

Data Sheet | Item Number: 2000-559

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; gray

<https://www.wago.com/2000-559>



Color: ■ gray

Similar to illustration

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

Nominal voltage (III/3)	500 V
Rated impulse withstand voltage (III / 3)	6 kV
Rated current	13.5 A
Legend (ratings)	(III / 3) \triangleq Overvoltage category III / Pollution degree 3

Ratings per UL

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group C)	300 V
Rated current UL (Use Group C)	10 A

Approvals per

CSA 22.2 No 158

Use group	B	C	D
Rated voltage	300 V	300 V	-
Rated current	10 A	10 A	-

General information

Wiring direction	Side-entry wiring
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Connection Data

Clamping units	9
Total number of potentials	9

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm ²
Solid conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm ² / 24 ... 18 AWG

Connection 1

Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm ² / 20 ... 18 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	9 ... 11 mm / 0.35 ... 0.43 inches
Pole number	9
Wiring direction	Side-entry wiring

Physical data

Width	33 mm / 1.3 inches
Module width	3.5 mm / 0.138 inches

Mechanical data

Marking level	Center/side marking
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Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.329 MJ
Weight	17.4 g

Environmental requirements

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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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

Environmental Testing



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	
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143394628
Customs tariff number	85366990990

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-14-11-51
eCl@ss 9.0	27-14-11-51
ETIM 9.0	EC002021
ETIM 10.0	EC002021
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	2130762	Railway WAGO GmbH & Co. KG	-	Railway Ready

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 2000-559	↓

Documentation

Bid Text			
2000-559	19.02.2019	xml 3.43 KB	↓
2000-559	07.08.2018	docx 14.97 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models
2000-559

CAE data

EPLAN Data Portal
2000-559

ZUKEN Portal
2000-559

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.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.1.2 Marking

1.1.2.1 Marker



Item No.: 793-3501
WMB marking card; as card; plain; snap-on type; white

Item No.: 2009-113/000-006
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue

Item No.: 2009-113/000-007
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray

Item No.: 2009-113/000-023
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green



Item No.: 2009-113/000-017
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green

Item No.: 2009-113/000-012
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange

Item No.: 2009-113/000-005
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red

Item No.: 2009-113/000-024
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet



Item No.: 2009-113
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

Item No.: 2009-113/000-002
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow

1.1.2.2 Marking strip



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

1.1.3 Strain relief

1.1.3.1 Strain relief plate

Item No.: 734-329

Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray

1.1.4 Test and measurement

1.1.4.1 Testing accessories



Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

1.1.5 Tool

1.1.5.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item No.: 210-648

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

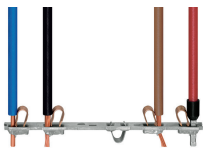


Item No.: 210-647

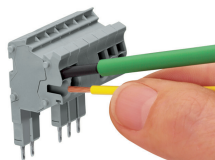
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

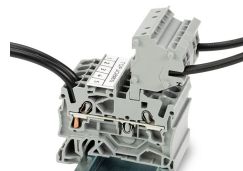


All conductor types at a glance



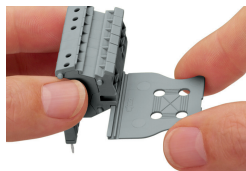
Conductor termination via:

- Operating tool for fine-stranded conductors without ferrules
- Push-in connection of solid conductors



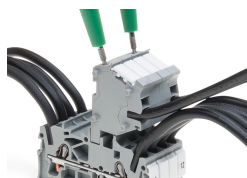
The modular TOPJOB® S connectors also connect conductors of the same size as the terminal blocks being used.

Strain relief



Snapping on a strain relief plate.

Testing



TOPJOB® S Connectors with a 2 mm Ø test socket for testing voltage via 2-pole voltage tester