1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; 1,50 mm²; black



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 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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UII	ner	ISIC	ns	ın	mm	

 $L = [(pole no./2) - 1] \times pin spacing + 5.2 mm$ 

Coding finger (red circle)

#### Item description

- Universal connection for all conductor types
- Unique, compact, double-row connector system for conductor cross-sections up to 1.5 mm<sup>2</sup>
- High-density, wire-to-board connections in very confined spaces
- Centered strain relief plate anchors conductors, while acting as convenient connection and disconnection handle. It also provides easy access to operating slots even when wired.
- Coding fingers provide 100% protection against mismating

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# 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 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)	80 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse voltage (III/2)	2.5 kV
Nominal voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) ≙ 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)	10 A
Rated voltage UL (Use Group C)	50 V
Rated current UL (Use Group C)	10 A

# Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V

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Rated current CSA (Use Group B)	10 A
Connection data	
Connection points	8
Total number of potentials	8
Number of connection types	1
Number of levels	2

#### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation perpendicular to conductor entry
Solid conductor	0.08 1.5 mm² / 28 16 AWG
Fine-stranded conductor	0.08 1.5 mm² / 28 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 1 mm²
Strip length	6 7 mm / 0.24 0.28 inches
Pole number	8
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	15.5 mm / 0.61 inches
Height	18.8 mm / 0.74 inches
Depth	16 mm / 0.63 inches

#### **Mechanical Data**

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes
Plugging without loss of pin spacing	No
Locking of plug-in connection	none

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#### **Material Data**

Note (material data)

Information on material specifications can be found here

Color	black
Material group	II
Insulation material	Glass fiber-reinforced polyamide (PA66 GF)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.067 MJ
Weight	4.3 g

## **Environmental requirements**

Limit temperature range	-60 +100 °C
Processing temperature	-35 +60 °C

#### Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL
GTIN	4045454696078
Customs tariff number	85366990990

### **Environmental Product Compliance**

RoHS Compliance Status	Compliant,No Exemption	

### Approvals / Certificates

General approvals

Certificate

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Logo	Approval	Additional Approval Text	name
	CCA	EN 61984	2169947.01
	DEKRA Certification B.V.		
	CCA	IEC 61984	NL-30980
	DEKRA Certification B.V.		
	CSA	C22.2	2315087
	DEKRA Certification B.V.		
	UR	UL 1059	E45172
	Underwriters Laboratories Inc.		

## Counterpart

Item no.713-1404 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; Pin	www.wago.com/713-1404
spacing 3.5 mm; 8-pole; black  Item no.713-1404/105-000/997-405  THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; in tapeand-reel packaging; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1404 /105-000/997-405
Item no.713-1424/105-000 THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1424 /105-000
Item no.713-1404/105-000 THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1404 /105-000
Item no.713-1424 THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1424
Item no.713-1424/105-000/997-405 THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; in tapeand-reel packaging; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1424 /105-000/997-405
Item no.713-1464 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; with orientation nose; Pin spacing 3.5 mm; 8-pole; black	www.wago.com/713-1464

## Optional accessories

#### Ferrule

Ferrule		
	Item no.: 216-101	1010 101
	Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-102	
	Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
	Item no.: 216-103	
	Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103

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Item no.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-123
Item no.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-122
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 1/08.92	www.wago.com/216-142
Item no.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
<b>Item no.: 216-121</b> Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
Item no.: 216-143 Ferrule; Sleeve for 1 mm² / 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 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
Item no.: 216-141 Ferrule; Sleeve for 0.5 mm² / 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 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
Item no.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
Item no.: 216-241 Ferrule; Sleeve for 0.5 mm² / 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 mm² / 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 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
Item no.: 216-221	

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Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20	AWG; insulated; electro-tin plated; white	www.wago.co	om/216-221
Item no.: 216-243 Ferrule; Sleeve for 1 mm² / AWG acc. to DIN 46228, Part 4/09.90;	6 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; red	www.wago.cc	om/216-243
Item no.: 216-263 Ferrule; Sleeve for 1 mm² / AWG acc. to DIN 46228, Part 4/09.90;	6 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; red	www.wago.cc	om/216-263
Item no.: 216-262 Ferrule; Sleeve for 0.75 mm² / 18 crimped; acc. to DIN 46228, Par	8 AWG; insulated; electro-tin plated; electrolytic copper; gastight t 4/09.90; gray	www.wago.co	om/216-262
Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / A	WG 24; insulated; electro-tin plated; yellow	www.wago.co	om/216-301
Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / A	WG 24; insulated; electro-tin plated; yellow	www.wago.co	om/216-321
Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 2	2 AWG; insulated; electro-tin plated; light turquoise	www.wago.co	om/216-322
Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 2:	2 AWG; insulated; electro-tin plated; light turquoise	www.wago.co	om/216-302
Tool			
Operating tool			
<b>Item no.: 210-647</b> Operating tool; Blade: 2.5 x 0.4 r	nm; with a partially insulated shaft; multicoloured	www.wago.co	om/210-647
<b>Item no.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 r	nm; with a partially insulated shaft	www.wago.co	om/210-719
Strain relief			
Strain relief plate			
Item no.: 713-126 Strain relief plate; for female cor	nnectors; 11 mm wide; 1 part; Pin spacing 3.5 mm; black	www.wago.co	om/713-126
Downloads			
Documentation			
Additional Information			
	2019 年4月3日	pdf 2.0 MB	Download

#### CAD/CAE-Data

CAD data

2D/3D Models 713-1104

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	URL	Download
CAE data		
ZUKEN Portal 713-1104	URL	Download
Environmental Draduat Compliance		
Environmental Product Compliance		
Compliance Search		
Environmental Product Compliance 713-1104	URL	Download
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; 1,50 mm²; black		
Installation Notes		
Conductor termination		
Inserting a conductor via (2.5 x 0.4) mm screwdriver.		
Locking system		
Lever as a lock – when closed, female connector is locked.		
Subject to changes. Please also observe the further product documentation!		

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Lever as a disconnection aid – when opened,	Screw interlock can only be disconnected	ed
female connector is disconnected. Rotating	using a tool.	
the lever lifts the female connector out of the male header.		
Coding		
	1	
Coding a famala connector buremoving	4	
Coding a female connector by removing coding finger(s).		
Installation		
	1	
Centered strain relief plate anchors	-	
conductors for easy disconnection.		
Product family		
Subject to changes. Please also observe the fu	urther product documentation	
Subject to charges, ricase also observe the fu	a case product documentation:	

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MCS MINI HD

Show all products from the family

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