

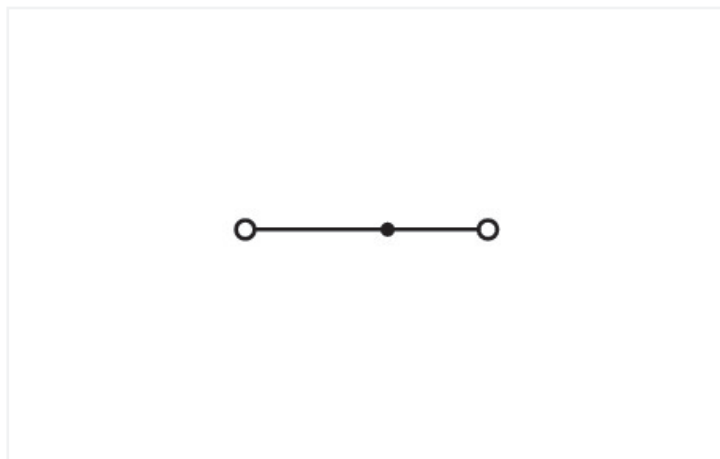
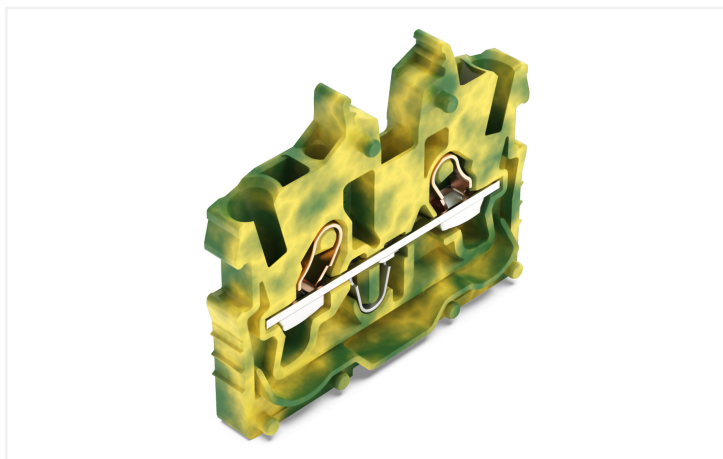
## Data Sheet | Item Number: 2050-307

2-conductor miniature through terminal block; with operating slots; 1 mm<sup>2</sup>; End terminal block with mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm<sup>2</sup>; green-yellow

<https://www.wago.com/2050-307>

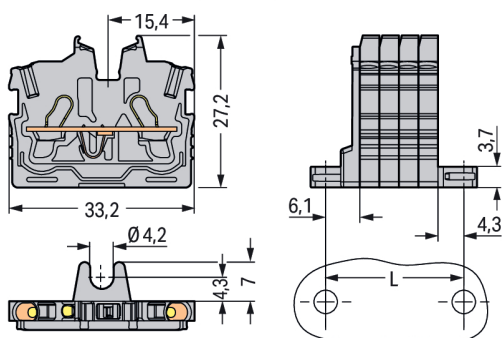


Color: ■ green-yellow



Similar to illustration

Modular Terminal Blocks and Terminal Strips with Mounting Flanges  
 $L = (\text{Pole no.} \times 3,5 \text{ mm}) + 4,3 \text{ mm} + 6,1 \text{ mm}$





Through terminal block, 2050 Series, green-yellow

Easily, quickly and safely connect conductors with this through terminal block (item number 2050-307). Whether for industrial or building applications, you can use our through terminal blocks to connect electrical conductors quickly and safely. We offer variants for both classic through-wiring and potential distribution. Rated current and voltage are key factors to consider when choosing a mini rail-mount terminal block, as they determine the product's suitability for different applications. This product has a rated voltage of 500 V and a rated current of 13.5 A. Ensure that the strip lengths are between 9 mm and 11 mm when connecting conductors to this through terminal block. 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, offering a key advantage: 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 ideal for conductor cross sections ranging from 0.14 mm² to 1.5 mm². It features one level and two clamping points for connecting a single potential. The green-yellow 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 guarantee secure electrical connections across many different industrial applications and modern building installations. They simplify wiring, as you can quickly plug in solid, stranded, and fine-stranded conductors with ferrules. Conductors made of copper can be connected via 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	-	-
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																												
Clamping units	2	<div>Connection 1</div> <table><tr><td>Connection technology</td><td>Push-in CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Nominal cross-section</td><td>1 mm²</td></tr><tr><td>Solid conductor</td><td>0.14 ... 1.5 mm² / 24 ... 16 AWG</td></tr><tr><td>Solid conductor; push-in termination</td><td>0.5 ... 1.5 mm² / 20 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.14 ... 1.5 mm² / 24 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.14 ... 1 mm² / 24 ... 18 AWG</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.14 ... 1 mm² / 24 ... 18 AWG</td></tr><tr><td>Fine-stranded conductor; with ferrule; push-in termination</td><td>0.5 ... 1 mm² / 20 ... 18 AWG</td></tr><tr><td>Note (conductor cross-section)</td><td>Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.</td></tr><tr><td>Strip length</td><td>9 ... 11 mm / 0.35 ... 0.43 inches</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table>	Connection technology	Push-in CAGE CLAMP®	Actuation type	Operating tool	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 ... 1 mm² / 24 ... 18 AWG	Fine-stranded conductor; with uninsulated ferrule	0.14 ... 1 mm² / 24 ... 18 AWG	Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 1 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
Connection technology	Push-in CAGE CLAMP®																											
Actuation type	Operating tool																											
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 ... 1 mm² / 24 ... 18 AWG																											
Fine-stranded conductor; with uninsulated ferrule	0.14 ... 1 mm² / 24 ... 18 AWG																											
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 1 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																											
Total number of potentials	1																											
Number of levels	1																											
Number of jumper slots	1																											



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		Mounting flange
Marking level		Center/side marking

Material data		
Note (material data)		<a href="#">Information on material specifications can be found here</a>
Color		green-yellow
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Fire load		0 MJ
Weight		2.5 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		4055143965125
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



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
ATEX-Attestation of Con- formity WAGO GmbH & Co. KG	-	-
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
AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
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 2050-307



CAD/CAE-Data

CAD data
2D/3D Models 2050-307



CAE data
EPLAN Data Portal 2050-307
WSCAD Universe 2050-307
ZUKEN Portal 2050-307





1 Compatible Products

1.1 System counterpart

1.1.1 Through terminal block



**Item No.: 2050-327**  
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; green-yellow

1.2 Required Accessories

1.2.1 End plate

1.2.1.1 End plate



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

1.3 Optional Accessories

1.3.1 Ferrule

1.3.1.1 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

1.3.2 Installation

1.3.2.1 Mounting accessories



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




1.3.3 Jumper

1.3.3.1 Jumper

			
<a href="#">Item No.: 2000-406/020-000</a> Delta jumper; insulated; light gray	<a href="#">Item No.: 2000-410/000-006</a> Jumper; 10-way; insulated; blue	<a href="#">Item No.: 2000-410</a> Jumper; 10-way; insulated; light gray	<a href="#">Item No.: 2000-410/000-005</a> Jumper; 10-way; insulated; red
			
<a href="#">Item No.: 2000-402/000-006</a> Jumper; 2-way; insulated; blue	<a href="#">Item No.: 2000-402</a> Jumper; 2-way; insulated; light gray	<a href="#">Item No.: 2000-402/000-005</a> Jumper; 2-way; insulated; red	<a href="#">Item No.: 2000-402/000-018</a> Jumper; 2-way; insulated; yellow-green
			
<a href="#">Item No.: 2000-403/000-006</a> Jumper; 3-way; insulated; blue	<a href="#">Item No.: 2000-403</a> Jumper; 3-way; insulated; light gray	<a href="#">Item No.: 2000-403/000-005</a> Jumper; 3-way; insulated; red	<a href="#">Item No.: 2000-404/000-006</a> Jumper; 4-way; insulated; blue
			
<a href="#">Item No.: 2000-404</a> Jumper; 4-way; insulated; light gray	<a href="#">Item No.: 2000-404/000-005</a> Jumper; 4-way; insulated; red	<a href="#">Item No.: 2000-405/000-006</a> Jumper; 5-way; insulated; blue	<a href="#">Item No.: 2000-405</a> Jumper; 5-way; insulated; light gray
			
<a href="#">Item No.: 2000-405/000-005</a> Jumper; 5-way; insulated; red	<a href="#">Item No.: 2000-406/000-006</a> Jumper; 6-way; insulated; blue	<a href="#">Item No.: 2000-406</a> Jumper; 6-way; insulated; light gray	<a href="#">Item No.: 2000-406/000-005</a> Jumper; 6-way; insulated; red
			
<a href="#">Item No.: 2000-407/000-006</a> Jumper; 7-way; insulated; blue	<a href="#">Item No.: 2000-407</a> Jumper; 7-way; insulated; light gray	<a href="#">Item No.: 2000-407/000-005</a> Jumper; 7-way; insulated; red	<a href="#">Item No.: 2000-408/000-006</a> Jumper; 8-way; insulated; blue
			
<a href="#">Item No.: 2000-408</a> Jumper; 8-way; insulated; light gray	<a href="#">Item No.: 2000-408/000-005</a> Jumper; 8-way; insulated; red	<a href="#">Item No.: 2000-409/000-006</a> Jumper; 9-way; insulated; blue	<a href="#">Item No.: 2000-409</a> Jumper; 9-way; insulated; light gray
			
<a href="#">Item No.: 2000-409/000-005</a> Jumper; 9-way; insulated; red	<a href="#">Item No.: 2000-440</a> Jumper; from 1 to 10; insulated; light gray	<a href="#">Item No.: 2000-433/000-006</a> Jumper; from 1 to 3; insulated; blue	<a href="#">Item No.: 2000-433</a> Jumper; from 1 to 3; insulated; light gray
			
<a href="#">Item No.: 2000-433/000-005</a> Jumper; from 1 to 3; insulated; red	<a href="#">Item No.: 2000-434</a> Jumper; from 1 to 4; insulated; light gray	<a href="#">Item No.: 2000-435</a> Jumper; from 1 to 5; insulated; light gray	<a href="#">Item No.: 2000-436</a> Jumper; from 1 to 6; insulated; light gray
			
<a href="#">Item No.: 2000-437</a> Jumper; from 1 to 7; insulated; light gray	<a href="#">Item No.: 2000-438</a> Jumper; from 1 to 8; insulated; light gray	<a href="#">Item No.: 2000-439</a> Jumper; from 1 to 9; insulated; light gray	<a href="#">Item No.: 2000-405/011-000</a> Star point jumper; 3-way; insulated; light gray

1.3.4 Marking

1.3.4.1 Group marker carrier


<a href="#">Item No.: 2009-191</a> Group marker carrier; gray



1.3.4.2 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

1.3.4.3 Marking strip



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

1.3.5 Protective warning marker

1.3.5.1 Cover



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

1.3.6 Push-in type wire jumper

1.3.6.1 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

1.3.7 Test and measurement

1.3.7.1 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

1.3.8 Tool

1.3.8.1 Operating tool



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



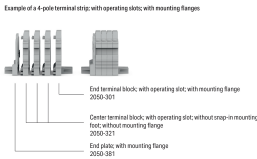
**Item No.: 210-648**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

Installation Notes

Installation



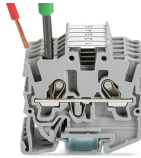
Conductor termination



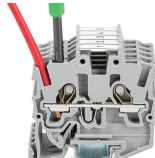
Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.

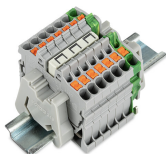


Insert fine-stranded conductors via operating tool.

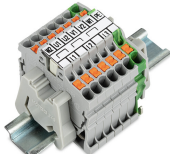


Remove all conductors via operating tool.

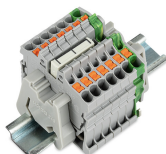
Commoning



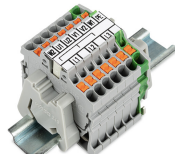
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (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)

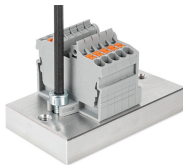
Testing



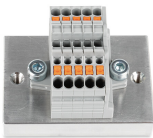
Testing with a 2 mm Ø 210-136 Test Plug (max. 42 V).



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)

Marking



Snapping a marking strip into the marker slot.



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