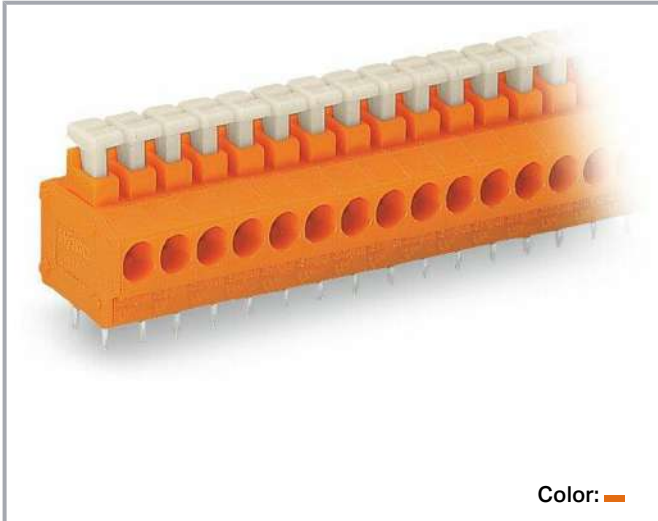


Data sheet | Item number: 235-148

PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.81 mm; 48-pole;
Push-in CAGE CLAMP®; 1,50 mm²; orange



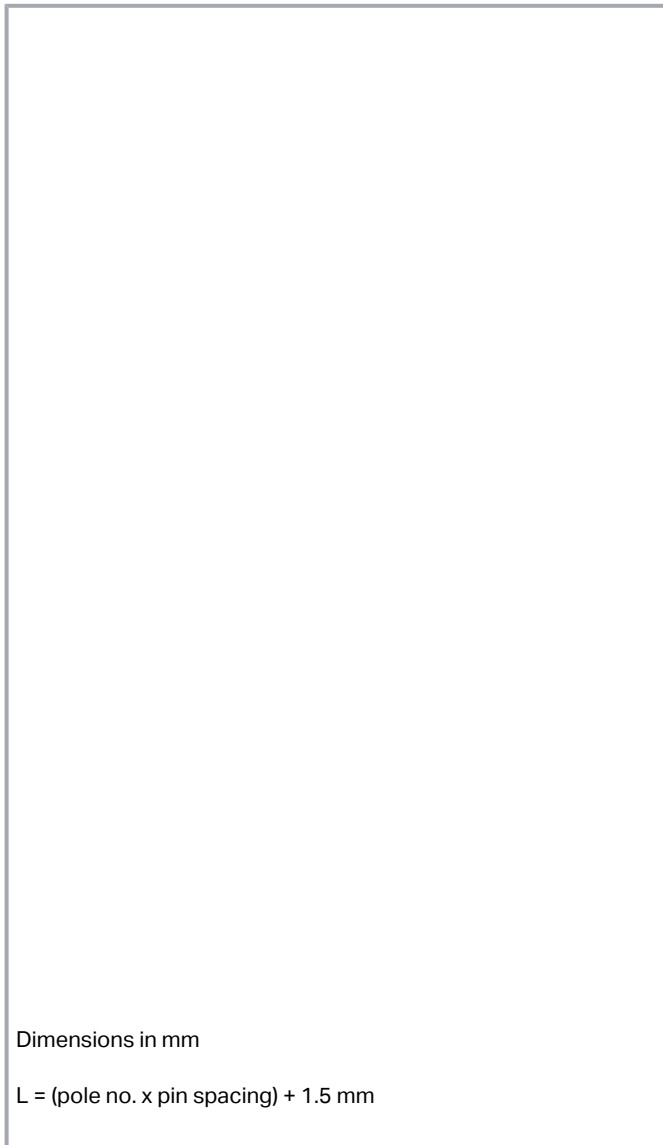
www.wago.com/235-148



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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

Item description

- PCB terminal strips with push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons

Data

Notes

Variants:

Other pole numbers

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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Other colors
 Mixed-color PCB connector strips
 Direct marking
 Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>

Electrical data

IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	200 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	500 V
Rated surge voltage (II/2)	4 kV
Rated current	17.5 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

UL Approvals

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 D)	300 V
Rated current UL (Use Group D)	10 A

CSA Approvals

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A

Connection data

Total number of connection points	48
Total number of potentials	48
Number of connection types	1
Number of levels	1

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

WAGO Corporation
 Germantown, WI 53022
 Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
 Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.5 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor	0.75 ... 1.5 mm ² / 20 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1 mm ²
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Conductor connection direction to PCB	0°
Number of poles	48

Physical data

Pin spacing	3.81 mm / 0.15 inch
Width	184.38 mm / 7.259 inch
Height	19.1 mm / 0.752 inch
Height from the surface	15.5 mm / 0.61 inch
Depth	12.5 mm / 0.492 inch
Solder pin length	3.6 mm
Solder pin dimensions	0.4 x 0.8 mm
Drilled hole diameter with tolerance	1 ^(+0.1) mm

PCB contact

PCB Contact	THT
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	2

Material data

Color	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.484 MJ

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

Weight	27.8g
--------	-------

Environmental requirements






Limit temperature range	-60 ... +105 °C
-------------------------	-----------------

Commercial data

Product Group	4 (Printed Circuit)
PU (SPU)	20 (5) Stück
Packaging type	box
Country of origin	CH
GTIN	4044918829434
Customs tariff number	85369010000

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7144
	CCA DEKRA Certification B.V.	EN 60947	2149549.02
	CCA DEKRA Certification B.V.	EN 60998	NTR NL-6919
	CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL-7774
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60947	40029328

Ship Approvals














Logo	Approval	Additional Approval Text	Certificate name

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

	ABS American Bureau of Shipping	-	19- HG1869876- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

Optional accessories

Ferrules

Ferrule			
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-106
	Item no.: 216-107 Ferrule; Sleeve for 4 mm ² / AWG 12; uninsulated; electro-tin plated		www.wago.com/216-107
	Item no.: 216-108 Ferrule; Sleeve for 6 mm ² / AWG 10; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-108
	Item no.: 216-109 Ferrule; Sleeve for 10 mm ² / AWG 8; uninsulated; electro-tin plated		www.wago.com/216-109
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated		www.wago.com/216-103
	Item no.: 216-110 Ferrule; Sleeve for 16 mm ² / AWG 6; uninsulated; electro-tin plated; metallic brown		www.wago.com/216-110
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-123
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored		www.wago.com/216-122
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated		www.wago.com/216-124
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92		www.wago.com/216-142

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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.










	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
	Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-143
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	www.wago.com/216-207
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-209 Ferrule; Sleeve for 10 mm ² / AWG 8; insulated; electro-tin plated; red	www.wago.com/216-209
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	www.wago.com/216-144
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow	www.wago.com/216-208
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223

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



	<p>Item no.: 216-210 Ferrule; Sleeve for 16 mm² / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-210
	<p>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</p>	www.wago.com/216-241
	<p>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</p>	www.wago.com/216-242
	<p>Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray</p>	www.wago.com/216-222
	<p>Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</p>	www.wago.com/216-221
	<p>Item no.: 216-224 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black</p>	www.wago.com/216-224
	<p>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</p>	www.wago.com/216-243
	<p>Item no.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	www.wago.com/216-244
	<p>Item no.: 216-263 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	www.wago.com/216-263
	<p>Item no.: 216-246 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-246
	<p>Item no.: 216-266 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-266
	<p>Item no.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	www.wago.com/216-264
	<p>Item no.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	www.wago.com/216-284
	<p>Item no.: 216-286 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-286
	<p>Item no.: 216-287 Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	www.wago.com/216-287
	<p>Item no.: 216-262 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</p>	www.wago.com/216-262

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

	<p>Item no.: 216-288 Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow</p>	www.wago.com/216-288
	<p>Item no.: 216-289 Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	www.wago.com/216-289
	<p>Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p>	www.wago.com/216-301
	<p>Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p>	www.wago.com/216-321
	<p>Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green</p>	www.wago.com/216-322
	<p>Item no.: 216-267 Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	www.wago.com/216-267
	<p>Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p>	www.wago.com/216-302

Downloads

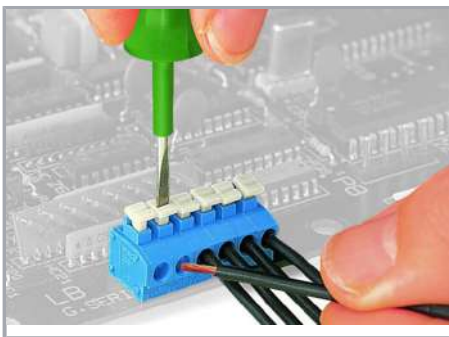
Documentation

Additional Information

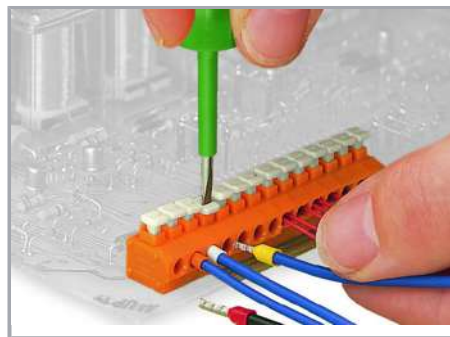
Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
------------------------	------------	---------------	----------

Installation Notes

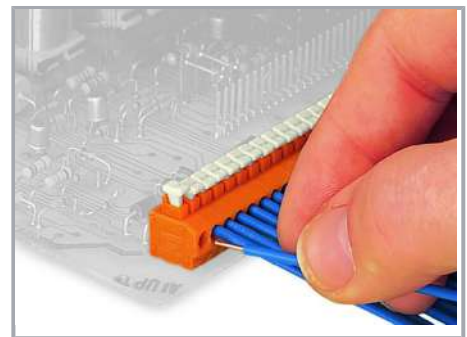
Conductor termination



Inserting/removing fine-stranded conductors via push-button.



Insert/remove fine-stranded conductors with ferrules via push-button.



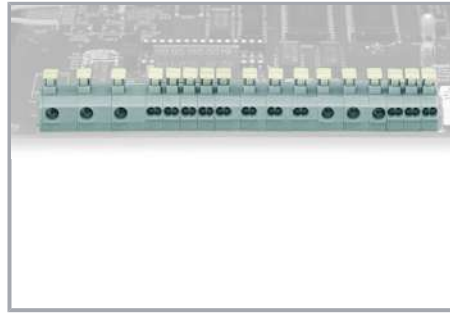
Insert solid conductors via push-in termination.

Installation

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

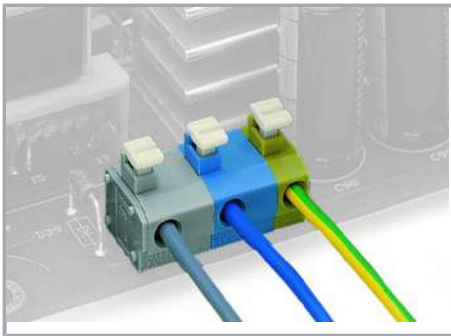
WAGO Corporation
 Germantown, WI 53022
 Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
 Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Combining 1- and 2-conductor terminal blocks with different pin spacing.

Testing



Application example: field-wiring terminal strip

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