

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

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: 7, 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 15, color: blue

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1047491 |
| Packing unit | 20 pc |
| Minimum order quantity | 20 pc |
| Sales key | BEA122 |
| Product key | BEA122 |
| GTIN | 4055626665962 |
| Weight per piece (including packing) | 10.84 g |
| Weight per piece (excluding packing) | 10.695 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

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 | 0.56 W |

Connection data

| | |
|---------------------------------|---------------------|
| Service Entrance | yes |
| Number of connections per level | 7 |
| 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 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

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 | 19 mm |
| Height | 21.6 mm |
| Depth on NS 15 | 27.4 mm |

Material specifications

| | |
|---|-----------------|
| Color | blue (RAL 5015) |
| 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 |

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

| | |
|---|--------|
| 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 |
| Short-time withstand current 4 mm ² | 0.48 kA |
| Short-time withstand current 6 mm ² | 0.72 kA |
| Short-time withstand current 1.5 mm ² | 0.18 kA |
| Short-time withstand current 2.5 mm ² | 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 |
| Test force setpoint | 5 N |
| Result | Test passed |

Test for conductor damage and slackening

| | |
|--------------------------------|------------------------------|
| Rotation speed | 10 rpm |
| Revolutions | 135 |
| Conductor cross-section/weight | 0.2 mm ² / 0.2 kg |
| | 4 mm ² / 0.9 kg |
| | 6 mm ² / 1.4 kg |
| Result | Test passed |

Test for conductor damage and slackening

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

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

| | |
|--------------------------------|-------------------------------|
| Revolutions | 135 |
| Conductor cross-section/weight | 0.14 mm ² / 0.2 kg |
| | 1.5 mm ² / 0.4 kg |
| | 2.5 mm ² / 0.7 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 | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| 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 |
|----------------------------------|---------------|

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

| | |
|--|---------------|
| | IEC 60998-2-2 |
|--|---------------|

Mounting

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

PTFIX 4/6X1,5-NS15A BU - Distribution block

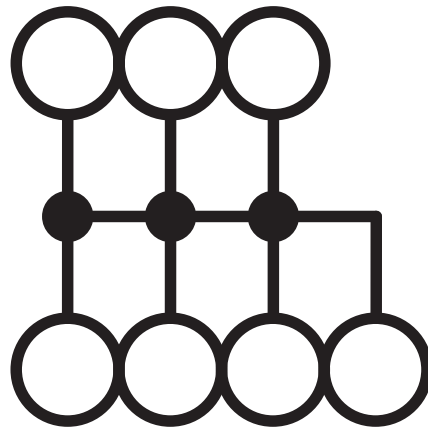
1047491

<https://www.phoenixcontact.com/gb/products/1047491>



Drawings

Circuit diagram



PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

Classifications

ECLASS

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

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC000897 |
|----------|----------|

UNSPSC

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

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/gb/products/1047491>

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