

Data Sheet | Item Number: 2050-323

2-conductor miniature through terminal block; with operating slots; 1 mm²; Center terminal block without snap-in mounting foot, without mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm²; red

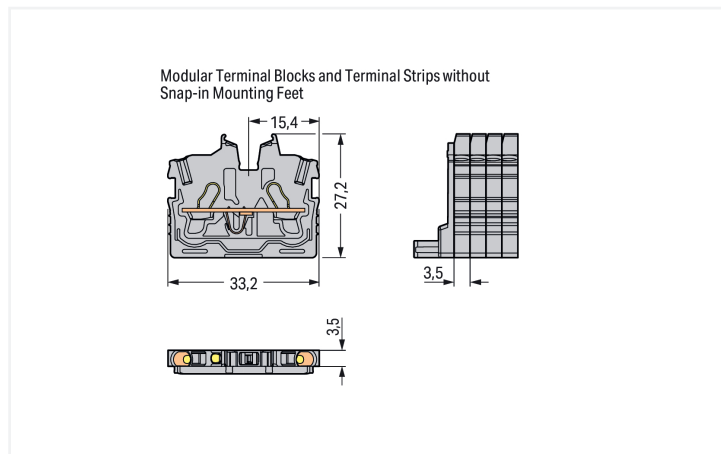
<https://www.wago.com/2050-323>



Color: ■ red



Similar to illustration



Through terminal block, 2050 Series, red

Our through terminal block (item number 2050-323) makes connections quick and easy. Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this through terminal block. Our mini rail-mount terminal blocks are perfect for tight spaces thanks to their compact design. You can also choose from a range of mounting and actuation variants for unparalleled flexibility, making it easy to select the ideal mini terminal block for each use. 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. Depending on the type of conductor, this through terminal block is designed for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

This mini rail-mount terminal block is operated with an operating tool. Our TOPJOB® S rail-mount terminal blocks are perfect for many different industrial applications and modern building installations as they ensure secure electrical connections. You can work anywhere in the world and on any application with just a single rail-mount terminal block system. This product is designed for specific Ex applications (please refer to the product datasheet).

Electrical data

Ratings per		IEC/EN 60998-2-2			Approvals per		UL 1059		
Overvoltage category		III	III	II	Use group		B	C	D
Pollution degree		3	2	2	Rated voltage		300 V	300 V	-
Nominal voltage		500 V	-	-	Rated current		10 A	10 A	-
Rated impulse withstand voltage		6 kV	-	-					
Rated current		13.5 A	-	-					
Current at conductor cross-section (max.) mm ²		17.5 A	-	-					

Approvals per		CSA 22.2 No 158		
Use group		B	C	D
Rated voltage		300 V	300 V	-
Rated current		10 A	10 A	-

Ex information	
Reference to 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 power loss specification	13.5 A
Resistance value for specified, current-dependent power loss	0.00238 Ω

General information	
Wiring direction	Front-entry wiring

Connection Data

Clamping units	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 ²
Solid conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 1 mm ² / 24 ... 18 AWG
Fine-stranded conductor; with uninsulated ferrule	0.14 ... 1 mm ² / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 1 mm ² / 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	without snap-in mounting feet
Marking level	Center/side marking

Material data	
Note (material data)	Information on material specifications can be found here
Color	red
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.042 MJ
Weight	2.3 g

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

Commercial data	
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	IN
GTIN	4066966312669
Customs tariff number	85369010000

Product Classification	
UNSPSC	39121410
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

Approvals for marine applications			Approvals for hazardous areas		
			    		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAE00003JT	ATEX Physikalisch Technische Bundesanstalt	EN 60079	PTB 19 ATEX 1019 U
			CCC CNEX	GB/T 3836.3	2020312313000289 (Ex eb IIC Gb, Ex eb I Mb)

Approvals for hazardous areas		
IECEX Physikalisch Technische Bundesanstalt	IEC 60079	IECEX PTB 19.0050U
INMETRO TÜV Rheinland do Brasil Lt- da.	IEC 60079	TÜV 22.0014 U

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 2050-323

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CAD/CAE-Data

CAD data

2D/3D Models 2050-323

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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 mm² / 20 AWG; insu-
lated; 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; in-
sulated; electro-tin plated; electrolytic cop-
per; gastight crimped; acc. to DIN 46228,
Part 4/09.90; gray



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulat-
ed; 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
 Item No.: 2000-405/000-005 Jumper; 5-way; insulated; red	 Item No.: 2000-406/000-006 Jumper; 6-way; insulated; blue	 Item No.: 2000-406 Jumper; 6-way; insulated; light gray	 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 Jumper; 7-way; insulated; red	 Item No.: 2000-408/000-006 Jumper; 8-way; insulated; blue
 Item No.: 2000-408 Jumper; 8-way; insulated; light gray	 Item No.: 2000-408/000-005 Jumper; 8-way; insulated; red	 Item No.: 2000-409/000-006 Jumper; 9-way; insulated; blue	 Item No.: 2000-409 Jumper; 9-way; insulated; light gray
 Item No.: 2000-409/000-005 Jumper; 9-way; insulated; red	 Item No.: 2000-440 Jumper; from 1 to 10; insulated; light gray	 Item No.: 2000-433/000-006 Jumper; from 1 to 3; insulated; blue	 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 Jumper; from 1 to 4; insulated; light gray	 Item No.: 2000-435 Jumper; from 1 to 5; insulated; light gray	 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	 Item No.: 2000-405/011-000 Star point jumper; 3-way; insulated; light gray

1.2.3 Marking

1.2.3.1 Group marker carrier

 Item No.: 2009-191 Group marker carrier; gray
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1.2.3.2 Marker


Item No.: 793-3501

WMB marking card; as card; plain; snap-on type; white


Item No.: 2009-113/000-006

WMB-Inline; for Smart Printer; 2300 pieces 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.: 2009-113/000-017

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


Item No.: 2009-113/000-012

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


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


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

1.2.3.3 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 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

1.2.6 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 mm²; 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

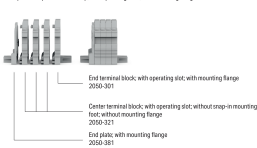


Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

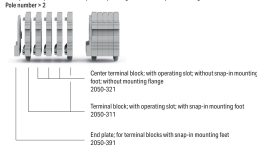
Installation Notes

Installation

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



Example of a 5-pole terminal strip, with operating slots, with snap-in mounting feet
Pole number = 2



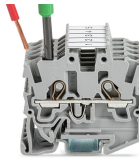
Conductor termination



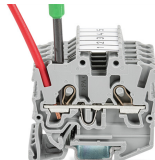
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

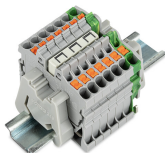


Insert fine-stranded conductors via operating tool.

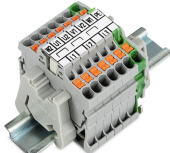


Remove all conductors via operating tool.

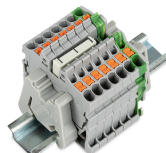
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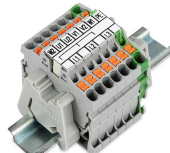
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (Item No. 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).



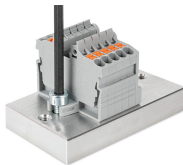
Marking strip (Item No. 2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

Testing

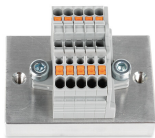


Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).

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)

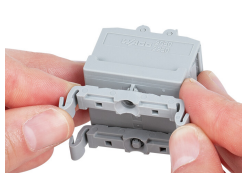
Installation



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

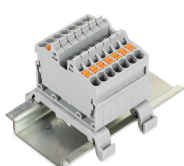


Mounting a terminal strip with snap-in feet onto aluminum rail.



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 (Item No. 2009-110) into a marker slot.