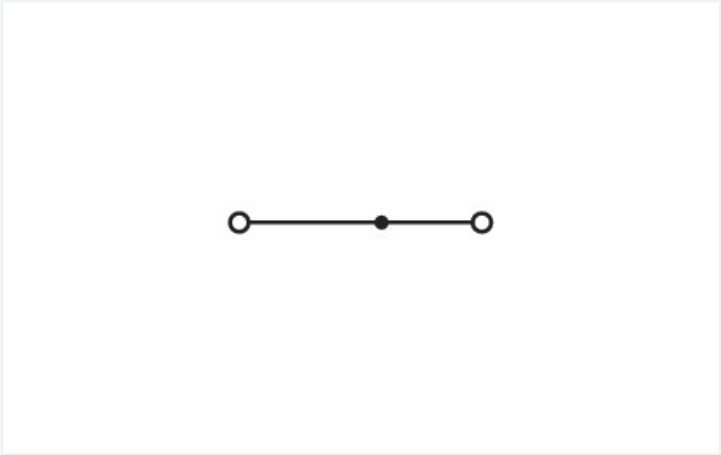
# Data Sheet | Item Number: 2050-307

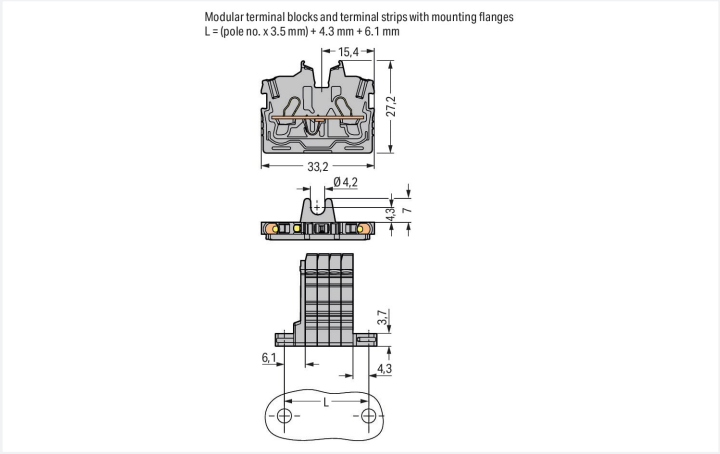
2-conductor miniature through terminal block; with operating slots; 1 mm²; End terminal block with mounting flange; side and center marking; with test port; Push-in CAGE CLAMP®; 1,00 mm²; green-yellow

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

Color: green-yellow



Similar to illustration




## Electrical data

### Ex information

| | |
|---|---|
| Reference hazardous areas | See “Downloads – Documentation – Additional Information: Technical Section; Technical Explications” |

### 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 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 |

## 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 | Mounting flange |
| Marking level | Center/side marking |

## Material data

| | |
|---|---|
| Note (material data) | Information on material specifications can be found here |
| Color | green-yellow |
| Material group | I |
| Insulation material | 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

| | |
|---|---|
| ETIM 8.0 | EC001284 |
| ETIM 7.0 | EC001284 |
| PU (SPU) | 100 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4055143965125 |
| Customs tariff number | 85369010000 |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CCA<br>DEKRA Certification B.V. | EN 60998 | NTR NL 7840 |
| CSA<br>CSA | C22.2 No. 158 | 80034182 |
| cURus<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |

### General approvals

| | | |
|---|---|---|
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60998 | 71-113957 |

## Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

## Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| AEx<br>Underwriters Laboratories Inc. | UL 60079 | E185892 (AEx eb IIC resp. Ex eb IIC) |
| ATEX<br>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<br>CNEX | GB/T 3836.3 | 2020312313000289 (Ex eb IIC Gb, Ex eb I Mb) |
| IECEx<br>Physikalisch Technische Bundesanstalt | IEC 60079 | IECEx PTB 19.0050U (Ex eb IIC Gb or EX eb I Mb) |
| INMETRO<br>TÜV Rheinland do Brasil Ltda. | IEC 60079 | TÜV 22.0014 U |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 2050-307

### Documentation

**Additional Information**

Technical Section — pdf, 2142.18 KB

### 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

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

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


Continued on next page

### 1.3.8.1 Operating tool

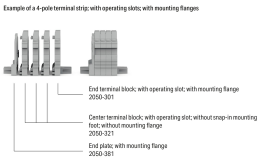
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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

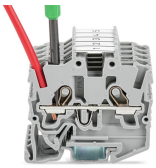



### Conductor termination

Insert solid conductors via push-in termination.

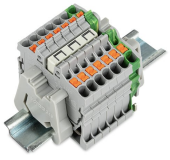
Insert ferruled conductors via push-in termination.

Insert fine-stranded conductors via operating tool.

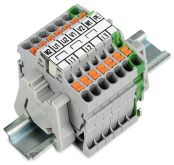


Remove all conductors via operating tool.

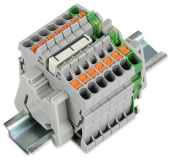
### Commoning



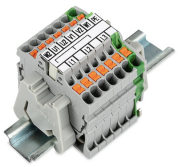
Insert a delta jumper and push down until it hits the backstop (example shows terminal blocks with push-buttons).



Marking strip (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).

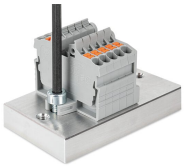


Marking strip (2009-110) inserted in the marking slot with jumper symbols of the inserted jumper (2000-405/011-000 Delta Jumper) (example shows terminal blocks with push-buttons)

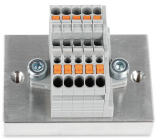
### Testing

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.