

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

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.



Ground terminal, Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories)., nom. voltage: 1000 V, nominal current: 24 A, number of connections: 2, connection method: Bolt connection, mounting type: NS 35/7,5, NS 35/15, color: green-yellow

Your advantages

- Another labeling option
- Green-yellow housing
- Low contact resistance
- Corrosion-free terminal points

Commercial data

Item number	3049615
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	0180*
Product key	BE4312
Catalog page	Page 379 (C-1-2019)
GTIN	4046356140782
Weight per piece (including packing)	21 g
Weight per piece (excluding packing)	20.4 g
Customs tariff number	85369010
Country of origin	CN

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

Technical data

Notes

General	Note: the BE-RT... path extension is to be used for non-insulated cable lugs (see accessories).
General	
Note	The rated insulation voltage applies to insulated cable lugs acc. to DIN 46237:1970-07 and for uninsulated cable lugs acc. to DIN 46234:1980-03 with path extension.

Product properties

Product type	Bolt connection terminal block
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

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	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-2
Nominal current	24 A
Nominal voltage	1000 V

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	0.5 mm ² ... 2.5 mm ²
Cross section range AWG	20 ... 14 (converted acc. to IEC)
Hole diameter	3.2 mm
Width	6 mm
Bolt diameter	3 mm
Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	1 mm ² ... 2.5 mm ²

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

Cross section range AWG	18 ... 14 (converted acc. to IEC)
Hole diameter	3.2 mm
Width	6 mm
Bolt diameter	3 mm
Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Identification color of ring cable lugs : red	1 mm ²
Identification color of ring cable lugs : blue	2.5 mm ²

Ex data

Rated data (ATEX/IECEx)

Identification	Ex II 2 G Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	3049097 D-RT 3/5
	0706647 TPNS-UK
	3049819 BE-RT 3/5
	1209855 SHN 5.5
	3022276 CLIPFIX 35-5
output	(Permanent)

Ex connection data General

Torque range	0.6 Nm ... 0.8 Nm
Nominal cross section	2.5 mm ²
Rated cross section AWG	14
Connection capacity rigid	0.1 mm ² ... 2.5 mm ²
Connection capacity AWG	26 ... 14
Connection capacity flexible	0.1 mm ² ... 2.5 mm ²
Connection capacity AWG	26 ... 14

Dimensions

Width	12.3 mm
End cover width	2.2 mm
Height	66 mm
Depth on NS 35/7,5	49.9 mm
Depth on NS 35/15	57.4 mm

Material specifications

Color	green-yellow
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

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

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

Mechanical properties

Mechanical data

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

Environmental and real-life conditions

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.02g ² /Hz
Acceleration	0.8g
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	5g
Shock duration	30 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, 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

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

Connection in acc. with standard	IEC 60947-7-2
----------------------------------	---------------

Mounting

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

RTO 3-PE - Ground terminal

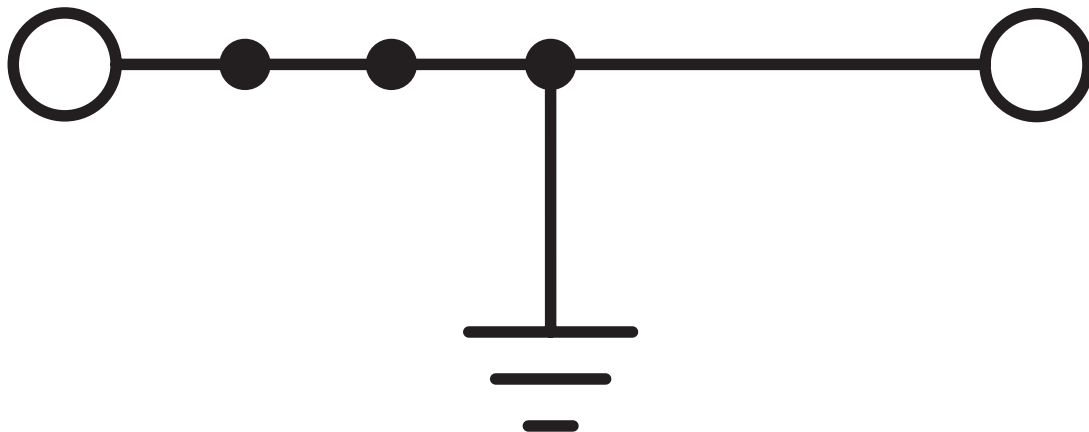
3049615

<https://www.phoenixcontact.com/sg/products/3049615>



Drawings

Circuit diagram



RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sg/products/3049615>



IECEE CB Scheme

Approval ID: DE1-62981



VDE approval of drawings

Approval ID: 40022551

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	-	-	-	0.14 - 2.5



cULus Recognized

Approval ID: E60425



EAC Ex

Approval ID: KZ 7500525010101950



IECEx

Approval ID: IECExPTB08.0063U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	-	-	-	0.1 - 2.5



ATEX

Approval ID: PTB09ATEX1003U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	-	-	-	0.1 - 2.5



CCC

Approval ID: 2020322313000627



UKCA-EX

Approval ID: CSAE 22UKEX1085U

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250103

ETIM

ETIM 9.0	EC000901
----------	----------

UNSPSC

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

RTO 3-PE - Ground terminal



3049615

<https://www.phoenixcontact.com/sg/products/3049615>

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 SEA Pte. Ltd.
105 Eunos Avenue 3, #04-00
Singapore 409836
+65 6228 4900
marketing@phoenixcontact.com.sg