Louver control system

Sun/Twilight Sensor

Glass Breakage Sensor

Adapter

Function

Together with the components of the louver control system, these sensors facilitate the sun protection, twilight and glass breakage functions. These functions depend upon the attachment used (please refer to the operating instructions of the attachment) and are not possible for attachments without sensor connection.

Only one sensor plug can be connected to the attachment. If the sun protection/twilight sensor and the glass breakage sensor are to be employed at the same time, please use an adapter.

The sensor or adapter can be connected to the attachment through a plug.

For buried installation, the sensor line can be connected to the insert through a screw terminal (please refer to the louver control insert Operating Instructions).

Installation

Important: The sensor line carries protective low voltage (SELV). Please observe the installation procedures as specified by VDE 0100.

To connect the sensors, please refer to the attachment and insert operating instructions.

The twilight function facilitates automatic shutting of the louver after a programmed brightness value is undercut. The louver moves into its lower end position. The position of the twilight sensor can be individually chosen on the window pane.

Application: Shutting the louver at nightfall.

Sun/Twilight Sensor

The sun/twilight sensor (Fig. ①) can be attached to the window pane by its suction cup.

The sun protection function facilitates automatic shutting of the louver after a programmed brightness value is exceeded. The end position of the louver can be individually chosen by correspondingly positioning the sensor on the window pane.

Applications:
Sun protection at terminal workstations, sun protection for flower windows or greenhouses etc.
Glass Breakage Sensor

The glass breakage sensor (Fig. 2) monitors plane glass surfaces within a maximum radius of 2 m (depending upon the pane thickness, frame, puttying etc.) Mechanical vibrations which do not reach the sensor with the corresponding intensity are not detected (e. g. gaps in the pane). Window panes with uneven surfaces (structural glass, wire reinforced glass) or multilayer glass panes produce excessively high reduction of vibration and must not be monitored by the glass breakage sensor. The glass must not be covered with film or foil and must not show any cracks. The glass breakage sensor is a sensitive device.

Knocking or other improper handling may result in damage.

The glass breakage sensor must be attached to the window pane by a suitable bonding agent (e. g. Loc-tite glass-metal adhesive set) (clean or degrease the bonding surfaces of the sensor and the pane). Please observe the information of the adhesive manufacturer. Foreign bodies between the sensor and the window pane adversely affect sensitivity. Please keep the distances from the window frame (please refer to Fig. 3). If the window pane is damaged, the louver will be moved into its lower end position.

Application:
Protection against weather influences in case of glass breakage.

Adapter

The adapter (Fig. 4) can be connected to the attachment with sensor connection or insert through the 3-pole connection terminal. The adapter has two sockets for the connection of the sun/twilight sensor and the glass breakage sensor.

For connecting, please refer to the ‘Insert’ Operating Instructions.

Specifications

Sun/Twilight Sensor

Max. photodiode sensitivity: At $\lambda$ of approx. 850 nm
Max. number used: 1 piece
Temperature range: -30 °C to +70 °C
Protective system: IP 54
### Glass Breakage Sensor

- **Contact:** Single-pole normally closed
- **Max. switching capacity:** 350 mW
- **Transition resistance**
  - **At rest:** Max. 30 Ohms
  - **Alarm condition:** Min. 1 MOhm
- **Alarm duration:** Approx. 0.5 - 5 sec
- **Connecting leads:** LIYY 2x0.14 mm
- **Temperature range:** -30 °C to +70 °C
- **Protective system:** IP 67
- **Max. number used:** 10 pcs. (to be connected in series)

### Adapter

- **Max. number of sensors at plug connector:**
  - 1 sun/twilight sensor
  - 1 glass breakage sensor

### Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

Gira  
Giersiepen GmbH & Co. KG  
Service Center  
Dahlienstrasse 12  
D-42477 Radevormwald

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