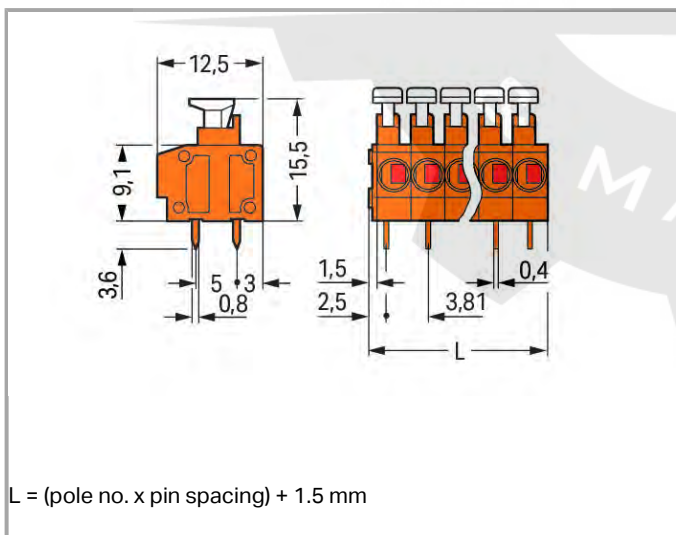
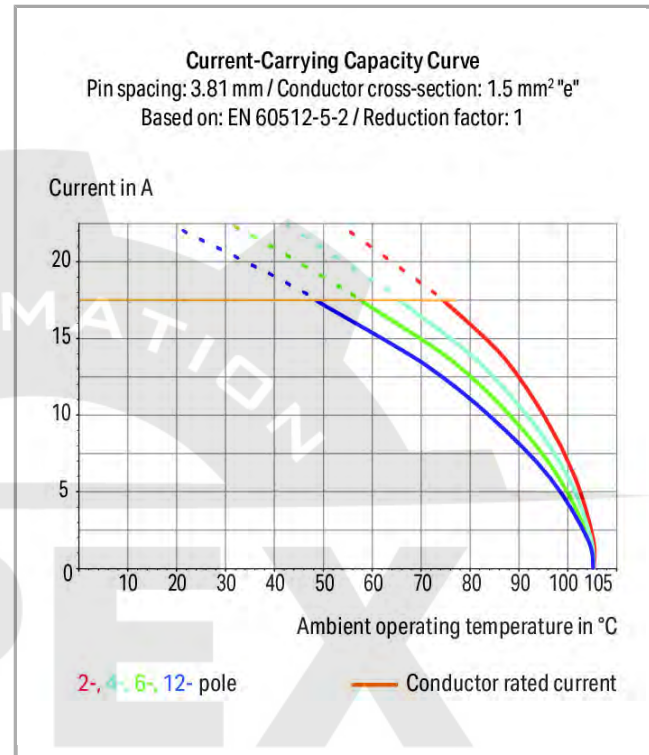
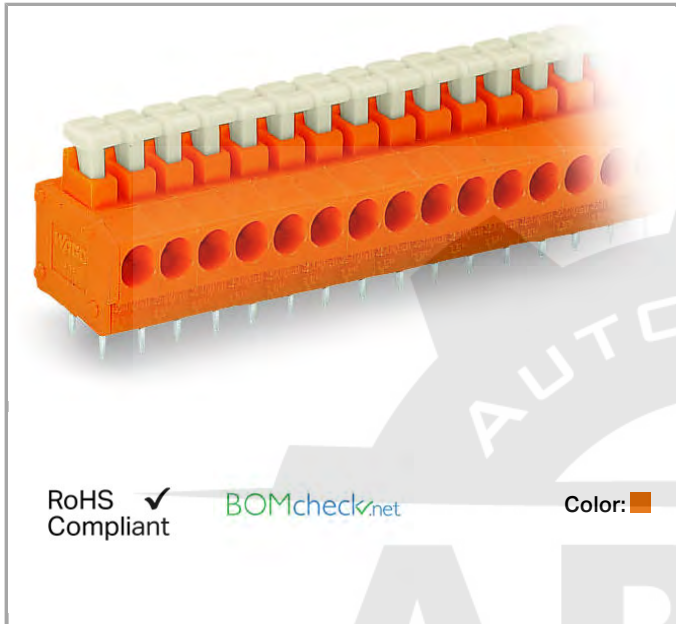


Data sheet | Item number: 235-109

PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.81 mm; 9-pole;
Push-in CAGE CLAMP®



235-109



Item description

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

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	200 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)	500 V
Rated impulse voltage (II / 2)	4 kV
Rated current	17.5 A

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)	10 A

Connection data

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 ferrule with plastic collar	0.25 ... 1 mm ²
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 1 mm ²
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch
Conductor entry angle to the PCB	0°
No. of poles	9
Total number of connection points	9
Total number of potentials	9
Number of connection types	1
Number of levels	1

Geometrical Data

Pin spacing	3.81 mm / 0.15 inch
Width	35.79 mm / 1.409 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 (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
Insulating material	Polyamide 66 (PA 66)
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	0.094 MJ
Weight	5.304 g

Environmental Requirements

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

Commercial data

Product Group	4 (Printed Circuit)
Country of origin	CH
GTIN	4044918828826
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals

Certificate

Logo	Approval	Additional Approval Text	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-7625
	CSA DEKRA Certification B.V.	-	1673956
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60947	40029328

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14-HG1241537-PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

Compatible products

ferrule

	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated	216-101
	Item no.: 216-102	

	Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated	216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	216-103
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated	216-121
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated	216-122
	Item no.: 216-123 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	216-123
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	216-131
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	216-132
	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	216-141
	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	216-142
	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	216-143
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	216-151
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	216-152
	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated	216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated	216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated	216-203
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated	216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated	216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated	216-223
	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	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	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	216-243
	Item no.: 216-262 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	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	216-263
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-322
Marking accessories		
	Item no.: 210-332/381-202 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	210-332 / 381-202
	Item no.: 210-332/381-204 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	210-332 / 381-204
	Item no.: 210-332/381-205 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	210-332 / 381-205
	Item no.: 210-332/381-206 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	210-332 / 381-206
tools		
	Item no.: 210-657 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short	210-657
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720

Downloads

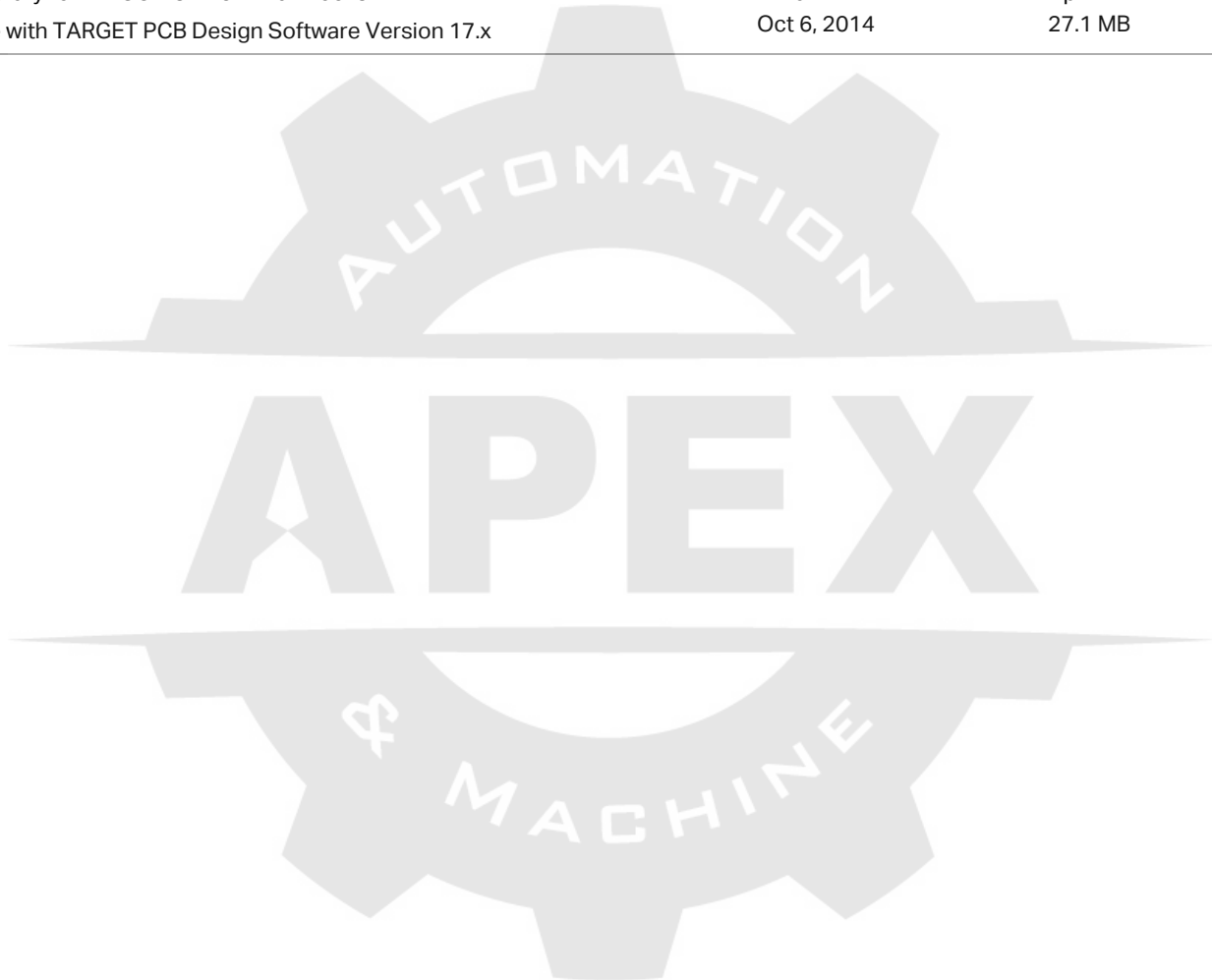
CAD/CAE - Smart Data

CAD data

3D Download 235-109	URL	Download
---------------------	-----	----------

**PCB libraries**

EAGLE Library for WAGO PCB Terminal Blocks Compatible with EAGLE PCB Design Software Version 6.x or higher	2.1 Oct 6, 2014	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
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



Subject to changes.
