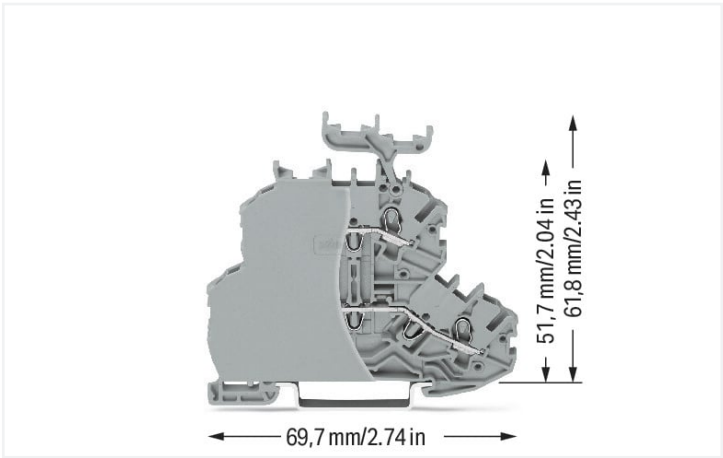
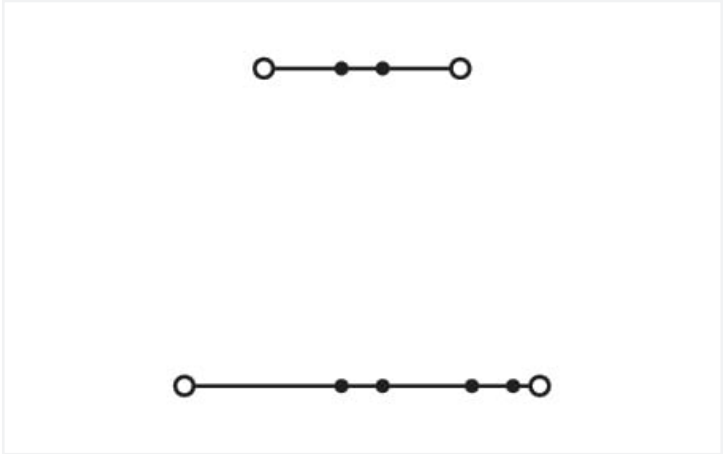
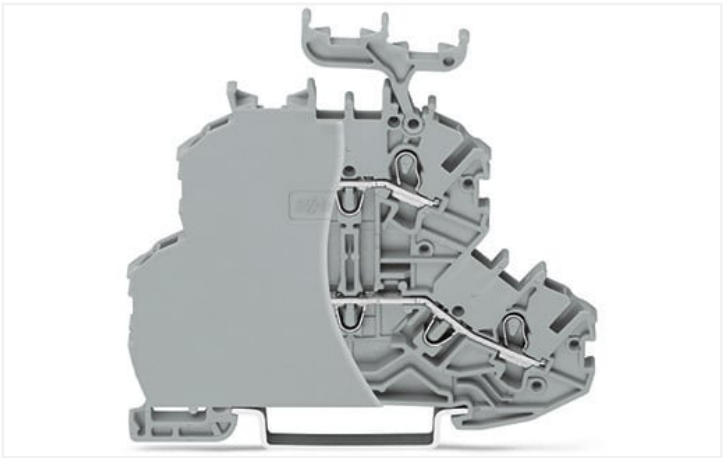


Data Sheet | Item Number: 2000-2231/099-000
Double-deck terminal block; Through/through terminal block; with end plate; L/L;
with marker carrier; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00
mm²; gray

<https://www.wago.com/2000-2231/099-000>



Color: ■ gray



Similar to illustration

Electrical data				
Ratings per		IEC/EN 60947-7-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		800 V	-	-
Rated surge voltage		8 kV	-	-
Rated current		13.5 A	-	-
Current at conductor cross-section (max.) mm²		16 A	-	-
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		15 A	15 A	-
Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		600 V	600 V	-
Rated current		10 A	10 A	-
Ex information		See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications"		
Reference hazardous areas				
Ratings per		ATEX: PTB 11 ATEX 1041 U / IECEx: PTB 11.0093U (Ex eb IIC Gb)		
Rated voltage EN (Ex e II)		550 V		
Rated current (Ex e II)		13 A		
Rated current (Ex e II) with jumper		12 A		



Power Loss	
Power loss, per pole (potential)	0.4338 W
Rated current I _N for specified power loss	13.5 A
Resistance value for specified, current-dependent power loss	0.00238 Ω

Connection data			
Connection points	4	Connection 1	
Total number of potentials	2	Connection technology	Push-in CAGE CLAMP®
Number of levels	2	Number of connection points	2
Number of jumper slots	4	Actuation type	Operating tool
Number of jumper slots (rank)	1	Connectable conductor materials	Copper
		Nominal cross-section	1 mm²
		Solid conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
		Solid conductor; push-in termination	0.5 ... 1.5 mm² / 20 ... 16 AWG
		Fine-stranded conductor	0.14 ... 1.5 mm² / 24 ... 16 AWG
		Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm² / 24 ... 18 AWG
		Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm² / 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
		Wiring direction	Front-entry wiring

Connection 2	
Number of connection points 2	2

Physical data	
Width	4.2 mm / 0.165 inches
Height	69.7 mm / 2.744 inches
Depth from upper-edge of DIN-rail	61.8 mm / 2.433 inches

Mechanical data	
Potential marking	L/L
Mounting type	DIN-35 rail
Marking level	Center/side marking

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.239 MJ
Weight	9.8 g



Environmental requirements	
Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data	
Product Group	22 (TOPJOB S)
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 8.0	EC000897
ETIM 7.0	EC000897
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821037651
Customs tariff number	85369010000

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
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7962	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125928	Railway WAGO GmbH & Co. KG	-	Railway Ready
UL Underwriters Laboratories Inc.	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	RU C-DE.AM02. B.00127/19 (Ex e IIC Gb U)



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
2000-2231/099-000

↓

Documentation

Additional Information

Technical Sectionpdf
2240.62 KB

↓

Bid Text

2000-2231/099-00019.02.2019xml
3.86 KB

↓

2000-2231/099-00007.08.2018docx
14.59 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models
2000-2231/099-000

↓

CAE data

EPLAN Data Portal
2000-2231/099-000

↓

WSCAD Universe
2000-2231/099-000

↓

ZUKEN Portal
2000-2231/099-000

↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored



Item No.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



1.1.2 Ferrule

1.1.2.1 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.: 216-243
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

1.1.3 Installation

1.1.3.1 Cover



Item No.: 709-156
Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent

1.1.3.2 Cover carrier



Item No.: 709-169
Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray

1.1.4 Jumper

1.1.4.1 Jumper



Item No.: 2001-406/020-000
Delta jumper; insulated; light gray



Item No.: 2001-410
Jumper; 10-way; insulated; light gray



Item No.: 2001-402
Jumper; 2-way; insulated; light gray



Item No.: 2001-403
Jumper; 3-way; insulated; light gray



Item No.: 2001-404
Jumper; 4-way; insulated; light gray



Item No.: 2001-405
Jumper; 5-way; insulated; light gray



Item No.: 2001-406
Jumper; 6-way; insulated; light gray



Item No.: 2001-407
Jumper; 7-way; insulated; light gray



Item No.: 2001-408
Jumper; 8-way; insulated; light gray



Item No.: 2001-409
Jumper; 9-way; insulated; light gray



Item No.: 2001-440
Jumper; from 1 to 10; insulated; light gray



Item No.: 2001-433
Jumper; from 1 to 3; insulated; light gray



Item No.: 2001-434
Jumper; from 1 to 4; insulated; light gray



Item No.: 2001-435
Jumper; from 1 to 5; insulated; light gray



Item No.: 2001-436
Jumper; from 1 to 6; insulated; light gray



Item No.: 2001-437
Jumper; from 1 to 7; insulated; light gray



Item No.: 2001-438
Jumper; from 1 to 8; insulated; light gray



Item No.: 2001-439
Jumper; from 1 to 9; insulated; light gray



Item No.: 2001-405/011-000
Star point jumper; 3-way; insulated; light gray



Item No.: 2000-492
Vertical jumper; insulated; light gray



Item No.: 210-103
Wire commoning chain; insulated; black



Item No.: 210-123
Wire commoning chain; insulated; blue



1.1.5 Marking

1.1.5.1 Marker



Item No.: 793-4501/000-006
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; blue



Item No.: 793-4501/000-014
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; brown



Item No.: 793-4501/000-007
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; gray



Item No.: 793-4501/000-023
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; green



Item No.: 793-4501/000-017
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; light green



Item No.: 793-4501/000-012
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; orange



Item No.: 793-4501/000-005
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 793-4501/000-024
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; violet



Item No.: 793-4501
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 793-4501/000-002
WMB marking card; as card; stretchable 4 - 4.2 mm; plain; snap-on type; yellow



Item No.: 2009-114/000-006
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; blue



Item No.: 2009-114/000-007
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; gray



Item No.: 2009-114/000-023
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; green



Item No.: 2009-114/000-012
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; orange



Item No.: 2009-114/000-005
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; red



Item No.: 2009-114/000-024
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; violet



Item No.: 2009-114
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; white



Item No.: 2009-114/000-002
WMB-Inline; for Smart Printer; 2000 pieces on roll; stretchable 4 - 4.2 mm; plain; snap-on type; yellow

1.1.5.2 Marking strip



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

1.1.6 Protective warning marker

1.1.6.1 Cover



Item No.: 2001-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.7 Push-in type wire jumper

1.1.7.1 Jumper



Item No.: 2009-404
Push-in type wire jumper; 0.75 mm²; insulated; 110 mm long; gray



Item No.: 2009-406
Push-in type wire jumper; 0.75 mm²; insulated; 250 mm long; gray



Item No.: 2009-402
Push-in type wire jumper; 0.75 mm²; insulated; 60 mm long; gray

1.1.8 Screwless end stop

1.1.8.1 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

1.1.9 Test and measurement

1.1.9.1 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.: 2009-182
Testing tap; for max. 2.5 mm²; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

1.1.10 Tool

1.1.10.1 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



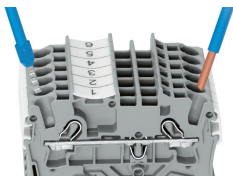
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoulored

Installation Notes

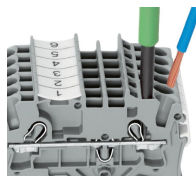
Conductor termination



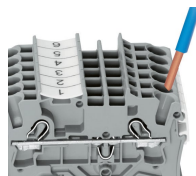
All conductor types at a glance



Push-in termination of solid and ferruled conductors

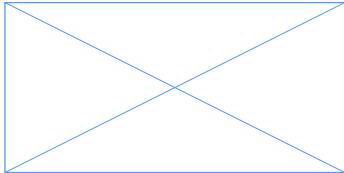


Inserting a conductor via operating tool:
Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use an operating tool.
Advantage:
To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.



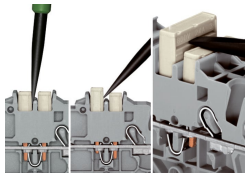
Inserting a conductor via push-in termination:
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

Conductor termination

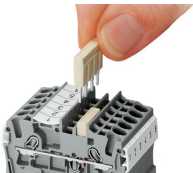


Conductor termination – insulation stop

Commoning

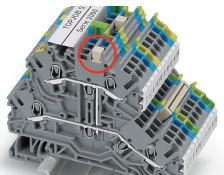


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.



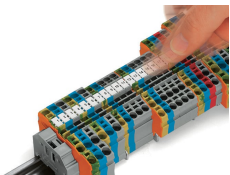
Insert push-in type jumper bar and push down until it hits backstop.

Commoning

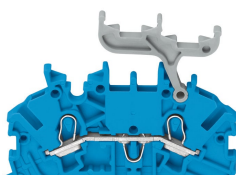
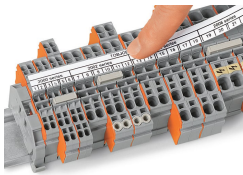


Commoning two levels via double-deck vertical jumper (2000-492).

Marking



Snapping WMB Inline markers into marker slots.



Double-Deck Terminal Blocks
A double-deck marker carrier (2000-121) can be retrofitted to double-deck terminal blocks without a marker carrier.