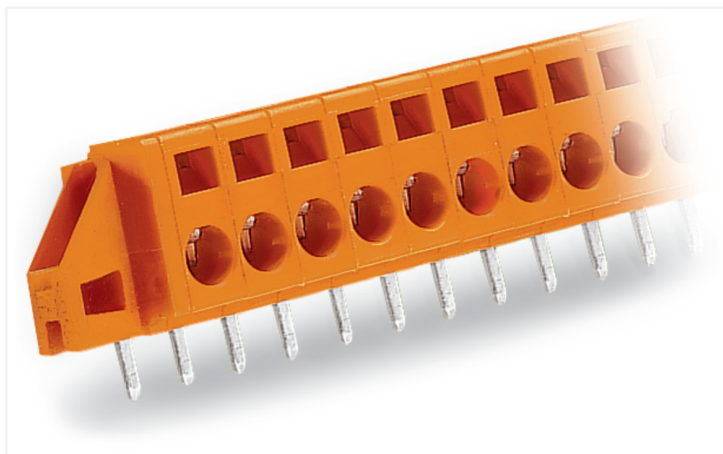


# Data Sheet | Item Number: 231-633/017-000

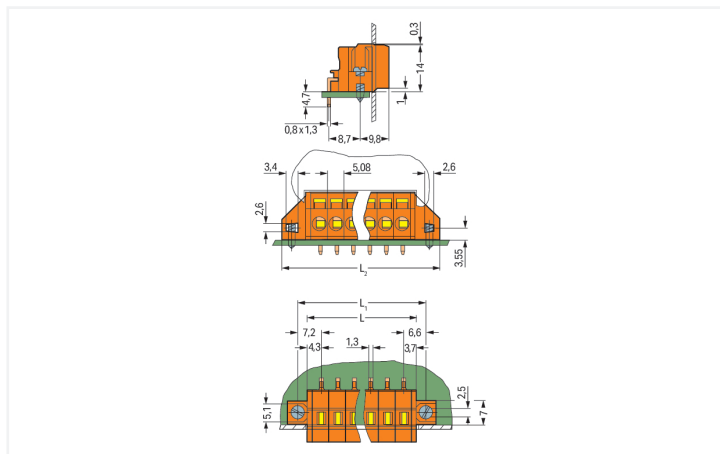
PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 3-pole; CAGE CLAMP®; clamping collar; orange

<https://www.wago.com/231-633/017-000>



Color: ■ orange

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 3 \text{ mm}$

$L1 = L + 5.8 \text{ mm}$

$L2 = L1 + 6.4 \text{ mm}$

## Durchführungsklemme Serie 231 mit Rastermaß 5,08 mm

Die Durchführungsklemme mit der Artikelnummer 231-633/017-000 ermöglicht eine einfache und sichere Verbindung. Mit unseren Durchführungsklemmen bekommen Sie ein universelles Steckverbindersystem, das vielseitig verwendet werden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklempen. Für den Leiteranschluss werden bei dieser Durchführungsklemme Abisolierlängen von 8 bis 9 mm benötigt. Bei diesem Produkt findet die CAGE CLAMP®-Technologie Verwendung. Der erprobte und wartungsfreie CAGE CLAMP® Universalanschluss ermöglicht den Anschluss aller Leiterarten mit einer Käfigzugfeder. Eine Vorbehandlung der Leiter, z.B. durch das Aufcrimpen von Aderendhülsen, ist nicht erforderlich. Die Maße sind in Breite x Höhe x Tiefe (30,44 x 19 x 19,1) mm. Diese Durchführungsklemme ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm<sup>2</sup> bis 2,5 mm<sup>2</sup> geeignet. Die Kontaktoberfläche besteht aus Zinn. Über ein Betätigungswerkzeug wird diese Durchführungsklemme betätigt. Die Durchführungsklemme wird mittels THT auf die Platine gelötet. Der Leiter wird im 0°-Winkel zur Platine eingeführt.

### 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		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Rated current	16 A	16 A	16 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	150 V	300 V
Rated current	15 A	15 A	10 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	150 V	300 V
Rated current	15 A	15 A	10 A

## Connection data

Clamping units	3
Total number of potentials	3
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
Conductor connection direction to PCB	0°
Pole number	3

## Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	30.44 mm / 1.198 inches
Height	19 mm / 0.748 inches
Height from the surface	14.3 mm / 0.563 inches
Depth	19.1 mm / 0.752 inches
Solder pin length	4.7 mm
Solder pin dimensions	0.8 x 1.3 mm
Drilled hole diameter with tolerance	1.8 <sup>(+0.1)</sup> mm
PCB thickness (max.)	1.5 mm

## Mechanical data

Mounting type	Mounting flange Feed-through mounting Panel mounting
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## 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	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	0.087 MJ
Weight	5.1 g

### Environmental requirements

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

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918282970
Customs tariff number	85369010000

### Product classification

UNSPSC	39121409
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 8.0	EC002637
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
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UL UL International Germany GmbH	UL 1977	E45171
UR Underwriters Laboratories Inc.	UL 1059	E45172

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV DNV GL SE	-	TAE000016Z

## Downloads

### Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 231-633/017-000	↓

## Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	↓

## CAD/CAE-Data

CAD data	
2D/3D Models 231-633/017-000	↓

CAE data	
EPLAN Data Portal 231-633/017-000	↓

ZUKEN Portal 231-633/017-000	↓
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## PCB Design

Symbol and Footprint via SamacSys 231-633/017-000	↓
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Symbol and Footprint via Ultra Librarian 231-633/017-000	↓
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## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

<p><b>Item No.: 216-301</b> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; un-insulated; electro-tin plated; yellow</p>	<p><b>Item No.: 216-302</b> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; un-insulated; electro-tin plated; light turquoise</p>	<p><b>Item No.: 216-201</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white</p>	<p><b>Item No.: 216-241</b> 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 4/09.90; white</p>
<p><b>Item No.: 216-141</b> 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</p>	<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.: 216-242</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 4/09.90; gray</p>	<p><b>Item No.: 216-262</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 4/09.90; gray</p>
<p><b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-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.: 216-243</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 4/09.90; red</p>

### 1.1.1.1 Ferrule



**Item No.: 216-263**

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



**Item No.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated



**Item No.: 216-143**

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



**Item No.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-244**

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



**Item No.: 216-264**

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



**Item No.: 216-284**

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



**Item No.: 216-144**

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



**Item No.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored



**Item No.: 216-106**

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.: 231-195**

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

### Conductor termination



Feedthrough PCB terminal strips – front-entry conductor termination

### Application



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

### Application



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