# Distribution block - PTFIX 12X1,5-G WH

3002891

https://www.phoenixcontact.com/us/products/3002891

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, 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: adhesive, color: white

## Your advantages

- Space-saving, thanks to the compact design
- Flexible use, thanks to DIN rail and direct mounting
- Space-saving potential distribution, thanks to compact micro potential distributors
- Convenient test options, thanks to test openings at every terminal point
- Clear arrangement thanks to marking of all terminal points

## Commercial Data

| | |
|---|---|
| Item number | 3002891 |
| Packing unit | 1 pc |
| Minimum order quantity | 20 pc |
| Sales Key | B02 |
| Product Key | BEA114 |
| Catalog Page | Page 432 (C-1-2019) |
| GTIN | 4055626432977 |
| Weight per Piece (including packing) | 11.5 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 |
| Conductor cross section solid | 0.14 mm² ... 2.5 mm² |
| Cross section AWG | 26 ... 14 |
| Conductor cross section flexible | 0.14 mm² ... 1.5 mm² |
| Conductor cross section, flexible [AWG] | 24 ... 14 |
| 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 |
| 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 | 18.7 mm |
| Length | 21.6 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

| | |
|---|---|
| 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) | -35 °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

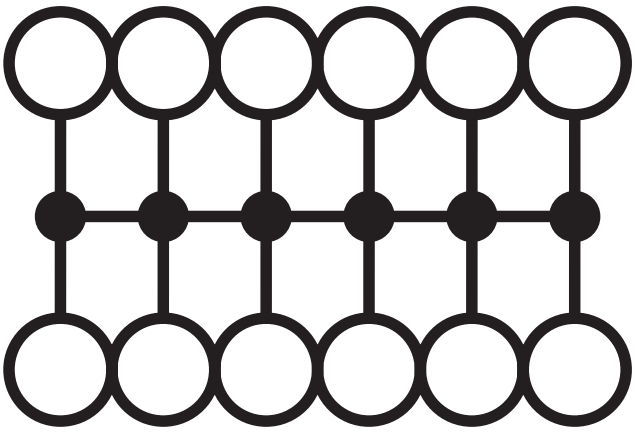
| | |
|---|---|
| Connection in acc. with standard | IEC 60998-2-2 |

## Mounting

| | |
|---|---|
| Mounting type | adhesive |

## 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.

### Accessories

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

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

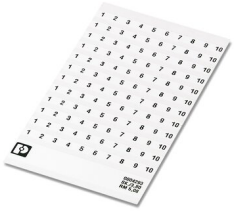
Test plug terminal block, Accessories



### Marker card

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

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

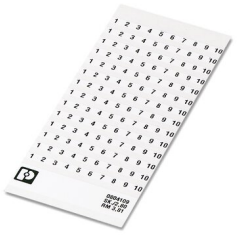


Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

## 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 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

## 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

## 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

## 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

## 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

## 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


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