# PTFIX 6/6X2,5-NS15A BK - Distribution block

3274180

https://www.phoenixcontact.com/us/products/3274180

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, Block with horizontal alignment and integrated supply, nom. voltage: 690 V, nominal current: 24 A, number of connections: 7, connection method: Push-in connection, Rated cross section: 2.5 mm$^2$, Load contact, cross section: 0.14 mm$^2$ - 4 mm$^2$, Push-in connection, Line contact, Rated cross section: 6 mm$^2$, cross section: 0.5 mm$^2$ - 10 mm$^2$, mounting type: NS 15, color: black

## Your advantages

- Time savings of up to 80 %, thanks to ready-to-mount blocks without manual bridging
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Clear wiring, thanks to eleven different color variants
- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting

## Commercial data

| | |
|---|---|
| Item number | 3274180 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | BE09 |
| Product key | BEA122 |
| GTIN | 4055626393841 |
| Weight per piece (including packing) | 22.18 g |
| Weight per piece (excluding packing) | 22.18 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 | 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 |
| Potentials | 1 |

### Insulation characteristics

| | |
|---|---|
| Overvoltage category | III |
| Degree of pollution | 3 |

## Electrical properties

| | |
|---|---|
| Rated surge voltage | 8 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 |
| 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 |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² |
| Nominal cross section | 2.5 mm² |
| Nominal current | 24 A |

| | |
|---|---|
| Maximum load current | 32 A (with 4 mm² conductor cross-section) |
| Maximum total current | 57 A (The maximum load current of the individual terminal point must not be exceeded.) |
| Nominal voltage | 690 V |

Line contact

| | |
|---|---|
| Connection method | Push-in connection |
| Stripping length | 10 mm ... 12 mm |
| Internal cylindrical gage | A5 |
| Connection in acc. with standard | IEC 60947-7-1 |
| 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 |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² ... 1.5 mm² |
| Nominal cross section | 6 mm² |
| Nominal current | 41 A |
| Maximum load current | 57 A (with 10 mm² conductor cross-section) |
| Maximum total current | 57 A (The maximum load current of the individual terminal point must not be exceeded.) |
| Nominal voltage | 690 V |

Load contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross-section rigid | 0.34 mm² ... 4 mm² |
| Conductor cross-section, rigid [AWG] | 24 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm² ... 2.5 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.34 mm² ... 2.5 mm² |

Line contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross-section rigid | 1 mm² ... 10 mm² |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 1 mm² ... 6 mm² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 1 mm² ... 6 mm² |

## Dimensions

| | |
|---|---|
| Width | 25.6 mm |
| Height | 28.6 mm |
| Depth on NS 15 | 31.4 mm |

## Material specifications

| | |
|---|---|
| Color | black (RAL 9005) |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | I |
| Insulating material | PA |

| | |
|---|---|
| Static insulating material application in cold | -60 °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 |
| 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

| | |
|---|---|
| Test voltage setpoint | 9.8 kV |
| 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 10 mm² | 1.2 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 |
| Test force setpoint | 5 N |
| 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. |

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):2008-03 |
| 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):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 ... 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

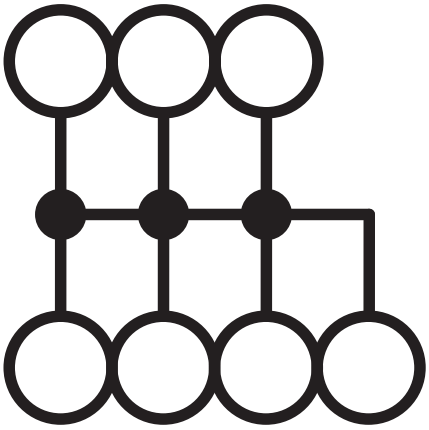
| | |
|---|---|
| Connection in acc. with standard | IEC 60947-7-1 |
| | IEC 60947-7-1 |

## Mounting

| | |
|---|---|
| Mounting type | NS 15 |

## Drawings

Circuit diagram



## Classifications

### ECLASS

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

### ETIM

| | |
|---|---|
| ETIM 9.0 | 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 USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com