

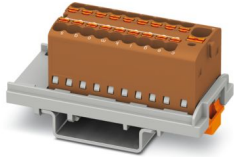
PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

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: 500 V, nominal current: 17.5 A, number of connections: 19, connection method: Push-in connection, Load contact, cross section: 0.14 mm² - 2.5 mm², Line contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², mounting type: NS 35/7,5, NS 35/15, color: brown

Your advantages

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

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1047457 |
| Packing unit | 20 pc |
| Minimum order quantity | 20 pc |
| Sales key | BE09 |
| Product key | BEA124 |
| GTIN | 4055626665627 |
| Weight per piece (including packing) | 23.18 g |
| Weight per piece (excluding packing) | 22.89 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

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 | 19 |
| 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 | 0.56 W |

Connection data

| | |
|---------------------------------|---------------------|
| Service Entrance | yes |
| Number of connections per level | 19 |
| Nominal cross section | 1.5 mm ² |
| 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 mm ² ... 2.5 mm ² |
| Cross section AWG | 26 ... 14 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross-section, flexible [AWG] | 26 ... 14 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.14 mm ² ... 1.5 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.14 mm ² ... 1.5 mm ² |
| Nominal current | 17.5 A |
| Maximum load current | 22 A (with a 2.5 mm ² conductor cross-section) |
| Maximum total current | 32 A |
| Nominal voltage | 500 V |

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Line contact

| | |
|---|---|
| Stripping length | 10 mm ... 12 mm |
| Connection in acc. with standard | IEC 60998-2-2 |
| Conductor cross-section rigid | 0.2 mm ² ... 6 mm ² |
| Cross section AWG | 24 ... 10 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.2 mm ² ... 6 mm ² |
| Conductor cross-section, flexible [AWG] | 24 ... 10 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.2 mm ² ... 4 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.2 mm ² ... 4 mm ² |
| Nominal cross section | 4 mm ² |
| Nominal current | 41 A |
| Maximum load current | 41 A (with 6 mm ² conductor cross-section) |
| Maximum total current | 41 A |

Load contact Connection cross sections directly pluggable

| | |
|---|--|
| Conductor cross-section rigid | 0.34 mm ² ... 2.5 mm ² |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.34 mm ² ... 1.5 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.34 mm ² ... 1.5 mm ² |

Line contact Connection cross sections directly pluggable

| | |
|---|--|
| Conductor cross-section rigid | 0.34 mm ² ... 6 mm ² |
| Conductor cross-section, rigid [AWG] | 24 ... 12 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.34 mm ² ... 4 mm ² |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.2 mm ² ... 4 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.2 mm ² ... 4 mm ² |

Dimensions

| | |
|--------------------|---------|
| Width | 21.6 mm |
| Height | 58.1 mm |
| Depth on NS 15 | 26.4 mm |
| Depth on NS 35/7,5 | 28.4 mm |

Material specifications

| | |
|---|------------------|
| Color | brown (RAL 8028) |
| 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 |

1047457

<https://www.phoenixcontact.com/us/products/1047457>

| | |
|---|------------|
| 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

| | |
|-----------------------|-------------|
| Test voltage setpoint | 7.3 kV |
| Result | Test passed |

Temperature-rise test

| | |
|-----------------------------------|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Result | Test passed |
| 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 |
| Test force setpoint | 5 N |
| 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 |

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

| | |
|------------------------|---|
| ASD level | 6.12 (m/s ²) 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 | NS 35/7,5 |
| | NS 35/15 |

Drawings

Circuit diagram



PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1047457>

| 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 | - | - |

| CSA Approval ID: 13631 | | | | |
|----------------------------------|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| B | | | | |
| Output | 300 V | 20 A | 26 - 12 | - |
| Input | 300 V | 30 A | 24 - 10 | - |
| C | | | | |
| Output | 150 V | 20 A | 26 - 12 | - |
| Input | 150 V | 30 A | 24 - 10 | - |

| IECEE CB Scheme Approval ID: DE1-62701 | | | | |
|--|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 500 V | 32 A | - | - 4 |

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

| VDE Zeichengenehmigung Approval ID: 40047797 | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

| cULus Recognized Approval ID: E60425 | | | | |
|--|-----------------------|-----------------------|-------------------|----------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| B | | | | |
| Output | 300 V | 20 A | 26 - 12 | - |
| Input | 300 V | 30 A | 24 - 10 | - |
| C | | | | |
| Output | 150 V | 20 A | 26 - 12 | - |
| Input | 150 V | 30 A | 24 - 10 | - |

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>



EAC

Approval ID: KZ7500651131219505

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

PTFIX 4/18X1,5-NS35 BN - Distribution block



1047457

<https://www.phoenixcontact.com/us/products/1047457>

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