PTFIX 6/12X2,5-G BK - Distribution block

3273496

https://www.phoenixcontact.com/us/products/3273496

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Distribution block, Basic terminal block with supply, nom. voltage: 450 V, nominal current: 24 A, number of connections: 13, connection method: Push-in connection, Load contact, cross section: 0.14 mm^2 - 4 mm^2, Push-in connection, Line contact, Rated cross section: 6 mm^2, cross section: 0.5 mm^2 - 10 mm^2, mounting type: adhesive, color: black

Your advantages

- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Clear wiring, thanks to eleven different color variants
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Time savings of up to 80 %, thanks to ready-to-mount blocks without manual bridging
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting

Commercial data

Item number	3273496
Packing unit	8 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA123
Catalog page	Page 444 (C-1-2019)
GTIN	4055626393247
Weight per piece (including packing)	30.96 g
Weight per piece (excluding packing)	30.96 g
Customs tariff number	85369010
Country of origin	PL

Technical data

Notes

Notes on operation	the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories

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	13
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Service Entrance	yes
Number of connections per level	13
Nominal cross section	2.5 mm²
Rated cross section AWG	14

Load contact

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.14 mm² ... 4 mm²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
Conductor cross section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² ... 2.5 mm²
Nominal current	24 A
Maximum load current	32 A (with 4 mm² conductor cross section)
Maximum total current	57 A (with 10 mm² conductor cross section)

Nominal voltage	450 V

Line contact

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.5 mm² ... 10 mm²
Cross section AWG	20 ... 8 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm² ... 10 mm²
Conductor cross section, flexible [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 6 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm² ... 6 mm²
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm² ... 1.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
Nominal current	41 A (with 6 mm² conductor cross section)
Maximum load current	57 A (with 10 mm² conductor cross section)
Nominal cross section	6 mm²

Load contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm² ... 4 mm²
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

Line contact Connection cross sections directly pluggable

Conductor cross section rigid	1 mm² ... 10 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm² ... 6 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	1 mm² ... 6 mm²

Dimensions

Width	41 mm
Height	28.6 mm
Depth	22.7 mm

Material specifications

Color	black
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 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

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

Attachment on the carrier

DIN rail/fixing support	NS 35/NS 15
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):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 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

Specification	DIN EN 50155 (VDE 0115-200):2008-03
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

Ambient conditions

Ambient temperature (operation)	-35 °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

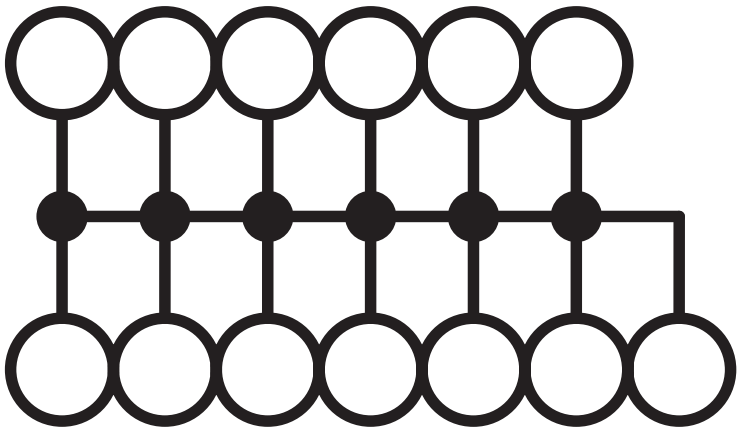
Connection in acc. with standard	IEC 60998-2-2
	IEC 60998-2-2

Mounting

Mounting type	adhesive

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3273496

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group D				
Input	600 V	5 A	20 - 8	-
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-
Use group C				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-

IECEE CB Scheme
Approval ID: DE1-63086

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	450 V	41 A	-	- 6

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

LR
Approval ID: LR2002627TA

VDE Zeichengenehmigung
Approval ID: 40047798

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	450 V	41 A	-	-

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-
Use group C				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-

Use group D				
Output	600 V	5 A	26 - 12	-
Input	600 V	5 A	20 - 8	-

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

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%

Accessories

Note: Applying some accessories below might limit this product.

FBS 2-5 - Plug-in bridge

3030161

https://www.phoenixcontact.com/us/products/3030161

Plug-in bridge, pitch: 5.2 mm, number of positions: 2, length: 23 mm, color: red

Max. current carrying capacity: 24 A

FBS 2-5 BU - Plug-in bridge

3036877

https://www.phoenixcontact.com/us/products/3036877

Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

Max. current carrying capacity: 24 A

FBS 2-5 GY - Plug-in bridge

3038969

https://www.phoenixcontact.com/us/products/3038969

Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

Max. current carrying capacity: 24 A

KLM 2 - Terminal strip marker carrier

0807575

https://www.phoenixcontact.com/us/products/0807575

Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using snap-in labels

KLM 3-L - Terminal strip marker carrier

0814788

https://www.phoenixcontact.com/us/products/0814788

Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using labels in 20 x 8 mm format

MPS-MT 1-S - Test plug

1944372

https://www.phoenixcontact.com/us/products/1944372

Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket

PTFIX 2,5-RZ - Mounting adapter

1632417

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

Securing pin adapter, for direct mounting of 2.5 mm^2, 4 mm^2, and 10 mm^2 FIX blocks, color: gray

PAI-4-N GY - Test adapter

3032871

https://www.phoenixcontact.com/us/products/3032871

4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

MPS-MT - Test plug

0201744

https://www.phoenixcontact.com/us/products/0201744

Test plug, with solder connection up to 1 mm^2 conductor cross section, number of positions: 1, color: gray

MPS-IH WH - Insulating sleeve

0201663

https://www.phoenixcontact.com/us/products/0201663

Insulating sleeve, color: white

MPS-IH RD - Insulating sleeve

0201676

https://www.phoenixcontact.com/us/products/0201676

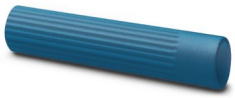
Insulating sleeve, color: red

MPS-IH BU - Insulating sleeve

0201689

https://www.phoenixcontact.com/us/products/0201689

Insulating sleeve, color: blue



MPS-IH YE - Insulating sleeve

0201692

https://www.phoenixcontact.com/us/products/0201692

Insulating sleeve, color: yellow

MPS-IH GN - Insulating sleeve

0201702

https://www.phoenixcontact.com/us/products/0201702

Insulating sleeve, color: green

MPS-IH GY - Insulating sleeve

0201728

https://www.phoenixcontact.com/us/products/0201728

Insulating sleeve, color: gray

MPS-IH BK - Insulating sleeve

0201731

https://www.phoenixcontact.com/us/products/0201731

Insulating sleeve, color: black

ISH 2,5/0,2 - Insulating sleeve

3002843

https://www.phoenixcontact.com/us/products/3002843

Insulating sleeve, color: white

ISH 2,5/0,5 - Insulating sleeve

3002856

https://www.phoenixcontact.com/us/products/3002856

Insulating sleeve, color: gray

ISH 2,5/1,0 - Insulating sleeve

3002869

https://www.phoenixcontact.com/us/products/3002869

Insulating sleeve, color: black

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

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

SK 2,8 REEL P5,2 WH CUS - Marker card

8199986

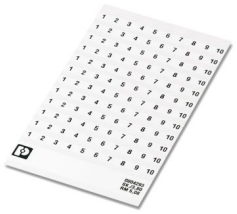
https://www.phoenixcontact.com/us/products/8199986

Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

SK 3,8 REEL P5,2 WH CUS - Marker card

8199989

https://www.phoenixcontact.com/us/products/8199989



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8 mm

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

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

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

MPS-MT SN - Test plug

3212251

https://www.phoenixcontact.com/us/products/3212251

Test plug, with solder connection up to 1 mm^2 conductor cross section, tin-plated surface, number of positions: 1, color: silver

SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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