

Instruction manual GD 330

DESCRIPTION

GD 330 is a passive glass break detector glued on the glass surface. The detector has latching relay output that opens during alarm and can be connected directly to the alarm loop.

It is specifically designed for surveillance of:

- shop-windows
- glass sliding doors
- single-glazed windows
- other vulnerable glass surfaces in public offices and private homes.

GD 330 complies with:

- EN 50131-2-7-2:2012, security grade 2
- EN 50130-5:2011, environmental class IIIA

FEATURES

- Detects glass break of float glass
- Large coverage area
- Very resistant to disturbances on the glass
- No sensitivity adjustment
- Ideal for 24-hour loop perimeter protection
- Low current consumption
- Completely sealed plastic casing

OPERATING PRINCIPLE

GD 330 is equipped with a piezoelectric sensor that detects mechanical waves propagating in the glass pane. During glass breakage, a very short vibration pulse with high amplitude and very high frequency contents is generated and propagates with high speed in the glass. This pulse triggers the detector, activating an alarm.

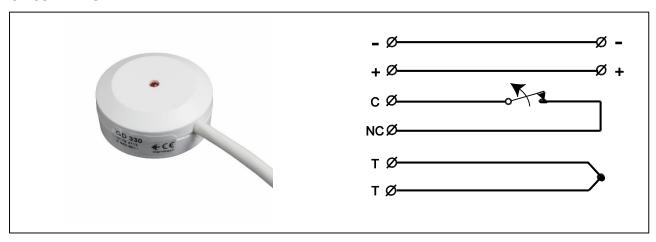
WIRING

#	Signal	Wire colour code	Function	Description
1	(-)	Black	DC power supply (-)	Power supply lines
2	(+)	Red	DC power supply (+)	
3	С	White	Alarm relay output	Output of alarm relay inside detector
4	NC	White	Alarm relay output	
5	Т	White	Tamper	Sabotage protection loop. Additionally marked with a label.
6	Т	White	Tamper	

Wire identification hints:

- Power supply lines are marked as red and black
- Sabotage loop is marked with additional small label presenting shunt wires
- Sabotage loop can be also easily identified with the help of ohm-meter, as it is the only pair of wires shorted inside detector

CIRCUIT DIAGRAM



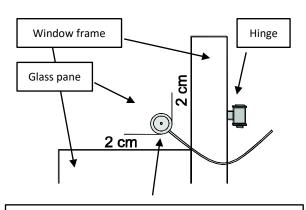
INSTALLATION

Warning #1: correct gluing of the detector is vital for its function. Follow the installation instructions carefully.

Warning #2: GDK 100 adhesive kit must be used for safe installation.

Procedure:

- Before installation, test the detector using GVT-500 or GVT-5000 tester. Use the 12 V output of the GVT-5000 tester to supply the detector.
- Select the spot on the window pane if possible at about 5 cm distances from the frame. Distance between the detector and the frame must not be lower than 20 mm.



Minimum distances between detector and window

- 3. Clean the glass surface with the cleaning solvent (bottle no. 1). Let the surface dry.
- 4. Apply the enclosed sticker template for precise installation.
- 5. Clean the detector's bottom surface with the brown graining pad to remove any grease.
- Apply activator (bottle no. 2) on the bottom surface of the detector and on the installation spot. The sticker template (if used) will prevent staining the glass outside the installation area. Let the surfaces dry for 1-2 minutes.
- 7. Place a small drop of glue (bottle no. 3) in the **centre** of the detector's bottom surface and spread it evenly in a thin layer with enclosed triangular spatula. A thin layer is very important for a good and fast bond.
- 8. Press and hold the detector against the glass surface on the selected spot until you feel it adheres. (10 sec).
- 9. Let the glue harden for another 5 minutes before you start working with the cables.
- 10. Remove the surplus glue from the side of the detector using the triangular spatula. Remove the sticker template (if used).

TECHNICAL DATA

Type of protected glass	float
Standard glass thickness	4 mm
Detection radius	2 m
Supply voltage	8 – 15 VDC
Max. voltage ripple	2 Vpp at 12 V
Current consumption quiescent	5 mA
Current consumption in alarm state	12 mA
Alarm output	relay
Contact rating	max. 50 mA, max. 50 VDC/peak AC, Rs ≤ 30 Ω
Alarm indication	LED
Alarm hold time	Latching
Alarm reset	power down below 2 V
Cable	3 m, φ 3,9 mm, 6x0,182 mm ²
Environmental class (EN50130-5:2011)	IIIA
Operating temperature range	-40°C to +70°C
Operating humidity	max. 95% RH
Housing material	plastic ABS
Dimensions:	Φ 35x15,5 mm
Tested acc. to VdS 2332, EN50131-2-7-2:2012+A1:2013 and SSF 1014-4	Class B, Grade 2, Class 2 respectively
Approvals	SBSC 10-31, VdS G192531

We reserve the right to changes without notice.