

VAL-US-600D/30/3+0-FM - Surge protection device



2910391

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Surge protective device, UL Listed type 1 and IEC type 2, three channel with remote indicator contact for 600 V AC DELTA.

Your advantages

- Multi-channel type 2 protective devices
- Mechanical coding of all slots
- Optical, mechanical status indication for the individual arresters
- Disconnect device on each individual plug
- Type 2 consistent plug-in surge arresters

Commercial data

Item number	2910391
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL17
Product key	CL132U
GTIN	4055626445281
Weight per piece (including packing)	389.7 g
Weight per piece (excluding packing)	364.89 g
Customs tariff number	85363030
Country of origin	DE

Technical data

Notes

General

Note	<p>For use in all low-voltage systems between L-PEN.</p> <p>Only for use in IT systems between L-PE if the exposed conductive parts of the equipment of the low-voltage electrical installation are connected to the grounding system of the transformer station (common grounding of the HV transformer station and the exposed conductive part of the LV load system).</p> <p>RE = RA according to VDE 0100-442:2013, Figure 44.A1 and Table 44.A1</p>
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Product properties

Product type	Surge protection for NEMA power supply units
Product family	VALVETRAB US
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-C
	IT
Type	DIN rail module, two-section, divisible
Distance between live and grounded parts	8 mm
Number of positions	3
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
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Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact
Operating voltage	5 V AC ... 250 V AC
	30 V DC
Operating current	5 mA AC ... 1.5 A AC
	1 A DC

Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm (1.5 mm ² ... 16 mm ²)

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	4.5 Nm (25 mm ² ... 35 mm ²)
Stripping length	16 mm
Conductor cross-section flexible	1.5 mm ² ... 25 mm ²
Conductor cross-section rigid	1.5 mm ² ... 35 mm ²
Conductor cross-section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross-section flexible	1.5 mm ² ... 16 mm ²

Remote fault indicator contact

Connection method	Plug-in/screw connection via COMBICON
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross-section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross-section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16

Dimensions

Dimensional drawing	
Width	53.4 mm
Height	98.7 mm
Depth	65.7 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	3 Div.

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6/PBT
Material group	I
Housing material	PA 6.6
	PBT

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Mode of protection	L-PE
Direction of action	3L-GND

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Nominal voltage U_N	600 V AC (Delta TN-S)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C	750 V AC
Standby power consumption P_C	≤ 400 mVA
Nominal discharge current I_n (8/20) μ s	15 kA
Maximum discharge current I_{max} (8/20) μ s	30 kA
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	≤ 2.9 kV
Residual voltage U_{res}	≤ 2.9 kV (at I_n)
	≤ 2.7 kV (at 10 kA)
	≤ 2.5 kV (at 5 kA)
	≤ 2.3 kV (at 3 kA)
TOV behavior at U_T	1000 V AC (5 s / withstand mode)
	1056 V AC (120 min / safe failure mode)
Max. backup fuse with branch wiring	100 A (gG)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20 (only when all terminal points are used)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g (Half-sine / 11 ms / 3x $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Approvals

UL specifications

Maximum continuous operating voltage MCOV	750 V AC
Short-circuit current rating (SCCR)	200 kA
Voltage protection rating VPR (L-L)	4000 V
Voltage protection rating VPR (L-G)	2500 V
UL type	type 1
Nominal discharge current I_n	20 kA
Maximum Surge Current per Phase	30 kA
Mode of protection	L-L
	L-G
Nominal voltage	600 V AC (3-phase Delta)
Power distribution system	Delta
Nominal frequency	50/60 Hz
SPD Type	1

UL indicator/remote signaling

Operating voltage	125 V AC
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AC operating current	1 A AC
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UL connection data

Tightening torque	30 lb _F in.
Conductor cross-section AWG	14 ... 2

Standards and regulations

Air clearances and creepage distances

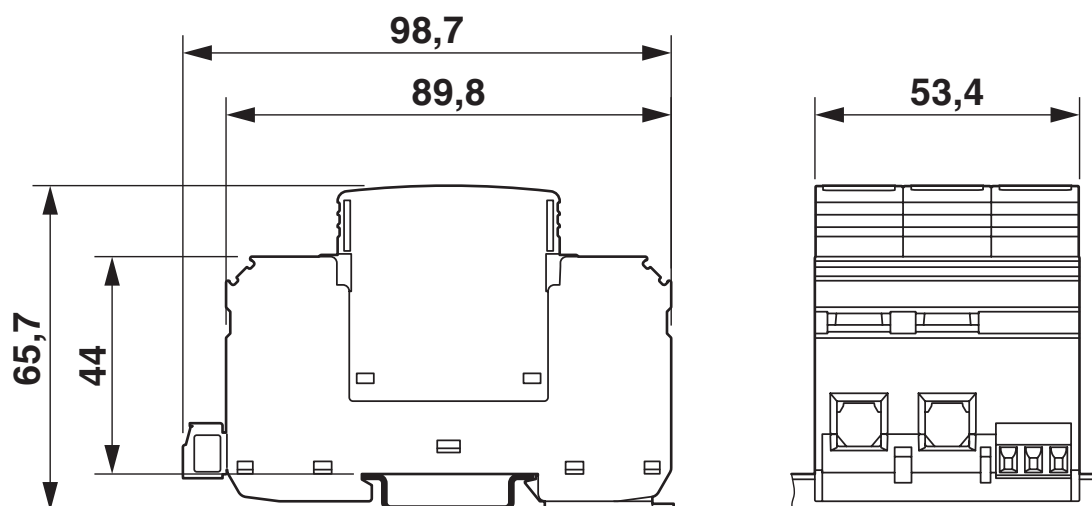
Standards/regulations	EN 60664-1 / EN 61643-11
Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012

Mounting

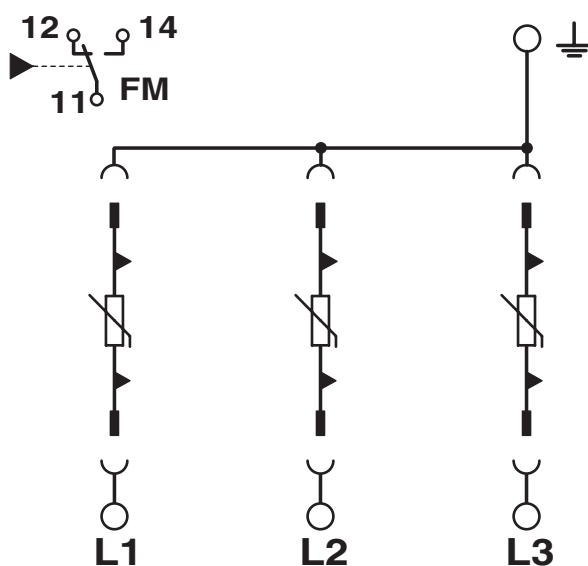
Mounting type	DIN rail: 35 mm
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Drawings

Dimensional drawing



Circuit diagram



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Approvals

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UL Listed

Approval ID: FILE E 330181



cUL Listed

Approval ID: FILE E 330181

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Classifications

ECLASS

ECLASS-13.0	27171202
ECLASS-15.0	27171202

ETIM

ETIM 9.0	EC000941
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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