

Data sheet | Item number: 2020-181

End module for 1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 1-pole; 1,50 mm²; gray

www.wago.com/2020-181



Item description

Customizing Modular Female Plugs

WAGO's modular X-COM®S-SYSTEM female plugs can be customized for applications that require a varying number of poles (e.g., when designing prototypes).

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
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Modules and Pole Numbers

A customized X-COM®S-SYSTEM MINI

female plug consists of:

- One base module with an end plate
- Up to 14 end modules

Intended Use

According to EN 61984, connectors without current interrupting capacity must not be mated or unmated when live or under load.

Assembly

The appropriate mounting tool shall be used to ensure that the individual modules are properly attached to each other without damaging the locking latches.

Data

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

Ratings per	IEC/EN 61984
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated current	13.5 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	15 A

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Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	15 A

Ratings per CSA

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

Connection data

Connection points	1
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 mm ²
Solid conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm ² / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm ² / 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	22.4 mm / 0.882 inches

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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
Mismatching 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	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.039 MJ
Weight	2.2 g

Environmental requirements

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

Commercial data

Product Group	18 (X-COM-System)
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	250 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821245162

Subject to changes. Please also observe the further product documentation!



Customs tariff number

85366990990

Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates**General approvals**

Logo	Approval	Additional Approval Text	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

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	BV Bureau Veritas S.A.	EN 60947	38586/B0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

Optional accessories**Protective warning marker**

Cover

Subject to changes. Please also observe the further product documentation!

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Item no.: 2000-115

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

www.wago.com/2000-115

Locking levers

 Locking system

Item no.: 2022-141

Locking lever; gray

www.wago.com/2022-141

Item no.: 2022-151

Locking lever; gray

www.wago.com/2022-151

Item no.: 2022-142

Locking lever; orange

www.wago.com/2022-142

Item no.: 2022-152

Locking lever; orange

www.wago.com/2022-152

Tool

 Operating tool

Item no.: 210-648

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

www.wago.com/210-648

Item no.: 210-647

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-647

Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

Strain relief

 Strain relief plate

Item no.: 734-326

Strain relief plate; for female and male connectors; 35 mm wide; 1 part; gray

www.wago.com/734-326

Item no.: 734-327

Strain relief plate; for female and male connectors; 6 mm wide; 1 part; gray

www.wago.com/734-327

Item no.: 734-328

Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; gray

www.wago.com/734-328

Item no.: 734-329

Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray

www.wago.com/734-329

Marking accessories

 Marking strip

Item no.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/2009-110

Item no.: 210-831

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

www.wago.com/210-831

Item no.: 210-833

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

www.wago.com/210-833

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Item no.: 210-834 Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white	www.wago.com/210-834
Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white	www.wago.com/210-832
Marker	
Item no.: 2009-113 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white	www.wago.com/2009-113
Item no.: 793-3501 WMB marking card; as card; plain; snap-on type; white	www.wago.com/793-3501
Ferrule	
Ferrule	
Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243

Downloads

Documentation

Bid Text

2020-181 X81 - Datei	2019 年2月19日	xml 4.2 kB	Download
2020-181 docx - Datei	2018 年8月6日	docx 15.8 kB	Download

Additional Information

		pdf 2.2 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 2020-181		URL	Download
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CAE data

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WSCAD Universe 2020-181	URL	Download
ZUKEN Portal 2020-181	URL	Download
EPLAN Data Portal 2020-181	URL	Download

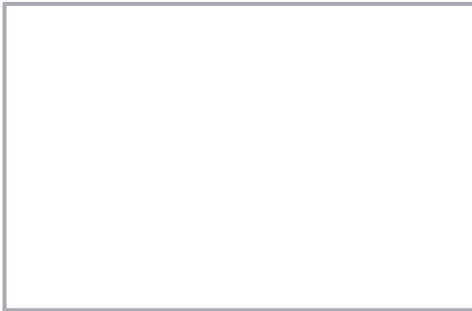
Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2020-181	URL	Download
End module for 1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm ² ; Pin spacing 3.5 mm; 1-pole; 1,50 mm ² ; gray		

Installation Notes

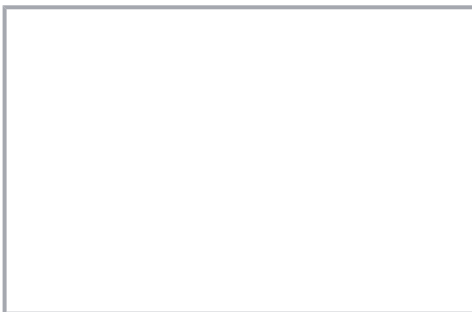
Coding



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.

Subject to changes. Please also observe the further product documentation!

Locking system



Slide the locking lever into position.



Female plugs can be individually locked.

Product family

X-COM S-Mini

[Show all products from the family](#)

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