

Type 2 surge protection plug - VAL-MS 230-UD-ST - 2858962

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Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 230 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)	60.0 GRM
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
Vibration (operation)	5g

General

Standards/specifications	IEC 61643-11 2011
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Technical data

General

	EN 61643-11 2012
IEC test classification	II
	T2
EN type	T2
SPD design	Voltage-limiting type
Mode of protection	L-PEN
	L-N
Mounting type	On base element
Color	black
Housing material	PA 6.6
Pollution degree	2
Inflammability class 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 operating voltage U_C	275 V AC
Residual current I_{PE}	≤ 0.45 mA
Standby power consumption P_C	≤ 120 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	≤ 1.35 kV
Residual voltage U_{res}	≤ 1.35 kV (at I_n)
	≤ 1.1 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
TOV behavior at U_T	335 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
Response time t_A	≤ 25 ns
Max. backup fuse with branch wiring	125 A AC (gG)

Connection data

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Technical data

Connection data

Connection method	VALVETRAB plug-in system
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UL specifications

UL class	Type 4 SPD for Type 2 applications
Maximum continuous operating voltage MCOV (L-N)	275 V AC
Nom. voltage	230 V AC
Mode of protection	L-N
Power distribution system	1
Nominal frequency	50/60 Hz
Voltage protection rating VPR (L-N)	1 kV
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

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
UNSPSC 13.2	39121620

Approvals

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Approvals


Approvals


UL Recognized / KEMA-KEUR / cUL Recognized / GOST / KEMA-KEUR / CSA / ÖVE / CCA / IECCEB Scheme / cULus Recognized


Ex Approvals

Approvals submitted


Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 

GOST 

KEMA-KEUR 

CSA

ÖVE 

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Approvals

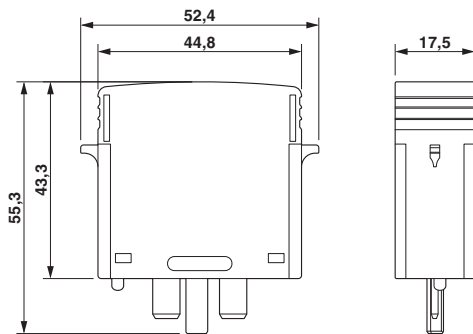
CCA

IECEE CB Scheme

cULus Recognized

Drawings

Dimensioned drawing



Circuit diagram

