PTFIX 10/18X4-NS35 BK - Distribution block

3273650

https://www.phoenixcontact.com/us/products/3273650

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: 800 V, nominal current: 32 A, number of connections: 19, connection method: Push-in connection, Rated cross section: 4 mm^2, Load contact, cross section: 0.2 mm^2 - 6 mm^2, Push-in connection, Line contact, Rated cross section: 10 mm^2, cross section: 0.5 mm^2 - 10 mm^2, mounting type: NS 35/7,5, NS 35/15, color: black

Your advantages

- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting
- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Time savings of up to 80 %, thanks to ready-to-mount blocks without manual bridging
- Clear wiring, thanks to eleven different color variants

Commercial data

Item number	3273650
Packing unit	8 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA124
GTIN	4055626667577
Weight per piece (including packing)	53.712 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Notes

General

Note	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
Number of connections	19
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Service Entrance	yes
Number of connections per level	19
Nominal cross section	4 mm²
Rated cross section AWG	10

Load contact

Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm² ... 6 mm²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm² ... 6 mm²
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm² ... 4 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.2 mm² ... 4 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1 mm²
Nominal cross section	4 mm²
Nominal current	32 A
Maximum load current	41 A (with 6 mm² conductor connection)
Maximum total current	63 A (The maximum load current of the individual terminal point

	must not be exceeded.)
Nominal voltage	800 V

Line contact

Connection method	Push-in connection
Stripping length	12 mm ... 14 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.5 mm² ... 10 mm²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm² ... 10 mm²
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 10 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.75 mm² ... 2.5 mm²
Nominal cross section	10 mm²
Nominal current	57 A
Maximum load current	57 A (with 10 mm² conductor cross-section)
Maximum total current	63 A (The maximum load current of the individual terminal point must not be exceeded.)
Nominal voltage	800 V

Load contact Connection cross sections directly pluggable

Conductor cross-section rigid	0.5 mm² ... 6 mm²
Conductor cross-section, rigid [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.75 mm² ... 4 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 4 mm²

Line contact Connection cross sections directly pluggable

Conductor cross-section rigid	1.5 mm² ... 10 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	2.5 mm² ... 10 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	1.5 mm² ... 10 mm²

Dimensions

Width	28.6 mm
Height	58.1 mm
Depth on NS 15	30.4 mm
Depth on NS 35/7,5	32.4 mm

Material specifications

Color	black (RAL 9005)
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

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 10 mm²	1.2 kA
Short-time withstand current 4 mm²	1.2 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

Result	Test passed
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.
	For versions with 6 or 7 connections, it is enough to place one DIN rail adapter centrally per block and place flange elements after every other block.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.5 mm² / 0.3 kg
	10 mm² / 2 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):2018-05
Spectrum	Long 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):2018-05
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)
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

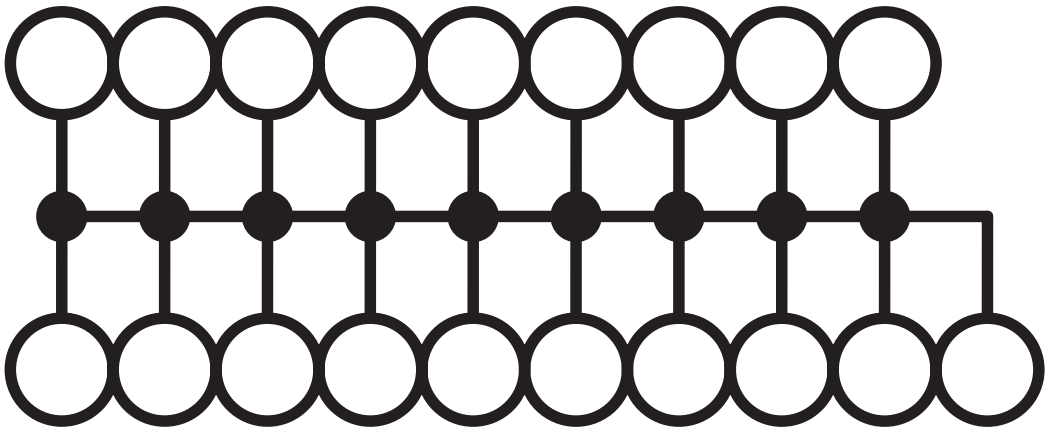
	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3273650

CSA
Approval ID: 13631

IECEE CB Scheme
Approval ID: DE1-62701

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	800 V	57 A	-	- 10

EAC
Approval ID: RU C-DE.BL08.B.00644

VDE Zeichengenehmigung
Approval ID: 40047797

cULus Recognized
Approval ID: E60425

EAC
Approval ID: KZ7500651131219505

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, 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%

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