

Data Sheet | Item Number: 713-1109/037-047

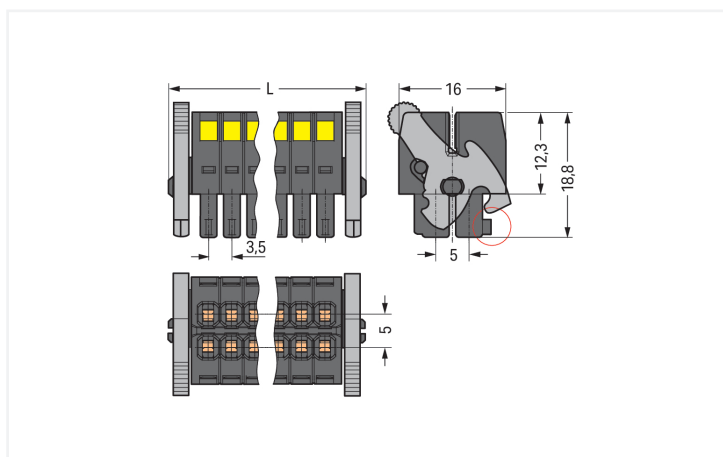
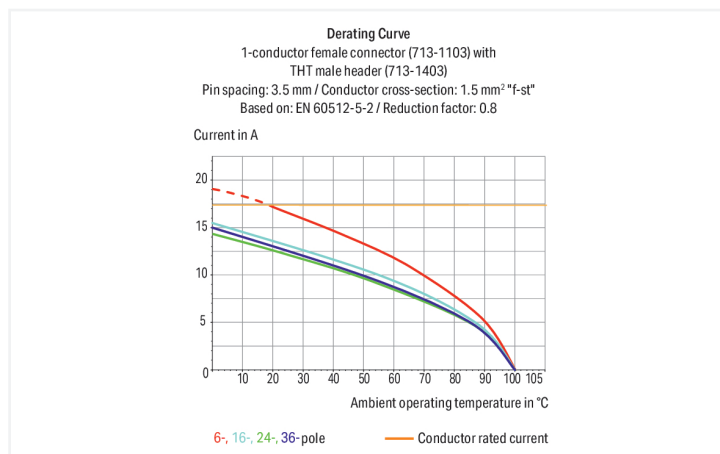
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 18-pole; 100% protected against mismatching; Levers; direct marking; 1,50 mm²; black

<https://www.wago.com/713-1109/037-047>



Color: ■ black

Similar to illustration



Dimensions in mm

$L = [(pole\ no./2) - 1] \times pin\ spacing + 12.2\ mm$ Coding finger (red circle)

Female connector, 713 Series, operating tool

This female connector (item number 713-1109/037-047) provides hassle-free electrical installations. Conductors can only be connected to this female connector if their strip length is between 6 and 7 mm. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our trusted universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. The item's dimensions are (40 x 18.8 x 16) mm (width x height x depth). Depending on the conductor type, this female connector is suitable for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

Tin is used for coating the contact surfaces.



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 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		80 V	160 V	250 V
Rated impulse withstand voltage		2.5 kV	2.5 kV	2.5 kV
Rated current		10 A	10 A	10 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	50 V	-
Rated current		10 A	10 A	-
Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	-	-
Rated current		10 A	-	-

Connection Data		
Clamping units	18	
Total number of potentials	18	
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	18	
Conductor entry direction to mating direction	0°	

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	40.2 mm / 1.583 inches
Height	16.5 mm / 0.65 inches
Depth	22.3 mm / 0.878 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
Locking of plug-in connection	Locking lever

Material data

Note (material data)	Information on material specifications can be found here
Color	black
Material group	II
Insulation material (main housing)	Glass fiber-reinforced polyamide (PA66 GF)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.14 MJ
Weight	10.2 g

Environmental requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821177098
Customs tariff number	85366990990

Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION



Environmental Product Compliance	
REACH Candidate List Substance	Perfluorobutane sulfonic acid (PFBS) and its salts
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	49e672af-7b5a-415c-801a-427a05e23c70
SCIP notification number (Belgium)	dfb8836a-44d1-48f2-86ca-f2105c7e420f
SCIP notification number (Bulgaria)	095177bb-1dd5-416a-9f36-21b50449dd75
SCIP notification number (Czech Republic)	cc23e7ed-47c9-4ce3-95d6-c7cbcad9c578
SCIP notification number (Denmark)	95e9a77e-d9bc-46df-a538-931a37f569cc
SCIP notification number (Finland)	8c85e5f8-b74b-4cec-a4ca-ba69e9907ecd
SCIP notification number (France)	48591a8f-d750-4202-916b-e59b24ca4907
SCIP notification number (Germany)	10ffdd63-4061-40c9-8cdb-cb2291af15b8
SCIP notification number (Hungary)	237c4d71-9151-4be8-896c-973eea817a4d
SCIP notification number (Italy)	132063ea-0f80-496f-837d-65ffdad14d64
SCIP notification number (Netherlands)	ab550502-36f3-4445-a690-1a70b59a0747
SCIP notification number (Poland)	f76dae7b-ec4f-4455-a59c-946e94a4160a
SCIP notification number (Romania)	752e97d1-0d5e-46c5-b7c9-bfad67b92447
SCIP notification number (Sweden)	8cfaabdc-117b-4c92-81c7-bf5c73471cd8

Approvals / Certificates

General approvals

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-102427
CSA CSA Group	C22.2	2315087
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-133740



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004422.000

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
713-1109/037-047

Download icon

Documentation

Additional Information

Technical Section
03.04.2019
pdf
2027.26 KB

Download icon



1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 713-1429/116-000/997-407
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 18-pole; black



Item No.: 713-1429/116-000
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



Item No.: 713-1409/116-000/997-407
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 18-pole; black



Item No.: 713-1409/116-000
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



Item No.: 713-1429/037-000
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



Item No.: 713-1409/037-000
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-131
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-132
Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



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



Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



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



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



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



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



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



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



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored



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



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



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



1.2.1.1 Ferrule



Item No.: 216-143
Ferrule; Sleeve for 1 mm² / AWG 18; unin-
sulated; electro-tin plated; electrolytic
copper; gastight crimped; acc. to DIN
46228, Part 1/08.92



Item No.: 216-123
Ferrule; Sleeve for 1 mm² / AWG 18; unin-
sulated; electro-tin plated; silver-colored

1.2.2 Stickers with operating instructions

1.2.2.1 Stickers with operating instructions



Item No.: 210-493
Stickers for operating instructions

1.2.3 Strain relief

1.2.3.1 Strain relief plate



Item No.: 713-127
Strain relief plate; for female connectors;
25 mm wide; 1 part; Pin spacing 3.5 mm;
black

1.2.4 Tool

1.2.4.1 Operating tool



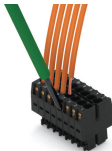
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft



Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft; multicoloured

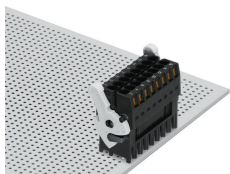
Installation Notes

Conductor termination

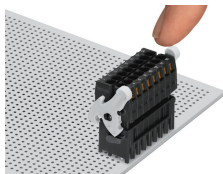


Inserting a conductor via (2.5 x 0.4) mm
screwdriver.

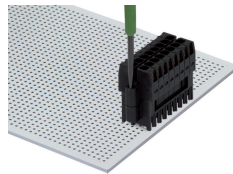
Locking system



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

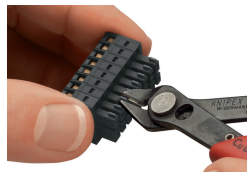


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

Coding

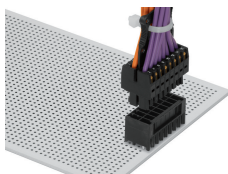


Coding a female connector by removing coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.