

## Distribution block - PTFIX 6X4-NS35A VT - 3273674

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 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: 6, cross section: 0.2 mm<sup>2</sup> - 6 mm<sup>2</sup>, AWG: 24 - 10, width: 18.5 mm, color: violet, 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	10 pc
Minimum order quantity	10 pc
GTIN	 4 055626 646527
GTIN	4055626646527

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

# Distribution block - PTFIX 6X4-NS35A VT - 3273674

## 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

## Distribution block - PTFIX 6X4-NS35A VT - 3273674

### 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	18.5 mm
Length	45.7 mm

# Distribution block - PTFIX 6X4-NS35A VT - 3273674

## Technical data

### Dimensions

Height NS 35/7,5	30.9 mm
------------------	---------

### 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

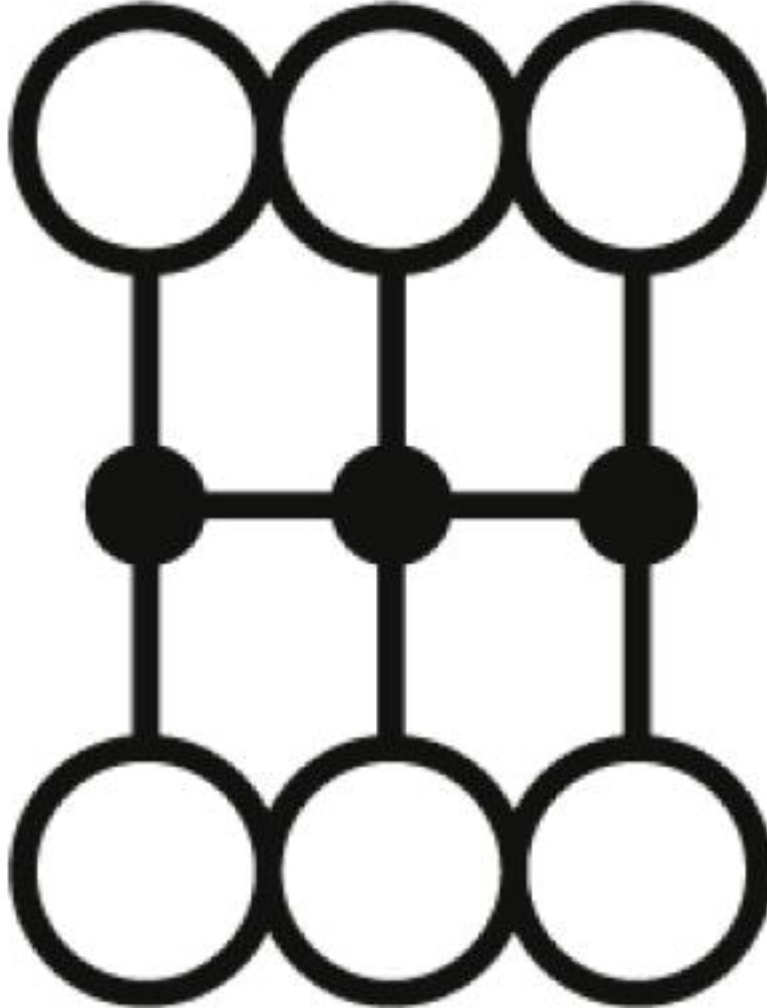
### Environmental Product Compliance

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

## Drawings

## Distribution block - PTFIX 6X4-NS35A VT - 3273674

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

# Distribution block - PTFIX 6X4-NS35A VT - 3273674

## Classifications

### 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

### 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 / IEC 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	

# Distribution block - PTFIX 6X4-NS35A VT - 3273674

## 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
	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	

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	
mm <sup>2</sup> /AWG/kcmil	24-10	24-10	

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

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		
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	800 V		
Nominal current IN	32 A		
mm <sup>2</sup> /AWG/kcmil	0.2-4		

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

## Distribution block - PTFIX 6X4-NS35A VT - 3273674

### Approvals

Nominal current I <sub>N</sub>	24 A
--------------------------------	------

EAC		RU C- DE.BL08.B.00644
-----	--	--------------------------

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	2002627TA
----	--	---	-----------

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

### 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



## Distribution block - PTFIX 6X4-NS35A VT - 3273674

### Accessories

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

---

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

---

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

---

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

---

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

---

## Distribution block - PTFIX 6X4-NS35A VT - 3273674

### Accessories

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

---

### Terminal marking

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

---

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

---

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

---

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 6X4-NS35A VT - 3273674

### Accessories

#### 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

---

#### 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

---

#### 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

---

#### 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