

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Distribution block, Block with horizontal alignment, connection method: Push-in connection, number of connections: 12, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, width: 31.2 mm, height: 28.7 mm, color: brown, mounting type: NS 35/7,5, NS 35/15

The figure shows the version PTFIX 18X2,5-NS35A in gray

### Why buy this product

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

### Key Commercial Data

Packing unit	8 STK
Minimum order quantity	8 STK
GTIN	 4 055626 391427
GTIN	4055626391427
Weight per Piece (excluding packing)	0.010 kg
Custom tariff number	85369010
Country of origin	Poland
Note	Made to Order (non-returnable)

### Technical data

#### General

Note	The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories
Number of levels	1
Number of connections	12
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	brown
Insulating material	PA
Flammability rating according to UL 94	V0

# Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

## Technical data

### General

Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W (the value is based on one connection block and is multiplied according to the pin assignment)
Maximum load current	24 A
Nominal current $I_N$	24 A
Nominal voltage $U_N$	500 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA

# Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

## Technical data

### General

Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

### Dimensions

Width	31.2 mm
-------	---------

# Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

## Technical data

### Dimensions

Length	45.7 mm
Height	28.7 mm
Height NS 35/7,5	30.8 mm
Height NS 35/15	38.3 mm

### Connection data

Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3

### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
Flammability rating according to UL 94	V0

## Drawings

Circuit diagram



## Classifications

eCl@ss

eCl@ss 4.0	27141121
eCl@ss 4.1	27141121
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120

# Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

## Classifications

### eCl@ss

eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Approvals


### Approvals


#### Approvals

UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	D
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	D
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Approvals

	B	C	D
Nominal current IN	20 A	20 A	5 A
Nominal voltage UN	300 V	300 V	600 V

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

### Accessories

#### Accessories

##### DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733

DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681

DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

---

End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

---

DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

---

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

---

DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail 35 mm (NS 35)

---

DIN rail - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail 35 mm (NS 35)

---

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

---

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

---



## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

---

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

---

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

---

### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, color: white

---

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, color: red

---

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, color: blue

---

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, color: yellow

---

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, color: green

---

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, color: gray

---

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, color: black

---

### Jumper

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 9 mm, number of positions: 2, color: red

---

Plug-in bridge - FBS 2-5 GN - 3032143



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: green

---

Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

---

Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

---

### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



Marker card, Card, white, labeled, Horizontal: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - (99)100, Mounting type: adhesive, for terminal block width: 5 mm, Lettering field: 5 x 3.8 mm

---

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

Marker card - SK 3,8 REEL P5 WH CUS - 0825124



Marker card, can be ordered: By card, white, labeled according to customer specifications, Mounting type: adhesive, for terminal block width: 5 mm, Lettering field: continuous x 3.8 mm

---

### Marker carriers

Terminal strip marker carrier - KLM 2 - 0807575



Terminal strip marker carrier, gray, unlabeled, Mounting type: Plug in, Lettering field: 20 mm x 8 mm

Terminal strip marker carrier - KLM 3-L - 0814788



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

---

### Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

---

### Terminal marking

Marking foil for zack marker strip - TML (EX3,8)R - 0801837



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, Mounting type: adhesive, for terminal block width: 30000 mm, Lettering field: 30,000 x 3.8 mm

## Distribution block - PTFIX 12X2,5-NS35A BN - 3273164

### Accessories

Marking foil for zack marker strip - TML (104X3,8)R - 0801833



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, Mounting type: adhesive, for terminal block width: 104 mm, Lettering field: 104 x 3.8 mm

---

### Test plug terminal block

Test plugs - MPS-MT SN - 3212251



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, tin-plated surface, color: silver

---

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: silver

---

### Test socket

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

---

Test plugs - MPS-MT 1-S - 1944372



Test plugs, consisting of Ø 1 mm test pin, 150 mm conductor length, and Ø 2 mm socket

