

Type 2 surge protection plug - VAL-MS 230 IT ST - 2807599

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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 (IT system)

Product Features

- ✓ Single-channel, DIN-rail mountable protective devices
- ✓ Base element with/without floating remote indication contact
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Disconnect device on each individual plug
- ✓ Mechanical coding of all slots
- ✓ Consists of base element and plug



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 075286
Weight per Piece (excluding packing)	49.36 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	52.4 mm
Width	17.5 mm
Depth	55.3 mm
Horizontal pitch	1 Div.

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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)

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
	IT
Number of ports	One
SPD design	Voltage-limiting type
Mode of protection	L-PEN
	L-N
	L-PE
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

Additional descriptions

Note	Usable in all low-voltage systems between L-N or L-PEN. Only usable in IT Systems between L-PE, if the exposed-conductive-parts (bodies) of the equipment of the low-voltage installation is connected to the earthing arrangement of the transformer substation. (interconnected earthing arrangement of the HV-transformer substation with the bodies of the LV-installation. $R_E = R_A$ accordance to IEC 60364-4-442 / VDE 0100-442 Fig. 44D / Example a)
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Protective circuit

Nominal voltage U_N	240/415 V AC (TN)
	240/415 V AC (TT)
	230 V AC (IT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	385 V AC
Residual current I_{PE}	≤ 0.45 mA
Standby power consumption P_C	≤ 175 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	≤ 1.8 kV
Residual voltage U_{res}	≤ 1.8 kV (at I_n)
	≤ 1.6 kV (at 10 kA)
	≤ 1.4 kV (at 5 kA)
	≤ 1.3 kV (at 3 kA)
TOV behavior at U_T	415 V AC (5 s / withstand mode)
	440 V AC (120 min / withstand mode)
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)	385 V AC
Nom. voltage	230 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

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801

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Classifications

eCl@ss

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
UNSPSC 13.2	39121620

Approvals

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IECEE CB Scheme / CSA / UL Recognized / KEMA-KEUR / ÖVE / cUL Recognized / CCA / EAC / cULus Recognized

Ex Approvals

Approvals submitted


Approval details

IECEE CB Scheme 

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Approvals

CSA 

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KEMA-KEUR 

ÖVE 

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CCA

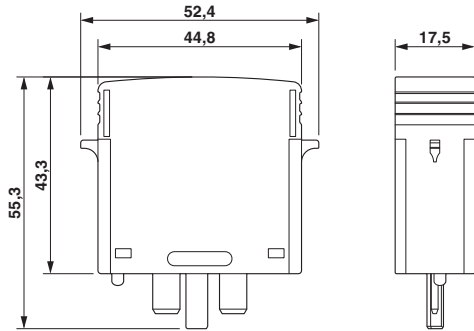
EAC

cULus Recognized 

Drawings

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Dimensional drawing



Circuit diagram

