

VAL-MS-T1/T2 75/12.5 ST - Type 1/2 surge protection plug



2801146

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Replacement plug for VAL-MS-T1/T2 75/12.5... plug-in lighting/surge arrester.



Commercial data

Item number	2801146
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL18
Product key	CL1151
GTIN	4046356708340
Weight per piece (including packing)	819.1 g
Weight per piece (excluding packing)	81.91 g
Customs tariff number	85363030
Country of origin	DE

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Technical data

Product properties

Product type	Replacement plug
Product family	VALVETRAB MS
IEC test classification	I / II T1 / T2
EN type	T1 / T2
IEC power supply system	TN
Type	Male
Surge protection fault message	optical

Insulation characteristics

Overvoltage category	III
Pollution degree	2

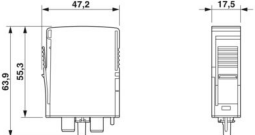
Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
Nominal voltage U_N	60 V DC

Connection data

Connection method	pluggable
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Dimensions

Dimensional drawing	
Width	17.7 mm
Height	47 mm
Depth	67.3 mm
Horizontal pitch	1 Div.

Material specifications

Color	black (RAL 9005) black (RAL 9005)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6/PBT
Material group	I
Housing material	PA 6.6 PBT

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Protective circuit

Mode of protection	L-N
	N-PE
	(L+) - (L-)
	(L+) - PE
Direction of action	L-N / L-PEN
Nominal voltage U_N	60 V AC $\pm 10\%$ (TN)
	60 V DC $\pm 10\%$
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	75 V AC
	100 V DC
Protective conductor current I_{PE}	≤ 0.3 mA
Standby power consumption P_C	≤ 45 mVA
Nominal discharge current I_n (8/20) μ s	12.5 kA
Maximum discharge current I_{max} (8/20) μ s	50 kA
Impulse discharge current (10/350) μ s, charge	6.25 As
Impulse discharge current (10/350) μ s, specific energy	39 kJ/ Ω
Impulse discharge current (10/350) μ s, peak value I_{imp}	12.5 kA
Short-circuit current rating I_{SCCR}	0.5 kA
Voltage protection level U_p	≤ 0.7 kV
Residual voltage U_{res}	≤ 0.7 kV (at I_n)
	≤ 0.65 kV (at 10 kA)
	≤ 0.6 kV (at 5 kV)
	≤ 0.55 kV (at 4 kA)
	≤ 0.55 kV (at 3 kA)
TOV behavior at U_T	208 V AC (5 s / withstand mode)
	100 V DC (5 s / withstand mode)
Response time t_A	≤ 25 ns
Max. backup fuse with branch wiring	160 A (gG)

Environmental and real-life conditions

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)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Approvals

UL specifications

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Maximum continuous operating voltage MCOV (L-N)	75 V AC
Maximum continuous operating voltage MCOV (L+) - (L-)	100 V DC
Nominal discharge current I_n (L-N)	20 kA
Nominal discharge current I_n (L+) - (L-)	20 kA
Mode of protection	L-N (L+) - (L-)
Nominal voltage	60 V AC
Nominal voltage	60 V DC
Power distribution system	Single phase
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	2080 V
Measured limiting voltage MLV (L+) - (L-)	2080 V
SPD Type	4CA

Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012

Mounting

Mounting type	on base element
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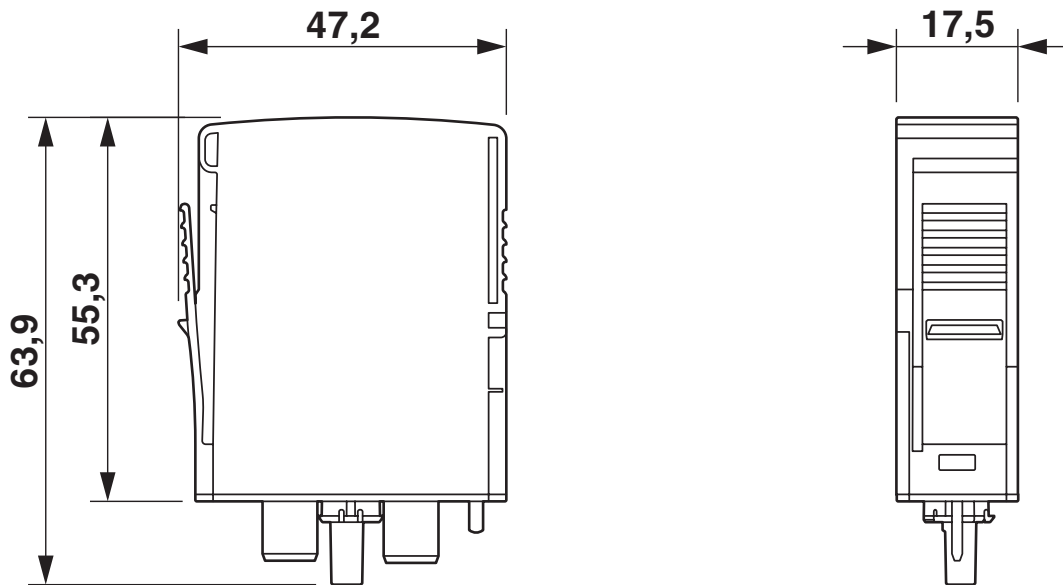


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Drawings

Dimensional drawing



Circuit diagram



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Classifications

UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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