

# SC 2,5/12 - COMBI coupling

3042324

<https://www.phoenixcontact.com/us/products/3042324>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

COMBI coupling, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 12, connection method: Spring-cage connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.08 mm<sup>2</sup> - 4 mm<sup>2</sup>, color: gray



## Your advantages

- Standard strain relief can be used
- Tested for railway applications

## Commercial data

Item number	3042324
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	BE02
Product key	BE2145
GTIN	4017918922597
Weight per piece (including packing)	33.003 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85366990
Country of origin	PL

# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

## Technical data

### Product properties

Product type	Terminal coupling
Area of application	Railway industry
	Machine building
	Plant engineering
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 <sup>2</sup>
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 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	28 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	28 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup>
Nominal cross section	2.5 mm <sup>2</sup>
Nominal current	24 A
Maximum load current	24 A (with 4 mm <sup>2</sup> conductor cross-section)
Nominal voltage	500 V

### Dimensions

Width	62.4 mm
End cover width	2.2 mm
Height	37.2 mm
Depth	18.8 mm

# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

Pitch	5.2 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
Short-time withstand current 2.5 mm <sup>2</sup>	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
-----------------	-----

## 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

# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
ASD level	0.964 (m/s <sup>2</sup> )/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
----------------------------------	-----------

## Drawings

Diagram



Circuit diagram



# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3042324>

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	300 V	20 A	28 - 12	-
C	300 V	20 A	28 - 12	-

<b>DNV</b> Approval ID: TAE00001CS				
---------------------------------------	--	--	--	--

 <b>EAC</b> Approval ID: KZ7500651131219505				
---	--	--	--	--

# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

## Classifications

### ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

### ETIM

ETIM 10.0	EC002021
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# SC 2,5/12 - COMBI coupling



3042324

<https://www.phoenixcontact.com/us/products/3042324>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)