

Type 1 surge protection plug - VAL-US-277/80-P - 2910331

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UL Recognized type 1 SPD and IEC type 2 surge protection plug with a varistor and thermal disconnect for use with VAL-US base elements, mechanical and visual fault warning

Product Description


Surge protective device replacement plug

Your advantages

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Secure hold of plugs in the event of high lightning current loads and strong vibrations thanks to new latching
- ✓ Thermal disconnect device for each individual plug
- ✓ Pluggable
- ✓ Mechanical coding of all slots
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Pluggable



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 445311
GTIN	4055626445311
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	47 mm
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Technical data

Dimensions

Width	17.5 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-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	7.5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

General

IEC test classification	II
	T2
EN type	T2
Mode of protection	L-N
	L-PEN
	N-PE
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	Male
Number of positions	1
Surge protection fault message	optical

Protective circuit

Nominal voltage U_N	240/415 V AC
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	385 V AC
Residual current I_{PE}	≤ 600 μA
Standby power consumption P_C	≤ 230 mVA
Nominal discharge current I_n (8/20) μs	40 kA
Maximum discharge current I_{max} (8/20) μs	80 kA

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Protective circuit

Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	≤ 2 kV
Residual voltage U_{res}	≤ 2 kV (at I_n)
	≤ 1.3 kV (at 10 kA)
	≤ 1.2 kV (at 5 kA)
	≤ 1.15 kV (at 3 kA)
TOV behavior at U_T	480 V AC (5 s / withstand mode)
	457 V AC (120 min / withstand mode)
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	1CA
Maximum continuous operating voltage MCOV	385 V AC
Nom. voltage	277/480 V AC
Mode of protection	L-N
	L-G
	N-G
Power distribution system	Single phase
Nominal frequency	50/60 Hz
Voltage protection rating VPR	1500 V
Nominal discharge current I_n	20 kA
Maximum Surge Current per Phase	80 kA
Short-circuit current rating (SCCR)	200 kA

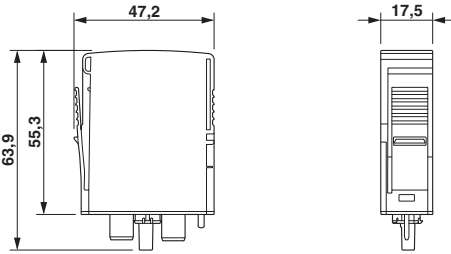
Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

Drawings

Type 1 surge protection plug - VAL-US-277/80-P - 2910331

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130890
eCl@ss 11.0	27130890
eCl@ss 6.0	27130800
eCl@ss 7.0	27130890
eCl@ss 8.0	27130890
eCl@ss 9.0	27130890

ETIM

ETIM 5.0	EC002496
ETIM 6.0	EC002497
ETIM 7.0	EC002497

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
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Approvals

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cULus Recognized			
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Accessories

Accessories

Surge arrester

Type 1 surge protection device - VAL-US-277/80/3+0-FM - 1075896



Surge protective device, three channel with remote indicator contact for 277/480 V AC, 4-wire.

Type 1 surge protection device - VAL-US-277/80/1+0-FM - 2910377



Surge protective device, single channel with remote indicator contact for 277 V AC.

Type 1 surge protection device - VAL-US-277/80/1+1V-FM - 2910378



Surge protective device, two channel with remote indicator contact for 277 V AC, 2-wire plus ground.

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Accessories

Type 1 surge protection device - VAL-US-277/80/3+1V-FM - 2910379



Surge protective device, four channel with remote indicator contact for 277/480 V AC, 4-wire plus ground.

Type 1 surge protection device - VAL-US-277/80/4+0-FM - 2910380



Surge protective device, four channel with remote indicator contact for 277/480 V AC, 4-wire plus ground.
