

PTFIX 6X2,5 BK - Distribution block



3273278

<https://www.phoenixcontact.com/us/products/3273278>

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Distribution block, Basic terminal block, nom. voltage: 450 V, nominal current: 24 A, number of connections: 6, connection method: Push-in connection, cross section: 0.14 mm² - 4 mm², mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: black

Your advantages

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

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 3273278 |
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| Sales key | BE09 |
| Product key | BEA113 |
| Catalog page | Page 439 (C-1-2019) |
| GTIN | 4055626392042 |
| Weight per piece (including packing) | 11.71 g |
| Weight per piece (excluding packing) | 11.7 g |
| Customs tariff number | 85369010 |
| Country of origin | PL |

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Technical data

Notes

| | |
|---------|--|
| General | the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories |
| General | |
| Note | The maximum load current of a single clamping unit must not be exceeded. |

Product properties

| | |
|----------------------------|----------------------------|
| Product type | Distributor terminal block |
| Number of connections | 6 |
| 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 | 0.77 W |

Connection data

| | |
|---|--|
| Number of connections per level | 6 |
| Nominal cross section | 2.5 mm ² |
| Rated cross section AWG | 12 |
| Stripping length | 8 mm ... 10 mm |
| Internal cylindrical gage | A3 |
| Connection in acc. with standard | IEC 60998-2-2 |
| Conductor cross section rigid | 0.14 mm ² ... 4 mm ² |
| Cross section AWG | 26 ... 12 (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 ... 2.5 mm ² |
| Flexible conductor cross section (ferrule with plastic sleeve) | 0.14 mm ² ... 2.5 mm ² |
| Nominal current | 24 A |
| Maximum load current | 32 A |
| Maximum total current | 48 A |
| Nominal voltage | 450 V |

Connection cross sections directly pluggable

| | |
|--------------------------------------|--|
| Conductor cross section rigid | 0.34 mm ² ... 4 mm ² |
| Conductor cross section, rigid [AWG] | 24 ... 12 (converted acc. to IEC) |

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

Dimensions

| | |
|--------|---------|
| Width | 16 mm |
| Height | 28.6 mm |
| Depth | 21.7 mm |

Material specifications

| | |
|---|-------------|
| Color | black |
| 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 |

Mechanical properties

Mechanical data

| | |
|-----------------|----|
| Open side panel | No |
|-----------------|----|

Mechanical tests

Attachment on the carrier

| | |
|--------|---|
| Result | Test passed |
| Note | <p>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.</p> <p>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.</p> <p>When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.</p> |

Environmental and real-life conditions

Needle-flame test

| | |
|------------------|------|
| Time of exposure | 30 s |
|------------------|------|

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| | |
|--------|-------------|
| Result | Test passed |
|--------|-------------|

Oscillation/broadband noise

| | |
|------------------------|--|
| Specification | DIN EN 50155 (VDE 0115-200):2008-03 |
| Spectrum | Service life test category 2, bogie-mounted |
| Frequency | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level | $6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$ |
| 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 (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 (storage/transport) | 30 % ... 70 % |

Standards and regulations

| | |
|----------------------------------|---------------|
| Connection in acc. with standard | IEC 60998-2-2 |
|----------------------------------|---------------|

Mounting

| | |
|---------------|--------------------------------------|
| Mounting type | for snapping onto a DIN rail adapter |
| | Direct mounting with flange |
| | Free-hanging |

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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3273278>

| DNV Approval ID: TAE00002TT-04 | | | | |
|-----------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 500 V | 24 A | - | - |

| CSA Approval ID: 13631 | | | | |
|---------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| Use group B | | | | |
| | 300 V | 20 A | 26 - 12 | - |
| Use group C | | | | |
| | 300 V | 20 A | 26 - 12 | - |
| Use group D | | | | |
| | 600 V | 5 A | 26 - 12 | - |

| CB IECEE CB Scheme Approval ID: DE1-63085 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 450 V | 24 A | - | - |

| EAC Approval ID: RU C-DE.AI30.B.01102 | | | | |
|--|--|--|--|--|
|--|--|--|--|--|

| LR Approval ID: LR2002627TA | | | | |
|--------------------------------|--|--|--|--|
|--------------------------------|--|--|--|--|

| BV Approval ID: 59146/A0 BV | | | | |
|--------------------------------|--|--|--|--|
|--------------------------------|--|--|--|--|

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


| VDE Zeichengenehmigung Approval ID: 40047798 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 450 V | 24 A | - | - |

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| | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| <div> cULus Recognized Approval ID: E60425</div> | | | | |
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| Use group B | | | | |
| | 300 V | 20 A | 26 - 12 | - |
| Use group C | | | | |
| | 300 V | 20 A | 26 - 12 | - |
| Use group D | | | | |
| | 600 V | 5 A | 26 - 12 | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27141120 |
| ECLASS-13.0 | 27250118 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC000897 |
|----------|----------|

UNSPSC

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

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Environmental product compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

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Accessories



Note: Applying some accessories below might limit this product.

FBS 2-5 - Plug-in bridge

3030161

<https://www.phoenixcontact.com/us/products/3030161>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, length: 23 mm, color: red



Max. current carrying capacity: 24 A

FBS 2-5 GN - Plug-in bridge

3032143

<https://www.phoenixcontact.com/us/products/3032143>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: green



Max. current carrying capacity: 24 A

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FBS 2-5 BU - Plug-in bridge

3036877

<https://www.phoenixcontact.com/us/products/3036877>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

 Max. current carrying capacity: 24 A

FBS 2-5 GY - Plug-in bridge

3038969

<https://www.phoenixcontact.com/us/products/3038969>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

 Max. current carrying capacity: 24 A

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PTFIX-NS35 - DIN rail adapter

3274054

<https://www.phoenixcontact.com/us/products/3274054>

DIN rail adapter, length: 58.1 mm, width: 28.6 mm, height: 58.1 mm, color: gray, mounting type: NS 35/7,5



PTFIX-NS35A - DIN rail adapter

3274056

<https://www.phoenixcontact.com/us/products/3274056>

DIN rail adapter, length: 45.7 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5



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PTFIX-NS35A-FIX - DIN rail adapter

3274057

<https://www.phoenixcontact.com/us/products/3274057>

DIN rail adapter, with end stop function, length: 45.7 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5

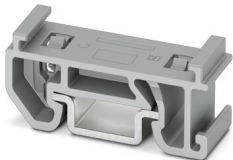


PTFIX-NS15A - DIN rail adapter

3274058

<https://www.phoenixcontact.com/us/products/3274058>

DIN rail adapter, length: 28.6 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15



PTFIX 6X2,5 BK - Distribution block

3273278

<https://www.phoenixcontact.com/us/products/3273278>

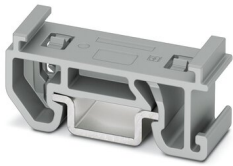


PTFIX-NS15A-FIX - DIN rail adapter

3274059

<https://www.phoenixcontact.com/us/products/3274059>

DIN rail adapter, with end stop function, length: 28.6 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15



PTFIX-F - Flange

3274060

<https://www.phoenixcontact.com/us/products/3274060>

Flange, with screw-on fixing, length: 28.6 mm, width: 8.6 mm, height: 28.6 mm, color: gray, mounting type: Screw mounting



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MPS-MT SN - Test plugs

3212251

<https://www.phoenixcontact.com/us/products/3212251>

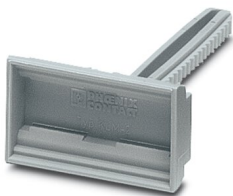


Test plugs, with solder connection up to 1 mm² conductor cross section, tin-plated surface, number of positions: 1, color: silver

KLM 2 - Terminal strip marker carrier

0807575

<https://www.phoenixcontact.com/us/products/0807575>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using snap-in labels

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KLM 3-L - Terminal strip marker carrier

0814788

<https://www.phoenixcontact.com/us/products/0814788>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using labels in 20 x 8 mm format

SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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MPS-MT 1-S - Test plugs

1944372

<https://www.phoenixcontact.com/us/products/1944372>

Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



CEC 2,5 - Filler plugs

3062757

<https://www.phoenixcontact.com/us/products/3062757>

Cover for conductor shaft, 10-pos., for spring cage terminal blocks (ST) and terminal blocks with push-in technology (PT) with a width of 5.2 mm



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PAI-4-N GY - Test adapter

3032871

<https://www.phoenixcontact.com/us/products/3032871>



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

MPS-MT - Test plugs

0201744

<https://www.phoenixcontact.com/us/products/0201744>



Test plugs, with solder connection up to 1 mm² conductor cross section, number of positions: 1, color: gray

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MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/us/products/0201663>

Insulating sleeve, color: white



MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/us/products/0201676>

Insulating sleeve, color: red



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MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/us/products/0201689>

Insulating sleeve, color: blue



MPS-IH YE - Insulating sleeve

0201692

<https://www.phoenixcontact.com/us/products/0201692>

Insulating sleeve, color: yellow



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MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/us/products/0201702>

Insulating sleeve, color: green



MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/us/products/0201728>

Insulating sleeve, color: gray



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MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/us/products/0201731>

Insulating sleeve, color: black



ISH 2,5/0,2 - Insulating sleeve

3002843

<https://www.phoenixcontact.com/us/products/3002843>

Insulating sleeve, color: white



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ISH 2,5/0,5 - Insulating sleeve

3002856

<https://www.phoenixcontact.com/us/products/3002856>



Insulating sleeve, color: gray

ISH 2,5/1,0 - Insulating sleeve

3002869

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Insulating sleeve, color: black

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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: 30000 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

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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

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SK 2,8 REEL P5,2 WH CUS - Marker card

8199986

<https://www.phoenixcontact.com/us/products/8199986>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

SK 3,8 REEL P5,2 WH CUS - Marker card

8199989

<https://www.phoenixcontact.com/us/products/8199989>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8 mm

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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

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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

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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

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