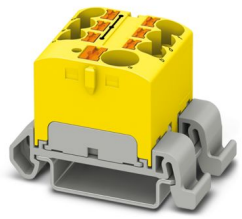
# PTFIX 10/6X4-NS35A YE - Distribution block

3273730

https://www.phoenixcontact.com/us/products/3273730

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, nom. voltage: 800 V, nominal current: 41 A, number of connections: 7, connection method: Push-in connection, Load contact, Rated cross section: 4 $mm^2$, cross section: 0.2 $mm^2$ - 6 $mm^2$, Push-in connection, Line contact, Rated cross section: 10 $mm^2$, cross section: 0.5 $mm^2$ - 10 $mm^2$, mounting type: NS 35/7,5, NS 35/15, color: yellow

## 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 | 3273730 |
| Packing unit | 8 pc |
| Minimum order quantity | 8 pc |
| Sales key | BE09 |
| Product key | BEA122 |
| Catalog page | Page 453 (C-1-2019) |
| GTIN | 4055626667652 |
| Weight per piece (including packing) | 25.15 g |
| Weight per piece (excluding packing) | 25.15 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 |
| Potentials | 1 |

### Insulation characteristics

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

## Electrical properties

| | |
|---|---|
| Rated surge voltage | 6 kV |
| Maximum power dissipation for nominal condition | 1.02 W |

## Connection data

| | |
|---|---|
| Service Entrance | yes |
| Number of connections per level | 7 |
| Nominal cross section | 4 mm² |
| Rated cross section AWG | 10 |

### Load contact

| | |
|---|---|
| Stripping length | 10 mm ... 12 mm |
| Internal cylindrical gage | A4 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section rigid | 0.2 mm² ... 6 mm² |
| Cross section AWG | 24 ... 10 (converted acc. to IEC) |
| Conductor cross section flexible | 0.2 mm² ... 4 mm² |
| Conductor cross section, flexible [AWG] | 24 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.2 mm² ... 4 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.2 mm² ... 4 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.5 mm² ... 1 mm² |
| Nominal current | 41 A |
| Maximum load current | 41 A (with 6 mm² conductor connection) |
| Maximum total current | 63 A |

| | |
|---|---|
| Nominal voltage | 800 V |
| Nominal cross section | 4 mm² |

Line contact

| | |
|---|---|
| Stripping length | 12 mm ... 14 mm |
| 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 ... 10 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.5 mm² ... 10 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 0.75 mm² ... 2.5 mm² |
| Nominal current | 57 A |
| Maximum load current | 57 A (with 10 mm² conductor cross section) |
| Maximum total current | 63 A (The maximum load current of the individual terminal point must not be exceeded.) |
| Nominal voltage | 800 V |
| Nominal cross section | 10 mm² |

Load contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross section rigid | 0.5 mm² ... 6 mm² |
| Conductor cross section, rigid [AWG] | 20 ... 10 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.75 mm² ... 4 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.5 mm² ... 4 mm² |

Line contact Connection cross sections directly pluggable

| | |
|---|---|
| Conductor cross section rigid | 1.5 mm² ... 10 mm² |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 2.5 mm² ... 10 mm² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 1 mm² ... 10 mm² |

## Dimensions

| | |
|---|---|
| Width | 27.9 mm |
| Height | 45.7 mm |
| Depth on NS 35/7,5 | 30.9 mm |

## Material specifications

| | |
|---|---|
| Color | yellow |
| 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 |

## 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 10 mm² | 1.2 kA |
| Result | Test passed |

Power-frequency withstand voltage

| | |
|---|---|
| Test voltage setpoint | 2 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 |
| 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 |
| | 10 mm² / 2 kg |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|---|---|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross section/weight | 0.2 mm² / 0.2 kg |
| | 4 mm² / 0.9 kg |
| | 6 mm² / 1.4 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 | 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 ... 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, no longer than 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

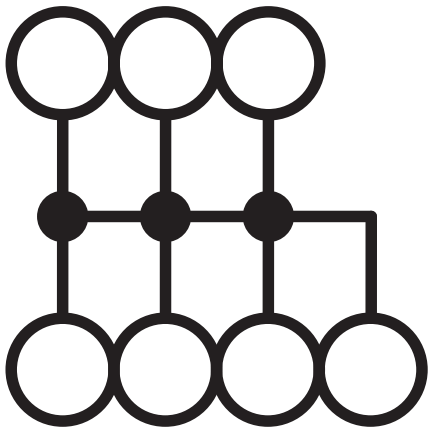
| | |
|---|---|
| Connection in acc. with standard | IEC 60947-7-1 |
| | IEC 60947-7-1 |

## Mounting

| | |
|---|---|
| Mounting type | NS 35/7,5 |
| | NS 35/15 |

## Drawings

Circuit diagram



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3273730

**CSA**
Approval ID: 13631

**IECEE CB Scheme**
Approval ID: DE1-62701

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| | 800 V | 57 A | - | - 10 |

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

**VDE Zeichengenehmigung**
Approval ID: 40047797

**cULus Recognized**
Approval ID: E60425

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 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% |

## Accessories

Note: Applying some accessories below might limit this product.

### FBS 2-6 - Plug-in bridge

3030336

https://www.phoenixcontact.com/us/products/3030336



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: red

Max. current carrying capacity: 32 A

### FBS 2-6 BU - Plug-in bridge

3036932

https://www.phoenixcontact.com/us/products/3036932



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: blue

Max. current carrying capacity: 32 A

## FBS 2-6 GY - Plug-in bridge

3032237

https://www.phoenixcontact.com/us/products/3032237



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: gray

Max. current carrying capacity: 32 A

## PTFIX 2,5-RZ - Mounting adapter

1632417

https://www.phoenixcontact.com/us/products/1632417

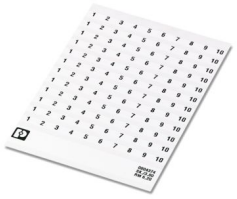


Securing pin adapter, for direct mounting of 2.5 $mm^2$, 4 $mm^2$, and 10 $mm^2$ FIX blocks, color: gray

## SK 6,2/3,8:FORTL.ZAHLEN - Marker card

0804374

https://www.phoenixcontact.com/us/products/0804374

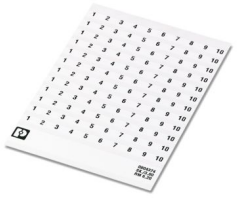


Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm

## SK 6,2/3,8:FORTL.ZAHLEN 1-10 - Marker for terminal blocks

0804374:0001

https://www.phoenixcontact.com/us/products/0804374:0001

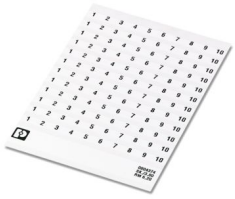


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 1 ... 10, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

## SK 6,2/3,8:FORTL.ZAHLEN 11-20 - Marker for terminal blocks

0804374:0011

https://www.phoenixcontact.com/us/products/0804374:0011

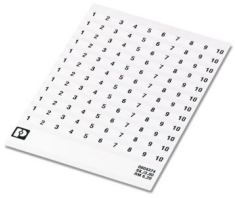


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 11 ... 20, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

## SK 6,2/3,8:FORTL.ZAHLEN 21-30 - Marker for terminal blocks

0804374:0021

https://www.phoenixcontact.com/us/products/0804374:0021

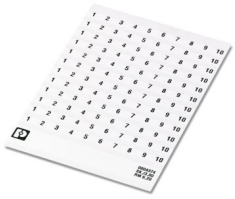


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 21 ... 30, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

## SK 6,2/3,8:FORTL.ZAHLEN 31-40 - Marker for terminal blocks

0804374:0031

https://www.phoenixcontact.com/us/products/0804374:0031

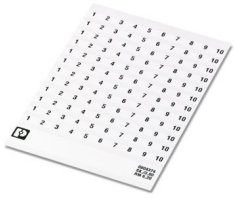


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 31 ... 40, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

## SK 6,2/3,8:FORTL.ZAHLEN 41-50 - Marker for terminal blocks

0804374:0041

https://www.phoenixcontact.com/us/products/0804374:0041



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 41 ... 50, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

## US-TML (104X3,8) - Marker for terminal blocks

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

## US-TML (104X2,8) - Marker for terminal blocks

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

## SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

https://www.phoenixcontact.com/us/products/0803906



Marker card, Din A4, 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

## SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

https://www.phoenixcontact.com/us/products/0803883



Marker card, Din A4, 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

## TML (EX3,8)R - Marker strip

0801837

https://www.phoenixcontact.com/us/products/0801837



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm, Number of individual labels: 12

## TML (104X3,8)R - Marker strip

0801833

https://www.phoenixcontact.com/us/products/0801833



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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

## TML (104X2,8)R - Marker strip

0801832

https://www.phoenixcontact.com/us/products/0801832



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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

## TML (EX2,8)R - Marker strip

0801836

https://www.phoenixcontact.com/us/products/0801836



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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: continuous x 2.8 mm, Number of individual labels: 14

# PTFIX 10/6X4-NS35A YE - Distribution block

3273730

https://www.phoenixcontact.com/us/products/3273730

## MM-TML (EX3,8)R C1 WH/BK - Label

1092026

https://www.phoenixcontact.com/us/products/1092026



Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm, Number of individual labels: 1

Phoenix Contact 2024 © - 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