SMD PCB terminal block; push-button; 0.75 mm<sup>2</sup>; Pin spacing 4 mm; 2-pole; Push-in CAGE CLAMP<sup>®</sup>; in tape-and-reel packaging; 0,75 mm<sup>2</sup>; white

W/AGO

https://www.wago.com/2060-452/998-604

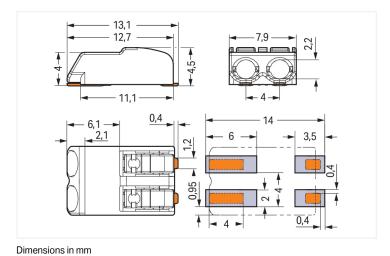


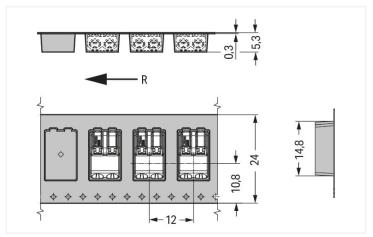


Color: white





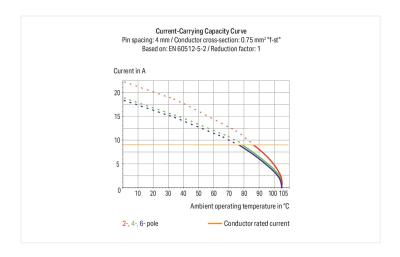




L = (pole no. x pin spacing) – 0.1 mm

Dimensions in mm R = feed direction





https://www.wago.com/2060-452/998-604



- SMD PCB terminal blocks with Push-in CAGE CLAMP® connection technology and push-buttons
- Push-in termination of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons
- Just 4.5 mm tall
- Available in tape-and-reel packaging for automated assembly

Notes	
Note	Application notes: Suitable for lead-free, reflow-soldering profiles per DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to application-specific variables (component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.  Depending on reflow soldering temperatures and times, color deviations may occur.
	These deviations will have no impact on functionality.
Recommendation	Recommendation for stencil: 150 µm material thickness; Pattern layout identical to solder pad layout

Page 3/7 Version 23.10.2024 Continued on next page



Electrical data				
Ratings per	IE	IEC/EN 60664-1		
Overvoltage category	III	III	II	
Pollution degree	3	2	2	
Nominal voltage	63 V	160 V	320 V	
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	
Rated current	9 A	9 A	9 A	

Ratings	
Approvals per	UL 1977
Rated voltage	320 V
Rated current	9 A

Connection data			
Clamping units	2	Connection 1	
Total number of potentials	2	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Push-button
Number of levels	1	Solid conductor	0.2 0.75 mm² / 24 18 AWG
		Fine-stranded conductor	0.2 0.75 mm² / 24 18 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 0.34 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 0.34 mm²
		Strip length	7 9 mm / 0.28 0.35 inches
		Conductor connection direction to PCB	0°
		Pole number	2

Physical data		
Pin spacing	4 mm / 0.157 inches	
Width	7.9 mm / 0.311 inches	
Height	4.5 mm / 0.177 inches	
Depth	13.1 mm / 0.516 inches	
Reel diameter of tape-and-reel packaging	380 mm	
Tape width	24 mm	

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

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	white
Material group	I
Insulation material (main housing)	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Copper alloy
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.016 MJ
Weight	0.5 g



# **Environmental requirements**

I to a te de a como a come do como a como a como a	00 110500
Limit temperature range	-60 +105 °C

Environmental Testing (Environment	ntal Conditions)
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$ $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
Acceleration	0.101g (highest test level used for all axes)     0.572g (highest test level used for all axes)     5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
V(1) (1)   1   1   1   1   1   1   1   1   1	D 1

Passed

Commercial data		
ETIM 9.0	EC001284	
ETIM 8.0	EC001284	
PU (SPU)	13500 (1500) pcs	
Packaging type	Вох	
Country of origin	CH	
GTIN	4066966483352	
Customs tariff number	85369010000	

Vibration and shock stress for rolling

stock equipment

https://www.wago.com/2060-452/998-604



#### **Environmental Product Compliance**

RoHS Compliance Status

Compliant, No Exemption

## Approvals / Certificates

## Declarations of conformity and manufacturer's declarations



Approval Standard Certificate Name

Railway - Z00004396.000

WAGO GmbH & Co. KG

## Downloads

#### **Environmental Product Compliance**

#### Compliance Search

Environmental Product Compliance 2060-452/998-604

 $\overline{\downarrow}$ 

#### **Documentation**

## Additional Information

**Technical Section** 

03.04.2019

2027.26 KB

 $\underline{\downarrow}$ 

#### 1 Compatible Products

#### 1.1 Optional Accessories

## 1.1.1 Board-to-board link

## 1.1.1.1 Board-to-board link

11/2

1

Item No.: 2060-952/028-004

Board-to-Board Link; Pin spacing 4 mm; 2-pole; Length: 28 mm; black

Item No.: 2060-952/028-000

Board-to-Board Link; Pin spacing 4 mm; 2-pole; Length: 28 mm; white

#### 1.1.2 Ferrule

## 1.1.2.1 Ferrule

Item No.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored

Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

Item No.: 216-132

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

https://www.wago.com/2060-452/998-604



#### 1.1.3 Tool

## 1.1.3.1 Operating tool



<u>Item No.: 206-860</u>

Operating tool; for 2060 Series; multico-



<u>Item No.: 2060-189</u>

Operating tool; made of insulating material; for 2060 Series; white

#### **Installation Notes**

## **Conductor termination**



Insert solid conductors via push-in termination

#### Conductor termination



Insert/remove fine-stranded conductors by lightly pressing on push-button, e.g., via optional operating tool (206-860).



Terminal blocks can be arranged side-byside without loss of poles.

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