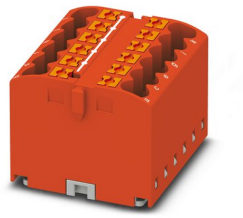
# Distribution block - PTFIX 12X2,5 RD

3273290

https://www.phoenixcontact.com/us/products/3273290

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, Basic terminal block, nom. voltage: 450 V, nominal current: 24 A, connection method: Push-in connection, cross section: 0.14 $mm^2$ - 4 $mm^2$, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: red

## 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 | 3273290 |
| Packing unit | 1 pc |
| Minimum order quantity | 8 pc |
| Sales Key | B02 |
| Product Key | BEA114 |
| Catalog Page | Page 439 (C-1-2019) |
| GTIN | 4055626392110 |
| Weight per Piece (including packing) | 22.83 g |
| Weight per Piece (excluding packing) | 22.83 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 | 0.77 W |

## Connection data

| | |
|---|---|
| Number of connections per level | 12 |
| Nominal cross section | 2.5 mm² |
| 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 solid | 0.14 mm² ... 4 mm² |
| Cross section AWG | 26 ... 12 (converted acc. to IEC) |
| Conductor cross section flexible | 0.14 mm² ... 2.5 mm² |
| Conductor cross section, flexible [AWG] | 26 ... 12 (converted acc. to IEC) |
| Flexible conductor cross section flexible (ferrule, w/o plastic sleeve) | 0.14 mm² ... 2.5 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.14 mm² ... 2.5 mm² |
| 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 solid | 0.34 mm² ... 4 mm² |
| Conductor cross section, solid [AWG] | 24 ... 12 (converted acc. to IEC) |

| | |
|---|---|
| Flexible conductor cross section flexible (ferrule, w/o 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 | 21.7 mm |
| Length | 28.6 mm |

## Material specifications

| | |
|---|---|
| Color | red |
| 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) | 125 °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 | 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. |
| | 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. |
| | When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half. |

## Environmental and real-life conditions

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 Hz to $f_2$ = 250 Hz |
| ASD level | 6.12 $(m/s^2)^2/Hz$ |
| 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 (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

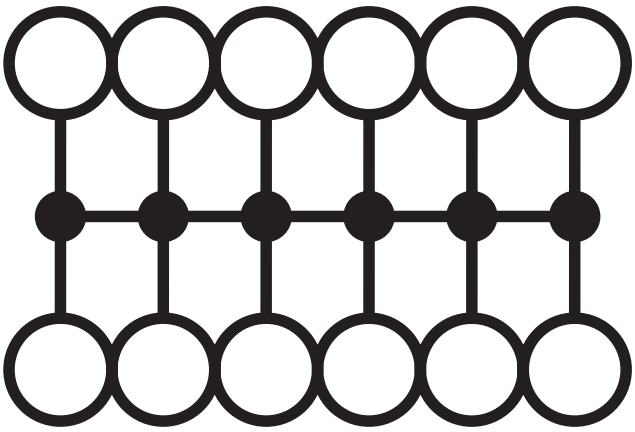
| | |
|---|---|
| Connection in acc. with standard | IEC 60998-2-2 |

## Mounting

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

## Drawings

Circuit diagram



## Approvals

**DNV**
Approval ID: TAE00002TT

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 500 V | 24 A | - | - |

**CSA**
Approval ID: 13631

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| 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 | - |

**IECEE CB Scheme**
Approval ID: DE1-63085

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 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 $mm^2$ |
|---|---|---|---|---|
| | 450 V | 24 A | - | - |

**cULus Recognized**
Approval ID: E60425

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 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 | - |

## 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 |

## Environmental Product Compliance

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

## Accessories

Note: Applying some accessories below might limit this product.

### Plug-in bridge

Plug-in bridge - FBS 2-5 - 3030161

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



Plug-in bridge, pitch: 5.2 mm, color: red

Max. current carrying capacity: 24 A

### Plug-in bridge

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

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



Plug-in bridge, pitch: 5.2 mm, color: green

Max. current carrying capacity: 24 A

## Plug-in bridge

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

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



Plug-in bridge, pitch: 5.2 mm, color: blue

Max. current carrying capacity: 24 A

## Plug-in bridge

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

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



Plug-in bridge, pitch: 5.2 mm, color: gray

Max. current carrying capacity: 24 A

## DIN rail adapter

DIN rail adapter - PTFIX-NS35 - 3274054

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

DIN rail adapter, length: 58.1 mm, width: 28.6 mm, height: 11 mm, color: gray



## DIN rail adapter

DIN rail adapter - PTFIX-NS35A - 3274056

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

DIN rail adapter, length: 45.7 mm, width: 10.3 mm, height: 11.9 mm, color: gray



## DIN rail adapter

DIN rail adapter - PTFIX-NS35A-FIX - 3274057

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

DIN rail adapter, with end stop function, length: 45.7 mm, width: 10.3 mm, height: 12 mm, color: gray

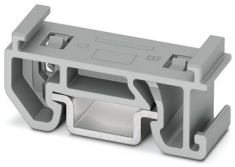


## DIN rail adapter

DIN rail adapter - PTFIX-NS15A - 3274058

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

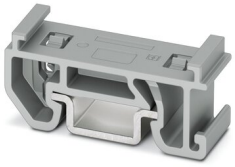
DIN rail adapter, length: 28.6 mm, width: 10.3 mm, height: 10.8 mm, color: gray



## DIN rail adapter

DIN rail adapter - PTFIX-NS15A-FIX - 3274059

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



DIN rail adapter, with end stop function, length: 28.6 mm, width: 10.3 mm, height: 10.8 mm, color: gray

## Flange

Flange - PTFIX-F - 3274060

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



Flange, with screw-on fixing, length: 28.6 mm, width: 8.6 mm, height: 21.7 mm, color: gray

## Test plugs

Test plugs - MPS-MT SN - 3212251

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

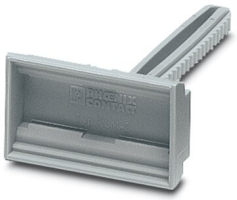


Test plugs, with solder connection up to 1 $mm^2$ conductor cross section, tin-plated surface, color: silver

## Terminal strip marker carrier

Terminal strip marker carrier - KLM 2 - 0807575

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



Terminal strip marker carrier, gray, unlabeled, mounting type: plug in, lettering field size: 20 mm x 8 mm

## Terminal strip marker carrier

Terminal strip marker carrier - KLM 3-L - 0814788

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

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

## Test plugs

Test plugs - MPS-MT 1-S - 1944372

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

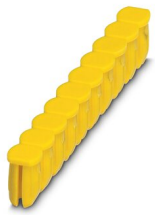
Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



## Filler plugs

Filler plugs - CEC 2,5 - 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

## Test adapter

Test adapter - PAI-4-N GY - 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

## Test plugs

Test plugs - MPS-MT - 0201744

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



Test plugs, with solder connection up to 1 $mm^2$ conductor cross section, color: gray

## Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

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

Insulating sleeve, color: white



## Insulating sleeve

Insulating sleeve - MPS-IH RD - 0201676

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

Insulating sleeve, color: red

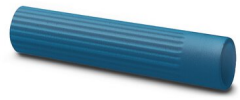


## Insulating sleeve

Insulating sleeve - MPS-IH BU - 0201689

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

Insulating sleeve, color: blue



## Insulating sleeve

Insulating sleeve - MPS-IH YE - 0201692

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

Insulating sleeve, color: yellow



## Insulating sleeve

Insulating sleeve - MPS-IH GN - 0201702

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

Insulating sleeve, color: green



## Insulating sleeve

Insulating sleeve - MPS-IH GY - 0201728

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

Insulating sleeve, color: gray



## Insulating sleeve

Insulating sleeve - MPS-IH BK - 0201731

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

Insulating sleeve, color: black



## Insulating sleeve

Insulating sleeve - ISH 2,5/0,2 - 3002843

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

Insulating sleeve, color: white



## Insulating sleeve

Insulating sleeve - ISH 2,5/0,5 - 3002856

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



Insulating sleeve, color: gray

## Insulating sleeve

Insulating sleeve - ISH 2,5/1,0 - 3002869

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



Insulating sleeve, color: black

## Marking foil for zack marker strip

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

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



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: 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: 30000 x 3. 8 mm, Number of individual labels: 1

## Marking foil for zack marker strip

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

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



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: 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

## Marking foil for zack marker strip

Marking foil for zack marker strip - TML (104X2,8)R - 0801832

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



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: 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

## Marking foil for zack marker strip

Marking foil for zack marker strip - TML (EX2,8)R - 0801836

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

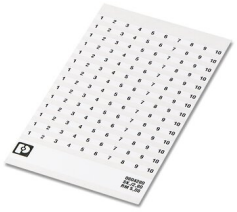


Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2. 8 mm, Number of individual labels: 1

## Marker card

Marker card - SK 2,8 REEL P5,2 WH CUS - 8199986

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

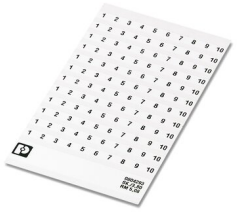


Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

## Marker card

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

## Marker for terminal blocks

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

## Marker for terminal blocks

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

## Marker card

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906

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



Marker card, Sheet, 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

## Marker card

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883

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



Marker card, Sheet, 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

# Distribution block - PTFIX 12X2,5 RD

3273290

https://www.phoenixcontact.com/us/products/3273290

## Label

Label - MM-TML (EX3,8)R C1 WH/BK - 1092026

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



Label, Roll, white, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, for terminal block width: 8000 mm, lettering field size: continuous x 2.8 mm

Phoenix Contact 2022 © - 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