

COMBI receptacle - SC 2,5-RZ/12



3041613

<https://www.phoenixcontact.com/de/produkte/3041613>

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COMBI receptacle, nom. voltage: 500 V, nominal current: 24 A, connection method: Spring-cage connection, Rated cross section: 2.5 mm², cross section: 0.08 mm² - 4 mm², mounting type: on mounting plate, color: gray



Your advantages

- COMBI coupling for direct mounting

Commercial Data

Item number	3041613
Packing unit	10 pc
Minimum order quantity	1 pc
Sales Key	A1 - Reihenklemmen
Product Key	BE2145
Catalog Page	Page 314 (C-1-2019)
GTIN	4017918922832
Weight per Piece (including packing)	38,7 g
Weight per Piece (excluding packing)	38,7 g
Customs tariff number	85366990
Country of origin	PL

Technical Data

Product properties

Product type	Terminal coupling
Number of positions	12
Pitch	5.2 mm
Number of connections	1
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	0.77 W

Connection data

Nominal cross section	2.5 mm ²
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross section solid	0.08 mm ² ... 4 mm ²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.08 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ²
Nominal current	24 A
Maximum load current	24 A (with 4 mm ² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm ²

Dimensions

Width	62.4 mm
End cover width	2.2 mm
Height	21.8 mm
Length	37.2 mm
Drill hole spacing	5.2 mm
Hole diameter	3.5 mm
Pitch	5.2 mm
Plate thickness	0.8 mm ... 1.5 mm

Material specifications

Color	gray
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
Short-time withstand current 2.5 mm ²	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	Yes
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Technical data

Drill hole spacing	5.2 mm
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Mechanical tests

Attachment on the carrier

DIN rail/fixing support	Metal wall 1 mm
Test force setpoint	1 N
Result	Test passed

Environmental and real-life conditions

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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 1, class B, body mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	$0.964 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	0.58g
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	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 ... 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 61984
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Mounting

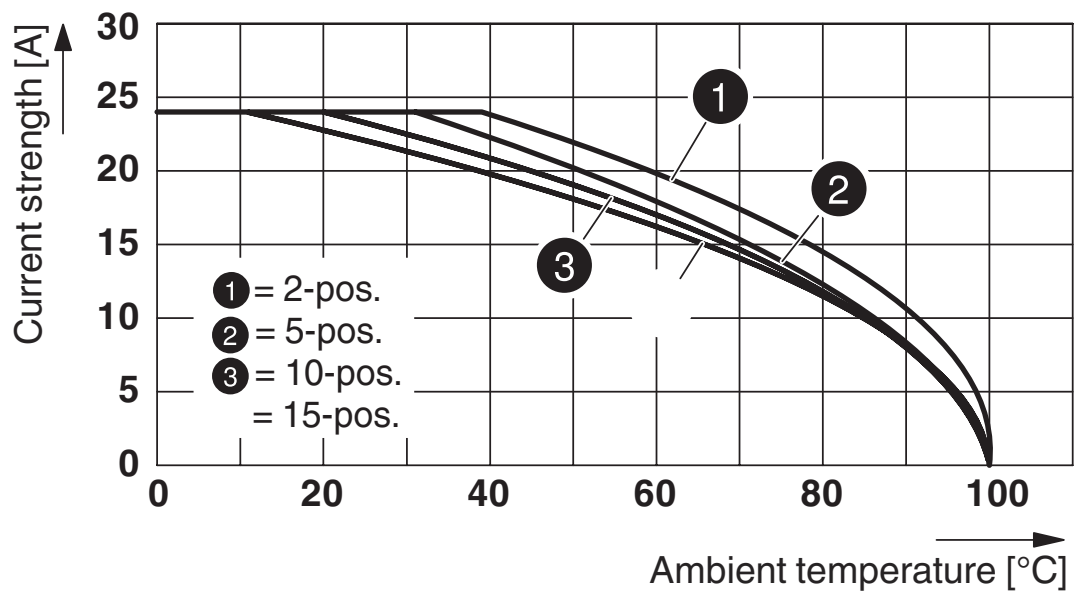
Mounting type	on mounting plate
Plate thickness	0.8 mm ... 1.5 mm

Drawings

Circuit diagram



Diagram



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Approvals



EAC

Approval ID: RU C-DE.BL08.B.00511



LR

Approval ID: LR2042068TA



RS

Approval ID: 22.44.01.00083.250



BV

Approval ID: 27721/B0 BV

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
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cULus Recognized

Approval ID: E60425

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
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Use group B

300 V

20 A

28 - 12

-

Use group C

300 V

20 A

28 - 12

-

DNV

Approval ID: TAE00001CS

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
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Classifications

ECLASS

ECLASS-9.0	27141151
ECLASS-10.0.1	27141151
ECLASS-11.0	27141151

ETIM

ETIM 8.0	EC002021
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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