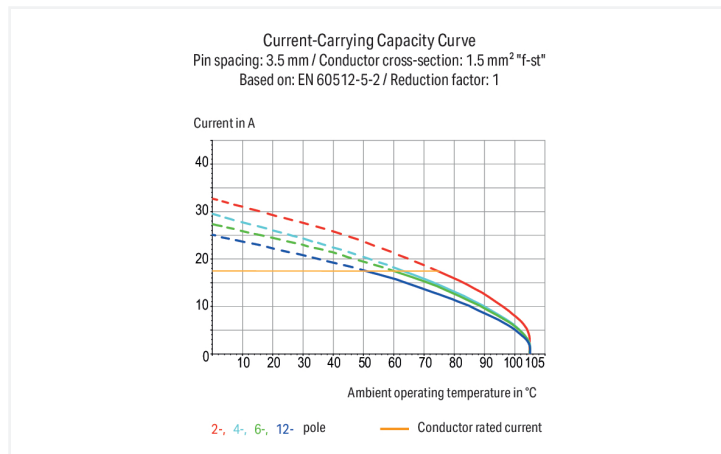
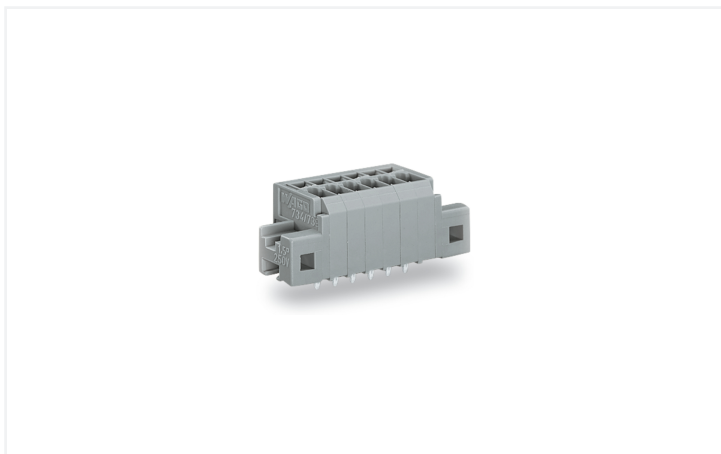


# Data Sheet | Item Number: 739-309/001-000

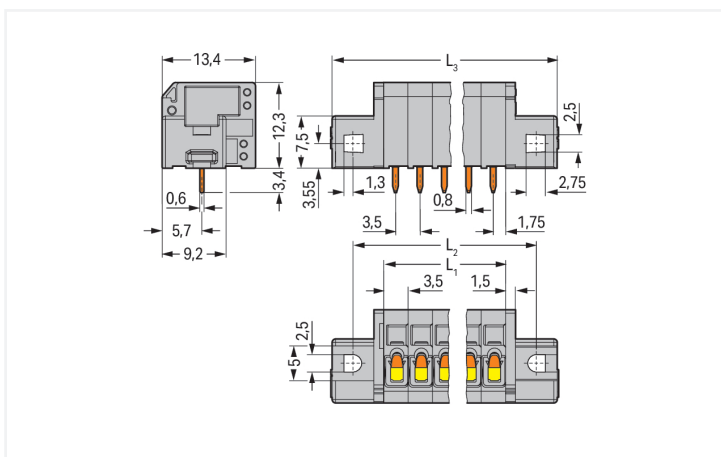
PCB terminal block; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 9-pole; CAGE CLAMP®; clamping collar; gray

<https://www.wago.com/739-309/001-000>



Color: ■ gray

Similar to illustration



Dimensions in mm

$L1 = \text{pole no.} \times \text{pin spacing}$   
 $L2 = L1 + 8.8 \text{ mm}$   
 $L3 = L1 + 14.8 \text{ mm}$

## PCB terminal block, 739 Series, gray

This PCB terminal block (item number 739-309/001-000) is designed for quick and easy connections. You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Conductors can only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a reliable 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 (46.3 x 15.7 x 13.4) mm (width x height x depth). Depending on the conductor type, 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 assemble the PCB terminal block. The conductor is designed to be inserted into the board at a 90° 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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
-----------	--

## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1059		
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

Clamping units	9	<b>Connection 1</b>	
Total number of potentials	9	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
		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	46.3 mm / 1.823 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

## Mechanical data

Mounting type	Mounting flange
Mounting type	Panel mounting
Suitable for through-panel applications	Yes

### 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	0.129 MJ
Weight	6.6 g

### Environmental requirements

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

### Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	80 (20) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918634854
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



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

#### General approvals

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  
739-309/001-000



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models  
739-309/001-000



CAE data

EPLAN Data Portal  
739-309/001-000



ZUKEN Portal

739-309/001-000



PCB Design

Symbol and Footprint  
via SamacSys  
739-309/001-000



Symbol and Footprint  
via Ultra Librarian  
739-309/001-000



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

 <b>Item No.: 216-101</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-121</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored	 <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	 <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
 <b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	 <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	 <b>Item No.: 216-102</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored	 <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	 <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	 <b>Item No.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red
 <b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated; red	 <b>Item No.: 216-103</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated	 <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	 <b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-124</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; un-insulated; electro-tin plated	 <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	 <b>Item No.: 216-104</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored	




1.1.2 Marking

1.1.2.1 Marking strip

 <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	 <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	 <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
--	---	--

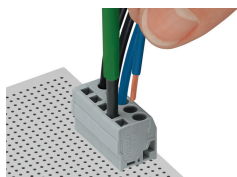
1.1.3 Tool

1.1.3.1 Operating tool

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

## Installation Notes

### Conductor termination



Inserting a conductor parallel to screwdriver actuation – 739 Series.