

# PCB terminal block - SPTAF 1/ 9-3,5-EL-EX - 1071006

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PCB terminal block, nominal current: 16 A, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.5 mm, number of positions: 9, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.6 mm



The figure shows 10-pos. standard item (without EX marking)

### Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Finger-operated release button for very convenient operation
- $\ensuremath{\,^{\scriptsize \ensuremath{\mathbb{M}}}}$  Small component size for applications where space is at a premium
- Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- Quick and convenient testing using integrated test option



# Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	4 063151 100735
GTIN	4063151100735

# Technical data

## Item properties

Brief article description	PCB terminal block
Range of articles	SPTAF 1/EL-EX
Pitch	3.5 mm
Number of positions	9
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1



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# Technical data

## **Electrical parameters**

Nominal current	16 A
Nom. voltage	44 V

## Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup> (When connecting and possibly adjusting a solid conductor of 1.5 mm <sup>2</sup> , the mechanical lateral forces, which can affect the terminal block, have to be absorbed by lateral support.)
Conductor cross section flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup>
Stripping length	8 mm

#### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (2 - 4 μm Sn)
Metal surface soldering area (top layer)	Tin (2 - 4 μm Sn)

#### Material data - housing

Housing color	green (6021)
Insulating material	РА
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

## Dimensions for the product

Length [1]	11 mm
Width [ w ]	33 mm
Height [ h ]	12.8 mm
Pitch	3.5 mm
Height (without solder pin)	10.2 mm
Solder pin [P]	2.6 mm
Pin dimensions	0.75 x 0.3 mm

## Dimensions for PCB design

	Hole diameter	1.1 mm
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# Packaging information

Type of packaging	Тгау
Pieces per package	50
Denomination packing units	Pcs.



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# Technical data

## General product information

Type of note	Note on application
	Note on Ex protection
	Note on Ex protection
Note	Maximum permissible outer diameter of the wire insulation $\leq$ 3 mm
	Certificate of conformity and EX certificate available upon request
	Further information is to be found in the installation notes.

#### Ambient conditions

Ambient temperature (storage/transport)	-40 °C 70 °C
Ambient temperature (assembly)	-5 °C 100 °C
Ambient temperature (operation)	-40 °C 100 °C

#### Termination and connection method

Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

## Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.25 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

#### Mechanical tests according to standard

Test specification	IEC 60947-7-4

### Electrical tests

Rated current	16 A
Conductor cross section	1.5 mm <sup>2</sup>

#### Air clearances and creepage distances

#### Temperature-rise test

Result	Test passed
Specification	IEC 60947-7-4:2013-08

### Current carrying capacity / derating curves

Specification	IEC 60947-7-4

## Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz



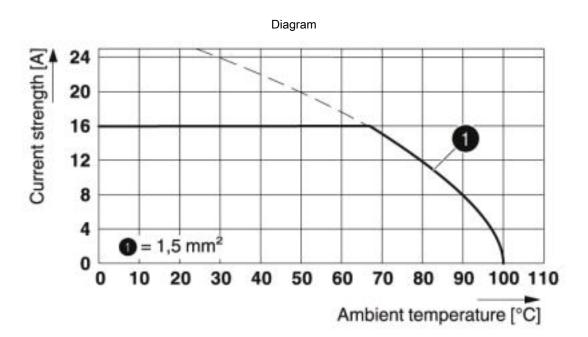
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## Vibration test

Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Test duration per axis	2.5 h

# Drawings



Type: SPTAF 1/...-3,5-IL(EL)

# Accessories

Accessories

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip



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