

RBO 5-F E - Bolt connection terminal block



3059582

<https://www.phoenixcontact.com/in/products/3059582>

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Bolt connection terminal block, nom. voltage: 800 V, nominal current: 57 A, number of connections: 2, connection method: Bolt connection, 1 level, Rated cross section: 10 mm², mounting type: direct screw connection, color: dark gray

Commercial Data

Item number	3059582
Packing unit	50 pc
Minimum order quantity	1 pc
Sales Key	BE4
Product Key	BE4415
GTIN	4046356501378
Weight per Piece (including packing)	99.99 g
Weight per Piece (excluding packing)	99.99 g
Country of origin	IN

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Technical Data

Notes

General

Note	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve.
	The rated insulation voltage applies to insulated cable lugs acc. DIN 46237:1970-07 and for uninsulated cable lugs acc. DIN 46234:1980-03 with shrink sleeve. When using uninsulated cable lugs with shrink sleeve the min. required air clearances and creepage distances have to be ensured by the enduser.
	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
Pitch	13 mm
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
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Connection data

Number of connections per level	2
Nominal cross section	10 mm ²

1 level

Stripping length	The stripping length depends on the specification provided by the cable lug manufacturer.
Connection in acc. with standard	IEC 60947-7-1
Nominal current	57 A
Maximum load current	57 A (with 10 mm ² conductor cross section)
Nominal voltage	800 V
Nominal cross section	10 mm ²

Cable lug connection DIN 46234:1980-03

Connection in acc. with standard	DIN 46234:1980-03
Cross section	0.5 mm ² ... 10 mm ²
Cross section range AWG	26 ... 8 (converted acc. to IEC)

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Hole diameter	5.3 mm
Width	11 mm
Bolt diameter	5 mm
Screw thread	M5
Tightening torque	2 ... 2.2 Nm
Connection in acc. with standard	DIN 46237:1970-07
Cross section	1 mm ² ... 6 mm ²
Cross section range AWG	20 ... 10 (converted acc. to IEC)
Hole diameter	5.3 mm
Width	10 mm
Bolt diameter	5 mm
Tightening torque	2 ... 2.2 Nm
Identification color of ring cable lugs : red	1 mm ²
Identification color of ring cable lugs : blue	2.5 mm ²
Identification color of ring cable lugs : yellow	6 mm ²

Dimensions

Width	20.75 mm
End cover width	10 mm
Height	37 mm
Length	53.3 mm
Pitch	13 mm

Material specifications

Color	dark gray
Flammability rating according to UL 94	V2
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-40 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Relative insulation material temperature index (Elec., UL 746 B)	125 °C

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
	Test passed
Short-time withstand current 10 mm ²	1.2 kA
Result	Test passed

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Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
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Mechanical tests

Mechanical strength

Result	Test passed
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Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
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	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 ... 105 °C (max. short-term operating temperature 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 (storage/transport)	30 % ... 70 %

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Standards and regulations

Connection in acc. with standard

IEC 60947-7-1

Mounting

Mounting type

direct screw connection

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Drawings

Circuit diagram




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Approvals

 cUL Recognized Approval ID: FILE E 60425				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	600 V	45 A	-	-
Use group C				
	600 V	45 A	-	-

 UL Recognized Approval ID: FILE E 60425				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	600 V	45 A	-	-
Use group C				
	600 V	45 A	-	-

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Classifications

ECLASS

ECLASS-11.0

27141120

ETIM

ETIM 7.0

EC000897

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Environmental Product Compliance


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

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Accessories

 Note: Applying some accessories below might limit this product.

FB 10-13 - Fixed bridge

3059126

<https://www.phoenixcontact.com/in/products/3059126>



Fixed bridge, pitch: 13 mm, number of positions: 10, color: silver

 Max. current carrying capacity: 41 A

FB 10-13 ISO - Fixed bridge

3059663

<https://www.phoenixcontact.com/in/products/3059663>



Fixed bridge, pitch: 13 mm, number of positions: 10, color: silver

 Max. current carrying capacity: 41 A

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TS-KK 3 - Separating plate

2770215

<https://www.phoenixcontact.com/in/products/2770215>



Separating plate, length: 14 mm, width: 0.5 mm, height: 16 mm, color: gray

SHN 8 - Tool

1209868

<https://www.phoenixcontact.com/in/products/1209868>



Socket wrench, wrench size 8 mm

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AP RSC - Cover profile

3058017

<https://www.phoenixcontact.com/in/products/3058017>



Cover profile, for covering terminal strips, directly snapped onto RBO... and RSC... terminal blocks. Length supplied: 1 m

CARRIER F-13 KIT - Short circuit kit for current transformers

3215070

<https://www.phoenixcontact.com/in/products/3215070>



Short-circuit kit for current transformer. Use with panel mounted RBO/RSC 5 feed-through terminals

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CARRIER 35-13 KIT - Short circuit kit for current transformers

3215067

<https://www.phoenixcontact.com/in/products/3215067>

Short-circuit kit for current transformer. Use with DIN rail mounted RBO/RSC 5 feed-through terminals



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

0801733

<https://www.phoenixcontact.com/in/products/0801733>

DIN rail perforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)



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

0801681

<https://www.phoenixcontact.com/in/products/0801681>



DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

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

1204119

<https://www.phoenixcontact.com/in/products/1204119>



DIN rail perforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 25 (50 m)

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NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

<https://www.phoenixcontact.com/in/products/1204122>



DIN rail, unperforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

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

0801704

<https://www.phoenixcontact.com/in/products/0801704>



DIN rail, unperforated, acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver, Pack of 25 (50 m)

RBO 5-F E - Bolt connection terminal block

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<https://www.phoenixcontact.com/in/products/3059582>

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

1206421

<https://www.phoenixcontact.com/in/products/1206421>



DIN rail perforated, acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

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

1206434

<https://www.phoenixcontact.com/in/products/1206434>



DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

RBO 5-F E - Bolt connection terminal block

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NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/in/products/0801762>



DIN rail, unperforated, acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored, Pack of 10 (20 m)

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/in/products/1206560>

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



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NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/in/products/1201730>



DIN rail perforated, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

<https://www.phoenixcontact.com/in/products/1201714>



DIN rail, unperforated, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver, Pack of 25 (50 m)

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NS 35/15 WH PERF 2000MM - DIN rail perforated

0806602

<https://www.phoenixcontact.com/in/products/0806602>



DIN rail perforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white, Pack of 25 (50 m)

NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

<https://www.phoenixcontact.com/in/products/1204135>



DIN rail, unperforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

RBO 5-F E - Bolt connection terminal block

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NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

<https://www.phoenixcontact.com/in/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

NS 35/15 ZN PERF 2000MM - DIN rail perforated

1206599

<https://www.phoenixcontact.com/in/products/1206599>



DIN rail perforated, similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

RBO 5-F E - Bolt connection terminal block

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NS 35/15 ZN UNPERF 2000MM - DIN rail, unperforated

1206586

<https://www.phoenixcontact.com/in/products/1206586>



DIN rail, unperforated, similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver, Pack of 25 (50 m)

NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/in/products/1201895>



DIN rail, unperforated, similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored, Pack of 10 (20 m)

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NS 35/15 CAP - End cap

1206573

<https://www.phoenixcontact.com/in/products/1206573>

DIN rail end piece, for DIN rail NS 35/15



NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

<https://www.phoenixcontact.com/in/products/1201798>



DIN rail, unperforated, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver, Pack of 10 (20 m)

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ZB 13:UNBEDRUCKT - Zack marker strip

0829131

<https://www.phoenixcontact.com/in/products/0829131>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 13 mm, lettering field size: 13 x 10.5 mm, Number of individual labels: 5

ZB 13 CUS - Zack marker strip

0829132

<https://www.phoenixcontact.com/in/products/0829132>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 13 mm, lettering field size: 13 x 10.5 mm, Number of individual labels: 5

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ZBF 13:UNBEDRUCKT - Zack Marker strip, flat

0829133

<https://www.phoenixcontact.com/in/products/0829133>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 13 mm, lettering field size: 13 x 5.2 mm, Number of individual labels: 5

ZBF 13 CUS - Zack Marker strip, flat

0829134

<https://www.phoenixcontact.com/in/products/0829134>



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: 13 mm, lettering field size: 13 x 5.2 mm, Number of individual labels: 5

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CLIPFIX 35 - End clamp

3022218

<https://www.phoenixcontact.com/in/products/3022218>



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

CLIPFIX 35-5 - End clamp

3022276

<https://www.phoenixcontact.com/in/products/3022276>



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

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E/NS 35 N - End clamp

0800886

<https://www.phoenixcontact.com/in/products/0800886>

End clamp, width: 9.5 mm, color: gray



E/UK - End clamp

1201442

<https://www.phoenixcontact.com/in/products/1201442>

End clamp, material: PA, color: gray, Mounting on a DIN rail NS 32 or NS 35



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E/UK 1 - End clamp

1201413

<https://www.phoenixcontact.com/in/products/1201413>



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

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PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in