

## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

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Distribution block, Block with vertical alignment, connection method: Push-in connection, number of connections: 12, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, width: 28.6 mm, height: 28.7 mm, color: orange, mounting type: NS 35/7,5, NS 35/15

The figure shows the version PTFIX 18X2,5-NS35 in gray

### Why buy this product

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

### Key Commercial Data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Packing unit                         | 8 STK                          |
| Minimum order quantity               | 8 STK                          |
| GTIN                                 |                                |
| GTIN                                 | 4055626390758                  |
| Weight per Piece (excluding packing) | 0.010 kg                       |
| Custom tariff number                 | 85369010                       |
| Country of origin                    | Poland                         |
| Note                                 | Made to Order (non-returnable) |

### Technical data

#### General

|  |  |
|--|--|
| Note                                   | The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories |
| Number of levels                       | 1  |
| Number of connections                  | 12   |
| Potentials                             | 1  |
| Nominal cross section                  | 2.5 mm <sup>2</sup>  |
| Color                                  | orange   |
| Insulating material                    | PA   |
| Flammability rating according to UL 94 | V0   |

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### Technical data

#### General

|   |   |
|---|---|
| Rated surge voltage   | 6 kV  |
| Degree of pollution   | 3   |
| Overvoltage category  | III   |
| Insulating material group   | I   |
| Maximum power dissipation for nominal condition   | 0.77 W (the value is based on one connection block and is multiplied according to the pin assignment) |
| Maximum load current  | 24 A  |
| Nominal current I <sub>N</sub>  | 24 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   | 9.8 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   |
|   | 2.5 mm <sup>2</sup> / 0.7 kg  |
|   | 4 mm <sup>2</sup> / 0.9 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  | 2.5 mm <sup>2</sup>   |
| Tractive force setpoint   | 50 N  |
| Conductor cross section tensile test  | 4 mm <sup>2</sup>   |
| Tractive force setpoint   | 60 N  |
| Result of tight fit on support  | Test passed   |
| 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   | 2.5 mm <sup>2</sup>   |
| Short-time current  | 0.3 kA  |
| Conductor cross section short circuit testing   | 4 mm <sup>2</sup>   |
| Short-time current  | 0.48 kA   |

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## Technical data

### General

|   |  |
|---|--|
| Result of aging test  | Test passed                                    |
| Ageing test for screwless modular terminal block temperature cycles     | 192  |
| Result of thermal test  | Test passed                                    |
| Proof of thermal characteristics (needle flame) effective duration      | 30 s   |
| 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.)              |
| Relative insulation material temperature index (Elec., UL 746 B)        | 130 °C   |
| Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) | 130 °C   |
| Static insulating material application in cold                          | -60 °C   |
| 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  | 28.6 mm |
| Length | 58.1 mm |
| Height | 28.7 mm |

# Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

## Technical data

### Dimensions

|                  |         |
|------------------|---------|
| Height NS 35/7,5 | 32.1 mm |
| Height NS 35/15  | 39.6 mm |

### Connection data

|  |                      |
|--|----------------------|
| Connection method  | Push-in connection   |
| 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.   | 4 mm <sup>2</sup>    |
| Conductor cross section AWG min.   | 26                   |
| Conductor cross section AWG max.   | 12                   |
| Conductor cross section flexible min.                                      | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.                                      | 2.5 mm <sup>2</sup>  |
| Min. AWG conductor cross section, flexible                                 | 26                   |
| Max. AWG conductor cross section, flexible                                 | 14                   |
| 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. | 2.5 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.    | 2.5 mm <sup>2</sup>  |
| Stripping length   | 8 mm ... 10 mm       |
| Internal cylindrical gage  | A3                   |

### Standards and Regulations

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

## Drawings

### Circuit diagram



## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141121 |
| eCl@ss 4.1 | 27141121 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141120 |
| eCl@ss 6.0 | 27141120 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

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## Classifications

### ETIM

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

UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

### Approval details

|                            |   |   |              |
|----------------------------|---|---|--------------|
| 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 |
|                            | B   | C   | D            |
| mm <sup>2</sup> /AWG/kcmil | 26-12   | 26-12   | 26-12        |
| Nominal current IN         | 20 A  | 20 A  | 5 A          |
| Nominal voltage UN         | 300 V   | 300 V   | 600 V        |

|                            |   |   |              |
|----------------------------|---|---|--------------|
| 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 |
|                            | B   | C   | D            |
| mm <sup>2</sup> /AWG/kcmil | 26-12   | 26-12   | 26-12        |
| Nominal current IN         | 20 A  | 20 A  | 5 A          |
| Nominal voltage UN         | 300 V   | 300 V   | 600 V        |

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### Approvals

cULus Recognized



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

### Accessories

#### Accessories

##### DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733

DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681

DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704

DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

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## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

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DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail 35 mm (NS 35)

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DIN rail - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail 35 mm (NS 35)

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DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

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DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

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## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

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End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

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### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, color: white

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Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, color: red

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## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, color: blue

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Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, color: yellow

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Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, color: green

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Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, color: gray

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Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, color: black

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### Jumper

## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 9 mm, number of positions: 2, color: red

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Plug-in bridge - FBS 2-5 GN - 3032143



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

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Plug-in bridge - FBS 2-5 BU - 3036877



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

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Plug-in bridge - FBS 2-5 GY - 3038969



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

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### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



Marker card, Card, white, labeled, Horizontal: Consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - (99)100, Mounting type: adhesive, for terminal block width: 5 mm, Lettering field: 5 x 3.8 mm

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## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

Marker card - SK 3,8 REEL P5 WH CUS - 0825124



Marker card, can be ordered: By card, white, labeled according to customer specifications, Mounting type: adhesive, for terminal block width: 5 mm, Lettering field: continuous x 3.8 mm

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### Marker carriers

Terminal strip marker carrier - KLM 2 - 0807575



Terminal strip marker carrier, gray, unlabeled, Mounting type: Plug in, Lettering field: 20 mm x 8 mm

Terminal strip marker carrier - KLM 3-L - 0814788



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

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### Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 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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### 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: 30,000 x 3.8 mm

## Distribution block - PTFIX 12X2,5-NS35 OG - 3273040

### Accessories

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: 104 x 3.8 mm

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### Test plug terminal block

Test plugs - MPS-MT SN - 3212251



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, tin-plated surface, color: silver

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Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: silver

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### Test socket

Test adapter - PAI-4-N GY - 3032871



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

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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

