

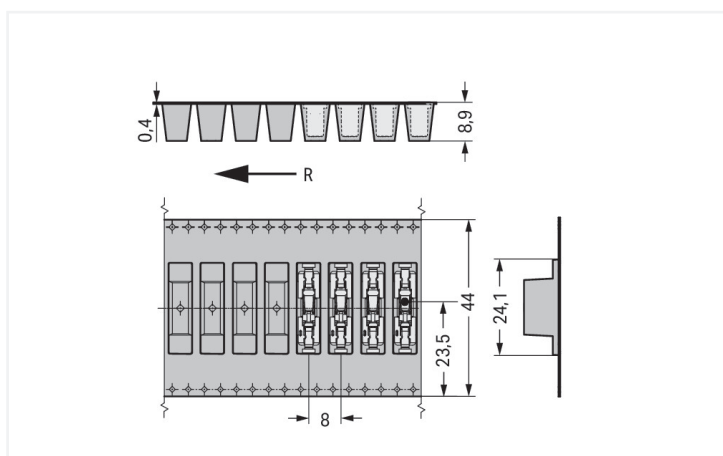
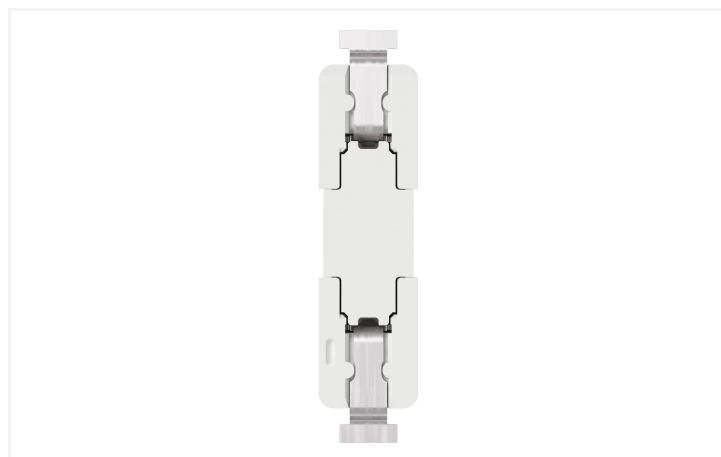
Data Sheet | Item Number: 2070-461/998-606

Through-Board SMD PCB Terminal Block; 0.75 mm²; Pin spacing 6.5 mm; 1-pole;
Push-in CAGE CLAMP®; in tape-and-reel packaging; white

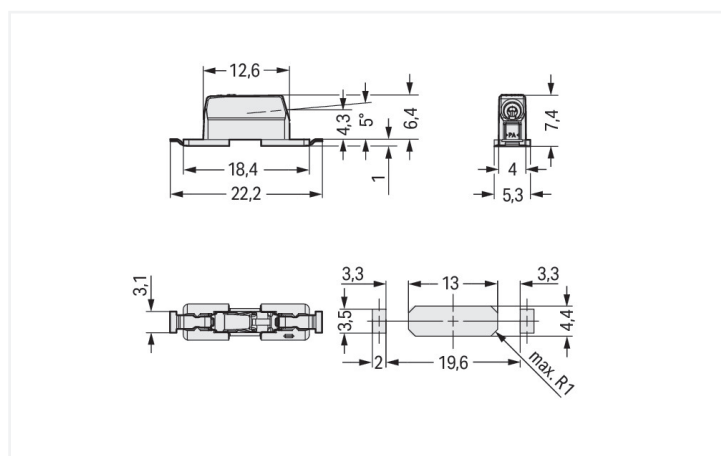
<https://www.wago.com/2070-461/998-606>



Color: ■ white



Dimensions in mm
R = feed direction



Dimensions in mm

PCB terminal block, 2070 Series, 0° conductor entry to board

This PCB terminal block (item number 2070-461/998-606) is designed for quick and simple connections. It offers the flexibility needed for different mounting types. Conductors should only be connected to this PCB terminal block if their strip length is between 8 and 10 mm. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all con-



ductor types, boasting a key feature: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The item's dimensions are (5.3 x 7.45 x 22.2) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 0.75 mm².

The contact surface is coated with tin. This PCB terminal block is operated with an operating tool. SMD is used to solder the PCB terminal block. The conductor is designed to be inserted at an angle of 0°..

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

Electrical data									
Ratings		Electrical data for FR4 PCB type			Ratings		Electrical data for metal-core PCBs		
Ratings per		IEC/EN 60664-1	IEC/EN 60664-1	IEC/EN 60664-1	Ratings per		IEC/EN 60664-1	IEC/EN 60664-1	IEC/EN 60664-1
Overvoltage category		III	III	II	Overvoltage category		III	III	II
Pollution degree		3	2	2	Pollution degree		3	2	2
Nominal voltage		320 V	320 V	630 V	Nominal voltage		200 V	320 V	500 V
Rated impulse withstand voltage		4 kV	4 kV	4 kV	Rated impulse withstand voltage		4 kV	4 kV	4 kV
Rated current		9 A	9 A	9 A	Rated current		9 A	9 A	9 A

Ratings	
Approvals per	UL 1977
Rated voltage	600 V
Rated current	9 A

Connection Data			
Clamping units		1	Connection 1
Total number of potentials		1	
Number of connection types		1	
Number of levels		1	
Connection technology		Push-in CAGE CLAMP®	
Actuation type		Operating tool	
Solid conductor		0.2 ... 0.75 mm ² / 24 ... 18 AWG	
Fine-stranded conductor		0.2 ... 0.75 mm ² / 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	380 mm
Tape width	44 mm
PCB thickness (max.)	2.4 mm



Mechanical data	
Design	with cover
Mounting type	Through-board

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 (main housing)	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.005 MJ
Weight	0.6 g

Environmental requirements	
Limit temperature range	-60 ... +105 °C
Environmental Testing	
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms



Environmental Testing	
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data		
PU (SPU)	7020 (1404) pcs	
Packaging type	Box	
Country of origin	CH	
GTIN	4055143932783	
Customs tariff number	85369010000	

Product Classification		
UNSPSC	39121409	
ETIM 9.0	EC001284	
ETIM 10.0	EC001284	
ECCN	NO US CLASSIFICATION	

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 60998	NL-61980
CB DEKRA Certification B.V.	EN 60998	NL-57653
KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-111047
KEMA/KEUR DEKRA Certification B.V.	EN 60998	71-107967
UR Underwriters Laboratories Inc.	UL 1977	E45171

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004398.000
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance	2070-461/998-606		↓

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	↓

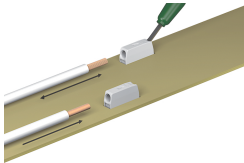
CAD/CAE-Data

CAD data			
2D/3D Models	2070-461/998-606		↓

PCB Design			
Symbol and Footprint via SamacSys	2070-461/998-606		↓
Symbol and Footprint via Ultra Librarian	2070-461/998-606		↓

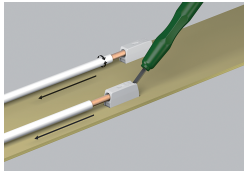
Installation Notes

Conductor termination



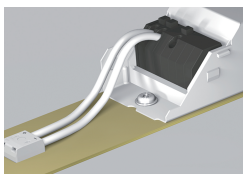
Insert fine-stranded conductors and remove all conductor types via operating tool. Solid conductors can also be terminated by simply pushing them in.

Conductor removal



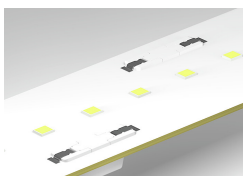
Use an operating tool or simply "twist and pull" to remove solid conductors.

Installation



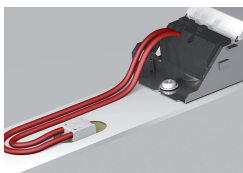
Shift wiring to the back of the LED module via 2070 Series SMD PCB Terminal Blocks.

Application



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

Application



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