

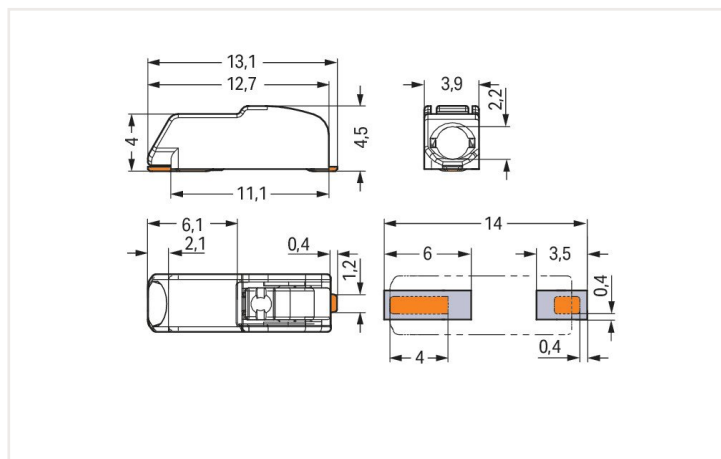
| : 2060-451/998-404

SMD PCB terminal block; push-button; 0.75 mm<sup>2</sup>; Pin spacing 4 mm; 1-pole; Push-in CAGE CLAMP®; in tape-and-reel packaging; 0,75 mm<sup>2</sup>; white

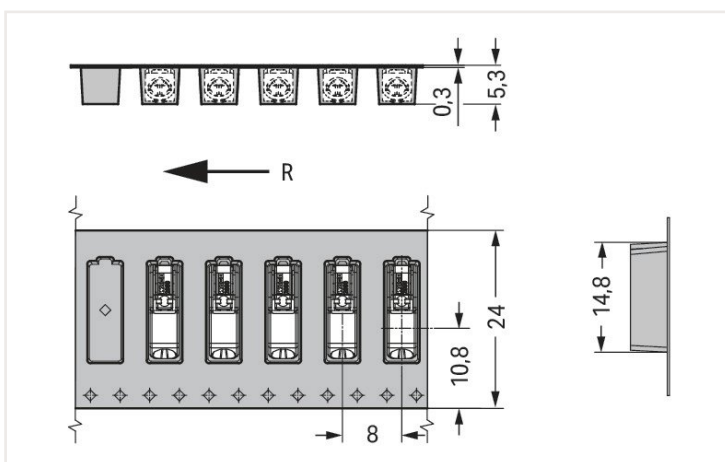
<https://www.wago.com/2060-451/998-404>



: white

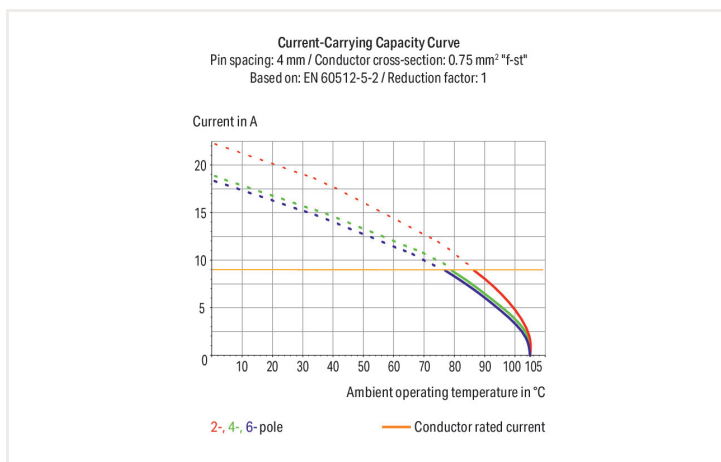


Dimensions in mm



Dimensions in mm

R = feed direction



- 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

## Electrical data

### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	63 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	9 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Ratings per UL

Rated voltage (UL 1977)	600 V
Rated current UL 1977	9 A

## Connection data

Connection points	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

### Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.2 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG
Fine-stranded conductor	0.2 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.34 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.34 mm <sup>2</sup>
Strip length	7 ... 9 mm / 0.28 ... 0.35 inches
Conductor connection direction to PCB	0°
Pole number	1

## Physical data

Pin spacing	4 mm / 0.157 inches
Width	3.9 mm / 0.154 inches
Height	4.5 mm / 0.177 inches
Depth	13.1 mm / 0.516 inches
Reel diameter of tape-and-reel packaging	330 mm
Tape width	24 mm

## Plug-in connection

Plugging without loss of pin spacing	Yes
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## 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)	<a href="#">Information on material data can be found here</a>
Color	white
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Copper alloy
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.009 MJ
Weight	0.5 g

## Environmental requirements

Limit temperature range	-60 ... +105 °C
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## Commercial data

Product Group	33 (Printed Circuit)
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	13500 (1500) Stück
Packaging type	Box
Country of origin VKOrg Germany	CH
GTIN	4055143888172
Customs tariff number VKOrg Germany	85369010000

## Approvals and certificates

### General approvals



CCA DEKRA Certification B.V.	EN 60947	NTR NL-7724
CCA DEKRA Certification B.V.	EN 60998	NTR NL 7725/M1
CCA DEKRA Certification B.V.	EN 60838	NTR NL 2168246
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7843
cURus Underwriters Laboratories Inc.	UL 1977	E45171
KEMA/KEUR DEKRA Certification B.V.	EN 60838	2168246.01
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-108183
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-109040
KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-114208

## Downloads

### Environmental Product Compliance

#### Compliance Search

Environmental Product  
Compliance  
2060-451/998-404



## Documentation

### Additional Information

Technical Section

03.04.2019

pdf

1949.09 KB



## CAD/CAE-Data

### CAD data

2D/3D Models  
2060-451/998-404



### CAE data

ZUKEN Portal  
2060-451/998-404



## 1 Compatible products

### 1.1 Optional accessories

#### 1.1.1 Board-to-board link

##### 1.1.1.1 Board-to-board link



#### [: 2060-951/028-000](#)

Board-to-Board Link; Pin spacing 4 mm; 1-  
pole; Length: 28 mm; white

### 1.1.2 Ferrule

#### 1.1.2.1 Ferrule



#### [: 216-301](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; in-  
sulated; electro-tin plated; yellow



#### [: 216-131](#)

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24;  
uninsulated; electro-tin plated; silver-co-  
lored



#### [: 216-302](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; in-  
sulated; electro-tin plated; light turquoise



#### [: 216-132](#)

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24;  
uninsulated; electro-tin plated

### 1.1.3 Tool

#### 1.1.3.1 Operating tool



**:206-860**

Operating tool; for 2060 Series; multicoloured

**:2060-189**

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

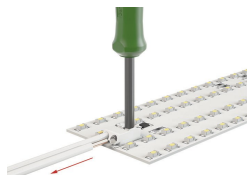
## Installation notes

### 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-by-side without loss of poles.