

## PCB terminal block - SPTAF 1/ 7-3,5-IL-EX - 1071015

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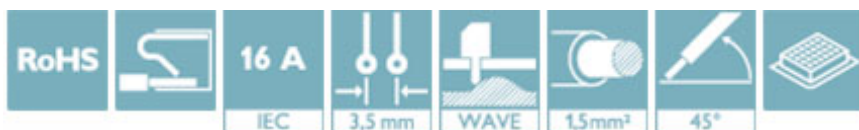
PCB terminal block, nominal current: 16 A, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 3.5 mm, number of positions: 7, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.6 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                 |  |
| GTIN                 | 4063151100827                                                                        |
| 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       | 7                         |
| 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                    | 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 ]                 | 26 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         | 70   |
| 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 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      |

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### Technical data

#### Vibration test

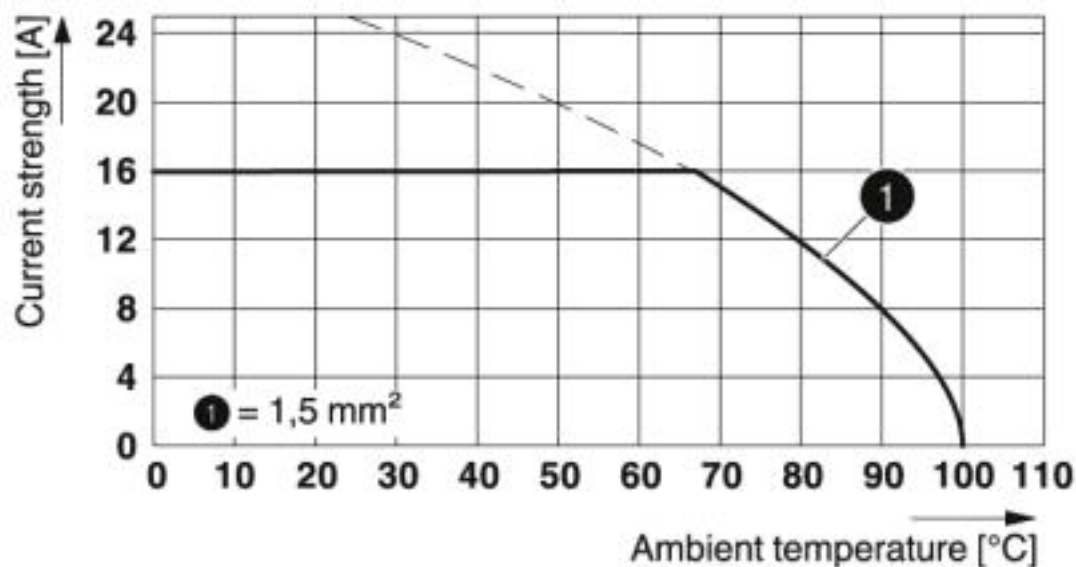
|                        |                        |
|------------------------|------------------------|
| Sweep speed            | 1 octave/min           |
| Amplitude              | 0.35 mm (10 - 60.1 Hz) |
| Test duration per axis | 2.5 h                  |

#### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----|

### 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/ 7-3,5-IL-EX - 1071015

### 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

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