

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

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 1/2 arresters from the VALVETRAB MS T1/T2 product range, with remote indication contact. Version: 1-channel

Why buy this product

- ✓ Plug-in direction parallel to the conductor axis
- ✓ Versions with and without floating remote indication contact
- ✓ Rack-mount 2U panel applications
- ✓ Accepts Type 1 and Type 2 VAL-MS plugs.
- ✓ Coding when protective plug is inserted for the first time
- ✓ DIN rail mounting



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 983372
GTIN	4046356983372
Weight per Piece (excluding packing)	1.000 g
Custom tariff number	85363030
Country of origin	United States

Technical data

Dimensions

Height	77.1 mm
Width	17.6 mm
Depth	89.2 mm

Ambient conditions

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Technical data

Ambient conditions

Degree of protection	IP20
	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	max. 2000 m
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g
Vibration (operation)	5g

General

IEC test classification	I / II
	T1 / T2
EN type	T1 / T2
Mounting type	DIN rail: 35 mm
Color	black
Housing material	PBT
Degree of pollution	2
Flammability rating according to UL 94	V0
Design	DIN rail module, two-section, divisible
Number of positions	1
Surge protection fault message	Remote indication contact
	Remote indication contact

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.
------	---

Protective circuit

Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_c	600 V AC
Rated load current I_L	80 A (with serial 16mm ² through wiring)
	80 A (with serial 16mm ² through wiring)
Short-circuit current rating I_{SCCR}	25 kA
Max. backup fuse with branch wiring	160 A (gL/gG)
Max. backup fuse with V-type through wiring	80 A AC (gL/gG)

Indicator/remote signaling

Switching function	PDT contact
Operating voltage	5 V AC ... 250 V AC
	125 V AC (UL)

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Technical data

Indicator/remote signaling

	30 V DC
Operating current	5 mA AC ... 1 A
	1 A (UL)
	1 A
Connection method	Screw connection
Screw thread	M2
Tightening torque	0.25 Nm
	0.25 Nm
	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
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG	28 ... 16 (IEC)
	30 ... 14 (UL)

Connection data

Connection method	Biconnect terminal blocks
Screw thread	M5
Tightening torque	3 Nm ... 4.5 Nm (UL)
	27 lb _F -in. ... 40 lb _F -in. (UL)
Stripping length	16 mm
Conductor cross section flexible min.	1.5 mm ²
Conductor cross section flexible max.	25 mm ²
Conductor cross section solid min.	1.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG	15 ... 2 (IEC)
	10 ... 2 (UL)

UL specifications

SPD Type	4 (for Type 2 applications)
----------	-----------------------------

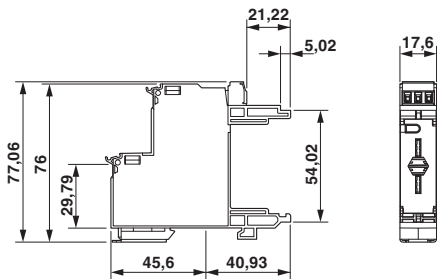
Standards and Regulations

Standards/regulations	IEC 61643-1 2005
	EN 61643-11/A11 2007

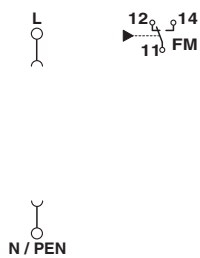
Drawings

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130802
eCl@ss 8.0	27130803
eCl@ss 9.0	27130803

ETIM

ETIM 5.0	EC000472
ETIM 6.0	EC000472

UNSPSC

UNSPSC 13.2	39121620
-------------	----------

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
---------------	---	---	---------------

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Approvals

cUL Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 330181

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Accessories

Accessories

Bridge

Wiring bridge - MPB 18/1- 2 - 2809209



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

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

Wiring bridge - MPB 18/1- 7 BU - 2856278



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 7-pos., color: Blue

Wiring bridge - MPB 18/1- 8 BU - 2858470



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos., color: Blue

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB 18/1-12 - 2748593



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

Wiring bridge - MPB 18/1-57 - 2809238



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

Wiring bridge - MPB 18/3- 6 - 2809241



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

Wiring bridge - MPB 18/3- 9 - 2809254



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 9-pos.

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

Wiring bridge - MPB F200X16/ 1GS - 2818339



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 200 mm

Wiring bridge - MPB F400X16/ 1GS - 2818342



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 400 mm

Wiring bridge - MPB F600X16/ 1GS - 2818355



Wiring bridge flexible, diameter: 16 mm², with a fork-type cable lug on one side, length: 600 mm

Wiring bridge - MPB F600X16/ 1GS - 2818355



Wiring bridge flexible, diameter: 16 mm², with a fork-type cable lug on one side, length: 600 mm

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB F400X16/ 1GS - 2818342



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 400 mm

Wiring bridge - MPB F200X16/ 1GS - 2818339



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 200 mm

Wiring bridge - MPB 18/1-10/1.0.0 - 2830443



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 10 pitches with contact sequence 1-0-0

Wiring bridge - MPB 18/1-20/1.2.5 - 2830168



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 20 pitches with contact sequence 1-2-0-0-5

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

Wiring bridge - MPB 18/3- 6 - 2809241



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

Wiring bridge - MPB 18/1-57 - 2809238



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

Wiring bridge - MPB 18/1-12 - 2748593



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

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

Wiring bridge - MPB 18/1- 2 - 2809209



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

Device marking

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

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: 18 x 5 mm

Feed-through terminal block

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



Feed-through terminal block for VAL and FLT applications

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: 18 x 5 mm

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: 18 x 5 mm

Marker pen

Type 2 surge protection base element - VAL-MS-T1/T2 BE/O-FM - 2905652

Accessories

Marker pen - B-STIFT - 1051993



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

Phoenix Contact 2017 © - all rights reserved
<http://www.phoenixcontact.com>