# Surge protection base element - VAL-MS BE-AR - 2801065

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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, and test point. 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
- Tested for railway applications

## 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 | 153 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 |

# Surge protection base element - VAL-MS BE-AR - 2801065

## Technical data

### Ambient conditions

| | |
|---|---|
| Permissible humidity (operation) | 5 % ... 95 % |
| 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) µs | 100 kA |
| Total surge current (10/350) µs | 15 kA |
| Mounting type | DIN rail mounting with additional retaining screw |
| Type | DIN rail module, two-section, divisible |
| Number of positions | 1 |

### 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 mm² |
| Conductor cross section stranded max. | 25 mm² |
| Conductor cross section solid min. | 1.5 mm² |
| Conductor cross section solid max. | 35 mm² |
| Conductor cross section AWG/kcmil min. | 15 |
| Conductor cross section AWG/kcmil max | 2 |
| AWG conductor cross section | 10 ... 2 (UL) |

### NEMA / UL data

| | |
|---|---|
| Maximum Surge Current per Phase | 100 kA |

# Surge protection base element - VAL-MS BE-AR - 2801065

## 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 | EC001675 |
| ETIM 5.0 | EC001675 |

### UNSPSC

| | |
|---|---|
| UNSPSC 6.01 | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11 | 39121610 |
| UNSPSC 12.01 | 39121610 |
| UNSPSC 13.2 | 39121620 |

## Drawings

Circuit diagram


Dimensioned drawing