

## Surge protection device - TTC-6-GDT-D-60AC-UT-I - 2906846

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Coarse surge protection with integrated status indicator for a 2-wire floating signal circuit.


The figure shows the version with 24 V AC

### 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
- ✓ Coarse surge protection by means of gas discharge tube



### Key Commercial Data

Packing unit	1
GTIN	 4 055626 137025
GTIN	4055626137025
Custom tariff number	85363010

### Technical data

#### Dimensions

Height	92 mm
	92 mm
Width	6.2 mm
Depth	69.5 mm

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20 (with end cover)

### General

Housing material	PBT
Flammability rating according to UL 94	V-0
Color	traffic grey A RAL 7042
Mounting type	DIN rail: 35 mm
Design	Rail-mountable module, one-piece
Direction of action	Line-Earth Ground

### Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage $U_N$	60 V AC
Maximum continuous voltage $U_C$	75 V AC
Rated current	2 A (60°C)
Operating effective current $I_C$ at $U_C$	$\leq 1 \mu A$
Nominal discharge current $I_n$ (8/20) $\mu s$ (core-GND)	5 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu s$ (core-GND)	0.5 kA
Voltage protection level $U_p$ (core-GND)	$\leq 800 V$ (C1 - 2 kV)
	$\leq 1 kV$ (C2 - 10 kV)
	$\leq 800 V$ (C3 - 25 A)
	$\leq 900 V$ (C3 - 100 A)
Response time $t_A$ (core-earth)	$\leq 100 ns$
Input attenuation $aE$ , asym.	typ. 0.3 dB ( $\leq 8 MHz / 150 \Omega$ )
	typ. 0.3 dB ( $\leq 30 MHz / 50 \Omega$ )
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 50 Ohm system	typ. 130 MHz
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 150 Ohm system	typ. 25 MHz
Capacity (Core-GND)	5 pF
Resistance in series	$\leq 100 m\Omega$
Surge protection fault message	optical
Impulse durability (conductor-GND)	C1 - 1 kA
	C2 - 5 kA
	C3 - 100 A

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## Technical data

### Protective circuit

	D1 - 500 A
Pulse reset time (conductor-GND)	$\leq 1$ ms

### Connection data

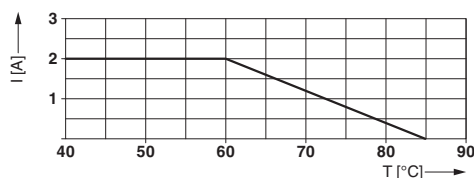
Connection method	Screw connection
Connection method IN	Screw terminal blocks
Connection method OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12

### Standards and Regulations

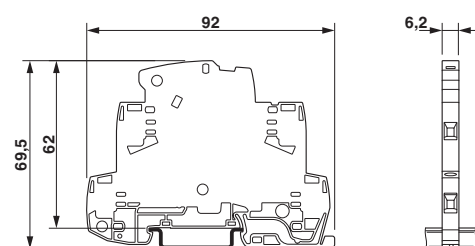
Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

## Drawings

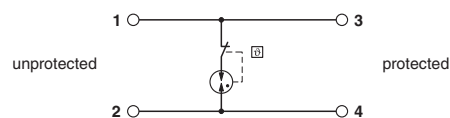
Diagram



Dimensional drawing



Circuit diagram



## Approvals

### Approvals

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## Approvals

Approvals

UL Listed

Ex Approvals

## Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 138168
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