Distribution block - PTFIX 2X2,5 BN

1028072

https://www.phoenixcontact.com/us/products/1028072

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 documentation. Our General Terms of Use for Downloads are valid.



Distribution block, Basic terminal block, nom. voltage: 450 V, nominal current: 24 A, connection method: Push-in connection, cross section: 0.14 mm^2 - 4 mm^2, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: brown

Your advantages

- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting
- Clear wiring, thanks to eleven different color variants
- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting

Commercial Data

Item number	1028072
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	B02
Product Key	BEA111
Catalog Page	Page 439 (C-1-2019)
GTIN	4055626524849
Weight per Piece (including packing)	3.842 g
Weight per Piece (excluding packing)	3.333 g
Customs tariff number	85369010
Country of origin	PL

Technical Data

Product properties

Product type	Distributor terminal block
Number of connections	2
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

Number of connections per level	2
Nominal cross section	2.5 mm²
Rated cross section AWG	12
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section solid	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 ... 12 (converted acc. to IEC)
Flexible conductor cross section flexible (ferrule, w/o 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	27 A
Nominal voltage	450 V

Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm² ... 4 mm²
Conductor cross section, solid [AWG]	24 ... 12 (converted acc. to IEC)
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

Dimensions

Width	5.2 mm
Height	21.7 mm
Length	28.6 mm

Material specifications

Color	brown
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

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Short-time withstand current 4 mm²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 35

Test force setpoint	1 N
Result	Test passed
Note	When aligning several blocks, the foot elements should be placed in a way that maximum 5 blocks are free-hanging in between. Flange elements should be placed after every 9 blocks.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	One DIN rail adapter PTFIX-NS35 is intended for maximum 11 blocks.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 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):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/s²)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)	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

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

Mounting

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

Drawings

Circuit diagram



Approvals

DNV
Approval ID: TAE00002TT

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	500 V	24 A	-	-

CSA
Approval ID: 13631

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

IECEE CB Scheme
Approval ID: DE1-63085

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	450 V	24 A	-	- 2.5

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

LR
Approval ID: LR2002627TA

BV
Approval ID: 59146/A0 BV

EAC
Approval ID: RU C-DE.BE.B.03378

VDE Zeichengenehmigung
Approval ID: 40047798

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	450 V	24 A	-	0.2 - 2.5

cULus Recognized
Approval ID: E60425

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group F				
	600 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

Classifications

ECLASS

ECLASS-9.0	27141120
ECLASS-10.0.1	27141120
ECLASS-11.0	27141120

ETIM

ETIM 8.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

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

Accessories

DIN rail adapter

DIN rail adapter - PTFIX-NS35 - 3274054

https://www.phoenixcontact.com/us/products/3274054

DIN rail adapter, length: 58.1 mm, width: 28.6 mm, height: 11 mm, color: gray



DIN rail adapter

DIN rail adapter - PTFIX-NS35A - 3274056

https://www.phoenixcontact.com/us/products/3274056

DIN rail adapter, length: 45.7 mm, width: 10.3 mm, height: 11.9 mm, color: gray



DIN rail adapter

DIN rail adapter - PTFIX-NS35A-FIX - 3274057

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

DIN rail adapter, with end stop function, length: 45.7 mm, width: 10.3 mm, height: 12 mm, color: gray

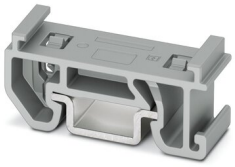


DIN rail adapter

DIN rail adapter - PTFIX-NS15A - 3274058

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

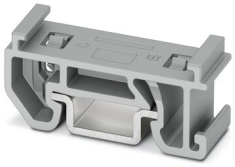
DIN rail adapter, length: 28.6 mm, width: 10.3 mm, height: 10.8 mm, color: gray



DIN rail adapter

DIN rail adapter - PTFIX-NS15A-FIX - 3274059

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



DIN rail adapter, with end stop function, length: 28.6 mm, width: 10.3 mm, height: 10.8 mm, color: gray

Flange

Flange - PTFIX-F - 3274060

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



Flange, with screw-on fixing, length: 28.6 mm, width: 8.6 mm, height: 21.7 mm, color: gray

Test plugs

Test plugs - MPS-MT SN - 3212251

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

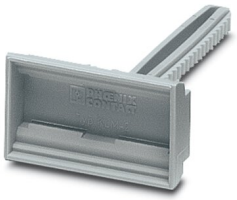


Test plugs, with solder connection up to 1 mm^2 conductor cross section, tin-plated surface, color: silver

Terminal strip marker carrier

Terminal strip marker carrier - KLM 2 - 0807575

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



Terminal strip marker carrier, gray, unlabeled, mounting type: plug in, lettering field size: 20 mm x 8 mm

Terminal strip marker carrier

Terminal strip marker carrier - KLM 3-L - 0814788

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



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

Screwdriver

Screwdriver - SZF 1-0,6X3,5 - 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

Test plugs

Test plugs - MPS-MT 1-S - 1944372

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

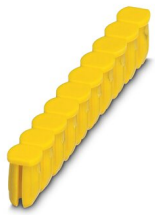
Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



Filler plugs

Filler plugs - CEC 2,5 - 3062757

https://www.phoenixcontact.com/us/products/3062757



Cover for conductor shaft, 10-pos., for spring cage terminal blocks (ST) and terminal blocks with push-in technology (PT) with a width of 5.2 mm

Test adapter

Test adapter - PAI-4-N GY - 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

Test plugs

Test plugs - MPS-MT - 0201744

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



Test plugs, with solder connection up to 1 mm^2 conductor cross section, color: gray

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

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

Insulating sleeve, color: white



Insulating sleeve

Insulating sleeve - MPS-IH RD - 0201676

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

Insulating sleeve, color: red

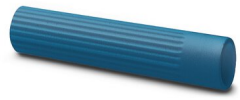


Insulating sleeve

Insulating sleeve - MPS-IH BU - 0201689

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

Insulating sleeve, color: blue



Insulating sleeve

Insulating sleeve - MPS-IH YE - 0201692

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

Insulating sleeve, color: yellow



Insulating sleeve

Insulating sleeve - MPS-IH GN - 0201702

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

Insulating sleeve, color: green



Insulating sleeve

Insulating sleeve - MPS-IH GY - 0201728

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

Insulating sleeve, color: gray



Insulating sleeve

Insulating sleeve - MPS-IH BK - 0201731

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

Insulating sleeve, color: black



Insulating sleeve

Insulating sleeve - ISH 2,5/0,2 - 3002843

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

Insulating sleeve, color: white



Insulating sleeve

Insulating sleeve - ISH 2,5/0,5 - 3002856

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



Insulating sleeve, color: gray

Insulating sleeve

Insulating sleeve - ISH 2,5/1,0 - 3002869

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



Insulating sleeve, color: black

Marking foil for zack marker strip

Marking foil for zack marker strip - TML (EX3,8)R - 0801837

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

Marking foil for zack marker strip - TML (104X3,8)R - 0801833

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

Marking foil for zack marker strip - TML (104X2,8)R - 0801832

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

Marking foil for zack marker strip - TML (EX2,8)R - 0801836

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

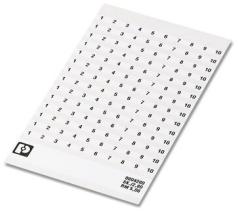


Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000 x 2. 8 mm, Number of individual labels: 1

Marker card

Marker card - SK 2,8 REEL P5,2 WH CUS - 8199986

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

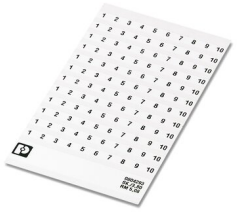


Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

Marker card

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

Marker for terminal blocks

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

Marker for terminal blocks

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

Marker card

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906

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

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883

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

Label

Label - MM-TML (EX3,8)R C1 WH/BK - 1092026

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



Label, Roll, white, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, for terminal block width: 8000 mm, lettering field size: continuous x 2.8 mm

Phoenix Contact 2022 © - all rights reserved
https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com