

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



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.



Plug, nom. voltage: 1000 V, nominal current: 41 A, number of positions: 8, connection method: Screw connection, Rated cross section: 6 mm², cross section: 0.2 mm²- 6 mm², color: gray

Commercial data

Item number	3060681
Packing unit	25 pc
Minimum order quantity	25 pc
Sales key	BE01
Product key	BE1144
GTIN	4046356607896
Weight per piece (including packing)	58.664 g
Weight per piece (excluding packing)	58.664 g
Customs tariff number	85366990
Country of origin	CN

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



Technical data

Notes

Notes on operation	COMBI connectors are connectors without switching power in accordance with IEC 61984 and can be connected or disconnected without load or voltage when used as intended
--------------------	---

Product properties

Product type	Terminal plug
Number of positions	8
Pitch	8.2 mm
Potentials	8

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
---------------------	------

Connection data

Nominal cross section	6 mm ²
-----------------------	-------------------

Level 1 above 1 below 1

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.6 ... 0.8 Nm
Stripping length	10 mm
Internal cylindrical gage	A5
Connection in acc. with standard	IEC 61984
Conductor cross-section rigid	0.2 mm ² ... 6 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm ² ... 10 mm ²
Conductor cross-section, flexible [AWG]	24 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 6 mm ²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm ² ... 6 mm ²
2 conductors with same cross section, rigid	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 4 mm ²
Nominal cross section	6 mm ²
Nominal current	41 A
Maximum load current	41 A (with 6 mm ² conductor cross-section)
Nominal voltage	1000 V

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



Dimensions

Width	65.6 mm
Height	21 mm
Depth	42.7 mm
Length	21 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

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

Connection in acc. with standard	IEC 61984
----------------------------------	-----------

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



Drawings

Circuit diagram



UP 6/ 8 - Plug



3060681

<https://www.phoenixcontact.com/us/products/3060681>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3060681>

 **CSA**
Approval ID: 13631

 **IECEE CB Scheme**
Approval ID: DE1-62748

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	41 A	-	0.2 - 6

 **cULus Recognized**
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	40 A	24 - 8	-
C				
	600 V	40 A	24 - 8	-

 **VDE Gutachten mit Fertigungsüberwachung**
Approval ID: 40034876

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	41 A	-	0.2 - 6

 **CSA**
Approval ID: 13631

 **EAC**
Approval ID: KZ7500651131219505

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



Classifications

ECLASS

ECLASS-13.0	27250306
ECLASS-15.0	27250306

ETIM

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

UNSPSC

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

UP 6/ 8 - Plug

3060681

<https://www.phoenixcontact.com/us/products/3060681>



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