PPC 2,5/1-L - COMBI coupling

3000653

https://www.phoenixcontact.com/us/products/3000653

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: 1, connection method: Push-in connection, Rated cross section: 2.5 mm^2, 1 level, cross section: 0.14 mm^2 - 4 mm^2, color: gray

Your advantages

- For secure and space-saving accommodation of plug-in contacts in cable ducts and distributor shafts
- The Push-in technology COMBI couplings for self-assembly provide solutions that users can implement themselves

Commercial data

Item number	3000653
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2245
GTIN	4046356676687
Weight per piece (including packing)	3.712 g
Weight per piece (excluding packing)	3.66 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Product properties

Product type	Terminal coupling
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

1 level

Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
	B3
Connection in acc. with standard	IEC 61984
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
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 (observe derating)
Maximum load current	24 A (with a 2.5 mm² conductor cross-section)
Nominal voltage	500 V

1 level Connection cross sections directly pluggable

Conductor cross-section rigid	0.34 mm² ... 4 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² ... 2.5 mm²

Dimensions

Width	5.2 mm
Height	20.5 mm
Depth	41 mm
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))	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

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

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

Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3000653

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	300 V	20 A	26 - 12	-
C				
	300 V	20 A	26 - 12	-

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	26 - 12	-
C				
	300 V	20 A	26 - 12	-

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	0.03 kg CO2e

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