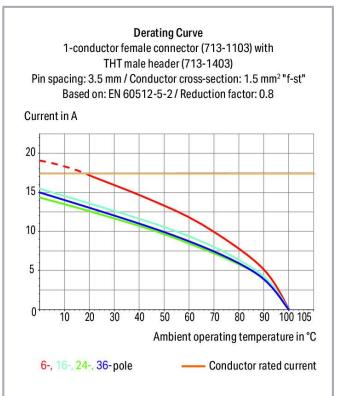
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; Screw flange; 1,50 mm²; black



www.wago.com/713-1104/107-000

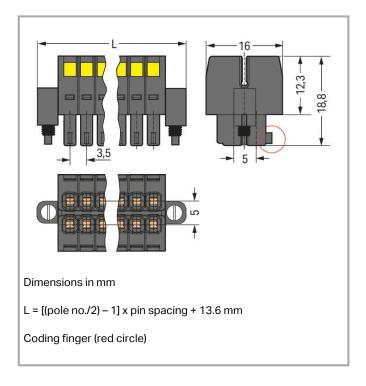




 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

www.wago.com/713-1104/107-000





## 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

# 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

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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 1059

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
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®	
-----------------------------------	--

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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	24.1 mm / 0.949 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	Screw flange

## **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

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Contact plating	Tin
Fire load	0.074 MJ
Weight	5 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	4045454806750
Customs tariff number	85366990990

## **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

## General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61984	NL-30980
KEMA	CCA DEKRA Certification B.V.	EN 61984	2169947.01
	CSA	C22.2	2315087



DEKRA Certification B.V.

UR UL 1059 E45172

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Underwriters Laboratories Inc.

## Counterpart

-
Militia.
- Carrier

#### Item no.713-1404/107-000

THT male header, 2-row;  $0.8 \times 0.8 \text{ mm}$  solder pin; straight; 100% protected against mismating; Threaded flange; Pin spacing 3.5 mm; 8-pole; black

www.wago.com/713-1404 /107-000



#### Item no.713-1404/117-000

THR male header, 2-row;  $0.8 \times 0.8$  mm solder pin; straight; 100% protected against mismating; Threaded flange; Pin spacing 3.5 mm; 8-pole; black

www.wago.com/713-1404 /117-000



#### Item no.713-1404/117-000/997-406

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 /117-000/997-406



#### Item no.713-1424/107-000

THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Threaded flange; Pin spacing 3.5 mm; 8-pole; black

www.wago.com/713-1424 /107-000



#### Item no.713-1424/117-000/997-406

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 /117-000/997-406



## Item no.713-1424/117-000

THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Threaded flange; Pin spacing 3.5 mm; 8-pole; black

www.wago.com/713-1424 /117-000



#### Item no.713-1464/107-000

THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; with orientation nose; Threaded flange; Pin spacing 3.5 mm; 8-pole; black

www.wago.com/713-1464 /107-000

## Optional accessories

#### Strain relief

Strain relief plate



## Item no.: 713-126

Strain relief plate; for female connectors; 11 mm wide; 1 part; Pin spacing 3.5 mm; black

www.wago.com/713-126

## Ferrule

#### Ferrule

Item no.: 216-101

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

www.wago.com/216-101

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1	<b>Item no.: 216-102</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
1	Item no.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
1	Item no.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-123
1	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-122
1	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
1	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
1	<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
1	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
1	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
I	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
1	<b>Item no.: 216-152</b> 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
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
1	<b>Item no.: 216-151</b> Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
1	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
Å	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight	www.wago.com/216-242

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	crimped; acc. to DIN 46228, Part 4/09.90; gray	
	ltem 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 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-263 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
	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
	ltem no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	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.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302
Stickers w	ith operating instructions	
Stickers	with operating instructions	
	Item no.: 210-493 Stickers for operating instructions	www.wago.com/210-493
ГооІ		
Operatin	g tool	
	<b>Item no.: 210-647</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-647
	Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719

# Downloads

## Documentation

## Additional Information

Technical Section 2019 Apr 3 pdf Download

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Technical explanations 2.0 MB

## CAD/CAE-Data

**CAD** data

2D/3D Models 713-1104/107-000 URL Download

CAE data

ZUKEN Portal 713-1104/107-000 URL Download

## **Environmental Product Compliance**

## Compliance Search

Environmental Product Compliance 713-1104/107-000

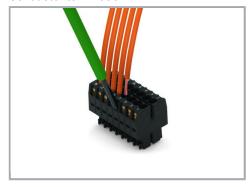
URL Download

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm;

8-pole; 100% protected against mismating; Screw flange; 1,50 mm²; black

## **Installation Notes**

#### Conductor termination



Inserting a conductor via  $(2.5 \times 0.4)$  mm screwdriver.

## Locking system

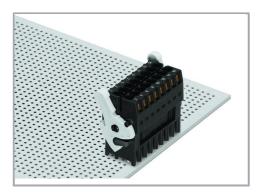
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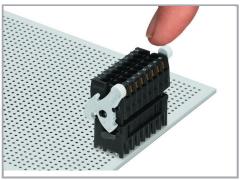
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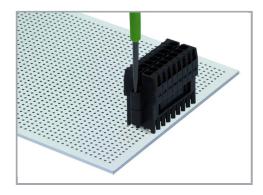




Lever as a lock – when closed, female connector is locked.

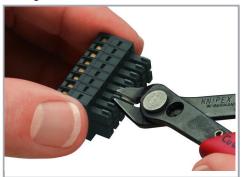


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

# Coding



Coding a female connector by removing coding finger(s).

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

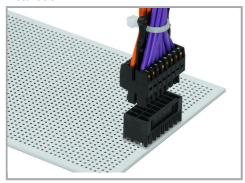
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# W/AGO

## Installation



Centered strain relief plate anchors conductors for easy disconnection.

## **Product family**

MCS MINI HD
Show all products from the family

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