

## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

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Distribution block, nom. voltage: 500 V, nominal current: 17.5 A, connection method: Push-in connection, Push-in connection, number of connections: 13, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, AWG: 26 - 14, width: 31.4 mm, color: black, mounting type: NS 15



COMPLIANT

### Key Commercial Data

Packing unit	20 pc
GTIN	
GTIN	4055626669168

### Technical data

#### General

Number of levels	1
Number of connections	13
Nominal cross section	1.5 mm <sup>2</sup>
Nominal cross section feed-in	4 mm <sup>2</sup>
Color	black
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 load current	22 A (with a 2.5 mm <sup>2</sup> conductor cross section)
Maximum total current	32 A
Nominal current I <sub>N</sub>	17.5 A
Nominal voltage U <sub>N</sub>	500 V
Maximum load current	41 A (with 6 mm <sup>2</sup> conductor cross section)
Maximum total current	41 A

# Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

## Technical data

### General

Nominal current $I_N$	41 A
Open side panel	No
Ambient temperature (operation)	-60 °C ... 85 °C
Ambient temperature (storage/transport)	-25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
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
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	0.2 mm <sup>2</sup> / 0.2 kg
	4 mm <sup>2</sup> / 0.9 kg
	6 mm <sup>2</sup> / 1.4 kg
	0.14 mm <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 0.4 kg
	2.5 mm <sup>2</sup> / 0.7 kg
Tensile test result	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 15
Setpoint	5 N
Result of voltage-drop test	Test passed
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45$ K
Short circuit stability result	Test passed
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Conductor cross section short circuit testing	1.5 mm <sup>2</sup>
Short-time current	0.18 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of thermal test	Test passed

# Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

## Technical data

### General

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):2018-05
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):2018-05
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))	125 °C
Static insulating material application in cold	-60 °C
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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	31.4 mm
Length	21.6 mm
Height NS 15	27.4 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.	2.5 mm <sup>2</sup>

## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Technical data

#### Connection data

Conductor cross section AWG min.	26
Conductor cross section AWG max.	14
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	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.	1.5 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.	1.5 mm <sup>2</sup>
Connection cross sections directly pluggable	0.34 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.34 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.34 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.	0.34 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	1.5 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.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	4 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.2 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	4 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.2 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	4 mm <sup>2</sup>

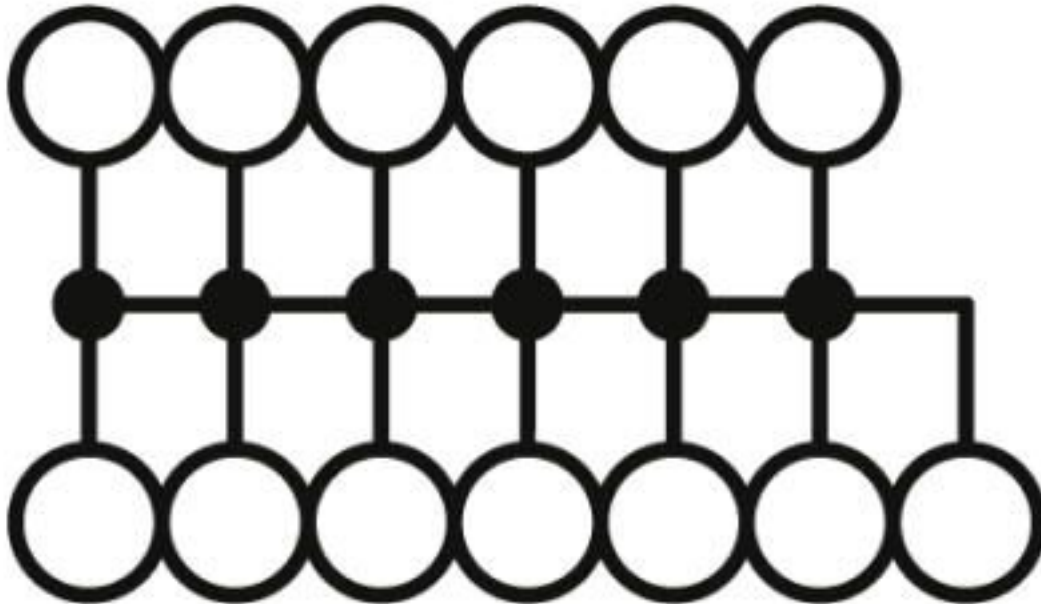
#### Standards and Regulations

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

### Drawings

# Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

## Approvals

### Approvals

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#### Approvals

EAC / UL Recognized / cUL Recognized / CSA / IECCE CB Scheme / VDE Zeichengenehmigung / DNV GL / EAC / LR / BV / cULus Recognized

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#### Ex Approvals

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### Approval details

# Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

## Approvals

EAC		RU C- DE.AI30.B.01102
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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
	B	C	
Nominal voltage UN	300 V	150 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	

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	
Nominal voltage UN	300 V	150 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	300 V	150 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	


IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62701
Nominal voltage UN	500 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	4		


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	500 V		

## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Approvals

Nominal current I <sub>N</sub>	32 A
mm <sup>2</sup> /AWG/kcmil	0.2-1.5

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00002TT
Nominal voltage U <sub>N</sub>	500 V		
Nominal current I <sub>N</sub>	24 A		

EAC		RU C- DE.BL08.B.00644
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	LR2002627TA
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BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	59146/A0 BV
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cULus Recognized	
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### Accessories

#### Accessories

#### Insulating sleeve

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



Insulating sleeve, color: white

## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Accessories

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 GY - 3030118



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: gray

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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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### Labeled terminal marker

Marker card - SK 3,8 REEL P4,15 WH CUS - 0825990



Marker card, Card, can be ordered: by card, 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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## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Accessories

Marker card - SK 2,8 REEL P4,15 WH CUS - 8199987



Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 2.8#mm

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Marker card - SK 3,8 REEL P4,15 WH CUS - 8199988



Marker card, Card, can be ordered: by card, 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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### 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 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 3.8 mm, Number of individual labels: 1

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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 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

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Marking foil for zack marker strip - TML (104X2,8)R - 0801832



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

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## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Accessories

#### Marking foil for zack marker strip - TML (EX2,8)R - 0801836



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2.8 mm, Number of individual labels: 1

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#### Marker for terminal blocks - US-TML (104X3,8) - 0830768



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22

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#### Marker for terminal blocks - US-TML (104X2,8) - 0830767



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

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#### Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

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#### Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

## Distribution block - PTFIX 4/12X1,5-NS15A BK - 1046991

### Accessories

Label - MM-TML (EX3,8)R C1 WH/BK - 1092026



Label, Roll, white, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, for terminal block width: 8000 mm, lettering field size: continuous x 3.8#mm

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### Test plug terminal block

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



Accessories, number of positions: 1, pitch: 0 mm

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