

## Type 1/2 surge protection plug - VAL-MS-T1/T2 175/12.5 ST - 2800676

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L-N replacement plug for VAL-MS-T1/T2 175/12.5 plug-in lighting/surge arrester.

### Why buy this product

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Secure hold of plugs in the event of high lightning current loads and strong vibrations thanks to new latching
- ✓ Thermal disconnect device for each individual plug
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Pluggable



### Key Commercial Data

Packing unit	10 STK
Minimum order quantity	10 STK
GTIN	 4 046356 624350
GTIN	4046356624350

### Technical data

#### Dimensions

Height	47 mm
Width	17.5 mm
Depth	67.3 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))

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## Technical data

### Ambient conditions

Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

### General

IEC test classification	I / II
	T1 / T2
	I
EN type	T1 / T2
IEC power supply system	TN-C
	TT
Mode of protection	L-N
	L-PEN
Mounting type	On base element
Color	jet black RAL 9005
Housing material	PA 6.6
	PBT
Degree of pollution	2
Flammability rating according to UL 94	V-0
Design	Male
Surge protection fault message	optical

### Protective circuit

Nominal voltage $U_N$	120/208 V AC (TN-C, TN-S)
	120/208 V AC (TT)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	175 V AC
Residual current $I_{PE}$	$\leq 800 \mu A$
Standby power consumption $P_C$	$\leq 140 mVA$
Nominal discharge current $I_n$ (8/20) $\mu s$	12.5 kA
Maximum discharge current $I_{max}$ (8/20) $\mu s$	50 kA
Impulse discharge current (10/350) $\mu s$ , charge	6.25 As
Impulse discharge current (10/350) $\mu s$ , specific energy	39 kJ/ $\Omega$
Impulse discharge current (10/350) $\mu s$ , peak value $I_{imp}$	12.5 kA
Short-circuit current rating $I_{SCCR}$	25 kA
Voltage protection level $U_p$	$\leq 0.8 kV$
Residual voltage $U_{res}$	$\leq 0.8 kV$ (at $I_n$ )
	$\leq 0.7 kV$ (at 10 kA)
	$\leq 0.6 kV$ (at 5 kA)
	$\leq 0.5 kV$ (at 3 kA)
TOV behavior at $U_T$	208 V AC (5 s / withstand mode)

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## Technical data

### Protective circuit

	229 V AC (120 min / withstand mode)
Response time $t_A$	$\leq 25$ ns
Max. backup fuse with branch wiring	160 A (gG)

### UL specifications

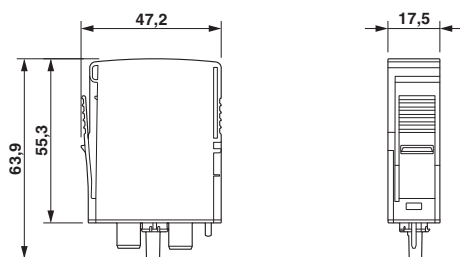
SPD Type	4CA
Maximum continuous operating voltage MCOV (L-N)	175 V AC
Nom. voltage	120 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	2200 V
Nominal discharge current $I_n$ (L-N)	20 kA

### Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

## Drawings

Dimensional drawing



Circuit diagram



## Approvals

### Approvals

Approvals

KEMA-KEUR / ÖVE / IECCEB CB Scheme / CCA / UL Recognized / cUL Recognized / EAC / DNV GL / cULus Recognized

Ex Approvals

### Approval details

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## Approvals

KEMA-KEUR		<a href="http://www.dekra-certification.com">http://www.dekra-certification.com</a>	2162496-01
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ÖVE		<a href="https://www.ove.at/en/certification-pz/certification-register/">https://www.ove.at/en/certification-pz/certification-register/</a>	18583-009-05
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IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	AT 2584
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CCA			NTR-AT 1906
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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
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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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EAC			RU C- DE.A*30.B01561
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DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001N9
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cULus 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>	
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