

TB 6-PE I - Protective conductor terminal block



3059870

<https://www.phoenixcontact.com/za/products/3059870>

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Protective conductor terminal block, number of connections: 2, number of positions: 1, connection method: Screw connection, cross section: 1.5 mm² - 6 mm², mounting method: PE foot with mounting screw, M4, mounting type: NS 35/7,5, NS 35/15, NS 32, color: green-yellow

Commercial data

Item number	3059870
Packing unit	50 pc
Minimum order quantity	1 pc
Sales key	010
Product key	BEK221
GTIN	4046356643566
Weight per piece (including packing)	26,155 g
Weight per piece (excluding packing)	26,064 g
Customs tariff number	85369010
Country of origin	CN

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Technical data

Product properties

Product type	Ground terminal block
Product family	TB
Number of positions	1
Number of connections	2
Number of rows	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 ²
Rated cross section AWG	8
Connection method	Screw connection
Screw thread	M4
Note	Please observe the current carrying capacity of the DIN rails.
Tightening torque	1.4 ... 1.5 Nm
Stripping length	10 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-2
Conductor cross-section rigid	1.5 mm ² ... 6 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	1.5 mm ² ... 6 mm ²
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	1.5 mm ² ... 6 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	1.5 mm ² ... 6 mm ²

Dimensions

Width	8.2 mm
End cover width	1.8 mm
Height	42.5 mm
Depth on NS 32	52 mm
Depth on NS 35/7,5	47 mm
Depth on NS 35/15	54.5 mm

Material specifications

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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
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
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

General

Terminal block mounting	1.5 Nm ... 1.8 Nm (PE foot with mounting screw, M4)
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Mechanical data

Open side panel	No
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Environmental and real-life conditions

Oscillation/broadband noise

Specification	EN 50155:2021-07
Spectrum	Long 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

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, not exceeding 24 h, -60 °C to +70 °C)

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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 60947-7-2
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Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32
Terminal block mounting	1.5 Nm ... 1.8 Nm (PE foot with mounting screw, M4)

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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/za/products/3059870>

 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	-	-	16 - 8	-
C	-	-	16 - 8	-
D	-	-	16 - 8	-

 EAC Approval ID: KZ7500651131219505	
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Classifications

ECLASS

ECLASS-13.0	27250103
ECLASS-15.0	27250103

ETIM

ETIM 9.0	EC000901
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UNSPSC

UNSPSC 21.0	39121400
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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%

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Accessories

UM-TM (8X10) - Marker for terminal blocks

0830918

<https://www.phoenixcontact.com/za/products/0830918>



Marker for terminal blocks, Strip, white, unmarked, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: latching, Number of individual labels: 14, text field height: 10 mm, text field width: 8 mm

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

1201002

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



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

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

1201015

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



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

SZS 1,0X4,0 VDE - Screwdriver

1205066

<https://www.phoenixcontact.com/za/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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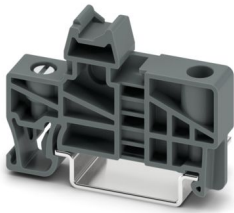
<https://www.phoenixcontact.com/za/products/3059870>

E/TB - End bracket

3246966

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

End bracket, material: PA, mounting type: NS 35/7,5, NS 35/15, color: dark gray



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