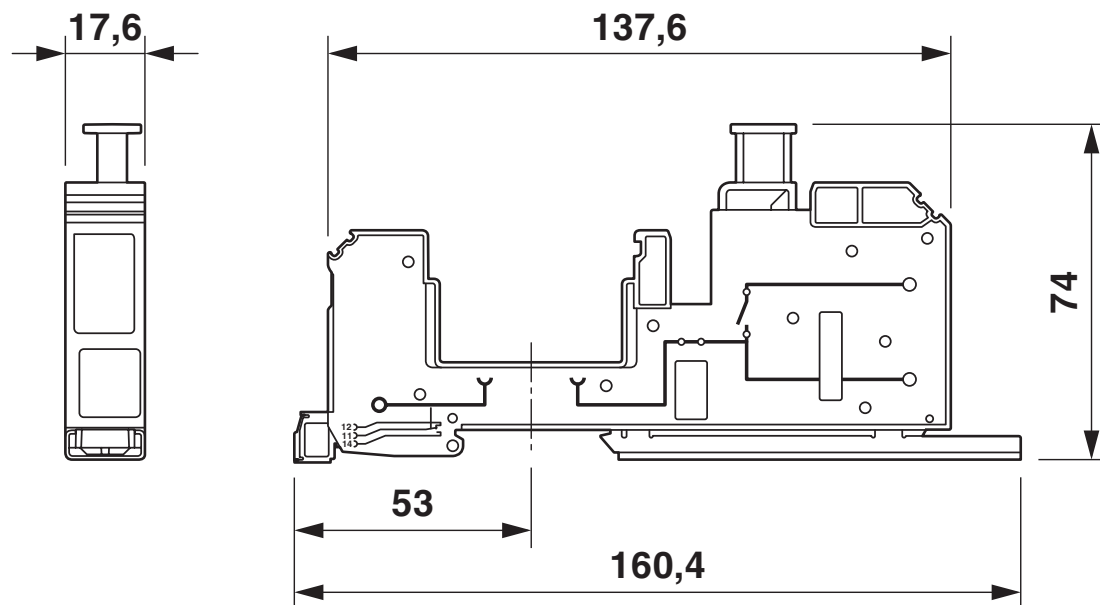
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Dimensional drawing



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Classifications

ECLASS

ECLASS-11.0	27130803
ECLASS-13.0	27171292

ETIM

ETIM 8.0	EC000472
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UNSPSC

UNSPSC 21.0	39121620
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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.)	No substance above 0.1 wt%

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Accessories

EB 56-18 - Insertion bridge

3009299

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Insertion bridge, pitch: 18 mm, number of positions: 56, color: gray

MPB 18/1-57 - Wiring bridge

2809238

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Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.

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MPB 18/1- 2 - Wiring bridge

2809209

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Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.

MPB 18/1-12 - Wiring bridge

2748593

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Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.

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FBS 2-18 - Plug-in bridge

2801068

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Plug-in bridge for cross-connections in the VAL-MS BE-AR terminal center, 2-pos., color: Red

TSD-M 6NM - Torque screwdriver

1212226

<https://www.phoenixcontact.com/us/products/1212226>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 3 - 6 Nm

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TSD-M 3NM - Torque screwdriver

1212225

<https://www.phoenixcontact.com/us/products/1212225>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm

SZS 0,8X4,0 VDE - Screwdriver

1212508

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Screwdriver, slot-headed, VDE insulated, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip

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SF-BIT-SL 1,0X4,0-70 - Screw insert

1212754

<https://www.phoenixcontact.com/us/products/1212754>



Screw bit, slotted, E6.3-1/4" drive, size: 1 mm x 4 mm x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

SF-BIT-SL 1,2X6,5-70 - Screw insert

1212577

<https://www.phoenixcontact.com/us/products/1212577>



Screw bit, bladed, E6.3-1/4" drive, size: 1.2 x 6.5 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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SZS 0,4X2,5 VDE - Screwdriver

1205037

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Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

SZS 1,0X6,5 VDE - Screwdriver

1205079

<https://www.phoenixcontact.com/us/products/1205079>



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 6.5 x 150 mm, 2-component grip, with non-slip grip

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