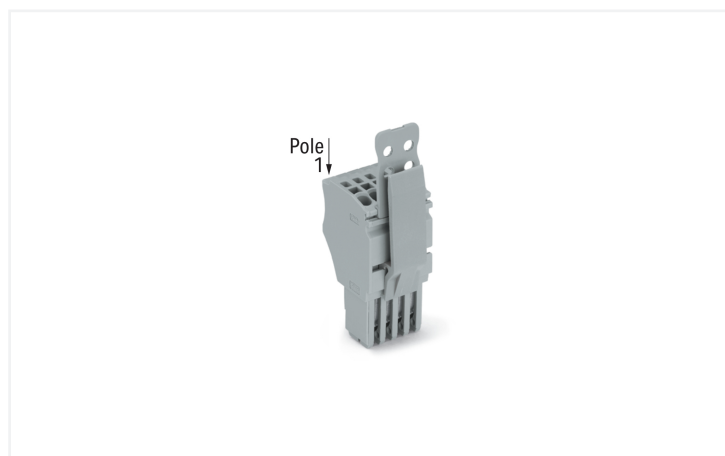


Data Sheet | Item Number: 2020-109/144-000

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; Centered locking levers; Strain relief plate; 1,50 mm²; gray

<https://www.wago.com/2020-109/144-000>



Color: gray

Similar to illustration

Female connector, 2020 Series, Push-in CAGE CLAMP®

Convenient electrical installations are guaranteed with this female connector (item number 2020-109/144-000). Strip lengths must be between 9 and 11 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are mainly used in switchgear units and control systems (e.g., in rail-road technology). They are essentially a combination of rail-mount terminal blocks and pluggable connectors. You can also pre-assemble installations thanks to the variable wiring system. This saves both time and money during manufacture, installation, operation, and maintenance. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The item's dimensions are (32.2 x 64 x 27.2) 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. The strain relief plate is a safety precaution for connected conductors that also makes wires much easier to handle..

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	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	13.5 A	-	-

Approvals per		UL 1059	
Use group	B	C	D
Rated voltage	300 V	300 V	300 V
Rated current	15 A	15 A	15 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	9
Total number of potentials	9

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	9
Wiring direction	Front-entry wiring

Physical data

Width	32.2 mm / 1.268 inches
Height	64 mm / 2.52 inches
Depth	27.2 mm / 1.071 inches
Module width	3.5 mm / 0.138 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
Locking of plug-in connection	Locking lever
Strain relief	Strain relief plate



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	0.367 MJ	
Weight	22 g	

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

Commercial data		
Product Group	18 (X-COM-System)	
PU (SPU)	25 pcs	
Packaging type	Box	
Country of origin	DE	
GTIN	4050821092605	
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
UL UL International Germany GmbH	UL 1059	E 45172
Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
2020-109/144-000

↓

Documentation

Bid Text			
2020-109/144-000	19.02.2019	xml 4.01 KB	↓
2020-109/144-000	06.08.2018	docx 15.42 KB	↓

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2020-109/144-000	EPLAN Data Portal 2020-109/144-000
↓	↓
	WSCAD Universe 2020-109/144-000
	↓
	ZUKEN Portal 2020-109/144-000
	↓

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 Marking

1.1.2.1 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

1.1.2.2 Marking strip



Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



Item No.: 2099-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white



Item No.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

1.1.3 Protective warning marker

1.1.3.1 Cover



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

1.1.4 Tool

1.1.4.1 Operating tool



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



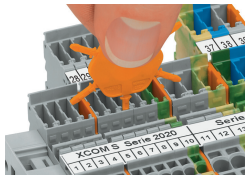
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

Installation Notes

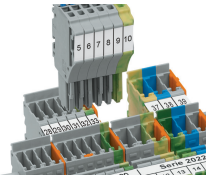
Coding



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.