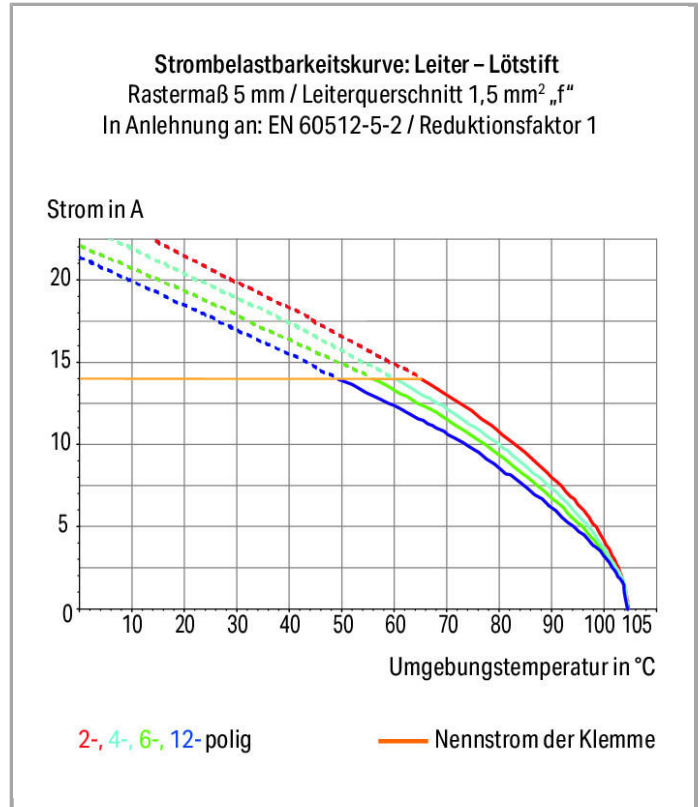


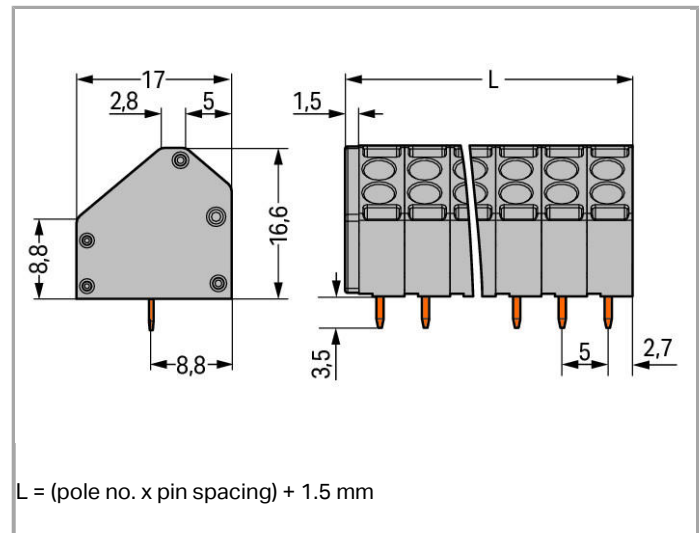
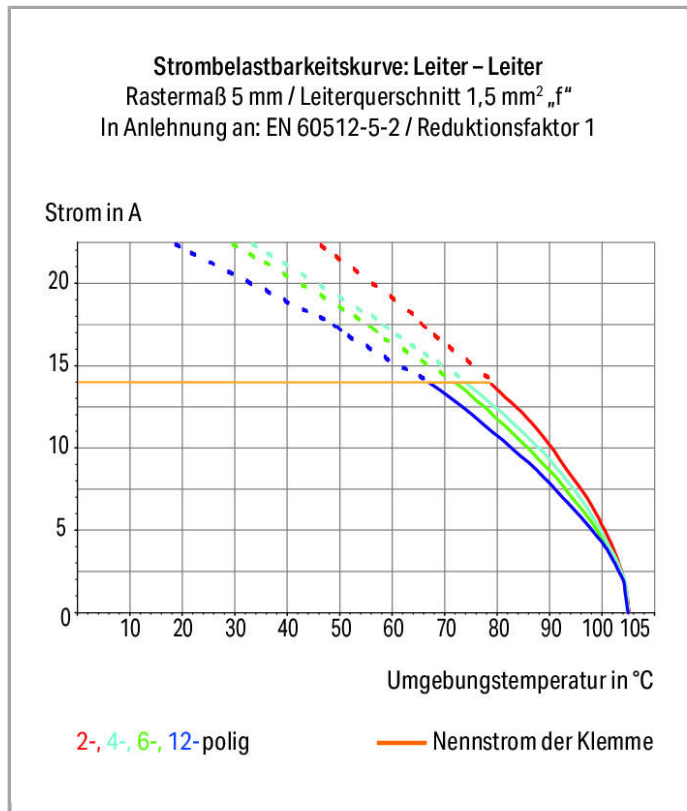
Data sheet | Item number: 816-109

2-conductor PCB terminal block; 1.5 mm²; Pin spacing 5 mm; 9-pole; Push-in
CAGE CLAMP®



www.wago.com/816-109





Item description

- Two-conductor terminal strips with screwdriver actuation and Push-in CAGE CLAMP® connection
- Double entries for supply and power distribution
- Simple, reliable connection via clamping units featuring individual operating slots
- Simple, push-in termination of solid and ferruled conductors

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Direct marking, Mixed-color terminal strips, Other colors, Other pole numbers

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV
Rated voltage (III / 2)	320 V
Rated impulse voltage (III / 2)	4 kV
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	14 A

Legend (ratings)

(III / 2) ≙ Overvoltage category III / Pollution degree 2

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

Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	8 A
Rated voltage CSA (Use Group D)	300 V

Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor	0.2 ... 1.5 mm ² / 24 ... 16 AWG
Fine-stranded conductor with ferrule with plastic collar	0.2 ... 1 mm ²
Fine-stranded conductor with ferrule without plastic collar	0.2 ... 1.5 mm ²
Strip length	9 ... 10 mm / 0.35 ... 0.39 Inch
Conductor entry angle to the PCB	45°
No. of poles	9
Total number of connection points	18
Total number of potentials	9
Number of connection types	1
Number of levels	2

Geometrical Data

Pin spacing	5 mm (0.197 inch)
Width	46.5 mm / 1.831 inch
Height	20.1 mm / 0.791 inch
Height from the surface	16.6 mm / 0.654 inch
Depth	17 mm / 0.669 inch
Solder pin length	3.5 mm
Solder pin dimensions	0.8 x 0.5 mm
Drilled hole diameter (tolerance)	1.1 ^(+0.1) mm

PCB contact

PCB contact	THT
Solder pin arrangement	over the entire terminal strip, in line
Number of solder pins per potential	1

Material Data

Color	gray
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0.206 MJ
Weight	10.734 g

Environmental Requirements



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

Country of origin	CH
GTIN	4045454732196
Customs Tariff No.	85369010000
Product Group	4 (Printed Circuit)

Approvals / Certificates

Country specific Approvals

Logo	Approval	Certificate name
	CCA DEKRA Certification B.V.	2158696.01
	CCA DEKRA Certification B.V.	NTR NL 7057
	CSA DEKRA Certification B.V.	1132097

UL-Approvals




Logo	Approval	Certificate name
	UR Underwriters Laboratories Inc.	E45172, sec. 6

Compatible products





Marking accessories



















	Item no.: 210-332/500-202 Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-332/500-202
	Item no.: 210-332/500-204 Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-332/500-204
	Item no.: 210-332/500-205 Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-332/500-205
	Item no.: 210-332/500-206 Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive	www.wago.com/210-332/500-206
	Item no.: 210-833 Marking strips; on reel; 6 mm wide; plain; Self-adhesive	www.wago.com/210-833









tools

	Item no.: 210-647 Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short	www.wago.com/210-647
	Item no.: 210-648 Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short; angled	www.wago.com/210-648
	Item no.: 210-719 Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm	www.wago.com/210-719

ferrule

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-101
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	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.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-104

	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	www.wago.com/216-121
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated	www.wago.com/216-122
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-123
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-131
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-142
	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.: 216-144 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	www.wago.com/216-144
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-203
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-241
	Item no.: 216-242	

	Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	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	www.wago.com/216-243
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-263
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322

Downloads

smartDATA

CAD data

3D Download 816-109	URL	Download
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PCB libraries

TARGET Library for WAGO PCB Terminal Blocks Compatible with TARGET PCB Design Software Version 17.x	1.1.0 Oct 6, 2014	ZIP 27.1 MB	Download
EAGLE Library for WAGO PCB Terminal Blocks Compatible with EAGLE PCB Design Software Version 6.x or higher	2.1 Nov 17, 2017	ZIP 23.9 MB	Download
DesignSpark Library for WAGO PCB Terminal Blocks Compatible with DesignSpark PCB Version 4.x or higher	2.1 Oct 6, 2014	ZIP 22.5 MB	Download

Subject to changes.

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