

# Printed-circuit board connector - PC 6/ 6-GL4U-7,62 - 1136014

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PCB headers, nominal current: 41 A, rated voltage (III/2): 630 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm

Figure shows a 4-pos. version with locking flange at position 3

## Your advantages

- Increased touch protection in the pin connector pattern for maximum safety even when not plugged in
- Intuitive locking mechanism prevents accidental disconnection
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use



## Key Commercial Data

|                      |               |
|----------------------|---------------|
| Packing unit         | 1             |
| GTIN                 |               |
| GTIN                 | 4063151070748 |
| Custom tariff number | 85366930      |

## Technical data

### Item properties

|                           |  |
|---------------------------|--|
| Brief article description | Printed-circuit board connector        |
| Plug-in system            | POWER COMBICON 6                       |
| Type of contact           | Male connector                         |
| Range of articles         | PC 6/..-GLU                            |
| Pitch                     | 7.62 mm                                |
| Number of positions       | 6                                      |
| Mounting type             | Wave soldering                         |
| Pin layout                | Linear pinning                         |
| Locking                   | Latch mechanism/latching at position 4 |
| Number of levels          | 1                                      |

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## Technical data

### Item properties

|                       |   |
|-----------------------|---|
|                       | 1 |
| Number of connections | 6 |
| Number of potentials  | 6 |

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 41 A   |
| Nom. voltage                | 630 V  |
| Rated voltage               | 630 V  |
| Rated voltage (III/2)       | 630 V  |
| Rated voltage (II/2)        | 1000 V |
| Rated surge voltage (III/3) | 6 kV   |
| Rated surge voltage (III/2) | 6 kV   |
| Rated surge voltage (II/2)  | 6 kV   |

### 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                     | Tin-plated  |
| Metal surface contact area (top layer)      | Tin (2 - 4 µm Sn)   |
| Metal surface contact area (middle layer)   | Nickel (1.3 - 3 µm Ni),   |
| Metal surface soldering area (top layer)    | Tin (2 - 4 µm Sn)   |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni)  |

### Material data - housing

|  |              |
|--|--------------|
| Housing color                          | green (6021) |
| Insulating material                    | PA GF        |
| Insulating material group              | I            |
| CTI according to IEC 60112             | 600          |
| Flammability rating according to UL 94 | V0           |

### Dimensions for the product

|                             |          |
|-----------------------------|----------|
| Length [ l ]                | 28.2 mm  |
| Width [ w ]                 | 61.36 mm |
| Height [ h ]                | 16.1 mm  |
| Pitch                       | 7.62 mm  |
| Height (without solder pin) | 13.5 mm  |
| Solder pin [P]              | 2.6 mm   |

### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 50                  |
| Denomination packing units | Pcs.                |

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## Technical data

### 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) | 5.5 mm              |
| Minimum clearance - inhomogeneous field (III/2) | 5.5 mm              |
| Minimum clearance - inhomogeneous field (II/2)  | 5.5 mm              |
| Minimum creepage distance value (III/3)         | 8 mm                |
| Minimum creepage distance value (III/2)         | 3.2 mm              |
| Minimum creepage distance value (II/2)          | 5 mm                |

### Mechanical tests (A)

|  |             |
|--|-------------|
| Test specification                           | IEC 61984   |
| Insertion strength per pos. approx.          | 11 N        |
| Withdraw strength per pos. approx.           | 10 N        |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N  | Test passed |

### Durability tests (B)

|  |                       |
|--|-----------------------|
| Specification                                | IEC 60512-9-1:2010-03 |
| Contact resistance R <sub>1</sub>            | 0.5 mΩ                |
| Insertion/withdrawal cycles                  | 25                    |
| Contact resistance R <sub>2</sub>            | 0.5 mΩ                |
| Impulse withstand voltage at sea level       | 7.3 kV                |
| Power-frequency withstand voltage            | 3.31 kV               |
| Insulation resistance, neighboring positions | > 4 TΩ                |

### Thermal tests (C)

|   |                       |
|---|-----------------------|
| Specification                                   | IEC 60512-5-1:2002-02 |
| Number of positions                             | 6                     |
| Conductor cross section                         | 6 mm <sup>2</sup>     |
| Test current                                    | 41 A                  |
| 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 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle |
| Impulse withstand voltage at sea level | 7.3 kV  |

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## Technical data

### Climatic tests (D)

|                                   |         |
|-----------------------------------|---------|
| Power-frequency withstand voltage | 3.31 kV |
|-----------------------------------|---------|

### Environmental and durability tests (E)

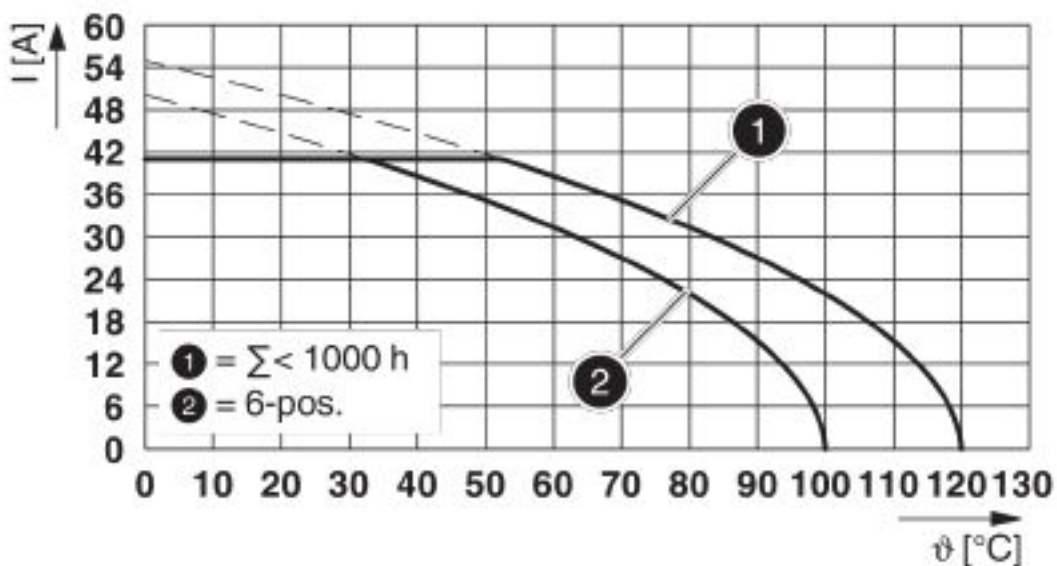
|                                       |                                     |
|---------------------------------------|-------------------------------------|
| Specification                         | IEC 61984:2008-10                   |
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

### Vibration test

|                        |                        |
|------------------------|------------------------|
| Specification          | IEC 60068-2-6:2007-12  |
| Result                 | Test passed            |
| Frequency              | 10 - 150 - 10 Hz       |
| Sweep speed            | 1 octave/min           |
| Amplitude              | 0.35 mm (10 - 60.1 Hz) |
| Acceleration           | 5 g (60.1 - 150 Hz)    |
| Test duration per axis | 2.5 h                  |

## Drawings

Diagram



Type: LPC 6/...-STL...-7,62 with PC 6/...-GL...U-7,62

## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 8.0    | 27440402 |
| eCl@ss 9.0    | 27440402 |

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## Classifications

ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC002637 |
|----------|----------|

## Approvals

Approvals

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Approvals

EAC

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Ex Approvals

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## Approval details

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

## 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

## Additional products

Printed-circuit board connector - LPC 6/ 6-STL4-7,62 - 1716948



PCB connector, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 6 mm<sup>2</sup>, number of positions: 6, pitch: 7.62 mm, connection method: Push-in spring connection, color: green, contact surface: Tin