



EBG V1 Electronic Break Glass

Datasheet

A major increase in security for electronically locked doors.

Automatic and remote reset modes that improve security and cut costs.

Improved aesthetics, suitable for new installations and retrofits.

Applications

- Emergency electric lock release
- New installations and retrofits
- Remote facilities
- High-security sites
- Managed buildings

Features

- Automatic, remote and local reset options
- Lift up protective activation guard/cover
- Back lit LED status indication
- Activation sounder
- Adjustable brightness/volume
- 12 & 24VDC
- Two 3A dry contacts
- Tamper switch (case opened or removed from wall)
- Local override switch
- Local reset switch
- Footprint & mounting options match most legacy break glass units for simple retrofits & upgrades
- Low power setting to accommodate voltage drop issues

Security & Cost Benefits for Everyone

The Jack Fuse Electronic Break Glass (EBG) introduces a new feature to the security industry. This innovative break glass can be remotely and/or automatically reset. A significant advantage over traditional break glass units, this feature eliminates response times and can reduce both call out costs and security vulnerabilities.

Every security, facility and building manager knows the hassle of a broken break glass. An activated break glass leaves facilities vulnerable and attracts labour costs to fix. A problem that only gets compounded outside of business hours.

Now, using the EBG, you no longer need to attend the door to reset the break glass and secure your facility. The EBG gives you the option to remotely re-secure your building. Alternatively, the EBG can be set to automatically solve your door security problems.

Gone are the days of finding a door unlocked and paying to have security attend while a replacement glass or special key is sourced. By removing these costs, the EBG pays for itself after just one activation with the added benefit of keeping your doors locked up and secure for longer. All while keeping people safe during a genuine emergency.

How Does the EBG Work?

To the user the EBG works just like a traditional manual break glass. Press the front activation “glass” to unlock the door and escape in an emergency. This will work even if the access control system has failed and the exit button or card reader is not working.

Traditional manual break glass units feature a mechanical latch and basic switch that cuts power to the electric door lock. The EBG however, implements a clever and reliable latching switch. This electronic latch cuts power to the door lock but then can be reset by a dedicated remote signal or even automatically using the electric lock power.

The electronic latch provides the means to quickly re-secure the door without attending site.

Aesthetics and Functionality

Don't settle for another ugly green box on the wall. The EBG housing features a new, softer, curved design in a charcoal colour that ties in with card reader and other architectural aesthetics. The traditional break glass green still features on the front facia and the press plate is back lit by green LEDs when the door is locked.

When activated, the LEDs will turn red and an alarm will sound. This helps discourage nuisance activations. Both the LED brightness and sounder volume can be adjusted or disabled.

The sleek transparent lift cover stops accidental activation and helps prevent malicious hook or probe attacks. The cover can also be removed for a cleaner look.

Upgrade With Ease

With a footprint that matches most legacy break glass units and suits existing call point mounting blocks the EBG is perfect for upgrading and retrofitting. Using the popular automatic reset mode also allows most old manual break glass units to be upgraded without needing any new cables.

Reset Options Explained

Once pressed, all break glass units need to be reset to lock the door. Traditional break glass units need to be attended and manually reset. Versatile reset options are a core new feature provide by the EBG. There are local, automatic and remote options.

Local reset

The EBG can be reset locally via a small switch hidden in the base of the housing. This is useful for technicians working on the system but isn't typically required by security staff during normal operations.

Automatic reset

The most popular option. If enabled, an automatic reset of the EBG is achieved by cycling the door lock power, On-Off-On. This can be done by swiping a card, pressing an exit button or by having the lock power turned off and on via the access control system.

Unlocking of a door on a time schedule will also automatically reset the EBG. This is useful for remote facilities. If the EBG has been activated at night, it will reset once the door unlocks in the morning allowing the door to automatically re-lock as intended on the next schedule later that day. No manual intervention is required.

Note that the automatic reset function can also act as a remote reset. A system operator may choose to operate the door lock via software to reset the EBG. This remote reset option does not require a dedicated reset cable.

Note. When in auto/lock power mode the EBG can't be activated while the door is scheduled to be unlocked. This helps prevent a would-be intruder from pressing the break glass during the day in order to come back and gain access after business hours.

Remote reset

If enabled, a remote reset of the EBG can be achieved via a dedicated control cable.

The remote reset signal can be configured in several ways. Methods may include a simple button at a security desk or even an output controlled via security software. The output may be controlled manually, set to an end of day schedule or programmed via logic to activate periodically or automatically when the system detects a break glass activation.

Remote reset can be configured to control an individual EBG unit or a group of EBG units depending on facility requirements.

The dedicated remote reset option gives facility managers a little more control over how their doors and break glass units operate.

Case Tamper

In a first for break glass design, the EBG features a built-in tamper switch. The switch allows monitoring for both the case being opened and for the unit being removed from the wall.

Wall removal monitoring is optional and is activated by screwing a tamper tab directly to the mounting surface.

The tamper alarm can be wired in tandem with break glass status monitoring (similar to a motion detector tamper) or connected directly to an alarm input to provide a separate alarm. This provides advance warning of attempts to open or bypass the EBG.

Mounting

The EBG has versatile mounting options.

1. Direct surface mount.
2. Mounting to the optional EBG-MB mounting box that provides conduit entries.
3. Mounting to a UK/Euro style electrical single gang;
 - a. Surface mounting block.
 - b. Recessed wall box or fire rated box. (Screws provided for both options)
4. Retro-fit in place of traditional, manual reset, square break glass units.
 - a. Using the existing square mounting block. (Screws provided.)
 - b. By removing the mounting block and using the matching mounting holes to secure the EBG directly to the wall.

Specifier Text

Door's that are fitted with a failsafe lock and do not feature a free handle exit shall be fitted with an emergency door release break glass, that, upon activation, facilitates emergency egress by directly disconnecting power to the lock or triggering an automatic door/gate.

The break glass shall have the ability to be remotely and/or automatically reset using a system output, button or lock power. A secondary contact shall be monitored as a break glass activation alarm. A tamper switch shall provide an alarm output when the break glass case is opened. The tamper alarm may be monitored in series with the activation contact to provide a tamper alarm.

When activated, the break glass shall provide visual and audible feedback. Volume and brightness are to be adjusted to match local requirements.

Technical Data

Conductor size, terminals	.2 - 1.5mm ² (24-16AWG)
Relay contact max current	3A
Relay contact configuration	2 X SPDT (1 Form C)
Power consumption	55mA @12VDC max (red LED + sounder on)
Operating Voltage	12 & 24VDC, auto sensing*
Dimensions L X W X H	86x86x40mm (with guard)
RoHS	Compliant
AUS/NZ (RMC-EMC) 61000.6.3/4	Compliant
Primary materials	Polycarbonate, Polyamide 46, fiberglass
Country of origin	China
Operating Environment	Indoor - 0°C-40°C 20% to 80% RH

*Standard voltage range is 11V to 28VDC. The EBG also features a low voltage setting that can help improve performance if the lock voltage in the field is below standard.

Expected Operational Life

Actuator presses	In excess of 10 ⁵ operations
Relay output cycles*	
500mA	11 ⁶ operations
2A	12 ⁵ operations
3A	10 ⁵ operations

*Values are derived from relay testing with a continuous 50% duty cycle. One second on, one second off under varying ambient temperatures.

Notes & expected operations.

Switching high current loads, such as multiple electromagnetic locks, regularly will impact the operational life of the EBG relay outputs. (For reference 6 X standard electromagnetic locks equal 3A at 12VDC)

For high traffic doors with demanding current/lock requirements there are several strategies that can extend the life and reliability of the EBG.

- 1) Use the EBG in dedicated power mode. Dedicated power mode will minimise output switching.
- 2) Drive secondary relays from the EBG output. Use one or more interface relays, such as the Jack Fuse Mini-FRI to carry the current.

- 3) Use multiple EBG units. This will reduce the current load on the output and ensure only the relevant escape door is unlocked during an activation.

Note: The electronic break glass is not intended to be used as a manual call point or as the sole means of emergency exit. Doors that feature an electronic break glass and are in an emergency exit path should also be unlocked automatically during a fire alarm via a fail-safe, supervised interface to the buildings FDCIE.

Ordering

EBG-C	Electronic Break Glass with cover - charcoal
EBG-MB-C	EBG mounting box with conduit entries
SCAR-C	Dress plate used when upgrading from existing single gang style break glass



EBG-MB-C mounting box

Learning

Become a **Jack Fuse Product and Power Certified Technician**. Free training available online.

More Information: For complete installation notes, data sheets and technical support please visit www.jackfuse.com

