# PTFIX 6/6X2,5-MTL - Function distribution block

1130760

https://www.phoenixcontact.com/gb/products/1130760

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.






Function distribution block, Basic terminal block with feed-in and disconnect knife in the branches, disconnection via screwdriver or manually, nom. voltage: 400 V, nominal current: 20 A, Load contact, connection method: Push-in connection, Rated cross section: 2.5 $mm^2$, cross section: 0.14 $mm^2$ - 4 $mm^2$, Line contact, connection method: Push-in connection, Rated cross section: 6 $mm^2$, cross section: 0.5 $mm^2$ - 10 $mm^2$, mounting: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: gray

## Your advantages

- Time savings with ready-to-mount blocks without manual bridging
- Approx. 30% space savings on the DIN rail with 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
- Circuit disconnection via built-in disconnect knife, actuation via screwdriver or by hand

## Commercial data

| | |
|---|---|
| Item number | 1130760 |
| Packing unit | 8 pc |
| Minimum order quantity | 8 pc |
| Sales key | BEA131 |
| Product key | BEA131 |
| GTIN | 4063151058463 |
| Weight per piece (including packing) | 34.59 g |
| Weight per piece (excluding packing) | 34 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

# Technical data

## Notes

### General

| | |
|---|---|
| Note | The maximum load current of a single clamping unit must not be exceeded. |
| | For power distribution applications, IEC 60364-4-43.2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed! |

## Product properties

| | |
|---|---|
| Product type | Distributor terminal block |
| Number of connections | 7 |
| Number of rows | 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

| | |
|---|---|
| Service Entrance | yes |
| Number of connections per level | 7 |
| Nominal cross section | 2.5 mm² |
| Rated cross section AWG | 14 |

### Load contact

| | |
|---|---|
| Connection method | Push-in connection |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A3 |
| | B3 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross-section rigid | 0.14 mm² ... 4 mm² |
| Cross section AWG | 26 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.14 mm² ... 4 mm² |
| Conductor cross-section, flexible [AWG] | 26 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm² ... 2.5 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.14 mm² ... 2.5 mm² |
| Nominal cross section | 2.5 mm² |
| Nominal current | 20 A |
| Maximum load current | 20 A (with 4 mm² conductor cross-section) |
| Maximum total current | 57 A (with 10 mm² conductor cross-section) |

| | |
|---|---|
| Nominal voltage | 400 V |
| Note | The IEC 60947-7-1 standard applies for the use of mounting accessories. |

Line contact

| | |
|---|---|
| Connection method | Push-in connection |
| Stripping length | 10 mm ... 12 mm |
| Internal cylindrical gage | A5 |
| | B4 |
| Conductor cross-section rigid | 0.5 mm² ... 10 mm² |
| Cross section AWG | 20 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.5 mm² ... 10 mm² |
| Conductor cross-section, flexible [AWG] | 20 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm² ... 6 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.5 mm² ... 6 mm² |
| Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve) | 0.5 mm² ... 1.5 mm² |
| Nominal cross section | 6 mm² |
| Connection in acc. with standard | IEC 60998-2-2 |
| Nominal voltage | 450 V (in accordance with IEC 60998-2-2) |

Load contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross-section rigid | 0.34 mm² ... 4 mm² |
| Conductor cross-section, rigid [AWG] | 22 ... 18 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.75 mm² ... 2.5 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.5 mm² ... 2.5 mm² |

Line contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross-section rigid | 1 mm² ... 10 mm² |
| Conductor cross-section, rigid [AWG] | 18 ... 8 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 1.5 mm² ... 6 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 1 mm² ... 6 mm² |

## Dimensions

| | |
|---|---|
| Width | 47.6 mm |
| Height | 28.6 mm |
| Depth | 28.2 mm |

## Material specifications

| | |
|---|---|
| Color | gray (RAL 7042) |
| 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) | 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) | 27,5 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 |

## Electrical tests

### Surge voltage test

| | |
|---|---|
| Result | Test passed |

### Temperature-rise test

| | |
|---|---|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| Short-time withstand current 6 mm² | 0.72 kA |
| Short-time withstand current 2.5 mm² | 0.3 kA |
| Result | Test passed |

### Power-frequency withstand voltage

| | |
|---|---|
| Test voltage setpoint | 1.89 kV |
| Result | Test passed |

## Mechanical properties

### Mechanical data

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

## Mechanical tests

### Mechanical strength

| | |
|---|---|
| Result | Test passed |

### 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. |
| | Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen. |
| | When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half. |

### Test for conductor damage and slackening

| | |
|---|---|
| Rotation speed | 10 rpm |

| | |
|---|---|
| Revolutions | 135 |
| Conductor cross-section/weight | 0.5 mm² / 0.3 kg |
| | 6 mm² / 1.4 kg |
| | 10 mm² / 2 kg |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|---|---|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross-section/weight | 0.14 mm² / 0.2 kg |
| | 2.5 mm² / 0.7 kg |
| | 4 mm² / 0.9 kg |
| Result | Test passed |

## Environmental and real-life conditions

Aging

| | |
|---|---|
| Temperature cycles | 192 |
| Result | Test passed |

Needle-flame test

| | |
|---|---|
| Time of exposure | 30 s |
| Result | Test passed |

Oscillation/broadband noise

| | |
|---|---|
| Specification | DIN EN 50155 (VDE 0115-200):2018-05 |
| Spectrum | Long 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):2018-05 |
| 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 ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see 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 (operation) | 20 % ... 90 % |
| Permissible humidity (storage/transport) | 30 % ... 70 % |

## Standards and regulations

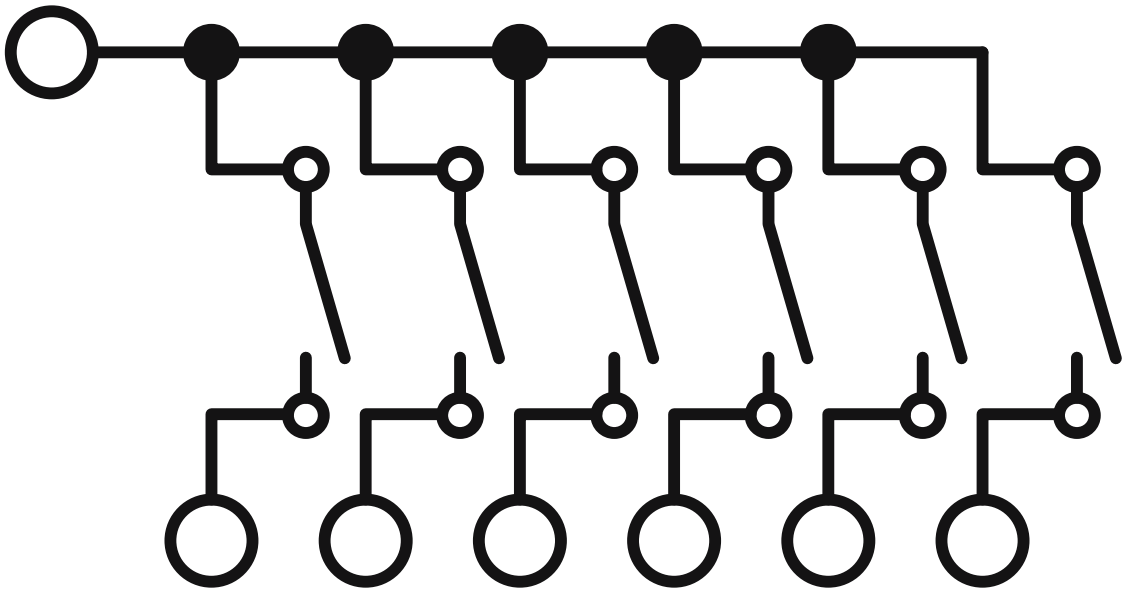
| | |
|---|---|
| Connection in acc. with standard | IEC 60947-7-1 |
| | IEC 60998-2-2 |

## Mounting

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

## Drawings

Circuit diagram



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1130760

**CSA**
Approval ID: 13631

**cULus Recognized**
Approval ID: E60425

**DNV**
Approval ID: TAE00002TT-05

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| | 500 V | 24 A | - | - |

**EAC**
Approval ID: KZ7500651131219505

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27250118 |
| ECLASS-15.0 | 27250118 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC000897 |

### UNSPSC

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

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |


Phoenix Contact 2026 © - all rights reserved
https://www.phoenixcontact.com



PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk