ZPV 1,5/2,5 (8/1) - Potential distributors

3031047

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Potential distributors, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, 1st level connection left, Rated cross section: 2.5 mm^2, cross section: 0.14 mm^2 - 4 mm^2, connection method: Spring-cage connection, 1st level connection right, 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

Your advantages

- The operating voltage is supplied via a 2.5 mm² spring-cage connection and distributed using eight 1.5 mm² connections
- Actuators and active initiators are simply and clearly supplied with operating voltage
- They are mainly used in small control cabinets with high-performance controllers

Commercial data

Item number	3031047
Packing unit	50 pc
Minimum order quantity	1 pc
Sales key	BE62
Product key	BE6211
GTIN	4017918169572
Weight per piece (including packing)	22.96 g
Weight per piece (excluding packing)	21.663 g
Customs tariff number	85369010
Country of origin	TR

Technical data

Product properties

Product type	Potential distributor
Number of connections	2
Number of rows	2
Potentials	8

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

1st level connection left

Connection method	Spring-cage connection
Stripping length	10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
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
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm²
Nominal cross section	2.5 mm²
Nominal current	24 A
Maximum load current	24 A (with 4 mm² conductor cross-section)
Nominal voltage	500 V

1st level connection right

Connection method	Spring-cage connection
Stripping length	10 mm
Internal cylindrical gage	A1
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.14 mm² ... 2.5 mm²
Cross section AWG	26 ... 16 (converted acc. to IEC)

Conductor cross-section flexible	0.14 mm² ... 1.5 mm²
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 cross section	1.5 mm²
Nominal current	17.5 A
Maximum load current	17.5 A
Nominal voltage	500 V

Dimensions

Width	5.2 mm
End cover width	2 mm
Height	141 mm
Depth on NS 35/7,5	51 mm
Depth on NS 35/15	58.5 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))	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	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 2.5 mm²	0.3 kA
Short-time withstand current 1.5 mm²	0.18 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 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
	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	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):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
	IEC 60947-7-1

Mounting

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

Drawings

Circuit diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3031047

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
B				
	300 V	15 A	24 - 10	-
C				
	150 V	15 A	24 - 10	-
D				
	300 V	10 A	24 - 10	-

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27250105
ECLASS-15.0	27250105

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%

EF3.1 Climate Change

CO2e kg	0.162 kg CO2e

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