

Feed-through terminal block - ST 2,5 - 3031212

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Feed-through terminal block, nom. voltage: 800 V, nominal current: 24 A, connection method: Spring-cage connection, number of connections: 2, cross section: 0.08 mm² - 4 mm², AWG: 28 - 12, width: 5.2 mm, color: gray, mounting type: NS 35/7,5, NS 35/15

Your advantages

- ✓ The consistent double function shaft offers every opportunity for time-saving potential distribution and accommodating test accessories
- ✓ As well as saving space, the compact design and front connection enable user-friendly wiring in a small amount of space
- ✓ The large wiring space enables the use of conductors with ferrules and plastic collars within the nominal cross section
- ✓ Tested for railway applications




Key Commercial Data

| | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| GTIN |  4 017918 186722 |
| GTIN | 4017918186722 |
| Weight per Piece (excluding packing) | 6.020 g |
| Custom tariff number | 85369010 |
| Country of origin | Germany |

Technical data

General

| | |
|----------------------------------------|---------------------|
| Number of levels | 1 |
| Number of connections | 2 |
| Potentials | 1 |
| Nominal cross section | 2.5 mm ² |
| Color | gray |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Area of application | Railway industry |

Feed-through terminal block - ST 2,5 - 3031212

Technical data

General

| | |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------|
| | Machine building |
| | Plant engineering |
| | Process industry |
| Rated surge voltage | 8 kV |
| Degree of pollution | 3 |
| Overvoltage category | III |
| Insulating material group | I |
| Maximum power dissipation for nominal condition | 0.77 W |
| Designation | Level 1 above 1 below 1 |
| Maximum load current | 31 A (with 4 mm ² conductor cross section) |
| Nominal current I _N | 24 A (at 2.5 mm ²) |
| Nominal voltage U _N | 800 V |
| Open side panel | Yes |
| Shock protection test specification | DIN EN 50274 (VDE 0660-514):2002-11 |
| Back of the hand protection | guaranteed |
| Finger protection | guaranteed |
| Result of surge voltage test | Test passed |
| Surge voltage test setpoint | 9.8 kV |
| Result of power-frequency withstand voltage test | Test passed |
| Power frequency withstand voltage setpoint | 2 kV |
| Result of the test for mechanical stability of terminal points (5 x conductor connection) | Test passed |
| Result of bending test | Test passed |
| Bending test rotation speed | 10 rpm |
| Bending test turns | 135 |
| Bending test conductor cross section/weight | 0.08 mm ² / 0.1 kg |
| | 2.5 mm ² / 0.7 kg |
| | 4 mm ² / 0.9 kg |
| Tensile test result | Test passed |
| Conductor cross section tensile test | 0.08 mm ² |
| Tractive force setpoint | 5 N |
| Conductor cross section tensile test | 2.5 mm ² |
| Tractive force setpoint | 50 N |
| Conductor cross section tensile test | 4 mm ² |
| Tractive force setpoint | 60 N |
| Result of tight fit on support | Test passed |
| Tight fit on carrier | NS 35 |
| Setpoint | 1 N |
| Result of voltage-drop test | Test passed |
| Requirements, voltage drop | ≤ 3.2 mV |
| Result of temperature-rise test | Test passed |

Feed-through terminal block - ST 2,5 - 3031212

Technical data

General

| | |
|-------------------------------------------------------------------------|--------------------------------------------------|
| Short circuit stability result | Test passed |
| Conductor cross section short circuit testing | 2.5 mm ² |
| Short-time current | 0.3 kA |
| Conductor cross section short circuit testing | 4 mm ² |
| Short-time current | 0.48 kA |
| Result of thermal test | Test passed |
| Ageing test for screwless modular terminal block temperature cycles | 192 |
| Proof of thermal characteristics (needle flame) effective duration | 30 s |
| Result of aging test | Test passed |
| Oscillation, broadband noise test result | Test passed |
| Test specification, oscillation, broadband noise | DIN EN 50155 (VDE 0115-200):2008-03 |
| Test spectrum | Service life test category 2, bogie-mounted |
| Test frequency | f ₁ = 5 Hz to f ₂ = 250 Hz |
| ASD level | 0.964 (m/s ²) ² /Hz |
| Acceleration | 4.25 g |
| Test duration per axis | 5 h |
| Test directions | X-, Y- and Z-axis |
| Shock test result | Test passed |
| Test specification, shock test | DIN EN 50155 (VDE 0115-200):2008-03 |
| Shock form | Half-sine |
| Acceleration | 30g |
| Shock duration | 18 ms |
| Number of shocks per direction | 3 |
| Test directions | X-, Y- and Z-axis (pos. and neg.) |
| Relative insulation material temperature index (Elec., UL 746 B) | 130 °C |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 125 °C |
| Static insulating material application in cold | -60 °C |
| Behavior in fire for rail vehicles (DIN 5510-2) | Test passed |
| Flame test method (DIN EN 60695-11-10) | V0 |
| Oxygen index (DIN EN ISO 4589-2) | >32 % |
| NF F16-101, NF F10-102 Class I | 2 |
| NF F16-101, NF F10-102 Class F | 2 |
| Surface flammability NFPA 130 (ASTM E 162) | passed |
| Specific optical density of smoke NFPA 130 (ASTM E 662) | passed |
| Smoke gas toxicity NFPA 130 (SMP 800C) | passed |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 27,5 MJ/kg |
| Fire protection for rail vehicles (DIN EN 45545-2) R22 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R26 | HL 1 - HL 3 |

Feed-through terminal block - ST 2,5 - 3031212

Technical data

Dimensions

| | |
|------------------|---------|
| Width | 5.2 mm |
| End cover width | 2.2 mm |
| Length | 48.5 mm |
| Height NS 35/7,5 | 36.5 mm |
| Height NS 35/15 | 44 mm |

Connection data

| | |
|-----------------------------------------------------------------------------------------|------------------------|
| Connection | 1 level |
| Connection method | Spring-cage connection |
| Stripping length | 8 mm ... 10 mm |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section solid min. | 0.08 mm ² |
| Conductor cross section solid max. | 4 mm ² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 12 |
| Conductor cross section flexible min. | 0.08 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Min. AWG conductor cross section, flexible | 28 |
| Max. AWG conductor cross section, flexible | 14 |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.14 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 2.5 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.14 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 2.5 mm ² |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 0.5 mm ² |
| Connection in acc. with standard | IEC/EN 60079-7 |
| Conductor cross section solid min. | 0.08 mm ² |
| Conductor cross section solid max. | 4 mm ² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 12 |
| Conductor cross section flexible min. | 0.08 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Internal cylindrical gage | A3 |

Standards and Regulations

| | |
|--------------------------------------------------------|---------------|
| Connection in acc. with standard | CSA |
| | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |
| Fire protection for rail vehicles (DIN EN 45545-2) R22 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R26 | HL 1 - HL 3 |

Feed-through terminal block - ST 2,5 - 3031212

Technical data

Environmental Product Compliance

| | |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Circuit diagram



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27141100 |
| eCl@ss 6.0 | 27141100 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11 | 39121410 |
| UNSPSC 12.01 | 39121410 |
| UNSPSC 13.2 | 39121410 |

Approvals

Approvals



Feed-through terminal block - ST 2,5 - 3031212

Approvals

Approvals


DNV GL / CSA / BV / LR / KR / NK / UL Recognized / cUL Recognized / IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / PRS / RS / cULus Recognized

Ex Approvals


EAC Ex / IECEx / ATEX

Approval details

| | | | |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|
| DNV GL |  | https://approvalfinder.dnvgl.com/ | TAE00001CS |
|--------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|

| | | | |
|----------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | | B | C |
| Nominal voltage UN | | 600 V | 600 V |
| Nominal current IN | | 20 A | 20 A |
| mm ² /AWG/kcmil | | 28-12 | 28-12 |

| | | | |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| BV |  | http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials | 13403/D0 BV |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|


| | | | |
|----|-------------------------------------------------------------------------------------|---------------------------------------------------------|----------|
| LR |  | http://www.lr.org/en | 04/20034 |
|----|-------------------------------------------------------------------------------------|---------------------------------------------------------|----------|


| | | | |
|----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------|
| KR |  | http://www.krs.co.kr/eng/main/main.aspx | HMB17372-EL002 |
|----|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------|


| | | | |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------|
| NK |  | http://www.classnk.or.jp/hp/en/ | 09 ME 140 |
|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------|


Feed-through terminal block - ST 2,5 - 3031212

Approvals

| | | | |
|----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 20 A | 20 A | |
| mm ² /AWG/kcmil | 28-12 | 28-12 | |

| | | | |
|----------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| cUL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | |
| Nominal voltage UN | 600 V | 600 V | |
| Nominal current IN | 20 A | 20 A | |
| mm ² /AWG/kcmil | 28-12 | 28-12 | |

| | | | |
|----------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------|
| IECEE CB Scheme |  | http://www.iecee.org/ | DE1-51366 |
| Nominal voltage UN | 800 V | | |
| mm ² /AWG/kcmil | 2.5 | | |

| | | | |
|--------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| VDE Gutachten mit Fertigungsüberwachung |  | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40009033 |
| Nominal voltage UN | 800 V | | |
| Nominal current IN | 24 A | | |
| mm ² /AWG/kcmil | 0.2-2.5 | | |

| | | |
|-----|-------------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C- DE.A*30.B.01742 |
|-----|-------------------------------------------------------------------------------------|--------------------------|

| | | | |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|
| PRS |  | http://www.prs.pl/ | TE/2156/880590/17 |
|-----|-------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------|


<https://www.phoenixcontact.com/gb/products/3031212>



Feed-through terminal block - ST 2,5 - 3031212

Approvals

| | | | |
|----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------|
| RS |  | http://www.rs-head.spb.ru/en/index.php | 17.00013.272 |
|----|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------|

| | |
|------------------|-----------------------------------------------------------------------------------|
| cULus Recognized |  |
|------------------|-----------------------------------------------------------------------------------|

Phoenix Contact 2019 © - all rights reserved
<http://www.phoenixcontact.com>



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk