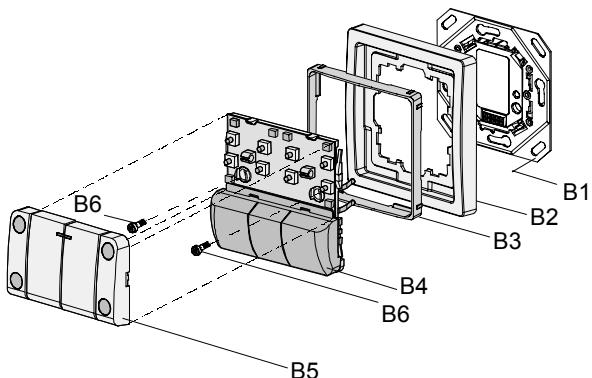


Push Button UP 230/2
4 – fold Movement Detector Included

5WG1 230-2AB
5WG1 230-2EB



Product	DELTA profil	DELTA style
Push button 4-fold Movement detector included	pearl grey titanium white anthracite silver	5WG1 230-2AB02 5WG1 230-2AB12 5WG1 230-2AB22 5WG1 230-2AB72
Frame	ordered separately from the DELTA ranges	
	cut-out frames	—
Tier frame	—	titanium white basalt black
Bus coupling unit	UP 110, UP 114	



- B1 Bus coupling unit
- B2 Frame
- B3 Tier frame for DELTA style
- B4 Push button UP 230 4-fold movement detector included *)
- B5 Rockers *)
- B6 Fixing screws *)

*) Scope of supply

Diagram 1: Mounting the push button UP 230

Push Button UP 230/2	5WG1 230-2AB
4 – fold Movement Detector Included	5WG1 230-2EB

Product and Applications Description

The push button UP 230 is composed of 3 functional units: the push button 4-fold, the motion detector beneath and the light intensity sensor.

- Push button

Four rocker switches are provided with two switching contacts each (one top and one bottom contact). After operating the rocker returns to its neutral position automatically. The two central rocker switches (main rocker switches) are approx. twice as wide as the two outer rocker switches.

Red LEDs are provided beneath each of the windows inserted into the two outer rockers and the two central rockers.

- Motion detector

Below the rocker switches there is a motion detector situated with two motion sensors and a light intensity sensor. Beneath the movement detector's optics there is a LED that is illuminated on detecting movement (display mode can be set in the parameter list).

- Light intensity sensor

Beneath the receiving lenses of the motion detector a light intensity measuring unit is incorporated so that e.g. lamps are switched on only if the light intensity falls below the threshold set in the parameter list.

Using an application program, the push buttons UP 230 give 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 or other parameterisable functional units.

The push button UP 230 is slid onto the bus coupling unit UP together with its frame. It requires a bus coupling unit and an appropriate application program to work properly, i.e. the push button (in combination with a bus coupling unit UP) consists of the devices (hardware) and the application program (software).

The bus coupling unit UP and frame are not included and therefore have to be ordered separately. When using DELTA style a tier frame must be employed.

With the ETS (EIB Tool Software) the application program is selected, the appropriate parameters and addresses are assigned.

NOTE

The motion detector is not fitted for being used in connection with alarm systems.

Application Programs

12 S8 MRocker 280103

- Per rocker switch:
 - 1x dimming with switching on/off or
 - 1 x blinds control and adjusting louvres or
 - 1 x switching on/off or
 - 2 x switching over or
 - 2 x dimming with preselected values.
- Up to 4 dimming values can be specified in the parameter list when using dimming with preselected values mode with the push button UP 230. Here, the two left rockers form one rocker switch while the two right rockers form the second one.
- Default setting (both rockers): 2 x switch over
- The two outer rockers can be locked (i.e. the measured light intensity cannot be sent) and released via the bus.
- The LEDs can be disabled or used as orientation lights or for displaying the actual state.
- Movement detection telegrams can be sent on the bus light intensity dependent or independent.
- The light intensity value (Lux) measured by the light intensity sensor can be sent on the bus.
- Separate settings are provided for the movement detector's light intensity dependent and independent modes: range of detection, response period, light intensity levels (light intensity dependent mode only).
- The movement detector's LED can be disabled or used for movement indication (especially when checking operation on commissioning the device).

Installation instructions

- The device may be used for permanent interior installations in dry locations within box mounts (in combination with a bus coupling unit UP).
- Any change of the thermal image in the detection area in dependency of its intensity could release the movement detector! E.g. bright lamps close by, intensive air circulation (ventilation slots), and so on.
- The device must be mounted free of vibration.
- Do not mount the device exposed to direct sun light.

Push Button UP 230/2
4 – fold Movement Detector Included

5WG1 230-2AB
5WG1 230-2EB

⚠ WARNING

- The device must be mounted and commissioned by an authorised electrician.
- The device must not be installed in box mounts together with 230 V devices.
- The device may be mounted to switch and socket combination box mounts (in combination with a bus coupling unit UP) if VDE-certified devices are used exclusively.
- The prevailing safety rules must be heeded.
- A device suspected faulty should be returned to the local Siemens office.

Technical data

Power supply

via bus coupling unit UP

Control elements

- 4 rocker switches with neutral position
- operating cycles: > 20000

Display elements

7 red LEDs:

- 2 LEDs beneath the window of each of the central rockers
- 4 LEDs beneath each of the two windows of the outer rockers
- 1 LED beneath the movement detector's optics

Motion detector

- max. detection angle horizontally:
approx. 180 degrees,
can be set in the parameter list of the application program: 90 degrees to left, 90 degrees to right, 180 degrees
- max. detection angle vertically:
approx. 10 degrees up, approx. 40 degrees down
- max. detection ranges:
major movement (e.g. human being): approx. 6 m
minor movement (e.g. hand): approx. 3 m
- mounting height for maximum performance:
1,10...1,30 m

Connections

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

Physical specifications

- housing: plastic
- dimensions (L x W x D):
65 x 65 x 17 mm (without spring)
65 x 65 x 30 mm (incl. spring)
- weight: approx. 40 g
- fire load: approx. 1050 kJ ± 10 %
- installation: slide onto bus coupling unit and secure with mounting screws

Electrical safety

- fouling class (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20
- protection class (according to IEC 61140): III
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V
- device complies with
EN 50090-2-2 and IEC 60664-1

Reliability

rate of failure: 321 fit at 40 °C

Electromagnetic compatibility

complies with EN 50081-1, EN 61000-2 and 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 %

Certification

EIB certificate

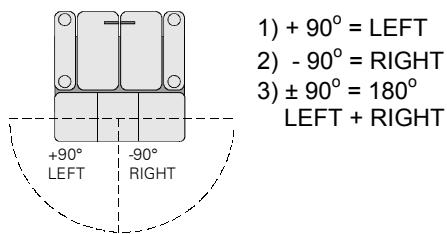
CE norm

complies with the EMC regulations (residential and functional buildings), and low voltage regulations

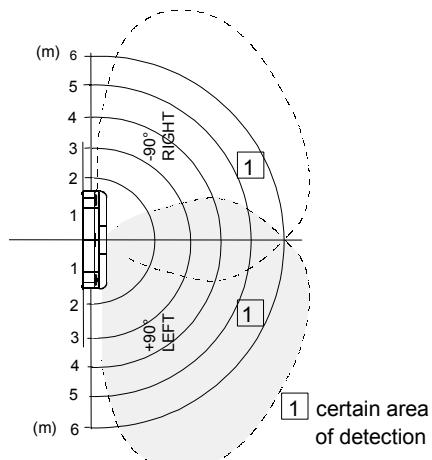
Push Button UP 230/2	5WG1 230-2AB
4 – fold Movement Detector Included	5WG1 230-2EB

Monitoring area of the motion detector

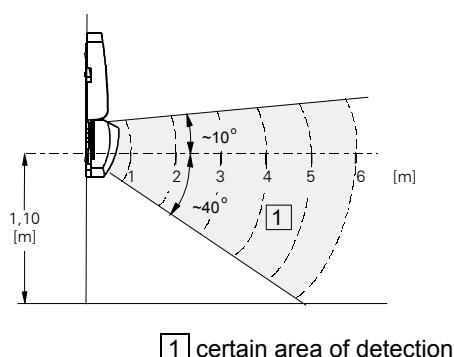
Three sections of the 180° monitoring area can be set via parameter adjustment:



Monitoring area (top view)



Monitoring area (side view)



Monitoring area of the light intensity sensor

The light intensity sensor evaluates the light received from any angle of illumination: featured by overall receiving.

Location of the display and operator elements

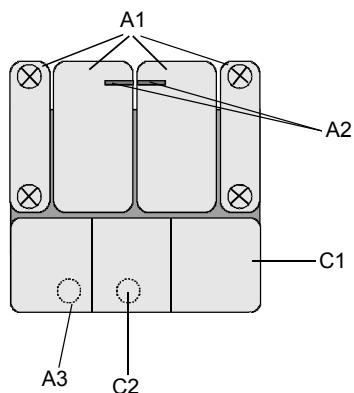


Diagram 2: Display and operator elements

A1 Rockers

A2 LEDs of the wide rockers

A3 Light intensity sensor (beneath the receiving lenses)

C1 Receiving lenses of the motion detector

C2 LED of the motion detector (beneath the receiving lenses)

Mounting

Note:

- The installation site and type of installation should be carefully selected according to the area that is to be monitored while considering any possible interference. The mounting wall should not be exposed to vibration or motion, as any movement of the motion detector has the same effect as thermal movement in the detection area. In order to prevent unwanted switching operations, the multi switch should if possible be installed so that it is not exposed to direct sunlight. Air turbulence caused by heaters, vents from air-conditioning units, dropping leaves of flowers etc. can also trigger switching operations in the monitoring area of the motion detector. Since infrared radiation is largely absorbed or reflected by glass, plas-

Push Button UP 230/2
4 – fold Movement Detector Included

5WG1 230-2AB
5WG1 230-2EB

tic, brickwork, metal and cardboard, it is not picked up by the motion detector.

- The optimum range is achieved if the sensor is mounted sideways to the direction of movement. There could otherwise be a reduction in the range.

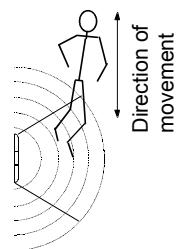


Diagram 3: Highly effective movement detection

- Sensors should not be aligned towards the sun. The high level of thermal energy can destroy the sensors.
- In the event of voltage recovery and after each programming process, it is necessary to wait for an immunity period of approx. 80 seconds before the motion detector is ready for operation again. No telegrams are sent by the motion detector during this time.

General description

The push button UP 230 is slid onto the bus coupling unit UP together with its frame.

- The flush-mounted bus coupling unit is connected and fixed in position in the flush-type box (see installation instructions for the flush-mounted bus coupling unit).

Mounting sequence

- Place the push button module (B4/B5) with the relevant frame (B2/B3) on the flush-mounted bus coupler (C1) and press the one strongly upon the other (diagram 4).

Using fixing screws:

- If the fixing screws (B6) are used first of all the rockers (B5) have to be lifted out altogether. This can be achieved by inserting the screwdriver between the frames in the recess (D1) and applying leverage (diagram 5).

Important: The push button module (B4) and the rockers (B5) must be held down / pressed down.

- Screw down the fixing screws (B6).
- The rockers (B5) have to be orientated properly and clicked upon the mounting rack (B7).

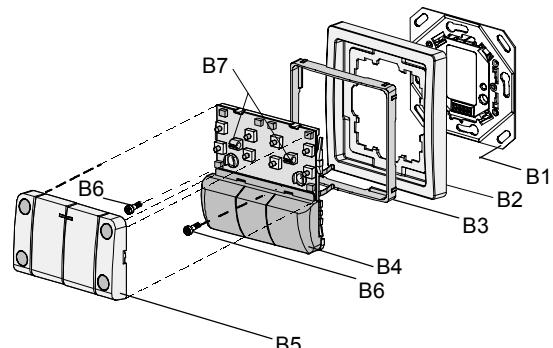


Diagram 4: Mounting sequence

Drawing representing the installation

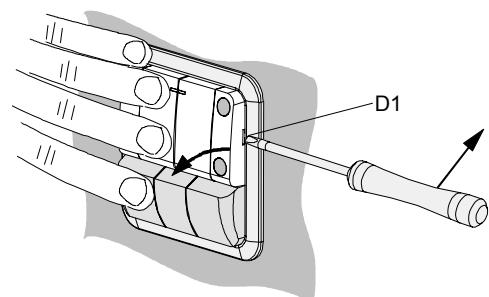


Diagram 5: Lifting out the rockers

Inserting / changing pictograms

Pictograms (which have to be ordered separately) can be inserted in the two small outer rockers (B5) in order to achieve a clearer representation of the functions.

Mounting sequence referring to the pictograms:

- Apply leverage with a screwdriver to remove the rockers (B5) from the module (B4). (See installation instructions „Using fixing screws“).
- Lift out the ROUND pictogram inserts (B11) by applying pressure with a hard object (screwdriver) at their rear sides. (see diagram 6)

Push Button UP 230/2
4 – fold Movement Detector Included

5WG1 230-2AB
5WG1 230-2EB

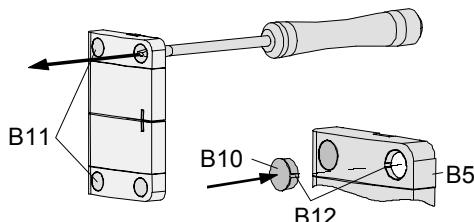


Diagram 6: Inserting / changing pictograms

- The desired pictograms (B10) can then be pushed in at the front side of the rocker (B5). Pay attention to the fin guideway (B12).
- The rockers (B5) have to be orientated properly and clicked upon the mounting rack (B7).

Dismantling

Without fixing screws

- Remove the push button UP 230 (B4) completely together with the frame (B2) from the flush-mounted bus coupler (B1):
 - a) with the mere hand
 - b) with a screwdriver beneath the frame / wall

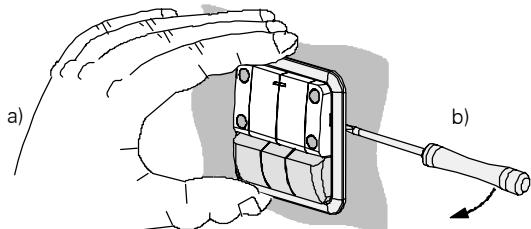


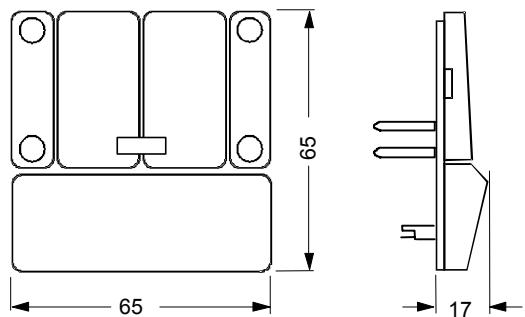
Diagram 7: Dismantling

With fixing screws

- Insert a screwdriver into the recess (D1, diagram 5) between the frame (B2) and the rockers (B5) and remove the rockers by applying leverage.
- Screw out the fixing screws (B6)
- The rockers (B5) have to be orientated properly and clicked upon the mounting rack (B7).
- Remove the whole multi switch (B4) as described at „Without fixing screws“.

Dimension Diagram

Dimensions in mm



General notes

- Any faulty devices should be returned to the local Siemens office.
- Should you have any additional queries, please contact our Technical Support department:



+49 (0) 180 50 50-222



+49 (0) 180 50 50-223



adsupport@siemens.com



www.siemens.com/automation/support-request