SIEMENS

January 2007

5WG1 221-2AB..

5WG1 222-2AB..

5WG1 223-2AB..

Wall switch, single UP 221 Wall switch, dual UP 222 Wall switch, triple UP 223

Product and Applications Description



The wall switches UP 221/ UP 222 / UP 223 are available in the following colors, matching the design of the wall switch design line DELTA i-system:

Wall switch, single UP 221	
electro white	5WG1 221-2AB01
titanium white	5WG1 221-2AB11
carbon metallic	5WG1 221-2AB21
aluminum metallic	5WG1 221-2AB31
Wall switch, dual UP 222	
electro white	5WG1 222-2AB01
titanium white	5WG1 222-2AB11
carbon metallic	5WG1 222-2AB21
aluminum metallic	5WG1 222-2AB31
Wall awitch tripla LIP 222	
electro white	5WC1 222 24P01
	5WG1 223-2ABU1
titanium white	5WG1 223-2AB11
carbon metallic	5WG1 223-2AB21
aluminum metallic	5WG1 223-2AB31

The wall switch UP 221 / UP222 / UP 223 is slid onto the bus coupling unit UP together with its DELTA line / DELTA vita / DELTA miro frame. At the same time the electric connection between the wall switch UP 2221 / UP 222 / UP 223 and the bus coupling unit UP is established via a physical external interface (PEI).

The wall switch requires a bus coupling unit and an appropriate application program to work properly, i.e. the wall switch UP 2221 / UP 222 / UP 223 (in combination with a bus coupling unit UP) consists of the device (hardware) and the application program (software).

The required bus coupling unit UP and DELTA line / DELTA vita / DELTA miro frame are not included and therefore have to be ordered separately (see current catalog).

An application program is available for the different tasks the wall switch can be applied to.

With an appropriate application program the wall switch UP 221 / UP 222 / UP 223 can control actuators via its bus coupling unit, e.g., for defined on and off switching,

dimming fluorescent lamps or for raising and lowering venetian blinds and adjusting the louvres.

Opposite rockers are combined for switching purposes e.g. for defined switching, dimming, controlling sliding shutters and blinds, i.e. the left rocker is used for e.g. switching on and the right rocker for switching off. These pairs of rocker switches are mutually interlocked in such a way that the function of the right rocker prevails if both rockers are operated simultaneously.

With the ETS (EIB Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the bus coupling unit UP.

Application Programs

Wall switch, single UP 221

12 S1 E-A-U/Dim/Jalo/Scene 211501

- Switching On/Off/Toggle
- Dimming
- Shutter/Blind up/down, slats movement
- Send value
- Scene (1-bit)
- Scene (8-bit)

Wall switch, dual UP 222

12 S2 E-A-U/Dim/Jalo/Scene 221501 selectable per pair of rocker switches

- Switching On/Off/Toggle
- Dimming
- Shutter/Blind up/down, slats movement
- · Send value
- Scene (1-bit)
- Scene (8-bit)

Wall switch, triple UP 223 12 S3 E-A-U/Dim/Jalo/Scene 230201 selectable per pair of rocker switches

- Switching On/Off/Toggle
- Dimming
- Shutter/Blind up/down, slats movement
- Send value
- Scene (1-bit)
- Scene (8-bit)

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Wall switch, single UP 221	5WG1 221-2AB.
Wall switch, dual UP 222	5WG1 222-2AB.
Wall switch, triple UP 223	5WG1 223-2AB.

Installation Instructions

• The device may be used for permanent interior installations in wall boxes in dry locations.

/!\ WARNING

- The device must be mounted and commissioned by an authorised electrician.
- The device may be mounted to switch and socket combination box mounts if VDE-certified devices are used exclusively.
- The prevailing safety rules must be heeded.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

Technical Specifications

Power supply

via bus coupling unit UP

Control elements

- · Horizontal pairs of rockers constitute pairs of switches (single, dual or triple) are combined for switching purposes e.g. for defined switching, dimming, controlling sliding shutters and blinds, i.e. the left rocker is used for e.g. switching on and the right rocker for switching off. These pairs of rocker switches are mutually interlocked via the software, to avoid malfunction if both rockers are operated simultaneously.
- Number of switching operations: > 20000 per rocker

Display elements

- 1 | FD
 - as orientation light in the dark

Connections

10-pin connector (PEI): for connection to a bus coupling unit UP

Physical specifications

- · housing: plastic
- dimensions (L x W x D):
- 55 x 55 x 24 mm (incl. spring)

Update: http://www.siemens.de/gamma

- weight: approx. 25 g
- · installation: mounted on bus coupling unit UP

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Electrical safety

- degree of pollution (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20 ٠
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V
- the device complies with EN 50 090-2-2 and IEC 60664-1

Electromagnetic compatibility complies with EN 50090-2-2

Environmental specifications

- climatic conditions: EN 50090-2-2
- ambient temperature operating: 5 ... + 45 °C
- ambient temperature non-op.: 25 ... + 70 ° C
- relative humidity (non-condensing): 5 % to 93 %

Markings

CE, EIB, KNX

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



- Transparent frame with switch buttons A1
- Transparent plastic labeling film A2
- A3 White label holder
- Mounting screws A4
- Switch main module Α5
- Design frame (DELTA line/vita/miro) A6
- Wall mounted bus coupling unit UP Δ7
- A8 Switch button
- A9 LED for orientation lighting
- A10 PEI interface on wall switch module
- A11 PEI interface on bus coupling unit

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5WG1 222-2AB..

5WG1 223-2AB..

Wall switch, single UP 221 Wall switch, dual UP 222 Wall switch, triple UP 223

Mounting and wiring

General description

The wall switch UP 221 / UP222 / UP 223 is slid onto the bus coupling unit UP together with its DELTA line / vita / miro frame. The electric connection between the wall switch UP 2221 / UP 222 / UP 223 and the bus coupling unit UP is established via a physical external interface (PEI).

Mounting

- The bus coupling unit UP (A7) is mounted into a flush-mount box (see installation instruction of the bus coupling unit UP).
- Remove the transparent frame with the switch buttons (A1) from the wall switch's main module (A5) by inserting a screwdriver laterally into the recesses and lifting the transparent frame upwards from the main module.
- Slip the wall switch's main module (A5) together with the design frame DELTA line / DELTA vita / DELTA miro (A6) onto the bus coupling unit UP.
- Attach the wall switch's main module to the bus coupling unit UP (A7) with the screws delivered in the package (A4).
- To write a label separate the white label holder (A3) from the transparent frame. Label a transparent plastic labeling medium (A2) (e.g. Avery Zweckform No. J4720 for inkjet printers or Avery Zweckform No. L4770 for laser printers) that you insert into the transparent frame (A1) with the tranparent medium (A2) and the white label holder (A3).
- Slide the transparent frame back onto the main module (A5).

<u>Unmounting</u>

- Remove the transparent frame with the switch buttons (A1) from the wall switch's main module (A5) by inserting a screwdriver laterally into the recesses and lifting the transparent frame upwards from the main module.
- Loosen the screws securing the wall switch's main module to the bus coupling unit UP (A7).
- Remove the wall switch's main module (A5) together with the design frame DELTA line / DELTA vita / DELTA miro (A6) from the bus coupling unit UP (A7).

Dimension Diagram

Dimensions in mm







General Notes

- Any faulty device should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support.
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 - ▲ +49 (180) 5050-222
- www.siemens.de/automation/support-request

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Notes

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