### Data Sheet | Item Number: 256-403

PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 3-pole; CAGE

CLAMP®; commoning option; gray

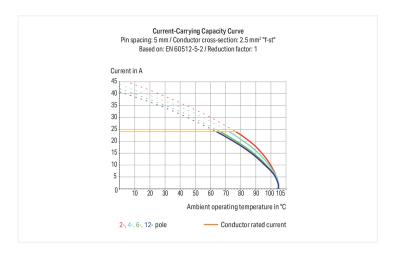
https://www.wago.com/256-403





Color: ■ gray Similar to illustration

Dimensions in mm L = (pole no. x pin spacing) + 2.9 mm



### PCB terminal block, 256 Series, 45 °conductor entry to board

Connect conductors quickly and easily with this PCB terminal block (item number 256-403). You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Rated current and voltage are key factors to consider when choosing a PCB terminal block, as they indicate how the product can be used. This product has a rated voltage of 320 V and a rated current of 24 A, making it suitable for high-load applications. Strip lengths must be between 5 mm 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 provides a secure 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 17.9 x 22.2 x 17.6 mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm². It features one level and three clamping points for connecting three potentials / 3 poles. The clamping spring is made of chrome-nickel spring steel (CrNi), the contacts are made of electrolytic copper (ECu), and the gray housing is made of polyamide (PA66) for insulation. The contact surface is coated with tin. A push-button is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at a 45° angle.. The solder pins, which are 0.7 x 0.7 mm in cross-section and 4 mm long, are laid out over the entire terminal strip (in-line). There are two solder pins per potential.

Other pole numbers  Versions for Ex e II and Ex i  Other colors  Mixed-color PCB connector strips  Direct marking  Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.



Electrical data			
Ratings per	IE	C/EN 60664	-1
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Rated current	24 A	24 A	24 A

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Approvals per		CSA	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection data			
Clamping units	3	Connection 1	
Total number of potentials	3	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	1	Solid conductor	0.08 2.5 mm² / 28 12 AWG
		Fine-stranded conductor	0.08 2.5 mm² / 28 12 AWG
	Fine-stranded conductor; with insulated ferrule	0.25 1.5 mm <sup>2</sup>	
	Fine-stranded conductor; with uninsulated ferrule	0.25 1.5 mm <sup>2</sup>	
	Note (conductor cross-section)	12 AWG: THHN, THWN	
	Strip length	5 6 mm / 0.2 0.24 inches	
		Conductor connection direction to PCB	45°
		Pole number	3

Physical data	
Pin spacing	5/5.08 mm / 0.197/0.2 inches
Width	17.9 mm / 0.705 inches
Height	22.2 mm / 0.874 inches
Height from the surface	18.2 mm / 0.717 inches
Depth	17.6 mm / 0.693 inches
Solder pin length	4 mm
Solder pin dimensions	0.7 x 0.7 mm
Drilled hole diameter with tolerance	1.1 <sup>(+0.1)</sup> mm

PCB contact	
PCB contact	ТНТ
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	2

# Data Sheet | Item Number: 256-403

https://www.wago.com/256-403



Material data	
Note (material data)	Information on material specifications can be found here
	information on material specifications can be round here
Color	gray
Material group	
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.052 MJ
Weight	3 g

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Environmental	i euuli ellielitä

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

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	280 (70) pcs
Packaging type	Вох
Country of origin	CH
GTIN	4044918756075
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 8.0	EC002643	
ECCN	NO US CLASSIFICATION	

Environmental Produc	ct Compliance
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RoHS Compliance Status Compliant, No Exemption

# Approvals / Certificates

# General approvals









	Approval	Standard	Certificate Name
	CCA DEKRA Certification B.V.	EN 60947	2160584.34
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7138
	CCA DEKRA Certification B.V.	IEC 60947-7-4	71-113042
	CSA DEKRA Certification B.V.	C22.2 No. 158	70049157
	UL Underwriters Laboratories Inc	UL 1059	20190731-E45172

# Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

# Data Sheet | Item Number: 256-403 https://www.wago.com/256-403



# Approvals for marine applications







Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	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 256-403	$\overline{\downarrow}$	

Documentation			
Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	$\underline{\downarrow}$
Gebrückte Klemmen- leisten für Leiterplatten		pdf 303.71 KB	$\downarrow$

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 256-403	EPLAN Data Portal 256-403
	ZUKEN Portal 256-403

PCB Design	
Symbol and Footprint via SamacSys 256-403	$\overline{\bot}$
Symbol and Footprint via Ultra Librarian 256-403	$\underline{\downarrow}$



#### 1 Compatible Products 1.1 Optional Accessories 1.1.1 Ferrule 1.1.1.1 Ferrule Item No.: 216-301 Item No.: 216-321 Item No.: 216-151 Item No.: 216-131 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; in-Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; in-Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; sulated; electro-tin plated; yellow sulated; electro-tin plated; yellow uninsulated; electro-tin plated uninsulated; electro-tin plated; silver-co-Item No.: 216-302 Item No.: 216-322 Item No.: 216-132 Item No.: 216-152 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; in-Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; in-Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; sulated; electro-tin plated; light turquoise sulated; electro-tin plated; light turquoise uninsulated; electro-tin plated uninsulated; electro-tin plated Item No.: 216-201 Item No.: 216-241 Item No.: 216-221 Item No.: 216-141 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; in-Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; in-Ferrule; Sleeve for 0.5 mm2 / 20 AWG; in-Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; unsulated; electro-tin plated; electrolytic insulated; electro-tin plated; electrolytic sulated: electro-tin plated: electrolytic sulated; electro-tin plated; white copper; acc. to DIN 46228, Part 4/09.90; copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN white 46228, Part 4/09.90; white 46228, Part 1/08.92 Item No.: 216-121 Item No.: 216-262 Item No.: 216-101 Item No.: 216-242 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; in-Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; ininsulated; electro-tin plated; silver-coloinsulated; electro-tin plated; silver-colosulated; electro-tin plated; electrolytic sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN red red 46228, Part 4/09.90; gray 46228, Part 4/09.90; gray Item No.: 216-202 Item No.: 216-222 Item No.: 216-142 Item No.: 216-102 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; in-Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; in-Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; sulated; electro-tin plated; gray sulated; electro-tin plated; gray uninsulated; electro-tin plated; electrolyuninsulated; electro-tin plated; silver-cotic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 Item No.: 216-122 Item No.: 216-243 Item No.: 216-263 Item No.: 216-203 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insu-Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insu-Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic coplated; electro-tin plated; electrolytic copuninsulated; electro-tin plated; silver-colated; electro-tin plated; red per; gastight crimped; acc. to DIN 46228, per; gastight crimped; acc. to DIN 46228, lored Part 4/09.90; red Part 4/09.90; red Item No.: 216-223 Item No.: 216-103 Item No.: 216-143 Item No.: 216-123 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; unin-Ferrule; Sleeve for 1 mm2 / AWG 18; insu-Ferrule; Sleeve for 1 mm2 / AWG 18; unin-Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninlated; electro-tin plated; red sulated; electro-tin plated sulated; electro-tin plated; electrolytic sulated; electro-tin plated; silver-colored copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 Item No.: 216-204 Item No.: 216-224 Item No.: 216-244 Item No.: 216-264 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; in-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; in-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; in-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black sulated; electro-tin plated; black sulated; electro-tin plated; electrolytic sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black 46228, Part 4/09.90; black Item No.: 216-124 Item No.: 216-284 Item No.: 216-144 Item No.: 216-104 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; in-Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; unsulated; electro-tin plated; electrolytic insulated; electro-tin plated insulated; electro-tin plated; electrolytic insulated; electro-tin plated; silver-colo-

copper; gastight crimped; acc. to DIN

46228, Part 1/08.92; silver-colored

red

copper; gastight crimped; acc. to DIN

46228, Part 4/09.90; black

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https://www.wago.com/256-403



#### 1.1.2 Tool

# 1.1.2.1 Operating tool

Item No.: 210-658

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

Item No.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

#### **Installation Notes**

#### **Conductor termination**



Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



Inserting/removing a conductor via finger-operated lever – 255 Series.



Inserting/removing a conductor via fingeroperated lever – 256 Series.

#### Installation



Possible conductor arrangement with terminal strips staggered (for 256 Series on-

## Marking



Formation of groups using housings of different colors

# Testing



Testing with test probes.

Testing with test plug modules.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at::  $\underline{www.wago.com}$