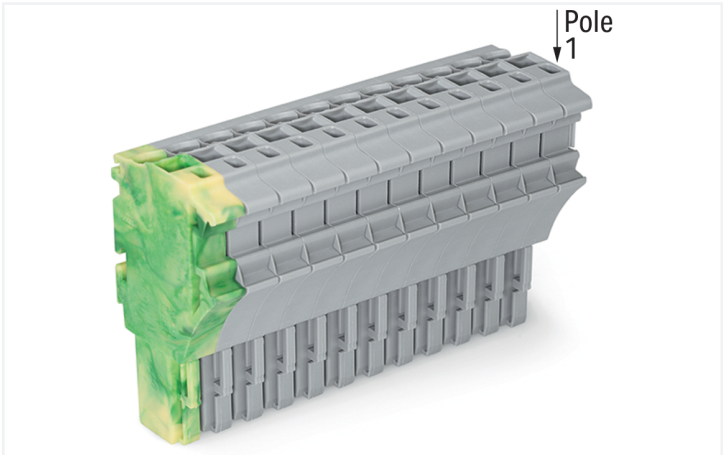




Color: gray/green-yellow Similar to illustration

Female connector, 2022 Series, green-yellow/gray

Enjoy seamless electrical installations with this female connector (item number 2022-114/000-037). Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the properties of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. This pluggable rail-mount terminal block has a rated voltage of 690 V and can handle currents up to 24 A. Strip lengths must be between 10 mm and 12 mm when connecting conductors to this female connector. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without the need for tools—all thanks to its pluggable design. The dimensions are 72.8 x 40.5 x 22.4 mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm². There are fourteen clamping points available that you can use to connect fourteen different potentials / fourteen poles. The green-yellow/gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this female connector/socket. Conductors made of copper can be connected thanks to front-entry wiring.

Notes			
Safety Information		According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.	

Electrical data							
Ratings per		IEC/EN 61984		Approvals per		UL 1059	
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	600 V	600 V	-
Nominal voltage	690 V	-	-	Rated current	20 A	20 A	-
Rated impulse withstand voltage	6 kV	-	-				
Rated current	24 A	-	-				
Current at conductor cross-section (max.) mm²	32 A	-	-				
Approvals per		CSA 22.2 No 158					
Use group	B	C	D				
Rated voltage	-	600 V	-				
Rated current	-	20 A	-				



Connection data			
Clamping units	14	Connection 1	
Total number of potentials	14	Connection technology	Push-in CAGE CLAMP®
		Actuation type	Operating tool
		Connectable conductor materials	Copper
		Nominal cross-section	2.5 mm²
		Solid conductor	0.25 ... 4 mm² / 22 ... 12 AWG
		Solid conductor; push-in termination	0.75 ... 4 mm² / 18 ... 12 AWG
		Fine-stranded conductor	0.25 ... 4 mm² / 22 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm² / 22 ... 14 AWG
		Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm² / 18 ... 14 AWG
		Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
		Strip length	10 ... 12 mm / 0.39 ... 0.47 inches
		Pole number	14
		Wiring direction	Front-entry wiring

Physical data		
Width		72.8 mm / 2.866 inches
Height		40.5 mm / 1.594 inches
Depth		22.4 mm / 0.882 inches
Module width		5.2 mm / 0.205 inches

Mechanical data		
Variable coding		Yes
Marking level		Side marking
Anti-rotation protection		Yes

Plug-in connection		
Contact type (pluggable connector)		Female connector/socket
Connector (connection type)		for conductor
Mismating protection		No
Plugging without loss of pin spacing		Yes

Material data		
Note (material data)		Information on material specifications can be found here
Color		gray/green-yellow
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Fire load		0.885 MJ
Weight		48.8 g



Environmental requirements		
Processing temperature	-35 ... +85 °C	
Continuous operating temperature	-60 ... +105 °C	
Environmental Testing		
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06	
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04	
Spectrum/Mounting location	Service life test, Category 1, Class A/B	
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard	
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz	
Acceleration	0.101g (highest test level used for all axes)	
Test duration per axis	10 min.	
Test directions	X, Y and Z axes	
Monitoring of contact faults and interruptions	Passed	
Voltage drop measurement before and after each axis	Passed	
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard	
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz	
Acceleration	0.572g (highest test level used for all axes)	
Test duration per axis	5 h	
Test directions	X, Y and Z axes	
Extended testing: Monitoring of contact faults and interruptions	Passed	
Extended testing: Voltage drop measurement before and after each axis	Passed	
Shock test	Test passed according to Section 10 of the standard	
Shock pulse form	Half sine	
Acceleration	5g (highest test level used for all axes)	
Shock duration	30 ms	
Number of shocks (per axis)	3 pos. und 3 neg.	
Test directions	X, Y and Z axes	
Extended testing: Monitoring of contact faults and interruptions	Passed	
Extended testing: Voltage drop measurement before and after each axis	Passed	
Vibration and shock stress for rolling stock equipment	Passed	

Commercial data	
Product Group	18 (X-COM-System)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454913090
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 8.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates					
General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2 No. 158	2437422	Railway WAGO GmbH & Co. KG	-	Z00004392.000

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2022-114/000-037	

Documentation			
Bid Text			
2022-114/000-037	17.05.2019	xml 4.21 KB	
2022-114/000-037	14.05.2019	docx 15.50 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2022-114/000-037	EPLAN Data Portal 2022-114/000-037
	WSCAD Universe 2022-114/000-037
	ZUKEN Portal 2022-114/000-037



1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



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.: 216-242
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.: 216-243
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.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-284
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-286
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.1.2 Insulation stop

1.1.2.1 Insulation stop



Item No.: 2002-171
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



Item No.: 2002-172
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; dark gray

1.1.3 Locking system

1.1.3.1 Locking system



Item No.: 2022-151
Locking lever; gray



Item No.: 2022-152
Locking lever; orange

1.1.4 Marking

1.1.4.1 Label



Item No.: 210-805
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; white



Item No.: 210-805/000-002
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; yellow



1.1.4.2 Marker



Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.4.3 Marking strip



Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white



Item No.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

1.1.5 Protective warning marker

1.1.5.1 Cover



Item No.: 2002-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.6 Screwless end stop

1.1.6.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.7 Strain relief

1.1.7.1 Strain relief plate



Item No.: 734-430
Strain relief plate; for female and male connectors; 1 part; gray

1.1.8 Tool

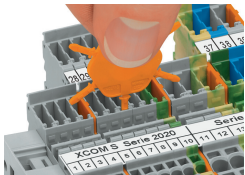
1.1.8.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.