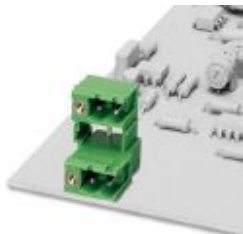


Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

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PCB headers, nominal current: 10 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, Can be aligned! Mounting flange: Order no. 1736771, 1736768. In combination with MVSTB or FKCV plugs, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plugs is not possible!

The figure shows a 2-position version

Your advantages

- Screwable flange for superior mechanical stability
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use
- Conductor connection on several levels enables higher contact density



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 50 pc |
| GTIN | |
| GTIN | 4017918184773 |

Technical data

Item properties

| | |
|---------------------------|---------------------|
| Brief article description | Feed-through header |
| Plug-in system | CLASSIC COMBICON |
| Type of contact | Male connector |
| Range of articles | MDSTB 2,5/..-GF |
| Pitch | 5 mm |
| Number of positions | 3 |
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |
| Locking | Threaded flange |
| Number of levels | 2 |

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Technical data

Item properties

| | |
|-----------------------|---|
| Number of connections | 6 |
| Number of potentials | 6 |

Electrical parameters

| | |
|-----------------------------|-------|
| Nominal current | 10 A |
| Nom. voltage | 320 V |
| Rated voltage | 250 V |
| Rated voltage (III/2) | 320 V |
| Rated voltage (II/2) | 400 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated surge voltage (III/2) | 4 kV |
| Rated surge voltage (II/2) | 4 kV |

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

Material data - housing

| | |
|----------------------------------------|--------------|
| Housing color | green (6021) |
| Insulating material | PBT |
| Insulating material group | IIIa |
| CTI according to IEC 60112 | 225 |
| Flammability rating according to UL 94 | V0 |

Dimensions for the product

| | |
|-----------------------------|----------|
| Length [L] | 22 mm |
| Pitch | 5 mm |
| Height (without solder pin) | 24 mm |
| Solder pin [P] | 3.2 mm |
| Pin dimensions | 1 x 1 mm |

Dimensions for PCB design

| | |
|---------------|--------|
| Hole diameter | 1.4 mm |
|---------------|--------|

Packaging information

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

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Technical data

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) | 3 mm |
| Minimum clearance - inhomogeneous field (III/2) | 3 mm |
| Minimum clearance - inhomogeneous field (II/2) | 3 mm |
| Minimum creepage distance value (III/3) | 4 mm |
| Minimum creepage distance value (III/2) | 4 mm |
| Minimum creepage distance value (II/2) | 4 mm |

Mechanical tests (A)

| | |
|----------------------------------------------|-------------|
| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 8 N |
| Withdraw strength per pos. approx. | 6 N |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N | Test passed |

Durability tests (B)

| | |
|----------------------------------------------|-----------------------|
| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance R ₁ | 1.7 mΩ |
| Insertion/withdrawal cycles | 25 |
| Contact resistance R ₂ | 1.7 mΩ |
| Impulse withstand voltage at sea level | 4.8 kV |
| Power-frequency withstand voltage | 2.21 kV |
| Insulation resistance, neighboring positions | > 0.3 TΩ |

Thermal tests (C)

| | |
|-------------------------------------------------|-----------------------|
| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 12 |
| Conductor cross section | 2.5 mm ² |
| Test current | 10 A |
| Upper limiting temperature requirements <100 °C | Test passed |

Climatic tests (D)

| | |
|----------------------------------------|---------------------------------------------------------------------------|
| Specification | ISO 6988:1985-02 |
| Cold stress | -40 °C/2 h |
| Thermal stress | 100 °C/168 h |
| Corrosive stress | 0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle |
| Impulse withstand voltage at sea level | 4.8 kV |

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Technical data

Climatic tests (D)

| | |
|-----------------------------------|---------|
| Power-frequency withstand voltage | 2.21 kV |
|-----------------------------------|---------|

Environmental and durability tests (E)

| | |
|---------------------------------------|-------------------------------------|
| Specification | IEC 61984:2008-10 |
| Result, degree of protection, IP code | Finger safety with IP20 test finger |

Vibration test

| | |
|------------------------|------------------------|
| Specification | IEC 60068-2-6:2007-12 |
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Standards and Regulations

| | |
|----------------------------------------|--------|
| Connection in acc. with standard | EN-VDE |
| | CUL |
| Flammability rating according to UL 94 | V0 |

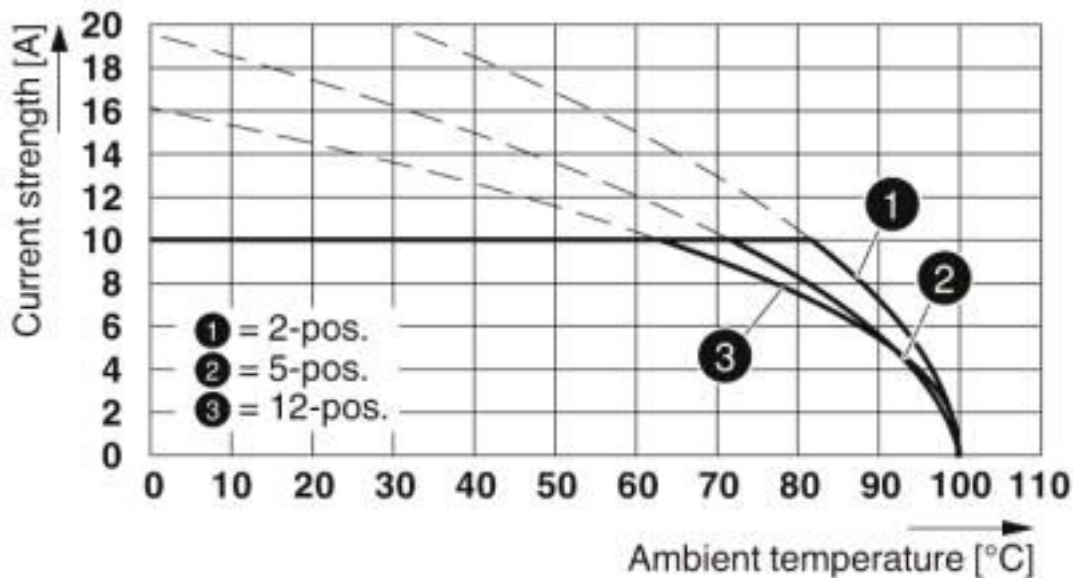
Environmental Product Compliance

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

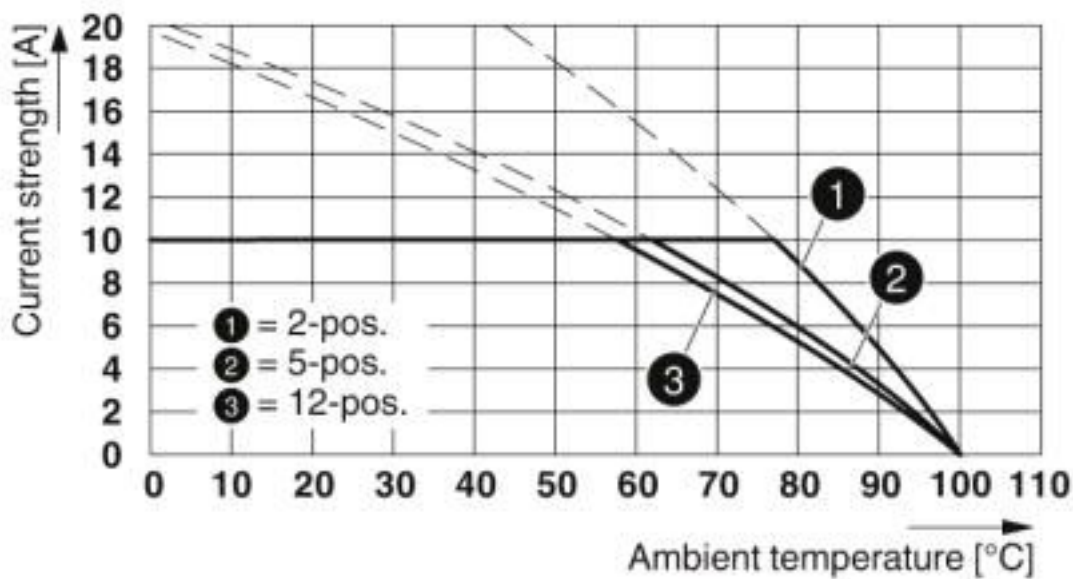
Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Diagram



Type: MSTB 2,5/...-STF with MDSTB 2,5/...-GF

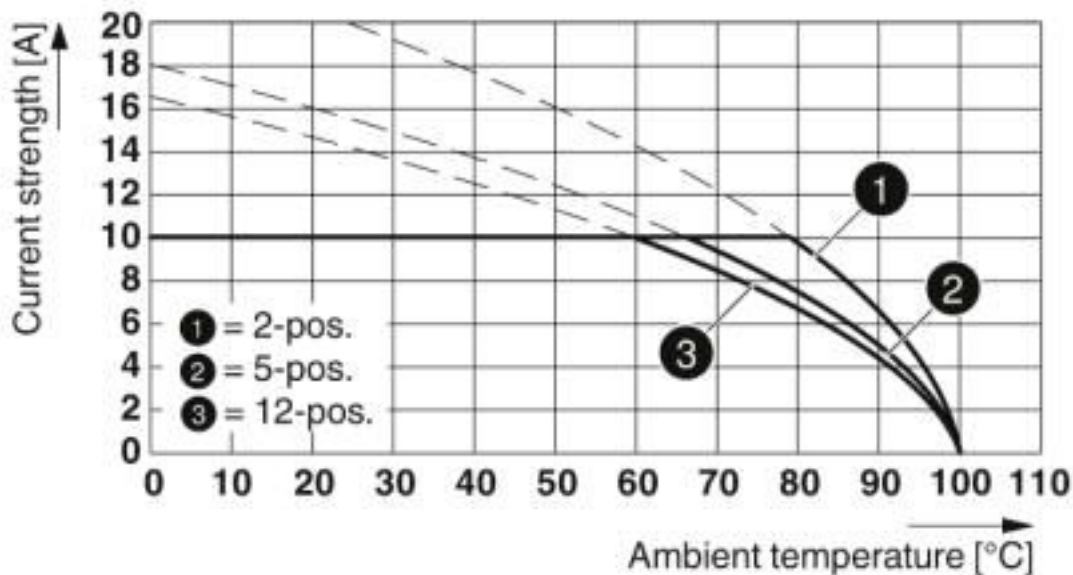
Diagram



Type: MSTBT 2,5/...-STF with MDSTB 2,5/...-GF

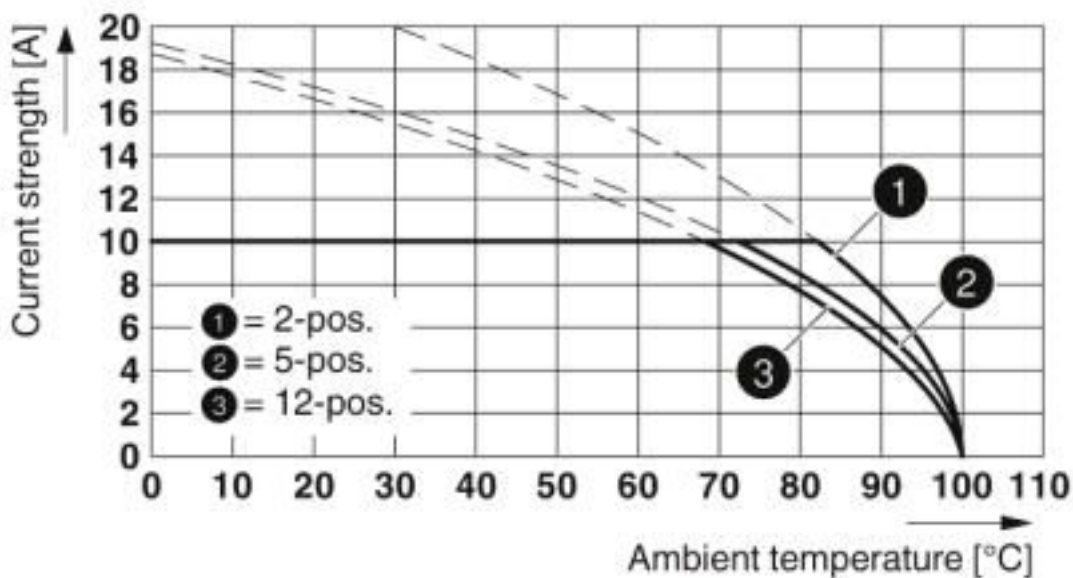
Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Diagram



Type: FRONT-MSTB 2,5/...-STF with MDSTB 2,5/...-GF

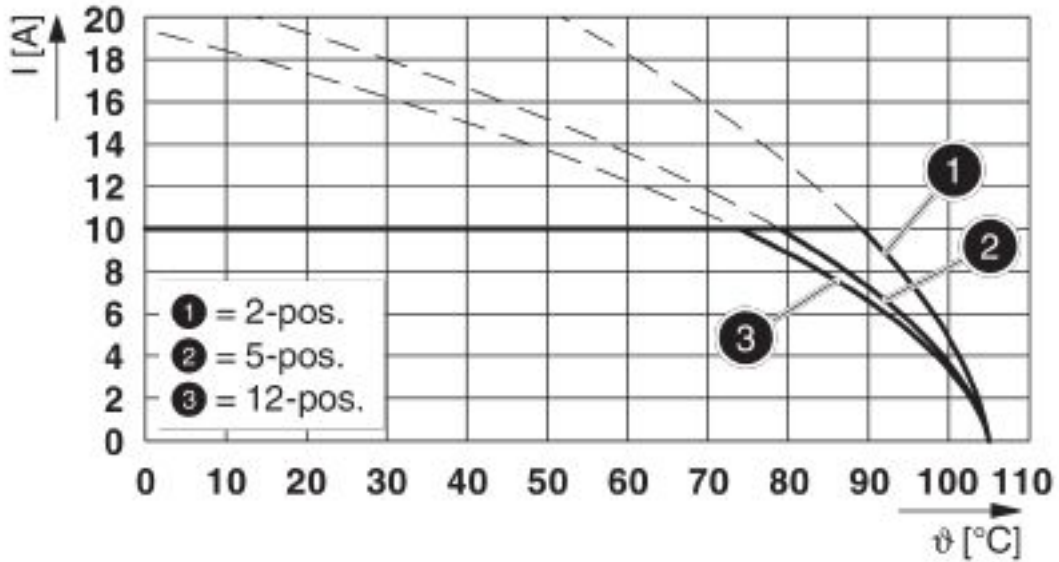
Diagram



Type: FKCS 2,5/...-STF with MDSTB 2,5/...-GF

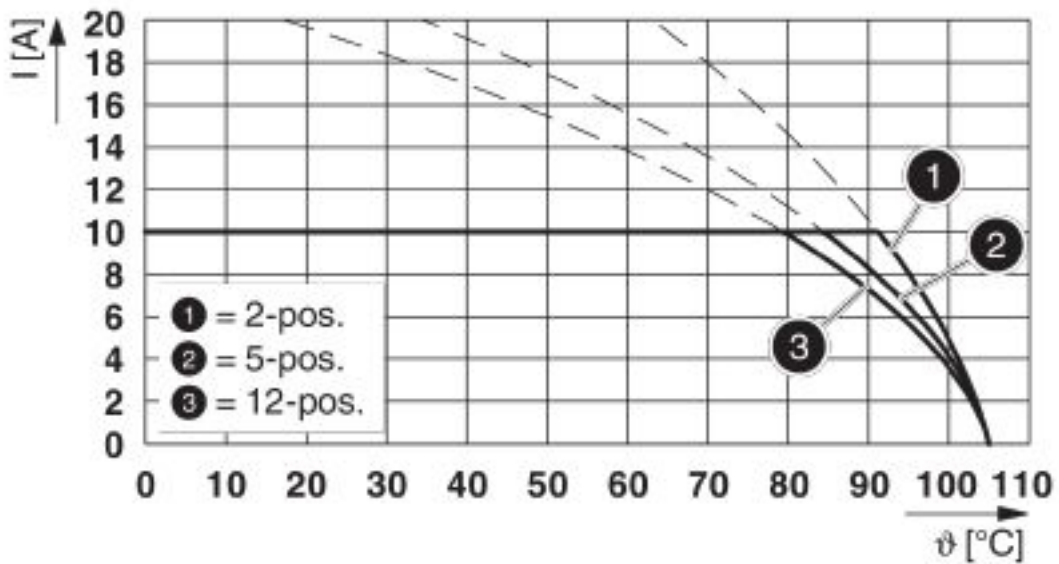
Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Diagram



Type: FKCN 2,5/...-STF with MDSTB 2,5/...-GF

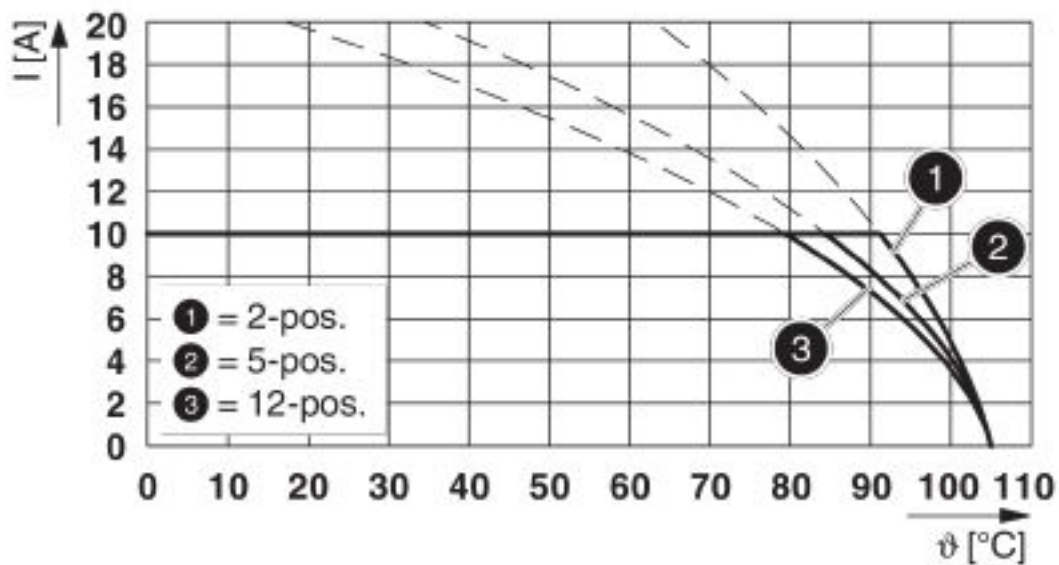
Diagram



Type: FKCVW 2,5/...-STF with MDSTB 2,5/...-GF

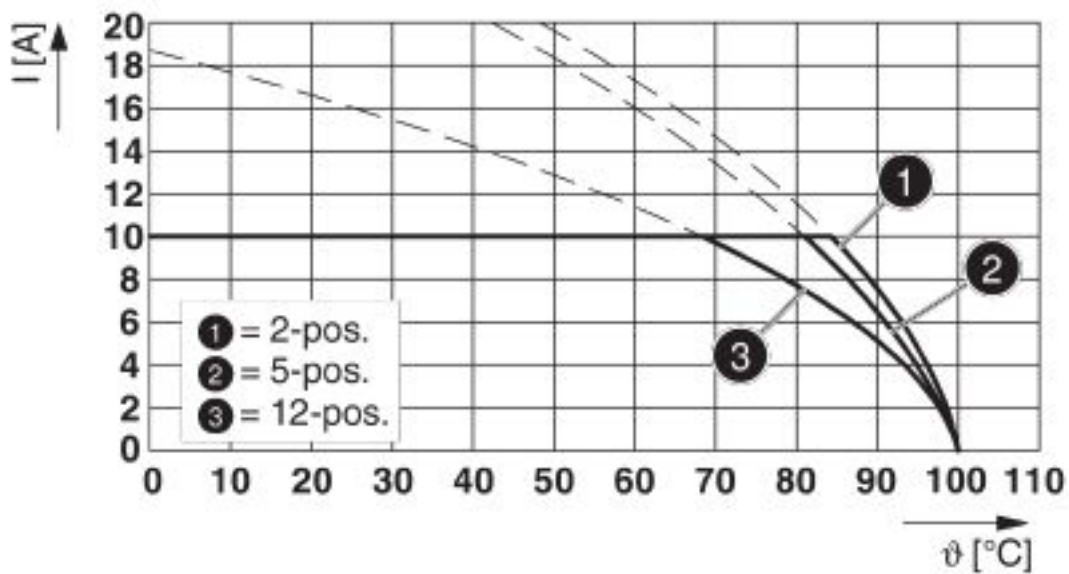
Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Diagram



Type: FKCVR 2,5/...-STF with MDSTB 2,5/...-GF

Diagram



Type: FKCT 2,5/...-STF with MDSTB 2,5/...-GF

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440402 |
| eCl@ss 4.0 | 27260700 |

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.1 | 27260700 |
| eCl@ss 5.0 | 27260700 |
| eCl@ss 5.1 | 27260700 |
| eCl@ss 6.0 | 27260700 |
| eCl@ss 7.0 | 27440402 |
| eCl@ss 8.0 | 27440402 |
| eCl@ss 9.0 | 27440402 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC002637 |
| ETIM 5.0 | EC002637 |
| ETIM 6.0 | EC002637 |
| ETIM 7.0 | EC002637 |

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

Approvals

IECEE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung

Ex Approvals

Approval details

Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Approvals

| | | | |
|--------------------|---------------------|-----------------------------------------------------------|----------------|
| IECEE CB Scheme | CB scheme | http://www.iecee.org/ | DE1-60988-B1B2 |
| Nominal voltage UN | | 250 V | |
| Nominal current IN | | 10 A | |

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

| | | | |
|--------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| cULus Recognized | cULus | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-19931011 |
| | | B | D |
| Nominal voltage UN | | 300 V | 300 V |
| Nominal current IN | | 15 A | 10 A |

| | | | |
|------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40050648 |
| Nominal voltage UN | | 250 V | |
| Nominal current IN | | 10 A | |

Accessories

Additional products

Printed-circuit board connector - FKCN 2,5/ 3-STF - 1732975

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



Printed-circuit board connector - FRONT-MSTB 2,5/ 3-STF - 1779657

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Front screw connection, color: green, contact surface: Tin



Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Accessories

Printed-circuit board connector - MSTB 2,5/ 3-STF - 1786844

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - MVSTBW 2,5/ 3-STF - 1835290

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - MVSTBR 2,5/ 3-STF - 1835481

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin



Printed-circuit board connector - FKCT 2,5/ 3-STF - 1909414

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



Printed-circuit board connector - FKCVR 2,5/ 3-STF - 1909896

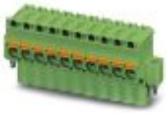
PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin



Feed-through header - MDSTB 2,5/ 3-GFL - 1874617

Accessories

Printed-circuit board connector - FKCVW 2,5/ 3-STF - 1910212



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - FKC 2,5/ 3-STF - 1910539



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Printed-circuit board connector - SMSTB 2,5/ 3-STF - 1970883



PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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