

## Distribution block - PTFIX 12X4-NS35A-FE - 3273700

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Distribution block, Block with horizontal alignment, The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories, nom. voltage: 800 V, nominal current: 32 A, connection method: Push-in connection, number of connections: 12, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 24 - 10, width: 36.9 mm, color: black/yellow, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- ✓ Space savings of up to 50% on the DIN rail, thanks to transverse mounting
- ✓ Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- ✓ Clear wiring, thanks to eleven different color variants
- ✓ 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



### Key Commercial Data

Packing unit	8 pc
Minimum order quantity	8 pc
GTIN	
GTIN	4055626646688

### 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	12
Potentials	1
Nominal cross section	4 mm <sup>2</sup>
Color	black/yellow
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	6 kV
Degree of pollution	3

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## Technical data

### General

Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.02 W (the value is based on one connection block and is multiplied according to the pin assignment)
Maximum load current	41 A
Maximum total current	63 A
Nominal current $I_N$	32 A
Nominal voltage $U_N$	800 V
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
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2 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
Tensile test result	Test passed
Conductor cross section tensile test	0.2 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV

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## Technical data

### General

Result of temperature-rise test	Test passed
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
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
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	36.9 mm
Length	45.7 mm

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## Technical data

### Dimensions

Height NS 35/7,5	30.9 mm
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### Connection data

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	12
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>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	1 mm <sup>2</sup>
Connection cross sections directly pluggable	0.5 mm <sup>2</sup> 6 mm <sup>2</sup> 20 10
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.75 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.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	4 mm <sup>2</sup>
Internal cylindrical gage	A4

### Standards and Regulations

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

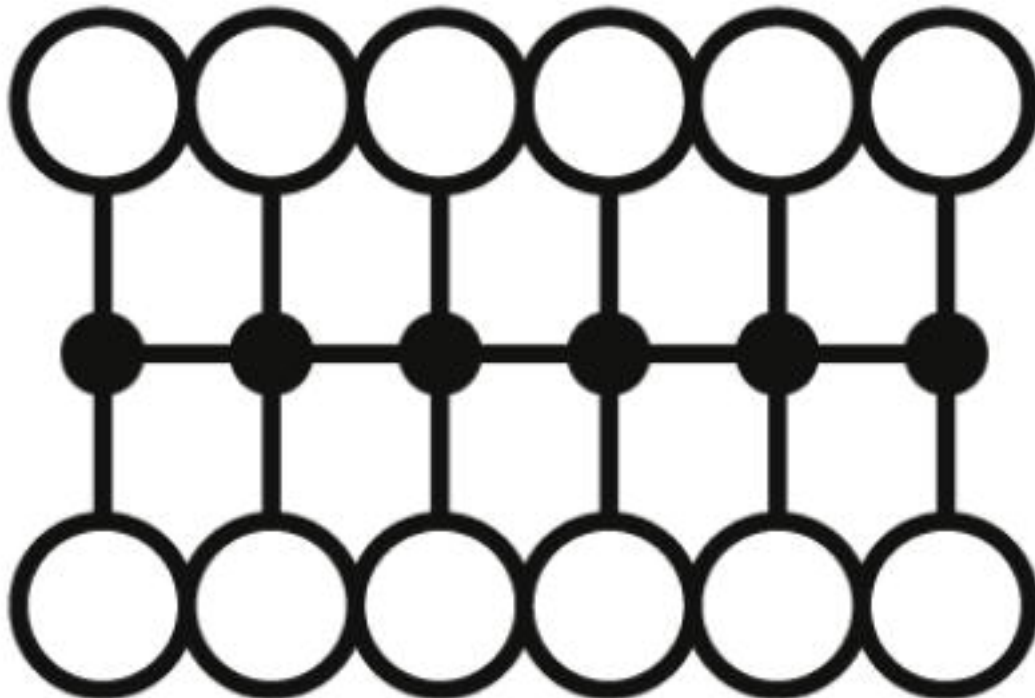
### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

# Distribution block - PTFIX 12X4-NS35A-FE - 3273700

Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 4.0	27141120
eCl@ss 4.1	27141120
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

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## Classifications

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals


### Approvals


#### Approvals

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

#### Ex Approvals

### Approval details

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	600 V	600 V	
Nominal current IN	32 A	32 A	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	

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	600 V	600 V	
Nominal current IN	32 A	32 A	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	

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## Approvals

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		600 V	600 V
Nominal current IN		32 A	32 A
mm²/AWG/kcmil		24-10	24-10

EAC			RU C- DE.AI30.B.01102
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IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62701
Nominal voltage UN		800 V	
Nominal current IN		32 A	
mm²/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		800 V	
Nominal current IN		32 A	
mm²/AWG/kcmil		0.2-4	

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

EAC			RU C- DE.BL08.B.00644
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## Distribution block - PTFIX 12X4-NS35A-FE - 3273700

### Approvals

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	2002627TA
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cULus Recognized	
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### Accessories

#### Accessories

#### Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-6 GY - 3032237



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: gray

Plug-in bridge - FBS 2-6 BU - 3036932



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: blue

#### Labeled terminal marker

Marker card - SK 6,2/3,8:FORTL.ZAHLEN - 0804374



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: 6.2 mm, lettering field size: 6.2 x 3.8 mm



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### Accessories

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Marker for terminal blocks - SK 6,2/3,8:FORTL.ZAHLEN 1-10 - 0804374:0001



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 1 ... 10, 10-section marker strips with 12 identical decades, white

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Marker for terminal blocks - SK 6,2/3,8:FORTL.ZAHLEN 11-20 - 0804374:0011



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 11 ... 20, 10-section marker strips with 12 identical decades, white

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Marker for terminal blocks - SK 6,2/3,8:FORTL.ZAHLEN 21-30 - 0804374:0021



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 21 ... 30, 10-section marker strips with 12 identical decades, white

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Marker for terminal blocks - SK 6,2/3,8:FORTL.ZAHLEN 31-40 - 0804374:0031



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 31 ... 40, 10-section marker strips with 12 identical decades, white

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Marker for terminal blocks - SK 6,2/3,8:FORTL.ZAHLEN 41-50 - 0804374:0041



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 41 ... 50, 10-section marker strips with 12 identical decades, white

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### Terminal marking

## Distribution block - PTFIX 12X4-NS35A-FE - 3273700

### Accessories

#### 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

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#### 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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## Distribution block - PTFIX 12X4-NS35A-FE - 3273700

### 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 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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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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