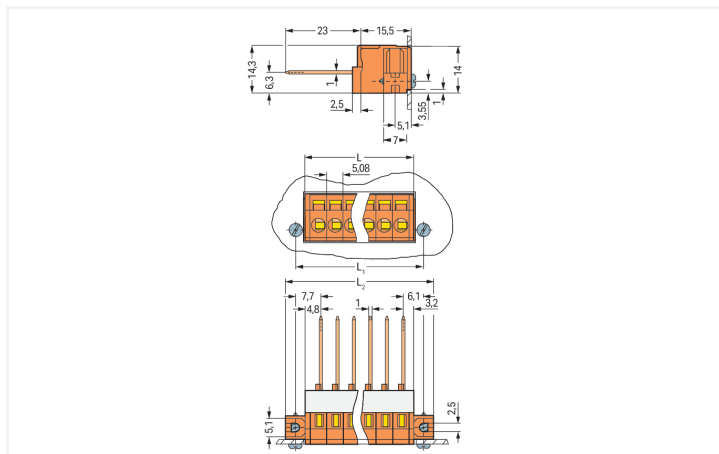
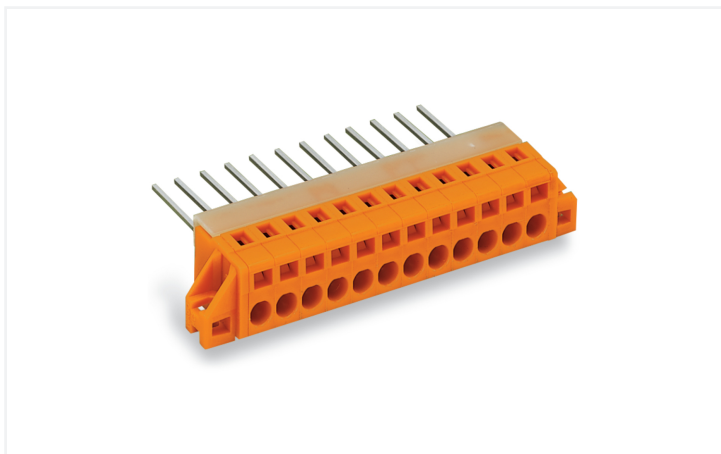


# Data Sheet | Item Number: 731-166/048-000

Feedthrough terminal block; Conductor/wire-wrap connection; Plate thickness: 1.5 mm; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 6-pole; CAGE CLAMP®; 2,50 mm<sup>2</sup>; orange

<https://www.wago.com/731-166/048-000>



Color: ■ orange

Similar to illustration

Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$   
 $L_1 = L + 5.8 \text{ mm}$   
 $L_2 = L_1 + 6 \text{ mm}$  for plate thickness up to 1.5 mm

## Feedthrough terminal block, 731 Series, CAGE CLAMP®

Our feedthrough terminal block (item number 731-166/048-000) is designed for seamless electrical installations. Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to feedthrough terminal block. This product incorporates one conductor terminal and utilizes CAGE CLAMP® and Wire-wrap pin. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (45.28 x 14.3 x 15.5) mm (width x height x depth). Depending on the conductor type, feedthrough terminal block is designed for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces.

### Notes

Variants:

- Other pole numbers
- Other colors
- Direct marking
- Versions without mounting flanges
- 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	5 A	5 A	5 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	150 V	300 V
Rated current	5 A	5 A	5 A

Approvals per	CSA		
	B	C	D
Use group	B	C	D
Rated voltage	300 V	-	-
Rated current	5 A	-	-

## Connection Data

Clamping units	6
Total number of potentials	6
Number of connection types	1
Number of levels	1

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Pole number	6

### Connection 2

Connection technology	Wire-wrap pin
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## Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	45.28 mm / 1.783 inches
Height	14.3 mm / 0.563 inches
Depth	15.5 mm / 0.61 inches

## Mechanical data

Housing sheet thickness	1.5 ... 1.5 mm / 0.059 ... 0.059 inches
Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting
Suitable for through-panel applications	Yes

## Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	orange
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	0.161 MJ
Weight	10.1 g

### Environmental requirements

Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918270106
Customs tariff number	85366990990

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
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
CB DEKRA Certification B.V.	IEC 61984	NL-113351
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UR Underwriters Laboratories Inc.	UL 1059	E45172

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product  
Compliance  
731-166/048-000



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

CAD/CAE-Data
























CAD data	CAE data
<a href="#">2D/3D Models</a> 731-166/048-000 <a href="#">↓</a>	<a href="#">EPLAN Data Portal</a> 731-166/048-000 <a href="#">↓</a>
	<a href="#">ZUKEN Portal</a> 731-166/048-000 <a href="#">↓</a>

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

 <a href="#">Item No.: 216-301</a> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	 <a href="#">Item No.: 216-302</a> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise	 <a href="#">Item No.: 216-201</a> 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	 <a href="#">Item No.: 216-241</a> 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
 <a href="#">Item No.: 216-141</a> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 <a href="#">Item No.: 216-101</a> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored	 <a href="#">Item No.: 216-242</a> 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	 <a href="#">Item No.: 216-262</a> 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
 <a href="#">Item No.: 216-202</a> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	 <a href="#">Item No.: 216-142</a> 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	 <a href="#">Item No.: 216-102</a> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored	 <a href="#">Item No.: 216-243</a> 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
 <a href="#">Item No.: 216-263</a> 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	 <a href="#">Item No.: 216-203</a> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	 <a href="#">Item No.: 216-103</a> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated	 <a href="#">Item No.: 216-143</a> 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
 <a href="#">Item No.: 216-204</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	 <a href="#">Item No.: 216-244</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 <a href="#">Item No.: 216-264</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	 <a href="#">Item No.: 216-284</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
 <a href="#">Item No.: 216-144</a> 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	 <a href="#">Item No.: 216-104</a> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored	 <a href="#">Item No.: 216-106</a> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored	

## 1.1.2 Installation

### 1.1.2.1 Mounting accessories



**Item No.: 231-295**  
Screw with nut



**Item No.: 231-195**  
Screw with nut; M2x12; for fixing element



**Item No.: 209-147**  
Self-tapping screw



**Item No.: 231-194**  
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

## 1.1.3 Marking

### 1.1.3.1 Marking strip



**Item No.: 210-332/508-202**  
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.: 210-332/508-205**  
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.: 210-332/508-204**  
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.: 210-332/508-206**  
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

## 1.1.4 Tool

### 1.1.4.1 Operating tool



**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

## Installation Notes



Feedthrough PCB terminal strips – front-entry conductor termination



Feedthrough PCB terminal strips can be used as front-panel feedthrough for external conductor termination.



With flanges for PCB or front-panel mounting – either flush with enclosure or protruding