

PTFIX 6X10/S-NS35 GY - Distribution block



1082403

<https://www.phoenixcontact.com/us/products/1082403>

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Distribution block, Block with vertical alignment, nom. voltage: 800 V, nominal current: 57 A, number of connections: 6, connection method: Push-in connection, Rated cross section: 10 mm², cross section: 0.5 mm² - 16 mm², mounting type: NS 35/7,5, NS 35/15, color: gray

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

Commercial data

Item number	1082403
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE09
Product key	BEA113
GTIN	4055626812786
Weight per piece (including packing)	31 g
Weight per piece (excluding packing)	29.445 g
Customs tariff number	85369010
Country of origin	PL

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Technical data

Notes

General

Note	For versions with 6 or 7 connections, it is enough to place one DIN rail adapter centrally per block and place flange elements after every other block.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.

Product properties

Product type	Distributor terminal block
Number of connections	6
Number of rows	1
Potentials	1

Data management status

Article revision	01
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.82 W

Connection data

Number of connections per level	6
Nominal cross section	10 mm ²
Stripping length	12 mm ... 14 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.5 mm ² ... 16 mm ²
Cross section AWG	20 ... 6 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm ² ... 10 mm ²
Conductor cross section, flexible [AWG]	20 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm ² ... 10 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm ² ... 6 mm ²
Nominal current	57 A
Maximum load current	76 A (with a 16 mm ² conductor cross section, rigid)
Maximum total current	90 A (The maximum load current of the individual terminal point must not be exceeded.)
Nominal voltage	800 V

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Nominal cross section	10 mm ²
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Connection cross sections directly pluggable

Conductor cross section rigid	1 mm ² ... 16 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm ² ... 10 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	1 mm ² ... 6 mm ²

Dimensions

Width	37 mm
Height	58.1 mm
Depth	25.1 mm
Depth on NS 15	32.1 mm
Depth on NS 35/7,5	34.6 mm

Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material group	I
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

Electrical tests

Surge voltage test

Result	Test passed
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

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Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Result	Test passed
Note	For versions with 6 or 7 connections, it is enough to place one DIN rail adapter centrally per block and place flange elements after every other block. When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.5 mm ² / 0.3 kg 10 mm ² / 2 kg 16 mm ² / 2.9 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

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Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, no longer than 24 h, -60°C to +70°C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
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Mounting

Mounting type	NS 35/7,5
	NS 35/15

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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1082403>

 CSA Approval ID: 158887				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	60 A	20 - 6	-
Use group C	600 V	60 A	20 - 6	-
Use group D	600 V	5 A	20 - 6	-

 IECEE CB Scheme Approval ID: DE1-62701_M1				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	57 A	-	- 10

 VDE Zeichengenehmigung Approval ID: 40047797				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	800 V	57 A	-	0.5 - 10

 cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	60 A	20 - 6	-
Use group C	600 V	60 A	20 - 6	-
Use group D	600 V	5 A	20 - 6	-

DNV Approval ID: TAE00002TT-04				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	500 V	24 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

ETIM

ETIM 9.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

i Note: Applying some accessories below might limit this product.

FBS 2-8 - Plug-in bridge

3030284

<https://www.phoenixcontact.com/us/products/3030284>



Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: red

i Max. current carrying capacity: 41 A

FBS 2-8 BU - Plug-in bridge

3032567

<https://www.phoenixcontact.com/us/products/3032567>



Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: blue

i Max. current carrying capacity: 41 A

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FBS 2-8 GY - Plug-in bridge

3032621

<https://www.phoenixcontact.com/us/products/3032621>



Plug-in bridge, pitch: 8.2 mm, number of positions: 2, color: gray

 Max. current carrying capacity: 41 A

PTFIX 2,5-RZ - Mounting adapter

1632417

<https://www.phoenixcontact.com/us/products/1632417>

Securing pin adapter, for direct mounting of 2.5 mm², 4 mm², and 10 mm² FIX blocks, color: gray



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

0830768

<https://www.phoenixcontact.com/us/products/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

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

0830767

<https://www.phoenixcontact.com/us/products/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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SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, 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

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

0803883

<https://www.phoenixcontact.com/us/products/0803883>



Marker card, Din A4, 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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TML (EX3,8)R - Marker strip

0801837

<https://www.phoenixcontact.com/us/products/0801837>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm, Number of individual labels: 12

TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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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TML (104X2,8)R - Marker strip

0801832

<https://www.phoenixcontact.com/us/products/0801832>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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

TML (EX2,8)R - Marker strip

0801836

<https://www.phoenixcontact.com/us/products/0801836>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), 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: continuous x 2.8 mm, Number of individual labels: 14

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

1092026

<https://www.phoenixcontact.com/us/products/1092026>



Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm, Number of individual labels: 1

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