# Distribution block - PTFIX 12X2,5 WH

3273298

https://www.phoenixcontact.com/us/products/3273298

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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: white

## Your advantages

- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Clear wiring, thanks to eleven different color variants
- 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
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting

## Commercial Data

| | |
|---|---|
| Item number | 3273298 |
| Packing unit | 1 pc |
| Minimum order quantity | 8 pc |
| Sales Key | B02 |
| Product Key | BEA114 |
| Catalog Page | Page 439 (C-1-2019) |
| GTIN | 4055626392158 |
| Weight per Piece (including packing) | 22.425 g |
| Weight per Piece (excluding packing) | 22.425 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 | white |
| 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 | 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/s²)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

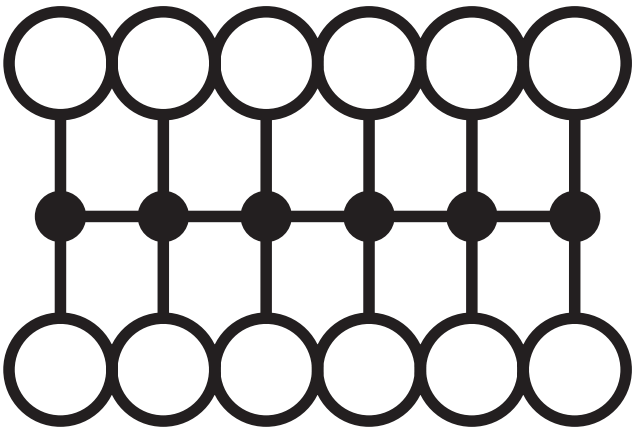
| | |
|---|---|
| Connection in acc. with standard | IEC 60998-2-2 |

## 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

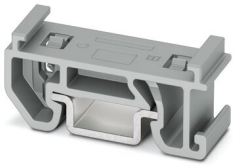


## DIN rail adapter

DIN rail adapter - PTFIX-NS15A - 3274058

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

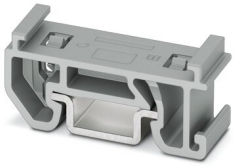
DIN rail adapter, length: 28.6 mm, width: 10.3 mm, height: 10.8 mm, color: gray



## 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

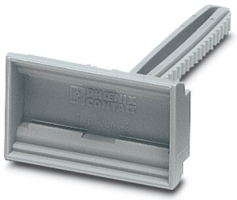


Test plugs, with solder connection up to 1 $mm^2$ conductor cross section, tin-plated surface, color: silver

## 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

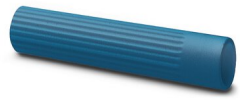


## Insulating sleeve

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

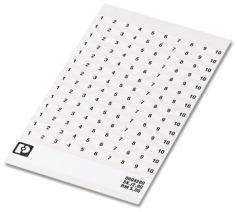


Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2. 8 mm, Number of individual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

## Marker card

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

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

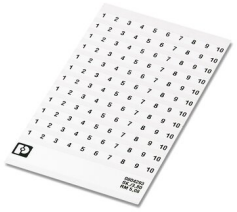


Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

## 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 WH

3273298

https://www.phoenixcontact.com/us/products/3273298

## 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

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