

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

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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: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCVW 1,5/...-ST, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: -90 °, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

### Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors



### Key Commercial Data

|                        |                                                                                      |
|------------------------|--------------------------------------------------------------------------------------|
| Packing unit           | 50 pc                                                                                |
| Minimum order quantity | 50 pc                                                                                |
| GTIN                   |  |
| GTIN                   | 4017918120740                                                                        |

### Technical data

#### Item properties

|                           |                  |
|---------------------------|------------------|
| Brief article description | PCB connector    |
| Plug-in system            | MINI COMBICON    |
| Type of contact           | Female connector |
| Range of articles         | MCVW 1,5/...-ST  |
| Pitch                     | 3.5 mm           |
| Number of positions       | 10               |
| Drive form screw head     | Slotted (L)      |
| Screw thread              | M2               |
| Locking                   | without          |
| Number of levels          | 1                |
| Number of connections     | 10               |
| Number of potentials      | 10               |

# Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

## Technical data

### 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                                               | 0.08 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, flexible                                            | 0.08 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                           |

### 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                  | hot-dip tin-plated                                                                |
| Metal surface terminal point (top layer) | Tin (4 - 8 µm Sn)                                                                 |
| Metal surface contact area (top layer)   | Tin (4 - 8 µm Sn)                                                                 |

### 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          |

# Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

## Technical data

### Material data - housing

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| 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 |
| Length [ l ]                | 10.4 mm                                                                                    |
| Width [ w ]                 | 35.8 mm                                                                                    |
| Height [ h ]                | 19.1 mm                                                                                    |
| Pitch                       | 3.5 mm                                                                                     |
| Height (without solder pin) | 19.1 mm                                                                                    |

### Packaging information

|                            |                     |
|----------------------------|---------------------|
| Type of packaging          | packed in cardboard |
| Pieces per package         | 50                  |
| 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) | 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)         | 0.8 mm              |
| Minimum creepage distance value (II/2)          | 1.6 mm              |

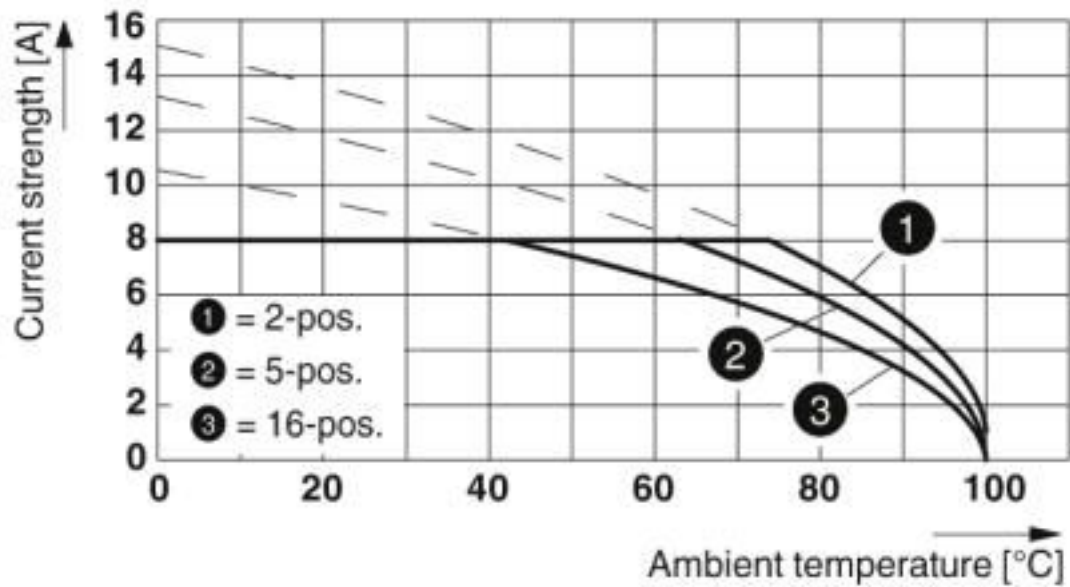
### Environmental Product Compliance

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

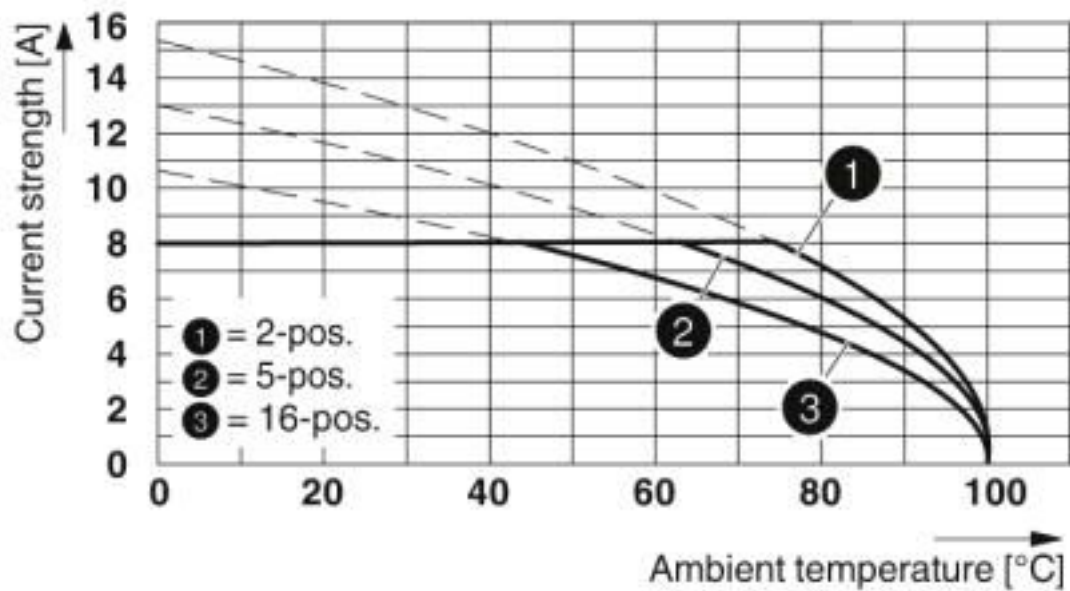
## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

Diagram



Type: MCVW 1,5/...-ST-3,5 with MC 1,5/...-G-3,5

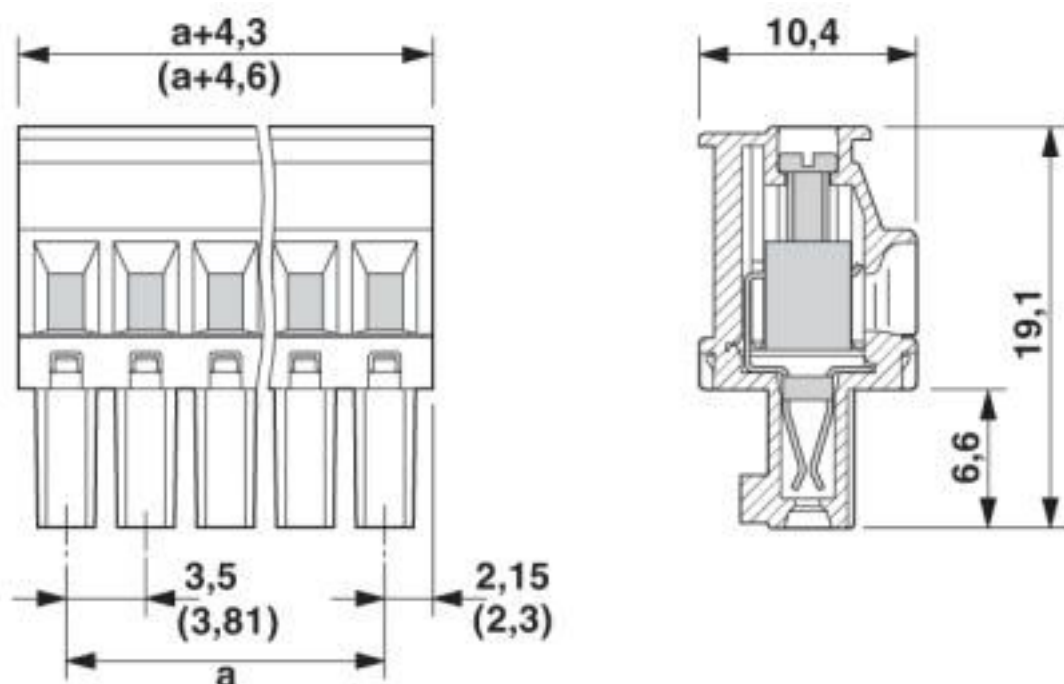
Diagram



Type: MCVW 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

Dimensional drawing



### Classifications

#### eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440309 |
| eCl@ss 11.0   | 27460202 |
| 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 |

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### Classifications

#### UNSPSC

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

##### Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

##### Ex Approvals

#### Approval details

|                    |                                                                                     |                                                           |                |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------|
| IECEE CB Scheme    |  | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-60987-B1B2 |
| Nominal voltage UN | 160 V                                                                               |                                                           |                |
| Nominal current IN | 8 A                                                                                 |                                                           |                |
| mm²/AWG/kcmil      | 0.2-1.5                                                                             |                                                           |                |

|                                            |                                                                                     |                                                                                                                                                                                                                |          |
|--------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit<br>Fertigungsüberwachung |  | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/<br/>VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40011723 |
| Nominal voltage UN                         | 160 V                                                                               |                                                                                                                                                                                                                |          |
| Nominal current IN                         | 8 A                                                                                 |                                                                                                                                                                                                                |          |
| mm²/AWG/kcmil                              | 0.2-1.5                                                                             |                                                                                                                                                                                                                |          |

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

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### 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                                                                                 | D                                                                                                                                                                     |
| Nominal voltage UN | 300 V                                                                             | 300 V                                                                                                                                                                 |
| Nominal current IN | 8 A                                                                               | 8 A                                                                                                                                                                   |
| mm²/AWG/kcmil      | 30-14                                                                             | 30-14                                                                                                                                                                 |

### Accessories

#### Accessories

##### Labeled terminal marker

Marker card - SK 3,5/2,8:FORTL.ZAHLEN - 0804073



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 3.5 mm, lettering field size: 3.5 x 2.8 mm

##### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 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

### Terminal marking

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### Accessories

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

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### Additional products

Printed-circuit board connector - MCV 1,5/10-G-3,5 P20 THRR56 - 1781049



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCV 1,5/-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: 56 mm wide tape, User information and design recommendations for through hole reflow technology can be found under: Downloads

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Printed-circuit board connector - MC 1,5/10-G-3,5 P26 THR - 1788660



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

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Printed-circuit board connector - MC 1,5/10-G-3,5 P26 THRR56 - 1788673



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: 56 mm wide tape

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Printed-circuit board connector - MC 1,5/10-G-3,5 P20 THRR56 - 1788893



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: 56 mm wide tape

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### Accessories

#### Printed-circuit board connector - MC 1,5/10-G-3,5 P14 THR - 1789106

PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/..-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard



#### Printed-circuit board connector - MC 1,5/10-G-3,5 P14 THRR56 - 1789119

PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/..-G-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: 56 mm wide tape



#### Printed-circuit board connector - MCV 1,5/10-G-3,5 - 1843680

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: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MCV 1,5/..-G, pitch: 3.5 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



#### Feed-through header - MC 1,5/10-G-3,5 - 1844294

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: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: MC 1,5/..-G, pitch: 3.5 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



#### Feed-through header - EMC 1,5/10-G-3,5 - 1897173

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: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: EMC 1,5/..-G, pitch: 3.5 mm, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.5 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard



## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### Accessories

#### Feed-through header - EMCV 1,5/10-G-3,5 - 1911091



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: Male connector, Number of potentials: 10, Number of rows: 1, Number of positions per row: 10, number of connections: 10, product range: EMCV 1,5/...-G, pitch: 3.5 mm, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.8 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard

#### Feed-through header - MCV 1,5/10-G-3,5 THT-R56 - 1951064



PCB headers, color: black, contact surface: Tin, Number of positions per row: 10, product range: MCV 1,5/...-G-THT, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 2.6 mm, type of packaging: 56 mm wide tape, User information and design recommendations for through hole reflow technology can be found under: Downloads

#### Printed-circuit board connector - MCDNV 1,5/10-G1-3,5 P26THR - 1952869



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 20, Number of rows: 2, Number of positions per row: 10, number of connections: 20, product range: MCDNV 1,5/...-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard, The pin length is 26 mm. User information and design recommendations on Through Hole Reflow Technology can be found at: [http: "Downloads"](http://Downloads).

#### Printed-circuit board connector - MCDNV 1,5/10-G1-3,5 P14THR - 1953088



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 20, Number of rows: 2, Number of positions per row: 10, number of connections: 20, product range: MCDNV 1,5/...-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard, The pin length is 1.4 mm. User information and design recommendations on Through Hole Reflow Technology can be found at: Downloads".

#### Feed-through header - MCDN 1,5/10-G1-3,5 P26THR - 1953790



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 20, Number of rows: 2, Number of positions per row: 10, number of connections: 20, product range: MCDN 1,5/...-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard, The pin length is 2.6 mm. User information and design recommendations on Through Hole Reflow Technology can be found at: "Downloads"

## Printed-circuit board connector - MCVW 1,5/10-ST-3,5 - 1862933

### Accessories

Feed-through header - MCDN 1,5/10-G1-3,5 P14THR - 1953994



PCB headers, nominal cross section: 1.5 mm<sup>2</sup>, color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 20, Number of rows: 2, Number of positions per row: 10, number of connections: 20, product range: MCDN 1,5/..-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm, Stecksystem: MINI COMBICON, Locking: without, type of packaging: packed in cardboard, The pin length is 1.4 mm. User information and design recommendations on Through Hole Reflow Technology can be found at: Downloads".

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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>