Potential distributors - PTRV 8-PV /BK

3270142

https://www.phoenixcontact.com/de/produkte/3270142

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Potential distributors, nom. voltage: 250 V, nominal current: 17.5 A, connection method: Push-in connection, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th level, Rated cross section: 1.5 mm^2, cross section: 0.14 mm^2 - 2.5 mm^2, mounting: NS 35/7,5, NS 35/15, color: gray, color of connection elements: black

Your advantages

- Potential distributor for distributing potentials up to 17.5 A
- High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- Tool-free wiring in a confined space thanks to compact size
- The 2.3 mm test connection enables testing between the conductors with test pins commonly used in the industry

Commercial Data

Item number	3270142
Packing unit	10 pc
Minimum order quantity	1 pc
Sales Key	A1 - Reihenklemmen
Product Key	BE6211
Catalog Page	Page 51 (C-1-2019)
GTIN	4046356796194
Weight per Piece (including packing)	34 g
Weight per Piece (excluding packing)	33,42 g
Customs tariff number	85369010
Country of origin	PL

Technical Data

Product properties

Product type	Potential distributor
Number of positions	2
Number of connections	32
Number of rows	8
Potentials	1

Insulation characteristics

Overvoltage category	III

Electrical properties

Rated surge voltage	4 kV
Maximum power dissipation for nominal condition	0.56 W

Connection data

Number of connections per level	4
Nominal cross section	1.5 mm²

1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th level

Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Cross section AWG	26 ... 14 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
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	20 A (in case of a 2.5 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	250 V
Nominal cross section	1.5 mm²

1st, 2nd, 3rd, 4th, 5th, 6th, 7th and 8th level Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm² ... 2.5 mm²
Conductor cross section, solid [AWG]	20 ... 14 (converted acc. to IEC)
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	8.3 mm

Height NS 35/15	95 mm
Height NS 35/7,5	87.5 mm
Length	100 mm

Material specifications

Color	gray
Color of connection elements	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))	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	4.8 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
	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.5 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes

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

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):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

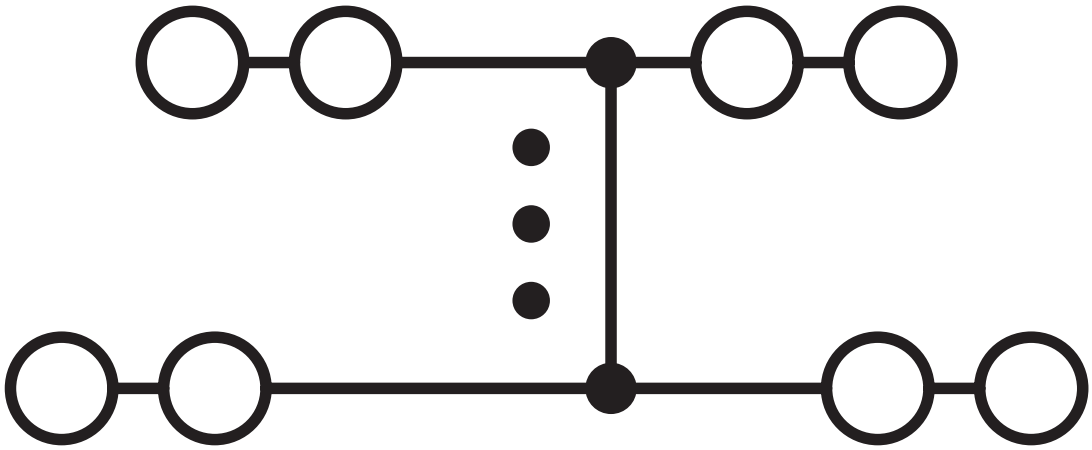
Connection in acc. with standard	IEC 60947-7-1

Mounting

Mounting type	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



Approvals

DNV
Approval ID: TAE000016Y

CSA
Approval ID: 13631

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

IECEE CB Scheme
Approval ID: NL-58817

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	250 V	17.5 A	-	-

EAC
Approval ID: RU C-DE.BL08.B.00682

cULus Recognized
Approval ID: E60425

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

KEMA-KEUR
Approval ID: 71-102890

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Only flexible conductors	250 V	17.5 A	-	0.14 - 1.5
Only rigid conductors	250 V	17.5 A	-	0.14 - 2.5

EAC
Approval ID: B.01687

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

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