Color: gray

Similar to illustration

Double-deck terminal block, 2000 Series, Push-in CAGE CLAMP®

This double-deck terminal block (item number 2000-2201/099-000) simplifies electrical installations. The double-deck terminal block also serves as a through terminal block. Conductors should only be connected to this double-deck terminal block if their strip length is between 9 mm and 11 mm. This product incorporates conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. This double-deck terminal block is suitable for conductor cross sections ranging from 0.14 mm² to 1.5 mm². It features two levels and four clamping points that you can use to connect two potentials. The gray housing is made of polyamide (PA66) for insulation. These through rail-mount terminal blocks are mounted using DIN-35 rails. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data

IEC/EN 60947-7-1			UL 1059		
Ratings per			Approvals per		
Overvoltage category	III	III	Use group	B	C
Pollution degree	3	2	Rated voltage	600 V	600 V
Nominal voltage	800 V	-	Rated current	15 A	15 A
Rated impulse withstand voltage	8 kV	-		-	-
Rated current	13.5 A	-		-	-
Current at conductor cross-section (max.) mm ²	16 A	-		-	-

Approvals per	CSA 22.2 No 158			Ex information
Use group	B	C	D	Reference to hazardous areas See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
Rated voltage	600 V	600 V	-	Ratings per ATEX: PTB 11 ATEX 1041 U / IECEx: PTB 11.0093U (Ex eb IIC Gb)
Rated current	10 A	10 A	-	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 power loss specification 13.5 AResistance value for specified, current-dependent power loss 0.00238 Ω **Connection data**

Clamping units 4

Total number of potentials 2

Number of levels 2

Number of jumper slots 4

Connection 1

Connection technology Push-in CAGE CLAMP®

Number of connection points 2

Actuation type Operating tool

Connectable conductor materials Copper

Nominal cross-section 1 mm²Solid conductor 0.14 ... 1.5 mm² / 24 ... 16 AWGSolid conductor; push-in termination 0.5 ... 1.5 mm² / 20 ... 16 AWGFine-stranded conductor 0.14 ... 1.5 mm² / 24 ... 16 AWGFine-stranded conductor; with insulated ferrule 0.14 ... 0.75 mm² / 24 ... 18 AWGFine-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

Physical data

Width 4.2 mm / 0.165 inches

Height 69.7 mm / 2.744 inches

Depth from upper-edge of DIN-rail 51.7 mm / 2.035 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 (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.216 MJ
Weight	9.5 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	$f_1 = 5 \text{ Hz}$ 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
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	22 (TOPJOB S)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821037231
Customs tariff number	85369010000

Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-20
eCl@ss 9.0	27-14-11-20
ETIM 9.0	EC000897
ETIM 8.0	EC000897
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates**General approvals****Declarations of conformity and manufacturer's declarations**

Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA	EN 60947	NTR NL 7962	ATEX-Attestation of Conformity	-	-
DEKRA Certification B.V.			WAGO GmbH & Co. KG		
KEMA/KEUR	EN 60947	71-125928	EU-Declaration of Conformity	-	-
DEKRA Certification B.V.			WAGO GmbH & Co. KG		
UL	UL 1059	E45172	Railway	-	Railway Ready
Underwriters Laboratories Inc.			WAGO GmbH & Co. KG		
			UK-Declaration of Conformity	-	-
			WAGO GmbH & Co. KG		

Approvals for hazardous areas

Approval	Standard	Certificate Name
AEx	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
Underwriters Laboratories Inc.		
ATEX	EN 60079	PTB 11 ATEX 1041 U (II 2 G Ex eb IIC Gb bzw. I M 2 Ex eb I Mb)
Physikalisch Technische Bundesanstalt		
CCC	GB/T 3836.3	2020312313000182 (Ex eb IIIC Gb, Ex eb I Mb)
CNEX		
IECEx	IEC 60079	IECEx PTB 11.0093U (Ex e IIC Gb or Ex e I Mb)
Physikalisch Technische Bundesanstalt		

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
2000-2201/099-000



Documentation

Bid Text

2000-2201/099-000

19.02.2019

xml

3.86 KB



2000-2201/099-000

07.08.2018

docx

14.72 KB



CAD/CAE-Data

CAD data

2D/3D Models

2000-2201/099-000



CAE data

EPLAN Data Portal

2000-2201/099-000



WSCAD Universe
2000-2201/099-000



ZUKEN Portal
2000-2201/099-000



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; 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

1.1.2 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 Marker carrier

**Item No.: 2000-121**

Adaptor; gray

1.1.5.3 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

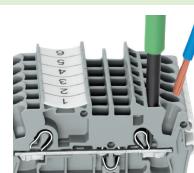
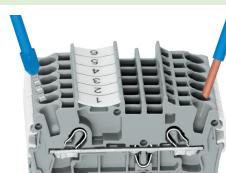
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

Item No.: 210-647

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

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.

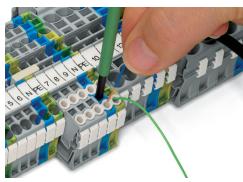
Advantage:

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:

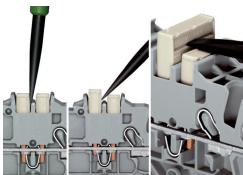
Solid conductors with cross-sections from either one size above, or up to two sizes below, the rated cross-section can be simply pushed in – no tools needed.

Conductor termination



Conductor termination – insulation stop

Commoning

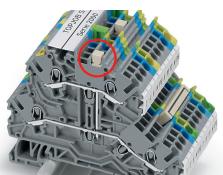


Removing a push-in type jumper bar:
 Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
 Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five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



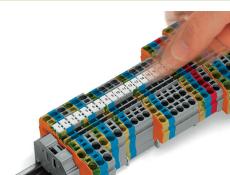
Insert push-in type jumper bar and push down until it hits backstop.

Commoning

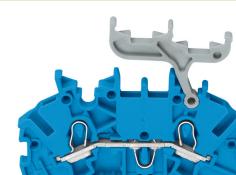
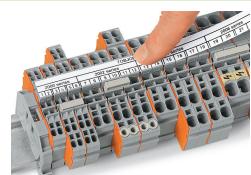


Commoning two levels via double-deck vertical jumper (Item No. 2000-492).

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.