

PTFIX 20X1,5-NS15A WH - Distribution block



3002945

<https://www.phoenixcontact.com/us/products/3002945>

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, bridged internally, nom. voltage: 500 V, nominal current: 17.5 A, number of connections: 20, connection method: Push-in connection, cross section: 0.14 mm² - 1.5 mm², mounting type: NS 15, color: white

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 3002945 |
| Packing unit | 20 pc |
| Minimum order quantity | 1 pc |
| Product key | BE2269 |
| GTIN | 4055626433554 |
| Weight per piece (including packing) | 17.595 g |
| Weight per piece (excluding packing) | 9.99 g |
| Country of origin | PL |

PTFIX 20X1,5-NS15A WH - Distribution block



3002945

<https://www.phoenixcontact.com/us/products/3002945>

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

Product properties

| | |
|-----------------------|----------------------------|
| Product type | Distributor terminal block |
| Number of connections | 20 |
| Number of rows | 1 |
| Potentials | 1 |

Insulation characteristics

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

Electrical properties

| | |
|---------------------|------|
| Rated surge voltage | 6 kV |
|---------------------|------|

Connection data

| | |
|---|--|
| Number of connections per level | 20 |
| Nominal cross section | 1.5 mm ² |
| Rated cross section AWG | 14 |
| Connection method | Push-in connection |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A1 / B1 |
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross-section rigid | 0.14 mm ² ... 1.5 mm ² |
| Cross section AWG | 26 ... 16 (converted acc. to IEC) |
| Conductor cross-section flexible | 0.14 mm ² ... 1.5 mm ² |
| Conductor cross-section, flexible [AWG] | 26 ... 16 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.25 mm ² ... 1.5 mm ² |
| Nominal current | 17.5 A |
| Maximum load current | 17.5 A |
| Nominal voltage | 500 V |

Connection cross sections directly pluggable

| | |
|---|--|
| Conductor cross-section rigid | 0.34 mm ² ... 1.5 mm ² |
| Conductor cross-section, rigid [AWG] | 24 ... 16 (converted acc. to IEC) |
| Conductor cross-section flexible (ferrule without plastic sleeve) | 0.5 mm ² ... 1.5 mm ² |
| Flexible conductor cross-section (ferrule with plastic sleeve) | 0.5 mm ² ... 1.5 mm ² |

Dimensions

| | |
|-------|-------|
| Width | 42 mm |
|-------|-------|

Material specifications

| | |
|---|-------------|
| Color | white |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | I |
| Insulating material | PA |
| 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 | 7.3 kV |
| Result | Test passed |

Temperature-rise test

| | |
|--|-------------------------------------|
| Requirement temperature-rise test | Increase in temperature \leq 45 K |
| Result | Test passed |
| Short-time withstand current 1.5 mm ² | 0.18 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 15 |
| Test force setpoint | 5 N |
| Result | Test passed |

Test for conductor damage and slackening

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

PTFIX 20X1,5-NS15A WH - Distribution block



3002945

<https://www.phoenixcontact.com/us/products/3002945>

| | |
|--------------------------------|-------------------------------|
| Revolutions | 135 |
| Conductor cross-section/weight | 0.14 mm ² / 0.2 kg |
| | 1.5 mm ² / 0.4 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 | 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):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 |

Standards and regulations

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

Mounting

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

Drawings

Circuit diagram



PTFIX 20X1,5-NS15A WH - Distribution block



3002945

<https://www.phoenixcontact.com/us/products/3002945>

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