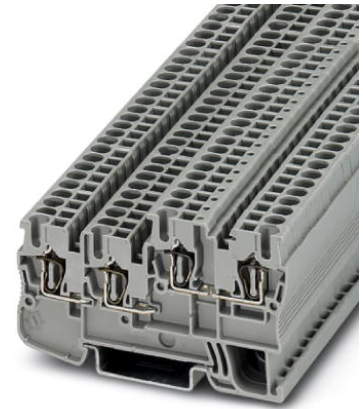



# STIO 2,5/3-2B/L

Order No.: 3209015



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=3209015>

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

Commercial data	
EAN	
sales group	A634
Pack	50 Pcs.
Customs tariff	85369010
Gross weight in pieces	0.009767 KG
Net weight per piece	0.0092 KG
Catalog page information	Page 236 (C-3-2013)

### Product notes

WEEE/RoHS-compliant since: 01/18/2007



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Technical data	
<b>General</b>	
Number of levels	3
Number of connections	4
Color	gray
Insulating material	PA
Inflammability class according to UL 94	V0

**General**

Rated surge voltage	4 kV
Pollution degree	3
Surge voltage category	III
Insulating material group	I
Connection in acc. with standard	IEC 60947-7-1
Maximum load current (lower level)	18 A
Additional text	with 4 mm <sup>2</sup> conductor cross section
Nominal current I <sub>N</sub> (lower level)	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
<b>Dimensions</b>	
Width	5.2 mm
Length	75 mm
Height NS 35/7,5	44.5 mm
Height NS 35/15	52 mm
<b>Connection data</b>	
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

**Certificates / Approvals**



Certification cULus Recognized

Certifications applied for:

Certification Ex:

**Accessories**

Item	Designation	Description
<b>Assembly</b>		
0801704	NS 35/ 7,5 AL UNPERF 2000MM	DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver
1206560	NS 35/ 7,5 CAP	DIN rail end piece, for DIN rail NS 35/7.5
0801762	NS 35/ 7,5 CU UNPERF 2000MM	DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m
0801733	NS 35/ 7,5 PERF 2000MM	DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm
0801681	NS 35/ 7,5 UNPERF 2000MM	DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m
1204119	NS 35/ 7,5 WH PERF 2000MM	DIN rail 35 mm (NS 35)
1204122	NS 35/ 7,5 WH UNPERF 2000MM	DIN rail 35 mm (NS 35)
1206421	NS 35/ 7,5 ZN PERF 2000MM	DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m
1206434	NS 35/ 7,5 ZN UNPERF 2000MM	DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

<b>Bridges</b>		
3030161	FBS 2-5	Plug-in bridge, Number of positions: 2, Color: red
3036877	FBS 2-5 BU	Plug-in bridge, Number of positions: 2, Color: blue
3038969	FBS 2-5 GY	Plug-in bridge, Number of positions: 2, Color: gray
3030174	FBS 3-5	Plug-in bridge, Number of positions: 3, Color: red

3036880	FBS 3-5 BU	Plug-in bridge, Number of positions: 3, Color: blue
3038972	FBS 3-5 GY	Plug-in bridge, Number of positions: 3, Color: gray
3030187	FBS 4-5	Plug-in bridge, Number of positions: 4, Color: red
3036893	FBS 4-5 BU	Plug-in bridge, Number of positions: 4, Color: blue
3038985	FBS 4-5 GY	Plug-in bridge, Number of positions: 4, Color: gray
3030190	FBS 5-5	Plug-in bridge, Number of positions: 5, Color: red
3036903	FBS 5-5 BU	Plug-in bridge, Number of positions: 5, Color: blue
3038998	FBS 5-5 GY	Plug-in bridge, Number of positions: 5, Color: gray
3030213	FBS 10-5	Plug-in bridge, Number of positions: 10, Color: red
3036916	FBS 10-5 BU	Plug-in bridge, Number of positions: 10, Color: blue
3039007	FBS 10-5 GY	Plug-in bridge, Number of positions: 10, Color: gray
3030226	FBS 20-5	Plug-in bridge, Number of positions: 20, Color: red
3036929	FBS 20-5 BU	Plug-in bridge, Number of positions: 20, Color: blue
3038671	FBS 20-5 GY	Plug-in bridge, Number of positions: 20, Color: gray
3038930	FBS 50-5	Plug-in bridge, Number of positions: 50, Color: red
3032114	FBS 50-5 BU	Plug-in bridge, Number of positions: 50, Color: blue
3032127	FBS 50-5 GY	Plug-in bridge, Number of positions: 50, Color: gray
3033702	FBSR 2-5	Plug-in bridge, Number of positions: 2, Color: red
3033710	FBSR 10-5	Plug-in bridge, Number of positions: 10, Color: red
3001591	FBSR 3-5	Plug-in bridge, Number of positions: 3, Color: red
3001592	FBSR 4-5	Plug-in bridge, Number of positions: 4, Color: red
3001593	FBSR 5-5	Plug-in bridge, Number of positions: 5, Color: red

**Covers**

3209112	D-STIO 2,5/3	End cover, Length: 72.5 mm, Width: 2.2 mm, Color: gray
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**General**

3039900	ST-IL	Operating decal for the ST terminal block
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**Marking**

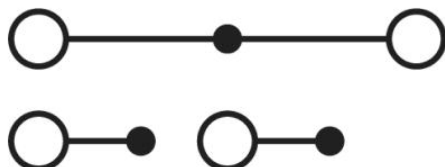
0818108	UC-TM 5	Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 10.5 x 4.6 mm
0824581	UC-TM 5 CUS	Marker for terminal blocks, can be ordered: 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

0818153	UC-TMF 5	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
0824638	UC-TMF 5 CUS	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
0828734	UCT-TM 5	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
0829595	UCT-TM 5 CUS	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
0828744	UCT-TMF 5	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
0829658	UCT-TMF 5 CUS	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
1050004	ZB 5 :UNBEDRUCKT	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
0824962	ZB 5 CUS	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
1050017	ZB 5,LGS:FORTL.ZAHLEN	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
1050033	ZB 5,LGS:GLEICHE ZAHLEN	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
1050415	ZB 5,LGS:L1-N,PE	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
1050020	ZB 5,QR:FORTL.ZAHLEN	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

0825025	ZBF 5 CUS	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
0808671	ZBF 5,LGS:FORTL.ZAHLEN	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
0810821	ZBF 5,LGS:GERADE ZAHLEN	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
0810863	ZBF 5,LGS:UNGERADE ZAHLEN	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
0808697	ZBF 5,QR:FORTL.ZAHLEN	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
0808642	ZBF 5:UNBEDRUCKT	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

## Drawings

Circuit diagram



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