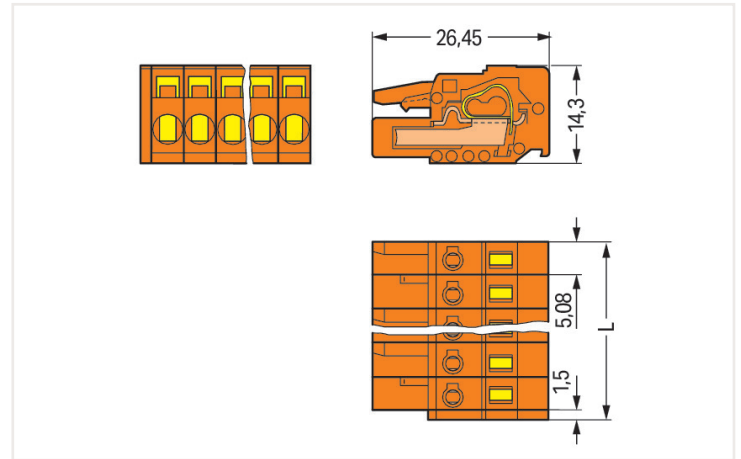
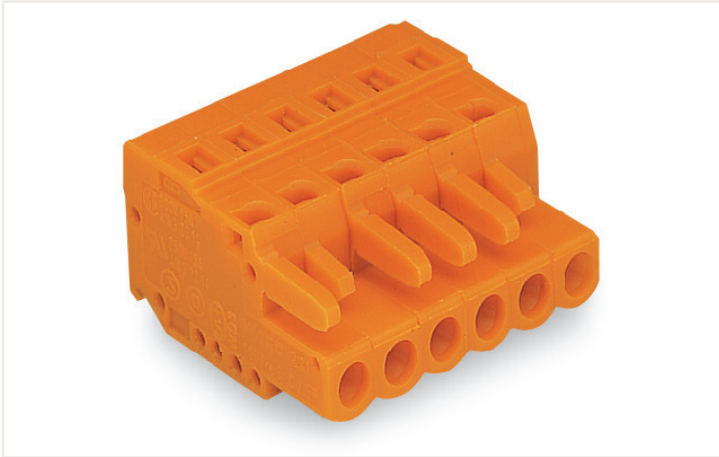


Data sheet | Item number: 231-303/026-000

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; 2,50 mm²; orange

<https://www.wago.com/231-303/026-000>

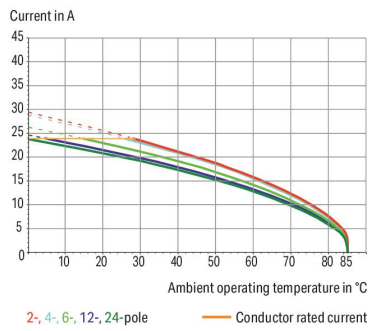


Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

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

Derating Curve
1-conductor female connector (231-102/026-000) with
THT male header (231-432/001-000)
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² *F-st*
Based on: EN 60512-5-2 / Reduction factor: 0.8



- 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

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. 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

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

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

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	3
Total number of potentials	3
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 inches
Pole number	3
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	16.74 mm / 0.659 inches
Height	14.3 mm / 0.563 inches
Depth	26.45 mm / 1.041 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

Material data

Note (material data)	Information on material data can be found here
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
Fire load	0.083 MJ
Weight	5.7 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)	100 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918345231
Customs tariff number VKOrg Germany	85366990990

Approvals and certificates

General approvals



Approval	Standard	Certificate name
CB DEKRA Certification B.V.	EN 61984, IEC 61984	NL-39756/A1
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453
UL UL International Germany GmbH	UL 1977	E45171
UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate name
Railway WAGO GmbH & Co. KG	-	Railway Ready

Approvals for marine applications



Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
231-303/026-000



Documentation

Additional Information

Technical Section
03.04.2019
pdf
1949.09 KB



CAD/CAE-Data

CAD data

2D/3D Models
231-303/026-000



CAE data

EPLAN Data Portal
231-303/026-000



ZUKEN Portal
231-303/026-000



1 Compatible products

1.1 System counterpart

1.1.1 Male connector/plug



Item no.: 231-633

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; 2,50 mm²; orange



Item no.: 231-633/019-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; clamping collar; 2,50 mm²; orange



Item no.: 231-633/018-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; DIN-35 rail/panel mounting; Snap-in mounting feet; 2,50 mm²; orange



Item no.: 231-633/114-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 3-pole; Snap-in flange; 2,50 mm²; orange



Item no.: 232-533/007-000

Double pin header; DIN-35 rail mounting; 3-pole; Pin spacing 5.08 mm; orange



Item no.:

231-533/001-000/105-604/997-405

THR male header; 1.0 x 1.0 mm solder pin; angled; in tape-and-reel packaging; Pin spacing 5.08 mm; 3-pole; black



Item no.: 231-533/001-000/105-604

THR male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 3-pole; black



Item no.: 231-333/001-000/105-604

THR male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm; 3-pole; black



Item no.: 232-363

THT male header for double-deck assembly; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 3-pole; orange



Item no.: 231-533/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 3-pole; orange



Item no.: 231-333/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm; 3-pole; orange



Item no.: 231-563/001-000

THT male header; 1.2 x 1.2 mm solder pin; angled; Pin spacing 5.08 mm; 3-pole; orange



Item no.: 231-363/001-000

THT male header; 1.2 x 1.2 mm solder pin; straight; Pin spacing 5.08 mm; 3-pole; orange

1.2 Optional accessories

1.2.1 Cover

1.2.1.1 Cover



Item no.: 231-669

Lockout caps; for covering unused clamping units; orange

1.2.2 Ferrule

1.2.2.1 Ferrule



Item no.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item no.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item no.: 216-151

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated



Item no.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item no.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item no.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item no.: 216-132

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



Item no.: 216-152

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



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



Item no.: 216-201

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



Item no.: 216-221





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



Item no.: 216-141




Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.2.2.1 Ferrule

 Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; un-insulated; electro-tin plated; silver-colored	 Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; un-insulated; electro-tin plated; silver-colored	 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	 Item no.: 216-262 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
 Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; un-insulated; electro-tin plated; gray	 Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; un-insulated; electro-tin plated; gray	 Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; un-insulated; electro-tin plated; silver-colored
 Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; un-insulated; electro-tin plated; silver-colored	 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	 Item no.: 216-263 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	 Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red
 Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated; red	 Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated	 Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; un-insulated; electro-tin plated; silver-colored
 Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; un-insulated; electro-tin plated; black	 Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; un-insulated; electro-tin plated; black	 Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / 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 mm ² / 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 mm ² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; un-insulated; electro-tin plated	 Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	 Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; un-insulated; electro-tin plated; silver-colored
 Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; un-insulated; electro-tin plated; silver-colored			

1.2.3 Insulation stop

1.2.3.1 Insulation stop

 Item no.: 231-670 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s"; white	 Item no.: 231-671 Insulation stop; 0.25 - 0.5 mm ² ; light gray	 Item no.: 231-672 Insulation stop; 0.75 - 1 mm ² ; dark gray
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1.2.4 Jumper

1.2.4.1 Jumper



Item no.: 231-910

Jumper; for conductor entry; 10-way; insulated; gray



Item no.: 231-902

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



Item no.: 231-903

Jumper; for conductor entry; 3-way; insulated; gray



Item no.: 231-905

Jumper; for conductor entry; 5-way; insulated; gray



Item no.: 231-907

Jumper; for conductor entry; 7-way; insulated; gray

1.2.5 Marking

1.2.5.1 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



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



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



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



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



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

1.2.6 Strain relief

1.2.6.1 Strain relief housing



Item no.: 232-633

Strain relief housing; orange

1.2.7 Test and measurement

1.2.7.1 Testing accessories



Item no.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red



Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

1.2.8 Tool

1.2.8.1 Operating tool



Item no.: 231-231
Combination operating tool; red



Item no.: 209-132
Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



Item no.: 280-440
Operating tool; made of insulating material; 10-way



Item no.: 209-130
Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



Item no.: 231-291
Operating tool; made of insulating material; 1-way; loose; red



Item no.: 231-131
Operating tool; made of insulating material; 1-way; loose; white



Item no.: 280-432
Operating tool; made of insulating material; 2-way; white



Item no.: 280-433
Operating tool; made of insulating material; 3-way



Item no.: 280-434
Operating tool; made of insulating material; 4-way



Item no.: 280-435
Operating tool; made of insulating material; 5-way; gray



Item no.: 280-436
Operating tool; made of insulating material; 6-way



Item no.: 280-437
Operating tool; made of insulating material; 7-way



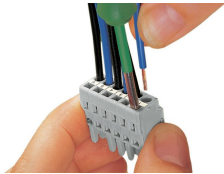
Item no.: 280-438
Operating tool; made of insulating material; 8-way



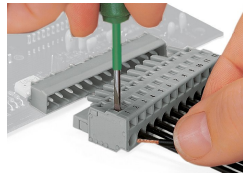
Item no.: 231-159
Operating tool; natural

Installation notes

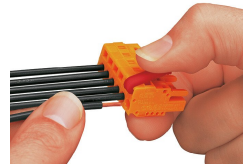
Conductor termination



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.



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



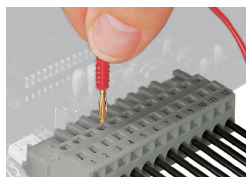
Inserting a conductor via operating tool.

Coding



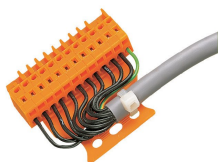
Coding a female connector by removing coding finger(s).

Testing



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

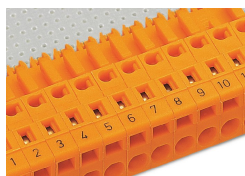


Male connector with strain relief plate



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

Marking



Labeling via direct marking or self-adhesive strips.