

Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

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>)



TAE outlet box (NFN) for surface mounting with surge protection for analog and digital telecommunications interfaces (VDSL up to 50 Mbps, on short paths (< 300 m) up to 100 Mbps)

Your advantages

- ✓ For surface mounting
- ✓ Three TAE6 slots
- ✓ Suitable for DSL (ADSL2+)
- ✓ Main areas of application: phone terminals, answering machines, modems, and fax machines
- ✓ For two N-coded and one F-coded termination device



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4017918108199

Technical data

Dimensions

Height	27 mm
Width	65 mm
Depth	80 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Degree of protection	IP20

General

Housing material	ABS
Color	cream white
Standards for clearances and creepage distances	VDE 0110-1
	IEC 60664-1

Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Technical data

General

For country-specific use in	D
Mounting type	Surface/Wall mounting
Type	Socket for surface mounting
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	B2
	C1
	C2
	C3
	D1
VDE requirement class	B2
	C1
	C2
	C3
	D1
Nominal voltage U_N	60 V DC
Maximum continuous voltage U_C	185 V DC
Rated current	450 mA ($\leq 40^\circ\text{C}$)
Operating effective current I_C at U_C	$\leq 10 \mu\text{A}$
Residual current I_{PE}	$\leq 6 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (line-line)	5 kA
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Total discharge current I_{total} (8/20) μs	10 kA
Total discharge current I_{total} (10/350) μs	5 kA
Max. discharge current I_{max} (8/20) μs maximum (line-line)	5 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	5 kA
Nominal pulse current I_{an} (10/1000) μs (line-line)	100 A
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Nominal pulse current I_{an} (10/700) μs (line-line)	150 A
Nominal pulse current I_{an} (10/700) μs (line-earth)	150 A
Output voltage limitation at 1 kV/ μs (line-line) spike	$\leq 250 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 450 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-line) static	$\leq 250 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 450 \text{ V}$
Voltage protection level U_p (line-line)	$\leq 250 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 250 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 250 \text{ V}$ (B2 - 4 kV / 100 A)
Voltage protection level U_p (line-earth)	$\leq 500 \text{ V}$ (C2 - 10 kV / 5 kA)
	$\leq 450 \text{ V}$ (C1 - 1 kV/500 A)
	$\leq 400 \text{ V}$ (B2 - 4 kV / 100 A)

Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Technical data

Protective circuit

Response time t_A (line-line)	$\leq 1 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	0.3 dB ($\leq 1 \text{ MHz} / 150 \Omega$)
	0.3 dB ($\leq 400 \text{ kHz} / 600 \Omega$)
Input attenuation aE, asym.	0.3 dB ($\leq 400 \text{ kHz} / 600 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 8 MHz
Cut-off frequency f_g (3 dB), sym. in 600 Ohm system	typ. 2 MHz
Capacity (line-line)	typ. 200 pF ($f = 1 \text{ MHz} / V_R = 0 \text{ V}$)
Capacity (line-earth)	typ. 15 pF ($f = 1 \text{ MHz} / V_R = 0 \text{ V}$)
Resistance per path	2.2 Ω 10 %
Short-circuit current self-quenching	150 mA
Surge protection fault message	none
Impulse durability (line-line)	C2 - 10 kV / 5 kA
	C1 - 1 kV / 500 A
	B2 - 4 kV / 100 A
Impulse durability (line-earth)	C2 - 10 kV / 5 kA
	C1 - 1 kV / 500 A
	B2 - 4 kV / 100 A
	D1 - 2.5 kA
Alternating current carrying capacity (line-earth)	5 A - 1 s

Connection data

Connection method	Screw connection & TAE 6
Connection method IN	Screw terminal blocks
Connection method OUT	3x TAE-NFN
Connection technology	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	6 mm
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	26 ... 16

Connection, equipotential bonding

Connection method	Screw terminal block
Stripping length	6 mm
Tightening torque, min	0.5 Nm
Conductor cross section flexible min.	0.14 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG min.	26

Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Technical data

Connection, equipotential bonding

Conductor cross section AWG max.	16
----------------------------------	----

Standards and Regulations

Standards/regulations	IEC 61643-21
Standards/specifications	DIN EN 61643-21 2002
	IEC 61643-21 2000

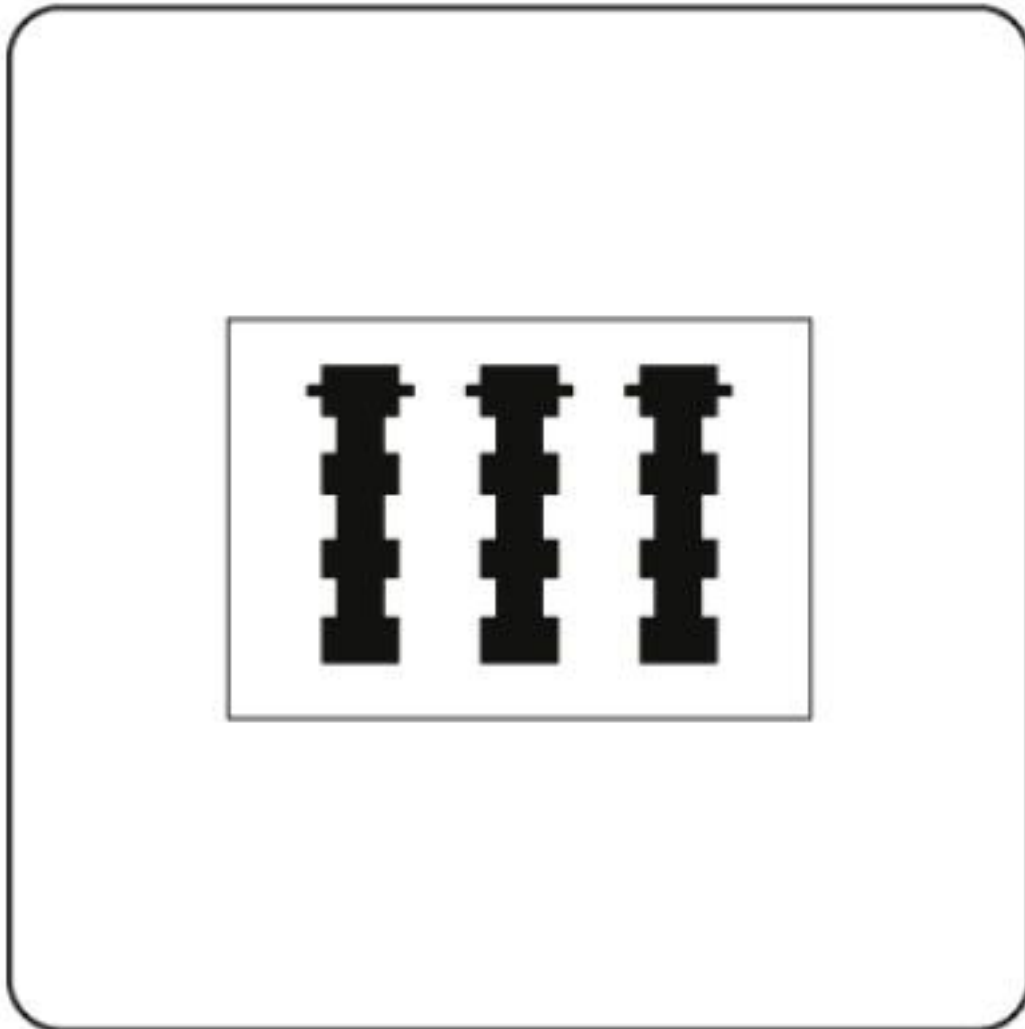
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

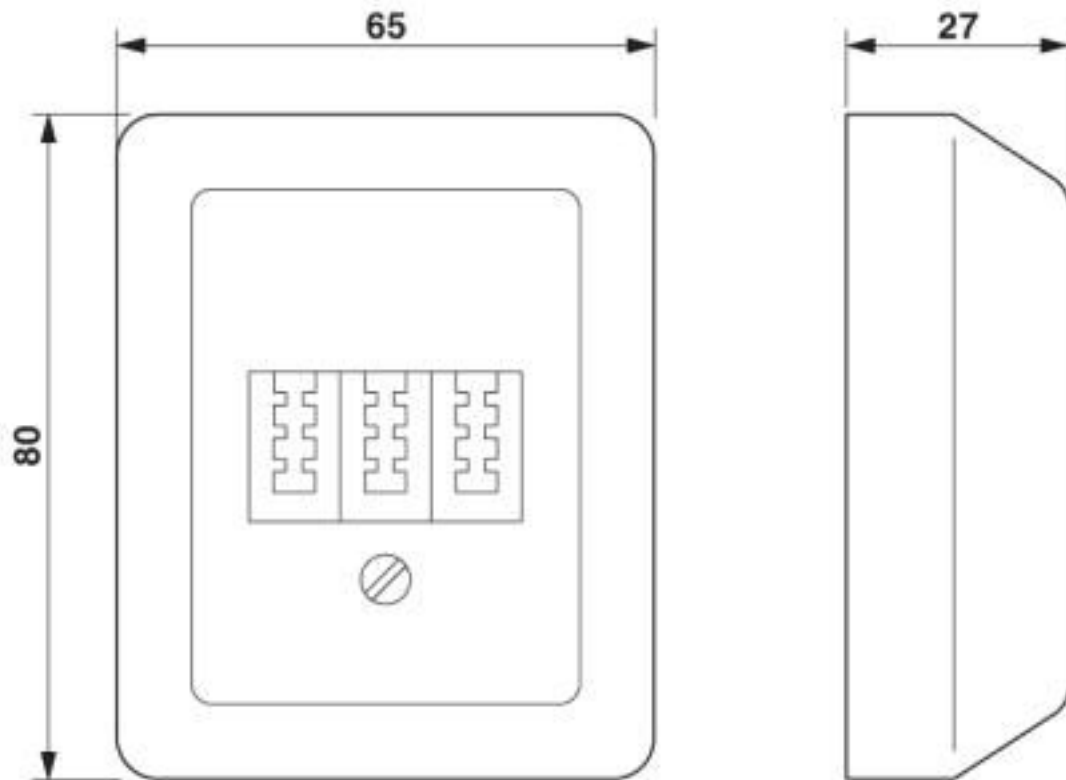
Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Product drawing

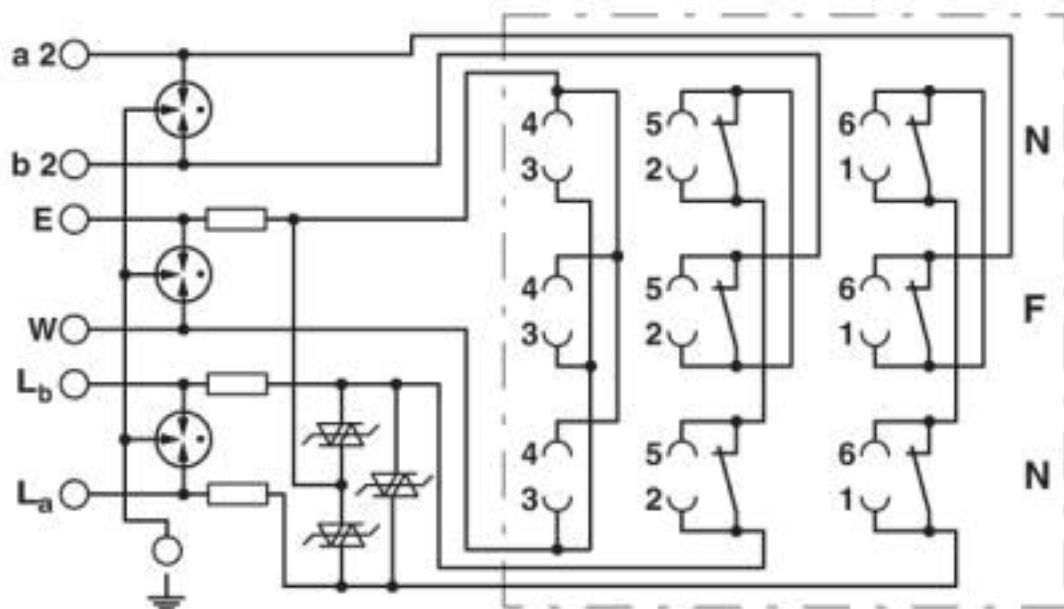


Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Dimensional drawing



Circuit diagram



Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Classifications

eCl@ss

eCl@ss 10.0.1	27130807
eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943
ETIM 6.0	EC000943
ETIM 7.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

Surge protection device - TAE-TRAB FM-NFN-AP - 2749628

Approvals

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

Phoenix Contact 2020 © - 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>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[2749628](#)