2-conductor through terminal block; 1 mm²; suitable for Ex e II applications; side and center marking; for DIN-rail 35 x 15 and 35 x 7.5; Push-in CAGE CLAMP®; 1,00 mm²; light gray



UL 1059

С

600 V

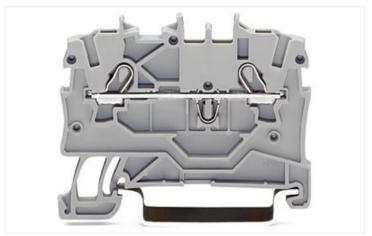
15 A

В

600 V

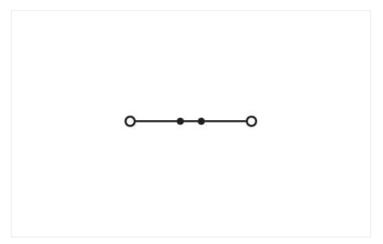
15 A

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Similar to illustration



Similar to illustration

Approvals per

Use group

Rated voltage

Rated current

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	-	-

Approvals per	CSA 22.2 No 158		
Use group	В	С	D
Rated voltage	600 V	600 V	-
Rated current	10 A	10 A	-

Ex information	
Reference hazardous areas	See application instructions in section "Knowledge and Downloads – Documentation – Additio- nal Information: Technical Section; Tech- nical Explications"
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 (max.) P <sub>I (max.)</sub> (note)	90 VAC / 24 VDC; 5 A
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



onnection data				
Connection points	2		Connection 1	
Total number of potentials	1		Connection technology	Push-in CAGE CLAMP®
Number of levels	1		Actuation type	Operating tool
Number of jumper slots	2		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 characte stic, a conductor with a smaller cross- section can also be inserted via push-i termination.		
	Strip length	9 11 mm / 0.35 0.43 inches		
			Wiring direction	Front-entry wiring

Physical data	
Width	3.5 mm / 0.138 inches
Height	48.5 mm / 1.909 inches
Depth from upper-edge of DIN-rail	32.9 mm / 1.295 inches

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

Material data	
Note (material data)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	light gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.079 MJ
Weight	3.6 g

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

https://www.wago.com/2000-1209



Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	100 pcs
Country of origin	CN
GTIN	4055143913133
Customs tariff number	85369010000

### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

### Approvals / Certificates

### General approvals









Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7962
CSA DEKRA Certification B.V.	C22.2	2130762
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125928
UL Underwriters Laboratories Inc.	UL 1059	E45172

### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications









VEHITAS		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	20-HG1941090-PDA
BV Bureau Veritas S.A.	EN 60947	38586/B0 BV
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
LR Lloyds Register	EN 60947	91/20112(E10)
American Bureau of Shipping BV Bureau Veritas S.A. DNV GL Det Norske Veritas, Germanischer Lloyd LR	EN 60947	38586/B0 BV TAE00001V2

### Approvals for hazardous areas





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

https://www.wago.com/2000-1209



#### **Downloads**

#### **Environmental Product Compliance**

#### Compliance Search

Environmental Product Compliance 2000-1209



#### **Documentation**

#### Additional Information

Technical Section

pdf

2240.62 KB



#### CAD/CAE-Data

#### CAD data

2D/3D Models 2000-1209



#### 1 Compatible Products

#### 1.1 Required Accessories

### 1.1.1 End plate

#### 1.1.1.1 End plate

Item No.: 2000-1291



li N 0000

End and intermediate plate; 0.7 mm thick;

224.14

Item No.: 2000-1292

End and intermediate plate; 0.7 mm thick;

orange

Item No.: 209-191

Separator for Ex e/Ex i applications; 3 mm thick; 120 mm wide; orange

V.

thick; 90 mm wide; orange

<u>Item No.: 209-190</u> Separator for Ex e/Ex i applications; 3 mm

### 1.2 Optional Accessories

### 1.2.1 DIN-rail

#### 1.2.1.1 Mounting accessories



Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm

thick; 2 m long; unslotted; similar to EN

### 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

60715; silver-colored

Item No.: 210-196

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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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

#### 1.2.3 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; 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

### 1.2.4 Jumper

#### 1.2.4.1 Jumper











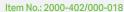
Item No.: 2000-410

Jumper; 10-way; insulated; light gray



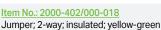






Item No.: 2000-410/000-005

Jumper; 10-way; insulated; red



Item No.: 2000-402/000-006 Jumper; 2-way; insulated; blue

Item No.: 2000-406/020-000

Delta jumper; insulated; light gray



Item No.: 2000-402

Item No.: 2000-403

Item No.: 2000-410/000-006

Jumper; 10-way; insulated; blue

Jumper; 2-way; insulated; light gray

Jumper; 3-way; insulated; light gray









Item No.: 2000-403/000-006 Jumper; 3-way; insulated; blue



Item No.: 2000-403/000-005

Jumper; 3-way; insulated; red

Jumper; 2-way; insulated; red





Item No.: 2000-404

Jumper; 4-way; insulated; light gray



Item No.: 2000-405/000-006 Jumper; 5-way; insulated; blue

Item No.: 2000-405

Jumper; 5-way; insulated; light gray



Item No.: 2000-405/000-005

Jumper; 5-way; insulated; red



Item No.: 2000-406

Jumper; 6-way; insulated; light gray



Item No.: 2000-406/000-006 Jumper; 6-way; insulated; blue



Item No.: 2000-406/000-005 Jumper; 6-way; insulated; red



Item No.: 2000-407/000-006 Jumper; 7-way; insulated; blue Item No.: 2000-407

Jumper; 7-way; insulated; light gray



Item No.: 2000-407/000-005

Item No.: 2000-408/000-006 Jumper; 7-way; insulated; red Jumper; 8-way; insulated; blue

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#### 1.2.4.1 Jumper









Item No.: 2000-408

Item No.: 2000-408/000-005 Jumper; 8-way; insulated; red Item No.: 2000-409/000-006

Item No.: 2000-409

Jumper; 8-way; insulated; light gray

Jumper; 9-way; insulated; blue

Jumper; 9-way; insulated; light gray

Item No.: 2000-409/000-005

Jumper; from 1 to 10; insulated; light gray

Jumper; from 1 to 4; insulated; light gray

Jumper; from 1 to 3; insulated; blue

Jumper; 9-way; insulated; red

Item No.: 2000-433/000-006

Item No.: 2000-433 Jumper; from 1 to 3; insulated; light gray

Item No.: 2000-433/000-005 Jumper; from 1 to 3; insulated; red Item No.: 2000-434

Item No.: 2000-440

Item No.: 2000-435

Item No.: 2000-436

Jumper; from 1 to 6; insulated; light gray

Item No.: 2000-437

Jumper; from 1 to 7; insulated; light gray

Item No.: 2000-438

Jumper; from 1 to 8; insulated; light gray

Item No.: 2000-439

Jumper; from 1 to 9; insulated; light gray

Jumper; from 1 to 5; insulated; light gray

Item No.: 2000-405/011-000

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

Wire commoning chain; insulated; black

Item No.: 210-123

Wire commoning chain; insulated; blue

1.2.5 Marking

Item No.: 210-103

### 1.2.5.1 Group marker carrier



Item No.: 2009-191

Group marker carrier; gray

1.2.5.2 Marker

Item No.: 2009-113/000-017

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

Item No.: 2009-113/000-012

Item No.: 2009-113/000-006 WMB-Inline; for Smart Printer; 2300 pie-

ces 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.: 2009-113/000-005

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

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green

ces on roll; plain; snap-on type; orange

WMB-Inline; for Smart Printer; 2300 pie-

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

1.2.5.3 Marking strip

Item No.: 2009-110

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

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#### 1.2.6 Protective warning marker

#### 1.2.6.1 Cover



#### Item No.: 2000-115

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

#### 1.2.7 Push-in type wire jumper

#### 1.2.7.1 Jumper





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

### 1

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

#### 1.2.8 Screwless end stop

#### 1.2.8.1 Mounting accessories



#### Item No.: 249-117

Screwless end stop; 10 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

# Item No.: 249-116

Screwless end stop; 6 mm wide; for DINrail 35 x 15 and 35 x 7.5; gray

### 1.2.9 Test and measurement

#### 1.2.9.1 Testing accessories

### Item No.: 2000-560

Modular TOPJOB®S connector; modular; for jumper contact slot; 10-pole; 1,00 mm²; gray

### Item No.: 2000-552

Modular TOPJOB®S connector; modular; for jumper contact slot; 2-pole; 1,00 mm²; gray

### Item No.: 2000-553

Modular TOPJOB®S connector; modular; for jumper contact slot; 3-pole; 1,00 mm²; gray

### Item No.: 2000-554

Modular TOPJOB®S connector; modular; for jumper contact slot; 4-pole; 1,00 mm²; gray

### Item No.: 2000-555

Modular TOPJOB®S connector; modular; for jumper contact slot; 5-pole; 1,00 mm²; gray

### Item No.: 2000-556

Modular TOPJOB®S connector; modular; for jumper contact slot; 6-pole; 1,00 mm²; gray

### Item No.: 2000-557

Modular TOPJOB®S connector; modular; for jumper contact slot; 7-pole; 1,00 mm²; gray

### Item No.: 2000-558

Modular TOPJOB®S connector; modular; for jumper contact slot; 8-pole; 1,00 mm²; gray

#### Item No.: 2000-559

Modular TOPJOB®S connector; modular; for jumper contact slot; 9-pole; 1,00 mm²; gray

#### Item No.: 2000-549

Spacer module; modular; e.g., for bridging commoned terminal blocks; gray

#### 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

#### Item No.: 2000-510

TOPJOB®S L-type test plug module; modular; for jumper contact slot; 1,00 mm²; gray

#### Item No.: 2000-511

TOPJOB®S L-type test plug module; modular; for jumper contact slot; 1-pole; 1,00 mm²; gray



#### 1.2.10 Tool

#### 1.2.10.1 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 push-in termi-

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.

#### Advantage:

To open the clamp, the operating tool is inserted vertically. The conductor entry is less than 15 degrees for easier wiring.

### Commoning



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



### 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.

### Commoning



This star point jumper has been specially developed to create a "star point" and is used on motor terminal boards equipped with Rail-Mount Terminal Blocks TOPJOB® S.



This delta jumper has been specially developed to create a delta configuration and is used on motor terminal boards equipped with rail-mount terminal blocks TOPJOB® S.



Push down the wire jumper (2009-402) until fully inserted. For rewiring, lift the jumper with an operating tool at the notch provided for this purpose on the jumper.

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#### Testing



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



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



Rail-mount terminal block assembly for electric motor wiring



Test plug adapter (2009-174, CAT I) for 4 mm Ø plugs – compatible with 2000 to 2016 Series



Testing tap (2009-182) for tool-free connection of test cables up to 2.5 mm<sup>2</sup> (12 AWG) - compatible with 2000 to 2016 Series

### Marking



Snapping WMB Inline markers into marker slots.





TOPJOB® S 2009-193 Group Marker Carrier (equipped with a marking strip) for all 2001 to 2016 Series TOPJOB® S Rail-Mount Terminal Blocks Do not use on an end plate!

### Ex application



Through terminal blocks with a blue insulated housing are suitable for Ex i applica-



All through and ground conductor terminal blocks are suitable for Ex e II applicati-



Separator plate for Ex e/Ex i applications

An end plate must be applied to the terminal block located directly behind an Ex e/ Ex i separator plate.



#### Ex e II/Ex i terminal strip Note:

The movable feet of terminal blocks and separator plates must face the same direction.



A separator plate is located between the Ex e II and Ex i terminal strip.

Ex e II terminal blocks

Separator plate for Ex e/Ex i applications

End plate

Ex i terminal blocks

According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common DIN-



Page 10/10 Version 15.11.2023