

Data sheet | Item number: 231-120/031-000

1-conductor female plug; clamping collar; 2.5 mm²; Pin spacing 5 mm; 20-pole



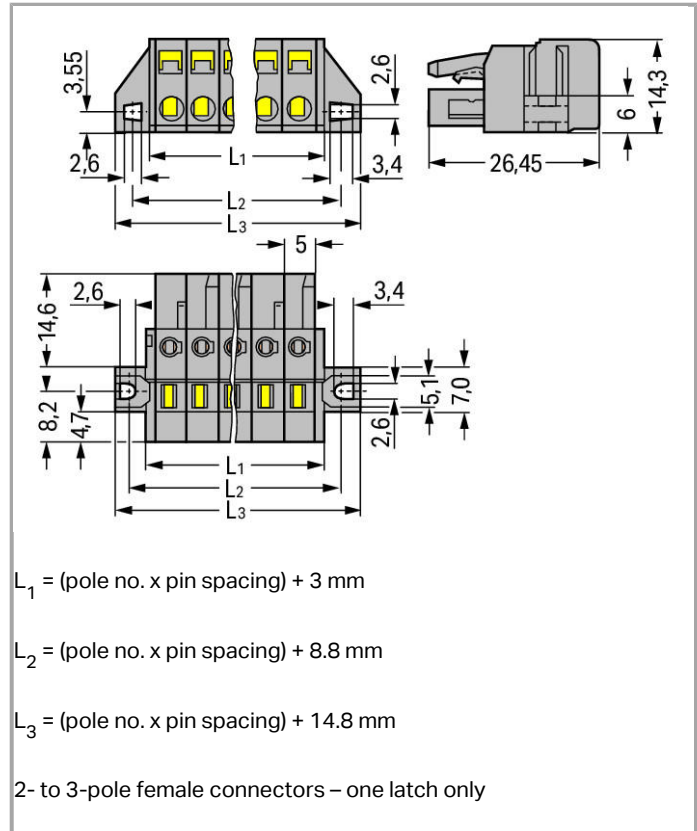
www.wago.com/231-120/031-000



RoHS Compliant

BOMcheck.net

Color: ■



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

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Gold-plated or partially gold-plated contact surfaces

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated 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
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	16 A
Legend (ratings)	(III / 2) ≙ 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 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®
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 ferrule with plastic collar	0.25 ... 1.5 mm ²
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 2.5 mm ²
Strip length	8 ... 9 mm / 0.31 ... 0.35 Inch
No. of poles	20
Total number of connection points	20
Total number of potentials	20
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

Geometrical Data

Pin spacing	5 mm (0.197 inch)
Width	114.8 mm / 4.52 inch
Height	14.3 mm / 0.563 inch
Depth	26.45 mm / 1.041 inch

Mechanical data

Mounting type	Mounting flange
Type of mounting	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
Insulating 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
Fire load	0.512 MJ
Weight	35.776 g

Environmental Requirements

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

Country of origin	DE
GTIN	4044918342889
Customs Tariff No.	85366990990
Product Group	3 (Multi Conn. System)



Approvals / Certificates

Country specific Approvals


Logo	Approval	Certificate name
	CB DEKRA Certification B.V.	NL-39756
	CSA DEKRA Certification B.V.	1466354
	CSA DEKRA Certification B.V.	1466354



Ship Approvals

Logo	Approval	Certificate name
	ABS American Bureau of Shipping	14-HG1241537-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAE000016Z

UL-Approvals




Logo	Approval	Certificate name
	UL Underwriters Laboratories Inc.	E45172
	UR UL International Germany GmbH	E45171
	UR UL International Germany GmbH	E45171



















Compatible products


















General accessories


















	Item no.: 231-668 Lockout caps; for covering unused clamping units	www.wago.com/231-668
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Jumper

	Item no.: 231-902 Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm	www.wago.com/231-902
	Item no.: 231-903 Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	www.wago.com/231-903
	Item no.: 231-905 Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	www.wago.com/231-905
	Item no.: 231-907	

	Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	www.wago.com/231-907
	Item no.: 231-910 Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	www.wago.com/231-910
assembling		
	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
ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	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.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	www.wago.com/216-106
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-121
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	www.wago.com/216-122
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-123
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-131
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-142

	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
	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	www.wago.com/216-144
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-204
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-242
	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	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	www.wago.com/216-244
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-262
	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	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight	www.wago.com/216-264

	crimped; acc. to DIN 46228, Part 4/09.90	
	Item no.: 216-284 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	www.wago.com/216-284
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322
check		
	Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable	www.wago.com/210-136
	Item no.: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable	www.wago.com/210-137
	Item no.: 231-661 Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing	www.wago.com/231-661
Insulation stop		
	Item no.: 231-670 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s"	www.wago.com/231-670
	Item no.: 231-671 Insulation stop; 0.25 - 0.5 mm ²	www.wago.com/231-671
	Item no.: 231-672 Insulation stop; 0.75 - 1 mm ²	www.wago.com/231-672
tools		
	Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material	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.: 210-657 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short	www.wago.com/210-657
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	www.wago.com/210-720
	Item no.: 231-131 Push-button; for female and male connectors; loose	www.wago.com/231-131
	Item no.: 231-159	

	Operating tool; for male and female connectors with CAGE CLAMP®; of Series 231, 232, 721, 722, 723, 731, 732	www.wago.com/231-159
	Item no.: 231-231 Combination operating tool; for male and female connectors with CAGE CLAMP®	www.wago.com/231-231
	Item no.: 231-291 Operating tool; for male and female connectors with CAGE CLAMP®; loose	www.wago.com/231-291
	Item no.: 280-432 Operating tool; of insulating material; 2-way	www.wago.com/280-432
	Item no.: 280-433 Operating tool; of insulating material; 3-way	www.wago.com/280-433
	Item no.: 280-434 Operating tool; of insulating material; 4-way	www.wago.com/280-434
	Item no.: 280-435 Operating tool; of insulating material; 5-way	www.wago.com/280-435
	Item no.: 280-436 Operating tool; of insulating material; 6-way	www.wago.com/280-436
	Item no.: 280-437 Operating tool; of insulating material; 7-way	www.wago.com/280-437
	Item no.: 280-438 Operating tool; of insulating material; 8-way	www.wago.com/280-438
	Item no.: 280-440 Operating tool; of insulating material; 10-way	www.wago.com/280-440

Downloads smartDATA

CAD data

	URL	Download
3D Download 231-120/031-000		

Subject to changes.

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