

Data Sheet | Item Number: 816-103

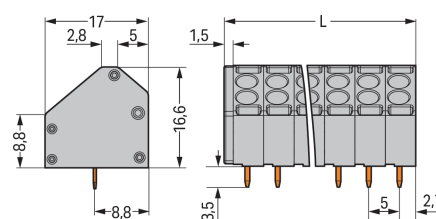
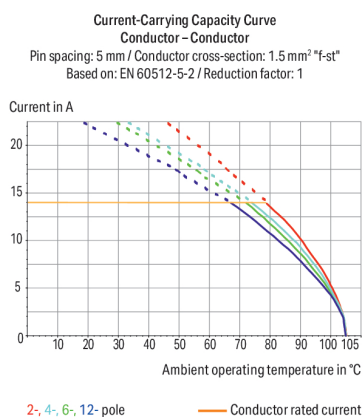
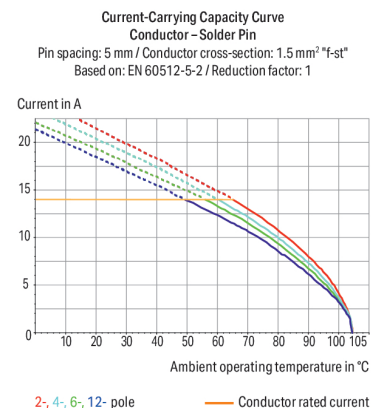
2-conductor PCB terminal block; 1.5 mm²; Pin spacing 5 mm; 3-pole; Push-in CAGE CLAMP®; gray

<https://www.wago.com/816-103>



Color: ■ gray

Similar to illustration



Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mm

PCB terminal block, 816 Series, solder pin dimensions 0.8 x 0.5 mm

Our PCB terminal block (item number 816-103) simplifies electrical installations. You can rely on proven safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Ensure that the strip lengths are between 9 and 10 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The item's dimensions are (16.5 x 20.1 x 17) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 1.5 mm².

Tin is used for coating the contact surfaces. This PCB terminal block is operated with an operating tool. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle..



Notes	
Variants:	Other pole numbers 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				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		320 V	320 V	630 V
Rated impulse withstand voltage		4 kV	4 kV	4 kV
Rated current		14 A	14 A	14 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		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		8 A	-	-

Connection Data		
Clamping units	6	
Total number of potentials	3	
Number of connection types	1	
Number of levels	2	

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.2 ... 1.5 mm² / 24 ... 16 AWG
Fine-stranded conductor	0.2 ... 1.5 mm² / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferule	0.2 ... 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.2 ... 1.5 mm²
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches
Conductor connection direction to PCB	45 °
Pole number	3

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	16.5 mm / 0.65 inches
Height	20.1 mm / 0.791 inches
Height from the surface	16.6 mm / 0.654 inches
Depth	17 mm / 0.669 inches
Solder pin length	3.5 mm
Solder pin dimensions	0.8 x 0.5 mm
Drilled hole diameter	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		
Note (material data)		Information on material specifications can be found here
Color		gray
Material group		I
Insulation material (main housing)		Polyamide (PA66)
Flammability class per UL94		V0
Clamping spring material		Chrome-nickel spring steel (CrNi)
Contact material		Copper alloy
Contact Plating		Tin
Fire load		0.063 MJ
Weight		3.8 g

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

Commercial data		
Product Group		4 (Printed Circuit Connectors)
PU (SPU)		224 (112) pcs
Packaging type		Box
Country of origin		CH
GTIN		4045454732066
Customs tariff number		85369010000

Product Classification		
UNSPSC		39121409
eCl@ss 10.0		27-44-04-01
eCl@ss 9.0		27-44-04-01
ETIM 9.0		EC002643
ETIM 10.0		EC002643
ECCN		NO US CLASSIFICATION

Environmental Product Compliance		
RoHS Compliance Status		Compliant, No Exemption

Approvals / Certificates

General approvals



General approvals

UR	UL 1059	E45172
Underwriters Laboratories Inc.		

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7057
CCA DEKRA Certification B.V.	EN 60947	2158696.01
CSA DEKRA Certification B.V.	C22.2	1132097



Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 816-103

Documentation

Safety Data Sheet	Additional Information
Handling and Safety Instructions of PCB Terminal Blocks with Push-In Cage Clamp	Technical Section03.04.2019pdf2027.26 KB

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 816-103	ZUKEN Portal 816-103

PCB Design
Symbol and Footprint via SamacSys 816-103
Symbol and Footprint via Ultra Librarian 816-103

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 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.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	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.: 216-142 Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
			
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	Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	

1.1.2 Marking

1.1.2.1 Marking strip

			
Item No.: 210-833 Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white	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; white	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; white	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; white
			
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; white			

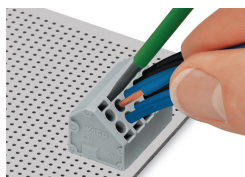
1.1.3 Tool

1.1.3.1 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

Conductor termination



Open the clamping unit via screwdriver (3.5 mm blade) to insert/remove fine-stranded conductors.

Push in solid and ferruled, fine-stranded conductors until fully inserted.