

Data sheet | Item number: 231-315/031-000

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 15-pole; clamping collar; 2,50 mm²; orange

www.wago.com/231-315_031-000



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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

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Dimensions in mm

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$$

$$L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$$

$$L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$$

2- to 3-pole female connectors – one latch only

Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation

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



- Integrated test ports
- With coding fingers

Data

Notes

Safety information 1

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Variants:

Gold-plated or partially gold-plated contact surfaces
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>

Electrical data

IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	16 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

UL Approvals

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 D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per UL

Rated voltage UL 1977	600 V
Rated current UL 1977	15 A

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CSA Approvals

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Total number of connection points	15
Total number of potentials	15
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Number of poles	15
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5.08 mm / 0.2 inch
Width	91 mm / 3.583 inch
Height	14.3 mm / 0.563 inch
Depth	26.45 mm / 1.041 inch

Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting

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
Locking of plug-in connection	Without

Material data

Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.405 MJ
Weight	28 g

Environmental requirements


Limit temperature range	-60 ... +85 °C
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Commercial data


Product Group	3 (Multi Conn. System)
PU (SPU)	25 Stück
Packaging type	box
Country of origin	DE
GTIN	4044918349147
Customs tariff number	8536694040

Approvals / Certificates


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354



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

	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01
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Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1869876- PDA

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus Underwriters Laboratories Inc.	UL 1059	E45172
	UL UL International Germany GmbH	UL 1977	E45171

Counterpart

	Item no.231-645 Male connector; 15-pole; Pin spacing 5.08 mm ; orange	www.wago.com/231-645
	Item no.231-345/001-000 Male header; 15-pole; THT; 1.0 x 1.0 mm solder pin; straight; pin spacing 5.08 mm; orange	www.wago.com/231-345/001-000
	Item no.231-545/001-000 Male header; 15-pole; THT; 1.0 x 1.0 mm solder pin; angled; pin spacing 5.08 mm; orange	www.wago.com/231-545/001-000

Optional accessories

Insulations stops

Insulation stop

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



Item no.: 231-672
Insulation stop; 0.75 - 1 mm²; dark gray

www.wago.com/231-672



Item no.: 231-670
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white

www.wago.com/231-670















Item no.: 231-671
Insulation stop; 0.25 - 0.5 mm²; light gray

www.wago.com/231-671

Ferrules

Ferrule

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-106
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-123
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-122
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-142
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
	Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-143

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Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	www.wago.com/216-144
Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
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.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
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
Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / 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	


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/216-263


 **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.: 216-284**
 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/216-284

 **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

 **Item no.: 216-301**
 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow www.wago.com/216-301

 **Item no.: 216-321**
 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow www.wago.com/216-321

 **Item no.: 216-322**
 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green www.wago.com/216-322

 **Item no.: 216-302**
 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise www.wago.com/216-302

Mounting

Mounting accessories

 **Item no.: 209-147**
 Self-tapping screw www.wago.com/209-147

 **Item no.: 231-194**
 Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø www.wago.com/231-194


 **Item no.: 231-195**
 Screw with nut; M2x12; for fixing element www.wago.com/231-195

 **Item no.: 231-295**
 Screw with nut www.wago.com/231-295

Jumpers

Jumper

 **Item no.: 231-905**
 Jumper; for conductor entry; 5-way; insulated; gray www.wago.com/231-905

 **Item no.: 231-903**
 Jumper; for conductor entry; 3-way; insulated; gray www.wago.com/231-903

 **Item no.: 231-907**
 Jumper; for conductor entry; 7-way; insulated; gray www.wago.com/231-907

 **Item no.: 231-910**
 Jumper; for conductor entry; 10-way; insulated; gray www.wago.com/231-910

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

**Item no.: 231-902**

Jumper; for conductor entry; 2-way; insulated; gray

www.wago.com/231-902**Cover**

Cover

**Item no.: 231-669**

Lockout caps; for covering unused clamping units; orange

www.wago.com/231-669**Marking accessories**

Marking strip

Item no.: 210-331/508-103

Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/508-103**Item no.: 210-331/508-104**

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/508-104**Item no.: 210-332/508-202**

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/508-202**Item no.: 210-332/508-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/508-204**Item no.: 210-332/508-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/508-206**Item no.: 210-332/508-205**

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/508-205**Tools**

Operating tool

**Item no.: 209-130**

Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material; white

www.wago.com/209-130**Item no.: 209-132**

Operating tool; for connecting comb-style jumper bar; 2-way; of insulating material

www.wago.com/209-132**Item no.: 231-159**

Operating tool; natural

www.wago.com/231-159**Item no.: 231-231**














Combination operating tool; red

www.wago.com/231-231**Item no.: 210-657**

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

www.wago.com/210-657

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

	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-720
	Item no.: 231-131 Operating tool; made of insulating material; 1-way; loose; white	www.wago.com/231-131
	Item no.: 231-291 Operating tool; made of insulating material; 1-way; loose; red	www.wago.com/231-291
	Item no.: 280-432 Operating tool; made of insulating material; 2-way; white	www.wago.com/280-432
	Item no.: 280-434 Operating tool; made of insulating material; 4-way	www.wago.com/280-434
	Item no.: 280-437 Operating tool; made of insulating material; 7-way	www.wago.com/280-437
	Item no.: 280-440 Operating tool; made of insulating material; 10-way	www.wago.com/280-440
	Item no.: 280-435 Operating tool; made of insulating material; 5-way; gray	www.wago.com/280-435
	Item no.: 280-436 Operating tool; made of insulating material; 6-way	www.wago.com/280-436
	Item no.: 280-438 Operating tool; made of insulating material; 8-way	www.wago.com/280-438
	Item no.: 280-433 Operating tool; made of insulating material; 3-way	www.wago.com/280-433
Testing accessories		
Testing accessories		
	Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable	www.wago.com/210-136
	Item no.: 231-661 Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray	www.wago.com/231-661

Downloads

Documentation

Additional Information

Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
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Subject to changes. Please also observe the further product documentation!



CAD files

CAD data

2D/3D Models 231-315/031-000	URL	Download
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CAE data

EPLAN Data Portal 231-315/031-000	URL	Download
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ZUKEN Portal 231-315/031-000	URL	Download
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EPLAN Data Portal 231-315/031-000	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 231-315/031-000	URL	Download
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1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 15-pole; clamping collar; 2,50 mm²; orange

Installation Notes



Female connectors with mounting flanges can be used as PCB through-panel connectors – conductor termination parallel to CAGE CLAMP® actuation.

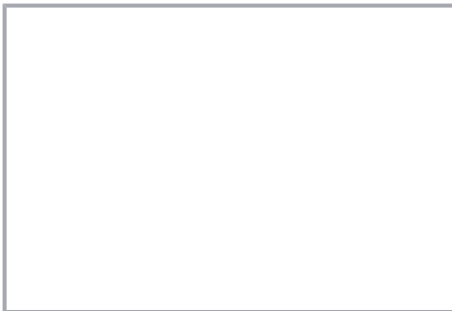
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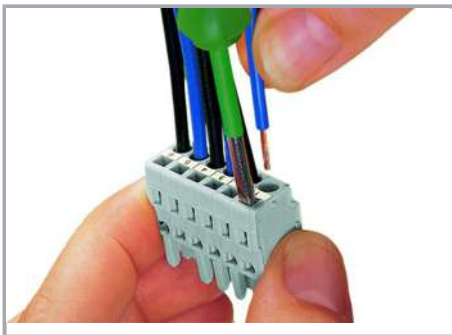
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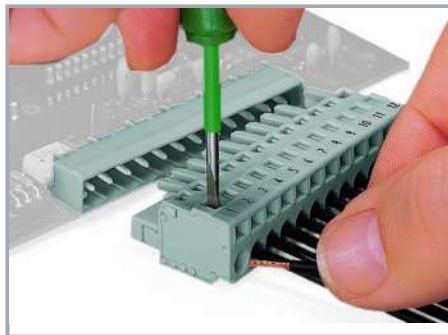
PCB female connectors with mounting flanges can be used as through-panel connectors for external wiring.



16-pole female connector with mounting flanges in a 19" rack – conductor termination parallel to CAGE CLAMP® actuation



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).

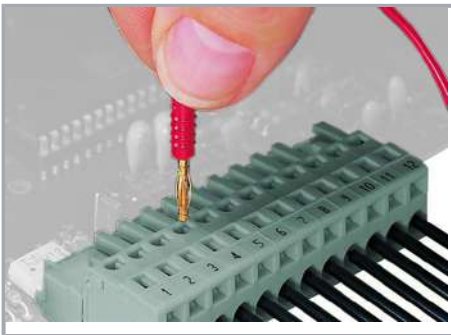
Subject to changes. Please also observe the further product documentation!



Inserting a conductor via operating tool.



Coding a female connector by removing coding finger(s).

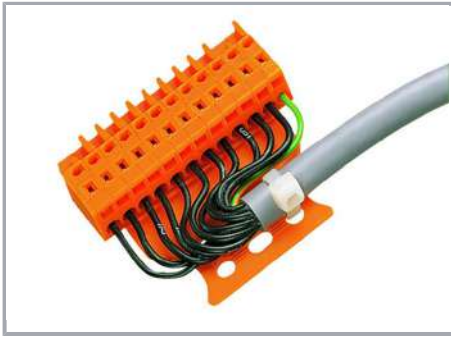


Testing – female connector with CAGE CLAMP®

Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

Installation

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

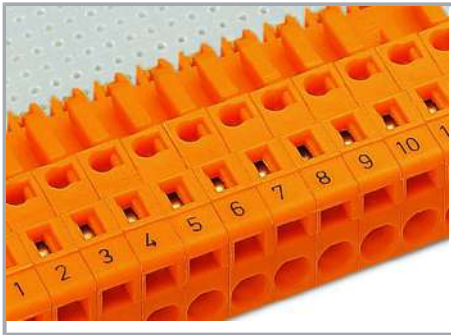


Male connector with strain relief plate



Strain relief housing shown with a male connector equipped with CAGE CLAMP®

Marking



Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic

[Show all products from the family](#)

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