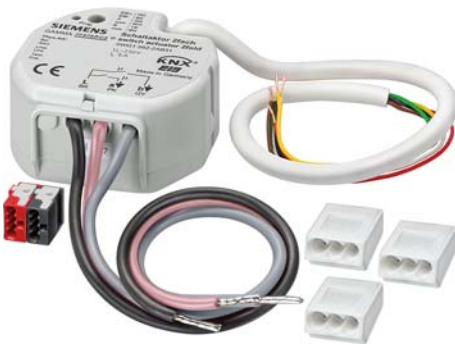


Switch actuator 2fold UP 562/31

5WG1 562-2AB31

Product and Function Description



Photo

The switch actuator 2fold receives telegrams from sensors via the Instabus and switches electrical loads with its two relay-outputs independently.

In addition, the device has two extension inputs that depending on parameter settings, can act directly on the outputs (local operation, see "state of delivery") or alternatively also as binary inputs on the Instabus. The connected potential-free switch or push button contacts are read in via a common reference potential on the actuator. As binary input, telegrams can be transmitted for switching or dimming, for Venetian blind control, value setting or scene recall / save.

State of delivery:

- When delivered, the switching state of the outputs is undefined.
- On application of the bus voltage, the relays will switch off.
- With the bus voltage applied, the extension inputs control the relays of the blind actuator as follows:

input	contact	behavior
A	closed	output a switch over
	open	-
B	closed	output b switch over
	open	-

Application program

12 A2 Switch 207101

- 2 binary inputs
 - ON / OFF / TOGGLE switching
 - Value setting
 - Dimming
 - Blind / Shutter – control
 - Scene control
 - Inputs blocking function
 - Behavior on bus power restoration

Technical specifications**Power supply**

- Carried out via the bus line
- Power consumption: typically 150 mW

Outputs

- Number: 2 outputs, (with common phase connection "L")
potential-free relay contact; (μ -contact) NO switch, bistable
- Rating voltage: AC 230V, 50 ... 60 Hz
- Nominal switching current: 6 A for each output
- Max. starting current: 120A, 20ms
- Switching power:
 - Lamps: 1.200 W
 - HV halogen 1.200 W
 - NV halogen
 - Lapped transformers: 500 VA
 - Electronic transformers: 500 VA
 - Capacitive load: 230V AC, 6 A, max. 14 μ F
- Switching behavior:
- For each output can be parameter set, depending on function

Contacts

- Output:
 - Contact the load on 2 x H07V-K 1,5 mm² (brown) with the attached clamps.
- Inputs and bus line:
 - Line YY 6x0.6 mm
 - Approx. 33cm pre-assembled, can be laid to max. 5m

Mechanical specifications

- Casing: plastic
- Dimensions: d = 53mm, height = 28 mm
- Weight: approx. 88g
- Mounting: in box mounts, \varnothing 60mm, depth: 40mm

Electrical safety

- Degree of pollution (to IEC 60664-1): 2
- Protection class (to EN 60529): IP 20
- Protection class (to IEC 61140): III
- Overvoltage category class (to IEC 60664-1): III
- Bus: safety extra low voltage SELV DC 24V
- Device complies with EN 50090-2-2 and IEC 60664-1

Reliability

Failure rate: 170 fit at 40°C

EMC criteria

- Complies with EN 61000-6-2, EN 61000-6-3 and EN 50090-2-2

Environmental specifications

- Climatic conditions: EN 50090-2-2
- Ambient temperature in operation: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
(Storage above + 45°C reduces the service life)
- Relative humidity (non-condensing): 5% to 93%

Markings

- KNX *EIB*

CE mark

- to EMC directive (residential and functional building)

Switching actuator 2fold UP 562/31

5WG1 562-2AB31

Location and functioning of the display and operating elements

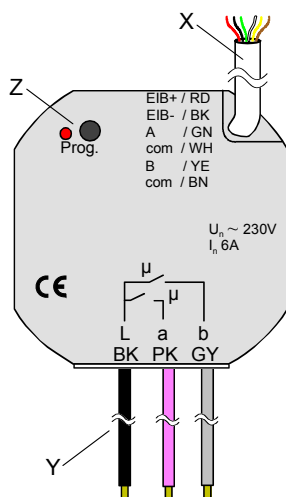


Figure 1: Location of the indicating and operating elements

- X Connector cables low voltages
 Red: Bus (+)
 Black: Bus (-)
 Green: input A
 White: Reference potential (com)
 Yellow: Input B
 Brown: Reference potential (com)
- Y Connector cables load
 black: L // pink: output a // grey: output b
- Z Program button / -LED (red)

Mounting and wiring

→ General:

It is recommended that the actuator is installed in two flush sockets connected to one another (cf. fig. 2). One socket (A) can accommodate, e.g., a series switch (C) as well as the bus and extension connection. The other socket (B) accommodates the actuator and the 230 V terminals. The 6-pole connection lead (D) is guided through the socket connection.

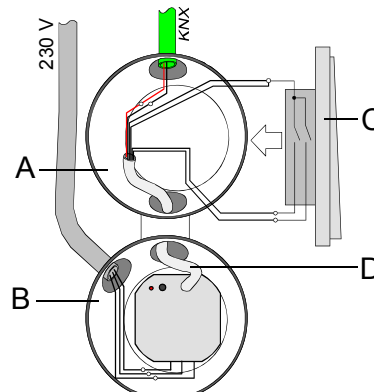


Figure 2

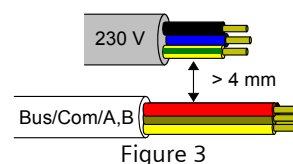


Figure 3



Danger

- The device must be mounted and commissioned by an authorised electrician.
- When connecting the device, it should be ensured that the device can be isolated.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- During installation, ensure adequate insulation between mains voltage and bus or extensions! A minimum spacing should be maintained between bus / extension cable cores and mains voltage cable cores of at least 4 mm. (cf. figure 3)

→ **Inputs:**

Two extension inputs can be used for the connection of potential-free contacts for local control or as binary inputs. (cf. figure 4)

Line YY 6x0.6 mm

Approx. 33cm pre-assembled, can be laid to max. 5m

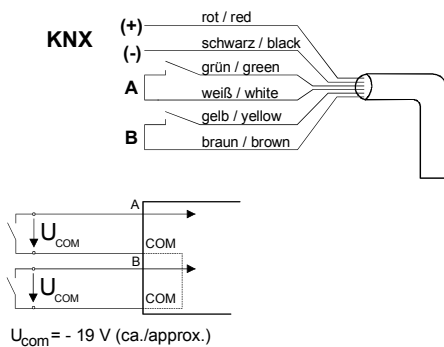


Figure 4

Caution

- To avoid disruptive EMI irradiation, the lines of the inputs should not be laid parallel to lines conducting mains voltage.
- Input A (green), input B (yellow) and reference potential (com) (white and brown) must not connect to inputs or reference potential (com) of other devices.

Danger

- On no account should you connect mains voltage (230 V) or other external voltages to the extension inputs! Connection to an external voltage would endanger the electrical safety of the entire KNX/EIB system (SELV / no galvanic isolation)! People can be at risk, equipment and devices can be destroyed!
- Unused cable cores of the 6-pole connection lead are to be insulated from one another and from external voltages.

→ **Outputs:**

Two independently Relays-outputs can switch electrical loads.

Both Relays-outputs have the same reference potential. (cf. figure 5)

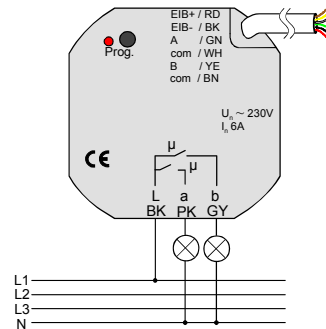


Figure 5

Note

- On reception of a central telegram, the relay outputs of the 2-channel switching actuator are activated with a short delay.

Danger

- The soldered end of lines have to connect by using the attached clamps.
- Do not connect the 2-channel switching actuator to different phase conductors.

Dimensioned picture

Dimensions in mm

Ø = 53 mm
Height = 28 mm

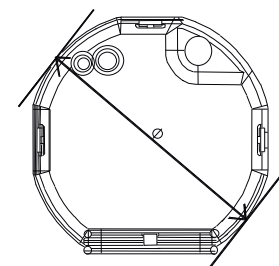


Figure 6

General notes

- Any faulty device is to be returned to the local Siemens office.
- If you have further questions concerning the product, please contact our Technical Support:
 - +49 (0) 180 50 50-222 (0,14 €/min. from the German landline network, deviating mobile communications prices are possible)
 - +49 (0) 180 50 50-223
 - E-Mail: support.automation@siemens.com
 - Internet: www.siemens.com/automation/support-request