



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/ FM - 2906323

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>)

Assembly with base element for type 2 arresters of the VALVETRAB MS product range, with remote indication contact and field wire disconnect. Version for 3-mode protection of 2-wire signals using 4 redundant field wires.



## Why buy this product

- With floating remote indication contact
- 3-Mode equalizer protection
- Field wire disconnect
- Redundant field wire connections

## Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	750.000 g
Custom tariff number	85363030
Country of origin	Germany

## Technical data

### Dimensions

Height	193 mm
Width	89 mm
Depth	78 mm
Horizontal pitch	5 Div.

### Ambient conditions

Degree of protection	IP20
	IP20 (Only when all disconnects are closed)
Ambient temperature (operation)	-40 °C ... 80 °C

# Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/ FM - 2906323

## Technical data

### General

Housing material	PBT / PA
Flammability rating according to UL 94	V0
Color	black
Standards for clearances and creepage distances	EN 60664-1
	EN 61643-1
Mounting type	DIN rail mounting with additional retaining screw
Number of positions	3
Surge protection fault message	Optical, remote indicator contact
Direction of action	(L+)-PE & (L-)-PE & (L+)-(L-)

### Protective circuit

IEC test classification	II
	T2
Nominal voltage $U_N$	5 V AC ... 48 V AC
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 <sup>2</sup> )
Residual current $I_{PE}$	≤ 5 μA
Max. discharge current $I_{max}$ (8/20) μs maximum (L-PE)	20 kA
Nominal discharge current $I_n$ (8/20) μs (L-PE)	10 kA
Voltage protection level $U_p$ (L-PE)	≤ 1.5 kV
Response time $t_A$	≤ 25 ns
Max. backup fuse with branch wiring	200 A (gL / gG)
Max. backup fuse with V-type through wiring	80 A (gL / gG)
Short-circuit resistance $I_p$ with max. backup fuse (effective)	25 kA
	25 kA
Short-circuit current rating $I_{SCCR}$	10 kA (L-L)

### Connection, protective circuit

Connection method	Screw terminal block
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Tightening torque	22 lb <sub>F</sub> -in. ... 27 lb <sub>F</sub> -in. (L1)
	13 lb <sub>F</sub> -in. ... 16 lb <sub>F</sub> -in. (L0)
	27 lb <sub>F</sub> -in. ... 40 lb <sub>F</sub> -in. (PE)
Conductor cross section AWG	16 ... 4 (L1)

## Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/ FM - 2906323

### Technical data

#### Connection, protective circuit

	20 ... 6 (L0)
	15 ... 2 (PE)

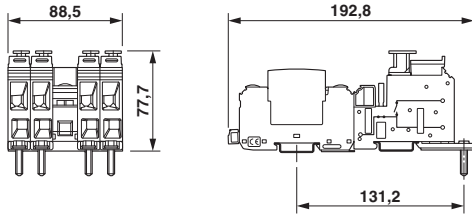
#### Remote indication contact

Connection name	Remote fault indicator contact
Switching function	PDT, 1-pos.
Connection method	MC 1,5/3
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 flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible 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 min.	28
Conductor cross section AWG max.	16
Maximum operating voltage U <sub>max</sub> AC	250 V AC
Maximum operating voltage U <sub>max</sub> DC	30 V DC
Max. operating current I <sub>max</sub>	1.5 A AC (250 V AC)
	1.5 A DC (125 V AC)
	1.5 A DC (30 V DC)

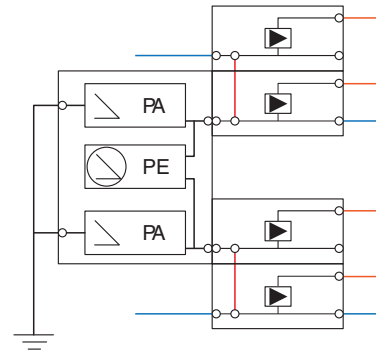
### Drawings

# Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/FM - 2906323

Dimensional drawing



Circuit diagram



House wires shown as blue. Field wires shown as orange.

## Classifications

### eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130802
eCl@ss 8.0	27130805
eCl@ss 9.0	27130805

### ETIM

ETIM 4.0	EC002497
ETIM 5.0	EC000941

## Accessories

### Accessories

#### Bridge

Plug-in bridge - FBS 2-18 - 2801068



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

## Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/ FM - 2906323

### Accessories

Wiring bridge - MPB 18/1-57 - 2809238



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

---

Plug-in bridge - FBS 2-18 - 2801068



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

---

### Insertion bridge

Insertion bridge - EB 56-18 - 3009299



Insertion bridge, Pitch: 18 mm, Number of positions: 56, Color: gray

---

### Screwdriver tools

Screwdriver - SZS 0,8X4,0 VDE - 1212508



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

---

## Type 2 surge protection base element - VAL-MS TE-AR/75X350/3EQR/ FM - 2906323

### Accessories

Screwdriver - SZS 0,4X2,5 VDE - 1205037



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

---

### Spare parts

Type 2 surge protection plug - VAL-MS 75 VF ST - 2805318



Surge protection plug type 2 with series connection consisting of varistor and gas-filled spark gap for VAL-MS base element, thermal monitoring, visual fault warning.

---

Type 2 surge protection plug - VAL-MS 350 VF ST - 2856595



surge protection connector type 2 with series connection consisting of varistor and gas-filled spark gap for VAL-MS base element, thermal monitoring, visual fault warning. Design: 350 V AC