

Installation ground terminal block - STIO 2,5/3-PE/B/L - 3209044

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Installation ground terminal block, nom. voltage: 250 V, nominal current: 18 A, connection method: Spring-cage connection, number of connections: 4, 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

- ✓ Three-conductor output terminal block of the same shape with PE connection in the lower level for wiring actuators
- ✓ Power terminal blocks can be located at any point on the terminal strip for supply or extension purposes
- ✓ Versions with LED for indicating the switching states
- ✓ Easy bridging and potential distribution using the patented plug-in bridges from the CLIPLINE complete system
- ✓ For space and time-saving wiring of three-conductor initiators and actuators
- ✓ The upper level is for signal wiring, whereas the two lower levels are used to distribute the positive and negative potential
- ✓ Potential is supplied via the STIO-IN power terminal blocks



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 50 pc |
| GTIN |  4 046356 143332 |
| GTIN | 4046356143332 |

Technical data

General

| | |
|--|---------------------|
| Number of levels | 3 |
| Number of connections | 4 |
| Nominal cross section | 2.5 mm ² |
| Color | gray |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Rated surge voltage | 4 kV |
| Degree of pollution | 3 |
| Overvoltage category | III |

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Technical data

General

| | |
|---|--|
| Insulating material group | I |
| Maximum power dissipation for nominal condition | 0.77 W (the value is multiplied when connecting multiple levels) |
| Connection in acc. with standard | IEC 60947-7-1/IEC 60947-7-2 |
| Nominal current I_N | 18 A |
| Maximum load current | 18 A (with 4 mm ² conductor cross section) |
| Nominal voltage U_N | 250 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 | 4.8 kV |
| Result of power-frequency withstand voltage test | Test passed |
| Power frequency withstand voltage setpoint | 1.5 kV |
| Checking the 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 |
| Short circuit stability result | Test passed |
| Conductor cross section short circuit testing | 2.5 mm ² |
| Short-time current | 0.3 kA |
| Result of aging test | Test passed |
| Ageing test for screwless modular terminal block temperature cycles | 192 |
| Result of thermal test | Test passed |

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Technical data

General

| | |
|---|-------------|
| Proof of thermal characteristics (needle flame) effective duration | 30 s |
| Relative insulation material temperature index (Elec.; UL 746 B) | 130 °C |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °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) | 28 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 |

Dimensions

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|------------------|---------|
| Width | 5.2 mm |
| Length | 75 mm |
| Height NS 35/7,5 | 44.5 mm |
| Height NS 35/15 | 52 mm |

Connection data

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|---|--|
| Note | Please observe the current carrying capacity of the DIN rails. |
| Connection method | Spring-cage connection |
| Conductor cross section solid min. | 0.08 mm ² |
| Conductor cross section solid max. | 4 mm ² |
| Conductor cross section flexible min. | 0.08 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 12 |
| 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 |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A3 |

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Technical data

Standards and Regulations

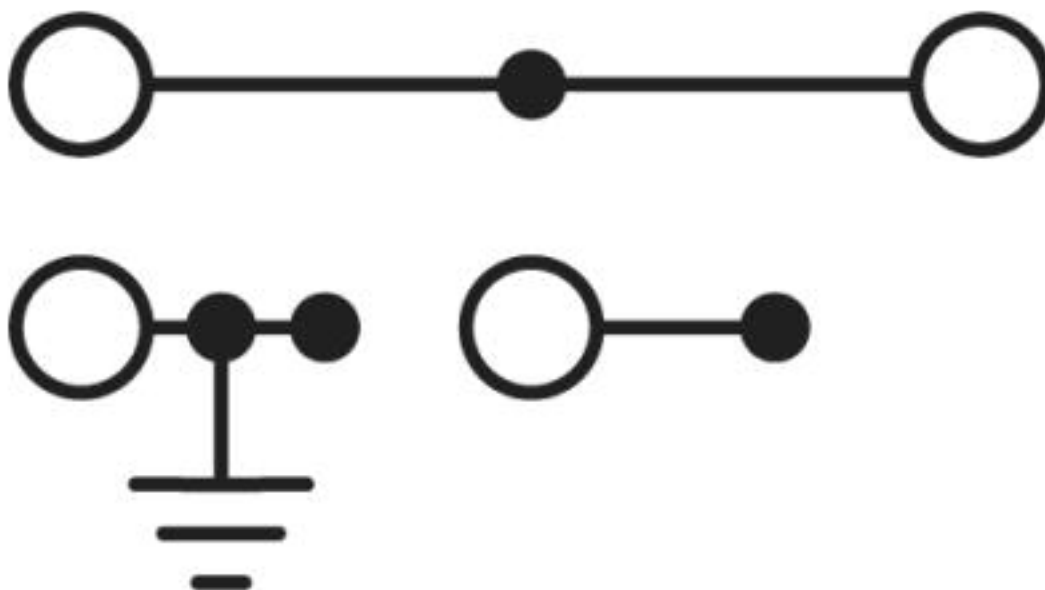
| | |
|--|-----------------------------|
| Connection in acc. with standard | CUL |
| | IEC 60947-7-1/IEC 60947-7-2 |
| Flammability rating according to UL 94 | V0 |
| Fire protection for rail vehicles (DIN EN 45545-2) R22 | HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL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

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

Drawings

Circuit diagram



Approvals

Approvals

Approvals


UL Recognized / cUL Recognized / EAC / cULus Recognized


Ex Approvals


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Approvals

Approval details

| | | | |
|----------------------------|---|---|--------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | D |
| Nominal voltage UN | 300 V | 150 V | 300 V |
| Nominal current IN | 10 A | 18 A | 10 A |
| mm ² /AWG/kcmil | 28-12 | 28-12 | 28-12 |

| | | | |
|----------------------------|---|---|--------------|
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| | | |
|-----|---|---------------|
| EAC |  | EAC-Zulassung |
|-----|---|---------------|

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

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