

**Switch actuator wave GE 561/11****5WG3 561-4AB11****Product- and Application Description**

The switch actuator wave GE 561/11 is a 2-channel actuator with integrated KNX radio receiver/transmitter, EnOcean radio receiver and converter function from EnOcean radio to GAMMA wave (KNX radio). It can be controlled by up to 40 GAMMA wave and 30 EnOcean radio sensors. In addition to switching the two internal actuator channels, EnOcean radio telegrams received can be converted to KNX radio and transmitted to other GAMMA wave radio actuators. The operating function of an EnOcean radio pushbutton to control a GAMMA wave radio actuator via the EnOcean/wave converter is defined by connection to the actuator (switching, dimming, Venetian blind control).

The switch actuator with a rating current of 2x16A is connected to the 230V network and supplied with current via an integrated power supply. The connected loads are each switched via a relay contact, it being adjustable whether the loads are to be permanently switched on or off (normal operation) or whether the actuator should function in time-switch operation with an adjustable on period from 1 to 60 minutes. The two actuator channels can be integrated in a scene control with up to 16 scenes.

In the event of a failure of operational voltage, the switch condition of the two relays is maintained.

The GE device is embodied in an elongated design and is suitable for installation in housing or under covers.

The EnOcean transmitters can be used for the remote control of the switch actuator wave GE 561/11 and for the conversion of EnOcean radio telegrams to KNX radio:

- Transmitter single EnOcean AP 221
- Transmitter double EnOcean AP 222

All the currently available GAMMA wave actuators can be operated with the radio telegrams converted from EnOcean to wave via the EnOcean transmitter:

- Push button wave UP 210 with switch insert sys
- Push button wave UP 210 with universal dimmer insert sys
- Push button wave shutter UP 211 with shutter control insert sys
- Transmitter actuator 230V wave UP 560
- Socket outlet switch wave/DECT S 563
- Socket outlet switch wave S 564
- Switch actuator wave GE 561/01
- Venetian blind actuator wave GE 520

The switch actuator is commissioned without additional auxiliaries via a pushbutton installed on the top of the device and an LED to display the operation conditions in the "special function" operating mode.

The "Special Function" operating mode includes the following functions:

- Connecting radio sensors wave with the integrated switch channels with the function switch ON/OFF or scene
- Connecting EnOcean radio pushbuttons with the integrated switch channels with the "ON/OFF" function
- Connecting EnOcean radio pushbuttons with the integrated switch channels with the "CHANGE OVER" function (toggle)
- Connecting EnOcean radio pushbuttons with the integrated switch channels with pushbutton function (bell button, "press ON," "release OFF," max. on period approx. 10 sec.)
- Connecting EnOcean radio pushbuttons with radio actuators wave via the converter with the "ON/OFF" function
- Connecting EnOcean radio pushbuttons with radio actuators wave via the converter with the "CHANGE OVER" function (toggle)
- Connecting EnOcean radio pushbuttons with radio actuators wave via the converter with pushbutton function (bell button, "press ON," "release OFF," on period approx. 10 sec.)
- Activating/deactivating the time-switch function
- Clearing connections to radio sensors and actuators
- Reset the device to the supplied state

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

**Technical Specifications****Frequency band**

- 868 MHz (transmission is not susceptible to interference; frequency band reserved for system and security applications)

**Range of radio control**

- Approx. 100 m in clear area

**Power supply**

- 230V power supply via terminals 2 (L1) and 3 (N)
- Rated voltage: AC 230V, 50 Hz
- Protection via 16A circuit-breaker, characteristic B or C required

**Control elements**

- 1 pushbutton: to switch between different operation and commissioning conditions

**Display elements**

- 1 red LED: to display the operation conditions and settings during commissioning

**Outputs**

- Number: 2 (relay contacts)
- Rated voltage: AC 230V
- Rated current: 16A at cos phi = 1

**Connections**

- 5 screw terminals for power supply and load supply; wire-stripping length approx. 7 ... 8 mm
- The following conductors or cross sections are permissible:
  - 0.5 to 4 mm<sup>2</sup> single-wire
  - 0.5 to 2,5 mm<sup>2</sup> finely stranded

**Mechanical specifications**

- Housing: plastic
- Dimensions: device installation, 42 x 32 x 274.5 mm (W x H x L)
- Weight: approx. 220 g
- Fire load: approx. 5800 kJ

**Electrical safety**

- Pollution degree (according to IEC 60664-1): 2
- Protection (according to EN 60529): IP 20
- Overvoltage category (according to IEC 60664- 1) III
- Device complies with EN 60669-2-1
- Relays with  $\mu$  contact

**Electromagnetic compatibility**

- complies with EN 300220, EN 301489, EN 60669-2-1

**Environmental specifications**

- Climatic conditions: EN 50090-2-2
- Ambient operating temperature: - 5 + 45°C
- Storage temperature: - 25 +70°C
- Relative humidity (non-condensing): 5% to 93%

**Certification**

- complies with **KNX** - standard
  - radio frequency wave
  - easy mode push button **EP**

**CE norm**

complies with the EMC regulations, low voltage regulations and R&TTE regulations

SIEMENS AG hereby states that the switch actuator wave GE 561/11 is in compliance with the basic requirements and the other relevant provisions of Regulation 1999/5/EC.

The CE declaration can be inspected at:

SIEMENS AG  
Siemensstraße 10  
93055 Regensburg, Germany

**Installation instructions****Caution:**

- Installation of the device in metal walls and ceilings should be avoided, since the range of radio control is thereby substantially reduced.
- Occasionally the transmission range may be influenced by structural factors (e.g., reinforced concrete) or electric/electronic sources of interference.
- A distance of at least 1 m must be maintained between the transmitter and the relevant receivers.
- Although the radio transmission occurs in the safe 868 MHz frequency band, interference in the radio transmission cannot be ruled out.
- The radio transmission used is not suitable for security applications.

Switch actuator wave GE 561/11

5WG3 561-4AB11

**DANGER**

- The device may be used only in dry interior rooms, for installation in equipment, housings or under covers.
- The device must be mounted and commissioned by an authorized electrician.
- The device must not be opened.
- The prevailing safety and accident regulations must be observed.
- In the planning and installation of electric facilities, the relevant regulations, provisions and terms of the respective country must be observed.
- An insulated tool (e.g. a screwdriver with insulation) should be used to operate the pushbutton.

**Mounting**

General description

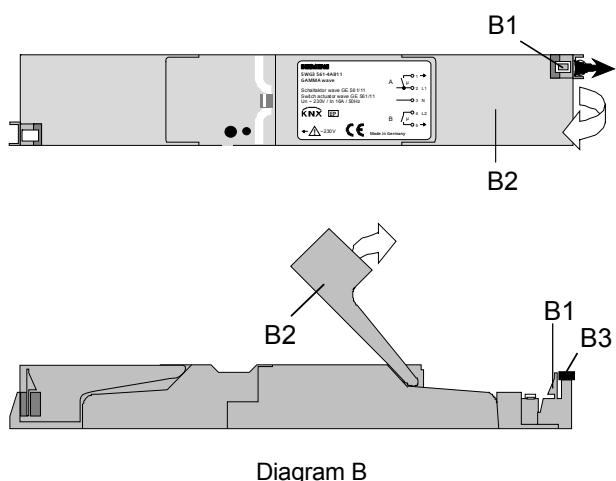
The device is attached with two screws 4 mm Ø (bore spacing 251 mm central).

Opening the terminal chamber (Diagram B)

Press the snap-in lever (B1) down and outwards (black arrow) and flip up the cover of the terminal chamber (B2).

Closing the terminal chamber (Diagram B)

Press down and snap in the cover of the terminal chamber (B2) and screw in the locking screw (B3).



Connect power supply and load circuit (Diagram C)

- The connections for the power supply and the load circuits are composed of screw terminals (C1).
- Insulate the conductors to be connected approx. 7 ... 8 mm, place in the terminals (C1) and screw in.
- The lead sheath is to be attached with the wire fixing (C2) to the housing of the installation device.

**Note:** Conductors up to 1.5 mm<sup>2</sup> single-wire can be looped directly to the terminal. It should be noted with looping that the maximum terminal current of 16 A must not be exceeded!

With installation it should be noted that the outer conductor (L) and the neutral conductor (N) must not be transposed, since otherwise the sensitivity of the radio receiver will be reduced and telegram losses may thereby occur.

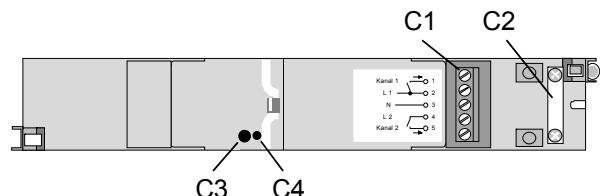


Diagram C

C1 Screw terminals  
C2 Wire fixing  
C3 Pushbutton  
C4 LED

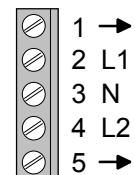


Diagram D

Terminal assignment (Diagram D)

1 → Load output channel A  
2 L1 Power supply (L) for actuator electronics and channel A  
3 N Power supply (N) for actuator electronics  
4 L2 Power supply (L) for channel B  
5 → Load output channel B

## Switch actuator wave GE 561/11

5WG3 561-4AB11

**Note:** An outer conductor must always be connected to terminal 2 (L1) even if channel A is not used, since the actuator electronics are supplied with current via terminals 2 and 3.

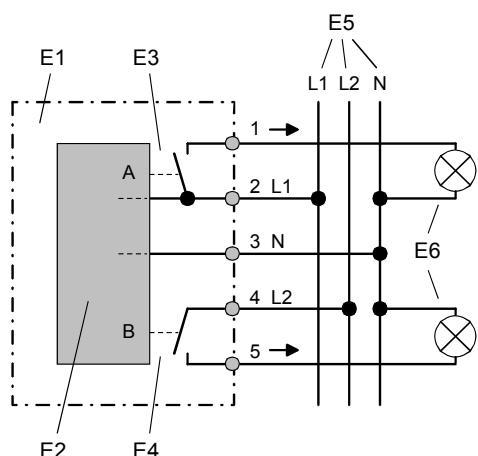


Diagram E

Connection example

- E1 Switch actuator wave GE 561/11
- E2 Actuator electronics
- E3 Switch channel A
- E4 Switch channel B
- E5 Power supply AC 230V, 50 Hz
- E6 Electric loads (e.g., lights)

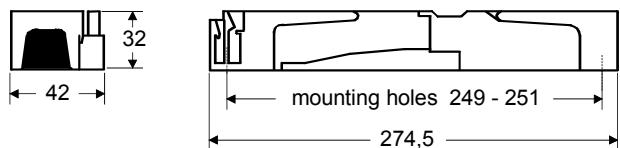
**Location and Function of the Display and Operating Elements**

Diagram C

- C3 Pushbutton to switch over to the "special function" operating mode, to select the commissioning functions and to connect the switch actuator via radio.
- C4 LED to display different settings and conditions in the "special function" operating mode during commissioning.

**Dimension Diagram**

Dimensions in mm

**Commissioning**

For the control of the internal actuator channels and the conversion of EnOcean radio telegrams to KNX radio, the two channels and the EnOcean/wave conversion function first have to be connected via radio to radio sensors wave, EnOcean radio control pushbuttons and radio actuators wave. The connection is made by switching on the "special function channel A," "special function channel B" or "special function converter" operating mode on the switch actuator, by correspondingly long actuation of the pushbutton and display via the LED. Subsequently, depending on the desired function, sending telegrams for programming is to be triggered at the radio sensor wave, radio actuator wave and EnOcean radio control button to be connected.

**Note:** To connect as well as to clear a connection of an EnOcean radio control button, three radio telegrams are required. To this end the corresponding pushbutton of the EnOcean radio control pushbutton is to be actuated three times within a period of approx. 5 seconds.

To connect the radio sensors wave and radio actuators wave, these are to be switched to the special function via DIP switch, pushbutton etc., depending on the device, and the sending of the program telegrams is to be triggered (see operating instructions for the corresponding device).

The two channels of the switch actuator and the EnOcean/wave converter function can be connected to a total of up to 40 wave and 30 EnOcean radio sensors.

For the EnOcean radio control pushbuttons to be connected, three operating functions are available for switching the internal actuator channels and for converting EnOcean to wave:

- "ON/OFF" switching via a rocker button (upper rocker pressure point "ON," lower rocker pressure point "OFF").

Switch actuator wave GE 561/11

5WG3 561-4AB11

When connecting to a dimmer via the converter function, give a long press to the pushbutton at the top to dim "BRIGHTER" and at the bottom "DARKER".

**Note:** This setting should also be used when connecting an EnOcean radio control pushbutton to a Venetian blind actuator wave via the converter function (operating function long pushbutton pressure "top UP"/"bottom DOWN" and short pushbutton pressure "top shade "UP"/"bottom shade closed" or "Stop").

- "CHANGE OVER" switch function (toggle function) via a rocker pressure point. With the first actuation of the pushbutton, it is switched on, with the next actuation it is switched off, etc. When connecting to a dimmer via the converter function, a long pushbutton pressure is for brighter or darker (first long pressure of the pushbutton is for brighter, the next long actuation is for darker, etc.) The 2nd rocker pressure point is available for another function.
- Button function (bell button) via a rocker pressure point. Actuating the rocker button "ON," releasing the button "OFF." This operating function can be used with the internal switch channels and via the converter function with switch actuators wave. The 2nd rocker pressure point is available for another function.

**Note:** With the button function (bell button) the maximum on period is approx. 10 seconds. After this time the corresponding channel of the switch actuator wave is switched off.

**Connecting radio sensors wave with the internal channels of the switch actuator wave:**

To connect a radio sensor wave to a channel of the switch actuator, the corresponding channel should be switched to the "special function" operating mode.

**Special function for channel A (Diagram F):**

A brief actuation of the pushbutton (F2) for a period of up to 3 seconds switches the actuator to the "special function channel A" operating mode. This is indicated by a slow flashing with approx. 0.5 Hz (once in 2 seconds) of the LED (F3).

**Special function for channel B (Diagram F):**

A long actuation of the pushbutton (F2) for a period of 3 to 6 seconds switches the actuator to the "special function channel B" operating mode. This is indicated by a steady light of the LED (F3).

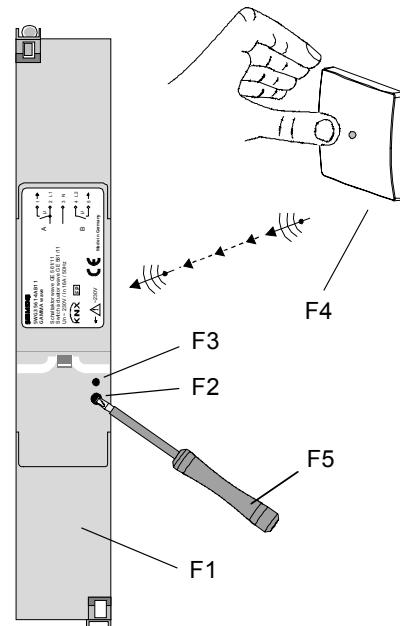


Diagram F

F1 Switch actuator wave GE 561/11  
F2 Pushbutton  
F3 LED  
F4 Radio button with GAMMA wave radio technology  
F5 Insulated screwdriver

**Programming a radio sensor wave to a switch channel.**

To program a radio sensor wave to a channel of the switch actuator, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**1A. Switch on special function channel A.**

Action: Brief actuation of the pushbutton (F2) for the duration of no more than 3 seconds.  
Display: Within 3 seconds after the release of the pushbutton the LED (F3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.  
or

**1B. Switch on special function channel B.**

Action: Long actuation of the pushbutton (F2) for the duration of 3 – 6 seconds.  
Display: Within 3 seconds the LED (F3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

The switch actuator wave waits for radio telegrams to connect to a radio sensor.

## 2. Trigger program telegram at the radio sensor wave.

Action: Trigger the sending of the program telegrams at the radio sensor wave (F4) to be connected (switch to special function via DIP switch, push button, etc., depending on the device, see operating instructions for the corresponding device).

## 3. Successful connection.

Display: After receipt of the program telegrams of the radio sensor wave (F4) and successful connection, the LED (F3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the "special function" operating mode.

Programming the radio sensor wave to the corresponding channel of the switch actuator has been completed.

**Note:** There is only a limited time available for connection, since the switch actuator wave exits the special function after approx. 2 minutes.

If connection fails (e.g., if the distance between the switch actuator wave and the radio sensor wave is too great), the switch actuator wave exits the special function after approx. 2 minutes without confirming success by rapid flashing. The LED clears.

If further radio sensors wave are to be connected to the channels of the switch actuator, this operation should be repeated.

## Deleting a connection:

Deleting a connection is carried out by reassignment (Diagram F).

To delete a connection between a radio sensor wave and a channel of the switch actuator wave, carry out the following steps 1 and 2 one after the other:

1. Activate the "special function A" in the switch actuator wave (briefly actuate the pushbutton (F2) for no more than 3 seconds) or "special function channel B" (long actuation of the pushbutton (F2) for the duration of 3-6 seconds).
2. Trigger the sending of the program telegrams at the radio sensor wave to be deprogrammed (see operating instructions for the corresponding device).

The connection of the radio sensor wave to the corresponding channel of the switch actuator wave is thus cleared.

## Connecting EnOcean radio sensors with the internal channels of the switch actuator wave:

To connect a rocker or a rocker pressure point of an EnOcean radio control pushbutton to a channel of the switch actuator, the corresponding channel should be switched to the "special function" operating mode.

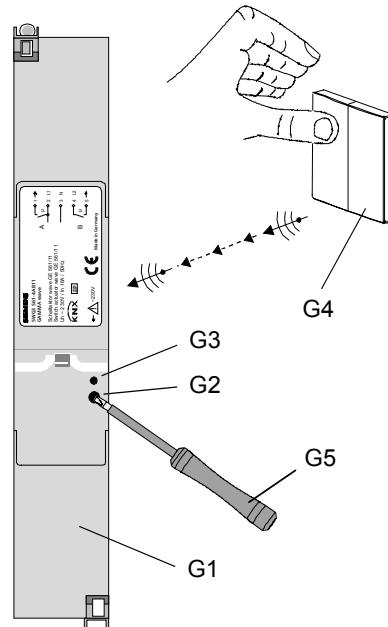


Diagram G

G1 Switch actuator wave GE 561/11

G2 Pushbutton

G3 LED

G4 Radio button with EnOcean radio technology.

G5 Insulated screwdriver

## Special function for channel A:

A brief actuation of the pushbutton (G2) for a period of up to 3 seconds switches the actuator to the "special function channel A" operating mode. This is indicated by a slow flashing with approx. 0.5 Hz (once in 2 seconds) of the LED (G3).

Switch actuator wave GE 561/11

5WG3 561-4AB11

Special function for channel B:

A long actuation of the pushbutton (G2) for a period of 3 to 6 seconds switches the actuator to the "special function channel B" operating mode. This is indicated by a steady light of the LED (F3).

After the activation of the "special function channel A" or "special function channel B" a further actuation of the pushbutton (G2) decides with which operating function the EnOcean radio control pushbutton is to be programmed.

Switching "ON/OFF" via a rocker button:

No further activation of the pushbutton.

"CHANGEOVER" switch function via a rocker pressure point:

Repeat brief activation of the pushbutton for no more than 3 seconds.

Button function (bell button) via a rocker pressure point:

Repeat long actuation of the pushbutton for 3 to 6 seconds.

**Programming with the "switch ON/OFF" function via a rocker button ("top ON," "bottom OFF").**

To program an EnOcean radio control pushbutton with the "switch On/OFF" function to a channel of the switch actuator wave, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**1A. Switch on special function channel A.**

Action: Brief actuation of the pushbutton (G2) for the duration of no more than 3 seconds

Display: Within 3 seconds after the release of the pushbutton the LED (G3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.

or

**1B. Switch on special function channel B.**

Action: Long actuation of the pushbutton (G2) for the duration of 3 – 6 seconds

Display: After 3 seconds the LED (G3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

The switch actuator wave waits for radio telegrams to connect to a radio sensor.

**2. Trigger three program telegrams at the EnOcean radio control button.**

Action: Actuate the rocker button of the EnOcean radio control button (G4) to be connected at the top or at the bottom 3 times in quick succession (within approx. 5 sec.) (With a 2-fold radio tactile sensor depending on the desired connection, actuate the left or the right rocker).

**3. Successful connection.**

Display: After receipt of the three program telegrams of the EnOcean radio pushbutton (G4) and successful connection, the LED (G3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the "special function" operating mode.

Programming the EnOcean radio control button with the "ON/OFF" function to the corresponding channel of the switch actuator has been completed.

**Note:** There is only a limited time available for connection, since the switch actuator wave exits the special function after approx. 2 minutes.

If connection fails (e.g., if the distance between the switch actuator wave and the EnOcean radio control button is too great, or if three radio telegrams in direct succession were not received by the switch actuator), the switch actuator wave exits the special function after approx. 2 minutes without confirming success by rapid flashing. The LED (G3) clears.

If further EnOcean radio control buttons are to be connected to the channels of the switch actuator wave, this operation should be repeated.

**Programming with the "switch CHANGEOVER" function (toggle function) via a rocker button pressure point (rocker top or bottom "CHANGEOVER").**

To program an EnOcean radio control pushbutton with the "switch CHANGEOVER" function to a channel of the switch actuator, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**1A. Switch on special function channel A.**

Action: Brief actuation of the pushbutton (G2) for the duration of no more than 3 seconds

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

Display: Within 3 seconds after the release of the pushbutton the LED (G3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.  
 or

**1B. Switch on special function channel B.**

Action: Long actuation of the pushbutton (G2) for the duration of 3 – 6 seconds  
 Display: After 3 seconds the LED (G3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

**2. Activate program operation “CHANGEOVER function”.**

Action: Repeat brief actuation of the pushbutton (G2) for the duration of no more than 3 seconds.  
 Display: The LED (G3) clears after actuation of the pushbutton and within 3 seconds after the release of the button returns to the display mode of the special function previously set (flashing with approx. 0.5 Hz with “special function channel A” or steady light with “special function channel B”).

The wave switch actuator waits for radio telegrams to connect to an EnOcean radio control pushbutton.

**3. Trigger three radio telegrams at the EnOcean radio control pushbutton.**

Action: Actuate the rocker button of the EnOcean radio control button (G4) to be connected 3 times in quick succession (within approx. 5 sec.) (Depending on the desired connection, the upper or the lower button of the corresponding rocker).

**4. Successful connection.**

Display: After receipt of the three radio telegrams of the EnOcean radio pushbutton (G4) and successful connection, the LED (G3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the “special function” operating mode.

Programming the EnOcean radio control button with the “CHANGEOVER” function to the corresponding channel of the switch actuator wave has been completed.

**Programming with the button function (bell button) via a rocker pressure point (rocker top or bottom “press ON” “release OFF”).**

To program an EnOcean radio control pushbutton with the button function (bell button) to a channel of the switch actuator, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**1A. Switch on special function channel A.**

Action: Brief actuation of the pushbutton (G2) for the duration of no more than 3 seconds  
 Display: Within 3 seconds after the release of the pushbutton the LED (G3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.  
 or

**1B. Switch on special function channel B.**

Action: Long actuation of the pushbutton (G2) for the duration of 3 – 6 seconds  
 Display: After 3 seconds the LED (G3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

**2. Activate “button function” program operation.**

Action: Repeat long actuation of the pushbutton (G2) for the duration of 3 to 6 seconds.  
 Display: The LED (G3) clears after actuation of the pushbutton, after 3 seconds flashes once briefly (approx. 0.1 sec.) and within 3 to 6 seconds after the release of the button returns to the display mode of the special function previously set (flashing with approx. 0.5 Hz with “special function channel A” or steady light with “special function channel B”).

The switch actuator wave waits for radio telegrams to connect to an EnOcean radio control pushbutton.

**3. Trigger three radio telegrams at the EnOcean radio control pushbutton.**

Action: Actuate the rocker button of the EnOcean radio control button (G4) to be connected 3 times in quick succession (within approx. 5 sec.) (Depending on the desired connection, the upper or the lower button of the corresponding rocker).

Switch actuator wave GE 561/11

5WG3 561-4AB11

**4. Successful connection.**

Display: After receipt of the three program telegrams of the EnOcean radio pushbutton (G4) and successful connection, the LED (G3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the "special function" operating mode.

Programming the EnOcean radio control button with the "bell button" function to the corresponding channel of the switch actuator wave has been completed.

**Deleting a connection.**

Deleting a connection is carried out by reassignment (Diagram G).

To delete a connection between an EnOcean radio control button and a channel of the switch actuator wave, carry out the following steps 1 and 2 one after the other:

1. Activate the "special function channel A" in the switch actuator wave (briefly actuation of the pushbutton (G2) for no more than 3 seconds) or "special function channel B" (long actuation of the pushbutton (G2) for the duration of 3-6 seconds).
2. Select the set operating function of the EnOcean radio control button to be deprogrammed:
  - Switch "ON/OFF" (no new actuation)
  - Switch "CHANGEOVER" (new brief actuation for the duration of no more than 3 seconds)
  - Button function (new long actuation for the duration of 3 to 6 seconds)
3. Actuate the rocker pressure point of the EnOcean radio control button to be deprogrammed 3 times in quick succession (within approx. 5 seconds).

The connection of the EnOcean radio control button to the corresponding channel of the switch actuator wave is thus cleared.

**Connecting EnOcean radio control buttons with radio actuators wave via the EnOcean/wave converter function:**

To connect a rocker or a rocker pressure point of an EnOcean radio control pushbutton to a radio actuator wave via the EnOcean/wave converter function, the switch actuator wave GE 561/11 should be switched to the "special function converter" operating mode.

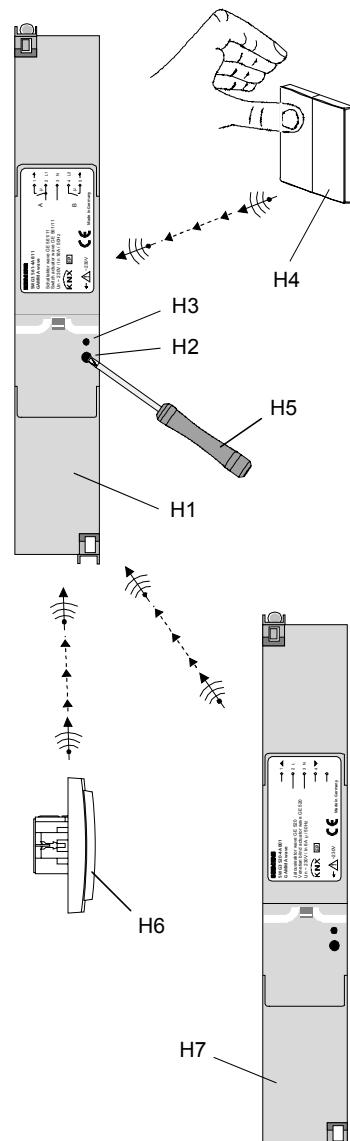


Diagram H

H1 Switch actuator wave GE 561/11  
 H2 Pushbutton  
 H3 LED  
 H4 Radio button with EnOcean radio technology.  
 H5 Insulated screwdriver  
 H6 Radio actuator wave (push button wave UP 210 with universal dimmer insert sys)  
 H7 Radio actuator wave (Venetian blind actuator wave GE 520)

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

Special function converter:

A long actuation of the pushbutton (H2) for a period of 6 - 9 seconds switches the actuator to the "special function converter" operating mode. This is indicated by a repeated flashing twice by the LED (H3) (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

After the activation of the "special function converter" a further actuation of the pushbutton (H2) decides with which operating function the EnOcean radio control pushbutton is to be connected with the radio actuator wave via the converter function.

Switching "ON/OFF" via a rocker button:

No further actuation of the pushbutton.

"CHANGEOVER" switch function via a rocker pressure point:

Repeat brief actuation of the pushbutton for no more than 3 seconds.

**Note:** This operating function can be used when connecting to switch actuators wave and dimmer actuators wave.

Button function (bell button) via a rocker pressure point:

Repeat long actuation of the pushbutton for 3 to 6 seconds.

**Note:** This operating function can be used only when connecting to switch actuators wave.

**Programming with the function "switch ON/OFF" via a rocker button ("top ON," "bottom OFF").**

To program an EnOcean radio control pushbutton with the "switch ON/OFF" function to a radio actuator wave via the converter function, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**Note:** This setting should also be used when connecting an EnOcean radio control button to a Venetian blind actuator wave via the converter function.

**1. Switch on special function in the radio actuator wave.**

Action: Switch the radio actuator wave (H6 or H7) to be connected via the converter function to the "special function" for programming and connecting with a radio sensor (depending on the device, switch to the special function via button actuation, DIP switch, etc.; see operating instructions for the respective device).

**2. Switch on special function converter in the switch actuator.**

Action: Long actuation of the pushbutton (H2) for the duration of 6 – 9 seconds

Display: After 3 and 6 seconds the LED (H3) flashes briefly (approx. 0.1 seconds) once. Within 6 – 9 seconds after the release of the pushbutton the LED begins to repeatedly flash twice (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

The switch actuator wave waits for radio telegrams to connect the radio actuator wave to an EnOcean radio control button via the converter function.

**3. Trigger three radio telegrams at the EnOcean radio control button.**

Action: Actuate the rocker button of the radio control button (H4) to be connected at the top or at the bottom 3 times in quick succession (within approx. 5 sec.) (With a 2-fold radio tactile sensor, depending on the desired connection, actuate the left or the right rocker).

**4. Successful connection.**

Display: After receipt of the three radio telegrams of the radio pushbutton (H4) and successful connection, the LED (H3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the "special function" operating mode.

Programming the EnOcean radio control button with the "ON/OFF" function to the radio actuator wave via the converter function has been completed.

**Note:** There is only a limited time available for connection, since the switch actuator wave exits the special function after approx. 2 minutes.

If connection fails (e.g., if the distance between the radio actuator wave, the switch actuator wave and the EnOcean radio control button is too great, or if three radio telegrams in direct succession were not received by the switch actuator), the switch actuator wave exits the special function after approx. 2 minutes without confirming success by rapid flashing. The LED (H3) clears.

If further EnOcean radio control buttons are to be connected to actuators wave via the converter function, this operation should be repeated.

**Programming with the “switch CHANGEOVER” function (toggle function) via a rocker button pressure point (rocker top or bottom “CHANGEOVER”).**

To program an EnOcean radio control pushbutton with the “switch CHANGEOVER” function to a radio actuator wave via the converter function, carry out the following steps 1, 2, 3, 4 and 5 one after the other:

**1. Switch on special function in the radio actuator wave.**

Action: Switch the radio actuator wave (H6 or H7) to be connected via the converter function to the “special function” for programming and connection to a radio sensor (depending on the device, switch to the special function via button actuation, DIP switch, etc.; see operating instructions for the corresponding device).

**2. Switch on special function converter in the switch actuator wave.**

Action: Long actuation of the pushbutton (H2) for the duration of 6 – 9 seconds.

Display: After 3 and 6 seconds the LED (H3) flashes briefly (approx. 0.1 seconds) once. Within 6 – 9 seconds after the release of the pushbutton the LED begins to flash twice repeatedly (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

**3. Activate program operation “CHANGEOVER function”.**

Action: Repeat brief actuation of the pushbutton (H2) for the duration of no more than 3 seconds.

Display: The LED (H3) clears after actuation of the pushbutton and within 3 seconds after the release of the button returns to the display mode of the special function converter previously set (repeatedly flashing twice (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

The switch actuator wave waits for radio telegrams to connect the radio actuator wave to an EnOcean radio control pushbutton via the converter function.

**4. Trigger three radio telegrams at the EnOcean radio control pushbutton.**

Action: Actuate the rocker button of the radio control button (H4) to be connected 3 times in quick succession (within approx. 5 sec.) (Depending on the desired connection, the upper or the lower button of the corresponding rocker).

**5. Successful connection.**

Display: After receipt of the three radio telegrams of the radio pushbutton (H4) and successful connection, the LED (H3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the “special function” operating mode.

Programming the EnOcean radio control button with the “CHANGEOVER” function to the radio actuator wave via the converter function has been completed.

**Programming with the button function (bell button) via a rocker pressure point (rocker top or bottom “press ON” “release OFF”).**

To program an EnOcean radio control pushbutton with the button function (bell button) to a radio actuator wave via the converter function, carry out the following steps 1, 2, 3, 4 and 5 one after the other:

**1. Switch on special function in the radio actuator wave.**

Action: Switch the radio actuator wave (H6 or H7) to be connected via the converter function to the “special function” for programming and connecting to a radio sensor (depending on the device, switch to the special function via button actuation, DIP switch, etc.; see operating instructions for the corresponding device).

**2. Switch on special function converter in the switch actuator wave.**

Action: Long actuation of the pushbutton (H2) for the duration of 6 – 9 seconds.

Display: After 3 and 6 seconds the LED (H3) flashes briefly (approx. 0.1 seconds) once. Within 6 – 9 seconds after the release of the pushbutton the LED begins repeatedly flashing twice (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

**3. Activate “button function” program operation.**

Action: Repeat long actuation of the pushbutton (H2) for the duration of 3 to 6 seconds.

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

**Display:** The LED (H3) clears after actuation of the pushbutton, after 3 seconds flashes once briefly (approx. 0.1 sec.) and within 3 to 6 seconds after the release of the button returns to the display mode of the special function converter previously set (repeatedly flashing twice (2 x quick flashes with approx. 2.5 Hz followed by a pause of approx. 0.6 seconds).

The switch actuator wave waits for radio telegrams to connect the radio actuator wave to an EnOcean radio control pushbutton via the converter function.

#### 4. Trigger three radio telegrams at the EnOcean radio control pushbutton.

**Action:** Actuate the rocker button of the radio control button (H4) to be connected 3 times in quick succession (within approx. 5 sec.) (Depending on the desired connection, the upper or the lower button of the corresponding rocker).

#### 5. Successful connection.

**Display:** After receipt of the three program telegrams of the radio pushbutton (H4) and successful connection, the LED (H3) flashes quickly for the duration of approx. 3 seconds with approx. 2.5 Hz (3 times per sec.). Subsequently the LED clears and the switch actuator exits the "special function" operating mode.

Programming the EnOcean radio control button with the "bell button" function to the radio actuator wave has been completed.

#### Deleting a connection:

Deleting a connection is carried out by reassignment (Diagram H).

To delete a connection between an EnOcean radio control button and a radio actuator wave via the converter function, carry out the following steps 1, 2, 3 and 4 one after the other:

1. Switch the radio actuator (H6 or H7) to be cleared to the "special function" (via button actuation, DIP switch, etc.; depending on the device, see the operating instructions for the corresponding device).
2. Activate in the switch actuator wave the "special function converter" (long actuation of the pushbutton (H2) for the duration of 6 to 9 seconds).

3. Select in the switch actuator wave the set operating function of the EnOcean radio control button and radio actuator wave to be deprogrammed:
  - Switch "ON/OFF" (no new actuation)
  - Switch "CHANGEOVER" (repeat brief actuation for the duration of no more than 3 seconds)
  - Button function (repeat long actuation for the duration of 3 to 6 seconds)

4. Actuate the rocker pressure point of the radio control button to be deprogrammed 3 times in quick succession (within approx. 5 seconds).

The connection of the EnOcean radio control button to the radio actuator wave via the converter function is thus cleared.

**Note:** When deprogramming through reassignment of an EnOcean tactile sensor and radio actuator wave via the converter function, although the connection is cleared, the device number still remains in the internal assignment table of the switch actuator wave and continues to occupy storage space. In order to be able to use all possibilities for assignment again (30 EnOcean and 40 wave devices), the device must be reset to the supplied state as described below.

#### Deleting all connections and resetting the switch actuator wave to the supplied state:

**Action:** Very long actuation of the pushbutton (H2) for at least 10 seconds.

**Display:** After 3, 6 and 9 seconds the LED (H3) flashes briefly (approx. 0.1 sec.) once. After 10 seconds the LED flashes quickly with 2.5 Hz (3 times per sec.) for the duration of approx. 3 seconds.

All connections to channels A and B of the switch actuator wave and all connections of EnOcean radio control buttons to radio actuators wave via the converter function are cleared. The device is in the supplied state.

If the pushbutton remains pressed after resetting to the supplied state for no more than 3 seconds, 3 to 6 seconds or 6 to 9 seconds, it will be switched directly to the "special function Channel A" "special function channel B" or "special function converter".

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

### Time switch operation (on period 1 to 60 minutes):

The two channels of the switch actuator wave can be operated respectively as time switches. The connected loads are thereby switched off automatically after a time that can be set in minute intervals. The on period can be retriggered, depending on the operating function of the radio tactile sensor with which the switch actuator wave is controlled in time switch operation.

Radio sensors wave and EnOcean radio control buttons with the switch "ON/OFF" function via a rocker button:  
The on period can be retriggered and is reset and restarted upon each receipt of an "ON" command via radio or upon "up" actuation of the rocker. Upon receipt of an "OFF" command or "down" actuation of the rocker, it is switched off immediately.

EnOcean radio control button with the switch "CHANGEOVER" function via a rocker pressure point:  
The on time cannot be retriggered. It is switched on with the first press of the button and the time for the on period is started. Upon repeated actuation of the button during the running time of the on period, it is switched off immediately.

EnOcean radio control button with the "bell button" switch function via a rocker pressure point:  
Irrespective of the time-switch operation, the maximum on period is approx. 10 seconds.

Activating or deactivating the time-switch operation is carried out via the "special function channel A" or "special function channel B".

### Activating time switch operation.

To activate the time-switch operation with an on period that can be adjusted in intervals of one minute in the range of 1 – 60 minutes, carry out the following steps 1A or 1B, 2, 3 and 4 one after the other:

#### 1A. Switch on special function channel A.

Action: Brief actuation of the pushbutton (H2) for the duration of no more than 3 seconds.  
Display: Within 3 seconds after the release of the pushbutton the LED (H3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.  
or

#### 1B. Switch on special function channel B.

Action: Long actuation of the pushbutton (H2) for the duration of 3 – 6 seconds.

Display: After 3 seconds the LED (H3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

#### 2. Select time switch mode of operation.

Action: Repeat long actuation of the pushbutton (H2) for the duration of 6 to 9 seconds.  
Display: The LED (H3) clears after actuation of the pushbutton, after 3 and 6 seconds flashes once briefly (approx. 0.1 sec.) and within 6 to 9 seconds after the release of the button flashes quickly with approx. 2.5 Hz for the duration of approx. 3 seconds (3 times per sec.).

#### 3. Set on period in intervals on one minute.

To set the on period in intervals of one minute, actuate the pushbutton (H2) repeatedly according to the desired on period. Each actuation of the pushbutton extends the on period by 1 minute (e.g., 1 button actuation = 1-minute on period, 5 button actuations = 5-minute on period, etc.).

The next button actuation must be made respectively within approx. 10 seconds.

If the pushbutton is not actuated for the duration of approx. 10 seconds, the present setting for the time switch operation will be stored and the special function is ended.

Action: Begin with a brief actuation of the push button (H2) within approx. 10 seconds. The 1<sup>st</sup> actuation sets the on period to 1 minute. Each repeated actuation increases the time by one more minute.

Display: The LED (H3) flashes briefly (approx. 0.1 sec.) once with each actuation of the button.

#### 4. Activating the time switch operation.

Action: After the last actuation of the button, no further operation for the duration of approx. 10 seconds.  
Display: After approx. 9 seconds the LED (H3) flashes quickly (3 times per sec.) with approx. 2.5 Hz for the duration of approx. 3 seconds.

The "special function channel A" or "special function channel B" mode of operation has been ended. The time switch operation for the previously selected channel is activated with the desired on period.

## Switch actuator wave GE 561/11

## 5WG3 561-4AB11

**Deactivating time switch operation.**

The time-switch operation is deactivated with the setting "on period = 0 minutes." This is set when the button is not actuated within the next 10 seconds after selecting the time switch mode of operation.

To deactivate the time switch operation, carry out the following steps 1A or 1B, 2 and 3 one after the other:

**1A. Switch on special function channel A.**

Action: Brief actuation of the pushbutton (H2) for the duration of no more than 3 seconds.

Display: Within 3 seconds after the release of the pushbutton the LED (H3) begins to flash slowly (once in 2 sec.) with approx. 0.5 Hz.  
or

**1B. Switch on special function channel B.**

Action: Long actuation of the pushbutton (H2) for the duration of 3 – 6 seconds.

Display: After 3 seconds the LED (H3) flashes briefly (approx. 0.1 seconds) once. Within 3 – 6 seconds after the release of the pushbutton the LED shows a steady light.

**2. Select time switch mode of operation.**

Action: Repeat long actuation of the pushbutton (H2) for the duration of 6 to 9 seconds.

Display: The LED (H3) clears after actuation of the pushbutton, after 3 and 6 seconds flashes once briefly (approx. 0.1 sec.) and within 6 to 9 seconds after the release of the button flashes quickly with approx. 2.5 Hz for the duration of approx. 3 seconds (3 times per sec.).

**3. Deactivating the time switch operation.**

Action: No further actuation of the pushbutton (H2) within approx. 10 seconds.

Display: After approx. 10 seconds the LED (H3) flashes quickly (3 times per sec.) with approx. 2.5 Hz for the duration of approx. 3 seconds.

The "special function channel A" or "special function channel B" mode of operation has been ended. The time switch operation for the previously selected channel has been deactivated.

**Exiting the "special function channel A" "special function channel B" or "special function converter" mode of operation.**

If the switch actuator wave is in the special function, this state can be ended by one of the following actions and switched back to normal operation:

- Successful connection via radio by receipt of program telegrams of a radio sensor.
- Activation or deactivation of the time-switch operation.
- Long actuation of the pushbutton (H2) for at least 10 seconds.
- Time Out after approx. 2 minutes (no actuation of the pushbutton (H2) for a period of approx. 2 minutes and no receipt of program telegrams).

**General Notes**

- The operating instructions should be handed over to the customer.
- Any faulty devices should be returned to the local Siemens office.
- If you have any further queries about this product, please contact our technical support:



+49 (0) 180 50 50-222



+49 (0) 180 50 50-223



[www.siemens.com/automation/support-request](http://www.siemens.com/automation/support-request)