

GB-5000 Series

Glass Break Detectors

VANDERBILT



The new EN 50131-2-7-2 approved glass break detectors series GB-5000 offers a wide variety of products with the following features:

- Large coverage area
- Low current consumption
- Visual alarm indication
- Versions with either current or relay outputs
- Version for laminated glass

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Functionalities

Application

The passive electronic glass break detectors of the GB-5000 series serve for reliable monitoring of glass panes such as windows, shop windows, glass doors, etc. for breakage.

Function

Any breaking of glass panes produces vibrations which propagate in the glass as mechanical oscillations. These oscillations are received and are converted into electric signals by the piezo ceramic sensor of the detector. The frequencies typical of breaking glass are amplified by the detector electronics in which the signals thus conditioned are evaluated for alarm triggering. The detectors of the GB-5300 and GB-5700 series can be connected to any intruder alarm control panels whose monitored detection line will respond to a change in current. The detectors are then supplied via the detection line. Those intruder alarm control units whose detection lines will not respond to a change in current allow either connection of the GB-5300 and GB-5700 series detectors via the GB-5000-IN relay interface unit, or else direct connection of the GB-5100 series detectors with relay output. The relay interface unit monitors the glass break detector line for any changes in current, and in case of an alarm uses a relay contact to interrupt the detection line of the control unit. The glass break detectors of the GB-5000 series are insensitive to any environmental interferences.

Installation

The glass break-detector must be glued at the pane of glass with glueset from LOCTITE (see accessories). The bottom of the glass break-detector and the joint-area must be cleaned and degreased (with spirit or methylalcohol).

Functional check

The function of the glass break-detector can be tested after the installation with the glass break testing unit GB-5000-TE.

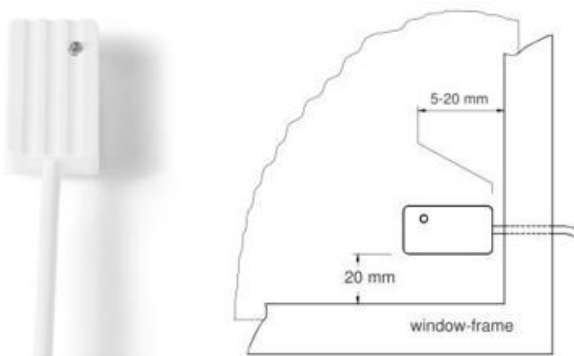
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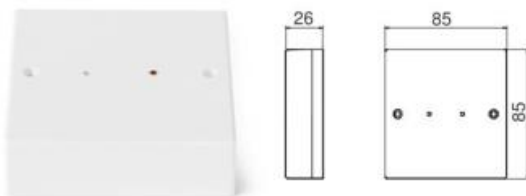
GB-5100, GB-5300, GB-5700



GB-5000-TE



GB-5000-IN



GB-5000-AD



GB-5000-AD-LAM



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Technical Data	GB-5100	GB-5300	GB5700	GB-5000-IN
Voltage	8 – 18 V DC	3 – 16 V DC	3 – 16 V DC	10 – 15 V DC
Closed-circuit Current	0.6 mA	<1 μ A (~ 20 nA)	<1 μ A (~ 20 nA)	5 mA
Operating current released	5 mA (12 V)	4 mA (6 V)	3.5 mA (6 V)	13.5 mA
Reset Timer	Max. 2 V	Max. 1 V	Max. 1 V	
Operating range	Radius 2 m	Radius 2 m	Radius 2 m	
Housing dimension	37 x 19 x 12 mm	37 x 19 x 12 mm	37 x 19 x 12 mm	
Switching voltage	Max. 24 V DC			Max. 24 V DC
Switching current	Max. 200 mA			Max. 200 mA
Switching power	Max. 300 mW			Max. 300 mW
Housing material	S-B	S-B	S-B	S-B, A-B-S
Temperature range	-25°C to 70°C	-25°C to 70°C	-25°C to 70°C	-30°C to 60°C
Housing protection	IP67	IP67	IP67	
Environmental class VdS / EN	III	III	III	II
Approvals	VdS, SBSC	VdS, SBSC	EN, SBSC	VdS

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Ordering Information			
Type	Order No.	Description	Weight
GB-5100-2	V54535-F101-A100	Glass break detector with relay output, 2 m cable	0.058 kg
GB-5100-6	V54535-F101-A200	Glass break detector with relay output, 6 m cable	0.145 kg
GB-5300-2	V54535-F102-A100	Glass break detector, 2 m cable	0.047 kg
GB-5300-6	V54535-F102-A200	Glass break detector, 6 m cable	0.107 kg
GB-5300-10	V54535-F102-A300	Glass break detector, 10 m cable	0.167 kg
GB-5700-2	V54535-F103-A100	Glass break detector for laminated glass, 2 m cable	0.047 kg
GB-5700-6	V54535-F103-A200	Glass break detector for laminated glass, 6 m cable	0.107 kg
GB-5700-10	V54535-F103-A300	Glass break detector for laminated glass, 10 m cable	0.167 kg
GB-5000-AD	N54535-N102-A100	Cleaning- / Adhesive set for GB-5100 and GB-5300	0.136 kg
GB-5000-AD-LAM	V54535-N103-A100	Cleaning-/ Adhesive set for GB-5700	0.082 kg
GB-5000-TE	N54535-N101-A100	Testing unit for glass break detectors	0.300 kg
GB-5000-IN	V54550-F112-A100	Relay interfaces for GB-5300 and GB5700	0.08 kg

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