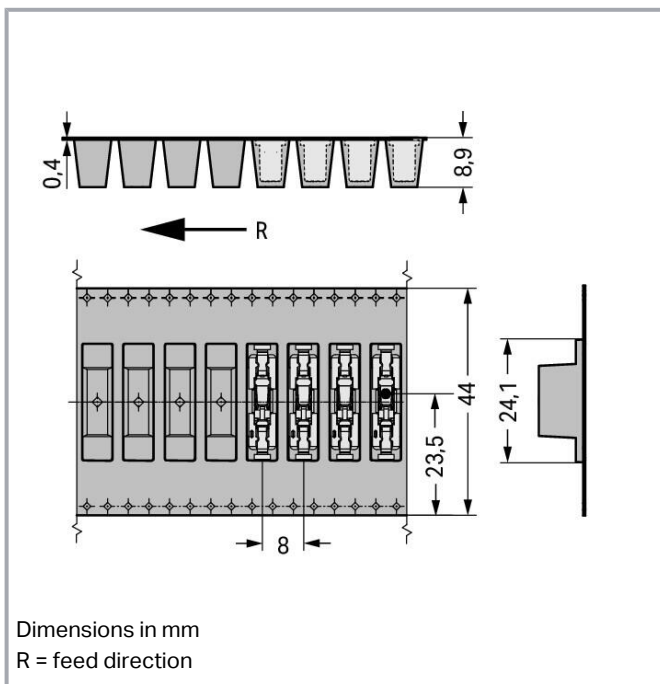
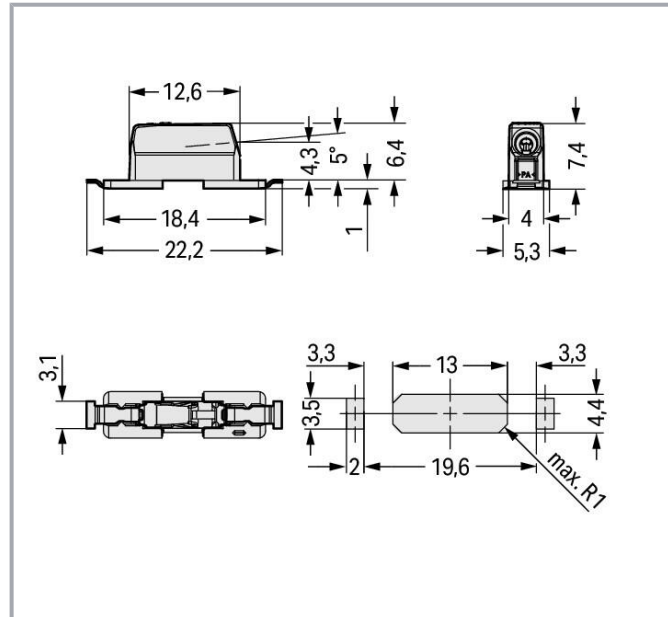


Data sheet | Item number: 2070-451/998-406

Through-Board SMD PCB Terminal Block; 0.75 mm<sup>2</sup>; Pin spacing 6.5 mm; 1-pole; Push-in CAGE CLAMP®; in tape-and-reel packaging; 0,75 mm<sup>2</sup>; white



[www.wago.com/2070-451/998-406](http://www.wago.com/2070-451/998-406)



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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## Item description

- SMD PCB terminal block with Push-in CAGE CLAMP® for back-side wiring of LED modules
- Low profile of just 1.1 mm on the module's front side
- Push-in termination of solid conductors
- Insert fine-stranded conductors and remove all conductors via operating tool

## Data

### Notes

Note	Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.
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Variants:	Reel diameter of tape-and-reel packaging: 381 mm Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
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## Electrical data

### Ratings per IEC/EN

Ratings	Electrical data for FR4 PCB type
Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated impulse voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated impulse voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	9 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### Ratings per IEC/EN 2

Ratings	Electrical data for metal-core PCBs
Ratings per 2	IEC/EN 60664-1
Rated voltage (III/3) 2	200 V
Rated surge voltage (III/3) 2	4 kV
Rated voltage (III/2) 2	320 V

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Rated surge voltage (III/2) 2	4 kV
Rated voltage (II/2) 2	500 V
Rated surge voltage (II/2) 2	4 kV
Rated current 2	9 A

### Ratings per UL 1977

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	Operating tool
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
Strip length	8 ... 10 mm / 0.31 ... 0.39 inches
Conductor connection direction to PCB	0°
Pole number	1

### Physical data

Pin spacing	6.5 mm / 0.256 inches
Width	5.3 mm / 0.209 inches
Height	7.45 mm / 0.293 inches
Depth	22.2 mm / 0.874 inches
Reel diameter of tape-and-reel packaging	330 mm
Tape width	44 mm
PCB thickness (max.)	2.4 mm

### Mechanical Data

Design	without Cover
Mounting type	Through-board

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



## 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)	Information on material specifications can be found here
Color	white
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	Tin
Weight	0.5 g

## Environmental requirements

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

eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
ECCN	NO DATA
PU (SPU)	4770 (954) pcs
Packaging type	box
Country of origin	CH
GTIN	4055143645188
Customs tariff number	85369010000




## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Subject to changes. Please also observe the further product documentation!

## Approvals / Certificates

### General approvals


Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 60998	NL-57652
	<b>CB</b> DEKRA Certification B.V.	EN 60998	NL-57653
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 60947-7-4	71- 107965
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 60998	71- 107967
	<b>UR</b> Underwriters Laboratories Inc.	UL 1977	E45171

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>UK-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

### Optional accessories

#### Tool

	<b>Item no.: 2070-400</b> Operating tool; made of insulating material; green	<a href="http://www.wago.com/2070-400">www.wago.com/2070-400</a>
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## Downloads

### Documentation

#### Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

## CAD/CAE-Data

### CAD data

2D/3D Models 2070-451/998-406	URL	Download
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### PCB Design

Symbol and Footprint via Ultra Librarian 2070-451/998-406	URL	Download
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CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

#### Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design
- Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer

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- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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Symbol and Footprint via SamacSys 2070-451/998-406

URL

Download

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB

—  
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- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

#### CAE data

ZUKEN Portal 2070-451/998-406	URL	Download
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#### Asset Administration Shell

Asset Administration Shell 2070-451/998-406	URL	Download
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### Environmental Product Compliance

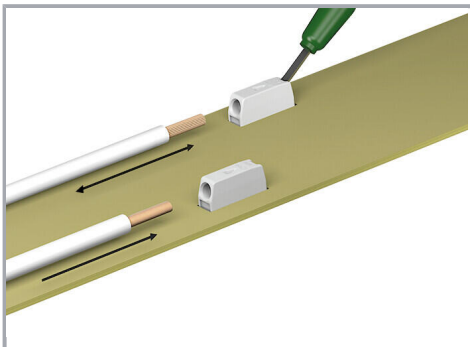
#### Compliance Search

Environmental Product Compliance 2070-451/998-406	URL	Download
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Through-Board SMD PCB Terminal Block; 0.75 mm<sup>2</sup>; Pin spacing 6.5 mm; 1-pole; Push-in CAGE CLAMP®; in tape-and-reel packaging; 0,75 mm<sup>2</sup>; white

### Installation Notes

#### Conductor termination

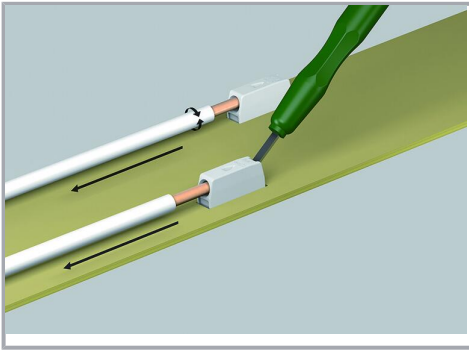


Insert fine-stranded conductors and remove all conductor types via operating tool. Solid conductors can also be terminated by simply pushing them in.

#### Conductor removal

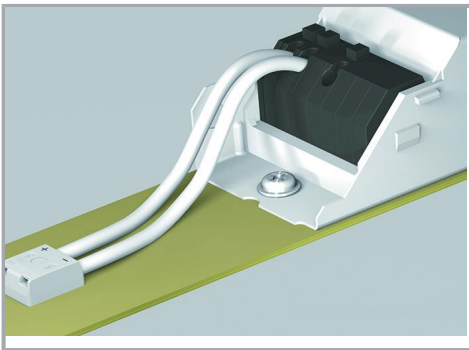
Subject to changes. Please also observe the further product documentation!





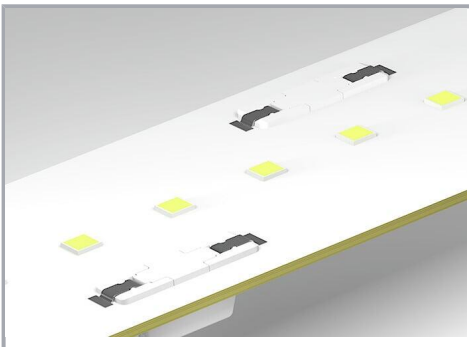
Use an operating tool or simply “twist and pull” to remove solid conductors.

### Installation



Shift wiring to the back of the LED module via 2070 Series SMD PCB Terminal Blocks.

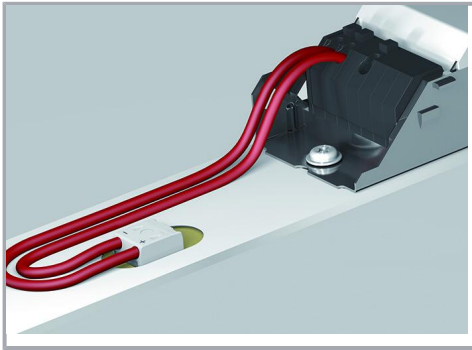
### Application



The variants with cover feature a center contact surface for easy pick-and-place assembly and minimum shadowing.

### Application

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



The printed variants offer unique pole marking on the back of the module.

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