

Glass break detector

Installer manual

GD 370



DESCRIPTION

GD 370 is an universal passive glass break detector glued on the glass surface. The detector has a 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 and other vulnerable glass surfaces in public offices and private homes.

FEATURES

- Detects glass break of float and laminated glass
- Large coverage area
- Very resistant to disturbances on the glass
- Built-in self-test module
- No sensitivity adjustment
- Ideal for 24-hour loop perimeter protection
- Low current consumption
- Build in LED memory function
- Completely sealed plastic casing

OPERATING PRINCIPLE

GD 370 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.

GD 370 is equipped with an additional piezoelectric crystal used for self-tests of the detector. The self-test is carried out after power on and can be triggered remotely by changing the state of the D/N line from DAY to NIGHT. If the detector fails to pass the self-test procedure, FAULT signal is generated

CIRCUIT DIAGRAM



Cabling description

- (-) black
- (+) red
- C/NC white
- T/T white

INSTALLATION

Please note! Correct gluing of the detector is vital for its function. Follow the installation instructions carefully.

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.

Please note! Use the recommended UV-radiation proof adhesive kit (Glue kit GDK 100) for safe installation.

Select the installation spot. Distance between the detector and the frame must not be lower than 20 mm.



Clean the glass surface with the cleaning solvent (bottle no. 1). Let the surface dry.

Apply the sticker template for precise installation.

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.

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.

TECHNICAL DATA

Press and hold the detector against the glass surface on the selected spot until you feel it adheres. (10sec).

Let the glue harden for another 5 minutes before you start working with the cables.

Remove the surplus glue from the side of the detector using the triangular spatula. Remove the sticker template (if used).

Type of protected glass	float	laminated P1
Standard glass thickness	4 mm	4 mm + 4 mm
Detection radius	2 m	2 m
Supply voltage	8 – 15 VDC Max.	
Voltage ripple	2 Vpp at 12 V Current	
Consumption quiescent	7 mA	
Consumption in alarm state	9 mA	
Alarm output	relay	
Contact rating	max. 100 mA, max. 50 VDC/peak A	C, Rs ≤ 30 Ω
Alarm indication	LED	
Alarm hold time	Latching	
Alarm reset	Power down	
Cable	3m φ 3,7 mm, 6x0,14 mm²	
Environmental class (EN50130-5)	IIIA	
Operating temperature range	-25°C to +55°C	
Operating humidity	max. 95% RH Housing	
Material	Plastic ABS	
Dimensions:	Φ 35x15,5 mm	
Grade (EN50131-2-7-2:2012)	2	