

PTFIX 10/6X4 BK - Distribution block



3273870

<https://www.phoenixcontact.com/us/products/3273870>

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Distribution block, nom. voltage: 450 V, nominal current: 41 A, number of connections: 7, connection method: Push-in connection, Load contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², Push-in connection, Line contact, Rated cross section: 10 mm², cross section: 0.5 mm² - 10 mm², mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: black

Commercial data

Item number	3273870
Packing unit	8 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA122
Catalog page	Page 451 (C-1-2019)
GTIN	4055626668055
Weight per piece (including packing)	23.27 g
Weight per piece (excluding packing)	23.27 g
Customs tariff number	85369010
Country of origin	PL

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Technical data

Notes

General

Note	The maximum load current of a single clamping unit must not be exceeded.
	For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!

Product properties

Product type	Distributor terminal block
Number of connections	7
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	6 kV
Maximum power dissipation for nominal condition	1.02 W

Connection data

Service Entrance	yes
Number of connections per level	7
Nominal cross section	4 mm ²
Rated cross section AWG	12

Load contact

Stripping length	10 mm ... 12 mm
Internal cylindrical gage	A4
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.2 mm ² ... 6 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm ² ... 4 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Nominal current	41 A

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Maximum load current	41 A (with 6 mm ² conductor connection)
Maximum total current	63 A
Nominal voltage	450 V
Nominal cross section	4 mm ²

Line contact

Stripping length	12 mm ... 14 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.5 mm ² ... 10 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm ² ... 10 mm ²
Conductor cross section, flexible [AWG]	24 ... 12 (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 ... 10 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.75 mm ² ... 2.5 mm ²
Nominal current	57 A
Maximum load current	57 A (with 10 mm ² conductor cross section)
Maximum total current	63 A
Nominal voltage	450 V
Nominal cross section	10 mm ²

Load contact Connection cross sections directly pluggable

Conductor cross section rigid	0.5 mm ² ... 6 mm ²
Conductor cross section, rigid [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm ² ... 4 mm ²

Line contact Connection cross sections directly pluggable

Conductor cross section rigid	1.5 mm ² ... 10 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	2.5 mm ² ... 10 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	1.5 mm ² ... 10 mm ²

Dimensions

Width	27.9 mm
Height	28.6 mm
Depth	21.7 mm

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE	130 °C

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0304-21))	
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

Mechanical properties

Mechanical data

Open side panel	No
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Mechanical tests

Attachment on the carrier

Result	Test passed
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.
	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.

Environmental and real-life conditions

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	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Pulse shape	Half-sine

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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

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 60998-2-2
	IEC 60998-2-2

Mounting

Mounting type	for snapping onto a DIN rail adapter
	Direct mounting with flange
	Free-hanging
Thread type	()

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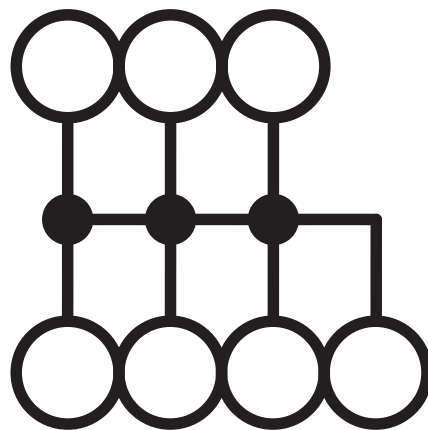
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Drawings

Circuit diagram



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Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3273870>



CSA

Approval ID: 13631



EAC

Approval ID: RU C-DE.BL08.B.00644



cULus Recognized

Approval ID: E60425

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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 2-6 - Plug-in bridge

3030336

<https://www.phoenixcontact.com/us/products/3030336>



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

i Max. current carrying capacity: 32 A

FBS 2-6 BU - Plug-in bridge

3036932

<https://www.phoenixcontact.com/us/products/3036932>



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

i Max. current carrying capacity: 32 A

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FBS 2-6 GY - Plug-in bridge

3032237

<https://www.phoenixcontact.com/us/products/3032237>



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

 Max. current carrying capacity: 32 A

PTFIX-F - Flange

3274060

<https://www.phoenixcontact.com/us/products/3274060>



Flange, with screw-on fixing, depth: 21.7 mm, width: 8.6 mm, height: 28.6 mm, color: gray, mounting type: Screw mounting

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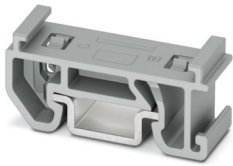


PTFIX-NS15A - DIN rail adapter

3274058

<https://www.phoenixcontact.com/us/products/3274058>

DIN rail adapter, depth: 10.8 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15

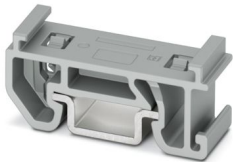


PTFIX-NS15A-FIX - DIN rail adapter

3274059

<https://www.phoenixcontact.com/us/products/3274059>

DIN rail adapter, with end stop function, depth: 10.8 mm, width: 10.3 mm, height: 28.6 mm, color: gray, mounting type: NS 15



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PTFIX-NS35 - DIN rail adapter

3274054

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DIN rail adapter, depth: 11 mm, width: 28.6 mm, height: 58.1 mm, color: gray, mounting type: NS 35/7,5



PTFIX-NS35A - DIN rail adapter

3274056

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DIN rail adapter, depth: 11.9 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5



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PTFIX-NS35A-FIX - DIN rail adapter

3274057

<https://www.phoenixcontact.com/us/products/3274057>

DIN rail adapter, with end stop function, depth: 12 mm, width: 10.3 mm, height: 45.7 mm, color: gray, mounting type: NS 35/7,5



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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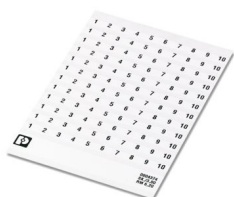
<https://www.phoenixcontact.com/us/products/3273870>



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

0804374

<https://www.phoenixcontact.com/us/products/0804374>

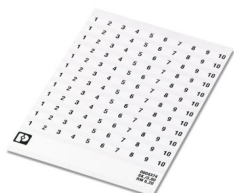


Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm

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

0804374:0001

<https://www.phoenixcontact.com/us/products/0804374:0001>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 1 ... 10, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

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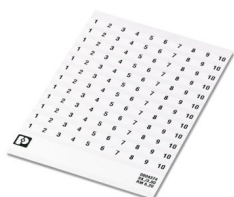
<https://www.phoenixcontact.com/us/products/3273870>



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

0804374:0011

<https://www.phoenixcontact.com/us/products/0804374:0011>

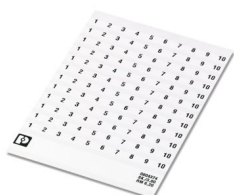


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 11 ... 20, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

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

0804374:0021

<https://www.phoenixcontact.com/us/products/0804374:0021>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 21 ... 30, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

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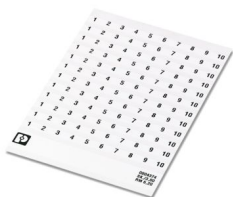
<https://www.phoenixcontact.com/us/products/3273870>



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

0804374:0031

<https://www.phoenixcontact.com/us/products/0804374:0031>

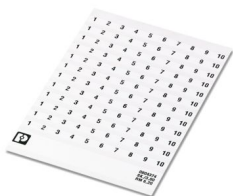


Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 31 ... 40, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

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

0804374:0041

<https://www.phoenixcontact.com/us/products/0804374:0041>



Marker card, self-adhesive, horizontally labeled with the consecutive numbers: 41 ... 50, 10-section marker strips with 12 identical decades, white, for terminal block width: 6.2 mm, mounting type: adhesive

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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

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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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