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Type 1/2 surge protection plug - VAL-MS-T1/T2 335/12.5 ST - 2800190

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L-N replacement plug for VAL-MS-T1/T2 335/12.5 plug-in lighting/surge arrester.

Key Commercial Data

Packing unit	10 STK
GTIN	 4 046356 518611

Technical data

Dimensions

Height	47 mm
Width	17.7 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))
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

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	I / II
	T1 / T2
	T1
EN type	T1 / T2
	T1
IEC power supply system	TN-C

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Technical data

General

	TN-S
	TT
SPD design	Voltage-limiting type
Mode of protection	L-PEN
	L-N
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
Type	DIN rail module, two-section, divisible
Surge protection fault message	optical

Protective circuit

Nominal voltage U_N	240/415 V AC (TN-C, TN-S)
	240/415 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	335 V AC
Residual current I_{PE}	$\leq 800 \mu A$
Standby power consumption P_C	$\leq 270 \text{ mVA}$
Nominal discharge current I_n (8/20) μs	12.5 kA
Maximum discharge current I_{max} (8/20) μs	50 kA
Impulse discharge current (10/350)# μs , charge	6.25 As
Impulse discharge current (10/350)# μs , specific energy	39 kJ/ Ω
Impulse discharge current (10/350)# μs , peak value I_{imp}	12.5 kA
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	$\leq 1.2 \text{ kV}$
	$\leq 1.6 \text{ kV}$ (30 kA - 8/20 μs)
Residual voltage U_{res}	$\leq 1.2 \text{ kV}$ (at I_n)
	$\leq 1.1 \text{ kV}$ (at 10 kA)
	$\leq 1 \text{ kV}$ (at 5 kA)
	$\leq 0.9 \text{ kV}$ (at 3 kA)
TOV behavior at U_T	415 V AC (5 s / withstand mode)
	120 min / safe failure mode
Response time t_A	$\leq 25 \text{ ns}$
Max. backup fuse with branch wiring	160 A (gG)

UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L-N)	335 V AC

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Technical data

UL specifications

Nom. voltage	240 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	2630 V
Nominal discharge current I_n (L-N)	20 kA

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130802
eCl@ss 7.0	27130802
eCl@ss 8.0	27130802
eCl@ss 9.0	27130802

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000381
ETIM 5.0	EC000381

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

KEMA-KEUR / ÖVE / CCA / IEC60384-1 / IEC60384-2 / IEC60384-3 / IEC60384-4 / IEC60384-5 / IEC60384-6 / IEC60384-7 / IEC60384-8 / IEC60384-9 / IEC60384-10 / IEC60384-11 / IEC60384-12 / IEC60384-13 / IEC60384-14 / IEC60384-15 / IEC60384-16 / IEC60384-17 / IEC60384-18 / IEC60384-19 / IEC60384-20 / IEC60384-21 / IEC60384-22 / IEC60384-23 / IEC60384-24 / IEC60384-25 / IEC60384-26 / IEC60384-27 / IEC60384-28 / IEC60384-29 / IEC60384-30 / IEC60384-31 / IEC60384-32 / IEC60384-33 / IEC60384-34 / IEC60384-35 / IEC60384-36 / IEC60384-37 / IEC60384-38 / IEC60384-39 / IEC60384-40 / IEC60384-41 / IEC60384-42 / IEC60384-43 / IEC60384-44 / IEC60384-45 / IEC60384-46 / IEC60384-47 / IEC60384-48 / IEC60384-49 / IEC60384-50 / IEC60384-51 / IEC60384-52 / IEC60384-53 / IEC60384-54 / IEC60384-55 / IEC60384-56 / IEC60384-57 / IEC60384-58 / IEC60384-59 / IEC60384-60 / IEC60384-61 / IEC60384-62 / IEC60384-63 / IEC60384-64 / IEC60384-65 / IEC60384-66 / IEC60384-67 / IEC60384-68 / IEC60384-69 / IEC60384-70 / IEC60384-71 / IEC60384-72 / IEC60384-73 / IEC60384-74 / IEC60384-75 / IEC60384-76 / IEC60384-77 / IEC60384-78 / IEC60384-79 / IEC60384-80 / IEC60384-81 / IEC60384-82 / IEC60384-83 / IEC60384-84 / IEC60384-85 / IEC60384-86 / IEC60384-87 / IEC60384-88 / IEC60384-89 / IEC60384-90 / IEC60384-91 / IEC60384-92 / IEC60384-93 / IEC60384-94 / IEC60384-95 / IEC60384-96 / IEC60384-97 / IEC60384-98 / IEC60384-99 / IEC60384-100

Ex Approvals

Type 1/2 surge protection plug - VAL-MS-T1/T2 335/12.5 ST - 2800190

Approvals


Approvals submitted

Approval details


KEMA-KEUR 


ÖVE 

CCA


IECEE CB Scheme 

GL

UL Recognized 

cUL Recognized 

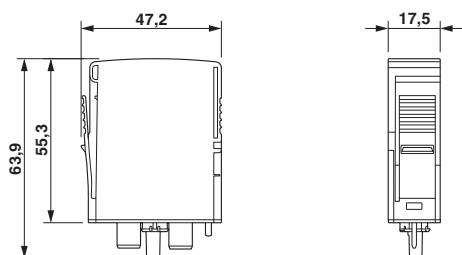
EAC

cULus Recognized 

Drawings

Type 1/2 surge protection plug - VAL-MS-T1/T2 335/12.5 ST - 2800190

Dimensional drawing



Circuit diagram



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