

Data Sheet | Item Number: 231-2204/037-000

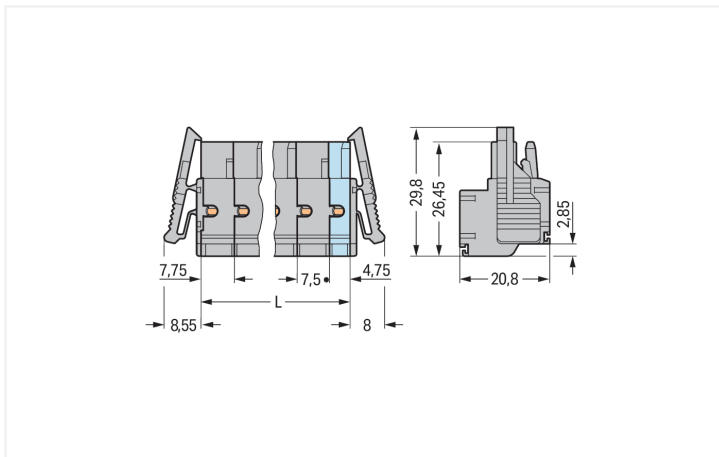
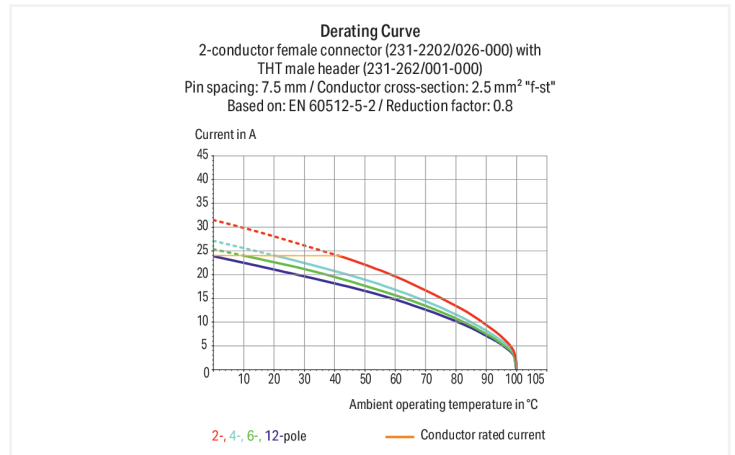
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 4-pole; Lateral locking levers; gray

<https://www.wago.com/231-2204/037-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

L = (pole no. – 2) x pin spacing + 12.5 mm 2- to 3-pole female connectors – one latch only

Female connector, 231 Series, operating tool

Enjoy fault-free electrical installations with this female connector (item number 231-2204/037-000). Conductors should only be connected to this female connector if their strip length is between 9 and 10 mm. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (44.05 x 20.8 x 29.8) mm (width x height x depth). Depending on the type of conductor, this female connector is ideal for conductor cross sections ranging from 0.2 mm² to 2.5 mm².

The contact surface is coated with tin.



Notes	
Safety Information	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. 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			
Ratings per		IEC/EN 60664-1	
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	630 V	1000 V
Rated impulse withstand voltage	6 kV	6 kV	6 kV
Rated current	16 A	16 A	16 A
Approvals per		UL 1059	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	10 A
Approvals per		UL 1977	
Rated voltage	600 V		
Rated current	20 A		
Approvals per		CSA	
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection Data	
Clamping units	8
Total number of potentials	4
Number of connection types	1
Number of levels	1
Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation parallel to conductor entry
Solid conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Pole number	4
Conductor entry direction to mating direction	0°

Physical data	
Pin spacing	7.5 mm / 0.295 inches
Width	44.05 mm / 1.734 inches
Height	20.8 mm / 0.819 inches
Depth	29.8 mm / 1.173 inches

Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Locking of plug-in connection	Locking lever

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.247 MJ
Weight	12.4 g

Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918563727
Customs tariff number	85366990990

Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 9.0	EC002638
ETIM 10.0	EC002638
ECCN	NO US CLASSIFICATION



Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Approvals for marine applications		
  			 		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351	DNV DNV GL SE	-	TAE000016Z
cURus Underwriters Laboratories Inc.	UL 1977	E45171	PRS Polski Rejestr Statków	-	TE/1095/880590/23
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1			
UL UL International Germany GmbH	UL 1059	E45172			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 231-2204/037-000	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 231-2204/037-000		EPLAN Data Portal 231-2204/037-000	
		ZUKEN Portal 231-2204/037-000	



1 Compatible Products			
1.1 System counterpart			
1.1.1 Male connector/plug			
			
Item No.: 731-604 1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 4-pole; 2,50 mm²; gray	Item No.: 231-834/001-000 THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 4-pole; gray	Item No.: 231-234/001-000 THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.5 mm; 4-pole; gray	
1.2 Optional Accessories			
1.2.1 Ferrule			
1.2.1.1 Ferrule			
			
Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	Item No.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-262 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
			
Item No.: 216-142 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	Item No.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-263 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
			
Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored
			
Item No.: 216-289 Ferrule; Sleeve for 10 mm² / AWG 8; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-209 Ferrule; Sleeve for 10 mm² / AWG 8; un-insulated; electro-tin plated; red	Item No.: 216-109 Ferrule; Sleeve for 10 mm² / AWG 8; un-insulated; electro-tin plated	Item No.: 216-210 Ferrule; Sleeve for 16 mm² / AWG 6; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue
			
Item No.: 216-110 Ferrule; Sleeve for 16 mm² / AWG 6; un-insulated; electro-tin plated; brown metallic	Item No.: 216-246 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	Item No.: 216-266 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	Item No.: 216-286 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue
			
Item No.: 216-106 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored	Item No.: 216-267 Ferrule; Sleeve for 4 mm² / AWG 12; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-287 Ferrule; Sleeve for 4 mm² / AWG 12; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-207 Ferrule; Sleeve for 4 mm² / AWG 12; un-insulated; electro-tin plated; gray
			
Item No.: 216-107 Ferrule; Sleeve for 4 mm² / AWG 12; un-insulated; electro-tin plated	Item No.: 216-208 Ferrule; Sleeve for 6 mm² / AWG 10; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	Item No.: 216-288 Ferrule; Sleeve for 6 mm² / AWG 10; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	Item No.: 216-108 Ferrule; Sleeve for 6 mm² / AWG 10; un-insulated; electro-tin plated; silver-colored



1.2.2 Insulation stop

1.2.2.1 Insulation stop



Item No.: 231-673
Insulation stop; 0.08-0.2 mm² / 0.2 mm²
"s"; white



Item No.: 231-674
Insulation stop; 0.25 - 0.5 mm²; light gray



Item No.: 231-675
Insulation stop; 0.75 - 1 mm²; dark gray

1.2.3 Marking

1.2.3.1 Marking strip



Item No.: 210-331/750-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/750-020
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.4 Strain relief

1.2.4.1 Strain relief plate



Item No.: 734-329
Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray

1.2.5 Test and measurement

1.2.5.1 Testing accessories



Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red



Item No.: 231-662
Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm²; light gray

1.2.6 Tool

1.2.6.1 Operating tool



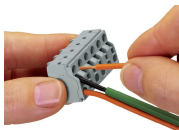
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

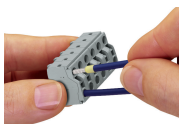
Installation Notes

Conductor termination



Operating Push-in CAGE CLAMP® is easy, fast and identical to that of CAGE CLAMP®. The screwdriver is fully inserted into the operating slot, holding Push-in CAGE CLAMP® open. After the conductor has been inserted into the clamping unit and the screwdriver been withdrawn, the conductor is clamped safely. Solid and fine-stranded conductors $< 0.5 \text{ mm}^2$ (20 AWG) are terminated and removed using a screwdriver.

Conductor termination



Solid conductors $\geq 0.5 \text{ mm}^2$ (20 AWG), as well as ferruled, fine-stranded conductors can be terminated by simply pushing them into unit. Integrated test ports allow touch contact with current bar via test probes in both horizontal and vertical directions.