chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

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.



Base element for surge arresters, for insulated DC voltage systems, for DIN rail mounting, 3-pos. base element 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	1466786
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL138Z
Product key	CL138Z
GTIN	4063151862701
Weight per piece (including packing)	151.4 g
Weight per piece (excluding packing)	126.2 g
Customs tariff number	85366990
Country of origin	DE

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Technical data

Notes

General

Note	Depending on the installation height, additional minimum lateral distances to grounded, conductive surfaces may need to be observed. See the table in the download area under the item Packing slip in the installation notes.

Product properties

Product type	Base element
Product family	VAL-SPP
IEC test classification	PV II
	PV T2
EN type	T2
IEC power supply system	DC
Type	DIN rail module, two-section, divisible
Number of positions	3
Installation location	Indoor
Installation location of the disconnect device	Internal
Accessibility	Accessible
Connection configuration	Y configuration
End-of-life mode	OCFM (Open-Circuit Failure Mode)
Surge protection fault message	Remote indication contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

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 (≤2000 m (amsl))
	5 V AC ... 150 V AC (≤ ⏚⬇⬇⬇ m (amsl))
AC operating current	5 mA AC ... 1 A AC
DC operating voltage	30 V DC (≤ ⏚⬇⬇⬇ m (amsl))
DC operating current	1 A DC
DC operating voltage	125 V DC (≤ ⏚⬇⬇⬇ m (amsl))
DC operating current	200 mA DC
Insulation type	The product has double/reinforced insulation between the main and auxiliary circuit.

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

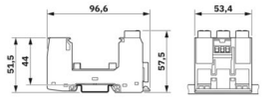
Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	2.5 Nm ... 3 Nm
Stripping length	12 mm
Conductor cross section flexible	1.5 mm² ... 16 mm²
	2x 1.5 mm² ... 6 mm² (2 conductors with the same cross-section)
Conductor cross section rigid	1.5 mm² ... 25 mm²
	2x 1.5 mm² ... 6 mm² (2 conductors with the same cross-section)
Conductor cross section AWG	15 ... 4
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm² ... 6 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm² ... 16 mm²
	2x 1.5 mm² ... 6 mm² (2 conductors with the same cross-section)
Conductor cross section flexible, with ferrule without plastic sleeve	1.5 mm² ... 16 mm²
	2x 1.5 mm² ... 6 mm² (2 conductors with the same cross-section)

Remote fault indicator contact

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
Stripping length	7 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	53.4 mm
Height	96.6 mm
Depth	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	3 Div.

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PBT

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Material group	I
Housing material	PBT

Mechanical properties

Mechanical data

Open side panel	No

Protective circuit

Mode of protection	(DC+) - (DC-)
	(DC+) - PE
	(DC-) - PE
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

PV protective circuit

Connection configuration	Y configuration
End-of-life mode	OCFM (Open-Circuit Failure Mode)

Protective circuit DC voltage side (DC)

Open circuit voltage U_{OCSTC}	1500 V DC
Maximum discharge current I_{max} (8/20) µs	40 kA
Total discharge current I_{Total} (8/20) µs	40 kA
Nominal discharge current I_n (8/20) µs	20 kA
Maximum continuous operating voltage U_{CPV}	1800 V DC (at ≤ 4000 m (amsl))
	1200 V DC (at ≤ 5000 m (amsl))

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 ±X, ±Y, ±Z)
Vibration (operation)	5g (5-500 Hz/2.5 h/XYZ)

Standards and regulations

Standards/specifications	EN 61643-31
Note	2019
Standards/specifications	IEC 61643-31
Note	2018

Mounting

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Mounting type	DIN rail: 35 mm

chanhvinh.com

chanhvinh.com

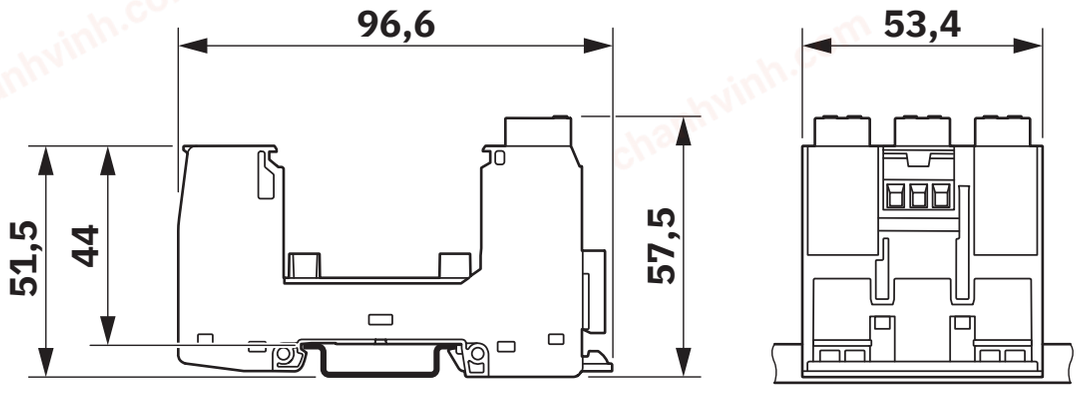
VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Drawings

Dimensional drawing



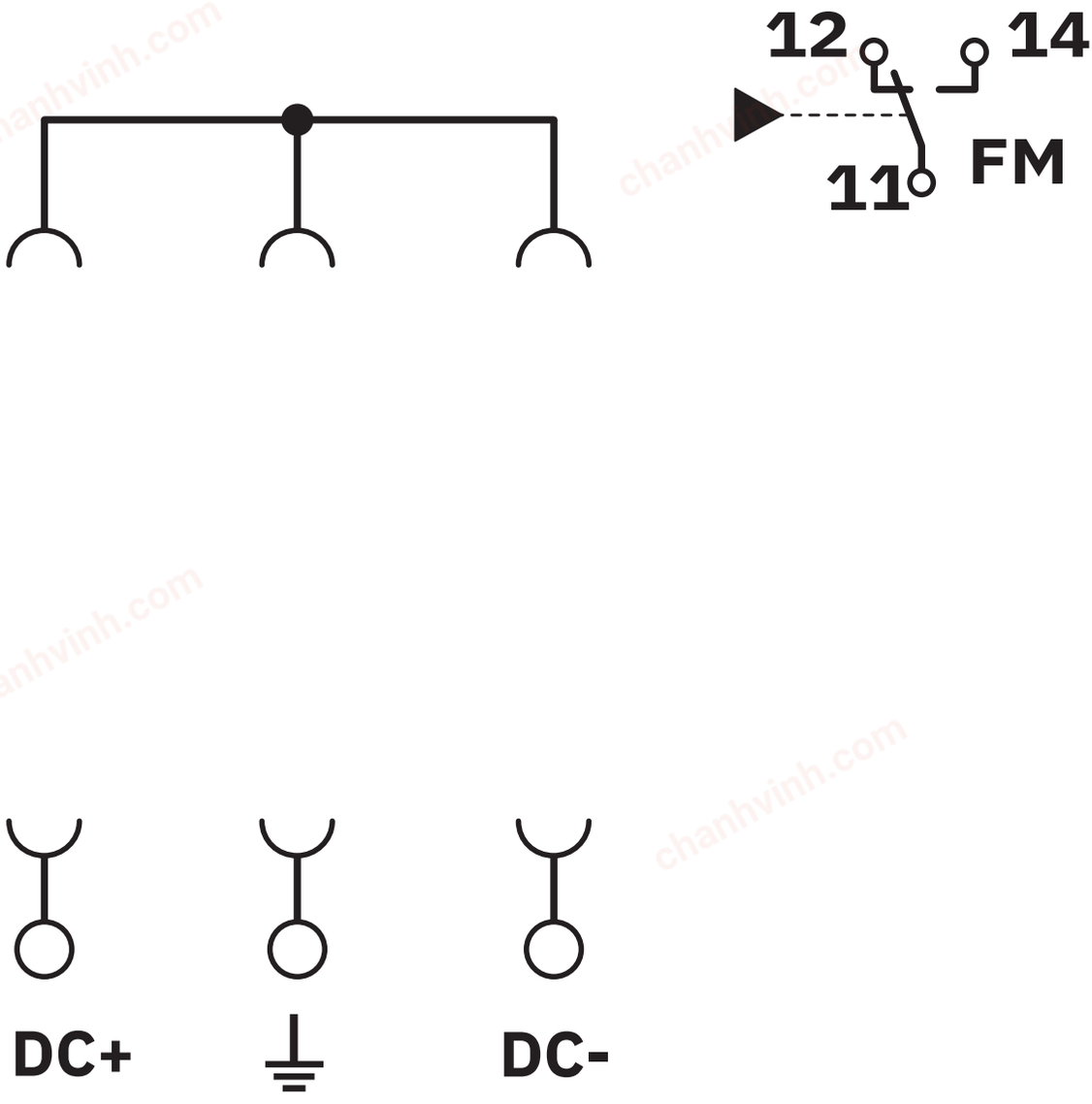
chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Circuit diagram



chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1466786

IECEE CB Scheme
Approval ID: NL-109183

CCA
Approval ID: NTR NL-8030

KEMA-KEUR
Approval ID: 71-133324

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

Classifications

ECLASS

ECLASS-13.0	27171492

ETIM

ETIM 9.0	EC002496

chanhvinh.com

VAL-SPP-BE-2+V/PV-UT-R - Surge protection base-element

1466786

https://www.phoenixcontact.com/gb/products/1466786

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