Push button UP 284 + IR
4-fold

5WG1 284-2EB__

Product and Applications Description

The design of the push button UP 284 + IR matches the DELTA ambiente range and is available in the following colour variants:

DELTA ambiente, arctic white/arctic white	5WG1 284-2EB01
DELTA ambiente, arctic white/soft	5WG1 284-2EB02
DELTA ambiente, arctic white/steel	5WG1 284-2EB03
DELTA ambiente, cosmos grey/corean	5WG1 284-2EB11
DELTA ambiente, royal blue/wood	5WG1 284-2EB21

The devices are compatible with the IR hand-held transmitter S 425 and the wall-mounted transmitters AP 420, AP 421 and AP 422.

The push button with IR is a flush-mounted sensor device for *instabus EIB*.
It only functions in combination with the bus coupler UP 114 and a corresponding application program i.e. the push button UP 284+IR (with bus coupler UP 114) consists of the device (hardware) and the application programs (software).
It also contains an infrared receiver so that freely selectable operations can be controlled remotely on the bus.
Each rocker has a red LED for status response. The LED assigned to the pair of push buttons for channel 1 can also display an incoming IR telegram when the appropriate parameter settings are selected.

The push button UP 284+IR is placed together with the relevant frame (DELTA ambiente) on the flush-mounted bus coupler. The electrical connection between the push button UP 284+IR and the flush-mounted bus coupler is thus created via the physical external interface (PEI).
Using an application program, the push button UP 284+IR gives commands via the flush-mounted bus coupler for example to actuators for defined switching on/off, for dimming lamps, raising/lowering shutters or for louvre adjustment.
8 push buttons (2 push buttons per channel) are available as operating elements. Opposing rockers are always combined to form a pair (channel).
Each channel thus has its own LED display which can be used for example as a status display. The push button also has an additional LED display as an orientation light.
Using the ETS program (EIB Tool Software), the application programs can be selected and the specific parameters and addresses can be assigned and transferred into the flush-mounted bus coupler.

Note:

The bus coupler UP 114 and the relevant frame "DELTA ambiente" are not supplied with the device but must be ordered separately (refer to the relevant catalogue).

Application program

20 S18 Push button UP + IR 900B01

- Per rocker: dimming, shutter or scene control
- Per rocker contact: on/off/toggle or send 8-bit value
- LED for status display or orientation light
- Status feedback of received IR telegrams

Notes for installation

- The device can be used for permanent interior installations, in dry rooms and for insertion in flush-type boxes.
- The range decreases when the receiver lens is exposed to incandescent light.
  Reference point: max. 500 lux permitted.
  In practice: incandescent lamps should not be located less than 2 m away.
- Direct sunlight should be avoided. This can lead to the infrared receiver being completely immobilised.
- Range with wall-mounted transmitter: a value cannot be given as this is dependent on the actual reflections of infrared light at the installation site (the wall-mounted transmitter radiates upwards).
- Range with IR hand-held transmitter S 425: approx. 25 m.

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⚠ WARNING

- The device may only be installed and commissioned by an authorised electrician.
- The device may not be inserted in the same box as 230 V devices.
- The device may be used in switch sockets, if VDE approved devices have been used.
- The prevailing safety and accident regulations must be observed.
- The device may not be opened. Any faulty devices should be returned to the local Siemens office.

Technical specifications

Power supply
via the flush-mounted bus coupler

Operating elements
- 8 rockers:
  opposing rockers are always combined to form a pair (as four rockers with idle state in the neutral position) and are interlocked via software, so that malfunctions are not triggered when they are operated simultaneously.
- Number of switching cycles: > 20,000 per push button

Display elements
- 4 red LEDs as an orientation light or for status display
- 1 red LED as an orientation light

IR receiver
- Range of infrared beam: approx. 25 m
  - with IR hand-held transmitter S 425 (5WG1 425-7AB21),
  - directed at the optical main axis,
  - with 500 lux of diffuse daylight at the receiver

Connections
10-pole plug connector (PEI):
for connection to the flush-mounted bus coupler

Physical specifications
- Housing: plastic
- Dimensions:
  (L x W x D): 65 x 65 x 14 mm (without spring)
  (L x W x D): 65 x 65 x 28 mm (with spring)
- Weight: approx. 85 g
- Fire load: approx. 850 kJ ± 10 %
- Mounting: placed on the flush-mounted bus coupler and screwed into position

Electrical safety
- Degree of pollution (according to IEC 664-2): 2
- Type of protection (according to EN 60529): IP 20
- Protection class (according to IEC 60356): III
- Overvoltage category (according to IEC 664-1): III
- Bus: safety extra-low voltage SELV DC 24 V
- Device complies with
  EN 50090-2-2 and IEC 664-1: 1992

EMC requirements
complies with EN 50081-1 and EN 50082-2

Environmental conditions
- Climatic withstand capability: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
- Relative humidity (not condensing): 5 % to 93 %

Approval
EIB-certified

CE mark
in accordance with the EMC guideline (residential and functional buildings) and the low voltage guideline

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Location and function of the operating and display elements

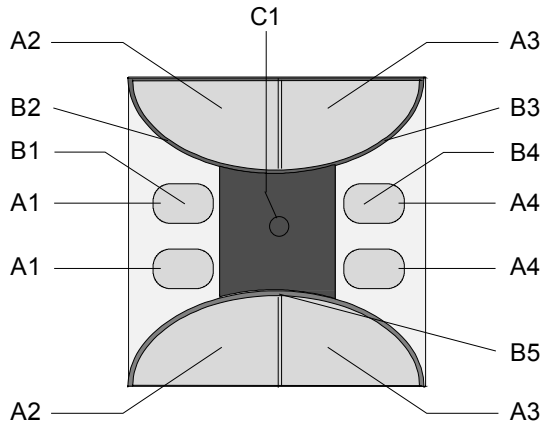

Diagram 1: *Location of the display and operating elements*

A1 Pair of push buttons, channel 1
A2 Pair of push buttons, channel 2
A3 Pair of push buttons, channel 3
A4 Pair of push buttons, channel 4

B1 LED for status display, channel 1
B2 LED for status display, channel 2
B3 LED for status display, channel 3
B4 LED for status display, channel 4
B5 LED as an orientation light

C1 IR receiver lens

Mounting and wiring

General description
The push button UP 284+IR is placed together with the relevant frame (DELTA ambiente) on the flush-mounted bus coupler. The electrical connection is thus created between the push button and the flush-mounted bus coupler via the physical external interface (PEI).

Mounting (Diagram 2)
- The flush-mounted bus coupler (D1) is connected to the flush-type box and fixed in position (refer to installation instructions for the bus coupler).
- Remove the two outer covers (D5) from the basic push button module (D4) (by inserting the screwdriver in the recesses provided at the side of the device).
- Place the module with the relevant frame (D2) (DELTA ambiente) on the flush-mounted bus coupler.
- Fix the basic push button module with the premounted screws (D3) onto the flush-mounted bus coupler and clip on the two covers again.

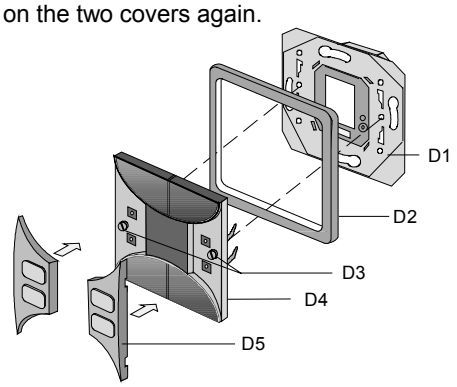

Diagram 2: *Mounting the push button (block diagram)*

D1 Flush-mounted bus coupler
D2 Frame
D3 Fixing screws
D4 Basic push button module
D5 Covers

Inserting the pictograms
A set of pictograms is supplied for the pairs of push buttons for channel 1 and channel 4.

Insertion: The four pairs of push buttons have a slot at the side for lifting out the perspex covers. Insert the selected pictogram in the cover and then press on the basic push button module. (See diagram 3)

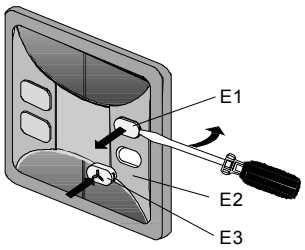

Diagram 3: *Inserting the pictograms*

E1 Perspex cover
E2 Cover
E3 Perspex cover with pictogram inserted

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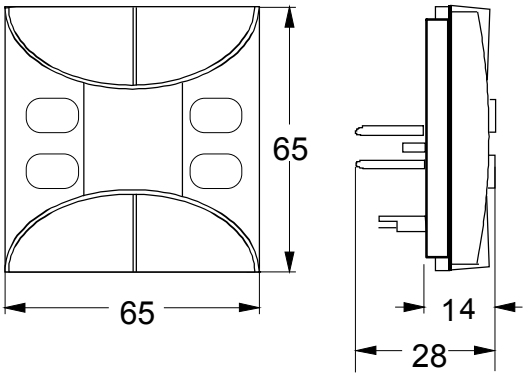
Dimension drawing

Dimensions in mm



Space for notes