

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

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.



Plug-in surge arrester, in accordance with Type 2/Class II, for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact.

Your advantages

- Easy and safe installation with forward-thinking handling and safety features
- Reliable system protection with maximum performance and endurance
- Can be used in a wide range of applications due to the optimized design and broad portfolio
- Simple planning due to comprehensive digital data and selectors

Commercial data

Item number	1466214
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL1381
Product key	CL1381
GTIN	4063151860561
Weight per piece (including packing)	474 g
Weight per piece (excluding packing)	444.3 g
Customs tariff number	85363030
Country of origin	DE

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

Technical data

Notes

General

Note	For pollution degree 3 and wiring with fork cable lugs, an additional minimum lateral distance of 1 mm to earthed conductive surfaces must be maintained for cross-sections $\geq 16 \text{ mm}^2$. No additional lateral distances are required for pollution degree 2.
------	--

Product properties

Product type	Surge arrester
Product family	VAL-SPP
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
Number of positions	4
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
-------------------------	---------------

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact
Max. required back-up fuse	1 A (gG)
AC operating voltage	5 V AC ... 250 V AC ($\leq 2000 \text{ m (amsl)}$ at pollution degree 2) 5 V AC ... 150 V AC ($\leq \text{ⓈⓂⓂⓂ m (amsl)}$)
AC operating current	5 mA AC ... 1 A AC
DC operating voltage	30 V DC ($\leq \text{ⓈⓂⓂⓂ m (amsl)}$)
DC operating current	1 A DC
DC operating voltage	125 V DC ($\leq \text{ⓈⓂⓂⓂ m (amsl)}$)
DC operating current	200 mA DC
Insulation type	The product has double/reinforced insulation between the main and auxiliary circuit.

Connection data

Connection method	Screw connection
-------------------	------------------

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

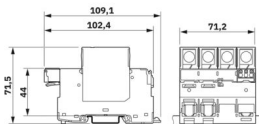
<https://www.phoenixcontact.com/gb/products/1466214>

Screw thread	M5
Tightening torque	3 Nm ... 3.5 Nm
Stripping length	18 mm
Conductor cross section flexible	1.5 mm² ... 35 mm² (without ferrule) 2x 1.5 mm² ... 16 mm² (2 conductors with the same cross-section)
Conductor cross section rigid	1.5 mm² ... 50 mm² 2x 1.5 mm² ... 16 mm² (2 conductors with the same cross-section)
Conductor cross section AWG	15 ... 2
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm² ... 35 mm² 2x 1.5 mm² ... 10 mm² (2 conductors with the same cross-section)
Conductor cross section flexible, with ferrule without plastic sleeve	1.5 mm² ... 25 mm² 2x 1.5 mm² ... 16 mm² (2 conductors with the same cross-section)
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm² ... 25 mm²

Remote fault indicator contact

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible	0.25 mm² ... 1.5 mm²
Conductor cross section rigid	0.25 mm² ... 1.5 mm²
Conductor cross section AWG	24 ... 16
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.75 mm²

Dimensions

Dimensional drawing	
Width	71.2 mm
Height	109.1 mm
Depth	71.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	4 Div.

Material specifications

Color	gray (RAL 7042) light gray (RAL 7035)
Flammability rating according to UL 94	V-0

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

CTI value of material	600
Insulating material	PA 6.6-FR 20 % GF
	PBT
Material group	I
Housing material	PA 6.6-FR 20 % GF
	PBT

Protective circuit

Mode of protection	L-N
	L-PE
	N-PE
Nominal voltage U_N	240/415 V AC $\pm 10\%$ (TN-S)
	240/415 V AC $\pm 10\%$ (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C (L-N)	275 V AC
Maximum continuous operating voltage U_C (L-PE)	275 V AC
Maximum continuous operating voltage U_C (N-PE)	305 V AC
Rated load current I_L	80 A (25 mm ²)
Residual current I_{PE}	$\leq 5 \mu A$
Standby power consumption P_C	≤ 360 mVA
Nominal discharge current I_n (8/20) μs	20 kA
Maximum discharge current I_{max} (8/20) μs	40 kA
Total discharge current I_{Total} (8/20) μs	40 kA
Follow current interrupt rating I_{fi} (N-PE)	100 A
Short-circuit current rating I_{SCCR}	50 kA
Voltage protection level U_p (L-N)	≤ 1.35 kV
Voltage protection level U_p (L-PE)	≤ 1.6 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Residual voltage U_{res} (L-N)	≤ 1.35 kV (at I_n)
	≤ 1.1 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
Residual voltage U_{res} (L-PE)	≤ 1.6 kV (at I_n)
	≤ 1.3 kV (at 10 kA)
	≤ 1.1 kV (at 5 kA)
	≤ 1 kV (at 3 kA)
Residual voltage U_{res} (N-PE)	≤ 0.5 kV (at I_n)
	≤ 0.4 kV (at 10 kA)
	≤ 0.3 kV (at 5 kA)
	≤ 0.1 kV (at 3 kA)
TOV behavior at U_T (L-N)	350 V AC (5 s / withstand mode)
	460 V AC (120 min / safe failure mode)
TOV behavior at U_T (L-PE)	1464 V AC (200 ms/withstand mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / withstand mode)

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Max. backup fuse with V-type through wiring	80 A (gG)
Max. backup fuse with branch wiring	315 A (gG)

Additional technical data

Short-circuit current rating I_{SCCR}	100 kA
---	--------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20C (Installed)
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Ambient temperature (assembly)	-5 °C ... 50 °C
Altitude	≤ 5000 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)

Standards and regulations

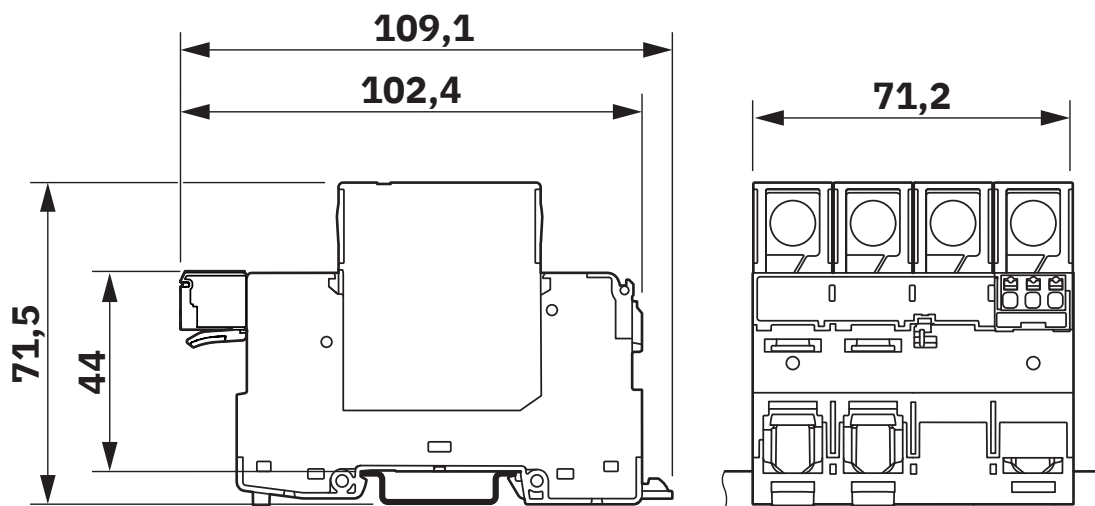
Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012 + A11:2018

Mounting

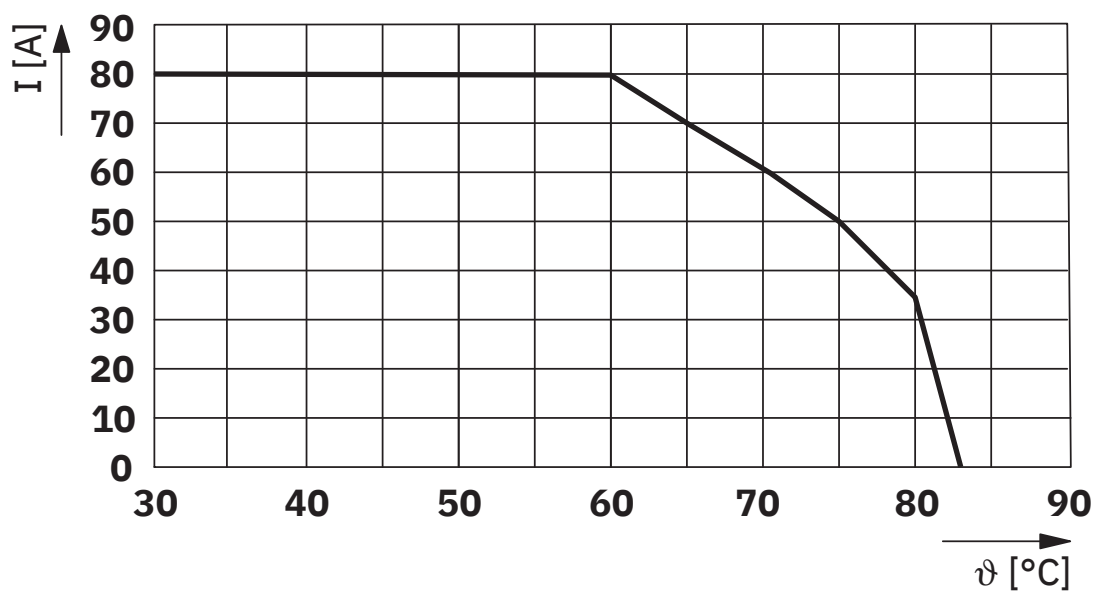
Mounting type	DIN rail: 35 mm
---------------	-----------------

Drawings

Dimensional drawing



Diagram



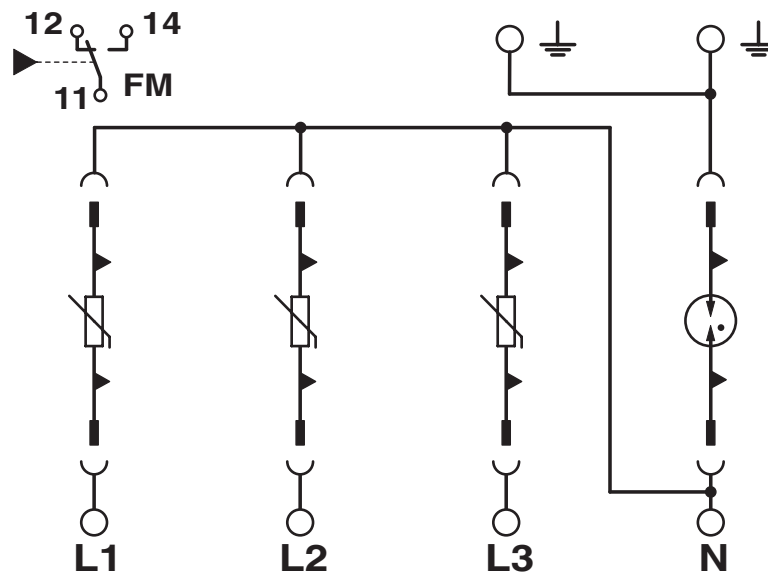
Max. permissible current in relation to the ambient temperature

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester

1466214

<https://www.phoenixcontact.com/gb/products/1466214>

Circuit diagram



VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1466214>



IECEE CB Scheme

Approval ID: NL-109184

CCA

Approval ID: NTR NL-8052



KEMA-KEUR

Approval ID: 71-138153 REV.2

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

Classifications

ECLASS

ECLASS-13.0	27171202
-------------	----------

ETIM

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

VAL-SPP-T2-275-3+1-UT-R - Type 2 surge arrester



1466214

<https://www.phoenixcontact.com/gb/products/1466214>

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 Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk