

**Data sheet | Item number: 2022-109**

1-conductor female connector; Push-in CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing  
5.2 mm; 9-pole; 4,00 mm<sup>2</sup>; gray

[www.wago.com/2022-109](http://www.wago.com/2022-109)



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

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## 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 <sup>2</sup>	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
Rated current UL (Use Group C)	20 A

### 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	9
Total number of potentials	9

### Connection 1

Connection technology

Push-in CAGE CLAMP®

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Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	2.5 mm <sup>2</sup>
Solid conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm <sup>2</sup> / 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	9
Wiring direction	Front-entry wiring

### Physical data

Width	46.8 mm / 1.843 inches
Height	40.5 mm / 1.594 inches
Depth	22.4 mm / 0.882 inches
Module width	5.2 mm / 0.205 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
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

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Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.484 MJ
Weight	28.9 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)	50 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821242802
Customs tariff number	85366990990

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals

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

#### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name

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<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
<b>UK-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

#### Approvals for marine applications

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

#### Optional accessories

##### Strain relief

Strain relief plate

<b>Item no.: 734-326</b> Strain relief plate; for female and male connectors; 35 mm wide; 1 part; gray	<a href="http://www.wago.com/734-326">www.wago.com/734-326</a>
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##### Locking levers

Locking system

<b>Item no.: 2022-151</b> Locking lever; gray	<a href="http://www.wago.com/2022-151">www.wago.com/2022-151</a>
<b>Item no.: 2022-152</b> Locking lever; orange	<a href="http://www.wago.com/2022-152">www.wago.com/2022-152</a>

##### Protective warning marker

Cover

<b>Item no.: 2002-115</b> Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow	<a href="http://www.wago.com/2002-115">www.wago.com/2002-115</a>
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##### Tool

Operating tool

<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
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##### Insulation stop

Insulation stop

<b>Item no.: 2002-171</b>
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Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray[www.wago.com/2002-171](http://www.wago.com/2002-171)**Item no.: 2002-172**Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray[www.wago.com/2002-172](http://www.wago.com/2002-172)**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](http://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](http://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](http://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](http://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](http://www.wago.com/210-832)

## Label

**Item no.: 210-805**

Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; white

[www.wago.com/210-805](http://www.wago.com/210-805)**Item no.: 210-805/000-002**

Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; yellow

[www.wago.com/210-805/000-002](http://www.wago.com/210-805/000-002)

## 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](http://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](http://www.wago.com/793-5501)**Ferrule**

## Ferrule

**Item no.: 216-241**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white[www.wago.com/216-241](http://www.wago.com/216-241)**Item no.: 216-242**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray[www.wago.com/216-242](http://www.wago.com/216-242)**Item no.: 216-243**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red[www.wago.com/216-243](http://www.wago.com/216-243)**Item no.: 216-244**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black[www.wago.com/216-244](http://www.wago.com/216-244)

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<b>Item no.: 216-263</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<a href="http://www.wago.com/216-263">www.wago.com/216-263</a>
<b>Item no.: 216-246</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-246">www.wago.com/216-246</a>
<b>Item no.: 216-266</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-266">www.wago.com/216-266</a>
<b>Item no.: 216-264</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-264">www.wago.com/216-264</a>
<b>Item no.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-286">www.wago.com/216-286</a>
<b>Item no.: 216-262</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-262">www.wago.com/216-262</a>

## Downloads

### Documentation

#### Bid Text

2022-109 X81 - Datei	2019 年5月17 日	xml 4.2 kB	Download
2022-109 docx - Datei	2019 年5月14 日	docx 15.7 kB	Download

#### Additional Information

		pdf 2.2 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 2022-109	URL	Download
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### CAE data

EPLAN Data Portal 2022-109	URL	Download
WSCAD Universe 2022-109	URL	Download

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 2022-109

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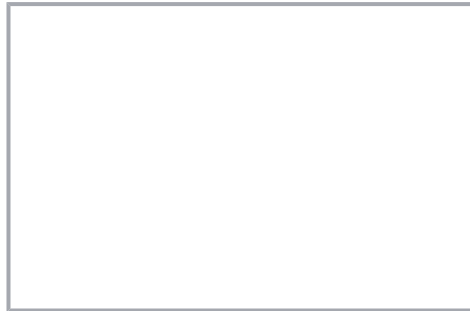
1-conductor female connector; Push-in CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing 5.2 mm;  
9-pole; 4,00 mm<sup>2</sup>; gray

## Installation Notes

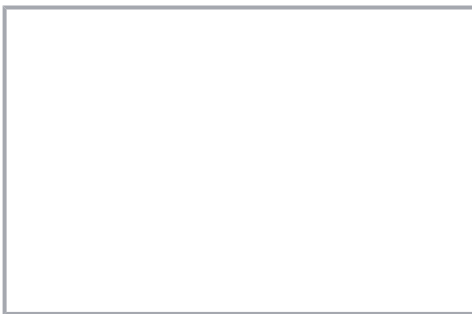
### Coding



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.

### Locking system

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Slide the locking lever into position.

Female plugs can be individually locked.

## Product family

**X-COM S**

[Show all products from the family](#)

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