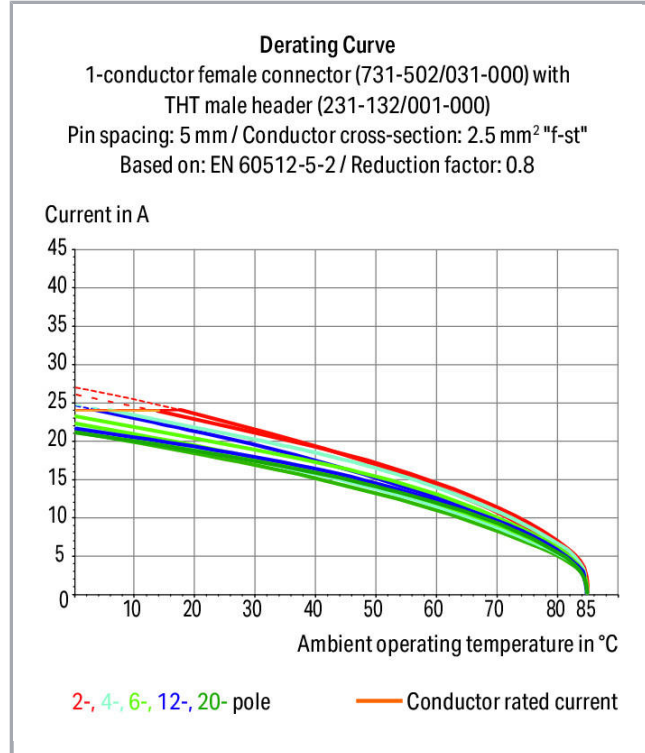


Data sheet | Item number: 731-519/031-000

1-conductor female plug; angled; clamping collar; 2.5 mm²; Pin spacing 5 mm; 19-pole; 2,50 mm²; gray

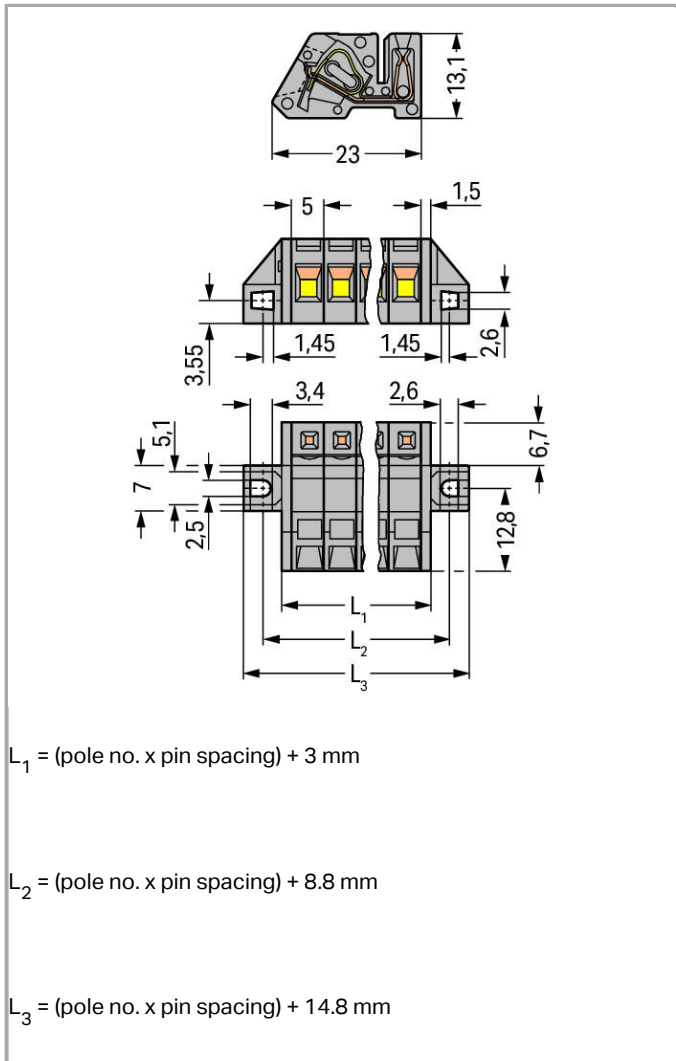
www.wago.com/731-519/031-000



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

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Item description

- Universal connection for all conductor types
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- Mounting adapter allows versions with snap-in mounting feet to be DIN-rail mounted
- Easy conductor termination, even when halves are mated

Safety information 1:

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

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

Data

Electrical data

Ratings per IEC/EN 60664-1

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	12 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	UL 1059

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	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®
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

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



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	7 ... 8 mm / 0.28 ... 0.31 inch
No. of poles	19
Total number of connection points	19
Total number of potentials	19
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	90°

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	109.8 mm / 4.323 inch
Height	13.1 mm / 0.516 inch
Depth	23 mm / 0.906 inch

Mechanical data

Design	angled; mountable
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	0.537 MJ
Weight	27.6 g

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

Environmental Requirements



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

Commercial data


Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	PL
GTIN	4044918575355
Customs Tariff No.	85366990990

Approvals / Certificates


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

Ship Approvals

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

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1977	E45171

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



UL
Underwriters Laboratories Inc.

UL 1059

20190731-
E45172

Counterpart






Item no. 231-619
1-conductor male connector; 2.5 mm²; Pin spacing 5 mm; 19-pole; 2,50 mm²; gray










www.wago.com/231-619

Compatible products

ferrule

	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 / 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.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 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.: 216-143	

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

	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	www.wago.com/216-151
	Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	
	Item no.: 216-152	www.wago.com/216-152
	Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	
	Item no.: 216-221	www.wago.com/216-221
	Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	
	Item no.: 216-222	www.wago.com/216-222
	Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	
	Item no.: 216-223	www.wago.com/216-223
	Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	
	Item no.: 216-224	www.wago.com/216-224
	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	
	Item no.: 216-241	www.wago.com/216-241
	Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	
	Item no.: 216-242	www.wago.com/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.: 216-243	www.wago.com/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.: 216-244	www.wago.com/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; black	
	Item no.: 216-246	www.wago.com/216-246
	Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	
	Item no.: 216-262	www.wago.com/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.: 216-263	www.wago.com/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.: 216-264	www.wago.com/216-264
	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; black	
	Item no.: 216-284	www.wago.com/216-284
	Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight	

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

crimped; acc. to DIN 46228, Part 4/09.90; black

Item no.: 216-321

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

www.wago.com/216-321

Item no.: 216-322

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

www.wago.com/216-322

Test Accessories**Item no.: 210-136**

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

www.wago.com/210-136

**Item no.: 210-137**

Test plug; 2.3 mm Ø; with 500 mm cable; yellow

www.wago.com/210-137

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

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; gray

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; gray

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; gray

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; gray

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; gray

www.wago.com/231-910

Marking accessories**Item no.: 210-332/500-202**

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/210-332/500-202

Item no.: 210-332/500-204

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/210-332/500-204

Item no.: 210-332/500-205

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/210-332/500-205

Item no.: 210-332/500-206

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/210-332/500-206

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

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Item no.: 210-833
Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

www.wago.com/210-833

Item no.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

www.wago.com/210-834

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



Item no.: 231-295
Screw with nut

www.wago.com/231-295

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.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short

www.wago.com/210-657



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

www.wago.com/210-720

Item no.: 231-131
Push-button; loose

www.wago.com/231-131

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

Item no.: 231-291
Operating tool; loose; red

www.wago.com/231-291

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

www.wago.com/280-432

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

www.wago.com/280-433

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

www.wago.com/280-434

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

www.wago.com/280-435

Item no.: 280-436

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



Operating tool; made of insulating material; 6-way

www.wago.com/280-436

Item no.: 280-437

Operating tool; made of insulating material; 7-way

www.wago.com/280-437

Item no.: 280-438

Operating tool; made of insulating material; 8-way

www.wago.com/280-438

Item no.: 280-440

Operating tool; made of insulating material; 10-way

www.wago.com/280-440

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

pdf
3.6 MB

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CAD/CAE-Data

CAD data

2D/3D Models 731-519/031-000

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CAE data

EPLAN Data Portal 731-519/031-000

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Installation Notes

Application

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



Angled female plug – a male header with straight solder pins is used for horizontal PCB mounting in narrow housings.

Application



Angled female connector used as through-panel connector.

Termination ports and operating slots are located outside the housing – panel thickness up to 2 mm.

Product family

[*<i>MCS</i>* MIDI Classic](#)

[Learn more about the product family.](#)

[Show all products from the family](#)

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