

## Feed-through header - MCVK 1,5/ 3-G-3,81 - 1832743

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DIN rail connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: MCVK 1,5/..-G, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, mounting: DIN rail, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard


The figure shows a 16-position version

### Your advantages

- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- ✓ Direct plug-in block for DIN rail mounting
- ✓ For mounting on a DIN rail NS 15
- ✓ Well-known connection principle allows worldwide use



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 50 pc   |
| GTIN         | <br>4 017918 051525 |
| GTIN         | 4017918051525   |

### Technical data

#### Item properties

|                           |                    |
|---------------------------|--------------------|
| Brief article description | DIN rail connector |
| Plug-in system            | MINI COMBICON      |
| Type of contact           | Male connector     |
| Range of articles         | MCVK 1,5/..-G      |
| Pitch                     | 3.81 mm            |
| Number of positions       | 3                  |
| Drive form screw head     | Slotted            |
| Screw thread              | M2                 |
| Mounting type             | DIN rail           |
| Locking                   | without            |
| Number of levels          | 1                  |

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## Technical data

### Item properties

|                       |   |
|-----------------------|---|
| Number of connections | 3 |
| Number of potentials  | 3 |

### Electrical parameters

|                             |        |
|-----------------------------|--------|
| Nominal current             | 8 A    |
| Nom. voltage                | 160 V  |
| Rated voltage               | 160 V  |
| Rated voltage (III/2)       | 160 V  |
| Rated voltage (II/2)        | 320 V  |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated surge voltage (II/2)  | 2.5 kV |

### Connection capacity

|   |   |
|---|---|
| Connection method   | Screw connection with tension sleeve          |
| pluggable   | Yes   |
| Conductor cross section solid   | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section flexible  | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section AWG / kcmil   | 28 ... 16                                     |
| Conductor cross section flexible, with ferrule without plastic sleeve                     | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>  |
| Conductor cross section, flexible, with ferrule, with plastic sleeve                      | 0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, solid   | 0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible  | 0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve       | 0.25 mm <sup>2</sup> ... 0.34 mm <sup>2</sup> |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>   |
| Cylindrical gauge a x b / diameter  | 2.4 mm x 1.5 mm / 1.6 mm                      |
| Stripping length  | 7 mm  |
| Torque  | 0.22 Nm ... 0.25 Nm                           |

### Flange specifications

|                 |         |
|-----------------|---------|
| Type of locking | without |
| Mounting flange | without |

### 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 terminal point (top layer)    | Tin (5 - 7 µm Sn)   |
| Metal surface terminal point (middle layer) | Nickel (2 - 3 µm Ni)  |
| Metal surface contact area (top layer)      | Tin (5 - 7 µm Sn)   |
| Metal surface contact area (middle layer)   | Nickel (2 - 3 µm Ni),   |

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## Technical data

### Material data - housing

|   |              |
|---|--------------|
| Housing color   | green (6021) |
| Insulating material   | PA           |
| Insulating material group   | I            |
| 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

|                             |  |
|-----------------------------|--|
| Caption                     | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Pitch                       | 3.81 mm  |
| Height (without solder pin) | 27 mm  |

### Packaging information

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

### General product information

|              |  |
|--------------|--|
| Type of note | Notes on operation   |
| Note         | 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. |

### Ambient conditions

|   |   |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C                                    |
| Ambient temperature (assembly)          | -5 °C ... 100 °C                                    |
| Ambient temperature (operation)         | -40 °C ... 105 °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) | 1.5 mm   |
| Minimum clearance - inhomogeneous field (III/2) | 1.5 mm   |
| Minimum clearance - inhomogeneous field (II/2)  | 1.5 mm   |
| Minimum creepage distance value (III/3)         | 2 mm   |
| Minimum creepage distance value (III/2)         | 1.5 mm   |
| Minimum creepage distance value (II/2)          | 1.6 mm   |
| Note on connection cross section                | With connected conductor 1.5 mm <sup>2</sup> (stranded). |

### Environmental Product Compliance

|            |  |
|------------|--|
| REACH SVHC | Lead 7439-92-1                                 |
| China RoHS | Environmentally Friendly Use Period = 50 years |

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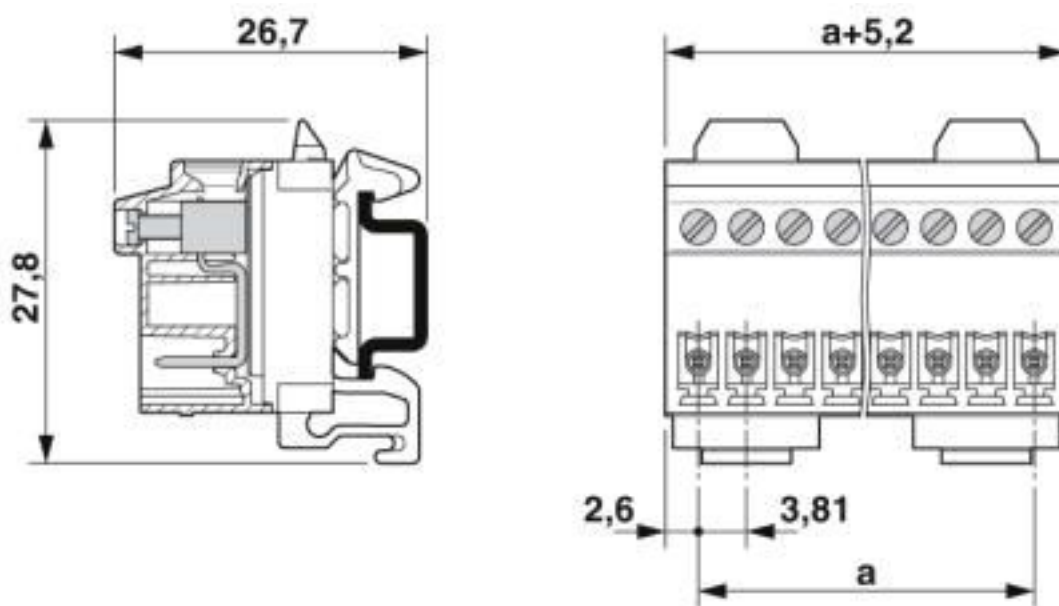
## Technical data

### Environmental Product Compliance

|  |   |
|--|---|
|  | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |
|--|---|

## Drawings

Dimensional drawing



## Classifications

### eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27141106 |
| eCl@ss 11.0   | 27141106 |
| eCl@ss 4.0    | 27260700 |
| eCl@ss 4.1    | 27260700 |
| eCl@ss 5.0    | 27141100 |
| eCl@ss 5.1    | 27141100 |
| eCl@ss 6.0    | 27141100 |
| eCl@ss 7.0    | 27141106 |
| eCl@ss 8.0    | 27141106 |
| eCl@ss 9.0    | 27141106 |

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002637 |
| ETIM 5.0 | EC001284 |
| ETIM 6.0 | EC001284 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 7.0 | EC001284 |
|----------|----------|

### 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


CSA / EAC / cULus Recognized


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#### Ex Approvals

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### Approval details

|                            |   |   |       |
|----------------------------|---|---|-------|
| CSA                        |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                            |   | B   |       |
| Nominal voltage UN         | 300 V   |   |       |
| Nominal current IN         | 8 A   |   |       |
| mm <sup>2</sup> /AWG/kcmil | 28-16   |   |       |

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

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## Approvals

|                            |  |   |                 |
|----------------------------|--|---|-----------------|
| cULus Recognized           |  | <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> | E60425-20110128 |
|                            |  | B   |                 |
| Nominal voltage UN         |  | 300 V   |                 |
| Nominal current IN         |  | 8 A   |                 |
| mm <sup>2</sup> /AWG/kcmil |  | 30-14   |                 |

## Accessories

### Accessories

#### Coding element

Coding profile - CP-MSTB - 1734634

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material



#### Labeled terminal marker

Marker card - SK 3,81/2,8:FORTL.ZAHLEN - 0804109



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: 3.81 mm, lettering field size: 3.81 x 2.8 mm

#### Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

#### Additional products

## Feed-through header - MCVK 1,5/ 3-G-3,81 - 1832743

### Accessories

#### Printed-circuit board connector - MC 1,5/ 3-ST-3,81 - 1803581



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: MC 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - QC 0,5/ 3-ST-3,81 - 1897403



PCB connector, nominal cross section: 0.5 mm<sup>2</sup>, color: green, nominal current: 6 A, rated voltage (III/2): 200 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: QC 0,5/..-ST, pitch: 3.81 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Feed-through header - IMCV 1,5/ 3-G-3,81 - 1875438



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: IMCV 1,5/..-G, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Feed-through header - IMC 1,5/ 3-G-3,81 - 1862580



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: IMC 1,5/..-G, pitch: 3.81 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - MCVW 1,5/ 3-ST-3,81 - 1826982



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: MCVW 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

## Feed-through header - MCVK 1,5/ 3-G-3,81 - 1832743

### Accessories

#### Printed-circuit board connector - FRONT-MC 1,5/ 3-ST-3,81 - 1850673



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: FRONT-MC 1,5/..-ST, pitch: 3.81 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - FK-MCP 1,5/ 3-ST-3,81 - 1851054



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: FK-MCP 1,5/..-ST, pitch: 3.81 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Printed-circuit board connector - MCC 1/ 3-STZ-3,81 - 1852189



PCB connector, nominal cross section: 1 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, 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: MCC 1/..-STZ, pitch: 3.81 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm<sup>2</sup>] data: 5A/MCC-MT 0,2-0,35 (1859988); 8A/MCC-MT 0,5-1,0 (1859991)

#### Printed-circuit board connector - MCVR 1,5/ 3-ST-3,81 - 1827130



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 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: MCVR 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard