

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

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Sensor/actuator terminal block, Connection method: Spring-cage connection, Cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 28 - 12, Width: 5.2 mm, Color: gray, Mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ 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
- ✓ Potential is supplied via the STIO-IN power terminal blocks
- ✓ The upper level is for signal wiring, whereas the two lower levels are used to distribute the positive and negative potential
- ✓ For space and time-saving wiring of three-conductor initiators and actuators

### Key commercial data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 50 pc   |
| GTIN                                 | <br>4 046356 143325 |
| Weight per Piece (excluding packing) | 9.2 g   |
| Weight per piece (including packing) | 9.767 g   |
| Custom tariff number                 | 85369010  |
| Country of origin                    | Poland  |
| Sales Key                            | A1 - Terminal Strips  |

### Technical data

#### General

|   |      |
|---|------|
| Number of levels                        | 3    |
| Number of connections                   | 4    |
| Color                                   | gray |
| Insulating material                     | PA   |
| Inflammability class according to UL 94 | V0   |
| Rated surge voltage                     | 4 kV |
| Pollution degree                        | 3    |
| Surge voltage category                  | III  |
| Insulating material group               | I    |

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Technical data

#### General

|   |                                     |
|---|-------------------------------------|
| Connection in acc. with standard  | IEC 60947-7-1                       |
| Nominal current I <sub>N</sub>  | 18 A                                |
| Nominal voltage U <sub>N</sub>  | 250 V                               |
| Open side panel   | ja                                  |
| Shock protection test specification   | DIN EN 50274 (VDE 0660-514):2002-11 |
| Back of the hand protection   | guaranteed                          |
| Finger protection   | guaranteed                          |
| Surge voltage test setpoint   | 4.8 kV                              |
| Result of surge voltage test  | Test passed                         |
| Power frequency withstand voltage setpoint                                      | 1.5 kV                              |
| Result of power-frequency withstand voltage test                                | Test passed                         |
| Checking the mechanical stability of terminal points (5 x conductor connection) | Test passed                         |
| Bending test rotation speed   | 10 rpm                              |
| Bending test turns  | 135                                 |
| Bending test conductor cross section/weight                                     | 0.08 mm <sup>2</sup> / 0.1 kg       |
|   | 2.5 mm <sup>2</sup> / 0.7 kg        |
|   | 4 mm <sup>2</sup> / 0.9 kg          |
| Result of bending test  | Test passed                         |
| Conductor cross section tensile test  | 0.08 mm <sup>2</sup>                |
| Tractive force setpoint   | 5 N                                 |
| Conductor cross section tensile test  | 2.5 mm <sup>2</sup>                 |
| Tractive force setpoint   | 50 N                                |
| Conductor cross section tensile test  | 4 mm <sup>2</sup>                   |
| Tractive force setpoint   | 60 N                                |
| Tensile test result   | Test passed                         |
| Tight fit on carrier  | NS 35                               |
| Setpoint  | 1 N                                 |
| Result of tight fit test  | Test passed                         |
| Requirements, voltage drop  | ≤ 3.2 mV                            |
| Result of voltage drop test   | Test passed                         |
| Temperature-rise test   | Test passed                         |
| Conductor cross section short circuit testing                                   | 2.5 mm <sup>2</sup>                 |
| Short-time current  | 0.3 kA                              |
| Short circuit stability result  | Test passed                         |
| Ageing test for screwless modular terminal block temperature cycles             | 192                                 |
| Result of aging test  | Test passed                         |
| Proof of thermal characteristics (needle flame) effective duration              | 30 s                                |
| Result of thermal test  | Test passed                         |
| Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))           | 120 °C                              |

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Technical data

#### Dimensions

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

#### Connection data

|   |                        |
|---|------------------------|
| Connection method   | Spring-cage connection |
| Conductor cross section solid min.  | 0.08 mm <sup>2</sup>   |
| Conductor cross section solid max.  | 4 mm <sup>2</sup>      |
| Conductor cross section stranded min.   | 0.08 mm <sup>2</sup>   |
| Conductor cross section stranded max.   | 2.5 mm <sup>2</sup>    |
| Conductor cross section AWG/kcmil min.  | 28                     |
| Conductor cross section AWG/kcmil max   | 12                     |
| Conductor cross section stranded, with ferrule without plastic sleeve min.              | 0.14 mm <sup>2</sup>   |
| Conductor cross section stranded, with ferrule without plastic sleeve max.              | 2.5 mm <sup>2</sup>    |
| Conductor cross section stranded, with ferrule with plastic sleeve min.                 | 0.14 mm <sup>2</sup>   |
| Conductor cross section stranded, with ferrule with plastic sleeve max.                 | 2.5 mm <sup>2</sup>    |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 0.5 mm <sup>2</sup>    |
| Stripping length  | 10 mm                  |
| Internal cylindrical gage   | A3                     |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141118 |
| eCl@ss 4.1 | 27141118 |
| eCl@ss 5.0 | 27141118 |
| eCl@ss 5.1 | 27141118 |
| eCl@ss 6.0 | 27141128 |
| eCl@ss 7.0 | 27141128 |
| eCl@ss 8.0 | 27141128 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000900 |
| ETIM 3.0 | EC000900 |
| ETIM 4.0 | EC000900 |
| ETIM 5.0 | EC000900 |

#### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 6.01 | 30211811 |
|-------------|----------|

# Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

## Classifications

### UNSPSC

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

## Approvals

### Approvals

Approvals

UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approvals submitted

### Approval details

|                                |       |       |       |
|--------------------------------|-------|-------|-------|
| UL Recognized                  |       |       |       |
|                                | B     | C     | D     |
| mm <sup>2</sup> /AWG/kcmil     | 28-12 | 28-12 | 28-12 |
| Nominal current I <sub>N</sub> | 10 A  | 18 A  | 10 A  |
| Nominal voltage U <sub>N</sub> | 300 V | 150 V | 300 V |

|                                |       |       |       |
|--------------------------------|-------|-------|-------|
| cUL Recognized                 |       |       |       |
|                                | B     | C     | D     |
| mm <sup>2</sup> /AWG/kcmil     | 28-12 | 28-12 | 28-12 |
| Nominal current I <sub>N</sub> | 10 A  | 18 A  | 10 A  |
| Nominal voltage U <sub>N</sub> | 300 V | 150 V | 300 V |

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

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

#### Accessories

#### Bridge

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, Number of positions: 2, Color: red

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Plug-in bridge - FBS 3-5 - 3030174



Plug-in bridge, Number of positions: 3, Color: red

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Plug-in bridge - FBS 4-5 - 3030187



Plug-in bridge, Number of positions: 4, Color: red

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Plug-in bridge - FBS 5-5 - 3030190



Plug-in bridge, Number of positions: 5, Color: red

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Plug-in bridge - FBS 10-5 - 3030213



Plug-in bridge, Number of positions: 10, Color: red

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## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Plug-in bridge - FBS 20-5 - 3030226



Plug-in bridge, Number of positions: 20, Color: red

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Plug-in bridge - FBS 50-5 - 3038930



Plug-in bridge, Number of positions: 50, Color: red

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Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, Number of positions: 2, Color: blue

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Plug-in bridge - FBS 3-5 BU - 3036880



Plug-in bridge, Number of positions: 3, Color: blue

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Plug-in bridge - FBS 4-5 BU - 3036893



Plug-in bridge, Number of positions: 4, Color: blue

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## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Plug-in bridge - FBS 5-5 BU - 3036903



Plug-in bridge, Number of positions: 5, Color: blue

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Plug-in bridge - FBS 10-5 BU - 3036916



Plug-in bridge, Number of positions: 10, Color: blue

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Plug-in bridge - FBS 20-5 BU - 3036929



Plug-in bridge, Number of positions: 20, Color: blue

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Plug-in bridge - FBS 50-5 BU - 3032114



Plug-in bridge, Number of positions: 50, Color: blue

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Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, Number of positions: 2, Color: gray

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## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Plug-in bridge - FBS 3-5 GY - 3038972



Plug-in bridge, Number of positions: 3, Color: gray

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Plug-in bridge - FBS 4-5 GY - 3038985



Plug-in bridge, Number of positions: 4, Color: gray

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Plug-in bridge - FBS 5-5 GY - 3038998



Plug-in bridge, Number of positions: 5, Color: gray

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Plug-in bridge - FBS 10-5 GY - 3039007



Plug-in bridge, Number of positions: 10, Color: gray

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Plug-in bridge - FBS 20-5 GY - 3038671



Plug-in bridge, Number of positions: 20, Color: gray

---



## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Plug-in bridge - FBS 50-5 GY - 3032127



Plug-in bridge, Number of positions: 50, Color: gray

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### Documentation

Mounting material - ST-IL - 3039900

Operating decal for the ST terminal block



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### End cover

End cover - D-STIO 2,5/3 - 3209112



End cover, Length: 72.5 mm, Width: 2.2 mm, Color: gray

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### Labeled terminal marker

Zack marker strip - ZB 5 CUS - 0824962



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Zack marker strip - ZB 5,LGS:FORTL.ZAHLEN - 1050017



Zack marker strip, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

#### Zack marker strip - ZB 5,QR:FORTL.ZAHLEN - 1050020



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

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#### Zack marker strip - ZB 5,LGS:GLEICHE ZAHLEN - 1050033



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Identical numbers 1 or 2, etc. up to 100, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

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#### Marker for terminal blocks - ZB 5,LGS:L1-N,PE - 1050415



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

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#### Marker for terminal blocks - UC-TM 5 CUS - 0824581



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 10.5 x 4.6 mm

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#### Marker for terminal blocks - UCT-TM 5 CUS - 0829595



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, Lettering field: 4.6 x 10.5 mm

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Zack Marker strip, flat - ZBF 5 CUS - 0825025



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 2 - 20, 22 - 40, etc. up to 82 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863



Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

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## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Marker for terminal blocks - UC-TMF 5 CUS - 0824638



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 5 CUS - 0829658



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

### Mounting rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

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DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

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DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

End cap - NS 35/ 7,5 CAP - 1206560

DIN rail end piece, for DIN rail NS 35/7.5



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### Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, Unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.1 x 10.5 mm

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Marker for terminal blocks - UC-TM 5 - 0818108



Marker for terminal blocks, Sheet, white, Unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 10.5 x 4.6 mm

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Marker for terminal blocks - UCT-TM 5 - 0828734



Marker for terminal blocks, Sheet, white, Unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 10.5 mm

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Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, Unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

## Sensor/actuator terminal block - STIO 2,5/3-2B/L - 3209015

### Accessories

Marker for terminal blocks - UC-TMF 5 - 0818153



Marker for terminal blocks, Sheet, white, Unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.6 x 5.1 mm

Marker for terminal blocks - UCT-TMF 5 - 0828744



Marker for terminal blocks, Sheet, white, Unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 4.4 x 4.7 mm

### Drawings

Circuit diagram

