

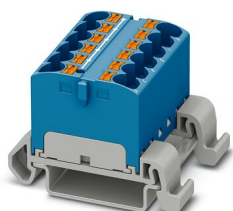
# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

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, Block with horizontal alignment, nom. voltage: 800 V, nominal current: 32 A, number of connections: 12, connection method: Push-in connection, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, color: blue

## Your advantages

- 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

## Commercial data

Item number	3273682
Packing unit	1 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA114
Catalog page	Page 449 (C-1-2019)
GTIN	4055626646572
Weight per piece (including packing)	33.51 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85369010
Country of origin	PL

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## Technical data

### Notes

General	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	1.02 W

### Connection data

Number of connections per level	12
Nominal cross section	4 mm <sup>2</sup>
Rated cross section AWG	10
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 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 ... 12 (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>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Nominal current	32 A
Maximum load current	41 A
Maximum total current	63 A
Nominal voltage	800 V

#### Connection cross sections directly pluggable

Conductor cross section rigid	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
-------------------------------	---

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

Conductor cross section, rigid [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.75 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>

## Dimensions

Width	36.9 mm
Height	45.7 mm
Depth on NS 35/7,5	30.9 mm

## Material specifications

Color	blue
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))	130 °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)	28 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 4 mm <sup>2</sup>	0.48 kA
Short-time withstand current 6 mm <sup>2</sup>	0.72 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

## Mechanical properties

### Mechanical data

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

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
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	0.2 mm <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 0.9 kg
	6 mm <sup>2</sup> / 1.4 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	$f_1 = 5 \text{ Hz}$ 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	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

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 (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 35/7,5
	NS 35/15

# PTFIX 12X4-NS35A BU - Distribution block

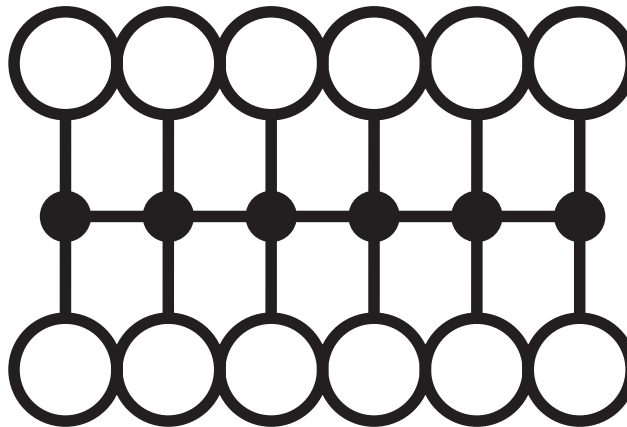
3273682

<https://www.phoenixcontact.com/us/products/3273682>



## Drawings

Circuit diagram



# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3273682>

DNV Approval ID: TAE00002TT-04				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	500 V	24 A	-	-

CSA Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B				
	600 V	32 A	24 - 10	-
Use group C				
	600 V	32 A	24 - 10	-

CB IECEE CB Scheme Approval ID: DE1-62701				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	800 V	32 A	-	- 4

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

LR Approval ID: LR2002627TA				
--------------------------------	--	--	--	--

BV Approval ID: 59146/A0 BV				
--------------------------------	--	--	--	--

VDE Zeichengenehmigung Approval ID: 40047797				
---	--	--	--	--

cULus Recognized Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B				
	600 V	32 A	24 - 10	-
Use group C				

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

	600 V	32 A	24 - 10	-
--	-------	------	---------	---



# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## Classifications

### ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

### ETIM

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

### UNSPSC

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

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## Environmental product compliance

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

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## Accessories

### FBS 2-6 - Plug-in bridge

3030336

<https://www.phoenixcontact.com/us/products/3030336>



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: red

---

### FBS 2-6 GY - Plug-in bridge

3032237

<https://www.phoenixcontact.com/us/products/3032237>



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: gray

## PTFIX 12X4-NS35A BU - Distribution block

3273682

<https://www.phoenixcontact.com/us/products/3273682>



## FBS 2-6 BU - Plug-in bridge

3036932

<https://www.phoenixcontact.com/us/products/3036932>

Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: blue



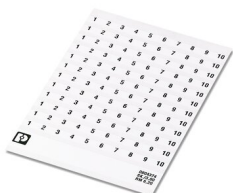
---

## SK 6,2/3,8:FORTL.ZAHLEN - Marker card

0804374

<https://www.phoenixcontact.com/us/products/0804374>

Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm



# PTFIX 12X4-NS35A BU - Distribution block



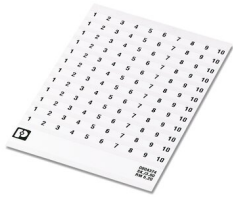
3273682

<https://www.phoenixcontact.com/us/products/3273682>

## SK 6,2/3,8:FORTL.ZAHLEN 1-10 - Marker for terminal blocks

0804374:0001

<https://www.phoenixcontact.com/us/products/0804374:0001>



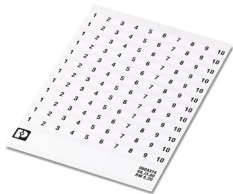
Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 1 ... 10, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

---

## SK 6,2/3,8:FORTL.ZAHLEN 11-20 - Marker for terminal blocks

0804374:0011

<https://www.phoenixcontact.com/us/products/0804374:0011>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 11 ... 20, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

# PTFIX 12X4-NS35A BU - Distribution block



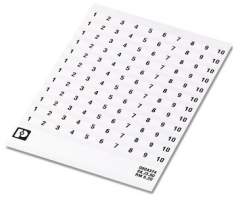
3273682

<https://www.phoenixcontact.com/us/products/3273682>

## SK 6,2/3,8:FORTL.ZAHLEN 21-30 - Marker for terminal blocks

0804374:0021

<https://www.phoenixcontact.com/us/products/0804374:0021>



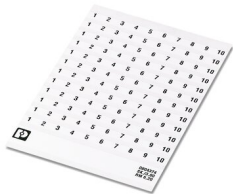
Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 21 ... 30, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

---

## SK 6,2/3,8:FORTL.ZAHLEN 31-40 - Marker for terminal blocks

0804374:0031

<https://www.phoenixcontact.com/us/products/0804374:0031>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 31 ... 40, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

# PTFIX 12X4-NS35A BU - Distribution block



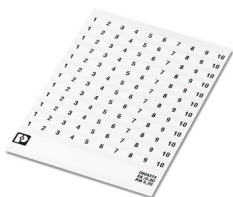
3273682

<https://www.phoenixcontact.com/us/products/3273682>

## SK 6,2/3,8:FORTL.ZAHLEN 41-50 - Marker for terminal blocks

0804374:0041

<https://www.phoenixcontact.com/us/products/0804374:0041>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 41 ... 50, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

---

## US-TML (104X3,8) - Marker for terminal blocks

0830768

<https://www.phoenixcontact.com/us/products/0830768>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22

## PTFIX 12X4-NS35A BU - Distribution block

3273682

<https://www.phoenixcontact.com/us/products/3273682>



## US-TML (104X2,8) - Marker for terminal blocks

0830767

<https://www.phoenixcontact.com/us/products/0830767>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

---

## SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440



## PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

### SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/us/products/0803883>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

---

### TML (EX3,8)R - Marker strip

0801837

<https://www.phoenixcontact.com/us/products/0801837>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

---

## TML (104X2,8)R - Marker strip

0801832

<https://www.phoenixcontact.com/us/products/0801832>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

# PTFIX 12X4-NS35A BU - Distribution block



3273682

<https://www.phoenixcontact.com/us/products/3273682>

## TML (EX2,8)R - Marker strip

0801836

<https://www.phoenixcontact.com/us/products/0801836>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: continuous x 2.8 mm

---

## MM-TML (EX3,8)R C1 WH/BK - Label

1092026

<https://www.phoenixcontact.com/us/products/1092026>



Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm

---

Phoenix Contact 2023 © - 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)