

## PCB terminal block - SPTAF 1/ 2-3,5-IL-EX - 1071010

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>)

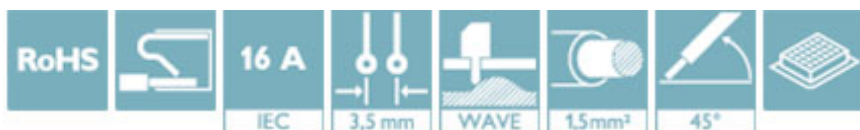
PCB terminal block, nominal current: 16 A, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.5 mm, number of positions: 2, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.6 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
- ✓ Intuitive use through colour coded actuation lever
- ✓ 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                 | <br>4 063151 100773 |
| GTIN                 | 4063151100773                                                                                           |
| Custom tariff number | 85369010                                                                                                |

### Technical data

#### Item properties

|                           |                           |
|---------------------------|---------------------------|
| Brief article description | PCB terminal block        |
| Range of articles         | SPTAF 1/...IL-EX          |
| Pitch                     | 3.5 mm                    |
| Number of positions       | 2                         |
| Connection method         | Push-in spring connection |
| Mounting type             | Wave soldering            |
| Pin layout                | Linear pinning            |
| Number of levels          | 1                         |

# PCB terminal block - SPTAF 1/ 2-3,5-IL-EX - 1071010

## 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                    | PA           |
| Insulating material group              | I            |
| CTI according to IEC 60112             | 600          |
| Flammability rating according to UL 94 | V0           |

### Dimensions for the product

|                             |               |
|-----------------------------|---------------|
| Length [ l ]                | 11 mm         |
| Width [ w ]                 | 8.5 mm        |
| Height [ h ]                | 10.6 mm       |
| Pitch                       | 3.5 mm        |
| Height (without solder pin) | 8 mm          |
| Solder pin [P]              | 2.6 mm        |
| Pin dimensions              | 0.75 x 0.3 mm |

### Dimensions for PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.1 mm |
|---------------|--------|

### Packaging information

|                            |      |
|----------------------------|------|
| Type of packaging          | Tray |
| Pieces per package         | 210  |
| Denomination packing units | Pcs. |

# PCB terminal block - SPTAF 1/ 2-3,5-IL-EX - 1071010

## 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 mm <sup>2</sup> / solid / > 10 N     |
|                                                          | 0.25 mm <sup>2</sup> / flexible / > 10 N |
|                                                          | 1.5 mm <sup>2</sup> / solid / > 40 N     |
|                                                          | 1.5 mm <sup>2</sup> / 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      |

## PCB terminal block - SPTAF 1/ 2-3,5-IL-EX - 1071010

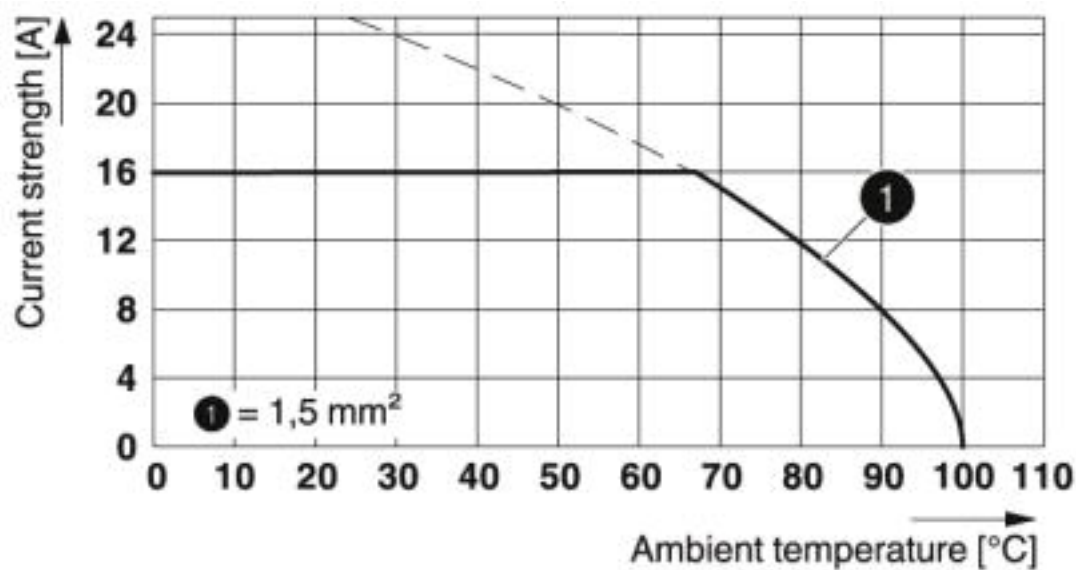
### Technical data

#### Vibration test

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

### Drawings

Diagram



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

## PCB terminal block - SPTAF 1/ 2-3,5-IL-EX - 1071010

### 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 x 2.5 x 75 mm, 2-component grip, with non-slip grip

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>