

Data sheet | Item number: 721-310/031-000

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

www.wago.com/721-310/031-000

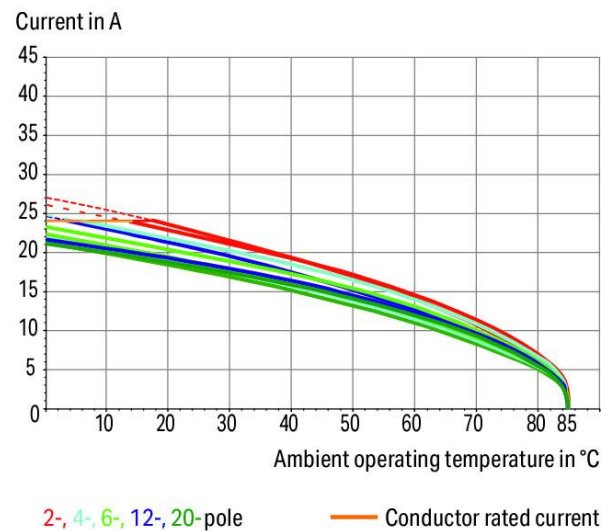


 Picture differs from the item.

Color: 

Derating Curve

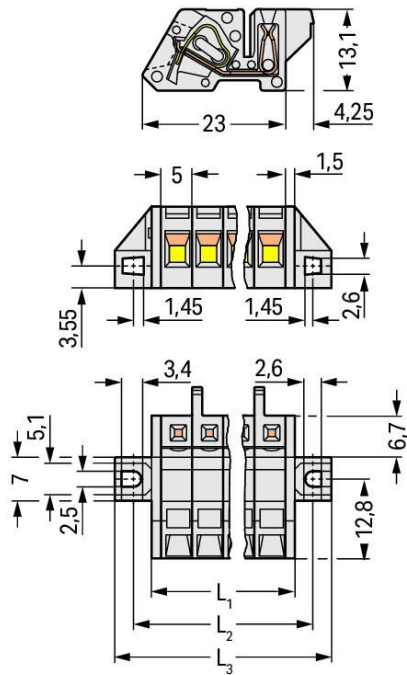
1-conductor female connector (721-302/031-000) with
THT male header (721-162/001-000)
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8



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

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Dimensions in mm

$L_1 = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$

$L_2 = (\text{pole no.} \times \text{pin spacing}) + 8.8 \text{ mm}$

$L_3 = (\text{pole no.} \times \text{pin spacing}) + 14.8 \text{ mm}$

Item description

- Universal connection for all conductor types
- 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-35 rail mounted
- Easy conductor termination, even when halves are mated
- 100% protected against mismating

Data

Notes

Safety information

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

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or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Variants:

Other pole numbers
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	12 A
Legend (ratings)	(III / 2) $\hat{=}$ 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 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

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



Connection data

Connection points	10
Total number of potentials	10
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation parallel to conductor entry
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	7 ... 8 mm / 0.28 ... 0.31 inches
Pole number	10
Conductor entry direction to mating direction	90 °

Physical data

Pin spacing	5 mm / 0.197 inches
Width	29.8 mm / 1.173 inches
Height	13.1 mm / 0.516 inches
Depth	27.25 mm / 1.073 inches

Mechanical Data

Variable coding	No
Housing sheet thickness	0.6 ... 1.2 mm / 0.024 ... 0.047 inches
Design	angled; mountable
Mounting type	Mounting flange
Mounting type	Panel mounting
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor

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



Mismating protection	Yes
Plugging without loss of pin spacing	No
Locking of plug-in connection	none

Material data

Note (material data)	Information on material specifications can be found here
Color	light gray
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	0.333 MJ
Weight	14.9 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	PL
GTIN	4044918574082
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

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

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1869876-PDA
	BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
	DNV DNV GL SE	-	TAE000016Z

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Counterpart


Item no. 721-610

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 100% protected against mismatching; 2,50 mm²; light gray

www.wago.com/721-610


Item no. 721-140/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 5 mm; 10-pole; light gray

www.wago.com/721-140/001-000

Optional accessories

Jumpers

Jumper


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


Item no.: 231-902

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

www.wago.com/231-902

Tool

Operating tool


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.: 231-131

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

www.wago.com/231-131


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

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**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**Ferrule**

Ferrule

**Item no.: 216-106**Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-106**Item no.: 216-107**Ferrule; Sleeve for 4 mm² / AWG 12; uninsulated; electro-tin platedwww.wago.com/216-107**Item no.: 216-108**Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-108**Item no.: 216-109**Ferrule; Sleeve for 10 mm² / AWG 8; uninsulated; electro-tin platedwww.wago.com/216-109**Item no.: 216-110**Ferrule; Sleeve for 16 mm² / AWG 6; uninsulated; electro-tin plated; brown metallicwww.wago.com/216-110**Item no.: 216-123**Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-123**Item no.: 216-122**Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-122**Item no.: 216-124**Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin platedwww.wago.com/216-124**Item no.: 216-142**Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92www.wago.com/216-142**Item no.: 216-132**Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin platedwww.wago.com/216-132

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	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
	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.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
	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.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	www.wago.com/216-207
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-209 Ferrule; Sleeve for 10 mm ² / AWG 8; insulated; electro-tin plated; red	www.wago.com/216-209
	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; silver-colored	www.wago.com/216-144
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	www.wago.com/216-208
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-210 Ferrule; Sleeve for 16 mm ² / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	www.wago.com/216-210
	Item no.: 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	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 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-243	

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

 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; www.wago.com/216-243
acc. to DIN 46228, Part 4/09.90; red

 **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; www.wago.com/216-263
acc. to DIN 46228, Part 4/09.90; red

 **Item no.: 216-246**
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-246

 **Item no.: 216-266**
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-266

 **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.: 216-286**
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue www.wago.com/216-286

 **Item no.: 216-287**
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; www.wago.com/216-287
acc. to DIN 46228, Part 4/09.90; gray

 **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

 **Item no.: 216-288**
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; www.wago.com/216-288
acc. to DIN 46228, Part 4/09.90; yellow

 **Item no.: 216-289**
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; www.wago.com/216-289
acc. to DIN 46228, Part 4/09.90; red

 **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; light turquoise www.wago.com/216-322

 **Item no.: 216-267**
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; www.wago.com/216-267
acc. to DIN 46228, Part 4/09.90; gray

Strain relief

Strain relief housing



Item no.: 232-610
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 10-pole; gray www.wago.com/232-610

Cover

Cover

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

**Item no.: 231-668**

Lockout caps; for covering unused clamping units; gray

www.wago.com/231-668**Marking accessories**

Marking strip

**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.: 210-332/500-206**

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**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.: 210-332/500-204**

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**Testing and measuring**

Testing accessories

**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 graywww.wago.com/231-661**Downloads****Documentation****Additional Information**

2019 Apr 3

pdf
2.1 MB

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CAD/CAE-Data**CAD data**

2D/3D Models 721-310/031-000

URL

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CAE data

EPLAN Data Portal 721-310/031-000

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 721-310/031-000	URL	Download
1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray		

Installation Notes

Application



Multilevel arrangement in a distributed electronic housing

Application

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



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

Product family

MCS MIDI

[Show all products from the family](#)

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