

Data sheet | Item number: 2050-301

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

www.wago.com/2050-301



Color:



Subject to changes. Please also observe the further product documentation!

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Email: info.de@wago.com | Web: www.wago.com

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Data

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 ²	17.5 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

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Ratings per UL

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 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)	0.434 W
Rated current I_N for specified power loss	13.5 A
Resistance value for specified, current-dependent power loss	0.002 Ω

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®
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Subject to changes. Please also observe the further product documentation!



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 ... 0.75 mm ² / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 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	Mounting flange
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	Polyamide (PA66)
Flammability class per UL94	V0
Weight	2.5 g

Environmental requirements

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

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Commercial data

ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	100 pcs
Country of origin	DE
GTIN	4055143968645
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	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

Logo	Approval	Additional Approval Text	Certificate name
	ATEX-Attestation of Conformity WAGO GmbH & Co. KG	-	-
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	AEx Underwriters Laboratories Inc.	UL 60079	E185892 (AEx eb IIC resp. Ex eb IIC)
	ATEX	EN IEC 60079-0	PTB 19 ATEX 1019

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Physikalisch Technische Bundesanstalt		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

Counterpart

Item no.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

www.wago.com/2050-321

Required accessories

End plate

End plate

Item no.: 2050-381

End plate; with fixing flange; 1.3 mm thick; gray

www.wago.com/2050-381

Optional accessories

Ferrule

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

www.wago.com/216-241

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

www.wago.com/216-242

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

www.wago.com/216-243

Mounting

Mounting accessories

Item no.: 209-123

Mounting foot with screw; can be screwed on terminal blocks with fixing flange; 6.4 mm wide; gray

www.wago.com/209-123

Item no.: 209-137

Mounting adapter; can be used as end stop; 6.5 mm wide; gray

www.wago.com/209-137

Subject to changes. Please also observe the further product documentation!

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Tool

 Operating tool

Item no.: 210-648 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short	www.wago.com/210-648
Item no.: 210-647 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-647
Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	www.wago.com/210-719

Testing and measuring

 Testing accessories

Item no.: 2009-174 Test plug adapter; for 4 mm Ø test plugs; for testing TOPJOB®S rail-mounted terminal blocks; gray	www.wago.com/2009-174
Item no.: 2009-182 Testing tap; for max. 2.5 mm ² ; tool-free connection for individual test wires 0.08 - 2.5 mm; gray	www.wago.com/2009-182
Item no.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red	www.wago.com/210-136

Jumpers

 Jumper

Item no.: 2000-408 Jumper; 8-way; insulated; light gray	www.wago.com/2000-408
Item no.: 2000-407 Jumper; 7-way; insulated; light gray	www.wago.com/2000-407
Item no.: 2000-409 Jumper; 9-way; insulated; light gray	www.wago.com/2000-409
Item no.: 2000-408/000-006 Jumper; 8-way; insulated; blue	www.wago.com/2000-408/000-006
Item no.: 2000-408/000-005 Jumper; 8-way; insulated; red	www.wago.com/2000-408/000-005
Item no.: 2000-409/000-005 Jumper; 9-way; insulated; red	www.wago.com/2000-409/000-005
Item no.: 2000-407/000-006 Jumper; 7-way; insulated; blue	www.wago.com/2000-407/000-006
Item no.: 2000-410 Jumper; 10-way; insulated; light gray	www.wago.com/2000-410

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

www.wago.com/2000-410/000-006

Item no.: 2000-433/000-005
Jumper; from 1 to 3; insulated; red

www.wago.com/2000-433/000-005

Item no.: 2000-407/000-005
Jumper; 7-way; insulated; red

www.wago.com/2000-407/000-005

Item no.: 2000-433/000-006
Jumper; from 1 to 3; insulated; blue

www.wago.com/2000-433/000-006

Item no.: 2000-410/000-005
Jumper; 10-way; insulated; red

www.wago.com/2000-410/000-005

Item no.: 2000-435
Jumper; from 1 to 5; insulated; light gray

www.wago.com/2000-435

Item no.: 2000-409/000-006
Jumper; 9-way; insulated; blue

www.wago.com/2000-409/000-006

Item no.: 2000-436
Jumper; from 1 to 6; insulated; light gray

www.wago.com/2000-436

Item no.: 2000-433
Jumper; from 1 to 3; insulated; light gray

www.wago.com/2000-433

Item no.: 2000-434
Jumper; from 1 to 4; insulated; light gray

www.wago.com/2000-434

Item no.: 2000-402
Jumper; 2-way; insulated; light gray

www.wago.com/2000-402

Item no.: 2000-402/000-006
Jumper; 2-way; insulated; blue

www.wago.com/2000-402/000-006

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

www.wago.com/2000-403

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

www.wago.com/2000-402/000-005

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

www.wago.com/2000-402/000-018

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Item no.: 2000-404 Jumper; 4-way; insulated; light gray	www.wago.com/2000-404
Item no.: 2000-403/000-005 Jumper; 3-way; insulated; red	www.wago.com/2000-403/000-005
Item no.: 2000-404/000-006 Jumper; 4-way; insulated; blue	www.wago.com/2000-404/000-006
Item no.: 2000-403/000-006 Jumper; 3-way; insulated; blue	www.wago.com/2000-403/000-006
Item no.: 2000-404/000-005 Jumper; 4-way; insulated; red	www.wago.com/2000-404/000-005
Item no.: 2000-405 Jumper; 5-way; insulated; light gray	www.wago.com/2000-405
Item no.: 2000-405/011-000 Star point jumper; 3-way; insulated; light gray	www.wago.com/2000-405/011-000
Item no.: 2000-405/000-006 Jumper; 5-way; insulated; blue	www.wago.com/2000-405/000-006
Item no.: 2000-406/000-006 Jumper; 6-way; insulated; blue	www.wago.com/2000-406/000-006
Item no.: 2000-405/000-005 Jumper; 5-way; insulated; red	www.wago.com/2000-405/000-005
Item no.: 2000-406 Jumper; 6-way; insulated; light gray	www.wago.com/2000-406
Item no.: 2000-406/000-005 Jumper; 6-way; insulated; red	www.wago.com/2000-406/000-005
Item no.: 2000-406/020-000 Delta jumper; insulated; light gray	www.wago.com/2000-406/020-000
Item no.: 2000-437 Jumper; from 1 to 7; insulated; light gray	www.wago.com/2000-437
Item no.: 2000-438 Jumper; from 1 to 8; insulated; light gray	www.wago.com/2000-438

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Item no.: 2000-439 Jumper; from 1 to 9; insulated; light gray	www.wago.com/2000-439
Item no.: 2000-440 Jumper; from 1 to 10; insulated; light gray	www.wago.com/2000-440
Protective warning marker	
Cover	
Item no.: 2000-115 Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow	www.wago.com/2000-115
Push-in type wire jumper	
Jumper	
Item no.: 2009-404 Push-in type wire jumper; 0.75 mm ² ; insulated; 110 mm long; gray	www.wago.com/2009-404
Item no.: 2009-402 Push-in type wire jumper; 0.75 mm ² ; insulated; 60 mm long; gray	www.wago.com/2009-402
Item no.: 2009-406 Push-in type wire jumper; 0.75 mm ² ; insulated; 250 mm long; gray	www.wago.com/2009-406
Marking accessories	
Marker	
Item no.: 2009-113 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white	www.wago.com/2009-113
Item no.: 2009-113/000-002 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; yellow	www.wago.com/2009-113/000-002
Item no.: 2009-113/000-012 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; orange	www.wago.com/2009-113/000-012
Item no.: 2009-113/000-007 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; gray	www.wago.com/2009-113/000-007
Item no.: 2009-113/000-005 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; red	www.wago.com/2009-113/000-005
Item no.: 2009-113/000-017 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; light green	www.wago.com/2009-113/000-017
Item no.: 2009-113/000-006 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; blue	www.wago.com/2009-113/000-006

Subject to changes. Please also observe the further product documentation!



Item no.: 2009-113/000-024
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; violet

www.wago.com/2009-113/000-024

Item no.: 2009-113/000-023
WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; green

www.wago.com/2009-113/000-023

Item no.: 793-3501
WMB marking card; as card; plain; snap-on type; white

www.wago.com/793-3501

Group marker carrier

Item no.: 2009-191
Group marker carrier; gray

www.wago.com/2009-191

Downloads

Documentation

Additional Information

pdf
2.3 MB
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CAD/CAE-Data

CAD data

2D/3D Models 2050-301

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CAE data

ZUKEN Portal 2050-301

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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2050-301

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

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Installation Notes

Installation



Conductor termination



Insert solid conductors via push-in termination.



Insert ferruled conductors via push-in termination.



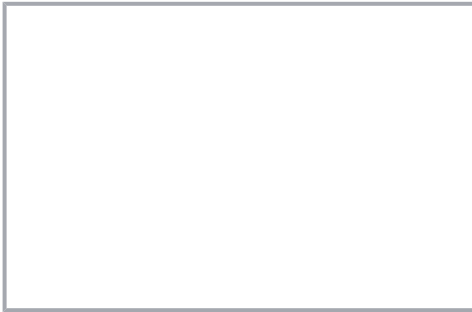
Insert fine-stranded conductors via operating tool.



Remove all conductors via operating tool.

Commoning

Subject to changes. Please also observe the further product documentation!



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)

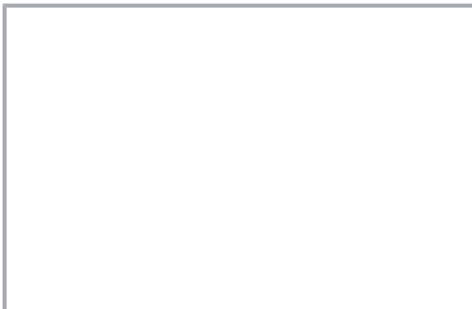


Insert a star point jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



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

Subject to changes. Please also observe the further product documentation!



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 (2009-110) into a marker slot.

Product family

TOPJOB® S

TOPJOB® S: In various industrial applications and modern building installations, WAGO's wide and versatile range of rail-mount terminal blocks provides more than just reliable electrical connections.

[Show all products from the family](#)

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