

# TB 6 EI RD - Feed-through terminal block



3000859

<https://www.phoenixcontact.com/in/products/3000859>

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Feed-through terminal block, nom. voltage: 1000 V, nominal current: 41 A, number of connections: 2, connection method: Screw connection, cross section: 1.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, NS 32, color: red

## Commercial Data

Item number	3000859
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	BE1
Product Key	BE1411
GTIN	4055626646046
Weight per Piece (including packing)	22.22 g
Weight per Piece (excluding packing)	22.22 g
Customs tariff number	39269098
Country of origin	IN

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## Technical Data

### Product properties

Product type	Feed-through 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	1.31 W

### Connection data

Number of connections per level	2
Nominal cross section	6 mm <sup>2</sup>

### Level 1 above 1 below 1

Screw thread	M3,5
Tightening torque	1 Nm
Stripping length	10 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	16 ... 8 (converted acc. to IEC)
Conductor cross section flexible	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	16 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	1.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
2 conductors with same cross section, solid	1.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross-section AWG rigid	16 ... 14 (converted acc. to IEC)
2 conductors with same cross section, flexible	1.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross-section AWG flexible	16 ... 14 (converted acc. to IEC)
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	1.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal current	41 A
Maximum load current	41 A
Nominal voltage	1000 V (in the case of enclosed clamping space)

### Dimensions

Width	8.2 mm
End cover width	1.8 mm

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Height NS 35/15	54.5 mm
Height NS 35/7,5	47 mm
Height	1.85 "
Height NS 32	52 mm
Length	42.5 mm

## Material specifications

Color	red
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 $\leq 45$ K
Result	Test passed
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2.2 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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### Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	5 N
Result	Test passed

### Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
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Revolutions	135
Conductor cross section/weight	1.5 mm <sup>2</sup> / 0.4 kg 6 mm <sup>2</sup> / 1.4 kg
Result	Test passed

## Environmental and real-life conditions

### Aging

Temperature cycles	192 192
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### 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 (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
Result	Test passed

### Shocks

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 ... 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 %

## Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
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## Mounting

	NS 35/7,5
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Mounting type	NS 35/15
	NS 32

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## Drawings

Circuit diagram




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## Approvals

 <b>UL Recognized</b> Approval ID: E60425		Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
		600 V	45 A	16 - 8	-
		600 V	45 A	16 - 8	-
		600 V	45 A	16 - 8	-
		600 V	5 A	16 - 8	-

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## Classifications

### ECLASS

ECLASS-11.0

27141120

### ETIM

ETIM 7.0

EC000897

### UNSPSC

UNSPSC 21.0

39121410



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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

### SCBI 10-8 - Fixed bridge

3246133

<https://www.phoenixcontact.com/in/products/3246133>

Fixed bridge, number of positions: 10, color: silver



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### INB 10-8 - Insertion bridge

3246191

<https://www.phoenixcontact.com/in/products/3246191>

Insertion bridge, Bridging in the terminal point, pitch: 8 mm, number of positions: 10, color: gray



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## D-TB 4/10 E - End cover

3246104

<https://www.phoenixcontact.com/in/products/3246104>



End cover, length: 42.5 mm, width: 1.5 mm, height: 35.9 mm, color: dark gray

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## TS-TB - Separating plate

3062838

<https://www.phoenixcontact.com/in/products/3062838>



Separating plate, for electrical isolation of neighboring bridges in the terminal center, length: 22 mm, height: 22 mm, color: dark gray

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## ATP-TB - Partition plate

3046272

<https://www.phoenixcontact.com/in/products/3046272>



Partition plate, length: 56 mm, width: 3 mm, height: 45.7 mm, color: dark gray

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## TPS 4/7/6 - Female test connector

3246243

<https://www.phoenixcontact.com/in/products/3246243>



Female test connector, for 4 mm test plugs, for screwing into the bridge shaft, number of positions: 1, fuse type: , mounting type: , , color: silver

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## SZS 1,0X4,0 VDE - Screwdriver

1205066

<https://www.phoenixcontact.com/in/products/1205066>



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

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## E/TB - End clamp

3246966

<https://www.phoenixcontact.com/in/products/3246966>



End clamp, for assembly on NS 32 or NS 35/7.5 DIN rail

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## NS 32 PERF 2000MM-VPE 10 - DIN rail perforated

1201002

<https://www.phoenixcontact.com/in/products/1201002>



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

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## NS 32 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201015

<https://www.phoenixcontact.com/in/products/1201015>



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

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## PS-MT - Test plugs

0311647

<https://www.phoenixcontact.com/in/products/0311647>



Test plugs, number of positions: 1, fuse type: , mounting type: , , color: silver

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## PS-IH WH - Insulating sleeve

0311566

<https://www.phoenixcontact.com/in/products/0311566>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: white

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## PS-IH RD - Insulating sleeve

0311579

<https://www.phoenixcontact.com/in/products/0311579>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: red

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## PS-IH BU - Insulating sleeve

0311582

<https://www.phoenixcontact.com/in/products/0311582>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: blue



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## PS-IH YE - Insulating sleeve

0311595

<https://www.phoenixcontact.com/in/products/0311595>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: yellow

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## PS-IH GN - Insulating sleeve

0311605

<https://www.phoenixcontact.com/in/products/0311605>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: green

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## PS-IH GY - Insulating sleeve

0311621

<https://www.phoenixcontact.com/in/products/0311621>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: gray

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## PS-IH BK - Insulating sleeve

0311634

<https://www.phoenixcontact.com/in/products/0311634>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: black

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## PS-IH VT - Insulating sleeve

0311618

<https://www.phoenixcontact.com/in/products/0311618>



Insulating sleeve, number of positions: 1, fuse type: , mounting type: , , color: violet

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