

## Type 2 surge protection base element - VAL-MS/3+0-BE - 2881816

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Base element for type 2 arresters of the VALVETRAB MS product range. Version for 3-phase power supply with PEN conductor.

### Your advantages

- Versions with and without floating remote indication contact
- Single/multi-position design for accommodating protective plugs
- DIN rail module
- Coding when protective plug is inserted for the first time

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 130417
GTIN	4046356130417
Weight per Piece (excluding packing)	203.200 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### Dimensions

Height	89.8 mm
Width	53.4 mm
Depth	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	3 Div.

#### Ambient conditions

Degree of protection	IP20 (only when all terminal points are used)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))

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## Technical data

### Ambient conditions

Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

### General

IEC test classification	II
	T2
EN type	T2
Mounting type	DIN rail: 35 mm
Color	jet black RAL 9005
Housing material	PBT
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	Base element, DIN rail mounting
Number of positions	3
Surge protection fault message	none

### Additional descriptions

Note	For installation into a touch protected cabinet. For applications with $U_C > 500$ V distances at the side and distances at the connection area must be minimum of 5 mm between different active parts including earthed parts.
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### Protective circuit

Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	800 V AC
Rated load current $I_L$	80 A
Short-circuit current rating $I_{SCCR}$	25 kA
Max. backup fuse with V-type through wiring	80 A (gG)
Max. backup fuse with branch wiring	200 A (gG)

### Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm (1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> )
	4.5 Nm (25 mm <sup>2</sup> ... 35 mm <sup>2</sup> )
Stripping length	16 mm
Conductor cross section flexible	1.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Conductor cross section solid	1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup>
Conductor cross section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>

### UL specifications

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### Technical data

#### UL specifications

SPD Type	4CA
Nom. voltage	690 V AC

#### UL connection data

Conductor cross section AWG	10 ... 2
Tightening torque	30 lb <sub>F</sub> -in.

#### Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

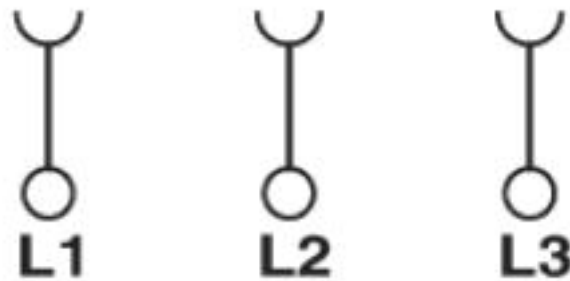
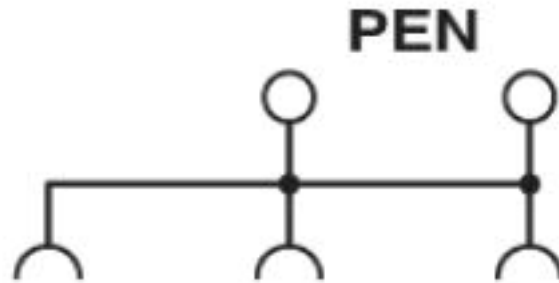
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

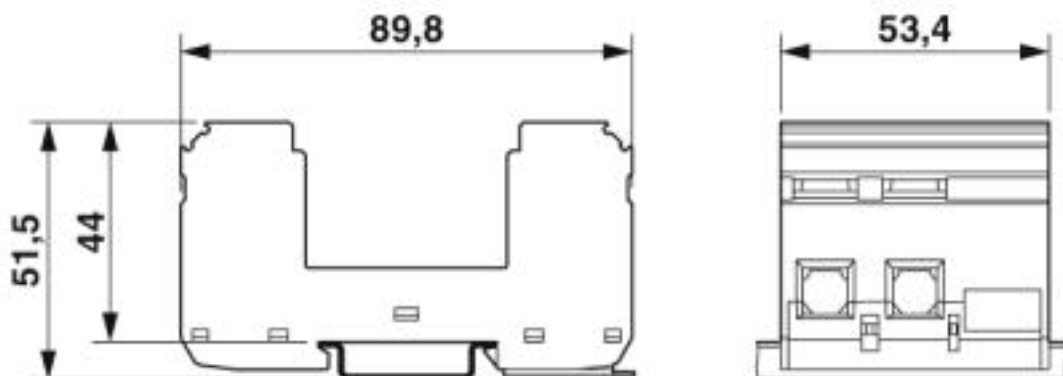
### Drawings

# Type 2 surge protection base element - VAL-MS/3+0-BE - 2881816

Circuit diagram



Dimensional drawing



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## Classifications

### eCl@ss

eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130803
eCl@ss 8.0	27130803
eCl@ss 9.0	27130803

### ETIM

ETIM 2.0	EC000472
ETIM 3.0	EC000472
ETIM 4.0	EC000472
ETIM 5.0	EC000472
ETIM 6.0	EC000472
ETIM 7.0	EC000472

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

## Approvals

### Approvals

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#### Approvals

CSA / GL / CCA / UL Recognized / KEMA-KEUR / cUL Recognized / IECCEB Scheme / ÖVE / EAC / cULus Recognized

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#### Ex Approvals

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### Approval details

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### Approvals

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	94385-10 HH
CCA			NTR-AT 1947-A
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
KEMA-KEUR		<a href="http://www.dekra-certification.com">http://www.dekra-certification.com</a>	2170208.01
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	AT 2905/M1
ÖVE		<a href="https://www.ove.at/zertifizierung-pz/zertifizierungsregister/">https://www.ove.at/zertifizierung-pz/zertifizierungsregister/</a>	18583-001-14
EAC			RU C- DE.A*30.B01561
cULus Recognized			

### Accessories

Accessories

Bridge

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### Accessories

Wiring bridge - MPB 18/3- 6 - 2809241



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.

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### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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### Feed-through terminal block

Feed-through terminal block - DK-BIC-35 - 2749880



Feed-through terminal block for VAL and FLT applications

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### Labeled device marker

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, Horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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### Marker pen

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### Accessories

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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