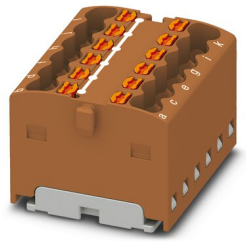
# Distribution block - PTFIX 12X1,5 BN

3002776

https://www.phoenixcontact.com/us/products/3002776

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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, bridged internally, nom. voltage: 450 V, nominal current: 17.5 A, connection method: Push-in connection, cross section: 0.14 $mm^2$ - 2.5 $mm^2$, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: brown

## Your advantages

- Clear arrangement thanks to marking of all terminal points
- Convenient test options, thanks to test openings at every terminal point
- Flexible use, thanks to direct mounting with flange covers from accessories
- Space-saving, thanks to the compact design
- Space-saving potential distribution, thanks to compact micro potential distributors

## Commercial Data

| | |
|---|---|
| Item number | 3002776 |
| Packing unit | 1 pc |
| Minimum order quantity | 20 pc |
| Sales Key | B02 |
| Product Key | BEA114 |
| Catalog Page | Page 429 (C-1-2019) |
| GTIN | 4055626432564 |
| Weight per Piece (including packing) | 10.48 g |
| Weight per Piece (excluding packing) | 9.99 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 |

### 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 | 0.56 W |

### Connection data

| | |
|---|---|
| Number of connections per level | 12 |
| Nominal cross section | 1.5 mm² |
| Rated cross section AWG | 14 |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A1 / B1 |
| Connection in acc. with standard | IEC 60998-2-2 |
| Conductor cross section solid | 0.14 mm² ... 2.5 mm² |
| Cross section AWG | 26 ... 14 (converted acc. to IEC) |
| Conductor cross section flexible | 0.14 mm² ... 1.5 mm² |
| Conductor cross section, flexible [AWG] | 24 ... 14 (converted acc. to IEC) |
| Flexible conductor cross section flexible (ferrule, w/o plastic sleeve) | 0.14 mm² ... 1.5 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.14 mm² ... 1.5 mm² |
| Nominal current | 17.5 A |
| Maximum load current | 22 A |
| Maximum total current | 26 A |
| Nominal voltage | 450 V |

Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross section solid | 0.34 mm² ... 2.5 mm² |
| Conductor cross section, solid [AWG] | 26 ... 14 (converted acc. to IEC) |
| Flexible conductor cross section flexible (ferrule, w/o plastic sleeve) | 0.34 mm² ... 1.5 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.34 mm² ... 1.5 mm² |

## Dimensions

| | |
|---|---|
| Width | 24.9 mm |
| Height | 17.7 mm |
| Length | 21.6 mm |

## Material specifications

| | |
|---|---|
| Color | brown |
| 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

| | |
|---|---|
| DIN rail/fixing support | NS 35/NS 15 |
| 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

Aging

| | |
|---|---|
| Temperature cycles | 192 |

Needle-flame test

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

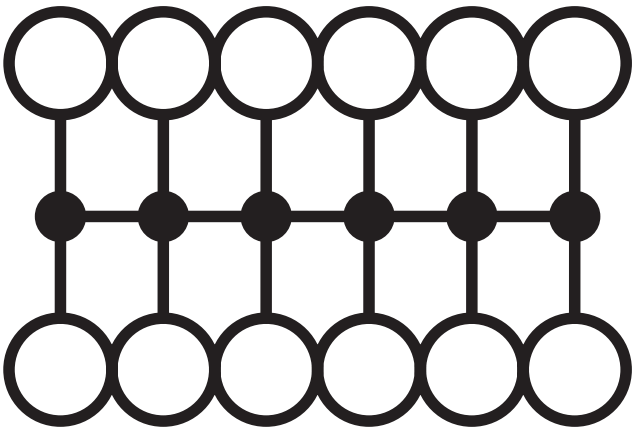
| | |
|---|---|
| Connection in acc. with standard | IEC 60998-2-2 |

## 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 | | | | |
| | 150 V | 20 A | 26 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 26 - 12 | - |

**IECEE CB Scheme**
Approval ID: DE1-63083

| | Nominal Voltage $U_N$ | Nominal Current $I_N$ | Cross Section AWG | Cross Section $mm^2$ |
|---|---|---|---|---|
| | 450 V | 17.5 A | - | - 1.5 |

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

**LR**
Approval ID: LR2002627TA

**BV**
Approval ID: 59146/A0 BV

**VDE Zeichengenehmigung**
Approval ID: 40047798

**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 | | | | |
| | 150 V | 20 A | 26 - 12 | - |
| Use group F | | | | |
| | 500 V | 20 A | 26 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 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 2-4 - 3030116

https://www.phoenixcontact.com/us/products/3030116



Plug-in bridge, pitch: 4.2 mm, color: red

Max. current carrying capacity: 17.5 A

### Plug-in bridge

Plug-in bridge - FBS 2-4 GY - 3030118

https://www.phoenixcontact.com/us/products/3030118



Plug-in bridge, pitch: 4.2 mm, color: gray

Max. current carrying capacity: 17.5 A

## Plug-in bridge

Plug-in bridge - FBS 2-4 BU - 3030117

https://www.phoenixcontact.com/us/products/3030117



Plug-in bridge, pitch: 4.2 mm, color: blue

Max. current carrying capacity: 17.5 A

## Flange

Flange - PTFIX 1,5-F - 1049503

https://www.phoenixcontact.com/us/products/1049503



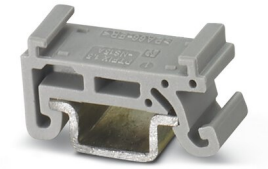
Flange, with screw-on fixing, mounting type: Screw mounting, color: gray

## DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS15A - 1049500

https://www.phoenixcontact.com/us/products/1049500

DIN rail adapter, length: 21.6 mm, width: 8 mm, height: 10.85 mm



## DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS35 - 1049497

https://www.phoenixcontact.com/us/products/1049497

DIN rail adapter, length: 58.1 mm, width: 21.6 mm, height: 11 mm



## DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS35AD - 1049498

https://www.phoenixcontact.com/us/products/1049498

DIN rail adapter, for NS 35 for accommodating two rows of PTFIX 1,5 distribution blocks, length: 44.4 mm, width: 8 mm, height: 10.9 mm



## Mounting adapter

Mounting adapter - PTFIX 1,5-RZF - 1050613

https://www.phoenixcontact.com/us/products/1050613

Adapter for direct mounting



## Accessories

Accessories - MPS-MT 1-S4-B RD - 1982800

https://www.phoenixcontact.com/us/products/1982800

Test plug terminal block, Accessories



## Insulating sleeve

Insulating sleeve - ISH 1,5/0,2 - 3206131

https://www.phoenixcontact.com/us/products/3206131

Insulating sleeve, color: white



## Insulating sleeve

Insulating sleeve - ISH 1,5/0,5 - 3031034

https://www.phoenixcontact.com/us/products/3031034

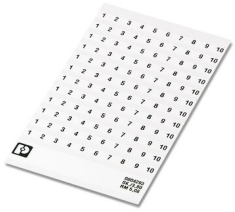


Insulating sleeve, color: gray

## Marker card

Marker card - SK 3,8 REEL P4,15 WH CUS - 0825990

https://www.phoenixcontact.com/us/products/0825990



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

## 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

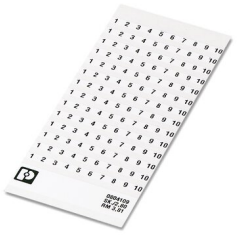


Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2. 8 mm, Number of individual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

## Marker card

Marker card - SK 2,8 REEL P4,15 WH CUS - 8199987

https://www.phoenixcontact.com/us/products/8199987



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 2.8 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

## 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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