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> PCB terminal block, nominal current: 16 A, nominal cross section: 1.5 mm², pitch: 3.5 mm, number of positions: 12, 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

- $\sqrt{}$ Defined contact force ensures that contact remains stable over the long term
- Finger-operated release button for very convenient operation
- 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	1
GTIN	4 0 6 3 1 5 1 1 0 0 7 6 6
GTIN	4063151100766
Custom tariff number	85369010

#### Technical data

## Item properties

Brief article description	PCB terminal block
Range of articles	SPTAF 1/EL-EX
Pitch	3.5 mm
Number of positions	12
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1



## 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 mm² 1.5 mm²
Conductor cross section AWG / kcmil	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 0.75 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.75 mm²
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	PA
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]	43.5 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	Tray
Pieces per package	70
Denomination packing units	Pcs.



## 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 $\leq 3 \text{ mm}$
	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	$0.2 \text{ mm}^2 / \text{ solid } / > 10 \text{ N}$
	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
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## 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
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## Vibration test

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

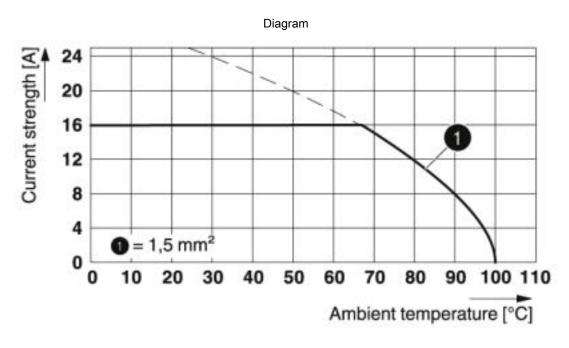


## Technical data

## 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)

## Classifications

## eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

## **ETIM**

ETIM 5.0	EC002643

#### Accessories

Accessories

Screwdriver tools



## Accessories

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



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

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