

1717138

https://www.phoenixcontact.com/us/products/1717138

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PCB hybrid header, nominal cross section: 6 mm<sup>2</sup>, color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Male connector, number of potentials: 10, number of rows: 1, number of positions: 10, number of connections: 10, product range: PCH 6/..+6-GL, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 2. 6 mm, plug-in system: COMBICON PC 6 hybrid, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

## Your advantages

- · Combining signals and power in a single header saves time and space
- · Intuitive locking mechanism prevents accidental disconnection
- · Easy PCB replacement thanks to plug-in modules
- · Well-known mounting principle allows worldwide use

#### **Commercial Data**

| Item number                          | 1717138                        |
|--------------------------------------|--------------------------------|
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to Order (non-returnable) |
| Sales Key                            | A02                            |
| Product Key                          | AADSDF                         |
| GTIN                                 | 4055626514994                  |
| Weight per Piece (including packing) | 14.37 g                        |
| Weight per Piece (excluding packing) | 14.37 g                        |
| Customs tariff number                | 85366930                       |
| Country of origin                    | CN                             |



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## **Technical Data**

#### Product properties

| Product line          | COMBICON Connectors L                  |
|-----------------------|--|
| Product type          | PCB hybrid header                      |
| Product family        | PCH 6/+6-GL                            |
| Number of positions   | 10                                     |
| Pitch                 | 7.62 mm                                |
| Number of connections | 10                                     |
| Number of rows        | 1                                      |
|                       | 2                                      |
| Mounting flange       | Latch mechanism/latching at position 4 |
| Number of potentials  | 10                                     |
| Pin layout            | Linear pinning                         |

### Electrical properties

| Nominal current I <sub>N</sub> | 41 A   |
|--------------------------------|--------|
| Nominal voltage U <sub>N</sub> | 630 V  |
| Degree of pollution            | 3      |
| Rated voltage (III/3)          | 630 V  |
| Rated surge voltage (III/3)    | 6 kV   |
| Rated voltage (III/2)          | 630 V  |
| Rated surge voltage (III/2)    | 6 kV   |
| Rated voltage (II/2)           | 1000 V |
| Rated surge voltage (II/2)     | 6 kV   |

## Mounting

| Mounting type | Wave soldering |
|---------------|----------------|
| Pin layout    | Linear pinning |

### Material specifications

### 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

| ' | Material data - Housing |              |
|---|-------------------------|--------------|
|   | Color (Housing)         | green (6021) |
|   | Insulating material     | PA GF        |



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| Insulating material group              | I I |
|--|-----|
| CTI according to IEC 60112             | 600 |
| Flammability rating according to UL 94 | V0  |
| Material data – actuating element      |     |
| Color ()                               | ()  |

#### Notes

| Notes on operation | In accordance with IEC 61984, COMBICON connectors have no       |
|--------------------|---|
|                    | switching power (COC). During designated use, they must not be  |
|                    | plugged in or disconnected when carrying voltage or under load. |

#### Dimensions

| Dimensional drawing   | P                  |
|-----------------------|--------------------|
| Pitch                 | 7.62 mm            |
| Width [w]             | 51.06 mm           |
| Height [h]            | 19 mm              |
| Length [I]            | 28.2 mm            |
| Installed height      | 16.4 mm            |
| Solder pin length [P] | 2.6 mm             |
|                       | 2.6 mm             |
| Pin dimensions        | 1 x 1.2 mm ±0.1 mm |

#### Electrical tests

#### Air clearances and creepage distances | Power

| Specification  | IEC 60664-1:2007-04 |
|--|---------------------|
| Insulating material group                              | 1                   |
| Comparative tracking index (IEC 60112)                 | CTI 600             |
| Rated insulation voltage (III/3)                       | 630 V               |
| Rated surge voltage (III/3)                            | 6 kV                |
| minimum clearance value - non-homogenous field (III/3) | 5.5 mm              |
| minimum creepage distance (III/3)                      | 8 mm                |
| Rated insulation voltage (III/2)                       | 630 V               |
| Rated surge voltage (III/2)                            | 6 kV                |
| minimum clearance value - non-homogenous field (III/2) | 5.5 mm              |
| minimum creepage distance (III/2)                      | 5.5 mm              |
| Rated insulation voltage (II/2)                        | 1000 V              |
| Rated surge voltage (II/2)                             | 6 kV                |
| minimum clearance value - non-homogenous field (II/2)  | 5.5 mm              |
| minimum creepage distance (II/2)                       | 5.5 mm              |



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#### Air clearances and creepage distances | Signal

| Specification  | IEC 60664-1:2007-04 |
|--|---------------------|
| Insulating material group                              | I                   |
| Comparative tracking index (IEC 60112)                 | CTI 600             |
| Rated insulation voltage (III/3)                       | 160 V               |
| Rated surge voltage (III/3)                            | 2.5 kV              |
| minimum clearance value - non-homogenous field (III/3) | 1.5 mm              |
| minimum creepage distance (III/3)                      | 2 mm                |
| Rated insulation voltage (III/2)                       | 160 V               |
| Rated surge voltage (III/2)                            | 2.5 kV              |
| minimum clearance value - non-homogenous field (III/2) | 1.5 mm              |
| minimum creepage distance (III/2)                      | 1.5 mm              |
| Rated insulation voltage (II/2)                        | 320 V               |
| Rated surge voltage (II/2)                             | 2.5 kV              |
| minimum clearance value - non-homogenous field (II/2)  | 1.5 mm              |
| minimum creepage distance (II/2)                       | 1.6 mm              |

#### Environmental and real-life conditions

#### Ambient conditions

| Ambient temperature (operation)         | -40 °C 100 °C (dependent on the derating curve) |
|---|---|
| Ambient temperature (storage/transport) | -40 °C 70 °C                                    |
| Relative humidity (storage/transport)   | 30 % 70 %                                       |
| Ambient temperature (assembly)          | -5 °C 100 °C                                    |

### Packaging specifications

| Type of packaging | packed in cardboard |
|-------------------|---------------------|



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## Approvals

|             | CULus Recognized Approval ID: E60425-20010727 |                                |                   |                               |
|-------------|---|--------------------------------|-------------------|-------------------------------|
|             | Nominal Voltage U <sub>N</sub>                | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
| Use group B |   |                                |                   |                               |
| Power       | 300 V   | 35 A                           | -                 | -                             |
| Signal      | 300 V   | 8 A                            | -                 | -                             |
| Use group C |   |                                |                   |                               |
| Power       | 300 V   | 35 A                           | -                 | -                             |
| Use group F |   |                                |                   |                               |
| Power       | 600 V   | 35 A                           | -                 | -                             |
| Signal      | 160 V   | 8 A                            | -                 | -                             |

|      | EAC                  |
|------|----------------------|
| EHE  | EAC                  |
| LIIL | Approval ID: B.01687 |

| VDE Zeichenge<br>Approval ID: 400506 | VDE Zeichengenehmigung Approval ID: 40050635 |                                |                   |                               |
|--------------------------------------|--|--------------------------------|-------------------|-------------------------------|
|                                      | Nominal Voltage $U_N$                        | Nominal Current I <sub>N</sub> | Cross Section AWG | Cross Section mm <sup>2</sup> |
| Power                                | 630 V  | 41 A                           | -                 | -                             |
| Signal                               | 160 V  | 8 A                            | -                 | -                             |



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## Classifications

UNSPSC 21.0

#### **ECLASS**

|      | ECLASS-9.0    | 27440402 |
|------|---------------|----------|
|      |               |          |
|      | ECLASS-10.0.1 | 27440402 |
|      | ECLASS-11.0   | 27460301 |
| ETIM |               |          |
|      | ETIM 8.0      | EC002643 |
| UN   | ISPSC         |          |

39121400



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## **Environmental Product Compliance**

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|------------|---|
|            | No hazardous substances above threshold values          |



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#### Accessories

#### CP-PC RD - Coding profile

1701967

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



#### LPCH 6/4+6-STL4-7,62 - PCB hybrid connector

1716989

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PCB hybrid connector, nominal cross section: 6 mm², color: green, nominal current: 41 A, 8 A, rated voltage (III/2): 1000 V, contact surface: Tin, type of contact: Female connector, number of potentials: 10, number of rows: 1, number of positions: 10, number of connections: 10, product range: LPCH 6/..+6-STL, pitch: 7.62 mm, connection method: Lever Push-in connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON PC 6 hybrid, locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

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