

# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Surge protective device, UL Listed type 1 and IEC type 2, single channel with remote indication contact for 240 V AC.

## Your advantages

- With floating remote indication contact
- Optical, mechanical status indication for the individual arresters
- Mechanical coding of all slots

## Commercial data

Item number	2910361
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL17
Product key	CL132U
GTIN	4055626445014
Weight per piece (including packing)	148.6 g
Weight per piece (excluding packing)	148.6 g
Customs tariff number	85363030
Country of origin	US

## Technical data

### 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
Type	DIN rail module, two-section, divisible
Number of positions	1
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)
-------------------------	---------------

### 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 ... 750 mA AC
	1 A DC

### Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm (1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> )
	4.5 Nm (25 mm <sup>2</sup> ... 35 mm <sup>2</sup> )
Stripping length	16 mm
Conductor cross section flexible	1.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Conductor cross section rigid	1.5 mm <sup>2</sup> ... 35 mm <sup>2</sup>
Conductor cross section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>

### Remote fault indicator contact

Connection method	Plug-in/screw connection via COMBICON
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm

# VAL-US-240/40/1+0-FM - Surge protection device

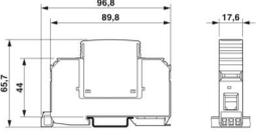


2910361

<https://www.phoenixcontact.com/us/products/2910361>

Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	28 ... 16

## Dimensions

Dimensional drawing	
Width	17.6 mm
Height	96.8 mm
Depth	65.7 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 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
-----------------	----

## Protective circuit

Mode of protection	L-PEN
Direction of action	1L-GND
Nominal voltage $U_N$	240 V AC (TN-C)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous operating voltage $U_C$	385 V AC
Nominal discharge current $I_n$ (8/20) $\mu$ s	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s	40 kA
Short-circuit current rating $I_{SCCR}$	25 kA
Voltage protection level $U_p$	$\leq 1.8$ kV
Residual voltage $U_{res}$	$\leq 1.8$ kV (at $I_n$ ) $\leq 1.6$ kV (at 10 kA) $\leq 1.4$ kV (at 5 kA) $\leq 1.3$ kV (at 3 kA)
TOV behavior at $U_T$	415 V AC (5 s / withstand mode) 440 V AC (120 min / withstand mode)

# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

Response time $t_A$	$\leq 25$ ns
Max. backup fuse with branch wiring	125 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	$\leq 2000$ 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	385 V AC
Short-circuit current rating (SCCR)	200 kA
Voltage protection rating VPR	1500 V
UL type	type 1
Nominal discharge current $I_n$	20 kA
Maximum Surge Current per Phase	40 kA
Mode of protection	L-N L-G
Nominal voltage	240 V AC (Single-phase)
Power distribution system	Single phase
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 <sub>F</sub> -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

# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

## Mounting

Mounting type
---------------

DIN rail: 35 mm
-----------------

# VAL-US-240/40/1+0-FM - Surge protection device

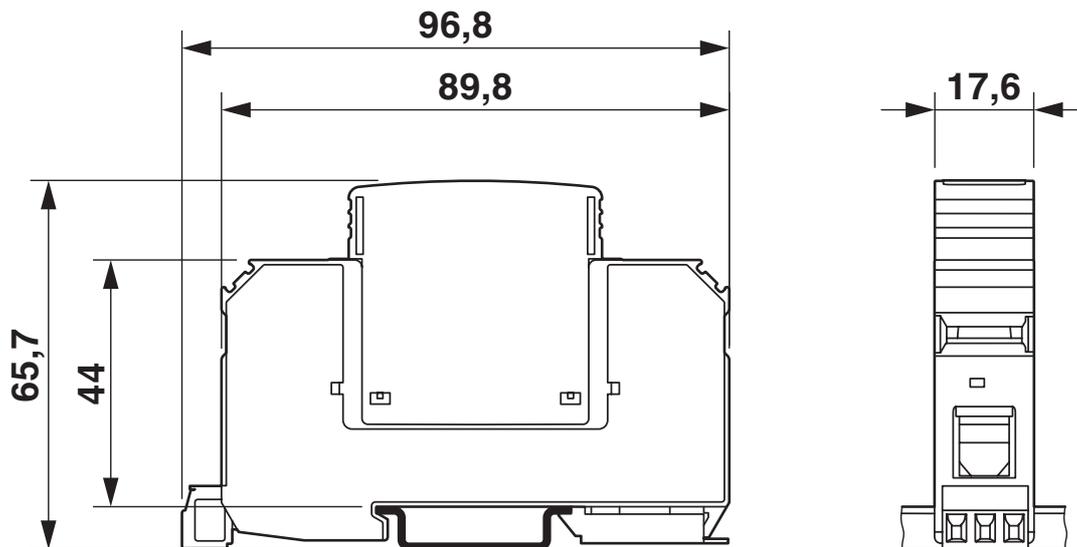
2910361

<https://www.phoenixcontact.com/us/products/2910361>

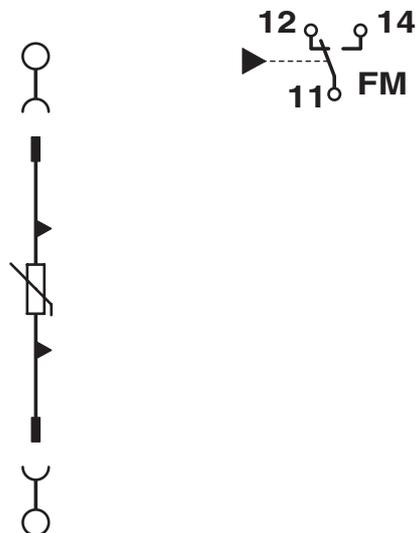


## Drawings

Dimensional drawing



Circuit diagram



# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2910361>



**UL Listed**

Approval ID: FILE E 330181



**cUL Listed**

Approval ID: FILE E 330181

# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

## Classifications

### ECLASS

ECLASS-13.0	27171202
ECLASS-15.0	27171202

### ETIM

ETIM 9.0	EC000941
----------	----------

### UNSPSC

UNSPSC 21.0	39121600
-------------	----------

# VAL-US-240/40/1+0-FM - Surge protection device



2910361

<https://www.phoenixcontact.com/us/products/2910361>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)