

## Distribution block - PTFIX 12X1,5-NS15A BK - 3002968

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Distribution block, bridged internally, nom. voltage: 500 V, nominal current: 17.5 A, connection method: Push-in connection, number of connections: 12, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, AWG: 26 - 14, width: 24.9 mm, color: black, mounting type: NS 15

### Your advantages

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



### Key Commercial Data

|                                      |                                                                                                         |
|--------------------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit                         | 20 pc                                                                                                   |
| Minimum order quantity               | 20 pc                                                                                                   |
| GTIN                                 | <br>4 055626 433769 |
| GTIN                                 | 4055626433769                                                                                           |
| Weight per Piece (excluding packing) | 10.760 g                                                                                                |
| Custom tariff number                 | 85369010                                                                                                |
| Country of origin                    | Poland                                                                                                  |

### Technical data

#### General

|                       |                                                                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Note                  | Notes on operation The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories |
|                       | Notes on operation The D-PTFIX 1,5 cover (accessory) must be placed on the end of the terminal strip                                      |
| Number of levels      | 1                                                                                                                                         |
| Number of connections | 12                                                                                                                                        |
| Potentials            | 1                                                                                                                                         |
| Nominal cross section | 1.5 mm <sup>2</sup>                                                                                                                       |

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## Technical data

### General

|                                                                                           |                                     |
|-------------------------------------------------------------------------------------------|-------------------------------------|
| Color                                                                                     | black                               |
| Insulating material                                                                       | PA                                  |
| Flammability rating according to UL 94                                                    | V0                                  |
| Rated surge voltage                                                                       | 6 kV                                |
| Degree of pollution                                                                       | 3                                   |
| Overvoltage category                                                                      | III                                 |
| Insulating material group                                                                 | I                                   |
| Maximum power dissipation for nominal condition                                           | 0.56 W                              |
| Ambient temperature (operation)                                                           | -60 °C ... 130 °C                   |
| Maximum load current                                                                      | 26 A                                |
| Maximum total current                                                                     | 26 A                                |
| Nominal current $I_N$                                                                     | 17.5 A                              |
| Nominal voltage $U_N$                                                                     | 500 V                               |
| Open side panel                                                                           | No                                  |
| Shock protection test specification                                                       | DIN EN 50274 (VDE 0660-514):2002-11 |
| Back of the hand protection                                                               | guaranteed                          |
| Finger protection                                                                         | guaranteed                          |
| Result of surge voltage test                                                              | Test passed                         |
| Surge voltage test setpoint                                                               | 7.3 kV                              |
| Result of power-frequency withstand voltage test                                          | Test passed                         |
| Power frequency withstand voltage setpoint                                                | 1.89 kV                             |
| Result of the test for mechanical stability of terminal points (5 x conductor connection) | Test passed                         |
| Result of bending test                                                                    | Test passed                         |
| Bending test rotation speed                                                               | 10 rpm                              |
| Bending test turns                                                                        | 135                                 |
| Bending test conductor cross section/weight                                               | 0.14 mm <sup>2</sup> / 0.2 kg       |
|                                                                                           | 1.5 mm <sup>2</sup> / 0.4 kg        |
| Tensile test result                                                                       | Test passed                         |
| Conductor cross section tensile test                                                      | 0.14 mm <sup>2</sup>                |
| Tractive force setpoint                                                                   | 10 N                                |
| Conductor cross section tensile test                                                      | 1.5 mm <sup>2</sup>                 |
| Tractive force setpoint                                                                   | 40 N                                |
| Result of tight fit on support                                                            | Test passed                         |
| Tight fit on carrier                                                                      | NS 15                               |
| Setpoint                                                                                  | 5 N                                 |
| Result of voltage-drop test                                                               | Test passed                         |
| Requirements, voltage drop                                                                | ≤ 3.2 mV                            |
| Result of temperature-rise test                                                           | Test passed                         |
| Short circuit stability result                                                            | Test passed                         |
| Conductor cross section short circuit testing                                             | 1.5 mm <sup>2</sup>                 |

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|                                                                     |                                                |
|---------------------------------------------------------------------|------------------------------------------------|
| Short-time current                                                  | 0.18 kA                                        |
| Result of thermal test                                              | Test passed                                    |
| Ageing test for screwless modular terminal block temperature cycles | 192                                            |
| Proof of thermal characteristics (needle flame) effective duration  | 30 s                                           |
| Result of aging test                                                | Test passed                                    |
| Oscillation, broadband noise test result                            | Test passed                                    |
| Test specification, oscillation, broadband noise                    | DIN EN 50155 (VDE 0115-200):2008-03            |
| Test spectrum                                                       | Service life test category 2, bogie-mounted    |
| Test 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                                                        | 3.12 g                                         |
| Test duration per axis                                              | 5 h                                            |
| Test directions                                                     | X-, Y- and Z-axis                              |
| Shock test result                                                   | Test passed                                    |
| Test specification, shock test                                      | DIN EN 50155 (VDE 0115-200):2008-03            |
| Shock form                                                          | Half-sine                                      |
| Acceleration                                                        | 30g                                            |
| Shock duration                                                      | 18 ms                                          |
| Number of shocks per direction                                      | 3                                              |
| Test directions                                                     | X-, Y- and Z-axis (pos. and neg.)              |
| Behavior in fire for rail vehicles (DIN 5510-2)                     | Test passed                                    |
| Flame test method (DIN EN 60695-11-10)                              | V0                                             |
| Oxygen index (DIN EN ISO 4589-2)                                    | >32 %                                          |
| NF F16-101, NF F10-102 Class I                                      | 2                                              |
| NF F16-101, NF F10-102 Class F                                      | 2                                              |
| 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                                         |
| Calorimetric heat release NFPA 130 (ASTM E 1354)                    | 28 MJ/kg                                       |
| 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                                    |

### Dimensions

|              |         |
|--------------|---------|
| Width        | 24.9 mm |
| Length       | 21.6 mm |
| Height NS 15 | 27.4 mm |

### Connection data

|                   |                    |
|-------------------|--------------------|
| Connection method | Push-in connection |
|-------------------|--------------------|

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### Technical data

#### Connection data

|                                                                            |                      |
|----------------------------------------------------------------------------|----------------------|
| Connection in acc. with standard                                           | IEC 60947-7-1        |
| Conductor cross section solid min.                                         | 0.14 mm <sup>2</sup> |
| Conductor cross section solid max.                                         | 2.5 mm <sup>2</sup>  |
| Conductor cross section AWG min.                                           | 26                   |
| Conductor cross section AWG max.                                           | 14                   |
| Conductor cross section flexible min.                                      | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.                                      | 1.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, flexible                                 | 24                   |
| Max. AWG conductor cross section, flexible                                 | 12                   |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 1.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule with plastic sleeve min.    | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve max.    | 1.5 mm <sup>2</sup>  |
| Stripping length                                                           | 8 mm ... 10 mm       |
| Internal cylindrical gage                                                  | A1 / B1              |

#### Standards and Regulations

|                                                        |               |
|--------------------------------------------------------|---------------|
| Connection in acc. with standard                       | IEC 60947-7-1 |
| Flammability rating according to UL 94                 | V0            |
| 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   |

#### Environmental Product Compliance

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

### Drawings

#### Circuit diagram



### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141120 |
| eCl@ss 4.1 | 27141120 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141120 |
| eCl@ss 6.0 | 27141100 |

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### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000897 |
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11     | 39121410 |
| UNSPSC 12.01  | 39121410 |
| UNSPSC 13.2   | 39121410 |

### Approvals

#### Approvals

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CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

#### Approval details

|                    |                                                                                     |                                                                                                                                         |       |
|--------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------|
| CSA                |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                    | D                                                                                   | B                                                                                                                                       | C     |
| Nominal voltage UN | 300 V                                                                               | 300 V                                                                                                                                   | 150 V |
| Nominal current IN | 10 A                                                                                | 15 A                                                                                                                                    | 15 A  |
| mm²/AWG/kcmil      | 26-14                                                                               | 26-14                                                                                                                                   | 26-14 |

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### Approvals

|                    |                                                                                   |                                                                                                                                                       |              |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| UL Recognized      |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                    | D                                                                                 | B                                                                                                                                                     | C            |
| Nominal voltage UN | 300 V                                                                             | 300 V                                                                                                                                                 | 150 V        |
| Nominal current IN | 10 A                                                                              | 15 A                                                                                                                                                  | 15 A         |
| mm²/AWG/kcmil      | 26-14                                                                             | 26-14                                                                                                                                                 | 26-14        |

|                    |                                                                                   |                                                                                                                                                       |              |
|--------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| cUL Recognized     |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 60425 |
|                    | D                                                                                 | B                                                                                                                                                     | C            |
| Nominal voltage UN | 300 V                                                                             | 300 V                                                                                                                                                 | 150 V        |
| Nominal current IN | 10 A                                                                              | 15 A                                                                                                                                                  | 15 A         |
| mm²/AWG/kcmil      | 26-14                                                                             | 26-14                                                                                                                                                 | 26-14        |

|     |                                                                                     |                          |
|-----|-------------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|-------------------------------------------------------------------------------------|--------------------------|

|                  |                                                                                     |
|------------------|-------------------------------------------------------------------------------------|
| cULus Recognized |  |
|------------------|-------------------------------------------------------------------------------------|

### Accessories

#### Accessories

##### DIN rail

DIN rail, unperforated - NS 15 UNPERF 2000MM - 1401695



DIN rail, unperforated, Standard profile, width: 15 mm, height: 5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 15 PERF 2000MM - 1401682



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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### Accessories

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#### DIN rail perforated - NS 15 AL PERF 2000MM - 1401763



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

#### DIN rail perforated - NS 15 WH PERF 2000MM - 1204096



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

#### End block

##### End clamp - CLIPFIX 15 - 3022263



Snap-on end bracket, to be snapped onto NS 15 DIN rail

#### End cover

##### End cover - D-PTFIX 1,5 - 3003254



End cover, for use in DIN rail mounting, length: 19.9 mm, width: 2.2 mm, height: 17.7 mm, color: gray

#### Insulating sleeve

##### Insulating sleeve - ISH 1,5/0,2 - 3206131



Insulating sleeve, color: white

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### Accessories

Insulating sleeve - ISH 1,5/0,5 - 3031034



Insulating sleeve, color: gray

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### Jumper

Plug-in bridge - FBS 2-4 - 3030116



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: red

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Plug-in bridge - FBS 2-4 BU - 3030117



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: blue

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Plug-in bridge - FBS 2-4 GY - 3030118



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: gray

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### Labeled terminal marker

Marking foil for zack marker strip - SK 3,8 REEL P4,15 WH CUS - 0825990



Marking foil for zack marker strip, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

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### Screwdriver tools

## Distribution block - PTFIX 12X1,5-NS15A BK - 3002968

### Accessories

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

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### Terminal marking

Marking foil for zack marker strip - TML (EX3,8)R - 0801837



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: 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: 30,000 x 3.8 mm

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Marking foil for zack marker strip - TML (104X3,8)R - 0801833



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: 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

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### Test plug terminal block

Accessories - MPS-MT 1-S4-B RD - 1982800



Accessories

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Test plugs - MPS-MT 1-S - 1944372



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