

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



1725168

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

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.



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

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



1725168

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

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
---------------------	---

Electrical properties

Rated surge voltage	8 kV
---------------------	------

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)

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



1725168

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

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
-----------------	----

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



1725168

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

Mechanical tests

Mechanical strength

Result	Test passed
--------	-------------

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

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

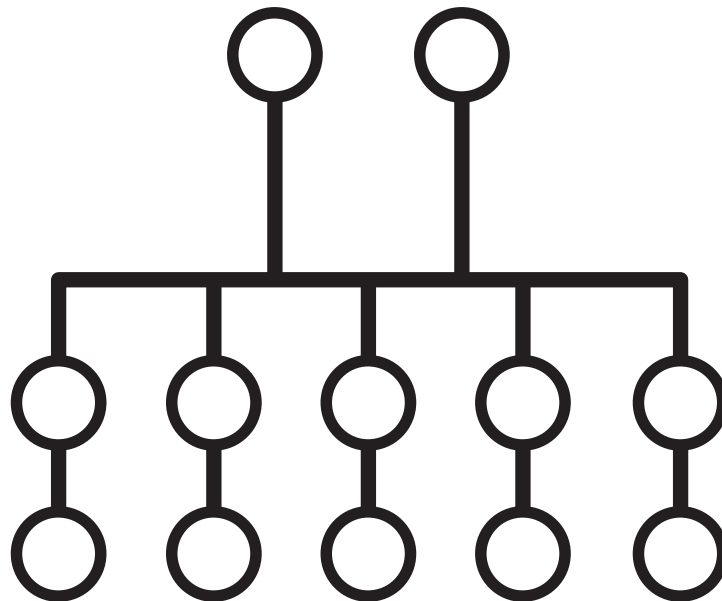
1725168

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



Drawings

Circuit diagram



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



1725168

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

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1725168>



UL Recognized

Approval ID: E60425



CSA

Approval ID: 80247697

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



1725168

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

Classifications

ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	27250118

ETIM

ETIM 10.0	EC000897
-----------	----------

UNSPSC

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

1725168

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

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)
-------------------------------------	----------------------

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com