

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

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 documentation. Our general terms of use for downloads are valid.



Installation protective conductor terminal block, nom. voltage: 250 V, nominal current: 18 A, number of connections: 5, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

Your advantages

- Upper level for signal wiring

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 3209060 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | BE02 |
| Product key | BE2118 |
| GTIN | 4046356143318 |
| Weight per piece (including packing) | 13.974 g |
| Weight per piece (excluding packing) | 13.255 g |
| Customs tariff number | 85369010 |
| Country of origin | TR |

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

Technical data

Product properties

| | |
|-----------------------|--------------------------------|
| Product type | Sensor/actuator terminal block |
| Number of connections | 5 |
| Number of rows | 3 |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Electrical properties

| | |
|---|--------|
| Rated surge voltage | 4 kV |
| Maximum power dissipation for nominal condition | 0.77 W |

Connection data

| | |
|---|--|
| Number of connections per level | 5 |
| Nominal cross section | 2.5 mm ² |
| Connection method | Spring-cage connection |
| Note | Please observe the current carrying capacity of the DIN rails. |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A3 |
| Connection in acc. with standard | IEC 60947-7-1/IEC 60947-7-2 |
| Conductor cross-section rigid | 0.08 mm ² ... 4 mm ² |
| Cross section AWG | 28 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.08 mm ² ... 2.5 mm ² |
| Conductor cross-section, flexible [AWG] | 28 ... 14 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm ² ... 2.5 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.14 mm ² ... 2.5 mm ² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm ² |
| Nominal current | 18 A |
| Maximum load current | 18 A (with 4 mm ² conductor cross-section) |
| Nominal voltage | 250 V |
| Nominal cross section | 2.5 mm ² |

Dimensions

| | |
|--------------------|---------|
| Width | 5.2 mm |
| End cover width | 2.2 mm |
| Height | 92.3 mm |
| Depth on NS 35/7,5 | 44.5 mm |
| Depth on NS 35/15 | 52 mm |

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

Material specifications

| | |
|---|-----------------|
| Color | gray (RAL 7042) |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | I |
| Insulating material | PA |
| Static insulating material application in cold | -60 °C |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C |
| Relative insulation material temperature index (Elec., UL 746 B) | 130 °C |
| 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 |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 28 MJ/kg |
| 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 |

Electrical tests

Surge voltage test

| | |
|-----------------------|-------------|
| Test voltage setpoint | 4.8 kV |
| Result | Test passed |

Temperature-rise test

| | |
|--|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| Short-time withstand current 2.5 mm ² | 0.3 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|-----------------------|-------------|
| Test voltage setpoint | 1.5 kV |
| Result | Test passed |

Mechanical properties

Mechanical data

| | |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

Mechanical tests

Mechanical strength

| | |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

Attachment on the carrier

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

| | |
|-------------------------|-------------|
| DIN rail/fixing support | NS 35 |
| Test force setpoint | 1 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|-------------------------------|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross-section/weight | 0.08 mm ² / 0.1 kg |
| | 2.5 mm ² / 0.7 kg |
| | 4 mm ² / 0.9 kg |
| Result | Test passed |

Environmental and real-life conditions

Aging

| | |
|--------------------|-------------|
| Temperature cycles | 192 |
| Result | Test passed |

Needle-flame test

| | |
|------------------|-------------|
| Time of exposure | 30 s |
| Result | Test passed |

Ambient conditions

| | |
|--|--|
| Ambient temperature (operation) | -60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.) |
| Ambient temperature (storage/transport) | -25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C) |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |
| Permissible humidity (operation) | 20 % ... 90 % |
| Permissible humidity (storage/transport) | 30 % ... 70 % |

Standards and regulations

| | |
|----------------------------------|-----------------------------|
| Connection in acc. with standard | IEC 60947-7-1/IEC 60947-7-2 |
|----------------------------------|-----------------------------|

Mounting

| | |
|---------------|-----------|
| Mounting type | NS 35/7,5 |
| | NS 35/15 |

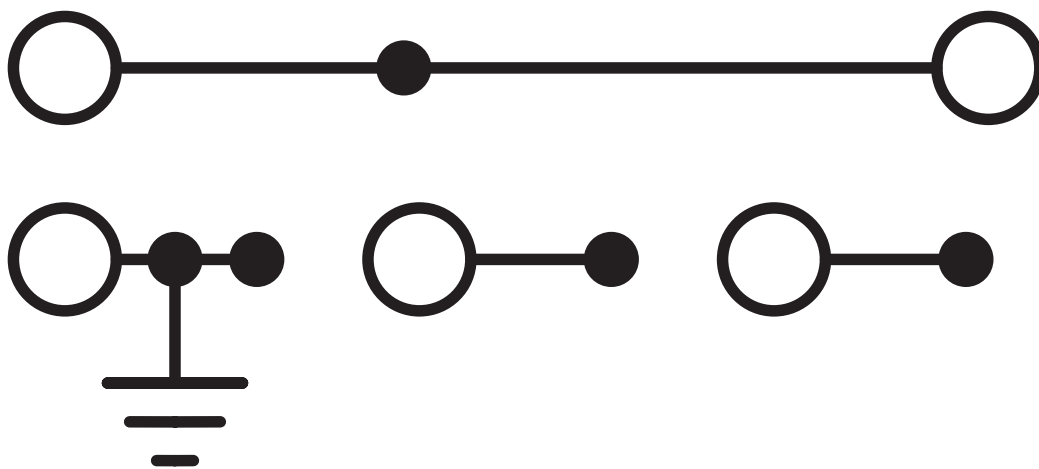
STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block

3209060

<https://www.phoenixcontact.com/us/products/3209060>

Drawings

Circuit diagram




STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block





3209060
<https://www.phoenixcontact.com/us/products/3209060>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3209060>

**EAC**
Approval ID: RU C-DE.BL08.B.00644

|  | cULus Recognized | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Approval ID: E60425 | | | |
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| B | | | | |
| | 300 V | 10 A | 28 - 12 | - |
| C | | | | |
| | 150 V | 18 A | 28 - 12 | - |
| D | | | | |
| | 300 V | 10 A | 28 - 12 | - |

**EAC**
Approval ID: KZ7500651131219505

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27250112 |
| ECLASS-15.0 | 27250112 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000900 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

STIO 2,5/4-PE/2B/L - Installation protective conductor terminal block



3209060

<https://www.phoenixcontact.com/us/products/3209060>

Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com