

Data sheet | Item number: 2020-164

Start module for 1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 1-pole; with integrated end plate; 1,50 mm²; blue

www.wago.com/2020-164



Color:

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	No

Material Data

Note (material data)	Information on material specifications can be found here
Color	blue
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.055 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)
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	4050821245148

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

Marking accessories

Marking strip

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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
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
Protective warning marker	
Cover	
Item no.: 2000-115 Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow	www.wago.com/2000-115
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
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

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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

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

Downloads

Documentation

Bid Text

2020-164 X81 - Datei	2019 年2月19 日	xml 4.3 kB	Download
2020-164 docx - Datei	2018 年8月6 日	docx 15.9 kB	Download

Additional Information

		pdf 2.3 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 2020-164		URL	Download
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CAE data

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Environmental Product Compliance

Compliance Search

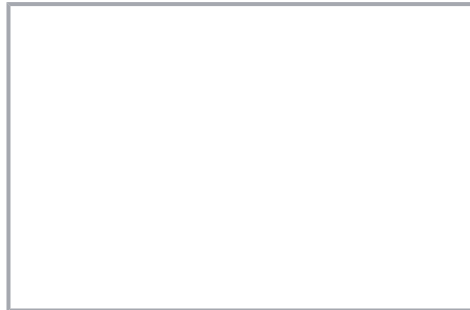
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Installation Notes

Coding



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



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

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



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

Product family

X-COM S-Mini

[Show all products from the family](#)

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