SC 2,5/ 1-L BU - COMBI coupling

3042191

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COMBI coupling, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Spring-cage connection, Rated cross section: 2.5 mm^2, cross section: 0.08 mm^2 - 4 mm^2, color: blue

Your advantages

- Tested for railway applications
- The coupling is assembled directly on site by snapping together single-position coupling elements
- The ST-COMBI couplings for self-assembly provide solutions that users can implement themselves

Commercial data

Item number	3042191
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2145
Product key	BE2145
GTIN	4017918922573
Weight per piece (including packing)	2.84 g
Weight per piece (excluding packing)	2.84 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Product properties

Product type	Terminal coupling
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	1
Pitch	5.2 mm
Number of connections	1
Number of rows	1
Potentials	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 mm²
Connection method	Spring-cage connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.08 mm² ... 4 mm²
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm² ... 2.5 mm²
Conductor cross-section, flexible [AWG]	28 ... 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
2 conductors with the same cross section, flexible, with TWIN ferrule with 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

Dimensions

Width	5.2 mm
End cover width	2.2 mm
Height	37.2 mm

Depth	21.8 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	blue (RAL 5015)
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 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	Yes

Technical data

Drill hole spacing	5.2 mm

Mechanical tests

Attachment on the carrier

DIN rail/fixing support	Metal wall 6 mm
Test force setpoint	1 N
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):2008-03
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

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 (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

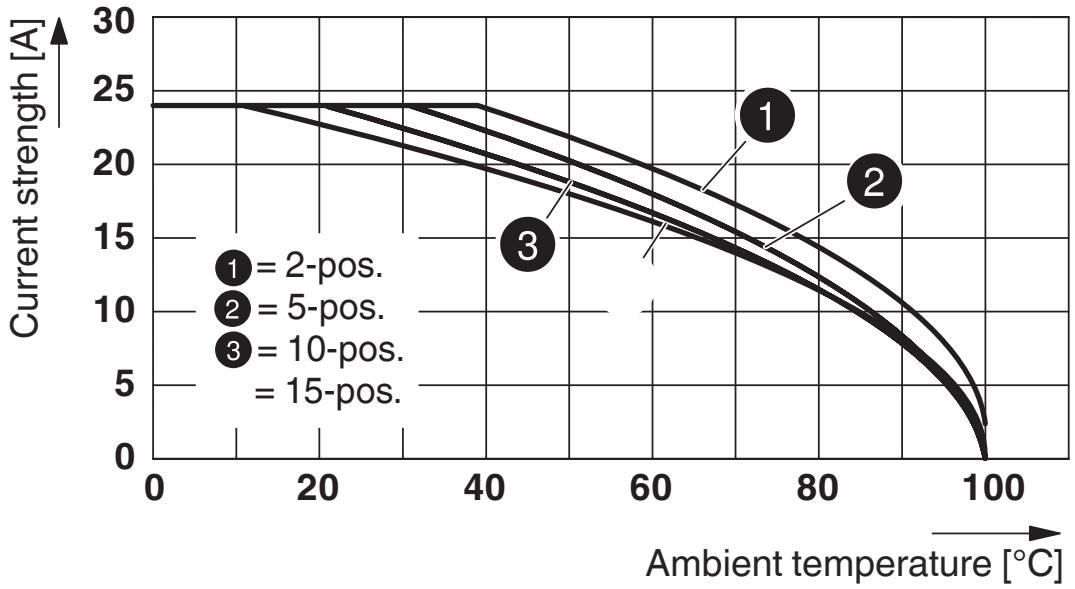
Connection in acc. with standard	IEC 61984

Mounting

Assembly note	Use of a parallel pressing tool is recommended for easy latching of the COMBI connector and coupling elements for self-assembly

Drawings

Diagram



Circuit diagram



Approvals

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cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	20 A	28 - 12	-
C				
	300 V	20 A	28 - 12	-

DNV
Approval ID: TAE00001CS

EAC
Approval ID: KZ7500651131219505

Classifications

ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

ETIM

ETIM 10.0	EC002021

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	0.019 kg CO2e

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