GIRA 505 Series Pushbutton Sensor Instruction Manual

GIRA

Operating instructions
Pushbutton sensor 4.95, 24 V, 1-gang
Order no. 5051 ..
Pushbutton sensor 4.95, 24 V, 2-gang
Order no. 5052 ..
Pushbutton sensor 4.95, 24 V, 4-gang
Order no. 5054 ..

Contents

Safety instructions

Electrical devices may be mounted and connected only by electrically skilled persons.
Serious injuries, fire or property damage are possible. Please read and follow the manual fully.
Danger of electric shock. During installation and cable routing, comply with the regulations and standards which apply for SELV circuits.
These instructions are an integral part of the product, and must remain with the end customer.

Device components

Front view (see figure 1)

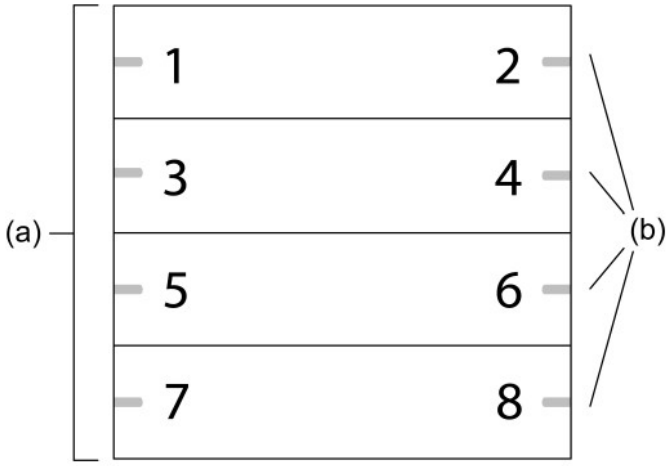

Figure 1: Device components 4-channel

(a) Operating rockers
(b) Status LED
1…8 Push-buttons assignment and status LED

Exploded view (see figure 2)

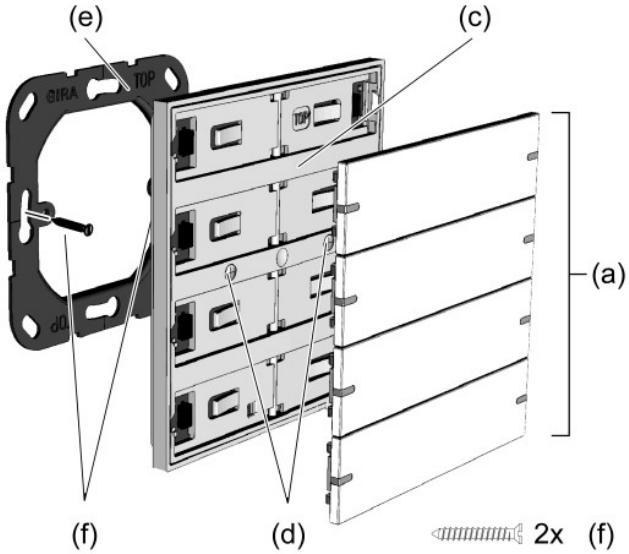

Figure 2: Fitting the device

(c) Push-button sensor
(d) Locking screws
(e) Supporting frame
(f) Box screws

Intended use

- Connection to SELV control systems
- Installation in appliance box according to DIN 49073

Product characteristics

- Functions: switching, push-button control, dimming, blind control in conjunction with control systems.
- Two status LEDs per rocker, white
- Room temperature measurement using temperature sensor (PT1000)

Information for electrically skilled persons

⚠ **DANGER**!
Mortal danger of electric shock.
Cover up live parts in the installation environment.

Mounting and connecting the device (see figure 2), (see figure 3)
The device should be used in an air-tight appliance box. Otherwise temperature measurements can be negatively influenced by draughts.
Mount supporting frame (e) in the right orientation on an appliance box.
Note the TOP marking.
Use the enclosed box screws (f).

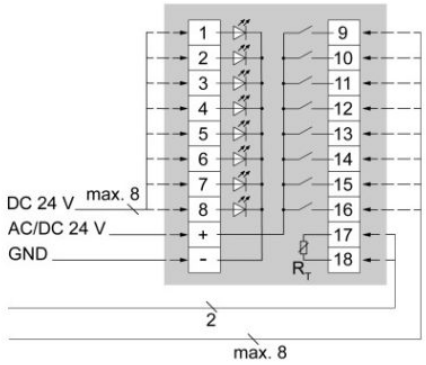

Figure 3: Connection of 4-gang push-button sensor

Connection assignment

Terminal	1-gang	2-gang	4-gang
1	LED 1 (left)	LED 1 (left)	LED 1 (left)
2	LED 2 (right)	LED 2 (right)	LED 2 (right)
3		LED 3 (left)	LED 3 (left)
4		LED 4 (right)	LED 4 (right)
5			LED 5 (left)
6			LED 6 (right)
7			LED 7 (left)
8			LED 8 (right)
+	Push-button: reference potential is plus		
–	LED: reference potential is GND		
9	Button 1 (left)	Button 1 (left)	Button 1 (left)
10	Button 2 (right)	Button 2 (right)	Button 2 (right)
11		Button 3 (left)	Button 3 (left)
12		Button 4 (right)	Button 4 (right)
13			Button 5 (left)
14			Button 6 (right)
15			Button 7 (left)
16			Button 8 (right)
17	Temperature sensor (PT1000)		
18	Temperature sensor (PT1000)		

Connecting the push-button sensor (c) according to (see figure 3)

An integrated resistance protects the push-button contacts against short-circuits up to a voltage of 24 V.

A cable with twisted wires must be used to connect the temperature sensor.

Pull off commissioning rockers from push-button sensor.

The push-button sensor is delivered with commissioning rockers. The operating rockers suitable for the push-button sensor must be ordered separately (see accessories).

Attach push-button sensor (c) onto the supporting frame (e).

Screw push-button sensor (c) with the integrated locking screws (d) onto supporting frame. Connection torque max. 0.8 Nm.

Optional: Cover up the locking screws (d) with the labels supplied with the rocker set (only for the 2-gang and 4-gang device variants).

Snap on operating rockers (a). Device is ready for operation.

Temperature measurement

The push-button sensor includes a PT1000 (class B) resistance for room temperature measurement. The resistance is designed for a maximum current of 0.3 mA. Suitable, standard transducers are available for evaluation.

The diagram (see figure 4) shows the resistance values for the temperature range from 0 °C to 40 °C.

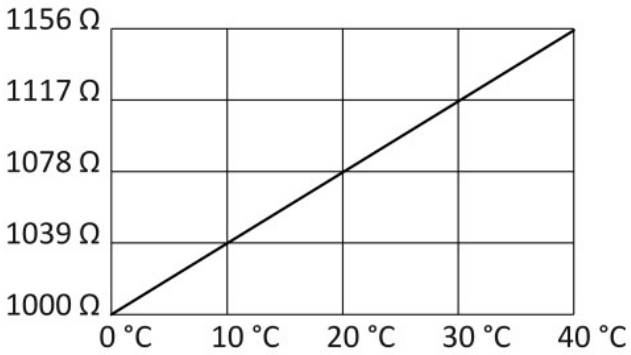

Figure 4: PT1000 characteristic curve

Technical data

Push-button	
Rated voltage	AC/DC 24 V SELV
Current carrying capacity	max. 20 mA per push-button
Output resistance	880 Ω
LED	
Rated voltage	DC 24 V SELV
Current consumption	approx. 1 mA per LED
Temperature sensor	
Type	PT1000, class B
Input current	Max. 0.3 mA
Connection	
Single stranded	0.2 … 1.5 mm²
Finely stranded without conductor sleeve	0.2 … 1.5 mm²
Ambient temperature	-5 … +45 °C
Storage/transport temperature	-25 … +70 °C
Relative humidity	5 … 95% (no moisture condensation)
Protection class	III

Accessories

Individually labelled rocker sets are available from the Gira inscription service www.beschriftung.gira.de.

Rocker set, 1-gang for pushbutton sensor 4.95	Order no. 5021 ..
Rocker set, 1-gang, inscribable, for pushbutton sensor 4.95	Order no. 5031 ..
Rocker set, 2-gang for pushbutton sensor 4.95	Order no. 5022 ..
Rocker set, 2-gang, inscribable, for pushbutton sensor 4.95	Order no. 5032 ..
Rocker set, 4-gang for pushbutton sensor 4.95	Order no. 5024 ..
Rocker set, 4-gang, inscribable, for pushbutton sensor 4.95	Order no. 5034 ..

Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements.
Please submit or send faulty devices postage paid together with a fault description to your responsible salesperson (specialist trade / installation company / electrical specialist trade). They will forward the devices to the Gira Service Center.

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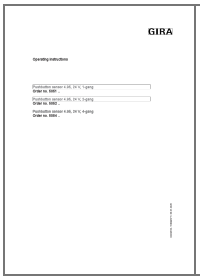
Documents / Resources

	GIRA 505 Series Pushbutton Sensor [pdf] Instruction Manual 5051, 5052, 5054, 505 Series Pushbutton Sensor, 505 Series, Pushbutton Sensor, Sensor

References

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