

## Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Distribution block, Block with vertical alignment and integrated supply, nom. voltage: 500 V, nominal current: 24 A, connection method: Push-in connection, Push-in connection, number of connections: 7, 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: black/yellow, mounting type: NS 35/7,5, NS 35/15

The figure shows the version 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           | 10 STK  |
| Minimum order quantity | 10 STK  |
| GTIN                   | <br>4 055626 391007 |
| GTIN                   | 4055626391007   |

### 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 |
| Number of levels              | 1   |
| Number of connections         | 7   |
| Potentials                    | 1   |
| Nominal cross section         | 2.5 mm <sup>2</sup>   |
| Nominal cross section feed-in | 6 mm <sup>2</sup>   |
| Color                         | black/yellow  |
| Insulating material           | PA  |

# Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

## Technical data

### General

|   |   |
|---|---|
| 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   | 1.31 W (the value is based on one connection block and is multiplied according to the pin assignment) |
| Maximum load current  | 24 A  |
| Nominal current $I_N$   | 24 A  |
| Nominal voltage $U_N$   | 500 V   |
| Maximum load current  | 57 A (with 10 mm <sup>2</sup> conductor cross section)  |
| Nominal current $I_N$   | 41 A (with 6 mm <sup>2</sup> conductor cross section)   |
| 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   | 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   | 0.5 mm <sup>2</sup> / 0.3 kg  |
|   | 6 mm <sup>2</sup> / 1.4 kg  |
|   | 10 mm <sup>2</sup> / 2 kg   |
|   | 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  | 0.5 mm <sup>2</sup>   |
| Tractive force setpoint   | 20 N  |
| Conductor cross section tensile test  | 6 mm <sup>2</sup>   |
| Tractive force setpoint   | 80 N  |
| Conductor cross section tensile test  | 10 mm <sup>2</sup>  |
| Tractive force setpoint   | 90 N  |
| Result of tight fit on support  | Test passed   |
| Tight fit on carrier  | NS 35   |

# Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

## Technical data

### General

|   |  |
|---|--|
| Setpoint  | 5 N  |
| Result of voltage-drop test   | Test passed                                      |
| Requirements, voltage drop  | ≤ 1.6 mV   |
| Result of temperature-rise test   | Test passed                                      |
| Short circuit stability result  | Test passed                                      |
| Conductor cross section short circuit testing                           | 6 mm <sup>2</sup>                                |
| Short-time current  | 0.72 kA  |
| Conductor cross section short circuit testing                           | 10 mm <sup>2</sup>                               |
| Short-time current  | 1.2 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)        | 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   |

# Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

## Technical data

### General

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

### Connection data

|  |                      |
|--|----------------------|
| Feed-in connection   | Feed-in stage        |
| 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                   |
| Connection method  | Push-in connection   |
| Connection in acc. with standard   | IEC 60947-7-1        |
| Conductor cross section solid min.   | 0.5 mm <sup>2</sup>  |
| Conductor cross section solid max.   | 10 mm <sup>2</sup>   |
| Conductor cross section AWG min.   | 20                   |
| Conductor cross section AWG max.   | 8                    |
| Conductor cross section flexible min.                                      | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible max.                                      | 6 mm <sup>2</sup>    |
| Min. AWG conductor cross section, flexible                                 | 20                   |
| Max. AWG conductor cross section, flexible                                 | 10                   |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 6 mm <sup>2</sup>    |

# Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

## Technical data

### Connection data

|   |                     |
|---|---------------------|
| Conductor cross section flexible, with ferrule with plastic sleeve min.                 | 0.5 mm <sup>2</sup> |
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 6 mm <sup>2</sup>   |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 1.5 mm <sup>2</sup> |
| Stripping length  | 10 mm ... 12 mm     |

### Standards and Regulations

|  |   |
|--|---|
| Connection in acc. with standard                       | IEC 60947-7-1                                   |
|  | 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 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24 | HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 |
| Fire protection for rail vehicles (DIN EN 45545-2) R26 | HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 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



## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / CSA / VDE approval of drawings / IECCEB Scheme / DNV GL / cULus Recognized

#### Ex Approvals

### Approval details

# Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

## 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         | 600 V | 300 V   | 300 V        |
| Nominal current IN         | 5 A   | 50 A  | 50 A         |
| mm <sup>2</sup> /AWG/kcmil | 20-8  | 20-8  | 20-8         |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| 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         | 600 V | 300 V   | 300 V        |
| Nominal current IN         | 5 A   | 50 A  | 50 A         |
| mm <sup>2</sup> /AWG/kcmil | 20-8  | 20-8  | 20-8         |

|                            |       |   |       |
|----------------------------|-------|---|-------|
| 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         | 600 V | 300 V   | 300 V |
| Nominal current IN         | 5 A   | 50 A  | 50 A  |
| mm <sup>2</sup> /AWG/kcmil | 20-8  | 20-8  | 20-8  |

|                          |       |   |          |
|--------------------------|-------|---|----------|
| VDE approval of drawings |       | <a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a> | 40047797 |
| Nominal voltage UN       | 630 V |   |          |
| Nominal current IN       | 41 A  |   |          |

|                    |       |   |           |
|--------------------|-------|---|-----------|
| IECEE CB Scheme    |       | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | DE1-60113 |
| Nominal voltage UN | 630 V |   |           |
| Nominal current IN | 41 A  |   |           |

|                    |   |            |
|--------------------|---|------------|
| DNV GL             | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAE00002TT |
| Nominal voltage UN | 500 V   |            |
| Nominal current IN | 24 A  |            |

## Distribution block - PTFIX 6/6X2,5-NS35-FE - 3273086

### Approvals

cULus Recognized



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

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>