CP 2,5-4L-Z - Connector housing

3041943

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Connector housing, nom. voltage: 250 V, nominal current: 10 A, number of connections: 4, number of positions: 4, connection method: Crimp connection, Rated cross section: 2.5 mm^2, cross section: 0.5 mm^2 - 2.5 mm^2, mounting type: Plug-in mounting, color: gray

Your advantages

- Can be labeled at each terminal point
- Four feed-through levels
- Design width of just 5.2 mm

Commercial data

Item number	3041943
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE02
Product key	BE2144
GTIN	4017918975302
Weight per piece (including packing)	2.116 g
Weight per piece (excluding packing)	1.749 g
Customs tariff number	85389099
Country of origin	DE

Technical data

Notes

General

Note	With a free-hanging connection, an insulating foil has to be placed between the plug connection and electrically conductive surfaces.

Product properties

Product type	Terminal plug
Number of positions	4
Number of connections	4
Number of rows	1
Potentials	4

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	4 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	4
Nominal cross section	2.5 mm²
Connection method	Crimp connection
Stripping length	10 mm
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.5 mm² ... 2.5 mm²
Cross section AWG	20 ... 14 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	20 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² ... 2.5 mm²
Nominal cross section	2.5 mm²
Nominal current	10 A
Maximum load current	10 A (with a 2.5 mm² conductor cross-section)
Nominal voltage	250 V

Dimensions

Width	5.2 mm
Height	23.5 mm
Depth	13 mm
Drill hole spacing	6.15 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

Result	Test passed
Short-time withstand current 1 mm²	0.12 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.5 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Technical data

Drill hole spacing	6.15 mm

Mechanical tests

Attachment on the carrier

Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 1, class B, body mounted
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	0.964 $(m/s^2)^2/Hz$
Acceleration	0.58g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 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 (max. operating temperature see derating curve)
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 61984

Mounting

Mounting type	Plug-in mounting

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3041943

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	10 A	20 - 14	-
D				
	300 V	10 A	20 - 14	-

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27440202
ECLASS-15.0	27440202

ETIM

ETIM 10.0	EC000437

UNSPSC

UNSPSC 21.0	31261500

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	0.021 kg CO2e

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