

## Data Sheet | Item Number: 2050-324

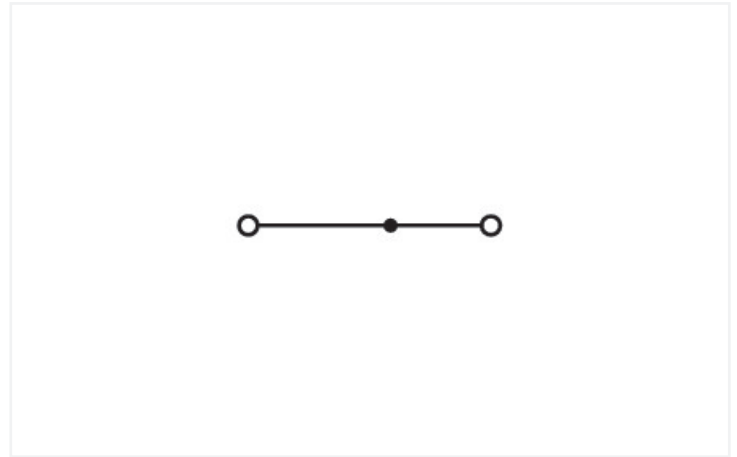
2-conductor miniature through terminal block; with operating slots; 1 mm<sup>2</sup>; Center terminal block without snap-in mounting foot, without mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm<sup>2</sup>; blue



<https://www.wago.com/2050-324>



Color: ■ blue



Similar to illustration

### Electrical data

#### Ratings per IEC/EN

Ratings per	IEC/EN 60998-2-2
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated current	13.5 A
Current at conductor cross-section (max.) mm <sup>2</sup>	17.5 A
Legend (ratings)	(III / 3) $\Delta$ Overvoltage category III / Pollution degree 3

#### Ratings per UL 1059

Approvals per	UL 1059
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

#### Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group C)	300 V
Rated current CSA (Use Group C)	10 A

#### Ex information

Reference hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explanations"
Ratings per	ATEX: PTB 19 ATEX 1019 U / IECEx: PTB 19.0050U (Ex eb IIC Gb)
Rated voltage EN (Ex e II)	352 V
Rated current (Ex e II)	13.5 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 $\Omega$

### Connection data

Connection points	2
Total number of potentials	1
Number of levels	1
Number of jumper slots	1

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

### Physical data

Width	3.5 mm / 0.138 inches
Height from the surface	27.2 mm / 1.071 inches
Depth	33.2 mm / 1.307 inches

### Mechanical data

Mounting type	none
Marking level	Center/side marking

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	blue
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.046 MJ
Weight	2.3 g

### Environmental requirements

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

### Commercial data

ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143964982
Customs tariff number	85369010000

### Approvals / Certificates

## General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL 7840
CSA CSA	C22.2 No. 158	80034182
cURus Underwriters Laboratories Inc.	UL 1059	E45172
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-113957

## Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

## Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX Physikalisch Technische Bundesanstalt	EN IEC 60079-0	PTB 19 ATEX 1019 U (II 2G Ex eb IIC Gb or I M 2 Ex eb I Mb)
CCC CNEX	GB/T 3836.3	2020312313000289 (Ex eb IIC Gb, Ex eb I Mb)
IECEX Physikalisch Technische Bundesanstalt	IEC 60079	IECEX PTB 19.0050U (Ex eb IIC Gb or EX eb I Mb)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV 22.0014 U

## Downloads

## Environmental Product Compliance

## Compliance Search

Environmental Product  
Compliance 2050-324



## Documentation

## Additional Information

Technical Section

pdf  
2142.18 KB



## CAD/CAE-Data

**CAD data**

2D/3D Models  
2050-324

**CAE data**

EPLAN Data Portal  
2050-324

WSCAD Universe  
2050-324

ZUKEN Portal  
2050-324

**1 Compatible Products**

**1.1 Required Accessories**

**1.1.1 End plate**

**1.1.1.1 End plate**



**Item No.: 2050-381**  
End plate; with fixing flange; 1.3 mm thick; gray

**1.2 Optional Accessories**

**1.2.1 Ferrule**

**1.2.1.1 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 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

**1.2.2 Jumper**

**1.2.2.1 Jumper**



**Item No.: 2000-406/020-000**  
Delta jumper; insulated; light gray



**Item No.: 2000-410/000-006**  
Jumper; 10-way; insulated; blue



**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.: 2000-402**  
Jumper; 2-way; insulated; light gray



**Item No.: 2000-402/000-005**  
Jumper; 2-way; insulated; red



**Item No.: 2000-402/000-018**  
Jumper; 2-way; insulated; yellow-green



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



**Item No.: 2000-403**  
Jumper; 3-way; insulated; light gray



**Item No.: 2000-403/000-005**  
Jumper; 3-way; insulated; red



**Item No.: 2000-404/000-006**  
Jumper; 4-way; insulated; blue



**Item No.: 2000-404**  
Jumper; 4-way; insulated; light gray



**Item No.: 2000-404/000-005**  
Jumper; 4-way; insulated; red












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




**Item No.: 2000-405**  
Jumper; 5-way; insulated; light gray

1.2.2.1 Jumper











 <b>Item No.: 2000-405/000-005</b> Jumper; 5-way; insulated; red	 <b>Item No.: 2000-406/000-006</b> Jumper; 6-way; insulated; blue	 <b>Item No.: 2000-406</b> Jumper; 6-way; insulated; light gray	 <b>Item No.: 2000-406/000-005</b> Jumper; 6-way; insulated; red
 <b>Item No.: 2000-407/000-006</b> Jumper; 7-way; insulated; blue	 <b>Item No.: 2000-407</b> Jumper; 7-way; insulated; light gray	 <b>Item No.: 2000-407/000-005</b> Jumper; 7-way; insulated; red	 <b>Item No.: 2000-408/000-006</b> Jumper; 8-way; insulated; blue
 <b>Item No.: 2000-408</b> Jumper; 8-way; insulated; light gray	 <b>Item No.: 2000-408/000-005</b> Jumper; 8-way; insulated; red	 <b>Item No.: 2000-409/000-006</b> Jumper; 9-way; insulated; blue	 <b>Item No.: 2000-409</b> Jumper; 9-way; insulated; light gray
 <b>Item No.: 2000-409/000-005</b> Jumper; 9-way; insulated; red	 <b>Item No.: 2000-440</b> Jumper; from 1 to 10; insulated; light gray	 <b>Item No.: 2000-433/000-006</b> Jumper; from 1 to 3; insulated; blue	 <b>Item No.: 2000-433</b> Jumper; from 1 to 3; insulated; light gray
 <b>Item No.: 2000-433/000-005</b> Jumper; from 1 to 3; insulated; red	 <b>Item No.: 2000-434</b> Jumper; from 1 to 4; insulated; light gray	 <b>Item No.: 2000-435</b> Jumper; from 1 to 5; insulated; light gray	 <b>Item No.: 2000-436</b> Jumper; from 1 to 6; insulated; light gray
 <b>Item No.: 2000-437</b> Jumper; from 1 to 7; insulated; light gray	 <b>Item No.: 2000-438</b> Jumper; from 1 to 8; insulated; light gray	 <b>Item No.: 2000-439</b> Jumper; from 1 to 9; insulated; light gray	 <b>Item No.: 2000-405/011-000</b> Star point jumper; 3-way; insulated; light gray

1.2.3 Marking

1.2.3.1 Group marker carrier

 <b>Item No.: 2009-191</b> Group marker carrier; gray
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1.2.3.2 Marker

 <b>Item No.: 793-3501</b> WMB marking card; as card; plain; snap-on type; white	 <b>Item No.: 2009-113/000-006</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue	 <b>Item No.: 2009-113/000-007</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray	 <b>Item No.: 2009-113/000-023</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green
 <b>Item No.: 2009-113/000-017</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green	 <b>Item No.: 2009-113/000-012</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange	 <b>Item No.: 2009-113/000-005</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red	 <b>Item No.: 2009-113/000-024</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet
 <b>Item No.: 2009-113</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white	 <b>Item No.: 2009-113/000-002</b> WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow		

### 1.2.3.3 Marking strip



**Item No.: 2009-110**

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

### 1.2.4 Protective warning marker

#### 1.2.4.1 Cover



**Item No.: 2000-115**

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

### 1.2.5 Push-in type wire jumper

#### 1.2.5.1 Jumper



**Item No.: 2009-404**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 110 mm long; gray



**Item No.: 2009-406**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 250 mm long; gray



**Item No.: 2009-402**

Push-in type wire jumper; 0.75 mm<sup>2</sup>; insulated; 60 mm long; gray

### 1.2.6 Test and measurement

#### 1.2.6.1 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 mm<sup>2</sup>; tool-free connection for individual test wires 0.08 - 2.5 mm; gray

### 1.2.7 Tool

#### 1.2.7.1 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



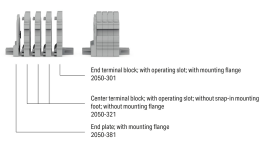
**Item No.: 210-647**

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

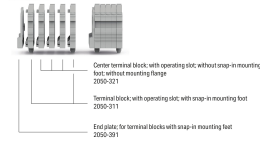
### Installation Notes

## Installation

Example of a 4-pole terminal strip; with operating slots; with mounting flange



Example of a 2-pole terminal strip; with operating slots; with snap-in mounting feet  
Pole number: 2



## Conductor termination



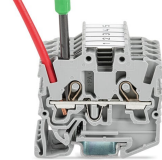
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.



Insert fine-stranded conductors via operating tool.

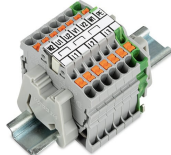


Remove all conductors via operating tool.

## Commoning



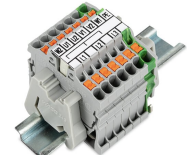
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (delta jumper) (example shows terminal blocks with push-buttons)



Insert a star point jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



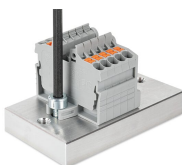
Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

## Testing

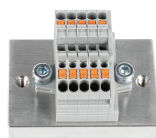


Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).

## Installation



Mounting and securing a terminal strip directly to the plate via screw-type flanges (example shows terminal blocks with push-buttons).



Terminal strip; with mounting flanges; screw mounting (example shows terminal blocks with push-buttons)

## Installation



Mounting a terminal strip with snap-in feet into holes.

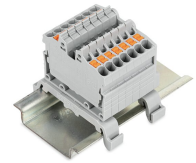


Mounting a terminal strip with snap-in feet onto aluminum rail.



Snapping a mounting foot (209-120) to a terminal strip with snap-in mounting feet.

(Distance between mounting feet: approx. 20 ... 25 mm)



Terminal strip; with snap-in mounting feet; for DIN-35 rail (209-120 Mounting Foot) (example shows terminal blocks with push-buttons)

## Marking



Snapping a marking strip into the marker slot.



Snapping a marking strip (2009-110) into a marker slot.