

# Distribution block - PTFIX 12X1,5-NS15A-FE - 3002981

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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: black/yellow, mounting type: NS 15

The figure shows the version in gray

## 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

## Key Commercial Data

Packing unit	20 STK
GTIN	
GTIN	4055626433882

## 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>
Color	black/yellow
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	0.56 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
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

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## Technical data

### General

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	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
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

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## Technical data

### Connection data

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
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


CSA / UL Recognized / cUL Recognized / cULus Recognized


Ex Approvals


### Approval details

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## Approvals

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

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