PTPOWER 50 - High-current terminal block

3260050

https://www.phoenixcontact.com/pc/products/3260050

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High-current terminal block, nom. voltage: 1000 V, nominal current: 150 A, number of connections: 2, number of positions: 1, connection method: PowerTurn connection, 1 level, cross section: 10 mm^2 - 70 mm^2, mounting type: NS 35/15, color: gray

Your advantages

- Quick and easy connection is now also possible for large conductors with the high-current terminal block
- The compact design enables wiring in a confined space
- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- In addition to using the existing test pick-off, pick-off terminal blocks can be connected, each of which can also accommodate two test cables

Commercial data

Item number	3260050
Packing unit	10 pc
Minimum order quantity	1 pc
Product key	BE2211
Catalog page	Page 137 (C-1-2019)
GTIN	4046356998000
Weight per piece (including packing)	156.92 g
Weight per piece (excluding packing)	152 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Product properties

Product type	High current terminal block
Number of positions	1
Number of connections	2
Number of rows	1
Potentials	1

Data management status

Article revision	10

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	4.73 W

Connection data

Number of connections per level	2
Nominal cross section	50 mm²
Rated cross section AWG	2/0

1 level

Stripping length	30 mm ... 32 mm
Internal cylindrical gage	A10
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	10 mm² ... 70 mm²
Cross section AWG	6 ... 2/0 (converted acc. to IEC)
Conductor cross section flexible	10 mm² ... 70 mm²
Conductor cross section, flexible [AWG]	6 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	10 mm² ... 50 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	10 mm² ... 50 mm²
Cross-section with insertion bridge, rigid	10 mm² ... 50 mm²
Cross-section with insertion bridge, flexible	10 mm² ... 50 mm²
Cross-section with insertion bridge, flexible, with ferrule without plastic sleeve	10 mm² ... 50 mm²
Cross-section with insertion bridge, flexible, with ferrule with plastic sleeve	10 mm² ... 50 mm²
Nominal current	150 A
Maximum load current	150 A (with 70 mm² conductor cross section)
Nominal voltage	1000 V

1 level Connection cross sections directly pluggable

Conductor cross section rigid	10 mm² ... 70 mm²
Conductor cross section, rigid [AWG]	8 ... 2/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	10 mm² ... 50 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	10 mm² ... 50 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	1206612 SZF 3-1,0X5,5
	1201662 E/AL-NS 35
List of bridges	/ EB 2-20/PT / 3260067
	/ EB 3-20/PT / 3260068
Bridge data	131 A / 50 mm²
Ex temperature increase	40 K (147 A / 50 mm²)
Rated voltage	1100 V
at bridging with insertion bridge	1100 V
Rated insulation voltage	1000 V
output	(Permanent)

Ex level General

Rated current	134 A
Maximum load current	134 A
Contact resistance	0.16 mΩ

Ex connection data General

Ferrule length	30 mm ... 32 mm
Stripping length	30 mm
Nominal cross section	50 mm²
Rated cross section AWG	1/0
Connection capacity rigid	10 mm² ... 70 mm²
Connection capacity AWG	8 ... 2/0
Conductor cross section flexible, with ferrule without plastic sleeve min.	16 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	50 mm²

Dimensions

Width	20 mm
Height	101 mm
Depth on NS 35/15	105 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0

Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

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

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
Test force setpoint	10 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135

Conductor cross section/weight	10 mm² / 2 kg
	50 mm² / 9.5 kg
	70 mm²/10.4 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
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, no longer than 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

Mounting

Mounting type	NS 35/15

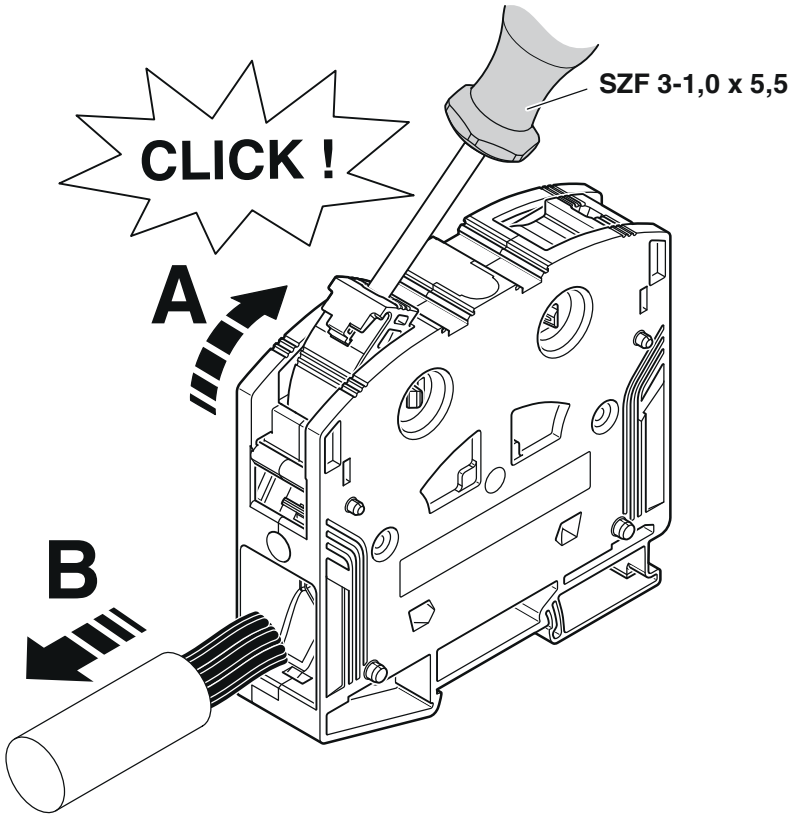
Drawings

Circuit diagram

Schematic diagram

PTPOWER

AGK 10-PTPOWER	**0,5 mm² ... 16 mm²**	**18 mm**
PTPOWER 35	**2,5 mm² ... 35 mm²**	**25 mm**
PTPOWER 50	**10 mm² ... 50 mm²**	**32 mm**
PTPOWER 95	**25 mm² ... 95 mm²**	**40 mm**
PTPOWER 185	**95 mm² ... 185 mm²**	**40 mm**



Approvals

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CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	140 A	8 - 1/0	-
Use group C				
	1000 V	140 A	8 - 1/0	-

cUL Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group C				
	1000 V	140 A	8 - 1/0	-

UL Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group E				
	1000 V	140 A	8 - 1/0	-

DNV
Approval ID: TAE00000Z9

CCC
Approval ID: 2020322313000630

UKCA-EX
Approval ID: CML 22UKEX1227U

IECEx
Approval ID: IECExSEV14.0013U

ATEX
Approval ID: SEV14ATEX0156U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Only rigid conductors	1100 V	134 A	-	10 - 70

multi-stranded with ferrule	1100 V	134 A	-	16 - 50

IECEx
Approval ID: IECExSEV14.0013U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1100 V	134 A	-	-
Only rigid conductors	1100 V	134 A	-	-
multi-stranded with ferrule	1100 V	134 A	-	-

cULus Recognized

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250101

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

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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