



UP 256

5WG1 256-2AB___

Motion detector

As at: March 2008

DELTA ambiente

Operating and mounting instructions

	DELTA i-system	DELTA profil	DELTA style	DELTA ambiente	
Frames	ordered separately from the DELTA ranges				
		cut-out frames			
Bus coupling unit	bus coupling unit UP 110 or UP 114 ordered separately				



B1 Bus coupling unit UP

- B2 Frame
- B3 Motion detector *
- B4 Detachable masking plate ' B5
- Intermediate frame (only for DELTA style basalt black)
- *) Scope of supply

Diagram 1: Mounting the motion detecto

Product and functional description

The motion detector UP 255 / UP 256 / UP 257 / UP 258 is a proximity sensor which reacts to movements of people, animals or other moving objects.

If a motion is detected the corresponding telegrams are sent on the bus. It is used for example to detect people moving in its monitoring area. Using an appropriate application program, it gives switching commands via the flush-mounted bus coupling unit to actuators such as binary outputs to switch groups of luminaires or to signalling units. The motion detector UP 255 / UP 256 / UP 257 / UP 258 can be operated in stand-alone mode, as a master or extension unit

Note:

The device is not fitted to be used in connection with alarm systems

It is placed on the flush-mounted bus coupling unit, together with the relevant frame and is only operational when used together with the bus coupling unit and the corresponding application program i.e. the motion detector UP 255 / UP 256 / UP 257 / UP 258 (with flush-mounted bus coupling unit] consists of the device (hardware) and the application program (software)

The flush-mounted bus coupling unit and the relevant frame are not included with delivery and must be ordered sepa-rately. When using DELTA style basalt black a intermediate frame must be employed.

Using the ETS software it is possible to select the application programs and assign the specific parameters and addresses

Using the detachable masking plate supplied (B4), it is possible to reduce the detection range on the left or right.



Diagram 2: Reducing the detection range

Detection range

- 2 Screened range
- B3 Motion detector
- Detachable masking plate B4

Additional Informations

http://www.siemens.com/gamma

Technical data

Power supply

via the flush-mounted bus coupling unit •

Operating elements

Potentiometer for stepless adjustment of the range between 100% and 20%

Properties

- Light sensor: adjustable in steps from approx.
- Horizontal detection angle: 180 degrees on two levels (can be reduced to 90° on the left or right using a detachable • masking plate)
- Range for mounting height of 1.10 m: approx. 10 m
- Range for mounting height of 2.20 m: approx. 10 m •
- Lateral range: 2 x approx. 6 m each side Optical system: Fresnel lens (2 levels with 18 segments) •

Connections

10-pole plug connector (PEI): for connection to the flushmounted bus coupling unit

Mechanical Data

- Dimensions (L x W x D): ٠ 68 x 68 x 23 mm / 65 x 65 x 23 mm / 55 x 55 x 23 mm Weight: approx. 45 g
- Mounting: clipped onto the flush-mounted bus coupling unit Mounting height: 1.10 m / 2.20 m

Electrical safety

Type of protection (according to EN 60529): IP 20

Environmental conditions

- Ambient temperature during operation: 5 ... + 45 $^{\circ}\mathrm{C}$
- Storage temperature: 25 ... + 70 °C
- Relative humidity (not condensing): 5 % to 93 %
- Markings
- KNX Ï EIB





Diagram 3: Motion detector rear view: Location of the display and operating elements

- A1 Motion
- Potentiometer for setting the range (left limit stop 20%, A2 right limit stop 100%)
- A3 Mounting springs
- 10-pole plug connector (PEI) A4

Mounting

The device may be used for permanent interior installations, in dry rooms and for insertion in flush-type boxes

∕∧ DANGER

- The device must be mounted 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 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.

Note:

The installation site and type of installation should be carefully selected according to the area that is to be moni-tored 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 motion detector 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, plastic, brickwork, metal and cardboard, it is not picked up by the motion de-tector. Depending on the lamp type, fluorescent lamps and incandescent lamps may not be placed less than 1-3 m away from the motion detector in the detection area. Otherwise, the motion detector may be switched on again due to the thermal variation in the sensor range generated when the lamp is switched off.

- 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.
- Sources of interference (lamps, heating systems etc.) should be excluded from the detection area (e.g. using the detachable masking plate).
- 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.

Representation of the detection ranges

Mounting height type	Spatial view	Top view	Side view
1,10 m	1,10 m	m 21	12 m
2,20 m	2.20 m	E 21 4 m 10 m	12 m
Type 2,20 Mounting height 1,10	1,10 m	E contraction of the second se	6 m

Diagram 4: Representation of the detection ranges

General description

The motion detector is placed on the flush-mounted bus coupling unit together with the relevant frame (DELTA profil cut-out, DELTA ambiente or DELTA style with the relevant intermediate frame).

Mounting sequence

- 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).
- If required, the uninstalled detachable masking plate (B4) is inserted on the left or right of the motion detector and induced to click into place by a strong pressure onto the 4 mounting clamps.
- It must not be forgotten to adjust the potentiometer for setting the range (A2) of diagram 2
- Place the motion detector (B3) with the relevant frame (B2) on the flush-mounted bus coupler (B1).
- The brightness limit is set in the application program.
- It is possible to check the function of the detector or the detection area after programming by carrying out a walk test (according to detection area in Diagram 4). Before this the setting "maximum" has to be selected for the brightness and the setting "minimum" has to be selected for the switching interval in the parameter list.



Diagram 5: Installing the motion detector

- Flush-mounted bus coupling unit
- B2 Frame B3
- Motion detector B4
- Detachable masking plate Intermediate frame B5
 - (only for DELTA style basalt black)

Dismantling:

The motion detector (B3) together with the frame is manually removed from the flush-mounted bus coupling unit (B1).

If a modification of the viewing area is required, the detachable masking plate can be removed careful.

General Notes

- The operating instructions must be handed over to the client.
- Any faulty device should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support:
 - +49 (180) 5050-222 1
 - +49 (180) 5050-223 8 Í www.siemens.com/automation/support-request