

# Distribution block - PTFIX 6/18X2,5-NS35 BU - 3273112

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, The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories, nom. voltage: 690 V, nominal current: 24 A, connection method: Push-in connection, Push-in connection, number of connections: 19, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, width: 28.6 mm, color: blue, mounting type: NS 35/7,5, NS 35/15

## Your advantages

- ✓ 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 pc
Minimum order quantity	8 pc
GTIN	 4 055626 391144
GTIN	4055626391144

## 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	19
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Nominal cross section feed-in	6 mm <sup>2</sup>
Color	blue
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	6 kV

## Distribution block - PTFIX 6/18X2,5-NS35 BU - 3273112

### Technical data

#### General

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)
Designation	Level 1
Maximum load current	32 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum total current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	24 A
Nominal voltage U <sub>N</sub>	690 V
Designation	Level 1 ext. 1
Maximum load current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	41 A (with 6 mm <sup>2</sup> conductor cross section)
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 6/18X2,5-NS35 BU - 3273112

## 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 6/18X2,5-NS35 BU - 3273112

## 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 NS 35/7,5	32.4 mm
Height NS 15	30.4 mm

### Connection data

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
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>
Internal cylindrical gage	A3
Connection	Feed-in stage
Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
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 6/18X2,5-NS35 BU - 3273112

## 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>

### Standards and Regulations

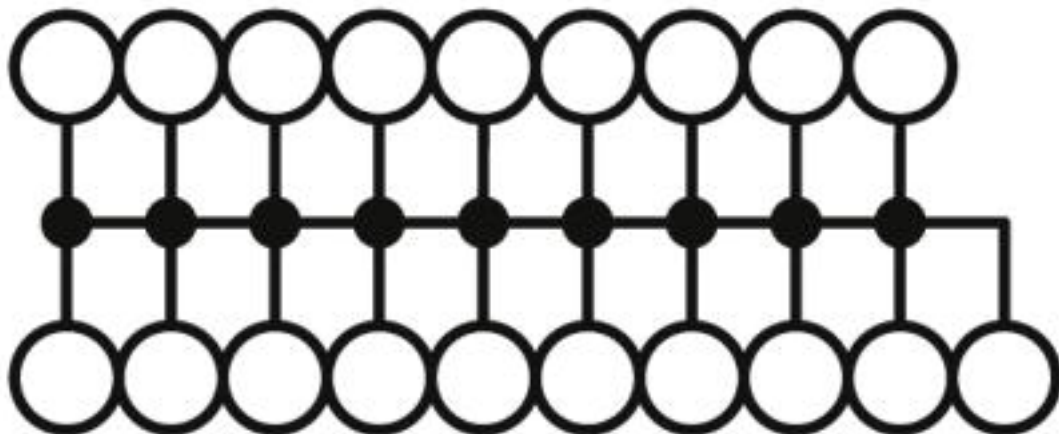
Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1
Flammability rating according to UL 94	V0
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 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



## Approvals

Approvals

Approvals


DNV GL / CSA / UL Recognized / cUL Recognized / IECCEB Scheme / VDE Zeichengenehmigung / EAC / cULus Recognized


# Distribution block - PTFIX 6/18X2,5-NS35 BU - 3273112


## Approvals


Ex Approvals


### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00002TT
Nominal voltage UN	500 V		
Nominal current IN	24 A		

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	50 A	50 A	5 A
mm <sup>2</sup> /AWG/kcmil	20-8	20-8	20-8


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
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	50 A	50 A	5 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
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	50 A	50 A	5 A
mm <sup>2</sup> /AWG/kcmil	20-8	20-8	20-8


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		

## Distribution block - PTFIX 6/18X2,5-NS35 BU - 3273112

### Approvals

VDE Zeichengenehmigung		<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	

EAC		RU C- DE.AI30.B.01102
-----	---	--------------------------

cULus Recognized	
------------------	---

Phoenix Contact 2019 © - 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>