PTFIX 4/6X1,5-NS15A GY - Distribution block

1047490

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Distribution block, Block with horizontal alignment and integrated supply, nom. voltage: 500 V, nominal current: 17.5 A, number of connections: 7, connection method: Push-in connection, Load contact, cross section: 0.14 mm² - 2.5 mm², Line contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², mounting type: NS 15, color: gray

Commercial data

Item number	1047490
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	BE09
Product key	BEA122
GTIN	4055626665955
Weight per piece (including packing)	10.81 g
Weight per piece (excluding packing)	10.77 g
Customs tariff number	85369010
Country of origin	PL

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

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

Service Entrance	yes
Number of connections per level	7
Nominal cross section	1.5 mm²
Rated cross section AWG	14

Load contact

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.14 mm² ... 2.5 mm²
Cross section AWG	26 ... 14 (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 ... 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	22 A (with a 2.5 mm² conductor cross-section)
Maximum total current	32 A
Nominal voltage	500 V

Line contact

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60998-2-2
Conductor cross-section rigid	0.2 mm² ... 6 mm²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm² ... 6 mm²
Conductor cross-section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm² ... 4 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.2 mm² ... 4 mm²
Nominal cross section	4 mm²
Nominal current	41 A
Maximum load current	41 A (with 6 mm² conductor cross-section)
Maximum total current	41 A

Load contact Connection cross sections directly pluggable

Conductor cross-section rigid	0.34 mm² ... 2.5 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² ... 1.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm² ... 1.5 mm²

Line contact Connection cross sections directly pluggable

Conductor cross-section rigid	0.34 mm² ... 6 mm²
Conductor cross-section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.34 mm² ... 4 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm² ... 4 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.2 mm² ... 4 mm²

Dimensions

Width	19 mm
Height	21.6 mm
Depth on NS 15	27.4 mm

Material specifications

Color	gray (RAL 7042)
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 4 mm²	0.48 kA
Short-time withstand current 6 mm²	0.72 kA
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	5 N
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.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135

Conductor cross-section/weight	0.2 mm² / 0.2 kg
	4 mm² / 0.9 kg
	6 mm² / 1.4 kg
Result	Test passed

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	Long 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 ... 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, 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 (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

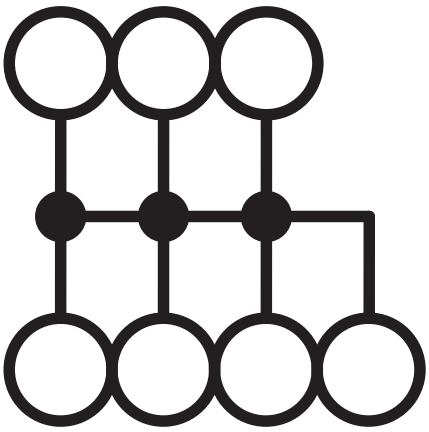
Connection in acc. with standard	IEC 60947-7-1
	IEC 60998-2-2

Mounting

Mounting type	NS 15

Drawings

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1047490

DNV
Approval ID: TAE00002TT-05

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	500 V	24 A	-	-

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-

IECEE CB Scheme
Approval ID: DE1-62701

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	500 V	32 A	-	- 4

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

VDE Zeichengenehmigung
Approval ID: 40047797

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	27250118

ETIM

ETIM 10.0	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%

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