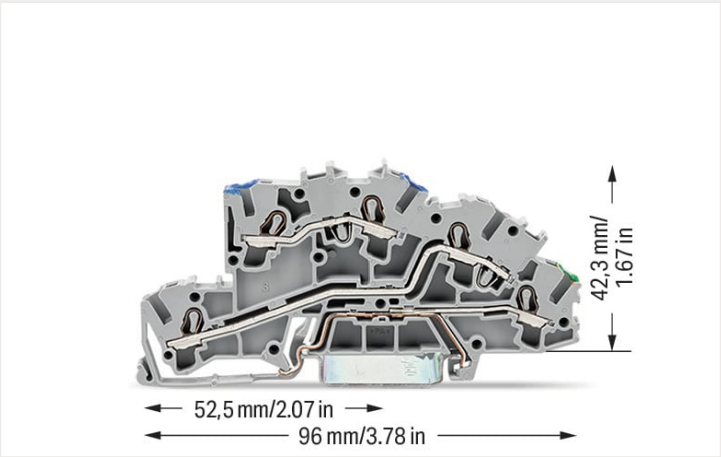
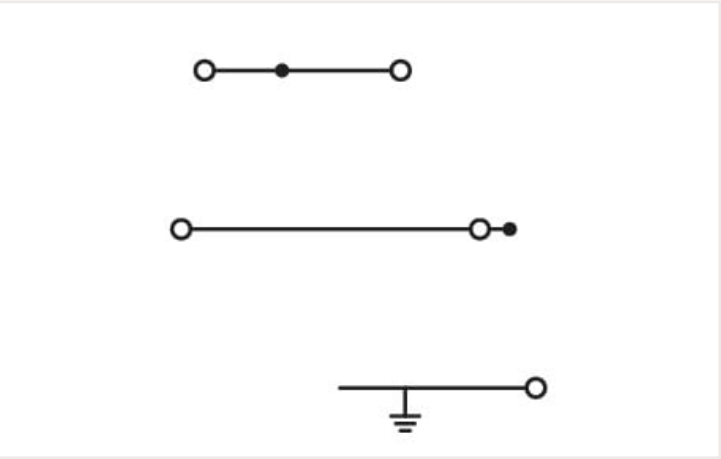
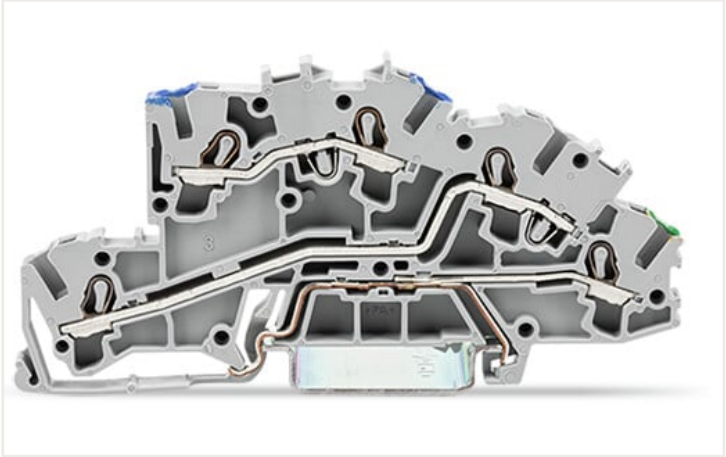




Color: gray



Similar to illustration

Electrical data			
Ratings per IEC/EN		Ratings per IEC/EN 2	
Ratings (note)	Potential – ground	Ratings (note) 2	Potential – ground
Nominal voltage (III/3)	250 V	Rated voltage (III/3) 2	250 V
Rated impulse voltage (III/3)	4 kV	Rated surge voltage (III/3) 2	4 kV
Rated current	24 A	Rated current 2	32 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3		

Ratings per IEC/EN 3		Power loss	
Ratings (note) 3	Potential – potential	Power loss, per pole (potential)	0.7661 W
Rated voltage (III/3) 3	400 V	Rated current I _N for specified power loss	24 A
Rated surge voltage (III/3) 3	6 kV	Resistance value for specified, current-dependent power loss	0.00133 Ω
Rated current 3	24 A		

Connection data

Connection points	5
Total number of potentials	3
Number of levels	3

Connection 1

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
Wiring direction	Front-entry wiring

Physical data

Width	5.2 mm / 0.205 inches
Height	96 mm / 3.78 inches
Depth from upper-edge of DIN-rail	42.3 mm / 1.665 inches

Mechanical Data

Potential marking	N/L/PE
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material Data

Note (material data)	Information on material data can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.245 MJ
Weight	16.3 g

Environmental requirements

Processing temperature	-35 ... +85 °C
------------------------	----------------

Commercial data

Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-25
eCl@ss 9.0	27-14-11-25
ETIM 8.0	EC001329
ETIM 7.0	EC001329
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918925617
Customs tariff number	85369010000



Approvals and certificates

General approvals



Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 60947	71-113530
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7828

Approvals for marine applications



Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112 (E9)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 2003-7646



Documentation

Additional Information
Technical Section

pdf
2142.18 KB



Bid Text			
2003-7646	29.04.2019	xml 4.16 KB	
2003-7646	29.04.2019	docx 14.92 KB	



CAD/CAE-Data

CAD data
2D/3D Models 2003-7646



CAE data
EPLAN Data Portal 2003-7646
WSCAD Universe 2003-7646
ZUKEN Portal 2003-7646



1 Compatible products

1.1 Required accessories

1.1.1 End plate

1.1.1.1 End plate



Item no.: 2003-7692

End and intermediate plate; 0.8 mm thick; orange

1.2 Optional accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item no.: 210-196

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item no.: 210-198

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item no.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item no.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item no.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item no.: 210-115

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



Item no.: 210-112

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



Item no.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 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.: 216-246

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

1.2.3 Installation

1.2.3.1 Cover



Item no.: 709-156

Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.2.3.2 Cover carrier



Item no.: 709-169

Cover carrier; Type 3; gray

1.2.3.3 Mounting accessories



Item no.: 2009-304

Busbar carrier; not suitable for use as end stop; for DIN 35 rail; 1.5 mm thick; blue



Item no.: 2009-305

Busbar carrier; with end stop function and detachable separator plate; for DIN 35 rail; 7.5 mm thick; blue

1.2.4 Insulation stop

1.2.4.1 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

1.2.5 Jumper

1.2.5.1 Jumper



Item no.: 2002-400

Continuous jumper; 2-way; insulated; light gray



Item no.: 2002-423/000-006

Continuous jumper; from 1 to 3; insulated; blue



Item no.: 2002-423

Continuous jumper; from 1 to 3; insulated; light gray



Item no.: 2002-423/000-005

Continuous jumper; from 1 to 3; insulated; red



Item no.: 2002-406/020-000

Delta jumper; insulated; light gray



Item no.: 2002-410/000-006

Jumper; 10-way; insulated; blue



Item no.: 2002-410

Jumper; 10-way; insulated; light gray



Item no.: 2002-410/000-005

Jumper; 10-way; insulated; red



Item no.: 2002-402/000-006

Jumper; 2-way; insulated; blue



Item no.: 2002-402

Jumper; 2-way; insulated; light gray



Item no.: 2002-402/000-005

Jumper; 2-way; insulated; red



Item no.: 2002-403/000-006

Jumper; 3-way; insulated; blue



Item no.: 2002-403

Jumper; 3-way; insulated; light gray



Item no.: 2002-403/000-005

Jumper; 3-way; insulated; red



Item no.: 2002-404/000-006

Jumper; 4-way; insulated; blue



Item no.: 2002-404

Jumper; 4-way; insulated; light gray



Item no.: 2002-404/000-005

Jumper; 4-way; insulated; red



Item no.: 2002-405/000-006

Jumper; 5-way; insulated; blue



Item no.: 2002-405

Jumper; 5-way; insulated; light gray



Item no.: 2002-405/000-005

Jumper; 5-way; insulated; red



Item no.: 2002-406/000-006

Jumper; 6-way; insulated; blue



Item no.: 2002-406

Jumper; 6-way; insulated; light gray



Item no.: 2002-406/000-005

Jumper; 6-way; insulated; red



Item no.: 2002-407/000-006

Jumper; 7-way; insulated; blue

1.2.5.1 Jumper

**Item no.: 2002-407**

Jumper; 7-way; insulated; light gray

**Item no.: 2002-407/000-005**

Jumper; 7-way; insulated; red

**Item no.: 2002-408/000-006**

Jumper; 8-way; insulated; blue

**Item no.: 2002-408**

Jumper; 8-way; insulated; light gray

**Item no.: 2002-408/000-005**

Jumper; 8-way; insulated; red

**Item no.: 2002-409/000-006**

Jumper; 9-way; insulated; blue

**Item no.: 2002-409**

Jumper; 9-way; insulated; light gray

**Item no.: 2002-409/000-005**

Jumper; 9-way; insulated; red

**Item no.: 2002-440**

Jumper; from 1 to 10; insulated; light gray

**Item no.: 2002-433**

Jumper; from 1 to 3; insulated; light gray

**Item no.: 2002-434**

Jumper; from 1 to 4; insulated; light gray

**Item no.: 2002-435**

Jumper; from 1 to 5; insulated; light gray

**Item no.: 2002-436**

Jumper; from 1 to 6; insulated; light gray

**Item no.: 2002-437**

Jumper; from 1 to 7; insulated; light gray

**Item no.: 2002-438**

Jumper; from 1 to 8; insulated; light gray

**Item no.: 2002-439**

Jumper; from 1 to 9; insulated; light gray

**Item no.: 2002-480**

Staggered jumper; 10-way; insulated; light gray

**Item no.: 2002-481**

Staggered jumper; 11-way; insulated; light gray

**Item no.: 2002-482**

Staggered jumper; 12-way; insulated; light gray

**Item no.: 2002-473/011-000**

Staggered jumper; 2-way; from 1 to 3; insulated; light gray

**Item no.: 2002-472**

Staggered jumper; 2-way; insulated; light gray

**Item no.: 2002-473**

Staggered jumper; 3-way; insulated; light gray

**Item no.: 2002-475/011-000**

Staggered jumper; 3-way; insulated; light gray

**Item no.: 2002-474**

Staggered jumper; 4-way; insulated; light gray

**Item no.: 2002-475**

Staggered jumper; 5-way; insulated; light gray

**Item no.: 2002-476**

Staggered jumper; 6-way; insulated; light gray

**Item no.: 2002-477**

Staggered jumper; 7-way; insulated; light gray

**Item no.: 2002-478**

Staggered jumper; 8-way; insulated; light gray

**Item no.: 2002-479**

Staggered jumper; 9-way; insulated; light gray

**Item no.: 2002-477/011-000**

Staggered jumper; insulated; light gray

**Item no.: 2002-479/011-000**

Staggered jumper; insulated; light gray

**Item no.: 2002-481/011-000**

Staggered jumper; insulated; light gray

**Item no.: 2002-405/011-000**

Star point jumper; 3-way; insulated; light gray

**Item no.: 210-103**

Wire commoning chain; insulated; black

**Item no.: 210-123**

Wire commoning chain; insulated; blue

1.2.6 Lock-out

1.2.6.1 Locking system

**Item no.: 2003-7300**

Lock-out; prevents reclosing of slide link; Snap-in type; for 2003 Series; orange

1.2.7 Marking

1.2.7.1 Group marker carrier

**Item no.: 2009-191**

Group marker carrier; gray

Item no.: 2009-192

Group marker carrier; gray

Item no.: 2009-193

Group marker carrier; gray

1.2.7.2 Marker

Item no.: 2009-145/000-006

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item no.: 2009-145/000-007

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item no.: 2009-145/000-023

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item no.: 2009-145/000-012

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item no.: 2009-145/000-005

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

Item no.: 2009-145/000-024

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item no.: 2009-145

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item no.: 2009-145/000-002

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

**Item no.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

Item no.: 248-501/000-007

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

Item no.: 248-501/000-023

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

Item no.: 248-501/000-017

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

Item no.: 248-501/000-005

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

Item no.: 248-501/000-024

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

Item no.: 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

**Item no.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

Item no.: 793-5501/000-006

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item no.: 793-5501/000-014

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; brown

Item no.: 793-5501/000-007

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray

**Item no.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item no.: 793-5501/000-017

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item no.: 793-5501/000-012

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item no.: 793-5501/000-005

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red

**Item no.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet

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.: 793-5501/000-002

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

Item no.: 793-501/000-006

WMB marking card; as card; not stretchable; plain; snap-on type; blue

**Item no.: 793-501/000-007**

WMB marking card; as card; not stretchable; plain; snap-on type; gray

Item no.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green

Item no.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green

Item no.: 793-501/000-012

WMB marking card; as card; not stretchable; plain; snap-on type; orange

**Item no.: 793-501/000-005**

WMB marking card; as card; not stretchable; plain; snap-on type; red

Item no.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet

Item no.: 793-501

WMB marking card; as card; not stretchable; plain; snap-on type; white

Item no.: 793-501/000-002

WMB marking card; as card; not stretchable; plain; snap-on type; yellow

**Item no.: 2009-115/000-006**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue

Item no.: 2009-115/000-007

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

Item no.: 2009-115/000-023

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item no.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

1.2.7.2 Marker



Item no.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item no.: 2009-115/000-005

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item no.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item no.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item no.: 2009-115/000-002

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.7.3 Marker carrier



Item no.: 2009-198

Adaptor; gray

1.2.7.4 Marking strip



Item no.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.8 Push-in type wire jumper

1.2.8.1 Jumper



Item no.: 2009-414

Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Item no.: 2009-414/000-005

Push-in type wire jumper; 1.5 mm²; insulated; 110 mm long; black



Item no.: 2009-416

Push-in type wire jumper; 1.5 mm²; insulated; 250 mm long; black



Item no.: 2009-414/000-006

Push-in type wire jumper; insulated; 110 mm long; black



Item no.: 2009-412

Push-in type wire jumper; insulated; 60 mm long; black

1.2.9 Test and measurement

1.2.9.1 Testing accessories



Item no.: 2009-174

Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray



Item no.: 210-136

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



Item no.: 2009-182

Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray



1.2.10 Tool

1.2.10.1 Operating tool



Item no.: 210-658
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



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



Item no.: 2009-309
Operating tool; Blades: 3.5 x 0.5 mm and 2.5 x 0.4 mm; for TOPJOB®S installation terminal blocks



Item no.: 2009-310
Operating tool; Blades: 3.5 x 0.5 mm and 5.5 x 0.8 mm; for TOPJOB®S installation terminal blocks; green

Installation notes

Conductor termination

All conductor types at a glance

Inserting a conductor via push-in termination.
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

Inserting a conductor via operating tool.
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.

Commoning

Adjacent Jumpers for Continuous Commoning (2002-400)

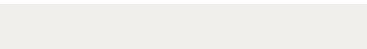
Commoning two potentials in one single jumper slot via extremely slim staggered jumpers.

Removing a staggered jumper:
Insert the operating tool between the staggered jumpers, then lift up the jumper.

Orient the staggered jumpers' red stripes on the inside.
Insert the staggered jumper and push down until it hits the backstop.

Orient the staggered jumpers' red stripes on the inside.
Insert the staggered jumper and push down until it hits the backstop.

Testing



Mounting busbars on busbar carriers: Insert busbar ends onto large busbar carriers (2009-305) or onto supply terminal blocks with an integrated busbar carrier.

The busbar transparent cover (Item No. 777-303) protects the busbar against accidental contact and makes it easy to see which terminal blocks are connected to the busbar.