

Data sheet | Item number: 2022-164

Start module for 1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 1-pole; with integrated end plate; 4,00 mm²; blue

www.wago.com/2022-164



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!

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Modules and Pole Numbers

A customized X-COM®S-SYSTEM

female plug consists of:

- One base module with an integrated end plate
- Up to 13 center modules (corresponding to a 15-pole female plug = maximum pole number)
- One end module

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.

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 61984
Nominal voltage (III/3)	690 V
Rated impulse voltage (III/3)	6 kV
Rated current	24 A
Current at conductor cross-section (max.) mm ²	32 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	600 V
Rated current UL (Use Group B)	20 A
Rated voltage UL (Use Group C)	600 V

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Rated current UL (Use Group C)	20 A
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Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group C)	600 V
Rated current CSA (Use Group C)	20 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	2.5 mm ²
Solid conductor	0.25 ... 4 mm ² / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm ² / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm ² / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm ² / 18 ... 14 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	10 ... 12 mm / 0.39 ... 0.47 inches
Pole number	1
Wiring direction	Front-entry wiring

Physical data

Width	5.2 mm / 0.205 inches
Height	40.5 mm / 1.594 inches
Depth	22.4 mm / 0.882 inches

Mechanical Data

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

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



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	blue
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.06 MJ
Weight	3.4 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	4050821243335
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Subject to changes. Please also observe the further product documentation!



Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2 No. 158	2437422
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 101560
	UL Underwriters Laboratories Inc.	UL 1059	E45172

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

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		

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



Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red www.wago.com/216-243

Item no.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black www.wago.com/216-244

Item no.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red www.wago.com/216-263

Item no.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-246

Item no.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-266

Item no.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black www.wago.com/216-264

Item no.: 216-286

Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-286

Item no.: 216-262

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 www.wago.com/216-262

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

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.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white www.wago.com/2009-115

Item no.: 793-5501

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white www.wago.com/793-5501

Insulation stop

Insulation stop

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

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**Item no.: 2002-171**Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light graywww.wago.com/2002-171**Item no.: 2002-172**Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; dark graywww.wago.com/2002-172**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**Item no.: 734-430**

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

www.wago.com/734-430**Item no.: 734-431**

Strain relief plate; for female and male connectors; 75 mm wide; 1 part; gray

www.wago.com/734-431**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**Protective warning marker**

Cover

Item no.: 2002-115

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

www.wago.com/2002-115**Tool**

Operating tool

Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

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Downloads

Documentation

Bid Text

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2022-164 X81 - Datei	2019 年2月19 日	xml 4.4 kB	Download
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Additional Information

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CAD/CAE-Data

CAD data

2D/3D Models 2022-164		URL	Download
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CAE data

EPLAN Data Portal 2022-164		URL	Download
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Environmental Product Compliance

Compliance Search

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Start module for 1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 1-pole; with integrated end plate; 4,00 mm²; blue

Installation Notes

Coding

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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.

Product family

X-COM S

[Show all products from the family](#)

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