

2905465

https://www.phoenixcontact.com/us/products/2905465

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 lightning and surge arrester combination, in accordance with Type 1+2/Class I+II, for 1-phase power supply networks, with combined PE and N installed in one conductor (L1, PEN).

#### Your advantages

- · Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- · Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- Optimum protective effect in the event of high-energy lightning currents, thanks to spark gap technology with low residual voltage characteristic
- · Maximum protection against dynamic overvoltages for sensitive devices, thanks to direct coordination with varistor arresters connected in parallel

#### Commercial data

Item number	2905465
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL01
Product key	CL1241
GTIN	4046356950145
Weight per piece (including packing)	350.1 g
Weight per piece (excluding packing)	351.7 g
Customs tariff number	85363030
Country of origin	DE



2905465

https://www.phoenixcontact.com/us/products/2905465

#### Technical data

#### Product properties

Product type	Arrester combination
Product family	SEC Family
IEC test classification	I + II
	T1 + T2
	T1
EN type	T1 + T2
	T1
IEC power supply system	TN-C
	ТТ
Туре	DIN rail module, two-section, divisible
Number of positions	1
Surge protection fault message	Optical, remote indicator contact
sulation characteristics	
Overvoltage category	III
Pollution degree	2

#### Electrical properties

Nominal frequency f <sub>N</sub>	50 Hz (60 Hz)
Indicator/remote signaling	
Connection name	Remote fault indicator contact
Switching function	Changeover contact
Operating voltage	12 V AC 250 V AC
	125 V DC (200 mA DC)
Operating current	10 mA AC 1 A AC
	1 A DC (30 V DC)

#### Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	18 mm
Conductor cross-section flexible	2.5 mm² 35 mm²
Conductor cross-section rigid	2.5 mm² 35 mm²
Conductor cross-section AWG	13 2
Connection method	Fork-type cable lug
Conductor cross-section flexible	1.5 mm² 16 mm²



2905465

https://www.phoenixcontact.com/us/products/2905465

#### 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 mm² 1.5 mm²
Conductor cross-section rigid	0.14 mm² 1.5 mm²
Conductor cross-section AWG	28 16

#### **Dimensions**

Dimensional drawing	95.2
Width	35.6 mm
Height	95.2 mm
Depth	74.5 mm
Horizontal pitch	2 Div.

#### Material specifications

Color (Male connector)	light gray (RAL 7035)
Color (Base element)	gray (RAL 7042)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA6.6-FR 20% GF
	PBT-FR
Material group	T. Control of the con
Housing material	PA 6.6-FR 20 % GF
	PBT-FR

#### Mechanical properties

Mechanical data
-----------------

Open side panel	No
-----------------	----

#### Protective circuit

Mode of protection	L-PEN
Direction of action	1L-N/PE
Nominal voltage $U_N$	240 V AC (TN-C)
	240 V AC (TT)
Nominal frequency f <sub>N</sub>	50 Hz (60 Hz)
Maximum continuous operating voltage U <sub>C</sub>	350 V AC



2905465

https://www.phoenixcontact.com/us/products/2905465

Rated load current I <sub>L</sub>	125 A (< 55 °C)
Nominal discharge current I <sub>n</sub> (8/20) μs	25 kA
Impulse discharge current (10/350) µs, charge	12.5 As
Impulse discharge current (10/350) µs, specific energy	160 kJ/Ω
Impulse discharge current (10/350) $\mu s$ , peak value $I_{imp}$	25 kA
Follow current interrupt rating I <sub>fi</sub>	25 kA (264 V AC)
	3 kA (350 V AC)
Short-circuit current rating I <sub>SCCR</sub>	25 kA (264 V AC)
	3 kA (350 V AC)
Voltage protection level U <sub>p</sub>	≤ 1.5 kV
Residual voltage U <sub>res</sub>	≤ 1.5 kV (at I <sub>n</sub> )
	≤ 1.2 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
Front-of-wave sparkover voltage at 6 kV (1.2/50) µs	≤ 1.5 kV
TOV behavior at U <sub>T</sub>	415 V AC (5 s / withstand mode)
	457 V AC (120 min / safe failure mode)
Response time t <sub>A</sub>	≤ 25 ns
Max. backup fuse with V-type through wiring	125 A (gG)
Max. backup fuse with branch wiring	315 A (gG)
dditional technical data	
Maximum discharge current I <sub>max</sub> (8/20) μs	100 kA

#### 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)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (5 - 500 Hz/2.5 h/X, Y, Z)

#### Approvals

#### UL specifications

Maximum continuous operating voltage MCOV	264 V AC
Short-circuit current rating (SCCR)	50 kA
Voltage protection rating VPR	1200 V
Nominal discharge current I <sub>n</sub>	20 kA
Mode of protection	L-G
Nominal voltage	240 V AC



2905465

https://www.phoenixcontact.com/us/products/2905465

Rated load current I <sub>L</sub>	50 A		
Power distribution system	Single phase		
Nominal frequency	50/60 Hz		
SPD Type	2CA		
UL indicator/remote signaling			
Operating voltage	125 V AC		
AC operating current	1 A AC		
UL connection data			
Tightening torque	40 lb <sub>f</sub> -in.		
Conductor cross-section AWG	3 2		
Standards and regulations			
Standards/specifications	IEC 61643-11		
Note	2011		
EN 61643-11			
Standards/specifications	EN 61643-11		
Note	2012		
Mounting			
Mounting type	DIN rail: 35 mm		

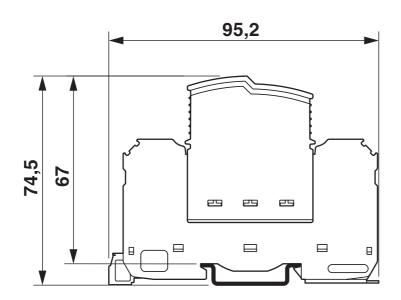


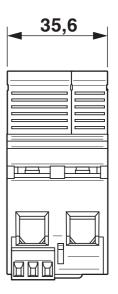
2905465

https://www.phoenixcontact.com/us/products/2905465

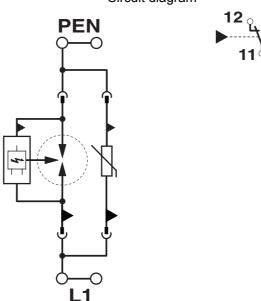
### Drawings

### Dimensional drawing





Circuit diagram





2905465

https://www.phoenixcontact.com/us/products/2905465

#### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2905465



**cUL Recognized**Approval ID: FILE E 330181



**UL Recognized** 

Approval ID: FILE E 330181



**IECEE CB Scheme** 

Approval ID: NL-58252

CCA

Approval ID: NTR-NL 7736



KEMA-KEUR

Approval ID: 71-106983

**UAE-RoHS** 

Approval ID: 23-10-88887



2905465

https://www.phoenixcontact.com/us/products/2905465

#### Classifications

#### **ECLASS**

	ECLASS-13.0	27171204		
	ECLASS-15.0	27171204		
ETIM				
	ETIM 9.0	EC001457		
UNSPSC				
	UNSPSC 21.0	39121600		



2905465

https://www.phoenixcontact.com/us/products/2905465

### 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