

Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

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>)



Replacement plug for PV arrester combinations from the VAL-MS-T1/T2 600DC-PV-... product range

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 714280
GTIN	4046356714280

Technical data

Dimensions

Height	52.4 mm
Width	17.5 mm
Depth	55.3 mm
Horizontal pitch	1 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	60g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	7.5g (5-500 Hz/2.5 h/XYZ)

General

IEC test classification	PV I / II
	PV T1 / T2
EN type	T1 / T2
SPD failure behavior	OCM (Open-circuit mode)

Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Technical data

General

Installation location	Interior
Accessibility	Accessible
Installation location of the disconnect device	Internal
Mounting type	on base element
Color	jet black RAL 9005
Housing material	PA 6.6-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	Male
Surge protection fault message	optical

Protective circuit DC voltage side (DC)

Maximum continuous operating voltage U_{CPV}	360 V DC
Short-circuit current rating I_{SCP}	2000 A
Continuous operating current I_{CPV}	< 20 μ A
Standby power consumption P_C	≤ 10 mVA
Nominal discharge current (8/20) μ s	15 kA
Maximum discharge current I_{max} (8/20) μ s	40 kA
Impulse discharge current (10/350) μ s, charge	2.5 As
Impulse discharge current (10/350) μ s, specific energy	6.25 kJ/ Ω
Impulse discharge current (10/350) μ s, peak value I_{imp}	5 kA
Voltage protection level U_p	≤ 1.4 kV
Residual voltage U_{res}	≤ 1.4 kV (at I_n)
	≤ 1.1 kV (at 5 kA)
	≤ 1.2 kV (at 10 kA)
	≤ 1.5 kV (at 20 kA)
	≤ 1.6 kV (at 30 kA)
	≤ 1.8 kV (at 40 kA)
Response time t_A	≤ 25 ns
Insulation resistance R_{iso}	> 5 G Ω (at 500 V DC)

Connection data

Connection method	pluggable
-------------------	-----------

UL specifications

SPD Type	1CA
Maximum continuous operating voltage MCOV	800 V DC
Nominal voltage	800 V DC
Mode of protection	(L+) - (L-)
	(L+) - G
	(L-) - G
Power distribution system	DC PV

Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Technical data

UL specifications

Voltage protection rating VPR	2 kV
Nominal discharge current I_n	20 kA
Short-circuit current rating (SCCR)	50 kA

Standards and Regulations

Standards/regulations	EN 50539-11 2013
-----------------------	------------------

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

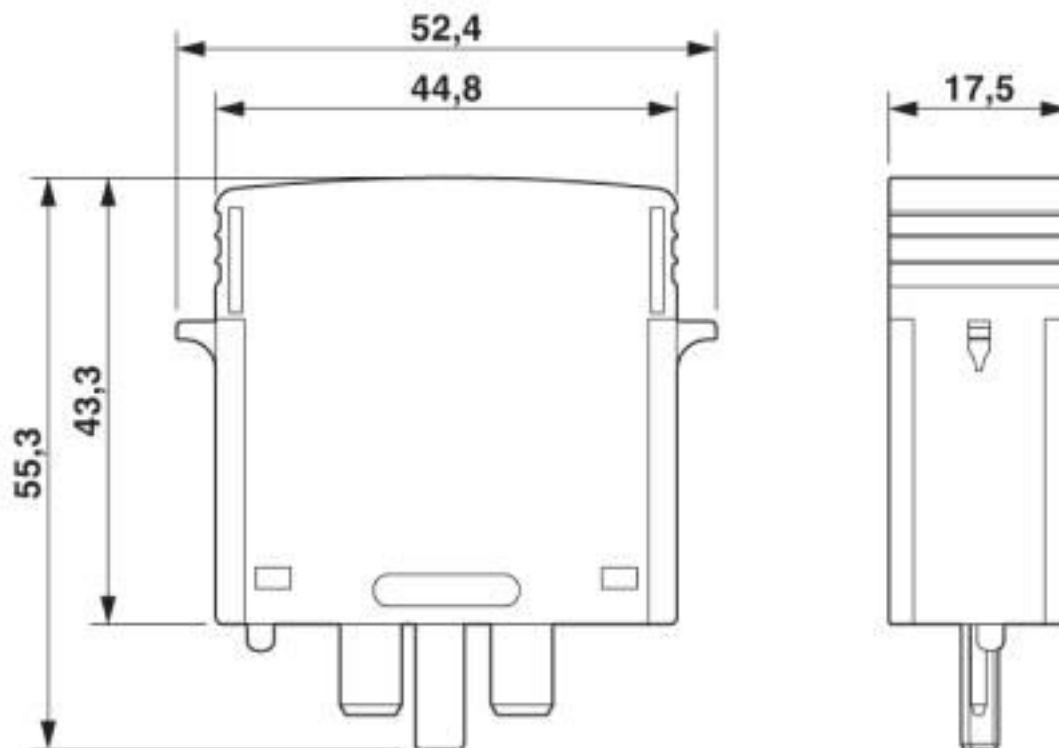
Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Circuit diagram



Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27130890
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	27130802
eCl@ss 8.0	27130890
eCl@ss 9.0	27130890

ETIM

ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC002496
ETIM 6.0	EC000381
ETIM 7.0	EC000381

UNSPSC

UNSPSC 6.01	30212010
-------------	----------

Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Classifications

UNSPSC

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

Approvals

UL Recognized / KEMA-KEUR / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

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

KEMA-KEUR		http://www.dekra-certification.com	71-102960 REV.1
-----------	---	---	-----------------

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

EAC			RU C- DE.*09.B.00169
-----	---	--	-------------------------

cULus Recognized			
------------------	---	--	--

Type 1/2 surge protection plug - VAL-MS-T1/T2 600DC-PV-ST - 2801165

Accessories

Accessories

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

Feed-through terminal block

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



Feed-through terminal block for VAL and FLT applications

Marker pen

Marker pen - B-STIFT - 1051993



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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[2801165](#)