

## Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Replacement plug for surge protective devices from the VALVETRAB SEC product range for DC power sources.

### Your advantages

- ✓ Varistor arrester with a low leakage current
- ✓ Extremely narrow design, just 12 mm per position
- ✓ High continuous voltage of 150 V DC for linear DC current sources with voltage fluctuations
- ✓ Pluggable
- ✓ Low voltage protection level
- ✓ Optical, mechanical status indicator
- ✓ With floating remote indication contact
- ✓ Plugs can be checked with CHECKMASTER 2



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 245034
GTIN	4055626245034
Weight per Piece (excluding packing)	60.000 g
Custom tariff number	85363010
Country of origin	Germany

### Technical data

#### Dimensions

Height	46.4 mm
Width	11.7 mm

# Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

## Technical data

### Dimensions

Depth	59.4 mm
Horizontal pitch	0.6 Div.

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 6000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

### General

IEC test classification	II
	T2
EN type	T2
IEC power supply system	DC
Mode of protection	(DC+) - (DC-)
	(DC+/DC-) - PE
Mounting type	on base element
Color	light grey RAL 7035
Housing material	PA 6.6-FR 20 % GF
	PBT-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	Male
Number of positions	1
Surge protection fault message	optical

### Protective circuit

Nominal voltage $U_N$	100 V DC ... 120 V DC
Maximum continuous voltage $U_C$	150 V DC
Residual current $I_{PE}$	≤ 5 μA DC
Nominal discharge current $I_n$ (8/20) μs	20 kA
Maximum discharge current $I_{max}$ (8/20) μs	40 kA
Impulse discharge current (10/350) μs, charge	0.5 As
Impulse discharge current (10/350) μs, specific energy	0.25 kJ/Ω
Impulse discharge current (10/350) μs, peak value $I_{imp}$	1 kA
Short-circuit current rating $I_{SCCR}$	0.2 kA (without backup fuse)

## Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

### Technical data

#### Protective circuit

	6 kA (for 20 A gG/B backup fuse)
Voltage protection level $U_p$	$\leq 0.85$ kV
Residual voltage $U_{res}$	$\leq 0.85$ kV (at $I_n$ )
	$\leq 0.75$ kV (at 10 kA)
	$\leq 0.65$ kV (at 5 kA)
	$\leq 0.63$ kV (at 4 kA)
	$\leq 0.57$ kV (at 2 kA)
TOV behavior at $U_T$	174 V DC (5 s / withstand mode)
Response time $t_A$	$\leq 25$ ns
Max. backup fuse with V-type through wiring	20 A (gG / B at $I_{SCCR} > 200$ A)
Max. backup fuse with branch wiring	20 A (gG / B at $I_{SCCR} > 200$ A)

#### Connection data

Connection method	pluggable
-------------------	-----------

#### UL specifications

SPD Type	1CA
Maximum continuous operating voltage MCOV	150 V DC
Nominal voltage	120 V DC
Mode of protection	(DC+) - G
	(DC-) - G
Power distribution system	DC
Voltage protection rating VPR	700 V
Nominal discharge current $I_n$	20 kA
Short-circuit current rating (SCCR)	50 kA

#### Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

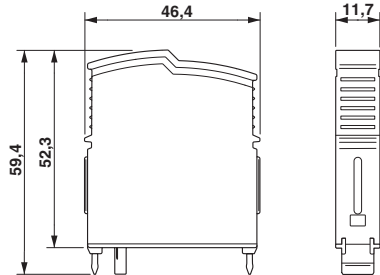
#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

# Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

Dimensional drawing



Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27130890
eCl@ss 11.0	27130890
eCl@ss 5.1	27130801
eCl@ss 6.0	27130800
eCl@ss 7.0	27130805
eCl@ss 9.0	27130890

### ETIM

ETIM 6.0	EC000941
ETIM 7.0	EC000941

### UNSPSC

UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

## Approvals

### Approvals

#### Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

# Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

## Approvals

### Approval details

EAC			RU C-DE.*09.B.00169
-----	--	--	---------------------

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
---------------	--	---	---------------

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 330181
----------------	--	---	---------------

cULus Recognized			
------------------	--	--	--

## Accessories

### Accessories

#### Device marking

Label - EML (20XE)R - 0803452



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

Label - EML (20XE)R YE - 0803453



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

#### Marker pen

## Type 2 surge protection plug - VAL-SEC-T2-120DC-P - 2907878

### Accessories

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm