

Type 1/2 surge protection plug - VAL-MS-T1/T2 1000DC-PV-ST - 2801162


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Replacement plug for PV arrester combinations from the VAL-MS-T1/T2 1000DC-PV-... product range



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 714310
GTIN	4046356714310

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

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Technical data

General

EN type	T1 / T2
SPD failure behavior	OCM (Open-circuit mode)
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}	525 V DC
Short-circuit current rating I_{SCPV}	2000 A
Continuous operating current I_{CPV}	< 20 μ A
Standby power consumption P_C	\leq 25 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	\leq 1.8 kV
Residual voltage U_{res}	\leq 1.8 kV (at I_n)
	\leq 1.5 kV (at 5 kA)
	\leq 1.7 kV (at 10 kA)
	\leq 1.9 kV (at 20 kA)
	\leq 2.2 kV (at 30 kA)
	\leq 2.4 kV (at 40 kA)
Response time t_A	\leq 25 ns
Insulation resistance R_{iso}	> 5 G Ω (at 500 V DC)

Connection data

Connection method	pluggable
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UL specifications

SPD Type	1CA
Maximum continuous operating voltage MCOV	1170 V DC
Nominal voltage	1170 V DC

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UL specifications

Mode of protection	(L+) - (L-)
	(L+) - G
	(L-) - G
Power distribution system	DC PV
Voltage protection rating VPR	3 kV
Nominal discharge current I_n	10 kA
Short-circuit current rating (SCCR)	50 kA

Standards and Regulations

Standards/regulations	EN 50539-11 2013
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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

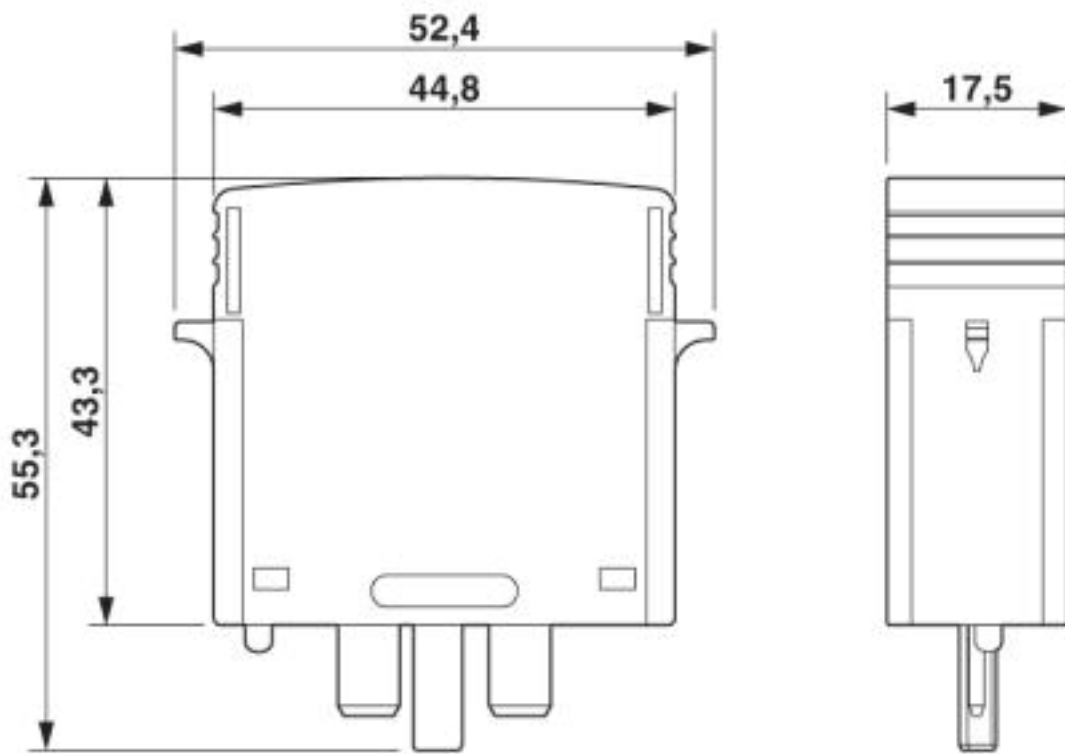
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Circuit diagram



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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

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Classifications

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

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
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KEMA-KEUR		http://www.dekra-certification.com	71-102960
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
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EAC			RU C- DE.A*30.B01561
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Approvals

cULus Recognized



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

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