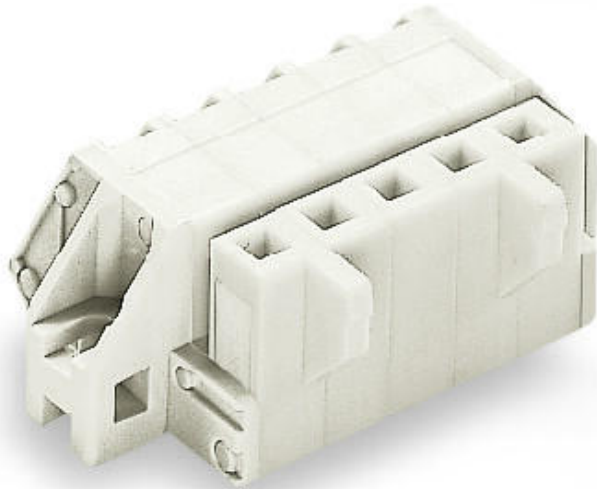


Data sheet | Item number: 721-307/031-000

1-conductor female plug; angled; 100% protected against mismatching;
clamping collar; 2.5 mm²; Pin spacing 5 mm; 7-pole; 2,50 mm²; light gray



721-307_031-000



RoHS
Compliant ✓

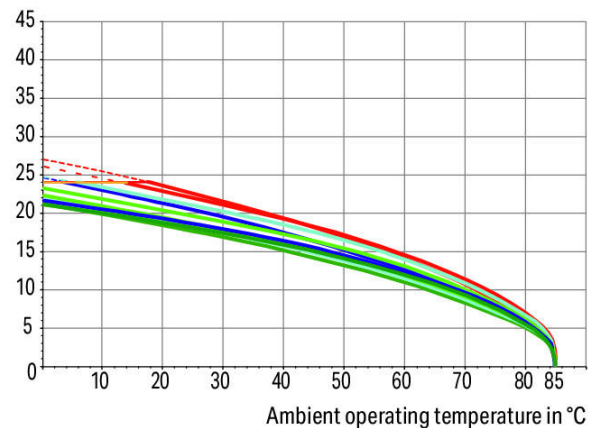
BOMcheck.net

Color:

Derating Curve

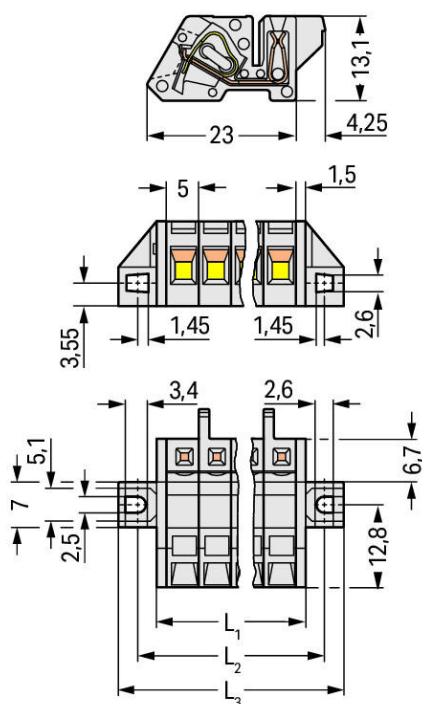
1-conductor female connector (721-302/031-000) with
THT male header (721-162/001-000)
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



2-, 4-, 6-, 12-, 20-pole

— Conductor rated current



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

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

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

Item description

- Universal connection for all conductor types
- 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
- 100 % protected against mismating

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.

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	12 A

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

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 mm² / 28 12 AWG
Fine-stranded conductor	0.08 2.5 mm² / 28 12 AWG
Fine-stranded conductor with ferrule with plastic collar	0.25 1.5 mm²
Fine-stranded conductor with ferrule without plastic collar	0.25 2.5 mm²
Strip length	7 8 mm / 0.28 0.31 inch
Total number of connection points	7
Total number of potentials	7
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	90°
No. of poles	7

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	26.8 mm / 1.055 inch
Height	13.1 mm / 0.516 inch
Depth	27.25 mm / 1.073 inch

Mechanical data

Gehäuseblechstärke	0.6 1.2 mm / 0.024 0.047 inch
Design	angled, mountable
Mounting type	Mounting flange
Type of mounting	Panel mounting

Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector connection type	for conductors
Mismating protection	Yes

Material Data

Color	light 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	0.246 MJ
Weight	10.852 g

Environmental Requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
Country of origin	PL
GTIN	4044918574051
Customs Tariff No.	85366990990

Approvals / Certificates

Radio-Approvals

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

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA DEKRA Certification B.V.	C22.2	1466354
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

Ship Approvals

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

Other Approvals

Logo	Approval	Additional Approval Text	Certificate name
------	----------	--------------------------	------------------

	UL Underwriters Laboratories Inc.	UL 1059	E45172
	UR UL International Germany GmbH	UL 1977	E45171

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	E45172- 19911118
	UR UL International Germany GmbH	UL 1977	E45171

Compatible products

ferrule			
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated		216-106
	Item no.: 216-107 Ferrule; Sleeve for 4 mm ² / AWG 12; uninsulated; electro-tin plated		216-107
	Item no.: 216-108 Ferrule; Sleeve for 6 mm ² / AWG 10; uninsulated; electro-tin plated		216-108
	Item no.: 216-109 Ferrule; Sleeve for 10 mm ² / AWG 8; uninsulated; electro-tin plated		216-109
	Item no.: 216-110 Ferrule; Sleeve for 16 mm ² / AWG 6; uninsulated; electro-tin plated		216-110
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated		216-121
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated		216-122

	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	216-123
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	216-124
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	216-131
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	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	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	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	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	216-144
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	216-151
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	216-152
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	216-207
	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	216-208
	Item no.: 216-209 Ferrule; Sleeve for 10 mm ² / AWG 8; insulated; electro-tin plated; red	216-209
	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	216-210
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	216-224
	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	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	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; red	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; black	216-244
	Item no.: 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	216-246
	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	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; red	216-263
	Item no.: 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	216-264
	Item no.: 216-266 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	216-266
	Item no.: 216-267 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-267
	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; black	216-284
	Item no.: 216-286 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	216-286
	Item no.: 216-287 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	216-287
	Item no.: 216-288 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	216-288
	Item no.: 216-289 Ferrule; Sleeve for 10 mm ² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	216-289
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	216-322
check		
	Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red	210-136

	Item no.: 210-137 Test plug; 2.3 mm Ø; with 500 mm cable; yellow	210-137
	Item no.: 231-661 Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm ² ; light gray	231-661
General accessories		
	Item no.: 231-668 Lockout caps; for covering unused clamping units; gray	231-668
	Item no.: 721-607 1-conductor male connector; 100% protected against mismatching; 2.5 mm ² ; Pin spacing 5 mm; 7-pole; 2,50 mm ² ; light gray	721-607
Strain relief plate		
	Item no.: 232-607 Strain relief housing; gray	232-607
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	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	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	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	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	231-910
tools		
	Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material	209-130
	Item no.: 231-131 Push-button; loose	231-131
	Item no.: 231-291 Operating tool; for male and female connectors with CAGE CLAMP®; loose; red	231-291
	Item no.: 280-432 Operating tool; of insulating material; 2-way	280-432
	Item no.: 280-433 Operating tool; made of insulating material; 3-way	280-433
	Item no.: 280-434 Operating tool; of insulating material; 4-way	280-434
	Item no.: 280-435 Operating tool; of insulating material; 5-way; gray	280-435



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

280-436



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

280-437



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

280-438



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

280-440

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

/500-202

210-332

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

/500-204

210-332

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

/500-205

210-332

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

/500-206

210-332



Item no.: 210-833

Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white

210-833



Item no.: 210-834

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

210-834

Downloads

Documentation

Additional Information

Technical explanations

Apr 3, 2019

pdf
3.6 MB

Download

CAD/CAE - Smart Data

CAD data

3D Download 721-307/031-000

URL

Download

EPLAN

EPLAN Data Portal

Download



Subject to changes.
