

# SMC 1,5/ 3-G-3,81 HT BK - PCB header



1999440  
<https://www.phoenixcontact.com/ca/products/1999440>

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PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, contact surface: Tin, contact connection type: Pin, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: SMC 1,5/..-G-HT, pitch: 3.81 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

## Your advantages

- Designed for integration into the SMT soldering process
- Angled connection enables multi-row arrangement on the PCB
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1999440       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | AA02          |
| Product key                          | AABTMA        |
| GTIN                                 | 4017918981174 |
| Weight per piece (including packing) | 1.3 g         |
| Weight per piece (excluding packing) | 1.228 g       |
| Customs tariff number                | 85366930      |
| Country of origin                    | DE            |

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## Technical data

### Product properties

|                           |                       |
|---------------------------|-----------------------|
| Product type              | PCB headers           |
| Product family            | SMC 1,5/...-G-HT      |
| Product line              | COMBICON Connectors S |
| Number of positions       | 3                     |
| Pitch                     | 3.81 mm               |
| Number of connections     | 3                     |
| Number of rows            | 1                     |
| Number of potentials      | 3                     |
| Mounting flange           | without               |
| Pin layout                | Linear pinning        |
| Solder pins per potential | 1                     |

### Electrical properties

|                     |   |
|---------------------|---|
| Degree of pollution | 3 |
|---------------------|---|

### Mounting

|               |                |
|---------------|----------------|
| Mounting type | THR 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 (3 - 5 µm Sn)                                                                |
| Metal surface contact area (middle layer)   | Nickel (1.3 - 3 µm Ni)                                                           |
| Metal surface soldering area (top layer)    | Tin (3 - 5 µm Sn)                                                                |
| Metal surface soldering area (middle layer) | Nickel (1.3 - 3 µm Ni)                                                           |

#### Material data - housing

|                                        |              |
|----------------------------------------|--------------|
| Color (Housing)                        | black (9005) |
| Insulating material                    | PA           |
| Insulating material group              | IIIa         |
| CTI according to IEC 60112             | 325          |
| Flammability rating according to UL 94 | V0           |

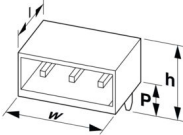
### Dimensions

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|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| Dimensional drawing   |  |
| Pitch                 | 3.81 mm                                                                            |
| Width [w]             | 9.01 mm                                                                            |
| Height [h]            | 14.4 mm                                                                            |
| Length [l]            | 13.1 mm                                                                            |
| Installed height      | 11 mm                                                                              |
| Solder pin length [P] | 3.4 mm                                                                             |

|               |        |
|---------------|--------|
| PCB design    |        |
| Hole diameter | 1.2 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 |
| Outer packaging type | Dry bag             |

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/ca/products/1999440>

|                                                                                                                                                       |                       |                       |                   |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| <div> <b>cULus Recognized</b><br/>Approval ID: E60425-20110128</div> |                       |                       |                   |                             |
|                                                                                                                                                       | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
| Use group B                                                                                                                                           |                       |                       |                   |                             |
|                                                                                                                                                       | 300 V                 | 8 A                   | -                 | -                           |
| Use group D                                                                                                                                           |                       |                       |                   |                             |
|                                                                                                                                                       | 300 V                 | 8 A                   | -                 | -                           |

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27460201 |
| ECLASS-12.0 | 27460201 |
| ECLASS-13.0 | 27460201 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002637 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |

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