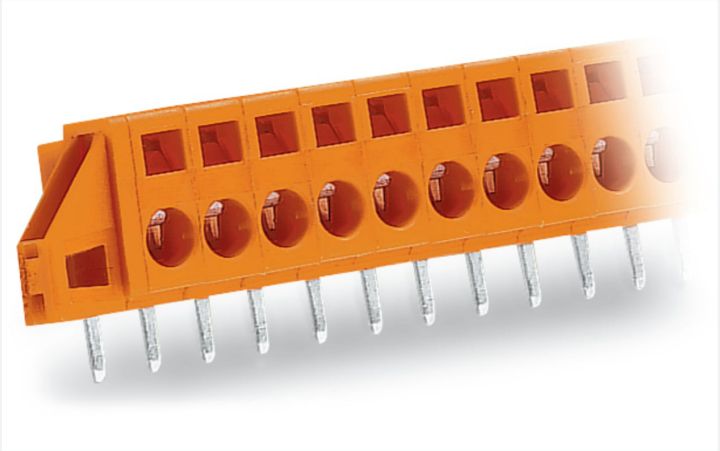
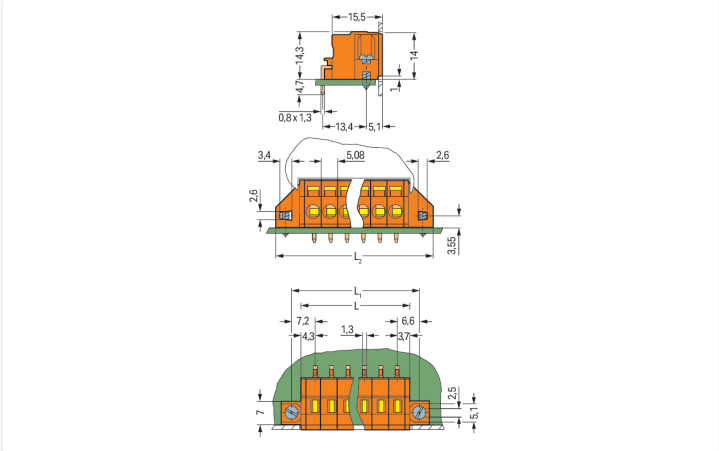
Data Sheet | Item Number: 231-640/023-000

PCB terminal block; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; CAGE CLAMP®; clamping collar; orange

https://www.wago.com/231-640/023-000





Color: orange

Dimensions in mm
L = (pole no. x pin spacing) + 3 mmL1 = L + 5.8 mmL2 = L1 + 6 mmfor plate thickness up to 1.5 mm

Feedthrough terminal block, 231 Series, with 5.08 mm pin spacing

Easy electrical installations are guaranteed with feedthrough terminal block (item number 231-640/023-000). 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®. 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 dimensions are (66 x 19 x 19.1) mm (width x height x depth). Depending on the type of conductor, feedthrough terminal block is designed for conductor cross sections ranging from 0.08 mm² to 2.5 mm². Tin is used for coating the contact surfaces. THT is used to assemble the feedthrough terminal block.

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	16 A	16 A	16 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

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

Connection Data

Clamping units	10
Total number of potentials	10
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 mm² / 28 … 14 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 2.5 mm²
Strip length	8 … 9 mm / 0.31 … 0.35 inches
Conductor connection direction to PCB	0 °
Pole number	10

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	65.6 mm / 2.583 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	1.8 $^{(+0.1)}$ mm
PCB thickness (max.)	1.5 mm

Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting 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)	Information on material specifications can be found here
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_{Cu})
Contact Plating	Tin
Fire load	0.2 MJ
Weight	14.3 g

Continued on next page

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	4044918283250
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 10.0	EC002637
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354
UR Underwriters Laboratories Inc.	UL 1059	E45172

Approvals for marine applications

Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
231-640/023-000

Continued on next page

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAE data

EPLAN Data Portal
231-640/023-000

PCB Design

Symbol and Footprint via
SamacSys
231-640/023-000

Symbol and Footprint via
Ultra Librarian
231-640/023-000

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 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored

Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; 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

Continued on next page

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



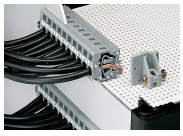
Feedthrough PCB terminal strips – front-entry conductor termination

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