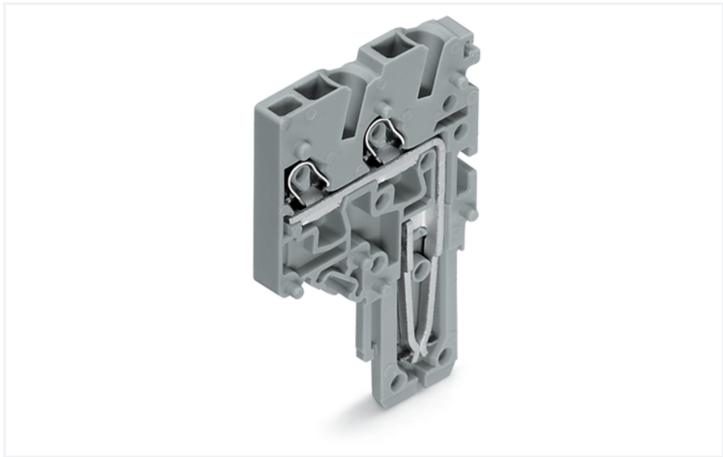




Color: ■ gray

Female connector, 2020 Series, gray

This female connector (item number 2020-281) provides fault-free electrical installations. Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the properties of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: (3.5 x 40.5 x 25) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

An operating tool is used to operate this female connector/socket.

Notes	
Safety Information	According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.
Safety information 2	Notice: An appropriate end plate must be applied to the carrier terminal blocks after each female plug.

Electrical data						
Ratings per		IEC/EN 61984			Approvals per	
		III	III	II	UL 1059	
Overvoltage category		III	III	II	Use group	B C D
Pollution degree		3	2	2	Rated voltage	300 V 300 V 300 V
Nominal voltage		500 V	-	-	Rated current	15 A 15 A 15 A
Rated impulse withstand voltage		6 kV	-	-		
Rated current		13.5 A	-	-		



Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		300 V	300 V	300 V
Rated current		10 A	10 A	10 A

General information	
Wiring direction	Front-entry wiring

Connection Data

Clamping units	2
Total number of potentials	1

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm²
Solid conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm² / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm² / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm² / 20 ... 18 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Pole number	1
Wiring direction	Front-entry wiring

Physical data

Width	3.5 mm / 0.138 inches
Height	40.5 mm / 1.594 inches
Depth	25 mm / 0.984 inches

Mechanical data

Variable coding	Yes
Marking level	Side marking
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	Yes

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.044 MJ
Weight	2.7 g



Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	18 (X-COM-System)
PU (SPU)	250 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821245261
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates											
General approvals		Declarations of conformity and manufacturer's declarations									
Approval	Standard	Certificate Name									
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7617									
CSA DEKRA Certification B.V.	C22.2	2516073									
UL UL International Germany GmbH	UL 1059	E 45172									
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
Approval	Standard	Certificate Name									
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-									
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-									

Approvals for marine applications		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2020-281			

Documentation

Bid Text			
2020-281	19.02.2019	xml 4.10 KB	
2020-281	07.08.2018	docx 15.51 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 2020-281		EPLAN Data Portal 2020-281	
		WSCAD Universe 2020-281	
		ZUKEN Portal 2020-281	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



[Item No.: 216-241](#)
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

[Item No.: 216-242](#)
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

[Item No.: 216-243](#)
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.1.2 Locking system

1.1.2.1 Locking system



[Item No.: 2022-141](#)
Locking lever; gray

[Item No.: 2022-151](#)
Locking lever; gray

[Item No.: 2022-142](#)
Locking lever; orange

[Item No.: 2022-152](#)
Locking lever; orange



1.1.3 Marking

1.1.3.1 Marker



Item No.: 793-3501
WMB marking card; as card; plain; snap-on type; white



Item No.: 2009-113
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

1.1.4 Protective warning marker

1.1.4.1 Cover



Item No.: 2000-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.5 Screwless end stop

1.1.5.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.6 Strain relief

1.1.6.1 Strain relief plate



Item No.: 734-328
Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; gray



Item No.: 734-329
Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray



Item No.: 734-326
Strain relief plate; for female and male connectors; 35 mm wide; 1 part; gray



Item No.: 734-327
Strain relief plate; for female and male connectors; 6 mm wide; 1 part; gray

1.1.7 Tool

1.1.7.1 Operating tool



Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



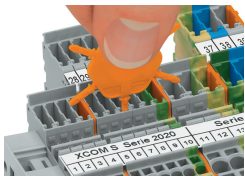
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

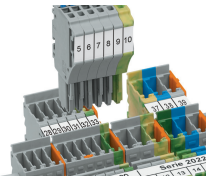
Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.