

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

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, the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories, bridged internally, nom. voltage: 500 V, nominal current: 17.5 A, connection method: Push-in connection, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, mounting type: NS 15, color: pink

## Your advantages

- 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
- Flexible use, thanks to DIN rail and direct mounting

## Commercial Data

Item number	3002977
Packing unit	20 pc
Minimum order quantity	1 pc
Sales Key	A1 - Reihenklemmen
Product Key	BEA114
Catalog Page	Page 433 (C-1-2019)
GTIN	4055626433851
Weight per Piece (including packing)	12,95 g
Weight per Piece (excluding packing)	10,925 g
Customs tariff number	85369010
Country of origin	PL

## Technical Data

### Notes

Notes on operation	the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories
--------------------	--

### General

Note	The maximum load current of a single clamping unit must not be exceeded.
------	--

### Product properties

Product type	Distributor terminal block
Number of connections	12
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	0.56 W

### Connection data

Number of connections per level	12
Nominal cross section	1.5 mm <sup>2</sup>
Rated cross section AWG	14
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1 / B1
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Cross section AWG	26 ... 14
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	24 ... 14
Flexible conductor cross section flexible (ferrule, w/o 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
Maximum total current	26 A
Nominal voltage	500 V

### Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, solid [AWG]	26 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

sleeve)	
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

## Dimensions

Width	24.9 mm
Height NS 15	27.4 mm
Length	21.6 mm

## Material specifications

Color	pink
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	7.3 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 1.5 mm <sup>2</sup>	0.18 kA
Short-time withstand current 2.5 mm <sup>2</sup>	0.3 kA
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	1 N
Result	Test passed
Note	<p>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.</p> <p>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.</p> <p>When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.</p>

### Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 0.4 kg
	2.5 mm <sup>2</sup> / 0.7 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	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
Test duration per axis	0.00138888888889 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2018-05
---------------	-------------------------------------

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

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 ... 105 °C (max. short-term operating temperature 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 (storage/transport)	30 % ... 70 %

## Standards and regulations

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

## Mounting

Mounting type	NS 15
---------------	-------

# Distribution block - PTFIX 12X1,5-NS15A PK

3002977

<https://www.phoenixcontact.com/de/produkte/3002977>



## Drawings

Circuit diagram



# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

## Approvals

<b>DNV</b> Approval ID: TAE00002TT				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	500 V	24 A	-	-

<b>CSA</b> Approval ID: 13631				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Use group B	300 V	20 A	26 - 12	-
Use group C	150 V	20 A	26 - 12	-
Use group D	300 V	10 A	26 - 12	-

<b>IECEE CB Scheme</b> Approval ID: DE1-62701				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	500 V	17.5 A	-	- 1.5

<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 $\text{mm}^2$
Use group B	300 V	20 A	26 - 12	-

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

Use group C	150 V	20 A	26 - 12	-
Use group F	500 V	20 A	26 - 12	-
Use group D	300 V	10 A	26 - 12	-

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

## Classifications

### ECLASS

ECLASS-9.0	27141120
ECLASS-10.0.1	27141120
ECLASS-11.0	27141120

### ETIM

ETIM 8.0	EC000897
----------	----------

### UNSPSC

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

# Distribution block - PTFIX 12X1,5-NS15A PK



3002977

<https://www.phoenixcontact.com/de/produkte/3002977>

## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e No hazardous substances above threshold values
------------	---

Phoenix Contact 2022 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstraße 8  
D-32825 Blomberg  
+49 52 35/3-1 20 00  
[info@phoenixcontact.de](mailto:info@phoenixcontact.de)