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PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 400 V, contact surface: Tin, type of contact: Female connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PT 1,5/..-PVH, pitch: 5 mm, connection method: Screw connection with wire protector, conductor/PCB connection direction: 0 °, Stecksystem: COMBICON COMPACT PST 1,3, Locking: without, type of packaging: packed in cardboard

The figure shows a 10-position version of the product

#### Your advantages

- Well-known connection principle allows worldwide use
- ☑ Low temperature rise, thanks to maximum contact force
- If terminal block capacity thanks to rectangular terminal block space
- ☑ Allows connection of two conductors
- Horizontal and vertical connection option for optimum conductor routing
- The latching on the side enables various numbers of positions to be combined



### Key Commercial Data

| Packing unit                         | 1 pc            |
|--------------------------------------|-----------------|
| Minimum order quantity               | 250 pc          |
| GTIN                                 | 4 017918 916640 |
| GTIN                                 | 4017918916640   |
| Weight per Piece (excluding packing) | 3.530 g         |
| Custom tariff number                 | 85366990        |
| Country of origin                    | China           |

### Technical data

#### Item properties

| Brief article description | PCB connector |
|---------------------------|---------------|
|---------------------------|---------------|



## Technical data

#### Item properties

| Plug-in system        | COMBICON COMPACT PST 1,3                |
|-----------------------|---|
| Type of contact       | Female connector                        |
| Range of articles     | PT 1,5/PVH                              |
| Pitch                 | 5 mm                                    |
| Number of positions   | 3                                       |
| Drive form screw head | Philipps recess with slotted Torx (H1L) |
| Screw thread          | M2,6                                    |
| Locking               | without                                 |
| Number of levels      | 1                                       |
| Number of connections | 3                                       |
| Number of potentials  | 3                                       |

#### **Electrical parameters**

| Nominal current             | 12 A  |
|-----------------------------|-------|
| Nom. voltage                | 400 V |
| Rated voltage (III/3)       | 250 V |
| Rated voltage (III/2)       | 400 V |
| Rated voltage (II/2)        | 630 V |
| Rated surge voltage (III/3) | 4 kV  |
| Rated surge voltage (III/2) | 4 kV  |
| Rated surge voltage (II/2)  | 4 kV  |

#### Connection capacity

| Connection method   | Screw connection with wire protector     |
|---|--|
| pluggable   | Yes                                      |
| Conductor cross section solid   | 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>  |
| Conductor cross section flexible  | 0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>  |
| Conductor cross section AWG / kcmil   | 26 14                                    |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm² 1.5 mm²                         |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm² 1.5 mm²                         |
| 2 conductors with same cross section, solid   | 0.2 mm <sup>2</sup> 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible  | 0.2 mm <sup>2</sup> 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm² 0.34 mm²                        |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² 0.75 mm²                         |
| Stripping length  | 5 mm                                     |
| Torque  | 0.35 Nm 0.4 Nm                           |

Material data - contact



## Technical data

#### Material data - contact

| Note                                     | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/<br>JEDEC JESD 201 |
|--|--|
| Contact material                         | Cu alloy   |
| Surface characteristics                  | hot-dip tin-plated   |
| Metal surface terminal point (top layer) | Tin (4 - 8 μm Sn)  |
| Metal surface contact area (top layer)   | Tin (4 - 8 μm Sn)  |

#### Material data - housing

| Housing color   | green (6021) |
|---|--------------|
| Insulating material   | РА           |
| Insulating material group   | 1            |
| CTI according to IEC 60112  | 600          |
| Flammability rating according to UL 94                            | V0           |
| Glow wire flammability index GWFI according to EN 60695-2-12      | 850          |
| Glow wire ignition temperature GWIT according to EN 60695-2-13    | 775          |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C       |

## Dimensions for the product

|                             | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
|-----------------------------|--|
| Length [1]                  | 11.4 mm  |
| Width [ w ]                 | 15 mm  |
| Height [ h ]                | 11.4 mm  |
| Pitch                       | 5 mm   |
| Height (without solder pin) | 11.4 mm  |

### Packaging information

| Type of packaging          | packed in cardboard |
|----------------------------|---------------------|
| Pieces per package         | 250                 |
| Denomination packing units | Pcs.                |

#### Ambient conditions

| Ambient temperature (storage/transport) | -40 °C 70 °C                                    |
|---|---|
| Ambient temperature (assembly)          | -5 °C 100 °C                                    |
| Ambient temperature (operation)         | -40 °C 100 °C (dependent on the derating curve) |

### Termination and connection method

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



## Technical data

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#### Termination and connection method

|  | Test passed                             |
|--|---|
| Pull-out test  |   |
| Pull-out test  | IEC 60999-1:1999-11                     |
| Conductor cross section / conductor type / tensile force | 0.2 mm <sup>2</sup> / solid / > 10 N    |
|  | 0.2 mm <sup>2</sup> / flexible / > 10 N |
|  | 2.5 mm <sup>2</sup> / solid / > 50 N    |
|  | 2.5 mm <sup>2</sup> / flexible / > 50 N |

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### Mechanical tests according to standard

| Test specification                  | IEC 61984                          |
|-------------------------------------|------------------------------------|
| Visual inspection                   | IEC 60512-1-1:2002-02              |
| Dimension check                     | IEC 60512-1-2:2002-02              |
| Resistance of inscriptions          | IEC 60068-2-70:1995-12             |
| Insertion and withdrawal force      | IEC 60512-7:1993-08                |
| Insertion strength per pos. approx. | 2.5 N                              |
| Withdraw strength per pos. approx.  | 2 N                                |
| Polarization and coding             | IEC 60512-7:1993-08 (Polarization) |
| Contact holder in insert            | IEC 60512-8:1993-01                |
| Test force per pos.                 | 20 N                               |

#### Air clearances and creepage distances

| Clearances and creepage distances               | IEC 60664-1:2007-04                                   |
|---|---|
| Specification                                   | IEC 60664-1:2007-04                                   |
| Minimum clearance - inhomogeneous field (III/3) | 3 mm  |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm  |
| Minimum clearance - inhomogeneous field (II/2)  | 3 mm  |
| Minimum creepage distance value (III/3)         | 3.2 mm  |
| Minimum creepage distance value (III/2)         | 3 mm  |
| Minimum creepage distance value (II/2)          | 3.2 mm  |
| Note on connection cross section                | With connected conductor 2.5 mm <sup>2</sup> (solid). |

### Current carrying capacity / derating curves

| Caption | Derating diagram for conductor cross section 2.5 mm <sup>2</sup> ; reduction factor = 0.8 |
|---------|---|
|---------|---|

#### Mechanical tests (A)

| Test specification                  | IEC 61984 |
|-------------------------------------|-----------|
| Insertion strength per pos. approx. | 2.5 N     |
| Withdraw strength per pos. approx.  | 2 N       |



## Technical data

### Mechanical tests (A)

| Polarization when inserted requirement >20 N | Test passed |
|--|-------------|
| Contact holder in insert requirements >20 N  | Test passed |

#### Durability tests (B)

| Specification                          | IEC 60512-5:1992-08 |
|--|---------------------|
| Contact resistance R <sub>1</sub>      | 1.3 mΩ              |
| Insertion/withdrawal cycles            | 10                  |
| Contact resistance R <sub>2</sub>      | 1.4 mΩ              |
| Impulse withstand voltage at sea level | 4.9 kV              |

### Thermal tests (C)

| Specification                                   | IEC 60512-5-1:2002-02 |
|---|-----------------------|
| Number of positions                             | 16                    |
| Upper limiting temperature requirements <100 °C | Test passed           |

### Climatic tests (D)

| Specification                          | ISO 6988:1985-02  |
|--|---|
| Cold stress                            | -40 °C/2 h  |
| Thermal stress                         | 100 °C/168 h  |
| Corrosive stress                       | $0.2 \text{ dm}^3 \text{SO}_2 \text{ on } 300 \text{ dm}^3/40 \text{ °C/1 cycle}$ |
| Impulse withstand voltage at sea level | 4.8 kV  |
| Power-frequency withstand voltage      | 2.5 kV  |

#### Environmental and durability tests (E)

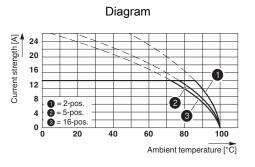
| Specification                         | IEC61984:2001-06                    |
|---------------------------------------|-------------------------------------|
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

#### **Environmental Product Compliance**

| China RoHS | Environmentally Friendly Use Period = 50 years  |
|------------|---|
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings





Derating diagram for conductor cross section 2.5 mm<sup>2</sup>; reduction factor = 0.8

## Classifications

### eCl@ss

| eCl@ss 10.0.1 | 27440309 |
|---------------|----------|
| eCl@ss 11.0   | 27460202 |
| eCl@ss 4.0    | 27260700 |
| eCl@ss 4.1    | 27260700 |
| eCl@ss 5.0    | 27260700 |
| eCl@ss 5.1    | 27260700 |
| eCl@ss 6.0    | 27260700 |
| eCl@ss 7.0    | 27440309 |
| eCl@ss 8.0    | 27440309 |
| eCl@ss 9.0    | 27440309 |

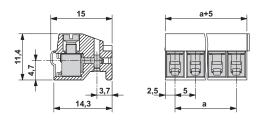
### ETIM

| ETIM 3.0 | EC001121 |
|----------|----------|
| ETIM 4.0 | EC002638 |
| ETIM 5.0 | EC002638 |
| ETIM 6.0 | EC002638 |
| ETIM 7.0 | EC002638 |

#### UNSPSC

| UNSPSC 6.01   | 30211801 |
|---------------|----------|
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11     | 34131203 |
| UNSPSC 12.01  | 39121432 |
| UNSPSC 13.2   | 39121409 |
| UNSPSC 18.0   | 39121409 |
| UNSPSC 19.0   | 39121409 |

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## Classifications

#### UNSPSC

| UNSPSC 20.0 | 39121409 |
|-------------|----------|
| UNSPSC 21.0 | 39121409 |

## Approvals

#### Approvals

Approvals

SEV / EAC / cULus Recognized / IECEE CB Scheme

Ex Approvals

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#### Approval details

| SEV                | SEV | https://www.eurofins.ch/de/ | IK-4496 |
|--------------------|-----|-----------------------------|---------|
|                    |     |                             |         |
| Nominal voltage UN |     | 320 V                       |         |
| Nominal current IN |     | 12 A                        |         |
| mm²/AWG/kcmil      |     | 0.2-1.5                     |         |

| EAC EAC | B.01687 |
|---------|---------|
|---------|---------|

| cULus Recognized   | http://database.ul.com/cgi-bin/XYV/template/L | ISEXT/1FRAME/index.htm | E60425-20030211 |
|--------------------|---|------------------------|-----------------|
|                    | В   | D                      |                 |
| Nominal voltage UN | 300 V   | 300 V                  |                 |
| Nominal current IN | 15 A  | 10 A                   |                 |
| mm²/AWG/kcmil      | 26-12   | 26-12                  |                 |



## Approvals

| IECEE CB Scheme Scheme | http://www.iecee.org/ CH-10786 |
|------------------------|--------------------------------|
|                        |                                |
| Nominal voltage UN     | 320 V                          |
| Nominal current IN     | 12 A                           |
| mm²/AWG/kcmil          | 0.2-1.5                        |

#### Accessories

#### Accessories

Coding element

Coding profile - CP-PT 1,5 - 1985564



Coding profile, inserted into the hole on the plug, made from red insulating material, diameter: 1.35 mm

Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm

#### Pin strip

Pin strip - PST 1,3/ 3-5,0 - 1933192



Pin strip, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 12 A (depends on the plug used), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PST 1,3/.-V, pitch: 5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: COMBICON COMPACT PST 1,3, Locking: without, type of packaging: packed in cardboard, The maximum current depends on the plug used. The lower of the two current values apply for plug and pin strip. The pin strip is made of highly temperature resistant plastic and is thus suitable for the reflow process.



### Accessories

Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

#### Additional products

Pin strip - PST 1,3/ 5-5,0 R56 - 1720327



Pin strip, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 12 A (depends on the plug used), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 5, Number of rows: 1, Number of positions per row: 5, number of connections: 5, product range: PST 1,3/.-V, pitch: 5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: COMBICON COMPACT PST 1,3, Locking: without, type of packaging: 56 mm wide tape, The maximum current depends on the plug used. The lower of the two current values apply for plug and pin strip. The pin strip is made of highly temperature resistant plastic and is thus suitable for the reflow process.

#### Pin strip - PST 1,3/ 3-H-5,0 - 1705478



Pin strip, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 12 A (depends on the plug used), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PST 1,3/.-H, pitch: 5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 6.8 mm, Stecksystem: COMBICON COMPACT PST 1,3, Locking: without, type of packaging: packed in cardboard, The maximum current depends on the plug used. The lower of the two current values apply for plug and pin strip. The pin strip is made of highly temperature resistant plastic and is thus suitable for the reflow process.

#### Pin strip - PST 1,3/ 3-5,0 - 1933192



Pin strip, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 12 A (depends on the plug used), rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, number of connections: 3, product range: PST 1,3/.-V, pitch: 5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: COMBICON COMPACT PST 1,3, Locking: without, type of packaging: packed in cardboard, The maximum current depends on the plug used. The lower of the two current values apply for plug and pin strip. The pin strip is made of highly temperature resistant plastic and is thus suitable for the reflow process.



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