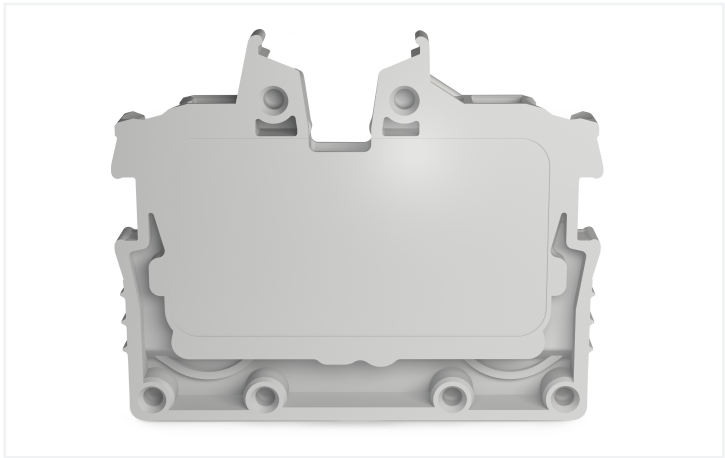
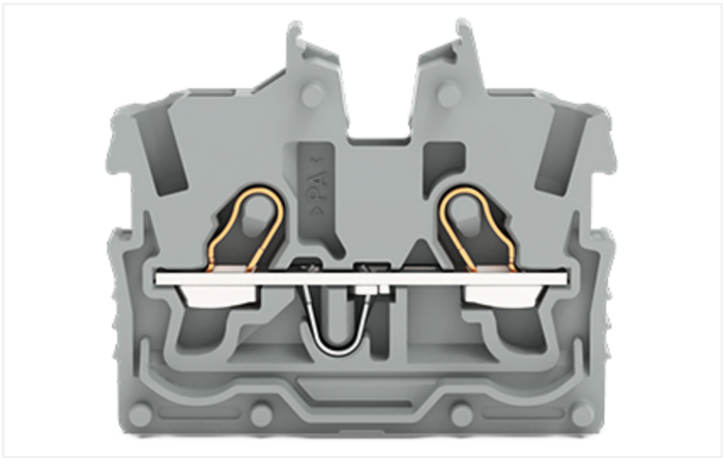


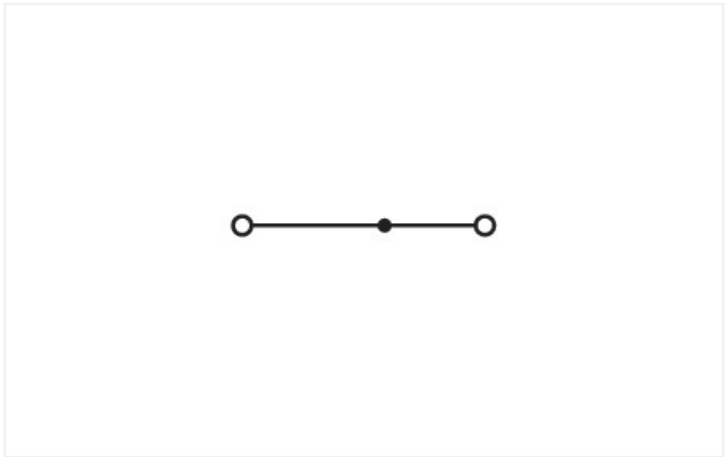
Data Sheet | Item Number: 2050-321

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; gray

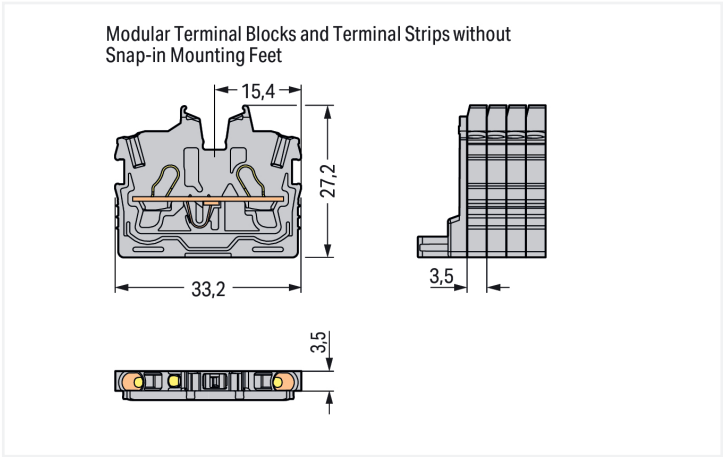
<https://www.wago.com/2050-321>



Color: ■ gray



Similar to illustration





Through terminal block, 2050 Series, operating tool

Easily, quickly and safely connect conductors with this through terminal block (item number 2050-321). Whether for use in industry or building installations, our rail-mount through terminal blocks make it easy to quickly and securely connect electrical conductors. They're perfect for either classic through-wiring or distributing potential, depending on the variant. Our mini rail-mount terminal block is rated for 500 V and is designed to handle a rated current of up to 13.5 A. Strip lengths must be between 9 mm and 11 mm when connecting conductors to this through terminal block. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing to use any tools—all thanks to its pluggable design. 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. It has one level. The single potential can connect using the two clamping points. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this mini rail-mount terminal block. Our TOPJOB® S rail-mount terminal blocks offer more than just secure electrical connections in a range of different industrial applications and modern building installations. They also offer the perfect solution for every use: lever, push-button, or operating slot. Conductors made of copper can be connected thanks to front-entry wiring. The one jumper slot enables potential distribution to other clamping points. This product is designed for specific Ex applications (please refer to the product datasheet).

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		CSA 22.2 No 158		
Use group	B	C	D	
Rated voltage	300 V	300 V	-	
Rated current	10 A	10 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 Ω			
Connection data				
Clamping units	2			
Total number of potentials	1			
Number of levels	1			
Number of jumper slots	1			
Connection 1		UL 1059		
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 _N for specified power loss	13.5 A			
Resistance value for specified, current-dependent power loss	0.00238 Ω			
Connection data				
Clamping units	2			
Total number of potentials	1			
Number of levels	1			
Number of jumper slots	1			
Connection 1		UL 1059		
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			



Connection 1	
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	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0 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	4055143964784
Customs tariff number	85369010000

Product classification	
UNSPSC	39121410
ETIM 9.0	EC001284
ETIM 8.0	EC001284
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption


Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60998	NTR NL 7840	ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
CSA CSA	C22.2 No. 158	80034182	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
cURus Underwriters Laboratories Inc.	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-113957			

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 2050-321	



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2050-321	EPLAN Data Portal 2050-321
	WSCAD Universe 2050-321
	ZUKEN Portal 2050-321

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; 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

1.2.2 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











 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

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; insu-
lated; 110 mm long; gray



Item No.: 2009-406
Push-in type wire jumper; 0.75 mm²; insu-
lated; 250 mm long; gray



Item No.: 2009-402
Push-in type wire jumper; 0.75 mm²; insu-
lated; 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 termi-
nal 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

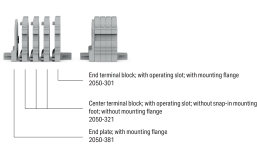


Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft; multicoloured

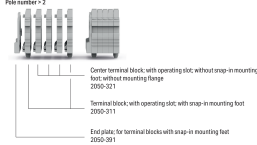
Installation Notes

Installation

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



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



Conductor termination



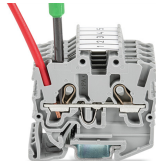
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

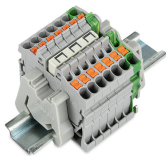


Insert fine-stranded conductors via operating tool.

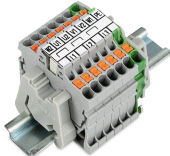


Remove all conductors via operating tool.

Commoning



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



Marking strip (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).



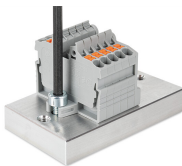
Marking strip (Item No. 2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

Testing

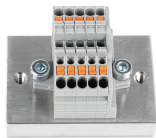


Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).

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)

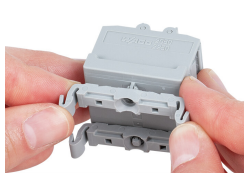
Installation



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

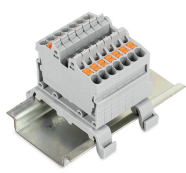


Mounting a terminal strip with snap-in feet onto aluminum rail.



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.