



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Surge protection device - TTC-6-2-HC-24DC-UT-I - 2908438

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>)



Surge protection with integrated status indicator for a 2-wire floating signal circuit with high nominal current.

Why buy this product

- ✓ Space-saving installation due to the narrow overall width of 6.2 mm
- ✓ Signaling without additional auxiliary power, thanks to the mechanical status indicator
- ✓ Optional remote signaling module monitors up to 40 items, without additional wiring
- ✓ Safe behavior in the event of overload, thanks to the integrated disconnect device

RoHS

6 A

24 V

IP20

2.5 mm²

SIL


evaluated
IEC 61508

D

H

W

Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 STK |
| GTIN |  4 055626 300429 |
| GTIN | 4055626300429 |

Technical data

Dimensions

| | |
|--------|---------------------------------|
| Height | 105.8 mm |
| Width | 6.2 mm +0.1 mm |
| Depth | 83.5 mm (incl. DIN rail 7.5 mm) |

Ambient conditions

| | |
|---|--|
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Altitude | ≤ 4000 m (amsl (above mean sea level)) |
| Degree of protection | IP20 |

General

| | |
|------------------|-----|
| Housing material | PBT |
|------------------|-----|

Surge protection device - TTC-6-2-HC-24DC-UT-I - 2908438

Technical data

General

| | |
|--|--|
| Flammability rating according to UL 94 | V-0 |
| Color | traffic grey A RAL 7042 |
| Mounting type | DIN rail: TH 35 - 7.5 mm |
| Type | DIN rail module, one-piece |
| Direction of action | Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground |

Protective circuit

| | |
|---|---|
| IEC test classification | C1 |
| | C2 |
| | C3 |
| | D1 |
| Nominal voltage U_N | 24 V DC |
| Maximum continuous voltage U_C | 30 V DC |
| Rated current | 6 A (55 °C) |
| Operating effective current I_C at U_C | $\leq 5 \mu A$ |
| Residual current I_{PE} | $\leq 1 \mu A$ |
| Nominal discharge current I_n (8/20) μs (line-line) | 0.5 kA |
| Nominal discharge current I_n (8/20) μs (line-earth) | 5 kA |
| Pulse discharge current I_{imp} (10/350) μs (line-earth) | 0.5 kA |
| Total discharge current I_{total} (8/20) μs | 5 kA |
| Voltage protection level U_p (line-line) | $\leq 50 V$ (C1 - 1 kV/500 A) |
| | $\leq 45 V$ (C3 - 25 A) |
| | $\leq 50 V$ (C3 - 100 A) |
| Voltage protection level U_p (line-earth) | $\leq 1.35 kV$ (C1 - 1 kV/500 A) |
| | $\leq 1.45 kV$ (C2 - 10 kV / 5 kA) |
| | $\leq 850 V$ (C3 - 25 A) |
| | $\leq 1.1 kV$ (C3 - 100 A) |
| Response time t_A (line-line) | $\leq 1 ns$ |
| Response time t_A (line-earth) | $\leq 100 ns$ |
| Input attenuation aE, sym. | typ. 0.3 dB ($\leq 300 kHz / 150 \Omega$) |
| Cut-off frequency f_g (3 dB), sym. in 150 Ohm system | typ. 1 MHz |
| Capacity (line-earth) | typ. 2.2 nF |
| Resistance in series | $\leq 100 m\Omega$ |
| Surge protection fault message | optical |
| Max. required back-up fuse | 6.3 A (FF) |
| Impulse durability (line-line) | C1 - 1 kV/500 A |
| | C3 - 100 A |
| Impulse durability (line-earth) | C1 - 1 kV/500 A |
| | C2 - 10 kV/5 kA |
| | C3 - 100 A |

Surge protection device - TTC-6-2-HC-24DC-UT-I - 2908438

Technical data

Protective circuit

| | |
|-------------------------------|------------|
| | D1 - 500 A |
| Pulse reset time (line-earth) | ≤ 40 ms |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Screw thread | M3 |
| Tightening torque | 0.5 Nm ... 0.6 Nm |
| Stripping length | 8 mm |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section solid | 0.2 mm ² ... 4 mm ² |
| Conductor cross section AWG | 24 ... 12 |

Standards and Regulations

| | |
|--------------------------|--|
| Standards/specifications | IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012 |
| | EN 61643-21 2001 + A1:2009 + A2:2013 |

Environmental Product Compliance

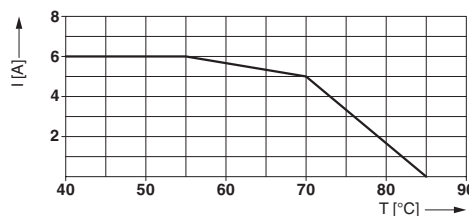
| | |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

Drawings

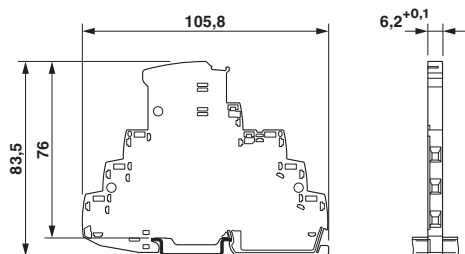
Pictogram



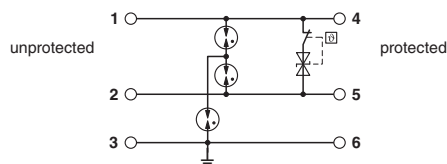
Diagram



Dimensional drawing



Circuit diagram



Approvals

Approvals

Surge protection device - TTC-6-2-HC-24DC-UT-I - 2908438

Approvals

Approvals

UL Listed / CSA / CSAus / DNV GL / cCSAus

Ex Approvals

Approval details

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 138168 |
| CSA | | http://www.csagroup.org/services-industries/product-listing/ | 70136717 |
| CSAus | | http://www.csagroup.org/services-industries/product-listing/ | 70136717 |
| DNV GL | | http://exchange.dnv.com/tari/ | TAE000027G |
| cCSAus | | http://www.csagroup.org/services-industries/product-listing/ | |

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>