

Type 2 surge protection plug - VAL-MS 320-UD ST - 2858315

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Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 320 V AC

The figure shows the VAL-MS 1000 PV-UD ST version



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	43.53 g
Custom tariff number	85363030
Country of origin	Germany

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)	25g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

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Technical data

General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN
	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
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	1
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10
Surge protection fault message	optical

Protective circuit

Nominal voltage U_N	240/415 V AC (TN)
	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}	≤ 0.45 mA
Standby power consumption P_C	≤ 150 mVA
Nominal discharge current I_n (8/20) μ s	20 kA
Maximum discharge current I_{max} (8/20) μ s	40 kA
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	≤ 1.5 kV
Residual voltage U_{res}	≤ 1.5 kV (at I_n)
	≤ 1.3 kV (at 10 kA)
	≤ 1.2 kV (at 5 kA)
	≤ 1.1 kV (at 3 kA)
TOV behavior at U_T	415 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)

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Protective circuit

Response time t_A	≤ 25 ns
Max. backup fuse with branch wiring	125 A (gG)

Connection data

Connection method	VALVETRAB plug-in system
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UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L-N)	320 V AC
Nom. voltage	320 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	2030 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	27130805
eCl@ss 7.0	27130805
eCl@ss 8.0	27130805
eCl@ss 9.0	27130805

ETIM

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

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610

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Classifications

UNSPSC

UNSPSC 13.2	39121620
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Approvals

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UL Recognized / KEMA-KEUR / cUL Recognized / CSA / ÖVE / CCA / IEC60384-14 / IEC60384-13 / IEC60384-12 / IEC60384-11 / IEC60384-10 / IEC60384-9 / IEC60384-8 / IEC60384-7 / IEC60384-6 / IEC60384-5 / IEC60384-4 / IEC60384-3 / IEC60384-2 / IEC60384-1 / IEC60384-0


Ex Approvals

Approvals submitted


Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 

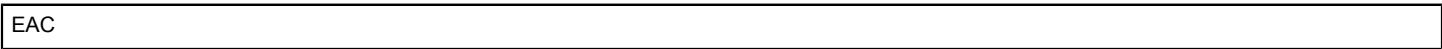
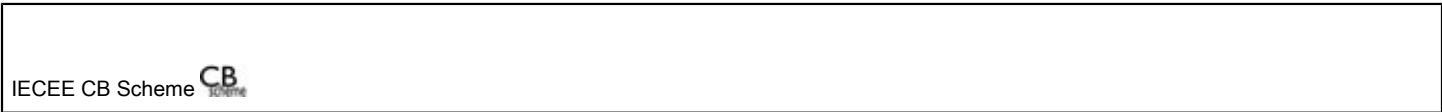
CSA

ÖVE 

CCA

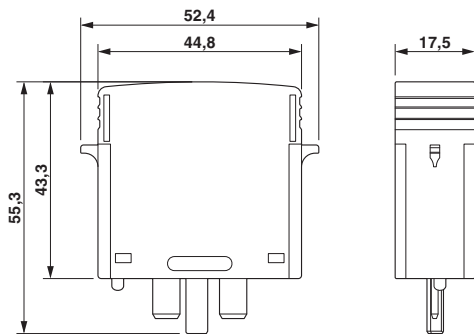
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Drawings

Dimensional drawing



Circuit diagram

