

Data sheet | Item number: 2020-5417

4-conductor sensor terminal block; for PNP (positive) switching sensors;
with ground contact; 1 mm²; Push-in CAGE CLAMP®; 1,00 mm²; gray

www.wago.com/2020-5417



Color:



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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

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Item description

3.5 mm spacing per signal (2 x 3.5 mm = 7 mm)

The double spacing per pole of this terminal block series maximizes connectivity. For example, ten sensors may be connected using only five sensor terminal blocks plus a power supply terminal block.

Data

Notes

Note	According to EN 61984, pluggable connectors without a current interrupting capacity must not be mated or unmated when live or under load. An appropriate end plate must be applied to the carrier terminal blocks after each female plug.
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Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60947-7-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	13.5 A
Legend (ratings)	(III / 3) $\hat{=}$ Overvoltage category III / Pollution degree 3

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	15 A

Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group C)	300 V
Rated current CSA (Use Group C)	10 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	8
Female plug slots	2
Total number of potentials	5
Number of levels	4
Number of jumper slots	5

Connection 1

Connection technology

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



	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper 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	7 mm / 0.276 inches
Height	97.3 mm / 3.831 inches
Depth from upper-edge of DIN-rail	52.4 mm / 2.063 inches

Mechanical Data

Mounting type	DIN-35 rail DIN-35 rail
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
Fire load	0.379 MJ
Weight	20.5 g

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Environmental requirements

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

Commercial data

eCl@ss 10.0	27-14-11-28
eCl@ss 9.0	27-14-11-28
ETIM 8.0	EC000900
ETIM 7.0	EC000900
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143525503
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 60947	NTR NL 7617
	CSA DEKRA Certification B.V.	C22.2	2516073
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	71- 100670
	UL UL International Germany GmbH	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

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

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Counterpart

Item no.2020-102 1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; 1,50 mm²; gray	www.wago.com/2020-102
Item no.2020-202 2-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 2-pole; 1,50 mm²; gray	www.wago.com/2020-202

Required accessories

End plate

End plate

Item no.: 2020-5491 End and intermediate plate; 1 mm thick; for 4-conductor terminal blocks; gray	www.wago.com/2020-5491
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Optional accessories

Carrier rail

Mounting accessories

Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	www.wago.com/210-197
Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	www.wago.com/210-198
Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	www.wago.com/210-113
Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	www.wago.com/210-118
Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	www.wago.com/210-112
Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-114
Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored	www.wago.com/210-115
Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-196

Marking accessories

Marking strip

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



	Item no.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	www.wago.com/2009-110
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Marker carrier		
	Item no.: 2000-121 Adaptor; gray	www.wago.com/2000-121
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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
	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
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Group marker carrier		
	Item no.: 2009-191 Group marker carrier; gray	www.wago.com/2009-191
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Ferrule		
Ferrule		
	Item no.: 216-241	

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

Ferrule; Sleeve for 0.5 mm ² / 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 mm ² / 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 mm ² / 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	
Cover carrier	
Item no.: 709-169 Cover carrier; Type 3; incl. fixing/retaining screws and knurled nut; suitable for 279 to 282 and 880 Series rail-mounted terminal blocks; suitable for 264 Series miniature rail-mounted terminal blocks; suitable for 270 Series sensor and actuator terminal blocks; gray	www.wago.com/709-169
Cover	
Item no.: 709-156 Cover; Type 3; suitable for cover carrier, type 3; 1 m long; transparent	www.wago.com/709-156
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
Jumpers	
Jumper	
Item no.: 210-123 Wire commoning chain; insulated; blue	www.wago.com/210-123
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

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



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
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

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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
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

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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
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
Item no.: 210-103 Wire commoning chain; insulated; black	www.wago.com/210-103
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
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
Coding	
Coding	
Item no.: 2020-100 Carrier with 6 coding pins; for coding of female plugs; for carrier terminal blocks; orange	www.wago.com/2020-100
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

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Downloads

Documentation

Bid Text

2020-5417 X81 - Datei	2019 年2月19 日	xml 4.6 kB	Download
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2020-5417 docx - Datei	2018 年8月7 日	docx 15.8 kB	Download
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Additional Information

		pdf 2.3 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 2020-5417		URL	Download
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CAE data

ZUKEN Portal 2020-5417		URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2020-5417 4-conductor sensor terminal block; for PNP (positive) switching sensors; with ground contact; 1 mm ² ; Push-in CAGE CLAMP®; 1,00 mm ² ; gray		URL	Download
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Installation Notes

Installation

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Snap individual terminal blocks onto the DIN-rail and slide together.



Separate terminal block assembly and slide individual terminal blocks laterally using an operating tool.

Conductor termination



All conductor types at a glance

Testing



Testing via testing tap (2009-182) or test plug adapter (2009-174) (up to max. 42 V).

Coding

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

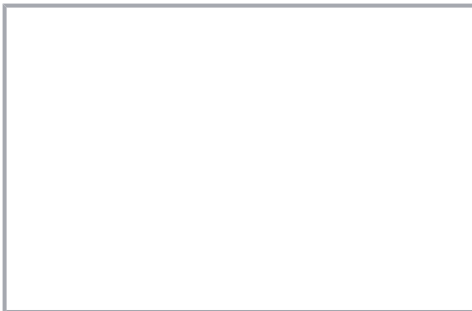


Insert coding pin into the corresponding slot and twist it off.



Remove the coding finger using a cutting tool.

Locking system



Slide the locking lever into position.

Strain relief



Removing a female plug via conductor bundle provided with strain relief plate.

Marking

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



Labeling terminal blocks via marking strips (2009-110) or 3.5 mm wide WMB markers (793-35xx) – from the top or the side.

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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