

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

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: 1000 V, nominal current: 41 A, number of connections: 2, number of positions: 1, connection method: Push-in connection, Rated cross section: 6 mm<sup>2</sup>, 1 level, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, color: gray

## Your advantages

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

## Commercial data

Item number	3000690
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2245
GTIN	4046356751797
Weight per piece (including packing)	7.952 g
Weight per piece (excluding packing)	7.94 g
Customs tariff number	85366990
Country of origin	PL

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

## Technical data

### Product properties

Product type	Terminal coupling
Area of application	Railway industry
	Machine building
	Plant engineering
Number of positions	1
Pitch	8.2 mm
Number of connections	2
Number of rows	1
Potentials	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	1.31 W

### Connection data

Nominal cross section	6 mm <sup>2</sup>
-----------------------	-------------------

#### 1 level

Connection method	Push-in connection
Stripping length	12 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Cross section AWG	20 ... 8 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal cross section	6 mm <sup>2</sup>
Nominal current	41 A (observe derating)
Maximum load current	41 A (with 6 mm <sup>2</sup> conductor cross-section)
Nominal voltage	1000 V

1 level Connection cross sections directly pluggable

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

Conductor cross-section rigid	1 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	1 mm <sup>2</sup> ... 6 mm <sup>2</sup>

## Dimensions

Width	8.2 mm
End cover width	2.2 mm
Height	47 mm
Depth	24.7 mm
Pitch	8.2 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

## Mechanical properties

### Mechanical data

Open side panel	Yes
-----------------	-----

## Environmental and real-life conditions

### 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

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

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



# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3000690>

<b>DNV</b> Approval ID: TAE000015D
---------------------------------------

<b>CSA</b> Approval ID: 13631	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	36 A	20 - 8	-
C	600 V	36 A	20 - 8	-

<b>CB Scheme</b> Approval ID: DE1-64372_B1_B2	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	1000 V	-	-	-

<b>cULus Recognized</b> Approval ID: E60425	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B	600 V	40 A	20 - 8	-
C	600 V	40 A	20 - 8	-
F	1000 V	40 A	20 - 8	-

<b>VDE Zeichengenehmigung</b> Approval ID: 40043445	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine	1000 V	-	-	0.5 - 6

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

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

## Classifications

### ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

### ETIM

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

### UNSPSC

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

# PPC 6/1-L - COMBI coupling



3000690

<https://www.phoenixcontact.com/us/products/3000690>

## 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	0.055 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](mailto:info@phoenixcon.com)