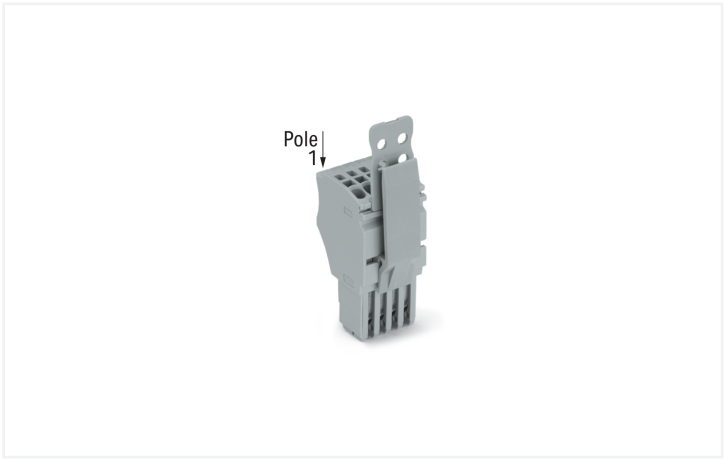
Data Sheet | Item Number: 2020-110/145-000

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 10-pole; Centered locking levers; Strain relief plate; 1,50 mm²; gray

https://www.wago.com/2020-110/145-000



Color: gray

Similar to illustration

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

Our female connector (item number 2020-110/145-000) is designed for seamless electrical installations. Strip lengths must be between 9 and 11 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are hugely popular in switchgear and control systems, for example, in railroad technology. They combine the best of rail-mount terminal blocks and connectors to create the perfect solution. Variable wiring systems make pre-assembly easy, which leads to considerable time and cost savings in production, installation, operation, and maintenance. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (35.7 x 69 x 27.2) mm (width x height x depth). Depending on the type of conductor, this female connector is designed for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

This female connector/socket is operated with an operating tool. You can secure connected conductors using the strain relief plate to make cables more manageable..

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

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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	10
Total number of potentials	10

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	10
Wiring direction	Front-entry wiring

Physical data

Width	35.7 mm / 1.406 inches
Height	69 mm / 2.717 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

Continued on next page

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	0.437 MJ
Weight	25.5 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	4050821092612
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

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7617
UL UL International Germany GmbH	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2020-110/145-000

Documentation

Bid Text

2020-110/145-000	19.02.2019	xml 4.01 KB
2020-110/145-000	06.08.2018	docx 15.39 KB

CAD/CAE-Data

CAD data

2D/3D Models 2020-110/145-000

CAE data

EPLAN Data Portal 2020-110/145-000

WSCAD Universe 2020-110/145-000

ZUKEN Portal 2020-110/145-000

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

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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.: 2009-110
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



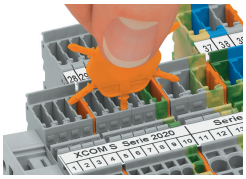
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

Installation Notes

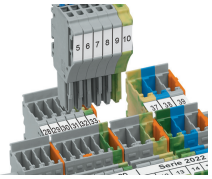
Coding



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.