

TB-EE-DB 175/2+10 - Distribution block



1725168

<https://www.phoenixcontact.com/us/products/1725168>

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Distribution block, nom. voltage: 1000 V, nominal current: 150 A, Thermal continuous current I_{th} : 175 A, number of connections: 12, number of positions: 1, connection method: Screw connection, Rated cross section: 50 mm², Line contact, cross section: 10 mm² - 70 mm², Screw connection, Load contact, cross section: 2.5 mm² - 16 mm², mounting type: NS 35/7,5, NS 35/15, Direct mounting, color: dark gray

Your advantages

- Fast installation via ready-to-connect distributor and collection block
- Blocks can be snapped to each other to form function groups
- As well as saving space, the compact design enables user-friendly wiring in a small amount of space
- Flexible use, thanks to DIN rail and direct mounting
- Reversible cover for optimum readability of the technical data

Commercial data

Item number	1725168
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BE04
Product key	BEK824
GTIN	4067923280649
Weight per piece (including packing)	229.9 g
Weight per piece (excluding packing)	229.9 g
Customs tariff number	85369010
Country of origin	IN

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Technical data

Notes

General

Note	The maximum load current of a single clamping unit must not be exceeded.
	For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!

Product properties

Product type	Distributor terminal block
Product family	TB
Area of application	Machine building
Number of positions	1
Number of connections	12
Number of rows	1

Insulation characteristics

Degree of pollution	3
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Electrical properties

Rated surge voltage	8 kV
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Connection data

Number of connections per level	12
Nominal cross section	50 mm ²
Rated cross section AWG	0

Line contact

Connection method	Screw connection
Screw thread	M10
Number of connections	2
Note	Ferrules are mandatory when using flexible conductors
Tightening torque	6 ... 10 Nm
Stripping length	18 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	10 mm ² ... 70 mm ²
Cross section AWG	6 ... 00 (converted acc. to IEC)
Flexible conductor cross-section (ferrule with plastic sleeve)	10 mm ² ... 50 mm ²
Nominal cross section	50 mm ²
Thermal continuous current I_{th}	175 A
Nominal current	150 A (300 A when connecting two conductors with a conductor cross-section of 50 mm ²)
Nominal voltage	1000 V AC (suitable for 1500 V DC)

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Load contact

Connection method	Screw connection
Screw thread	M5
Number of connections	10
Note	Ferrules are mandatory when using flexible conductors
Tightening torque	2 ... 3 Nm
Stripping length	11 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	2.5 mm ² ... 16 mm ²
Cross section AWG	12 ... 6 (converted acc. to IEC)
Flexible conductor cross-section (ferrule with plastic sleeve)	2.5 mm ² ... 16 mm ²

Dimensions

Width	46.2 mm
Height	72.5 mm
Depth	52.3 mm
Depth on NS 35/7,5	53.8 mm
Depth on NS 35/15	61.3 mm

Material specifications

Color	basalt gray (RAL 7012)
Flammability rating according to UL 94	V0
Insulating material group	I
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
Short-time withstand current 50 mm ²	6 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	3.82 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	9 rpm
Revolutions	135
Conductor cross-section/weight	2.5 mm ² / 0.7 kg
	16 mm ² / 2.9 kg
	70 mm ² /10.4 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	5 s
Result	Test passed

Ambient conditions

Degree of protection	IP10
Ambient temperature (operation)	-40 °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

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

Mounting

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

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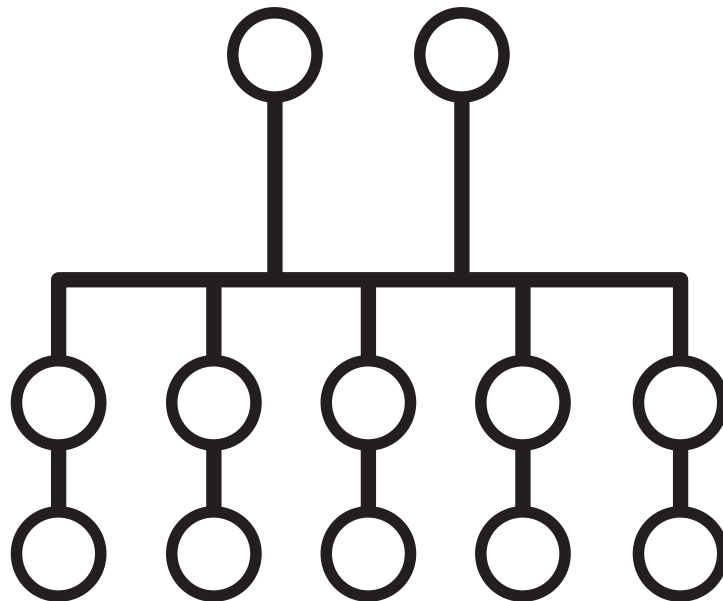
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Drawings

Circuit diagram



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Approvals

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UL Recognized

Approval ID: E60425



CSA

Approval ID: 80247697

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Classifications

ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	27250118

ETIM

ETIM 10.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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