

GMVSTBW 2,5/ 3-STF-7,62 EX - PCB connector



1810010

<https://www.phoenixcontact.com/us/products/1810010>

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PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, contact surface: Tin, contact connection type: Socket, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: GMVSTBW 2,5/..-STF-EX, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5 EX, locking: Screw locking mechanism, mounting: Screw flange, type of packaging: packed in cardboard

Your advantages

- Well-known connection principle allows worldwide use
- Satisfies the more stringent safety requirements of “Ex eb” protection according to IEC 60079-7 for potentially explosive areas
- Screwable flange for superior mechanical stability
- Low temperature rise, thanks to maximum contact force

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 1810010 |
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA03 |
| Product key | AACAMK |
| Catalog page | Page 379 (C-1-2013) |
| GTIN | 4046356705943 |
| Weight per piece (including packing) | 8.38 g |
| Weight per piece (excluding packing) | 8.2 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|-----------------------|-----------------------|
| Type | Standard |
| Product line | COMBICON Connectors M |
| Product type | PCB connector |
| Product family | GMVSTBW 2,5/..-STF-EX |
| Number of positions | 3 |
| Pitch | 7.62 mm |
| Number of connections | 3 |
| Number of rows | 1 |
| Mounting flange | Screw flange |
| Number of potentials | 3 |

Electrical properties

| | |
|---|--------------------------|
| Nominal current I_N | 12 A |
| Nominal voltage U_N | 352 V |
| Rated current / conductor cross section | 12 A/2.5 mm ² |
| Degree of pollution | 3 |

Ex data

Ex approval

| | |
|---------------------------------|--|
| Identification | 0344 ^{Ex} II 2GD / Ex eb IIC Gb |
| EU-type examination certificate | KEMA 10ATEX0196 U |
| IECEx certificate | IECEx KEM 10.0093U |

Connection data

Connection technology

| | |
|-------------------------|----------------------|
| Type | Standard |
| Connector system | COMBICON MSTB 2,5 EX |
| Nominal cross section | 2.5 mm ² |
| Contact connection type | Socket |

Interlock

| | |
|-------------------|-------------------------|
| Locking type | Screw locking mechanism |
| Mounting flange | Screw flange |
| Tightening torque | 0.3 Nm |

Conductor connection

| | |
|------------------------------------|---|
| Connection method | Screw connection with tension sleeve |
| Conductor/PCB connection direction | -90 ° |
| Conductor cross section rigid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |

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| | |
|---|--|
| Conductor cross section AWG | 24 ... 12 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² ... 2.5 mm ² |
| 2 conductors with same cross section, solid | 0.2 mm ² ... 1 mm ² |
| 2 conductors with same cross section, flexible | 0.2 mm ² ... 1.5 mm ² |
| 2 conductors with same cross section, flexible, with ferrule without plastic sleeve | 0.25 mm ² ... 1 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² ... 1 mm ² |
| Cylindrical gauge a x b / diameter | 2.8 mm x 2.0 mm / 2.4 mm |
| Stripping length | 7 mm |
| Tightening torque | 0.5 Nm ... 0.6 Nm |

Material specifications

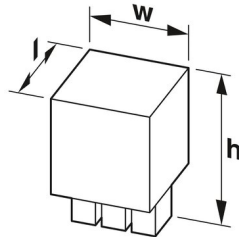
Material data - contact

| | |
|--|--|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201 |
| Contact material | Cu alloy |
| Surface characteristics | 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

| | |
|---|--------------|
| Color (Housing) | 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

| | |
|---------------------|--|
| Dimensional drawing |  |
| Pitch | 7.62 mm |
| Width [w] | 20.82 mm |

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| | |
|------------|----------|
| Height [h] | 26 mm |
| Length [l] | 12.52 mm |

Mounting

| | |
|-----------------------|--------------------------------------|
| Drive form screw head | Slotted (L) |
| Connection method | Screw connection with tension sleeve |
| Drive form screw head | Slotted (L) |

Flange

| | |
|-------------------|--------|
| Tightening torque | 0.3 Nm |
|-------------------|--------|

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. |
|--------------------|--|

Environmental and real-life conditions

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (operation) | -60 °C ... 110 °C |
| 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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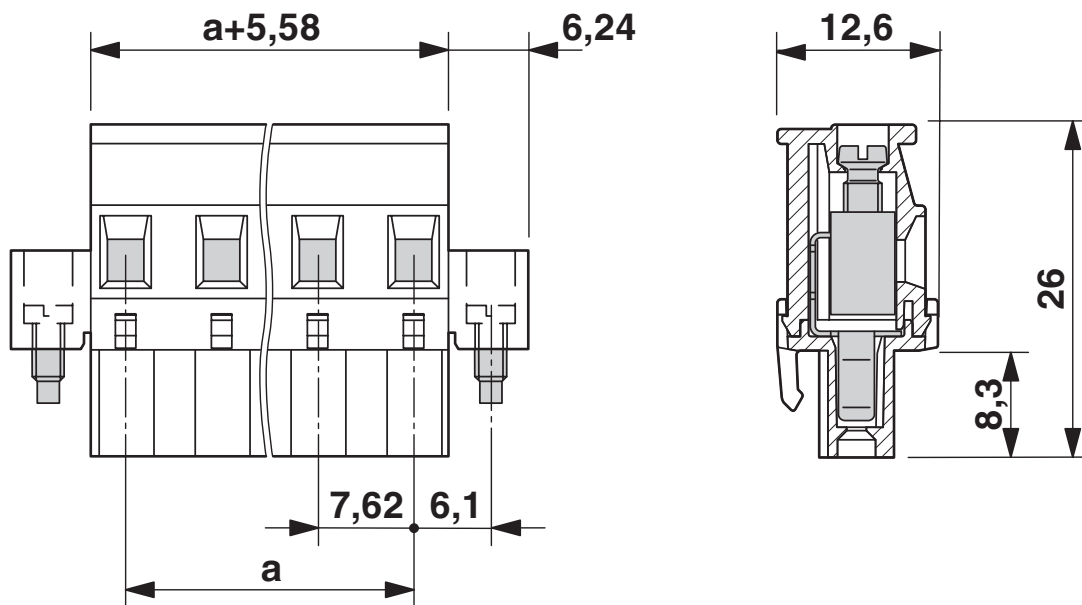


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Drawings

Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1810010>



ATEX

Approval ID: KEMA 10ATEX0196 U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 352 V | 12 A | - | 0.2 - 2.5 |



IECEX

Approval ID: IECEX KEM 10.0093U

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | 352 V | 12 A | - | 0.2 - 2.5 |



EAC Ex

Approval ID: B.00065/19



CCC

Approval ID: 2021122313114375

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27460202 |
| ECLASS-12.0 | 27460202 |
| ECLASS-13.0 | 27460202 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC002638 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 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-MSTB - Coding profile

1734634

<https://www.phoenixcontact.com/us/products/1734634>

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



MPS-MT - Test plugs

0201744

<https://www.phoenixcontact.com/us/products/0201744>

Test plugs, with solder connection up to 1 mm² conductor cross section, number of positions: 1, color: gray



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RPS - Reducing plug

0201647

<https://www.phoenixcontact.com/us/products/0201647>



Reducing plug, number of positions: 1, color: gray

SZS 0,6X3,5 - Screwdriver

1205053

<https://www.phoenixcontact.com/us/products/1205053>



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

<https://www.phoenixcontact.com/us/products/0804293>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412

<https://www.phoenixcontact.com/us/products/0805412>



Marker card, Din A4, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm, Number of individual labels: 1

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B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



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

GMSTB 2,5/ 3-GF-7,62 EX - PCB header

1795899

<https://www.phoenixcontact.com/us/products/1795899>



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, 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: GMSTB 2,5/..-GF-EX, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5 EX, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

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GMSTBV 2,5/ 3-GF-7,62 EX - PCB header

1796678

<https://www.phoenixcontact.com/us/products/1796678>



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, 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: GMSTBV 2,5/...-GF-EX, pitch: 7.62 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking mechanism, mounting: Threaded flange, type of packaging: packed in cardboard

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