

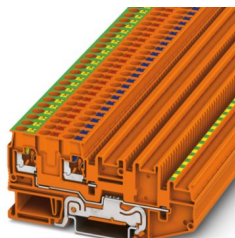
PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

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.



Sensor/actuator terminal block, Feed-in terminal with protective conductor function, nom. voltage: 250 V, nominal current: 20 A, number of connections: 3, connection method: Push-in connection, Rated cross section: 2.5 mm², cross section: 0.2 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, color: orange

Your advantages

- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- The compact design and front connection enable wiring in a confined space

- In addition to the testing option in the double function shaft, all terminal blocks provide an additional test pick-off

Commercial data

Item number	3244481
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2218
Catalog page	Page 41 (C-1-2019)
GTIN	4046356735896
Weight per piece (including packing)	18.374 g
Weight per piece (excluding packing)	18 g
Customs tariff number	85369010
Country of origin	PL

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Technical data

Product properties

Product type	Sensor/actuator terminal block
Number of connections	3
Number of rows	4
Potentials	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

Grounding foot	Yes
Number of connections per level	2
Nominal cross section	2.5 mm ²
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	0.2 mm ² ... 4 mm ²
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 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	20 A
Maximum load current	20 A
Nominal voltage	250 V
Nominal cross section	2.5 mm ²

Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 4 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm ² ... 2.5 mm ²

Dimensions

Width	7 mm
End cover width	2.2 mm

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Height	90.8 mm
Depth on NS 35/7,5	41.5 mm
Depth on NS 35/15	49 mm

Material specifications

Color	orange
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

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 4 mm ²	0.36 kA
	0.48 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

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

Test for conductor damage and slackening

Rotation speed	10 rpm
----------------	--------

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Revolutions	135
Conductor cross section/weight	0.2 mm ² / 0.2 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

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
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, no longer than 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
----------------------------------	-----------------------------

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

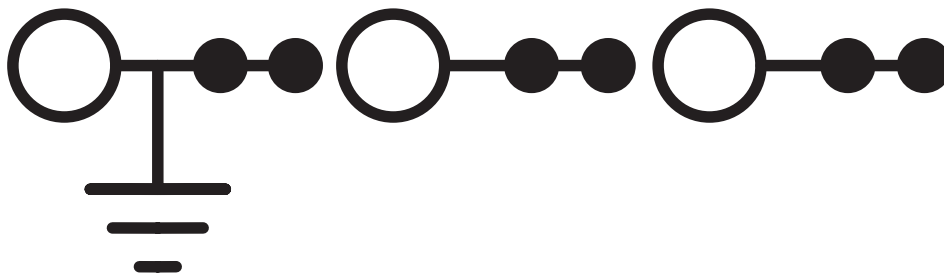
<https://www.phoenixcontact.com/us/products/3244481>

Mounting

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

Drawings

Circuit diagram



PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3244481>

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	10 A	24 - 12	-
PE connection	-	-	24 - 12	-
Use group C				
	150 V	16 A	24 - 12	-
PE connection	-	-	24 - 12	-
Use group D				
	300 V	10 A	24 - 12	-
PE connection	-	-	24 - 12	-

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
Use group B				
	300 V	10 A	24 - 12	-
PE connection	-	-	24 - 12	-
Use group C				
	150 V	16 A	24 - 12	-
PE connection	-	-	24 - 12	-
Use group D				
	300 V	10 A	24 - 12	-
PE connection	-	-	24 - 12	-

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Classifications

ECLASS

ECLASS-11.0	27141128
ECLASS-12.0	27141128
ECLASS-13.0	27250112

ETIM

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

UNSPSC

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

PTIO-IN 2,5/4-PE OG - Sensor/actuator terminal block



3244481

<https://www.phoenixcontact.com/us/products/3244481>

Environmental product compliance

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

Phoenix Contact 2024 © - 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