

## Distribution block - PTFIX 12X1,5-NS15A RD - 3002931

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Distribution block, internally jumpered, 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> - 1.5 mm<sup>2</sup>, AWG: 26 - 16, width: 27.4 mm, color: red, mounting type: NS 15

### Why buy this product

- 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

RoHS

### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 STK   |
| Minimum order quantity               | 20 STK  |
| GTIN                                 | <br>4 055626 433431 |
| GTIN                                 | 4055626433431   |
| Weight per Piece (excluding packing) | 11.000 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   |

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### Technical data

#### General

|   |                                     |
|---|-------------------------------------|
| Number of connections   | 12                                  |
| Potentials  | 1                                   |
| Nominal cross section   | 1.5 mm <sup>2</sup>                 |
| Color   | red                                 |
| 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  | 17.5 A                              |
| Nominal current I <sub>N</sub>  | 17.5 A                              |
| Nominal voltage U <sub>N</sub>  | 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                               |

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#### General

|   |  |
|---|--|
| 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>                              |
| 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz |
| ASD level   | 6.12 (m/s <sup>2</sup> ) <sup>2</sup> /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.)                |
| Relative insulation material temperature index (Elec., UL 746 B)        | 125 °C   |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 125 °C   |
| Static insulating material application in cold                          | -60 °C   |

#### Dimensions

|              |         |
|--------------|---------|
| Width        | 27.4 mm |
| Length       | 21 mm   |
| Height NS 15 | 27.2 mm |

#### Connection data

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

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## Technical data

### Connection data

|  |                      |
|--|----------------------|
| Conductor cross section solid min.   | 0.14 mm <sup>2</sup> |
| Conductor cross section solid max.   | 1.5 mm <sup>2</sup>  |
| Conductor cross section AWG min.   | 26                   |
| Conductor cross section AWG max.   | 16                   |
| 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                                 | 26                   |
| Max. AWG conductor cross section, flexible                                 | 16                   |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.25 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.    | 0.25 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            |

### 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 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |

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## Classifications

eCl@ss

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

Approvals

CSA / UL Recognized / cUL Recognized / 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         | 150 V   | 300 V   | 300 V |
| Nominal current IN         | 15 A  | 15 A  | 15 A  |
| mm <sup>2</sup> /AWG/kcmil | 26-14   | 26-14   | 26-14 |

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|                            |       |   |              |
|----------------------------|-------|---|--------------|
| 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         | 150 V | 300 V   | 300 V        |
| Nominal current IN         | 15 A  | 15 A  | 15 A         |
| mm <sup>2</sup> /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         | 150 V | 300 V   | 300 V        |
| Nominal current IN         | 15 A  | 15 A  | 15 A         |
| mm <sup>2</sup> /AWG/kcmil | 26-14 | 26-14   | 26-14        |

|                  |  |   |
|------------------|--|---|
| cULus 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> |
|------------------|--|---|

## 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

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

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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: white

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### End block

End clamp - CLIPFIX 15 - 3022263



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

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### 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

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### Insulating sleeve

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### Accessories

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



Insulating sleeve, color: white

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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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## Distribution block - PTFIX 12X1,5-NS15A RD - 3002931

### Accessories

#### 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

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, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30,000 x 3.8 mm

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, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, 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

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### Accessories

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



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Test plugs - MPS-MT 1-S - 1944372



Test plugs, consisting of Ø 1 mm test pin, 150 mm conductor length, and Ø 2 mm socket