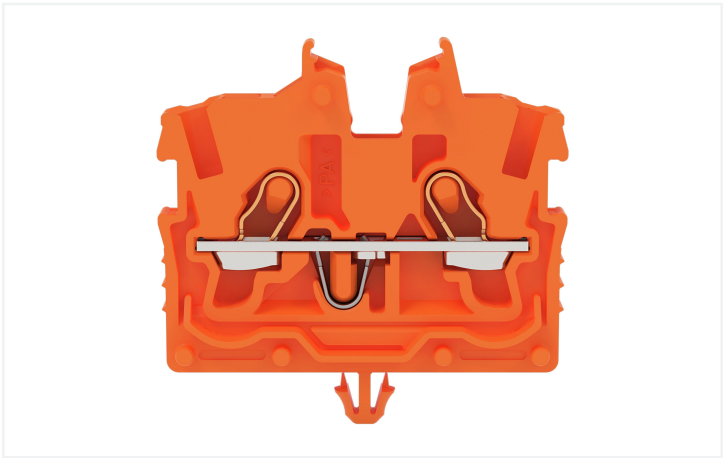


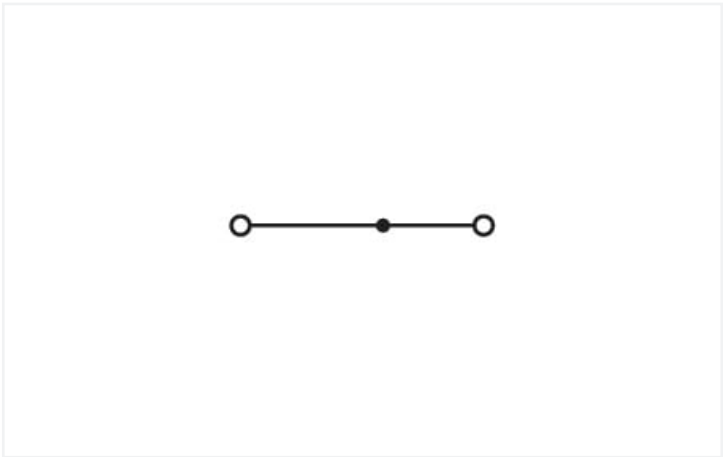
Data Sheet | Item Number: 2050-312

2-conductor miniature through terminal block; with operating slots; 1 mm²; with snap-in mounting foot; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm²; orange

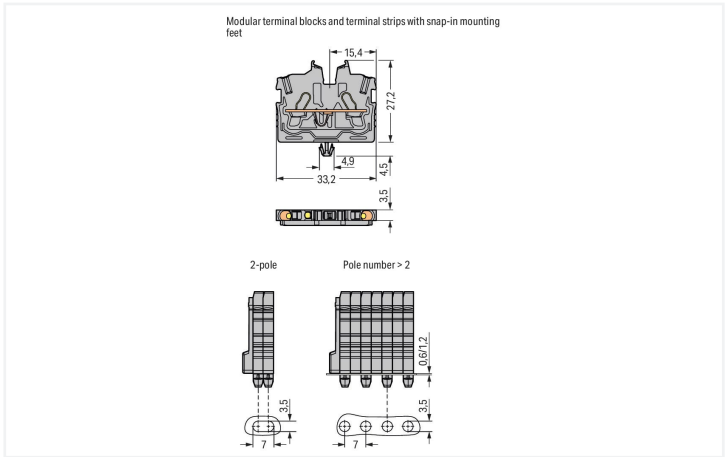
<https://www.wago.com/2050-312>



Color: ■ orange



Similar to illustration



Electrical data

Ratings per	IEC/EN 60998-2-2		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	-	-
Rated surge voltage	6 kV	-	-
Rated current	13.5 A	-	-
Current at conductor cross-section (max.) mm²	17.5 A	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	-
Rated current	10 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 hazardous areas	See "Downloads – Documentation – Additional Information: Technical Section; Technical Explications"
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 <sub>N</sub> for specified power loss	13.5 A
Resistance value for specified, current-dependent power loss	0.00238 Ω

Connection 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	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

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	Snap-in foot
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	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.047 MJ
Weight	2.4 g



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

Commercial data	
PU (SPU)	100 pcs
Country of origin	IN
GTIN	4066966312454
Customs tariff number	85369010000

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption


Approvals / Certificates

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	-	-

Downloads


Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2050-312	

Documentation

Additional Information		
Technical Section	pdf 2240.62 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 2050-312	



1 Compatible Products

1.1 System counterpart

1.1.1 Through terminal block



**Item No.: 2050-321**  
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 CA-GE CLAMP®; 1,00 mm<sup>2</sup>; gray

1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



**Item No.: 2050-391**  
End plate; for terminal blocks with snap-in mounting foot; 3.4 mm thick; gray

1.3 Optional Accessories

1.3.1 DIN-rail

1.3.1.1 Mounting accessories



**Item No.: 210-154**  
Aluminum carrier rail; 1000 mm long; 18 mm wide; 7 mm high; silver-colored

1.3.2 Ferrule

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



1.3.3 Installation

1.3.3.1 Mounting accessories



**Item No.: 209-137**  
Mounting adapter; can be used as end stop; 6.5 mm wide; gray



**Item No.: 209-120**  
Mounting foot; can be snapped on terminal blocks with snap-in mounting foot; for mounting on relay-modules; 6.4 mm wide; gray

1.3.4 Jumper

1.3.4.1 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

1.3.5 Marking

1.3.5.1 Group marker carrier



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

1.3.5.2 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

1.3.5.3 Marking strip



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

1.3.6 Protective warning marker

1.3.6.1 Cover



**Item No.: 2000-115**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.3.7 Push-in type wire jumper

1.3.7.1 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

1.3.8 Test and measurement

1.3.8.1 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

1.3.9 Tool

1.3.9.1 Operating tool



**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



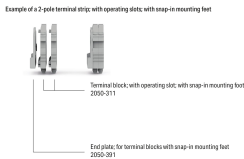
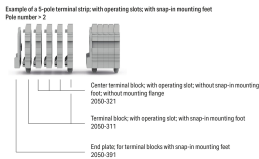
**Item No.: 210-648**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

Installation Notes

Installation



Conductor termination



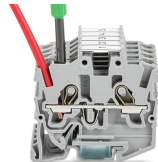
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

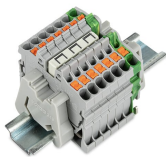


Insert fine-stranded conductors via operating tool.

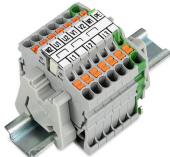


Remove all conductors via operating tool.

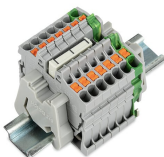
Commoning



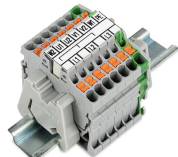
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



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).



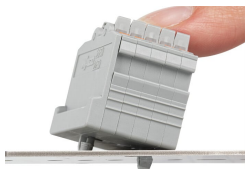
Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

Testing



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

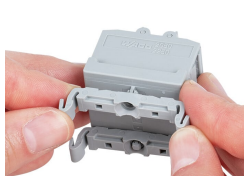
Installation



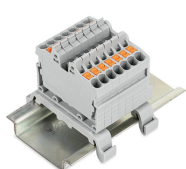
Mounting a terminal strip with snap-in feet into holes.



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.