TB-EE-DB 160/2+6 - Distribution block

1725166

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Distribution block, nom. voltage: 1000 V, nominal current: 150 A, Thermal continuous current I_{th}: 160 A, number of connections: 8, number of positions: 1, connection method: Screw connection, Rated cross section: 50 mm^2, Line contact, cross section: 16 mm^2 - 70 mm^2, Screw connection, Load contact, cross section: 2.5 mm^2 - 16 mm^2, 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	1725166
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BE03
Product key	BEK823
GTIN	4067923281103
Weight per piece (including packing)	129.7 g
Weight per piece (excluding packing)	129.7 g
Customs tariff number	85369010
Country of origin	IN

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	8
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV

Connection data

Number of connections per level	8
Nominal cross section	50 mm²
Rated cross section AWG	2

Line contact

Connection method	Screw connection
Screw thread	M10
Number of connections	1
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	16 mm² ... 70 mm²
Cross section AWG	4 ... 00 (converted acc. to IEC)
Flexible conductor cross-section (ferrule with plastic sleeve)	16 mm² ... 50 mm²
Nominal cross section	50 mm²
Thermal continuous current I_{th}	160 A
Nominal current	150 A
Nominal voltage	1000 V AC (suitable for 1500 V DC)

Load contact

Connection method	Screw connection
Screw thread	M5
Number of connections	6
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 mm² ... 16 mm²
Cross section AWG	12 ... 6 (converted acc. to IEC)
Flexible conductor cross-section (ferrule with plastic sleeve)	2.5 mm² ... 16 mm²

Load contact

Connection method	Screw connection
Screw thread	M6
Number of connections	1
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	6 mm² ... 16 mm²
Cross section AWG	8 ... 6 (converted acc. to IEC)
Flexible conductor cross-section (ferrule with plastic sleeve)	2.5 mm² ... 16 mm²

Dimensions

Width	29.4 mm
Height	75 mm
Depth	50.8 mm
Depth on NS 35/7,5	52.3 mm
Depth on NS 35/15	59.8 mm

Material specifications

Color	basalt gray (RAL 7012)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
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 mm²	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

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	10 mm² / 2 kg
	16 mm² / 2.9 kg
	70 mm²/10.4 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	IP20
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

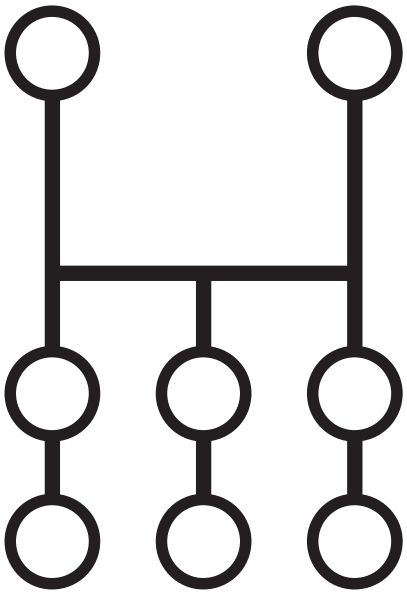
Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1
	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1725166

UL Recognized
Approval ID: E60425

CSA
Approval ID: 610003

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Output	600 V	160 A	14 - 6	-
Input 2	600 V	160 A	10 - 6	-
Input 1	600 V	160 A	6 - 2/0	-
C				
Output	600 V	160 A	14 - 6	-
Input 2	600 V	160 A	10 - 6	-
Input 1	600 V	160 A	6 - 2/0	-
E				
Input 1	1000 V	160 A	6 - 2/0	-

Classifications

ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	27250118

ETIM

ETIM 10.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

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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