

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

### Product Features

- Versions with and without floating remote indication contact
- 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



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	148.0 GRM
Custom tariff number	85363010
Country of origin	United States

### Technical data

#### Dimensions

Height	160 mm
Width	17.7 mm
Depth	75 mm

#### Ambient conditions

Degree of protection	IP20
	IP20 (when disconnect closed)
Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	max. 3000 m
Permissible humidity (operation)	5 % ... 95 %

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### Technical data

#### Ambient conditions

Permissible humidity (storage/transport)	5 % ... 95 %
Shock (operation)	10g
Vibration (operation)	2g (0 ... 200 Hz)

#### General

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Total surge current (8/20) $\mu$ s	100 kA
Total surge current (10/350) $\mu$ s	15 kA
Mounting type	DIN rail mounting with additional retaining screw
Type	DIN rail module, two-section, divisible
Number of positions	1
Surge protection fault message	Remote indicator contact

#### Protective circuit

Nominal voltage $U_N$	500 V AC
Nominal frequency $f_N$	50 Hz (60 Hz)
Rated load current $I_L$	55 A (with 6 AWG)
Recommended backup fuse maximum	125 A (gL / gG)
Short-circuit resistance $I_P$ with max. backup fuse (effective)	25 kA

#### Connection, protective circuit

Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section stranded min.	1.5 mm <sup>2</sup>
Conductor cross section stranded max.	25 mm <sup>2</sup>
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	35 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	15
Conductor cross section AWG/kcmil max	2
AWG conductor cross section	10 ... 2 (UL)

#### Remote indicator contact

Connection name	Remote fault indicator contact
Switching function	PDT, 1-pos.

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### Technical data

#### Remote indicator contact

Connection method	Screw connection
Screw thread	M2
Tightening torque	0.25 Nm
	2 lb <sub>f</sub> -in. ... 4 lb <sub>f</sub> -in. (UL)
Stripping length	7 mm
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage U <sub>max</sub> AC	250 V AC
Max. operating current I <sub>max</sub>	1 A AC (250 V AC)
	1 A DC (30 V DC)

#### NEMA / UL data

Maximum Surge Current per Phase	100 kA
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### Classifications

#### eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130802
eCl@ss 7.0	27130802
eCl@ss 8.0	27130802

#### ETIM

ETIM 3.0	EC000941
ETIM 4.0	EC000381
ETIM 5.0	EC000381

#### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610

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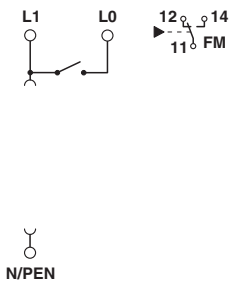
## Classifications

### UNSPSC

UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Drawings

Circuit diagram



Dimensioned drawing

