

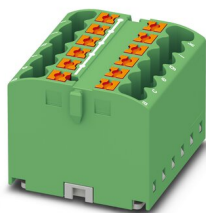
# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

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, Basic terminal block, nom. voltage: 450 V, nominal current: 24 A, number of connections: 12, connection method: Push-in connection, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: green

## 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	3273294
Packing unit	1 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA114
Catalog page	Page 439 (C-1-2019)
GTIN	4055626392134
Weight per piece (including packing)	23.025 g
Weight per piece (excluding packing)	22.3 g
Customs tariff number	85369010
Country of origin	PL

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## 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	0.77 W

### Connection data

Number of connections per level	12
Nominal cross section	2.5 mm <sup>2</sup>
Rated cross section AWG	12
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Nominal current	24 A
Maximum load current	32 A
Maximum total current	48 A
Nominal voltage	450 V

#### Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

## Dimensions

Width	31.5 mm
Height	28.6 mm
Depth	21.7 mm

## Material specifications

Color	green
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

## Mechanical properties

### Mechanical data

Open side panel	No
-----------------	----

## Mechanical tests

### Attachment on the carrier

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>

## Environmental and real-life conditions

### Needle-flame test

Time of exposure	30 s
------------------	------

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

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	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
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):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 60998-2-2
----------------------------------	---------------

## Mounting

Mounting type	for snapping onto a DIN rail adapter
	Direct mounting with flange
	Free-hanging

# PTFIX 12X2,5 GN - Distribution block

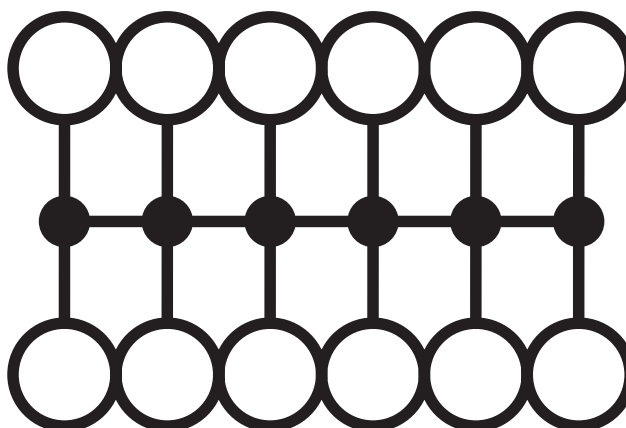
3273294

<https://www.phoenixcontact.com/us/products/3273294>



## Drawings

Circuit diagram



# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3273294>

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				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

CB IECEE CB Scheme Approval ID: DE1-63085				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	450 V	24 A	-	-

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

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

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

VDE Zeichengenehmigung Approval ID: 40047798				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	450 V	24 A	-	-

cULus Recognized Approval ID: E60425				
---	--	--	--	--

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

	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				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## Classifications

### ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

### ETIM

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

### UNSPSC

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



# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## Environmental product compliance

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

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## Accessories



Note: Applying some accessories below might limit this product.

### FBS 2-5 - Plug-in bridge

3030161

<https://www.phoenixcontact.com/us/products/3030161>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, length: 23 mm, color: red



Max. current carrying capacity: 24 A

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

3032143

<https://www.phoenixcontact.com/us/products/3032143>



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



Max. current carrying capacity: 24 A

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>


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

3036877

<https://www.phoenixcontact.com/us/products/3036877>



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

 Max. current carrying capacity: 24 A

---

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

3038969

<https://www.phoenixcontact.com/us/products/3038969>



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

 Max. current carrying capacity: 24 A

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## PTFIX-NS35 - DIN rail adapter

3274054

<https://www.phoenixcontact.com/us/products/3274054>

DIN rail adapter, length: 58.1 mm, width: 28.6 mm, height: 58.1 mm, color: gray, mounting type: NS 35/7,5



---

## PTFIX-NS35A - DIN rail adapter

3274056

<https://www.phoenixcontact.com/us/products/3274056>

DIN rail adapter, length: 45.7 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## PTFIX-NS35A-FIX - DIN rail adapter

3274057

<https://www.phoenixcontact.com/us/products/3274057>

DIN rail adapter, with end stop function, length: 45.7 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5



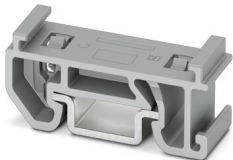
---

## PTFIX-NS15A - DIN rail adapter

3274058

<https://www.phoenixcontact.com/us/products/3274058>

DIN rail adapter, length: 28.6 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>

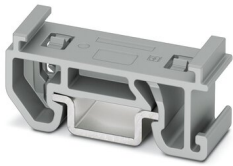


## PTFIX-NS15A-FIX - DIN rail adapter

3274059

<https://www.phoenixcontact.com/us/products/3274059>

DIN rail adapter, with end stop function, length: 28.6 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15



---

## PTFIX-F - Flange

3274060

<https://www.phoenixcontact.com/us/products/3274060>

Flange, with screw-on fixing, length: 28.6 mm, width: 8.6 mm, height: 28.6 mm, color: gray, mounting type: Screw mounting



## PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-MT SN - Test plugs

3212251

<https://www.phoenixcontact.com/us/products/3212251>



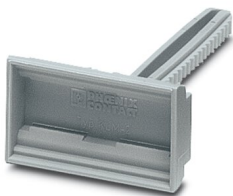
Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, tin-plated surface, number of positions: 1, color: silver

---

## KLM 2 - Terminal strip marker carrier

0807575

<https://www.phoenixcontact.com/us/products/0807575>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using snap-in labels

## PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## KLM 3-L - Terminal strip marker carrier

0814788

<https://www.phoenixcontact.com/us/products/0814788>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using labels in 20 x 8 mm format

---

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

1204517

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



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-MT 1-S - Test plugs

1944372

<https://www.phoenixcontact.com/us/products/1944372>

Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



---

## CEC 2,5 - Filler plugs

3062757

<https://www.phoenixcontact.com/us/products/3062757>

Cover for conductor shaft, 10-pos., for spring cage terminal blocks (ST) and terminal blocks with push-in technology (PT) with a width of 5.2 mm



## PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## PAI-4-N GY - Test adapter

3032871

<https://www.phoenixcontact.com/us/products/3032871>



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

---

## MPS-MT - Test plugs

0201744

<https://www.phoenixcontact.com/us/products/0201744>



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

# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/us/products/0201663>

Insulating sleeve, color: white



---

## MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/us/products/0201676>

Insulating sleeve, color: red



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/us/products/0201689>

Insulating sleeve, color: blue



---

## MPS-IH YE - Insulating sleeve

0201692

<https://www.phoenixcontact.com/us/products/0201692>

Insulating sleeve, color: yellow



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/us/products/0201702>

Insulating sleeve, color: green



---

## MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/us/products/0201728>

Insulating sleeve, color: gray



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/us/products/0201731>

Insulating sleeve, color: black



---

## ISH 2,5/0,2 - Insulating sleeve

3002843

<https://www.phoenixcontact.com/us/products/3002843>

Insulating sleeve, color: white



# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## ISH 2,5/0,5 - Insulating sleeve

3002856

<https://www.phoenixcontact.com/us/products/3002856>



Insulating sleeve, color: gray

---

## ISH 2,5/1,0 - Insulating sleeve

3002869

<https://www.phoenixcontact.com/us/products/3002869>



Insulating sleeve, color: black

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## 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: 30000 x 3.8 mm, Number of individual labels: 12

---

## 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



# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## 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

---

## 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

# PTFIX 12X2,5 GN - Distribution block

3273294

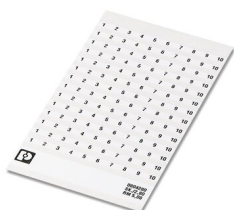
<https://www.phoenixcontact.com/us/products/3273294>



## SK 2,8 REEL P5,2 WH CUS - Marker card

8199986

<https://www.phoenixcontact.com/us/products/8199986>



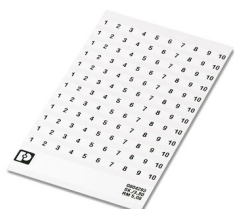
Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

---

## SK 3,8 REEL P5,2 WH CUS - Marker card

8199989

<https://www.phoenixcontact.com/us/products/8199989>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8 mm

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## 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

---

## 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

# PTFIX 12X2,5 GN - Distribution block



3273294

<https://www.phoenixcontact.com/us/products/3273294>

## 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

---

## 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

# PTFIX 12X2,5 GN - Distribution block

3273294

<https://www.phoenixcontact.com/us/products/3273294>



## 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)