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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.

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## Type 2 surge protection plug - VAL-MS 1000DC-PV-ST - 2800624


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

RoHS

### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 615099
GTIN	4046356615099

### 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 II
	PV T2
EN type	T2
SPD failure behavior	OCM (Open-circuit mode)

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## Technical data

### General

Installation location	Inside
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
Design	Male
Surge protection fault message	optical

### Protective circuit DC voltage side (DC)

Maximum continuous operating voltage $U_{CPV}$	585 V DC
Open circuit voltage $U_{OCSTC}$	$\leq 485$ V DC
Short-circuit current rating $I_{SCPV}$	1000 A
Continuous operating current $I_{CPV}$	$< 20$ $\mu$ A
Standby power consumption $P_C$	$\leq 25$ mVA
Nominal discharge current (8/20) $\mu$ s	15 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s	40 kA
Voltage protection level $U_p$	$\leq 1.9$ kV
Residual voltage $U_{res}$	$\leq 1.9$ kV (at $I_n$ )
	$\leq 1.5$ kV (at 5 kA)
	$\leq 1.7$ kV (at 10 kA)
	$\leq 2$ kV (at 20 kA)
	$\leq 2.3$ kV (at 30 kA)
	$\leq 2.5$ kV (at 40 kA)
Response time $t_A$	$\leq 25$ ns
Insulation resistance $R_{iso}$	$> 5$ G $\Omega$ (at 500 V DC)

### UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L+) - G	1170 V DC
Nominal voltage	970 V DC
Mode of protection	(L+) - G
Power distribution system	1
Measured limiting voltage MLV (L+) - G	1980 V
Nominal discharge current $I_n$ (L+) - G	10 kA

### Standards and Regulations

Standards/regulations	EN 50539-11 2013
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### Environmental Product Compliance

# Type 2 surge protection plug - VAL-MS 1000DC-PV-ST - 2800624

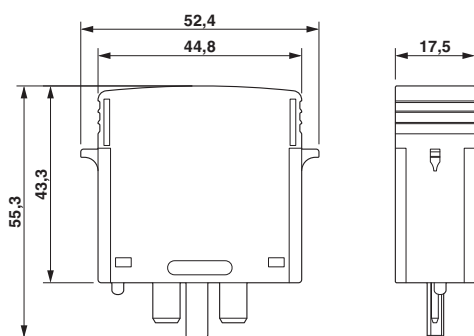
## Technical data

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Dimensional drawing



Circuit diagram



## Approvals




### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details

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>	2171492.01
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

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### Approvals

EAC



RU C-  
DE.A\*30.B01561

cULus Recognized



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

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