chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

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.



Lightning arrester, in acc. with Type 1 / Class I, for 3-phase power supply networks with combination installed N and PE (L1, L2, L3, PEN). For lightning protection equipotential bonding in accordance with lightning protection levels III and IV. For mounting on 40 mm busbar systems.

Your advantages

- Universal use – fits into every meter cabinet, regardless of manufacturer, with a narrow overall width of just 27 mm
- Installation in the unmetered area with application rule VDE-AR-N 4100 compliance – confirmed through VDE approval
- Mounts securely and without tools through a universal interlock on a 5 mm and 10 mm rail thickness
- Integration into building technology systems with optional remote signaling module

Commercial data

Item number	1168946
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CL1181
GTIN	4063151188207
Weight per piece (including packing)	625.3 g
Weight per piece (excluding packing)	554.9 g
Customs tariff number	85363090
Country of origin	DE

chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

Technical data

Product properties

Product type	Combination type
Product family	SEC Family
IEC test classification	I + II + III
	T1 + T2 + T3
EN type	T1 + T2 + T3
IEC power supply system	TN-C
Type	Busbar module, one-piece
Number of positions	3
Surge protection fault message	optical, remote signaling via optional module

Insulation characteristics

Overvoltage category	IV
Pollution degree	2

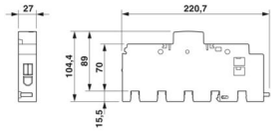
Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)

Connection data

Connection method	Screw connection
Screw thread	M6
Tightening torque	2.5 Nm
Stripping length	18 mm
Conductor cross section flexible	2.5 mm² ... 35 mm²
Conductor cross section rigid	2.5 mm² ... 50 mm²

Dimensions

Dimensional drawing	
Width	27 mm
	47 mm (with spacer lid)
	52 mm (with spacer lid)
Height	220.7 mm
Depth	104.4 mm
Horizontal pitch	1.5 Div.

Material specifications

Color	light gray (RAL 7035)

chanhvinh.com

Flammability rating according to UL 94	V-0
CTI value of material	175
Insulating material	PA 6.6
	PC
Material group	IIIa
Housing material	PA 6.6
	PC

Mechanical properties

Mechanical data

Open side panel	No

Protective circuit

Mode of protection	L-PEN
Direction of action	3L-PEN
Nominal voltage U_N	230/400 V AC ±10 % (TN-C)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	255 V AC
Nominal discharge current I_n (8/20) µs	20 kA
Combination wave U_{OC}	20 kV
Impulse discharge current (10/350) µs, charge	6.25 As
Impulse discharge current (10/350) µs, specific energy	39 kJ/Ω
Impulse discharge current (10/350) µs, peak value I_{imp}	12.5 kA
Total discharge current I_{total} (10/350) µs	37.5 kA
Follow current interrupt rating I_{fi}	25 kA
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p	≤ 1.5 kV
Front of wave sparkover voltage at 6 kV (1.2/50) µs	≤ 1.5 kV
TOV behavior at U_T	442 V AC (120 min / withstand mode)
Response time t_A	≤ 100 ns
Max. backup fuse with branch wiring	160 A (gG)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20C (Installed)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 6000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %

Standards and regulations

Standards/specifications	IEC 61643-11

chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

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

Mounting

Mounting type	Busbar 40 mm

chanhvinh.com

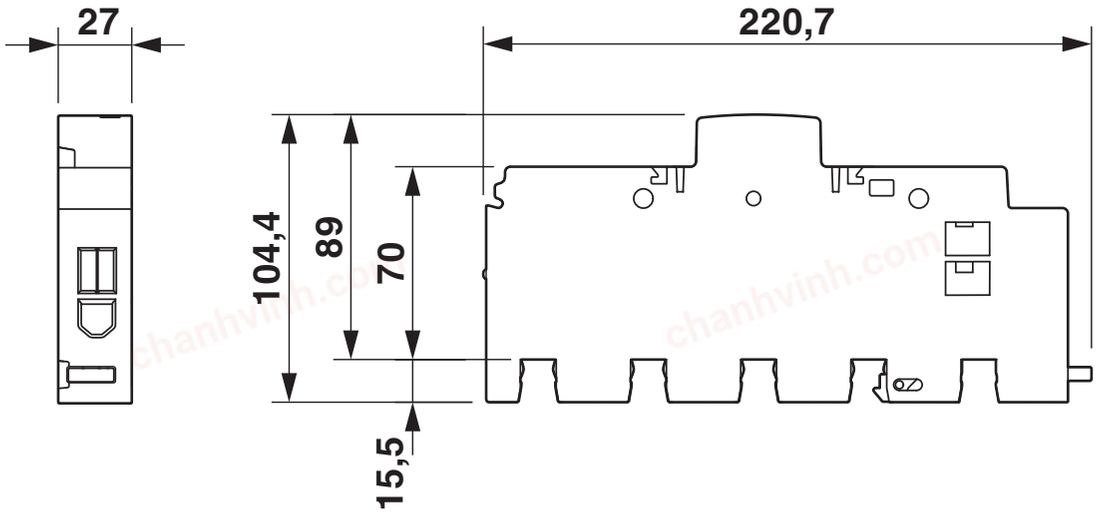
FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

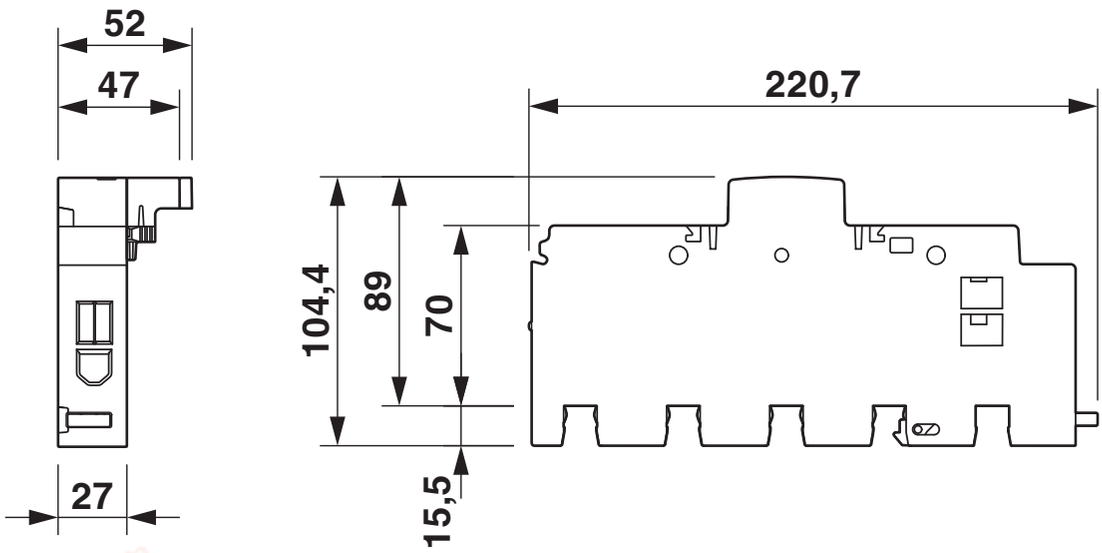
https://www.phoenixcontact.com/pc/products/1168946

Drawings

Dimensional drawing



Dimensional drawing



The figure shows the product with included spacer lid

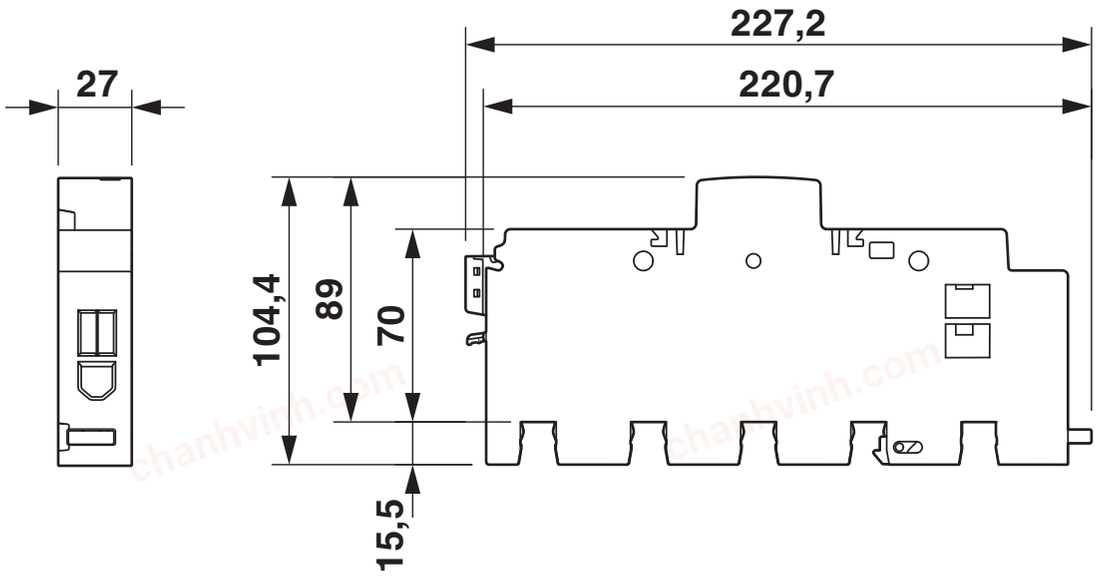
chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

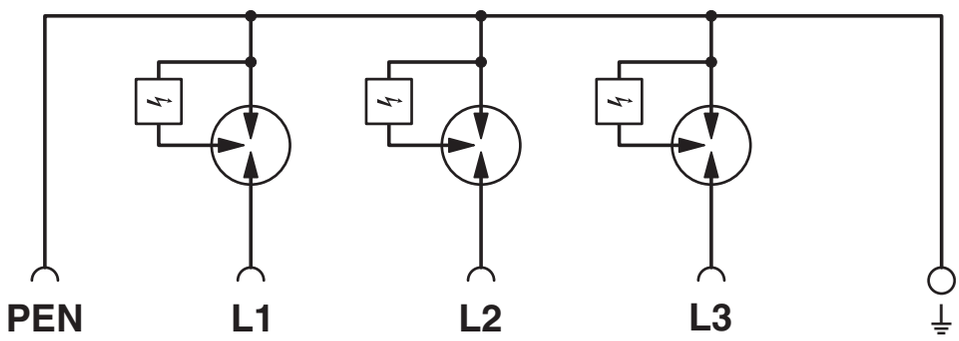
https://www.phoenixcontact.com/pc/products/1168946

Dimensional drawing



The figure shows the product with optional remote signaling “FM-MODULE”

Circuit diagram



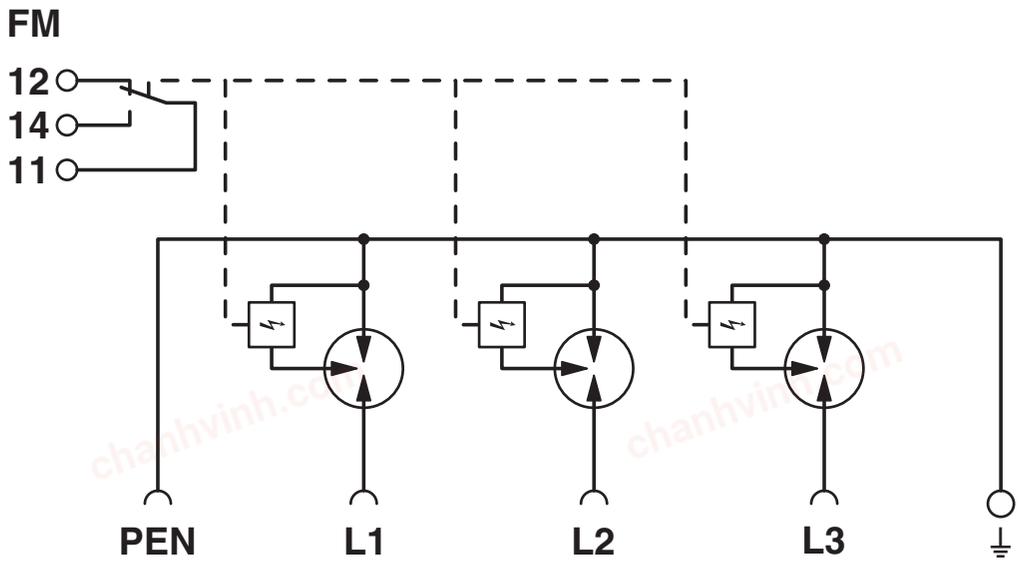
chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

Circuit diagram



The figure shows the product with optional remote signaling “FM-MODULE”

chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1168946

IECEE CB Scheme
Approval ID: NL-67563

CCA
Approval ID: NTR-NL 7853

KEMA-KEUR
Approval ID: 71-114664

VDE approval of drawings
Approval ID: 40052444

chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

Classifications

ECLASS

ECLASS-13.0	27171201

ETIM

ETIM 9.0	EC000381

UNSPSC

UNSPSC 21.0	39121600

chanhvinh.com

FLT-SEC-ZP2-3C-255/12.5 - Type 1+2+3 combined lightning current and surge arresters

1168946

https://www.phoenixcontact.com/pc/products/1168946

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.)	Perfluorobutane sulfonic acid (PFBS) and its salts(CAS: n/a)
SCIP	ddb64169-14f7-4538-a221-ed880efba9e2

EF3.0 Climate Change

CO2e kg	15.8 kg CO2e

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

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com