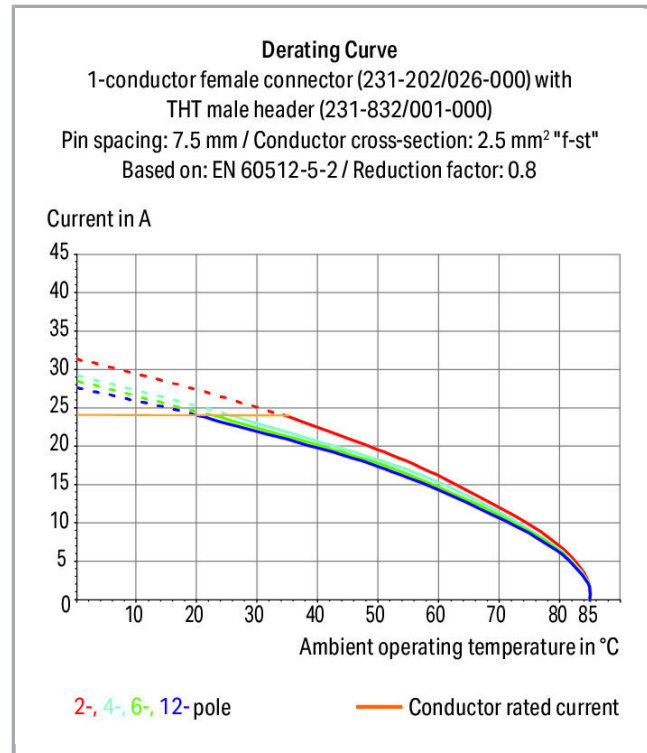
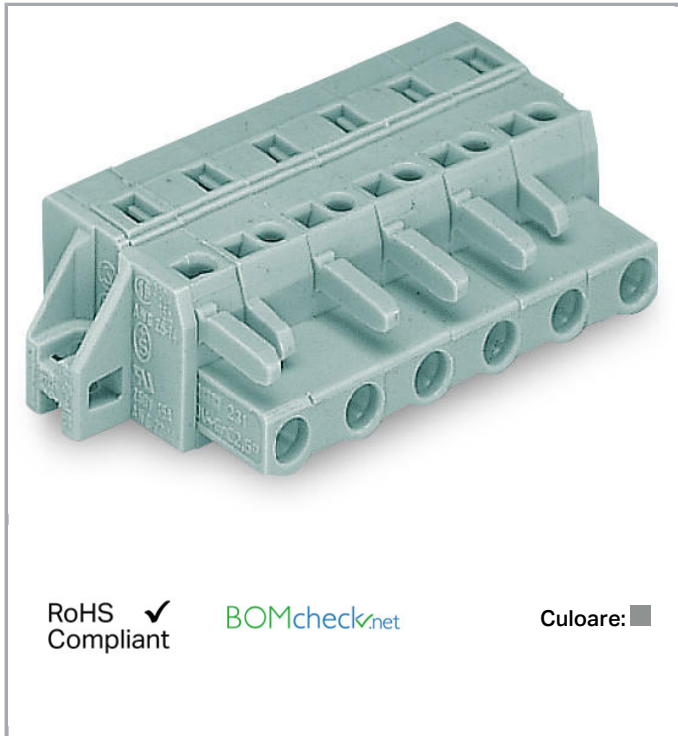


## Fișă tehnică | Număr articol: 231-209/031-000

1-conductor female plug; clamping collar; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 9-pole; 2,50 mm<sup>2</sup>; gray

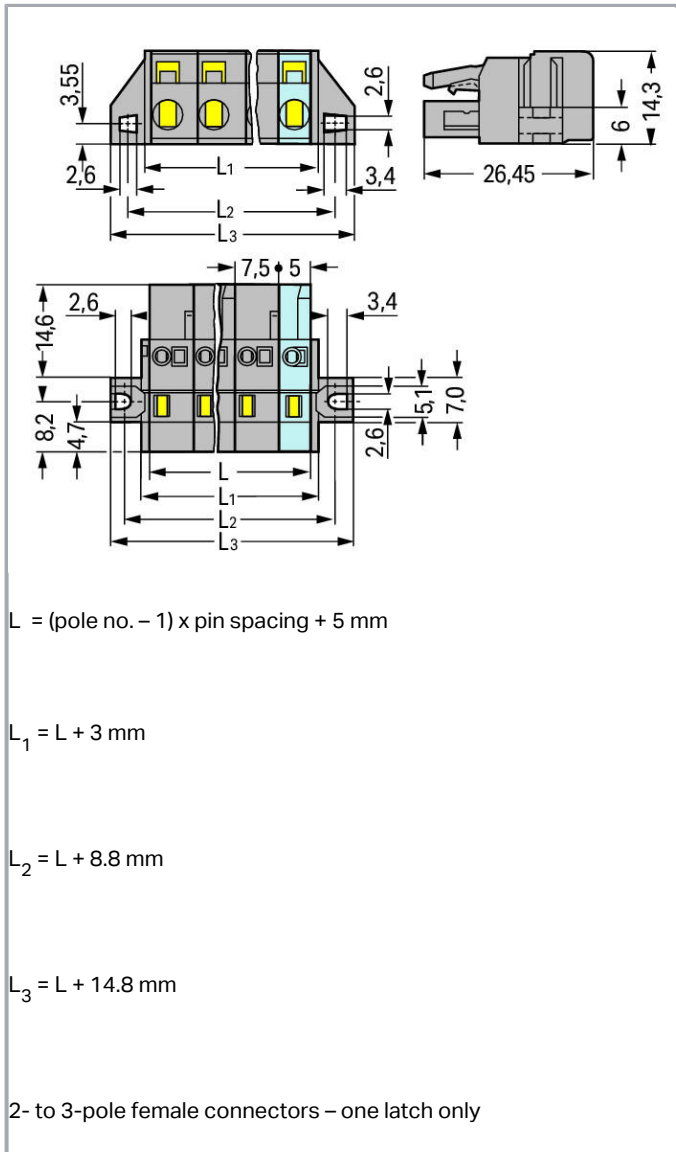
[www.wago.com/231-209/031-000](http://www.wago.com/231-209/031-000)



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/Representative Office Romania  
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building 1, 2nd floor | 077190 Voluntari, Ilfov  
Tel.: +40-(0)31 421 85 68 | Email: info-RO@wago.com

Aveți întrebări despre produsele noastre?  
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.



## Descriere articol

- 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

### Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS

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Connectors shall 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.

## Date

### Electrical data

#### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
Rated current	16 A
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2

#### 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
Approvals per	UL 1059

#### Approvals per UL 1977

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

#### 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 technology	CAGE CLAMP®
-----------------------	-------------

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Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Pole No.	9
Total number of connection points	9
Total number of potentials	9
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

### Geometrical Data

Pin spacing	7.5 mm / 0.295 inch
Width	74.8 mm / 2.945 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

### Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductors
Mismating protection	No

### Material Data

Color	gray
Material group	I
Insulation material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated

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Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.

Fire load	0,33 MJ
Weight	19,4 g

### Environmental Requirements



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



Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4044918367332
Customs tariff number	85366990990

### Aprobări / certificate

#### Country specific Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	CSA DEKRA Certification B.V.	C22.2	1466354
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

#### Ship Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat
	ABS American Bureau of Shipping	-	19- HG1869876- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z



#### UL-Approvals

Emblemă	Aprobare	Text de aprobare suplimentar	Nume certificat




Supus modificărilor.

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Sos. Pipera-Tunari nr. 1/1  
building 1, 2nd floor | 077190 Voluntari, Ilfov  
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Aveți întrebări despre produsele noastre?  
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.




	UR Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	20150318- E45171

### Counterpart

	Nr. articol: 731-609 1-conductor male connector; 2.5 mm <sup>2</sup> ; Pin spacing 7.5 mm; 9-pole; 2,50 mm <sup>2</sup> ; gray	<a href="http://www.wago.com/731-609">www.wago.com/731-609</a>
	Nr. articol: 231-239/001-000 THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 7.5 mm; 9-pole; gray	<a href="http://www.wago.com/231-239/001-000">www.wago.com/231-239/001-000</a>
	Nr. articol: 231-839/001-000 THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 7.5 mm; 9-pole; gray	<a href="http://www.wago.com/231-839/001-000">www.wago.com/231-839/001-000</a>

### Produse compatibile

#### check

	Nr. articol: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red	<a href="http://www.wago.com/210-136">www.wago.com/210-136</a>
	Nr. articol: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable; yellow	<a href="http://www.wago.com/210-137">www.wago.com/210-137</a>
	Nr. articol: 231-662 Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm <sup>2</sup> ; light gray	<a href="http://www.wago.com/231-662">www.wago.com/231-662</a>















#### Insulation stop

	Nr. articol: 231-673 Insulation stop; 0.08-0.2 mm <sup>2</sup> / 0.2 mm <sup>2</sup> "s"; white	<a href="http://www.wago.com/231-673">www.wago.com/231-673</a>
	Nr. articol: 231-674	


















Supus modificărilor.

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Aveți întrebări despre produsele noastre?  
Vă stăm la dispoziție pentru preluarea apelului la +40 (0) 31 421 85 68.















	Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; light gray	<a href="http://www.wago.com/231-674">www.wago.com/231-674</a>
	<b>Nr. articol: 231-675</b> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; dark gray	<a href="http://www.wago.com/231-675">www.wago.com/231-675</a>
<b>tools</b>		
	<b>Nr. articol: 210-657</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	<a href="http://www.wago.com/210-657">www.wago.com/210-657</a>
	<b>Nr. articol: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
	<b>Nr. articol: 231-131</b> Push-button; loose	<a href="http://www.wago.com/231-131">www.wago.com/231-131</a>
	<b>Nr. articol: 231-159</b> Operating tool; natural	<a href="http://www.wago.com/231-159">www.wago.com/231-159</a>
	<b>Nr. articol: 231-231</b> Combination operating tool; red	<a href="http://www.wago.com/231-231">www.wago.com/231-231</a>
	<b>Nr. articol: 231-291</b> Operating tool; loose; red	<a href="http://www.wago.com/231-291">www.wago.com/231-291</a>
<b>General accessories</b>		
	<b>Nr. articol: 231-668</b> Lockout caps; for covering unused clamping units; gray	<a href="http://www.wago.com/231-668">www.wago.com/231-668</a>
<b>Marking accessories</b>		
	<b>Nr. articol: 210-331/750-202</b> 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	<a href="http://www.wago.com/210-331/750-202">www.wago.com/210-331/750-202</a>
	<b>Nr. articol: 210-332/750-020</b> 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	<a href="http://www.wago.com/210-332/750-020">www.wago.com/210-332/750-020</a>
<b>ferrule</b>		
	<b>Nr. articol: 216-101</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-101">www.wago.com/216-101</a>
	<b>Nr. articol: 216-102</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-102">www.wago.com/216-102</a>
	<b>Nr. articol: 216-103</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-103">www.wago.com/216-103</a>
	<b>Nr. articol: 216-104</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-104">www.wago.com/216-104</a>
	<b>Nr. articol: 216-106</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-106">www.wago.com/216-106</a>

Supus modificărilor.

	<b>Nr. articol: 216-121</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-121">www.wago.com/216-121</a>
	<b>Nr. articol: 216-122</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-122">www.wago.com/216-122</a>
	<b>Nr. articol: 216-123</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-123">www.wago.com/216-123</a>
	<b>Nr. articol: 216-124</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-124">www.wago.com/216-124</a>
	<b>Nr. articol: 216-131</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-131">www.wago.com/216-131</a>
	<b>Nr. articol: 216-132</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-132">www.wago.com/216-132</a>
	<b>Nr. articol: 216-141</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-141">www.wago.com/216-141</a>
	<b>Nr. articol: 216-142</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-142">www.wago.com/216-142</a>
	<b>Nr. articol: 216-143</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-143">www.wago.com/216-143</a>
	<b>Nr. articol: 216-144</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-144">www.wago.com/216-144</a>
	<b>Nr. articol: 216-151</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-151">www.wago.com/216-151</a>
	<b>Nr. articol: 216-152</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-152">www.wago.com/216-152</a>
	<b>Nr. articol: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Nr. articol: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Nr. articol: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
	<b>Nr. articol: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Nr. articol: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-221">www.wago.com/216-221</a>

Supus modificărilor.



	<b>Nr. articol: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-222">www.wago.com/216-222</a>
	<b>Nr. articol: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-223">www.wago.com/216-223</a>
	<b>Nr. articol: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-224">www.wago.com/216-224</a>
	<b>Nr. articol: 216-241</b> 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	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<b>Nr. articol: 216-242</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/216-242">www.wago.com/216-242</a>
	<b>Nr. articol: 216-243</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/216-243">www.wago.com/216-243</a>
	<b>Nr. articol: 216-244</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/216-244">www.wago.com/216-244</a>
	<b>Nr. articol: 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>
	<b>Nr. articol: 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>Nr. articol: 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>Nr. articol: 216-284</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/216-284">www.wago.com/216-284</a>
	<b>Nr. articol: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<b>Nr. articol: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
	<b>Nr. articol: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
	<b>Nr. articol: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
<b>assembling</b>		
	<b>Nr. articol: 209-147</b> Self-tapping screw	<a href="http://www.wago.com/209-147">www.wago.com/209-147</a>

Supus modificărilor.



Nr. articol: 231-194  
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

[www.wago.com/231-194](http://www.wago.com/231-194)



Nr. articol: 231-195  
Screw with nut; M2x12; for fixing element

[www.wago.com/231-195](http://www.wago.com/231-195)



Nr. articol: 231-295  
Screw with nut

[www.wago.com/231-295](http://www.wago.com/231-295)

## Descărcări Documentation

### Additional Information

Technical explanations	Apr 3, 2019	pdf 3,6 MB	Descărcare
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## CAD/CAE-Data

### CAD data

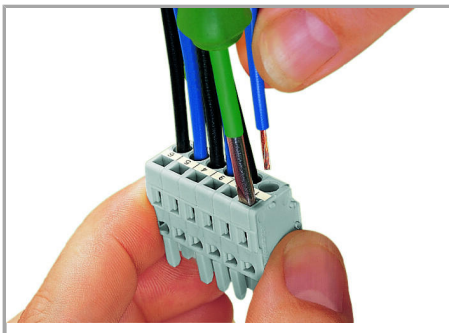
2D/3D Models 231-209/031-000	URL	Descărcare
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### CAE data

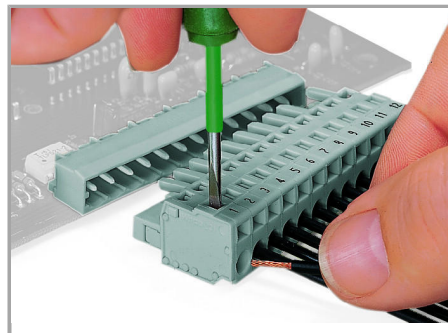
EPLAN Data Portal 231-209/031-000	URL	Descărcare
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## Installation Notes

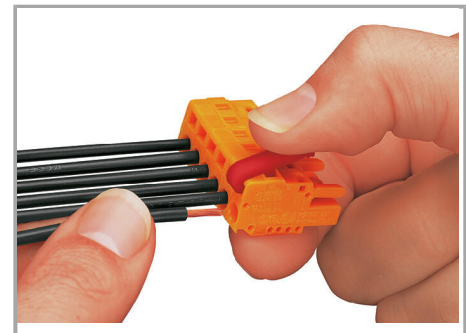
### Inserting a conductor



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

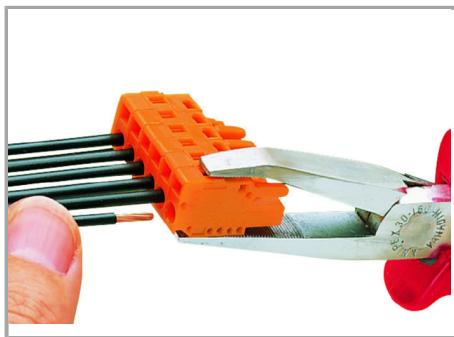


Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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

Supus modificărilor.



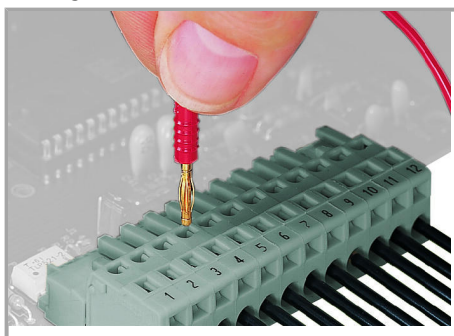
Inserting a conductor via operating tool.

### Coding



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

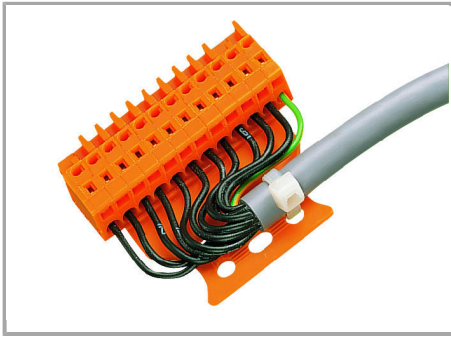
### Testing



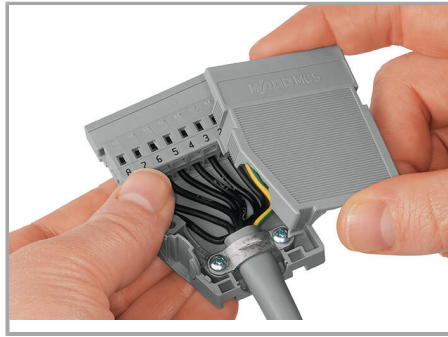
Testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP®.

### Assembly

Supus modificărilor.

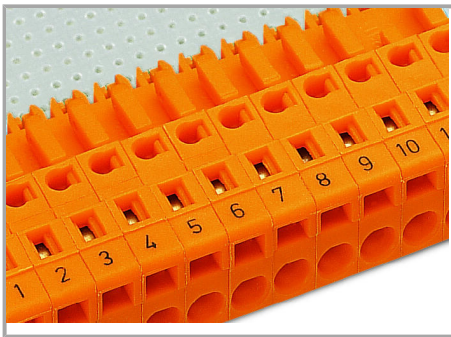


Male connector with strain relief plate



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

### Marking



Labeling via direct marking or self-adhesive strips.

### Familie de produse

<i>MCS</i> MIDI Classic

Afișare globală produse din familie.

Supus modificărilor.