Data sheet | Item number: 231-311/008-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 11-pole; Snap-in mounting feet; 2,50 mm²; orange



www.wago.com/231-311/008-000



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

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Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP[®] actuation
- Integrated test ports
- With coding fingers

Data Notes

Safety information	The <i>MCS</i> – <i>MULTI CONNECTION SYSTEM</i> 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

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

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32423 Minden	
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Email: info.de@wago.com Web: www.wago.com	



Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated impulse voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated impulse 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

Ratings per UL 1059

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 1977

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

Ratings per CSA

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

Connection points	11
Total number of potentials	11
Number of connection types	1
Number of levels	1

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Connection 1

Connection technology	CAGE CLAMP [®]
Actuation type	Operating tool
Actuation direction 1	Operation parallel to conductor entry
Actuation direction 2	Operation perpendicular to conductor entry
Solid conductor	0.08 2.5 mm² / 28 12 AWG
Fine-stranded conductor	0.08 2.5 mm² / 28 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	8 9 mm / 0.31 0.35 inches
Pole number	11
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	2.38 mm / 0.094 inches
Height	18.8 mm / 0.74 inches
Height from the surface	14.3 mm / 0.563 inches
Depth	26.45 mm / 1.041 inches

Mechanical Data

Variable coding	Yes
Housing sheet thickness	0.6 1.2 mm / 0.024 0.047 inches
Mounting type	Snap-in foot
Mounting type	Panel mounting
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	No
Locking of plug-in connection	none

Material Data

Note (material data)

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Information on material specifications can be found here

Color	orange
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.294 MJ
Weight	20.2 g

Environmental requirements

Limit temperature range	-60 +85 °C
Processing temperature	-35 +60 °C

Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 8.0	EC002638
ETIM 7.0	EC002638
PU (SPU)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918348249
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption
------------------------	------------------------

Approvals / Certificates

General approvals

			Certificate
Logo	Approval	Additional Approval Text	name
	СВ	IEC 61984	NL-39756
	DEKRA Certification B.V.		/A1

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SP:	CSA DEKRA Certification B.V.	C22.2	1466354
KEUR	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 121453
91 °	UL UL International Germany GmbH	UL 1977	E45171
91 °	UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
0	Railway	-	Railway
	WAGO GmbH & Co. KG		Ready
RAILWAY			

Approvals for marine applications

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

Counterpart



Item no.231-641 1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 11-pole; 2,50 mm²; orange

www.wago.com/231-641

Optional accessories

Jumpers

Jumper

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Data sheet | Item number: 231-311/008-000

www.wago.com/231-311/008-000



	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
S.S.	Item no.: 231-902 Jumper; for conductor entry; 2-way; insulated; gray	www.wago.com/231-902
lounting		
Mounting ad	ccessories	
å4	Item no.: 209-137 Mounting adapter; can be used as end stop; 6.5 mm wide; gray	www.wago.com/209-137
over		
Cover		
€_ - ² (ltem no.: 231-669 Lockout caps; for covering unused clamping units; orange	www.wago.com/231-669
errule		
Ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm² / 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 mm² / 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 mm² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	ltem no.: 216-142	

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Ferrule; Sleeve for 0.75 mm² / 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 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
Item no.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-143
Item no.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
Item no.: 216-141 Ferrule; Sleeve for 0.5 mm² / 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 mm² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
ltem no.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
 l tem no.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
 Item no.: 216-144 Ferrule; Sleeve for 1.5 mm² / 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
ltem no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
Item no.: 216-241 Ferrule; Sleeve for 0.5 mm² / 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 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
 Item no.: 216-221	www.wago.com/216-221
	- J

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Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

	Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-243 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.: 216-264 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
L.	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
Å	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
L.	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-322
L.	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302
Tool		
Operating t		
	Item no.: 209-130 Operating tool; made of insulating material; 1-way; for 264 Series (1-/2-way), 280, 281 Series (up to 3- way); natural	www.wago.com/209-130
	Item no.: 209-132 Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural	www.wago.com/209-132
J.	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

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Item no.: 231-131

Operating tool; made of insulating material; 1-way; loose; white



www.wago.com/231-131

G.	operating tool, made or insulating material, T way, loose, white	
R	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
Insulation sto		
Insulation st	op Item no.: 231-672 Insulation stop; 0.75 - 1 mm²; dark gray	www.wago.com/231-672
inter inter	Item no.: 231-670 Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white	www.wago.com/231-670
inter inter	Item no.: 231-671 Insulation stop; 0.25 - 0.5 mm²; light gray	www.wago.com/231-671
Mounting ada	pter	

Mounting accessories

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www.wago.com/209-148

Item no.: 209-148

Multi mounting adapter; for female and male connectors; 25 mm wide; 3 parts; gray

Marking acce	ssories		
Marking str			
111	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	
14	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	
111	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	
11	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	
14	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	
13	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	
esting and n	-		
Testing acc	essories		
Q	Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red	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			
Documenta			
dditional Inf	ormation		
Technical Se	ction 2019 Apr 3 planations	pdf 2.0 MB	Download

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CAD/CAE-Data

CAD data

2D/3D Models 231-311/008-000	URL	Download
CAE data		
EPLAN Data Portal 231-311/008-000	URL	Download
EPLAN Data Portal 231-311/008-000	URL	Download
ZUKEN Portal 231-311/008-000	URL	Download
Environmental Product Compliance		
Compliance Search		
Environmental Product Compliance 231-311/008-000	URL	Download
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 11- pole; Snap-in mounting feet; 2,50 mm²; orange		

Installation Notes

Conductor termination



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.

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

Inserting a conductor via operating tool.

Coding



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

Testing

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Testing – female connector with CAGE CLAMP®

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

Installation



Male connector with strain relief plate



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

Marking

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Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic Show all products from the family

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