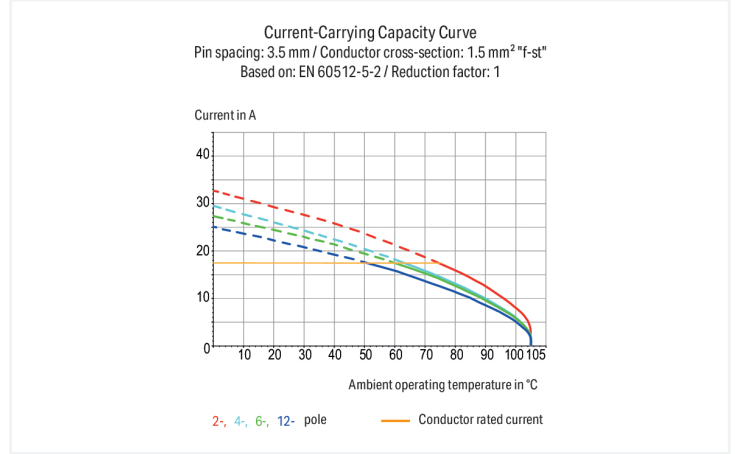
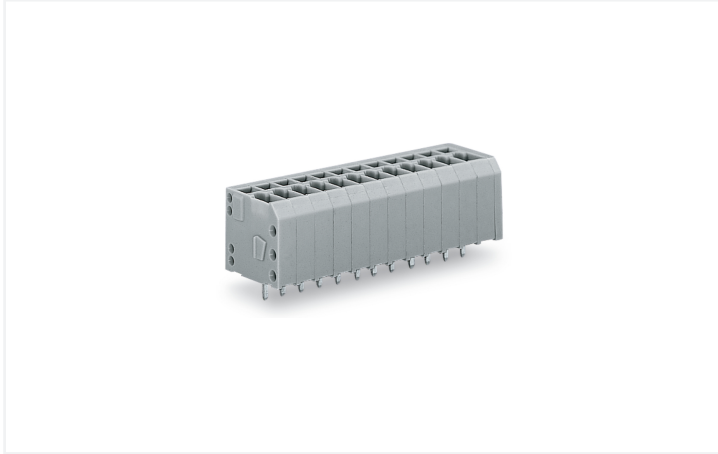


# Data Sheet | Item Number: 739-309

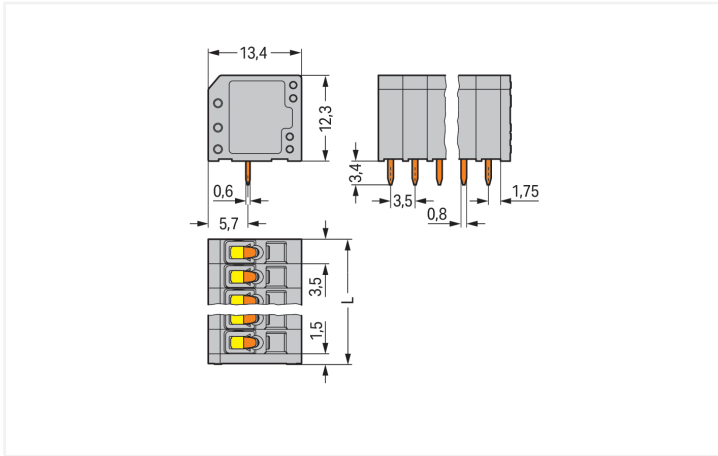
PCB terminal block; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 9-pole; CAGE CLAMP®; gray

<https://www.wago.com/739-309>



Color: ■ gray

Similar to illustration



Dimensions in mm

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

## PCB terminal block, 739 Series, 90° conductor entry to board

Our PCB terminal block (item number 739-309) is designed for seamless electrical installations. You can count on trusted safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a safe and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The dimensions are (33 x 15.7 x 13.4) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces. This PCB terminal block is operated with an operating tool. THT is used to solder the PCB terminal block. Insert the conductor into the board at an angle of 90°.

## 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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
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## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1059		
	III	III	II		B	C	D
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	160 V	160 V	320 V	Rated current	15 A	-	10 A
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	17.5 A	17.5 A	17.5 A				

## Connection Data

Connection Data		Connection 1	
Clamping units	9	Connection technology	CAGE CLAMP®
Total number of potentials	9	Actuation type	Operating tool
Number of connection types	1	Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
Number of levels	1	Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm <sup>2</sup>
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
		Note (conductor cross-section)	14 AWG: THHN, THWN
		Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
		Conductor connection direction to PCB	90°
		Pole number	9

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	33 mm / 1.299 inches
Height	15.7 mm / 0.618 inches
Height from the surface	12.3 mm / 0.484 inches
Depth	13.4 mm / 0.528 inches
Solder pin length	3.4 mm
Solder pin dimensions	0.6 x 0.8 mm
!	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)	<a href="#">Information on material specifications can be found here</a>
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	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.105 MJ
Weight	5.9 g

### Environmental requirements

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

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	140 (35) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918301435
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
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7961
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7780
CSA DEKRA Certification B.V.	C22.2 No. 158	1711139
KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-110334
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-125886

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 739-309



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 739-309



CAE data

EPLAN Data Portal 739-309



ZUKEN Portal 739-309



PCB Design

Symbol and Footprint via SamacSys 739-309



Symbol and Footprint via Ultra Librarian 739-309



1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



[Item No.: 216-301](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



[Item No.: 216-321](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



[Item No.: 216-151](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



[Item No.: 216-131](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



[Item No.: 216-302](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



[Item No.: 216-322](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



[Item No.: 216-132](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



[Item No.: 216-152](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



[Item No.: 216-201](#)

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



[Item No.: 216-241](#)

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



[Item No.: 216-221](#)


Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



[Item No.: 216-141](#)




Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

1.1.1.1 Ferrule

 <p><b>Item No.: 216-101</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-121</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-242</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	 <p><b>Item No.: 216-262</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>
 <p><b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	 <p><b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	 <p><b>Item No.: 216-142</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>	 <p><b>Item No.: 216-102</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>
 <p><b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	 <p><b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	 <p><b>Item No.: 216-203</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>
 <p><b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; red</p>	 <p><b>Item No.: 216-103</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated</p>	 <p><b>Item No.: 216-143</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>	 <p><b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; silver-colored</p>
 <p><b>Item No.: 216-124</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated</p>	 <p><b>Item No.: 216-144</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p>	 <p><b>Item No.: 216-104</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored</p>	




1.1.2 Marking

1.1.2.1 Marking strip

 <p><b>Item No.: 210-332/350-202</b> Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p>	 <p><b>Item No.: 210-332/350-204</b> Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p>	 <p><b>Item No.: 210-332/350-206</b> Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p>
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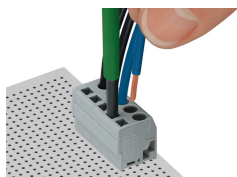
1.1.3 Tool

1.1.3.1 Operating tool

 <p><b>Item No.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft</p>	 <p><b>Item No.: 210-648</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short</p>	 <p><b>Item No.: 210-647</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured</p>
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## Installation Notes

### Conductor termination



Inserting a conductor parallel to screwdriver actuation – 739 Series.