

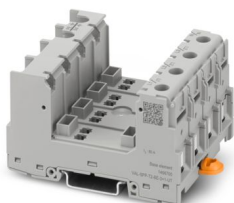
VAL-SPP-T2-BE-3+1-UT - Type 2 surge protection base element



1466705

<https://www.phoenixcontact.com/gb/products/1466705>

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Base element for type 2/Class II arresters from the VALVETRAB SPP product family. Version for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE).

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	1466705
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL138Z
Product key	CL138Z
GTIN	4063151861360
Weight per piece (including packing)	274.2 g
Weight per piece (excluding packing)	243 g
Customs tariff number	85363030
Country of origin	DE

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Technical data

Notes

General

Note	Depending on the voltage U_c, the installation height, and the pollution degree, additional minimum lateral distances to grounded, conductive surfaces may need to be observed. Pollution degree 2: $U_c \leq 440$: No lateral distances required. $U_c > 440$ V ... 880 V: A minimum distance of 6 mm must be observed up to an installation height of 3000 m. Pollution degree 3: $U_c \leq 385$ V: For wiring using a fork-type cable lug, an additional minimum distance of 1 mm must be observed for cross-sections ≥ 16 mm². $U_c > 385$ V ... 440 V: See the table in the download area under the item Packing slip in the installation notes.
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Product properties

Product type	Base element
Product family	VAL-SPP
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-S
	TT
Type	Base element, DIN rail mounting
Number of positions	4
Surge protection fault message	Remote signaling via optional module

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
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Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm ... 3.5 Nm
Stripping length	18 mm
Conductor cross section flexible	1.5 mm ² ... 35 mm ² (without ferrule)

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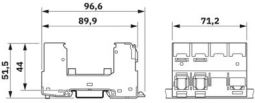


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	2x 1.5 mm ² ... 16 mm ² (2 conductors with the same cross-section)
Conductor cross section rigid	1.5 mm ² ... 50 mm ²
	2x 1.5 mm ² ... 16 mm ² (2 conductors with the same cross-section)
Conductor cross section AWG	15 ... 2
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm ² ... 16 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm ² ... 35 mm ²
	2x 1.5 mm ² ... 10 mm ² (2 conductors with the same cross-section)
Conductor cross section flexible, with ferrule without plastic sleeve	1.5 mm ² ... 25 mm ²
	2x 1.5 mm ² ... 16 mm ² (2 conductors with the same cross-section)
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm ² ... 25 mm ²

Dimensions

Dimensional drawing	
Width	71.2 mm
Height	96.6 mm
Depth	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	4 Div.

Material specifications

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

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Mode of protection	L-N
	L-PE
	N-PE
Nominal voltage U _N	400/690 V AC ±10 % (TN-S)

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	400/690 V AC $\pm 10\%$ (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	440 V AC
Rated load current I_L	80 A (25 mm ²)
Nominal discharge current I_n (8/20) μ s	40 kA
Maximum discharge current I_{max} (8/20) μ s	80 kA
Total discharge current I_{Total} (8/20) μ s	80 kA
Short-circuit current rating I_{SCCR}	50 kA
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
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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)

Approvals

UL specifications

Nominal voltage	347/600 V AC
Nominal frequency	50/60 Hz

UL connection data

Tightening torque	27 lb _F -in. ... 31 lb _F -in.
Conductor cross section AWG	14 ... 2

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
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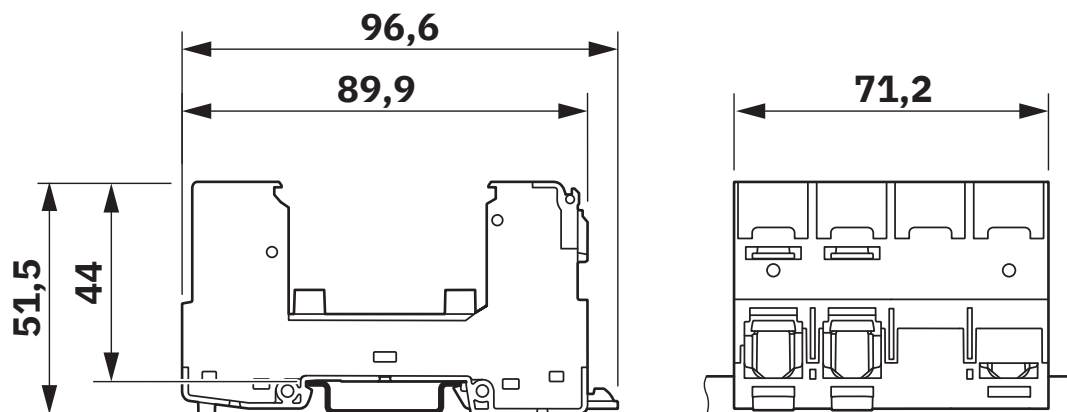


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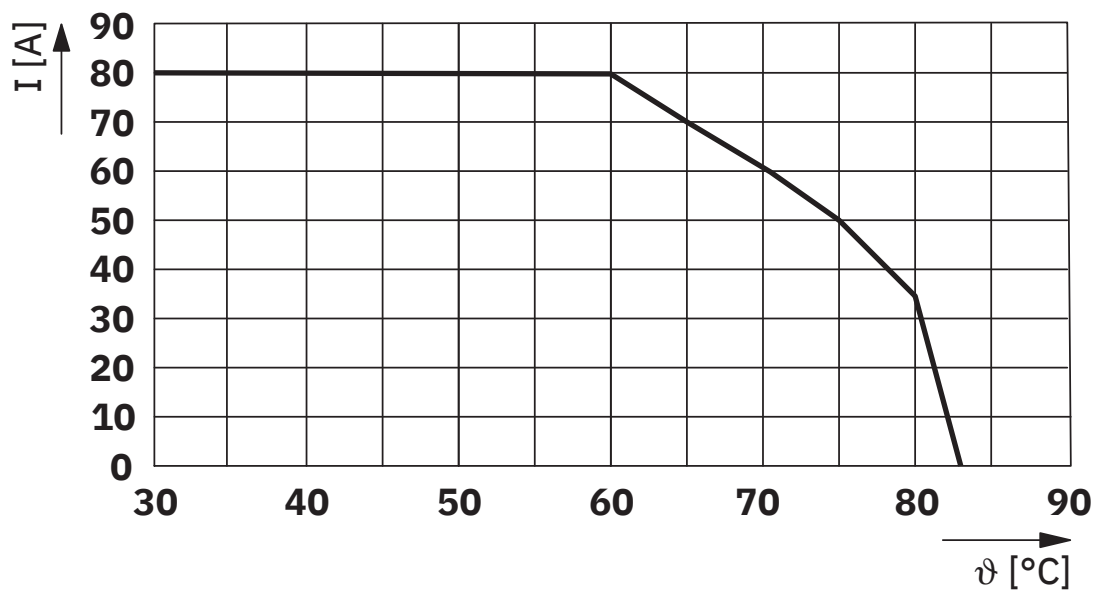
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Drawings

Dimensional drawing



Diagram



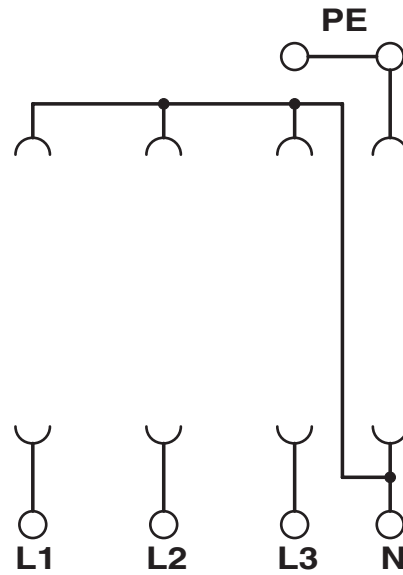
Max. permissible current in relation to the ambient temperature

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Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/1466705>



IECEE CB Scheme

Approval ID: NL-109184

CCA

Approval ID: NTR NL-8052



KEMA-KEUR

Approval ID: 71-138153 REV.2



cULus Recognized

Approval ID: E330181

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Classifications

ECLASS

ECLASS-13.0	27171292
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ETIM

ETIM 9.0	EC002496
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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%
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PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk