

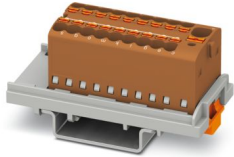
# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

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: 500 V, nominal current: 17.5 A, number of connections: 19, connection method: Push-in connection, Load contact, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, Line contact, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: brown

## Your advantages

- Flexible use, thanks to DIN rail and direct mounting
- Clear arrangement thanks to marking of all terminal points
- Convenient test options, thanks to test openings at every terminal point
- Space-saving potential distribution, thanks to compact micro potential distributors
- Space-saving, thanks to the compact design

## Commercial data

Item number	1047457
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	BE09
Product key	BEA124
Catalog page	Page 437 (C-1-2019)
GTIN	4055626665627
Weight per piece (including packing)	23.18 g
Weight per piece (excluding packing)	22.89 g
Customs tariff number	85369010
Country of origin	PL

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

## 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
Number of connections	19
Number of rows	1

#### Data management status

Article revision	03
------------------	----

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.56 W

### Connection data

Service Entrance	yes
Number of connections per level	19
Nominal cross section	1.5 mm <sup>2</sup>
Rated cross section AWG	14

#### Load contact

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Cross section AWG	26 ... 14 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	26 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal current	17.5 A
Maximum load current	22 A (with a 2.5 mm <sup>2</sup> conductor cross section)
Maximum total current	32 A

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Nominal voltage	500 V
-----------------	-------

## Line contact

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Nominal current	41 A
Maximum load current	41 A (with 6 mm <sup>2</sup> conductor cross section)
Maximum total current	41 A
Nominal cross section	4 mm <sup>2</sup>

## Load contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

## Line contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>

## Dimensions

Width	21.6 mm
Height	58.1 mm
Depth on NS 15	26.4 mm
Depth on NS 35/7,5	28.4 mm

## Material specifications

Color	brown (RAL 8028)
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

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

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	7.3 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature $\leq$ 45 K
Result	Test passed
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	1.89 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/NS 15
Test force setpoint	5 N
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	Service life test category 2, bogie-mounted

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
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, 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
	IEC 60998-2-2

## Mounting

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

Drawings

Circuit diagram



# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1047457>

<b>DNV</b> Approval ID: TAE00002TT-04				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	500 V	24 A	-	-

<b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
Use group C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-

<b>IECEE CB Scheme</b> Approval ID: DE1-62701				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	500 V	32 A	-	- 4

<b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

<b>LR</b> Approval ID: LR2002627TA				
---------------------------------------	--	--	--	--

<b>BV</b> Approval ID: 59146/A0 BV				
---------------------------------------	--	--	--	--

<b>VDE Zeichengenehmigung</b> Approval ID: 40047797				
--	--	--	--	--

<b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
Use group B				

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
Use group C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-



# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

## Classifications

### ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

### ETIM

ETIM 9.0	EC000897
----------	----------

### UNSPSC

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

# PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

## 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 2024 © - 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](mailto:info@phoenixcon.com)