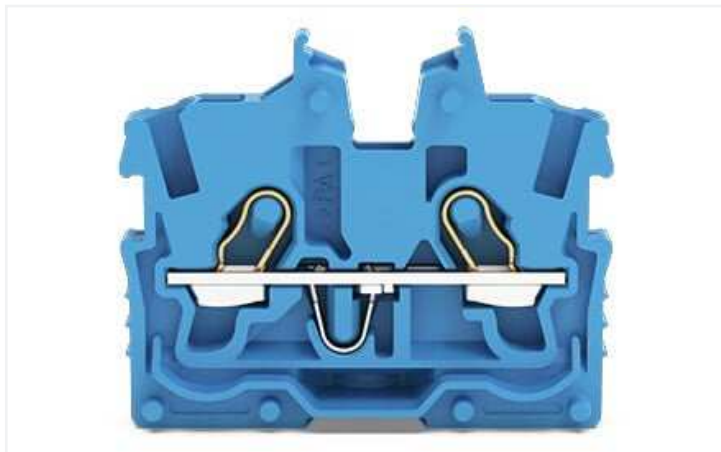


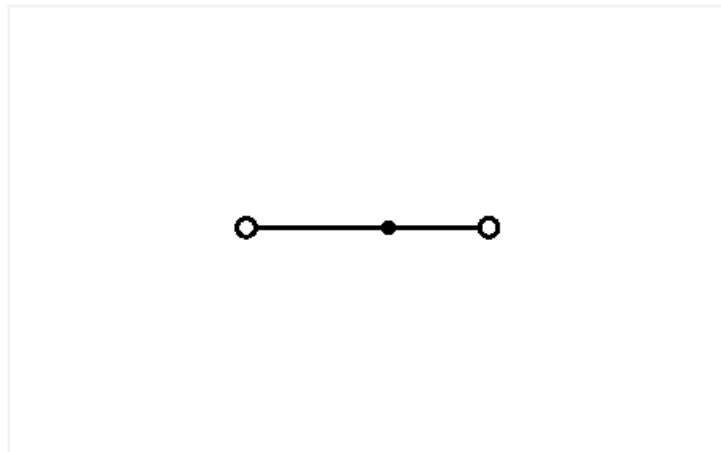
Data Sheet | Item Number: 2050-304

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; blue

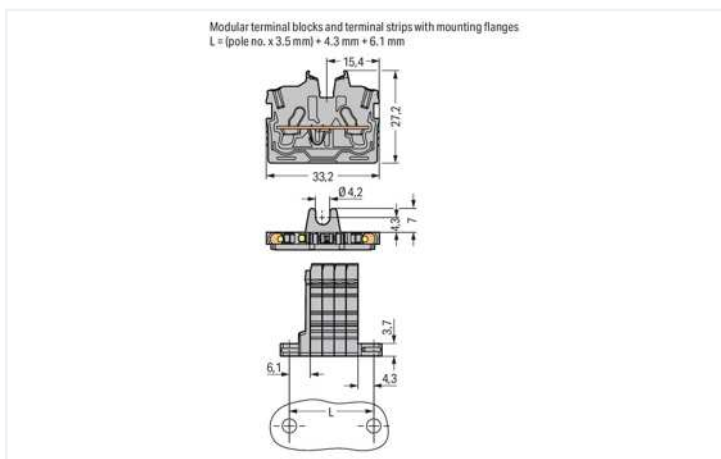
<https://www.wago.com/2050-304>



Color: ■ blue



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.) mm ²	17.5 A	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	300 V	-
Rated current	10 A	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 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 specified power loss	13.5 A
Resistance value for specified, current-dependent power loss	0.00238 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®
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	blue
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.051 MJ
Weight	2.5 g

Environmental requirements

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

Commercial data

ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143964968
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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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 TUV Rheinland do Brasil Ltda.	IEC 60079	TÜV 22.0014 U

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance 2050-304



Documentation

Additional Information

Technical Section

pdf
2142.18 KB



CAD/CAE-Data

CAD data

2D/3D Models
2050-304



CAE data

EPLAN Data Portal
2050-304



WSCAD Universe
2050-304



ZUKEN Portal
2050-304



1 Compatible Products

1.1 System counterpart

1.1.1 Through terminal block



Item No.: 2050-324

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 CA-GE CLAMP®; 1,00 mm²; blue

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

Item No.: 209-123
 Mounting foot with screw; can be screwed on terminal blocks with fixing flange; 6.4 mm wide; gray

1.3.3 Jumper

1.3.3.1 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

1.3.3.1 Jumper



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

1.3.4 Marking

1.3.4.1 Group marker carrier



Item No.: 2009-191

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



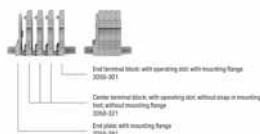
Item No.: 210-647

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

Installation

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



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 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.