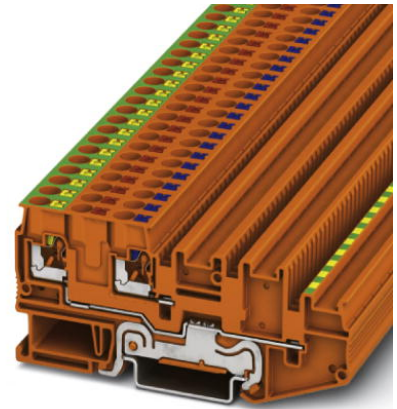



**PTIO-IN 2,5/4-PE OG**

Order No.: 3244481

<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=3244481>

Installation ground terminal block, Connection method: Push-in connection, Cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 24 - 12, Width: 7 mm, Color: orange, Mounting type: NS 35/7,5, NS 35/15

**Commercial data**

EAN	 4 046356 735896
sales group	A692
Pack	50 Pcs.
Customs tariff	85369010
Gross weight in pieces	0.01847 KG
Net weight per piece	0.01847 KG
Catalog page information	Page 141 (C-3-2013)

**Product notes**

WEEE/RoHS-compliant since:  
01/19/2012



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

**Technical data****General**

Number of levels	4
Number of connections	3
Color	orange
Insulating material	PA
Inflammability class according to UL 94	V0

**General**

Maximum load current	20 A
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 / IEC 60947-7-2
Maximum load current (lower level)	20 A
Nominal current $I_N$ (lower level)	20 A
Nominal voltage $U_N$	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	0.2 mm <sup>2</sup> / 0.2 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	0.2 mm <sup>2</sup>
Tractive force setpoint	10 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

Result of voltage drop test	Test passed
Temperature-rise test	Test passed
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.36 kA
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 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
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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Oscillation, broadband noise 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.)
Shock test result	Test passed
Temperature index, insulating material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C

**Dimensions**

Width	7 mm
Length	90.8 mm
Height NS 35/7,5	41.5 mm
Height NS 35/15	49 mm

#### Connection data

Connection in acc. with standard	IEC 60947-7-1 / IEC 60947-7-2
Connection method	Push-in connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, stranded	24
Max. AWG conductor cross section, stranded	14
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.2 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.	0.2 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

GOST

Certifications applied for:

Certification Ex:

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<b>Accessories</b>		
Item	Designation	Description
<b>Assembly</b>		
3022218	CLIPFIX 35	Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray
3022276	CLIPFIX 35-5	Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray
0800886	E/NS 35 N	End clamp, width: 9.5 mm, color: gray
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
1201756	NS 35/15 AL UNPERF 2000MM	DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm
1206573	NS 35/15 CAP	DIN rail end piece, for DIN rail NS 35/15
1201895	NS 35/15 CU UNPERF 2000MM	DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m
1201730	NS 35/15 PERF 2000MM	DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm
1201714	NS 35/15 UNPERF 2000MM	DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m
0806602	NS 35/15 WH PERF 2000MM	DIN rail 35 mm (NS 35)
1204135	NS 35/15 WH UNPERF 2000MM	DIN rail 35 mm (NS 35)
1206599	NS 35/15 ZN PERF 2000MM	DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m
1206586	NS 35/15 ZN UNPERF 2000MM	DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

1201798	NS 35/15-2,3 UNPERF 2000MM	DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m
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**Bridges**

3213056	FBS 10-3,5	Plug-in bridge, Number of positions: 10, Color: red
3213125	FBS 10-3,5 BU	Plug-in bridge, Number of positions: 10, Color: blue
3213196	FBS 10-3,5 GY	Plug-in bridge, Number of positions: 10, Color: gray
3213014	FBS 2-3,5	Jumper, Number of positions: 2, Color: red
3213086	FBS 2-3,5 BU	Jumper, Number of positions: 2, Color: blue
3213153	FBS 2-3,5 GY	Jumper, Number of positions: 2, Color: gray
3213069	FBS 20-3,5	Plug-in bridge, Number of positions: 20, Color: red
3213138	FBS 20-3,5 BU	Plug-in bridge, Number of positions: 20, Color: blue
3213206	FBS 20-3,5 GY	Plug-in bridge, Number of positions: 20, Color: gray
3213027	FBS 3-3,5	Plug-in bridge, Number of positions: 3, Color: red
3213099	FBS 3-3,5 BU	Plug-in bridge, Number of positions: 3, Color: blue
3213167	FBS 3-3,5 GY	Plug-in bridge, Number of positions: 3, Color: gray
3213030	FBS 4-3,5	Plug-in bridge, Number of positions: 4, Color: red
3213109	FBS 4-3,5 BU	Plug-in bridge, Number of positions: 4, Color: blue
3213180	FBS 4-3,5 GY	Plug-in bridge, Number of positions: 4, Color: gray
3213043	FBS 5-3,5	Plug-in bridge, Number of positions: 5, Color: red
3213112	FBS 5-3,5 BU	Plug-in bridge, Number of positions: 5, Color: blue
3213183	FBS 5-3,5 GY	Plug-in bridge, Number of positions: 5, Color: gray

**Connector/Adapter**

0201731	MPS-IH BK	Insulating sleeve, Color: black
0201689	MPS-IH BU	Insulating sleeve, Color: blue
0201702	MPS-IH GN	Insulating sleeve, Color: green
0201728	MPS-IH GY	Insulating sleeve, Color: gray
0201676	MPS-IH RD	Insulating sleeve, Color: red
0201663	MPS-IH WH	Insulating sleeve, Color: white
0201692	MPS-IH YE	Insulating sleeve, Color: yellow
0201744	MPS-MT	Test plugs, Color: silver

**Covers**

3244588	D-PTIO 1,5/S/4	End cover, Length: 90.8 mm, Width: 2.2 mm, Color: gray
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**General**

3208090	PT-IL	Operating decal for the push-in Technology
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**Marking**

0829486	UCT-TMF 3,5	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: 3.5 mm, Lettering field: 2.7 x 4.7 mm
0829644	UCT-TMF 3,5 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: 3.5 mm, Lettering field: 2.7 x 4.7 mm
0824997	ZB 7,62 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: 7.62 mm, Lettering field: 10.5 x 7.5 mm
1054233	ZB 7,62,LGS:FORTL.ZAHLEN	Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into tall marker groove, for terminal block width: 7.62 mm, Lettering field: 10.5 x 7.5 mm
1054000	ZB 7,62:UNBEDRUCKT	Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 7.62 mm, Lettering field: 10.5 x 7.5 mm
0829394	ZBF 3,5 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: 3.5 mm, Lettering field: 3.5 x 5.2 mm
0801406	ZBF 3,5,LGS:FORTL.ZAHLEN	Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 3.5 mm, Lettering field: 5.15 x 3.5 mm
0801407	ZBF 3,5,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: 3.5 mm, Lettering field: 5.15 x 3.5 mm
0829392	ZBF 3,5:UNBEDRUCKT	Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 3.5 mm, Lettering field: 3.5 x 5.2 mm
0825028	ZBF 7,5 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: 7.5 mm, Lettering field: 5.15 x 7.4 mm
0809955	ZBF 7,5,LGS:FORTL.ZAHLEN	Zack Marker strip, flat, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, Mounting type: Snap into flat marker groove, for terminal block width: 7.5 mm, Lettering field: 5.15 x 7.4 mm
0809968	ZBF 7,5,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: 7.5 mm, Lettering field: 5.15 x 7.4 mm

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0809942	ZBF 7,5:UNBEDRUCKT	Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 7.5 mm, Lettering field: 5.15 x 7.4 mm
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**Software**

5146040	CLIP-PROJECT ADVANCED	Multilingual software for easy planning of Phoenix Contact on DIN rails together with the integrated TRABTECH-select software module for planning comprehensive surge protection concepts.
5146053	CLIP-PROJECT PROFESSIONAL	Multi-lingual software for terminal strip project planning. A marking module allows professional labeling of markers and labels for marking terminal blocks, conductors, cables and devices. The additionally integrated software module TRABTECH-select for planning comprehensive surge protection concepts.

**Drawings**

Circuit diagram





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