

VAL-US-600D/30/3+0-FM - Type 1 surge protection device



2910391

<https://www.phoenixcontact.com/us/products/2910391>

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Surge protective device, 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
Catalog page	Page 99 (C-4-2019)
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

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Technical data

Notes

General

Note	Additional information for IT systems as used for 2920256
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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

Data management status

Article revision	05
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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) 4.5 Nm (25 mm ² ... 35 mm ²)
Stripping length	16 mm
Conductor cross section flexible	1.5 mm ² ... 25 mm ²

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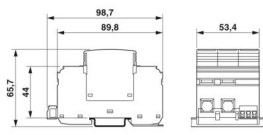
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Conductor cross section rigid	1.5 mm ² ... 35 mm ²
Conductor cross section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm ² ... 16 mm ²

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

Protective circuit

Mode of protection	L-PE
Direction of action	3L-GND
Nominal voltage U_N	600 V AC (IT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	750 V AC
Standby power consumption P_C	≤ 400.00 mVA
Nominal discharge current I_n (8/20) μs	15 kA
Maximum discharge current I_{max} (8/20) μs	30 kA
Short-circuit current rating I_{SCCR}	25 kA

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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 (L-L)	750 V AC
Maximum continuous operating voltage MCOV (L-G)	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
AC operating current	1 A AC

UL connection data

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

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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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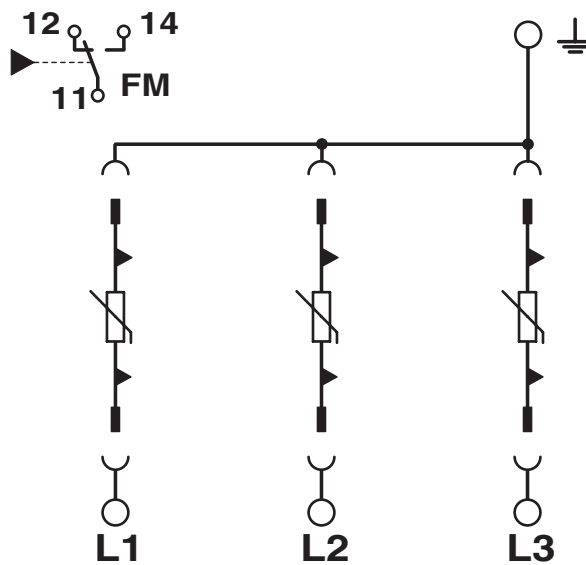


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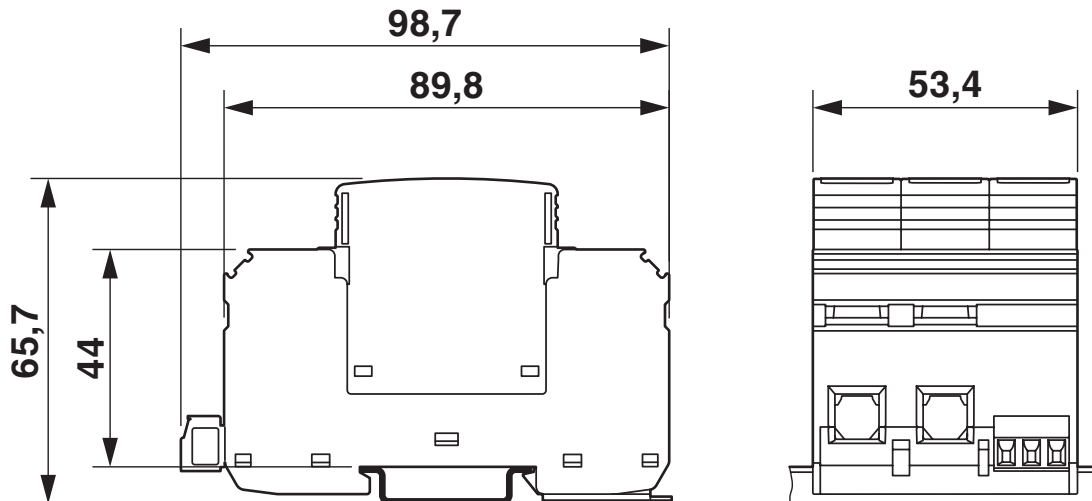
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Drawings

Circuit diagram



Dimensional drawing



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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-11.0	27130805
ECLASS-13.0	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
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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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com