

## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

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PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

### Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Integrated double steel spring provides additional safety in the event of temperature and power fluctuations
- ✓ Potentials can be easily looped through – ideal for BUS applications



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 20 pc                                                                                                   |
| GTIN         | <br>4 046356 103275 |
| GTIN         | 4046356103275                                                                                           |

### Technical data

#### Item properties

|                           |                                      |
|---------------------------|--------------------------------------|
| Brief article description | Printed-circuit board connector      |
| Plug-in system            | POWER COMBICON 16                    |
| Type of contact           | Female connector                     |
| Range of articles         | TPC 16/...-ST                        |
| Pitch                     | 10.16 mm                             |
| Number of positions       | 5                                    |
| Connection method         | Screw connection with tension sleeve |
| Drive form screw head     | Slotted (L)                          |
| Screw thread              | M4                                   |
| Locking                   | without                              |
| Number of levels          | 1                                    |

# Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

## Technical data

### Item properties

|                       |    |
|-----------------------|----|
| Number of connections | 10 |
| Number of potentials  | 5  |

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 76 A   |
| Nom. voltage                | 1000 V |
| Rated voltage               | 1000 V |
| Rated voltage (III/2)       | 1000 V |
| Rated voltage (II/2)        | 1000 V |
| Rated surge voltage (III/3) | 8 kV   |
| Rated surge voltage (III/2) | 8 kV   |
| Rated surge voltage (II/2)  | 6 kV   |

### Connection capacity

|                                                                                           |                                                                                    |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Connection method                                                                         | Screw connection with tension sleeve                                               |
| pluggable                                                                                 | Yes                                                                                |
| Conductor cross section solid                                                             | 0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup>                                        |
| Conductor cross section flexible                                                          | 0.75 mm <sup>2</sup> ... 16 mm <sup>2</sup>                                        |
| Conductor cross section AWG / kcmil                                                       | 18 ... 6                                                                           |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>                                         |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> (Only in connection with CRIMPFOX 16 S) |
| 2 conductors with same cross section, solid                                               | 0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>                                         |
| 2 conductors with same cross section, flexible                                            | 0.75 mm <sup>2</sup> ... 6 mm <sup>2</sup>                                         |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                          |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>                                          |
| Cylindrical gauge a x b / diameter                                                        | - / 6.4 mm                                                                         |
| Stripping length                                                                          | 18 mm                                                                              |
| Torque                                                                                    | 1.7 Nm ... 1.8 Nm                                                                  |

### 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                  | Silver-plated strip                                                               |
| Metal surface terminal point (top layer) | Silver (4 - 8 µm Ag)                                                              |
| Metal surface contact area (top layer)   | Silver (4 - 8 µm Ag)                                                              |

### Material data - housing

|                            |              |
|----------------------------|--------------|
| Housing color              | green (6021) |
| Insulating material        | PA           |
| Insulating material group  | I            |
| CTI according to IEC 60112 | 600          |

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## Technical data

### Material data - housing

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| 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

|                             |          |
|-----------------------------|----------|
| Length [ l ]                | 54.9 mm  |
| Width [ w ]                 | 50.64 mm |
| Height [ h ]                | 51.4 mm  |
| Pitch                       | 10.16 mm |
| Height (without solder pin) | 51.4 mm  |

### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 20                  |
| 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) |

### 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) | 8 mm                |
| Minimum clearance - inhomogeneous field (III/2) | 8 mm                |
| Minimum clearance - inhomogeneous field (II/2)  | 8 mm                |
| Minimum creepage distance value (III/3)         | 12.5 mm             |
| Minimum creepage distance value (III/2)         | 5 mm                |
| Minimum creepage distance value (II/2)          | 5 mm                |

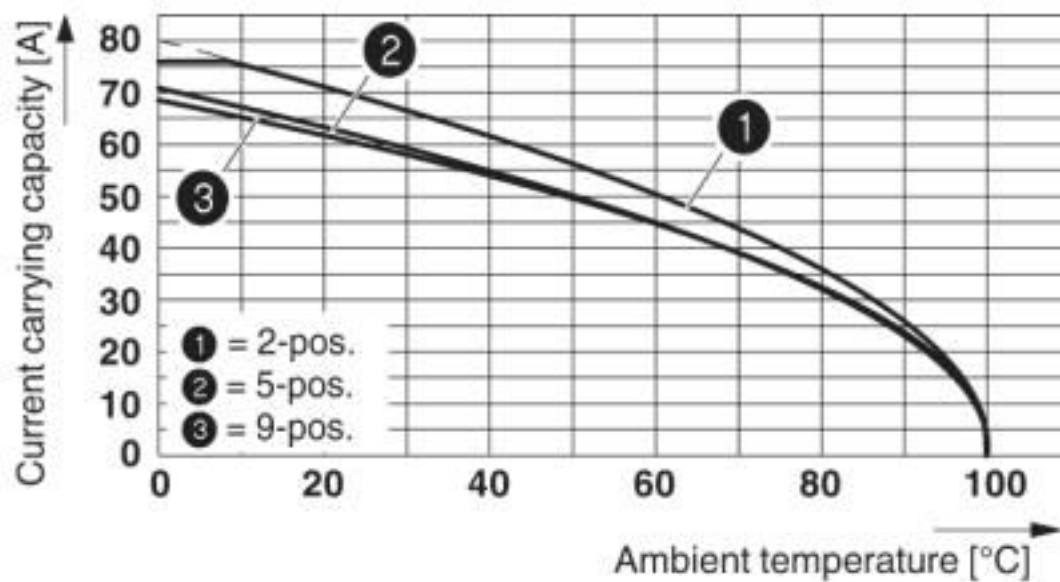
### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

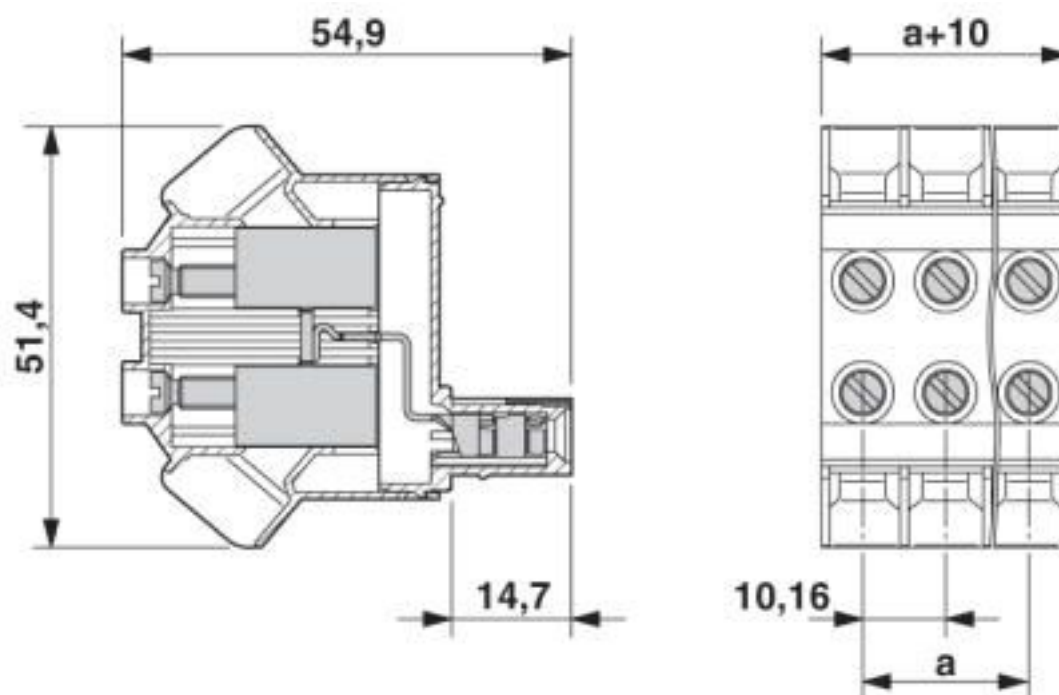
## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

Diagram



Derating curve for: TPC 16/....-ST-10,16 with PC 6-16/...-G-10,16

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1

27440309

## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| 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   | 30211810 |
| UNSPSC 7.0901 | 39121409 |
| UNSPSC 11     | 39121409 |
| UNSPSC 12.01  | 39121409 |
| UNSPSC 13.2   | 39121409 |
| UNSPSC 18.0   | 39121409 |
| UNSPSC 19.0   | 39121409 |
| UNSPSC 20.0   | 39121409 |
| UNSPSC 21.0   | 39121409 |

### Approvals

#### Approvals

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Approvals

EAC / cULus Recognized

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Ex Approvals

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#### Approval details

# Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

## Approvals

|     |            |         |
|-----|------------|---------|
| EAC | <b>EAC</b> | B.01687 |
|-----|------------|---------|

|                    |              |                                                                                                                                                       |                 |
|--------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized   | <b>cULus</b> | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | E60425-20040202 |
|                    | B            | C                                                                                                                                                     |                 |
| Nominal voltage UN | 600 V        | 600 V                                                                                                                                                 |                 |
| Nominal current IN | 60 A         | 60 A                                                                                                                                                  |                 |
| mm²/AWG/kcmil      | 20-4         | 20-4                                                                                                                                                  |                 |

## Accessories

### Accessories

#### Coding element

Coding profile - CP-PC RD - 1701967



Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red

## Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 16 S - 1207983



Crimping pliers for ferrules up to 16 mm²

## Screwdriver tools

## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

### Accessories

Screwdriver - SZS 1,0X4,0 VDE - 1205066



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

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### Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5#mm, Number of individual labels: 90000

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### Additional products

Feed-through header - PCV 6-16/ 5-G1-10,16 - 1998810



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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Feed-through header - PC 6-16/ 5-G1-10,16 - 1998962



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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Feed-through header - PC 6-16/ 5-G1U-10,16 - 1996265



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

### Accessories

#### Printed-circuit board connector - IPC 16/ 5-ST-10,16 - 1969409



PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

#### Printed-circuit board connector - ISPC 16/ 5-ST-10,16 - 1748574



PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, connection method: Push-in spring connection, color: green, contact surface: Silver

#### Feed-through header - DFK-PC 6-16/ 5-G-10,16 - 1701485



Feed-through header, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm

#### Feed-through header - DFK-PC 6-16/ 5-GU-10,16 - 1701647



Feed-through header, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.1 mm

#### Feed-through header - DFK-PCV 6-16/ 5-G-10,16 - 1702125



Feed-through header, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4.2 mm



## Printed-circuit board connector - TPC 16/ 5-ST-10,16 - 1715206

### Accessories

Feed-through plug - DFK-PC 16/ 5-ST-10,16 - 1703409



Feed-through connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 5, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

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