Distribution block - PTFIX 2X1,5 YE

1045931

https://www.phoenixcontact.com/us/products/1045931

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Distribution block, Basic terminal block, nom. voltage: 450 V, nominal current: 17.5 A, connection method: Push-in connection, cross section: 0.14 mm^2 - 2.5 mm^2, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: yellow

Commercial Data

Item number	1045931
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	B02
Product Key	BEA111
Catalog Page	Page 429 (C-1-2019)
GTIN	4055626639468
Weight per Piece (including packing)	1.908 g
Weight per Piece (excluding packing)	1.908 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	0.56 W

Connection data

Number of connections per level	2
Nominal cross section	1.5 mm²
Rated cross section AWG	14
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1 / B1
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Cross section AWG	26 ... 14
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section, flexible [AWG]	24 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.14 mm² ... 1.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² ... 1.5 mm²
Nominal current	17.5 A
Maximum load current	21 A (with a 2.5 mm² conductor cross section)
Maximum total current	21 A
Nominal voltage	450 V

Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm² ... 2.5 mm²
Conductor cross section, solid [AWG]	26 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.34 mm² ... 1.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 1.5 mm²

Dimensions

Width	4.2 mm
Height	17.7 mm
Length	21.6 mm

Material specifications

Color	yellow
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))	125 °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)	27,5 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	7.3 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 1.5 mm²	0.18 kA
Short-time withstand current 2.5 mm²	0.3 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/NS 15

Test force setpoint	1 N
Result	Test passed
Note	When aligning several blocks, the foot elements should be placed in a way that maximum 2 blocks are free-hanging in between. Flange elements should be placed after every 9 blocks and with engagement pins after every 12 blocks.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	One PTFIX 1,5-NS35 DIN rail adapter is suitable for a maximum of 13 blocks.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm² / 0.2 kg
	1.5 mm² / 0.4 kg
	2.5 mm² / 0.7 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 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):2018-05
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				
	150 V	20 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-

cUL Recognized
Approval ID: FILE E 60425

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	15 A	26 - 14	-
Use group C				
	150 V	15 A	26 - 14	-
Use group D				
	300 V	10 A	26 - 14	-

IECEE CB Scheme
Approval ID: DE1-63083

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

LR
Approval ID: LR2002627TA

BV
Approval ID: 59146/A0 BV

VDE Zeichengenehmigung
Approval ID: 40047798

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				
	150 V	20 A	26 - 12	-
Use group F				
	500 V	20 A	26 - 12	-
Use group D				
	300 V	10 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

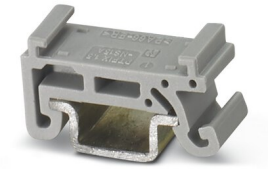
Accessories

DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS15A - 1049500

https://www.phoenixcontact.com/us/products/1049500

DIN rail adapter, length: 21.6 mm, width: 8 mm, height: 10.85 mm



DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS35 - 1049497

https://www.phoenixcontact.com/us/products/1049497

DIN rail adapter, length: 58.1 mm, width: 21.6 mm, height: 11 mm

DIN rail adapter

DIN rail adapter - PTFIX 1,5-NS35AD - 1049498

https://www.phoenixcontact.com/us/products/1049498

DIN rail adapter, for NS 35 for accommodating two rows of PTFIX 1,5 distribution blocks, length: 44.4 mm, width: 8 mm, height: 10.9 mm

Accessories

Accessories - MPS-MT 1-S4-B RD - 1982800

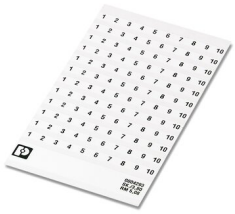
https://www.phoenixcontact.com/us/products/1982800

Test plug terminal block, Accessories

Marker card

Marker card - SK 3,8 REEL P4,15 WH CUS - 0825990

https://www.phoenixcontact.com/us/products/0825990

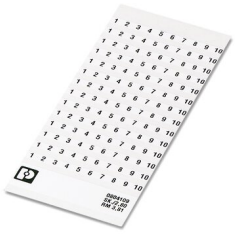


Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

Marker card

Marker card - SK 2,8 REEL P4,15 WH CUS - 8199987

https://www.phoenixcontact.com/us/products/8199987



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 2.8 mm

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

Flange

Flange - PTFIX 1,5-F - 1049503

https://www.phoenixcontact.com/us/products/1049503

Flange, with screw-on fixing, mounting type: Screw mounting, color: gray

Insulating sleeve

Insulating sleeve - ISH 1,5/0,2 - 3206131

https://www.phoenixcontact.com/us/products/3206131

Insulating sleeve, color: white

Insulating sleeve

Insulating sleeve - ISH 1,5/0,5 - 3031034

https://www.phoenixcontact.com/us/products/3031034

Insulating sleeve, color: gray

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

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

Mounting adapter

Mounting adapter - PTFIX 1,5-RZF - 1050613

https://www.phoenixcontact.com/us/products/1050613

Adapter for direct mounting

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

Distribution block - PTFIX 2X1,5 YE

1045931

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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

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