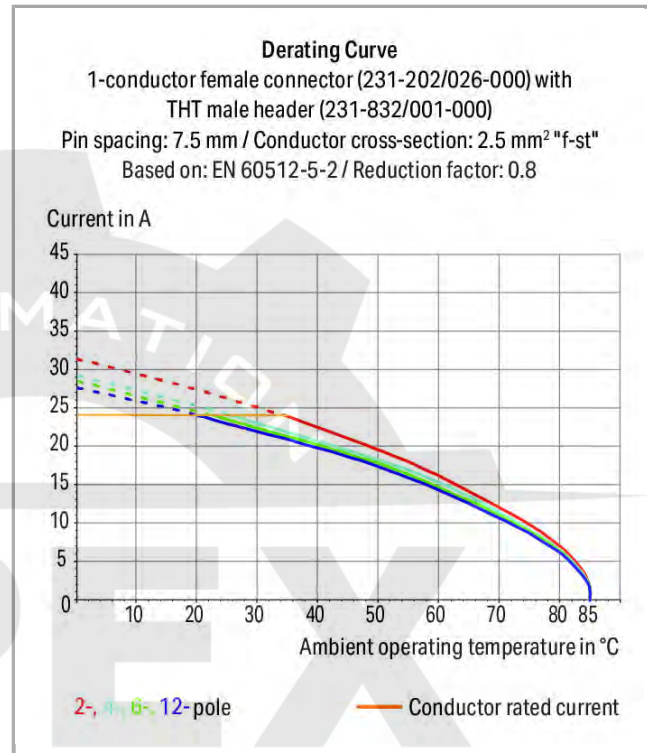


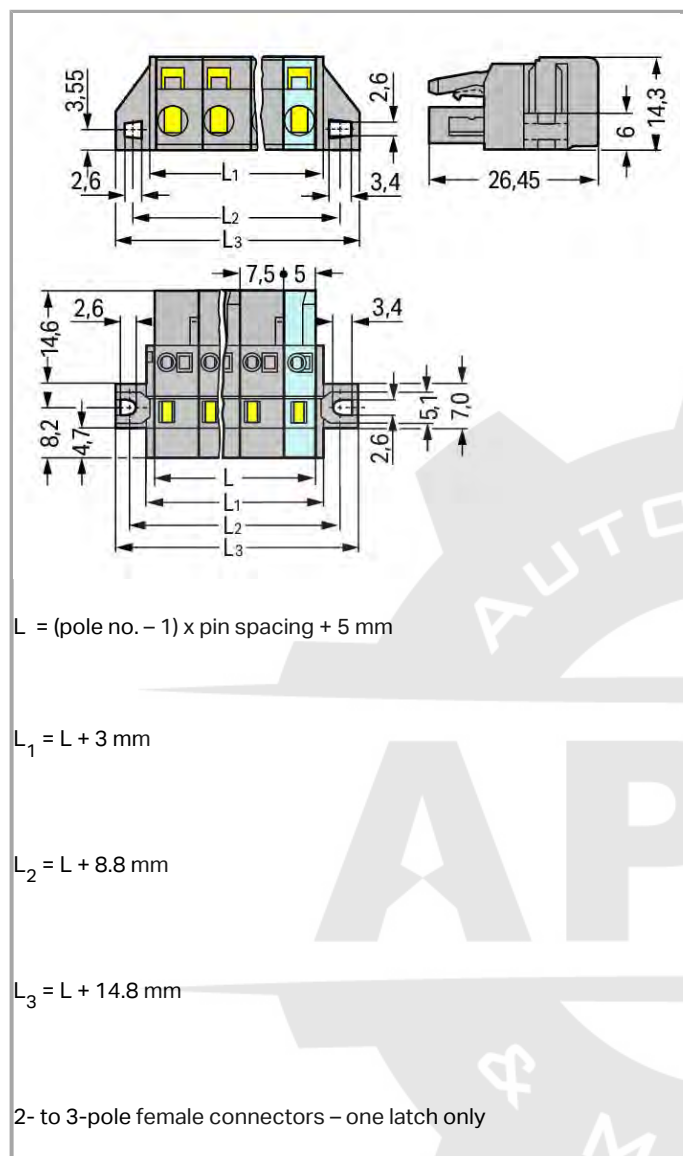
Data sheet | Item number: 231-211/031-000

1-conductor female plug; clamping collar; 2.5 mm²; Pin spacing 7.5 mm; 11-pole; 2,50 mm²; gray



231-211_031-000





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

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)	500 V
Rated impulse voltage (III / 3)	6 kV
Rated voltage (III / 2)	630 V
Rated impulse voltage (III / 2)	6 kV
Rated voltage (II / 2)	1000 V
Rated impulse voltage (II / 2)	6 kV
Rated current	16 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	8 9 mm / 0.31 0.35 inch
Total number of connection points	11
Total number of potentials	11
Number of connection types	1



Number of levels	1
Conductor entry direction to mating direction	0°
No. of poles	11

Geometrical Data

Pin spacing	7.5 mm / 0.295 inch
Width	89.8 mm / 3.535 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	0.4 MJ
Weight	23.607 g

Environmental Requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
Country of origin	DE
GTIN	4044918367448
Customs Tariff No.	85366990990

Approvals / Certificates

Radio-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	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
	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
	UR Underwriters Laboratories Inc.	UL 1977	E45171



UR
Underwriters Laboratories Inc.

UL 1059

E45172

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	E45171- 20010419

Compatible products

Marking accessories

	Item no.: 210-331/750-202 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	210-331 //50-202
	Item no.: 210-332/750-020 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	210-332 //50-020

assembling

	Item no.: 209-147 Self-tapping screw	209-147
	Item no.: 231-194 Self-tapping screw; B 2.2x13; fixing hole 1.8 mm Ø	231-194
	Item no.: 231-195 Screw with nut; M2x12; for fixing element	231-195
	Item no.: 231-295 Screw with nut	231-295

General accessories

	Item no.: 231-668 Lockout caps; for covering unused clamping units; gray	231-668
--	--	---------

ferrule

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	216-103
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated	216-106
	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.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	216-202

	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	216-204
	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.: 216-262 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.: 216-284 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.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	216-302
	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.: 231-662 Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm ² ; light gray	231-662
Insulation stop		
	Item no.: 231-673 Insulation stop; 0.08-0.2 mm ² / 0.2 mm ² "s"; white	231-673
	Item no.: 231-674 Insulation stop; 0.25 - 0.5 mm ² ; light gray	231-674
	Item no.: 231-675 Insulation stop; 0.75 - 1 mm ² ; dark gray	231-675
tools		
	Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short	210-657
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	210-720
	Item no.: 231-131 Push-button; loose	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; natural	231-159
	Item no.: 231-231 Combination operating tool; red	231-231
	Item no.: 231-291 Operating tool; for male and female connectors with CAGE CLAMP®; loose; red	231-291

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
------------------------	-------------	---------------	----------

CAD/CAE - Smart Data

CAD data

3D Download 231-211/031-000	URL	Download
-----------------------------	-----	----------

EPLAN

EPLAN Data Portal	Download
-------------------	----------



Subject to changes.
