



(1) **EU-Type Examination Certificate**

- (2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 2014/34/EU**
- (3) Certificate number: **SEV 19 ATEX 0159 U**
- (4) Product: Printed Circuit Terminal Blocks, SPTAF 1/...-EX(PROFINET...)
Type See Appendix
- (5) Manufacturer: Phoenix Contact GmbH & Co.KG
- (6) Address: Flachsmarktstrasse 8, 32825 Blomberg, Germany
- (7) The equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the European parliament and of the council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential report no 18-Ex-0156.X02
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
EN 60079-7:2015
EN 60079-0:2018
- Except in respect of those requirements listed at item 18 of the schedule.
- (10) If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- (11) This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- (12) The marking of the product shall include the following:



II 2 G Ex eb IIC T6...T1 Gb

Eurofins Electric & Electronic Product Testing AG
Notified Body ATEX

Martin Plüss
Product Certification



Appendix to: SEV 19 ATEX 0159 U**Issue No.: 1**
page 2 of 4**Applicant Name:** Phoenix Contact GmbH & Co. KG**Product:** Printed Circuit Terminal Blocks, SPTAF 1/...-EX(PROFINET...)**(13) Description of product**

Model/type reference: SPTAF 1/...-3,5-IL-EX(PROFINET...)
SPTAF 1/...-3,5-EL-EX(PROFINET...)
SPTAF 1/...-5,0-IL-EX(PROFINET...)
SPTAF 1/...-5,0-EL-EX(PROFINET...)

Rating: I = 16 AAC
PTAF 1/...-3,5-IL-EX(PROFINET...), and
SPTAF 1/...-3,5-EL-EX(PROFINET...) : Un= 44 VAC
SPTAF 1/...-5,0-IL-EX(PROFINET...), and
SPTAF 1/...-5,0-EL-EX(PROFINET...) : Un= 137.5 VAC

The circuit board terminals connect copper lines to electrical assemblies. The terminals are group II components in the categories 2G and are mounted on the circuit board by soldering. The wiring is to be introduced without a tool into the connectors. A locking pressure mechanism ensures the connection. It can be released by applying a force with a screwdriver to remove the wires. Components are to be introduced into an enclosure and are therefore marked by "U".

Classification of installation and use:

Rated ambient temperature range (°C):

Rated ambient temperature range (°C) for Ex Components:

Stationary

See below

Tamb min = - 60 °C

The maximal service temperature is 100 °C and depends on the current rating and on the ambient temperature

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Swiss Certification Body

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Ex component technical information:

Type:	SPTAF 1/...-3,5-IL-EX...	SPTAF 1/...-3,5-EL-EX...	SPTAF 1/...-5,0-IL-EX...	SPTAF 1/...-5,0-EL-EX...
Rated voltage [V]	44 VAC	44 VAC	137.5 VAC	137.5 VAC
- with jumper FBS...	none	none	none	none
- with skipping jumper [V]	none	none	none	none
- with skipping jumper type PE [V]	none	none	none	none
- with cut to length bridge [V]	none	none	none	none
- with cut to length bridge and cover type D [V]	none	none	none	none
- with cut to length bridge and cover type ATP [V]	none	none	none	none
Rated current [A]	16 AAC	16 AAC	16 AAC	16 AAC
with jumper type FBS ... [A]	---	---	---	---
Max. load current [A]	16 AAC	16 AAC	16 AAC	16 AAC
Temperature rise [K]	40	40	40	40
Contact resistance [mΩ]				
- first level	0.8	0.8	0.8	0.8
- second level	---	---	---	---
- third level	---	---	---	---
- lower / upper level	---	---	---	---
Rated cross-section [mm²] (AWG)	1,5	1,5	1.5	1.5
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0.2 ... 1.5	0.2 ... 1.5	0.2 ... 1.5	0.2 ... 1.5
- flexible [mm²] (AWG)	0.2 ... 1.5	0.2 ... 1.5	0.2 ... 1.5	0.2 ... 1.5
- rigid with end ferrule [mm²] (AWG)	0.25 ... 0.75	0.25 ... 0.75	0.25 ... 0.75	0.25 ... 0.75
- flexible with end ferrule [mm²] (AWG)	0.25 ... 0.75	0.25 ... 0.75	0.25 ... 0.75	0.25 ... 0.75
Assembly as stated	Assembly: by hand Disconnection: screwdriver SZF 0-0,4X2,5 - 1204504	Assembly: by hand Disconnection: screwdriver SZF 0-0,4X2,5 - 1204504	Assembly: by hand Disconnection: screwdriver SZF 0-0,4X2,5 - 1204504	Assembly: by hand Disconnection: screwdriver SZF 0-0,4X2,5 - 1204504
Stripping length [mm]	8	8	8	8
Service temperature [°C]	-60 ... +100	-60 ... +100	-60 ... +100	-60 ... +100
Connecting capacity (number of conductors per clamping unit)	1	1	1	1
Torque force	none	none	none	none

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(14) Specific conditions of use

The device marking is denoted by "U" to specified that:

- The device is to be inserted into an IP54 enclosure that meet the requirements of the standards IEC/EN 60079-0 and IEC/EN 60079-7.
- Conductors with smaller cross-sections than the rated cross-section specified for the terminal block can be chosen. The current is to adapted in consequence.
- The terminal blocks are suitable for use into an equipment (in a junction boxes or a connection boxes) of temperature class T6...T1. This applies with the condition that the specified rated current is not exceeded and that the ambient temperature in the immediate vicinity of the terminal blocks is a maximum of +40 ° C.
- When the terminal blocks is used in an equipment of temperature classes T6 to T1, the highest insulation temperature must not exceed 100 °C (during operation).
- The service temperature is: - 60 °C ... 100 °C.
- Make sure that the terminal solder connections are not mechanically stressed. Additionally secure the terminals on the printed circuit board or in the housing with following suitable mounting options:
 - Screwing
 - Deformation of the solder pins before soldering
 - Other appropriate measure
- By using the terminals in combination with qualified accessories, clearances and creepage distances must comply with IEC 60079-7.
- During the conductor connection, make sure that the core insulation of the cables protrude as far as possible into the cable funnels of the terminal.
For flexible cables with ferrules, use only qualified crimping tool. The length of the conductive part of the ferrule must match the specified stripping length.

(15) Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
None	

(16) Drawings and Documents

See test report "Manufacturer's Documents"