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Extract from the online catalog

## VAL-SQ SE 180-277/480Y /TS

Order No.: 2800378



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2800378>

Surge protection device for 277/480 V AC Wye configurations typically used as service entry protection. Protects across all phases and directions. NEMA rated enclosure provides a monitor with surge counter, status LEDs and audible alarm with remote monitor capability. Hybrid Sine Wave Tracking provides 180 kA surge protection.

Commercial data	
GTIN (EAN)	 4 046356 564694
Note	Made-to-order
sales group	J101
Pack	1 pcs.
Customs tariff	85363090
Catalog page information	Page 75 (TT-2011)

### Product notes

WEEE/RoHS-compliant since:  
02/21/2010



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

### Product description

Surge protection device for service entrance protection of 277/480 V AC, 220/380 V AC, 230/400 V AC and 240/415 V AC Wye systems with 180 kA protection. Protects across all phases in all directions.

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**Technical data**
**Standards**

Housing material	Metal
Degree of protection	NEMA 3R/12
Mounting type	Wall mounting
Design	Parallel MOV
Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-20 °C ... 65 °C
Permissible humidity (operation)	0 % ... 95 %
Altitude	3658 m
Message: Surge protection fault	Phase LEDs
	Audible alarm
	Remote indicator contact
Direction of action	3L-N & 3L-L & N-GND
Width	411.00 mm
Height	550.00 mm

**Protective circuit**

Arrester rated voltage $U_c$	320 V
Response time	< 1 ns

**Connection, protective circuit**

Connection method	Screw terminal blocks
	4-wire + Gnd
Tightening torque	4 Nm
Conductor cross section AWG/kcmil min.	10
Conductor cross section AWG/kcmil max	2

**Remote indicator contact**

Connection method	Screw connection
Conductor cross section AWG/kcmil min.	22
Conductor cross section AWG/kcmil max	14

**NEMA / UL data**

UL type	type 2
Maximum Continuous Operating Voltage (MCOV without reference direction)	320 V

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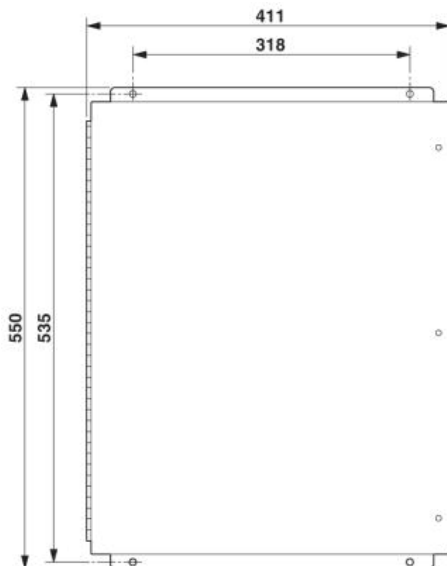
Voltage protection rating (VPR L-L)	1800 V
Voltage protection rating (VPR L-N)	1200 V
Voltage protection rating (VPR L-PE)	1200 V
Voltage protection rating (VPR N-PE)	1000 V
Nominal discharge current $I_n$ (without reference direction)	20 kA
Maximum Surge Current per Phase	180 kA
Short-circuit current rating (SCCR)	200 kA
EMI/RFI filtering	-30 dB @ 100 kHz

**Environmental conditions**

Standards/regulations	UL 1449 3 <sup>rd</sup> edition, Sept. 2009
	UL 1283
	IEEE C62.41
	IEEE C62.45

**Diagrams/Drawings**

Dimensioned drawing



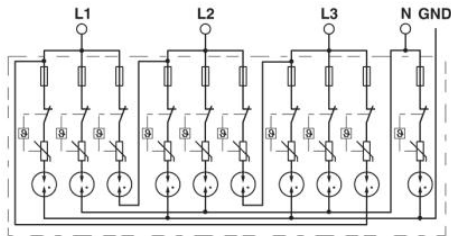
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Circuit diagram

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