

Electromagnetic Overhead Closer

Introduction

Briton 3934 electromagnetic door closers ensure safety and convenience. Ideal for keeping high traffic areas free from obstruction to enable smooth passage, making them the perfect solution for care home bedroom doors or school corridors.

At installation each unit can be set to either 'hold open' or 'swing free' operation. When de-activated via a connection to the building fire alarm or smoke detection system, the electromagnet disengages and the door closer closes the door from any position in the normal manner to prevent a fire from spreading.

Features & Functions

- Low projection template adjustable closer power size EN 3-4
- Power size EN 3 in parallel arm application
- Satisfies the requirements of Approved Document M
- Certified for door, frame and parallel mount applications
- Dual function can be set to operate in hold-open or swing-free at the point of installation
- Adjustable closing speed & latch action
- Designed for use on low voltage circuits 24v DC linked to a fire alarm
- Supplied with armset and brackets for regular, transom or parallel mounting
- Electromagnet is controlled by the building fire alarm/detector and activates the 'catch plate' to ensure the door closes automatically in the event of a fire or power failure
- Test switch simulates fire condition to check operation
- Supplied with flexible armoured power loop (330mm long as standard) to run power safely from the door frame to the closer
- Stainless steel grade 304 softline cover available in silver and satin steel finishes



Certification

UKCA Marked to EN 1154 & EN 1155 (1121-CPR-UK-AE7614)

CE Marked to EN 1154 & EN 1155 (2812-CPR-AE5012)

Certifire Approved (CF5598)

Fire tested to EN 1634-1 for use on fire doors up to 2hr timber

Environmental Product Declaration in accordance with ISO 14025 & EN15804

DoP available at www.britondops.co.uk

Electromagnetic Overhead Closer Briton 3934

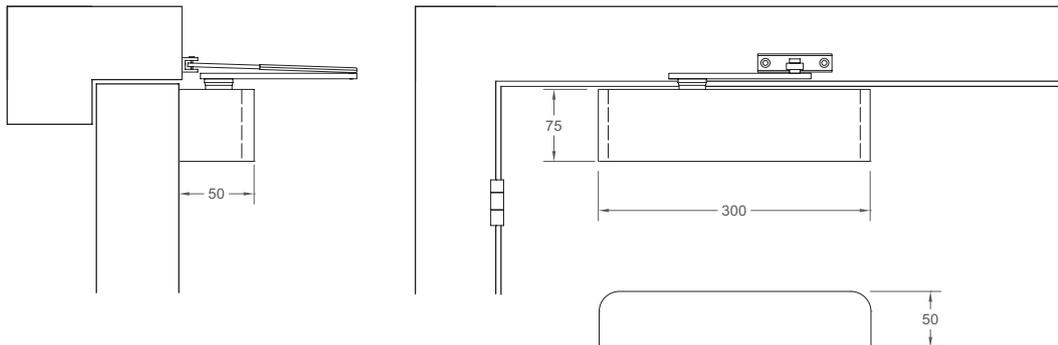
Product features	Product references
	3934
Closer type	Projecting arm
UKCA & CE marked	■
Variable closing power EN size (refer to table below)	3 - 4 **
Door limits (width/weight)	1100mm/80kg
Adjustment type	Spring power
Maximum angle of opening	180°
Adjustable closing speed & latch action	■
Adjustable backcheck	
Suitable for mounting applications	As shown below
Electromagnetic hold-open facility	□
Cover variants	Softline
Finishes available	SES, SSS
CE Classification	3 8 3-4 1 1 3 **

** Note: with parallel arm mounting power size is EN 3 (CE Classification - 3 8 3 1 1 3)

- Standard
- Available as an option/variant

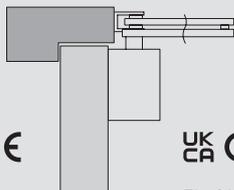
Power requirements

For the operation of the closer the power requirements are 24V DC, 90mA nominal. Transformers and relay interfaced to the fire alarm system can also be supplied to link the electricity supply and the fire alarm system.



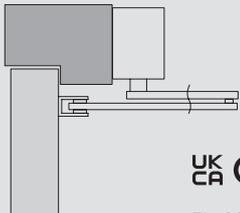
All dimensions are in mm

Mounting options



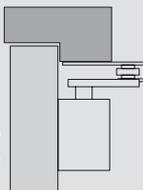
UK CA CE

Fig.1
Door mount pull side



UK CA CE

Fig.61
Transom mount push side



UK CA CE

Fig.66
Parallel arm push side mount

Mounting	Power size	Max. door opening
Door mount Fig.1	3	180°
	4	110°
Transom mount Fig.61	3	180°
	4	110°
Parallel arm mount Fig.66	3	170°

Finishes

All finish variants are supplied with matching armset and brackets. Other sprayed finishes are available on request.



General Maintenance

Door controls

In research, Allegion has identified that 95% of all problems associated with overhead door closers can be attributed directly to errors in installation rather than problems with the door closer itself. If the door is not closing properly into the frame you should first disconnect the door closer (disconnect the arm(s)) and determine that there is not an underlying problem with the door, frame or any smoke / draft seals that might be fitted.

PLEASE NOTE:

The power of the door closer should not be used to overcome problems associated with the door or other items of hardware fitted to it. Under no circumstances should the closer body be dismantled.

Types of maintenance

Much of the routine maintenance recommended consists of a combination of visual and mechanical checks, cleaning and lubrication. Look out for the icons opposite which provide a 'quick glance' reminder of the maintenance required.

Visual checks

Primarily making a visual check on the product and surrounding door/frame looking for wear, damage, and general condition.



Functional checks

Consists of checking that the product operates properly ensuring the door can fully close without any binding or undue force required. Check that any seals or weatherstripping do not inhibit correct operation of the door



Check fixings

Fixings need to be checked regularly and tightened when necessary. Check that no projection of fixings prevents the door from swinging freely.



Lubricating

Some products will benefit from periodic lubrication using a light machine oil or as instructed.



Cleaning

Build up of grease, dust and harmful chemicals should be removed to prevent corrosion and maintain the product finish.



Accessibility

Electromagnetic door controls and low energy operators are an essential part of providing accessibility. Routine checks should be carried out to ensure continued performance.



Closer Maintenance

WEEKLY

Release the door from the fully open position and ensure that it closes fully into the frame. Ensure the latch (if fitted) engages fully into the strike plate. Repeat the process a few times from different angles of opening to ensure the door closes consistently each time.



Check and adjust the closing and latching speeds if necessary.

Check the backcheck (if fitted) comes into operation at the desired angle and readjust if necessary.

Check the delayed action (if fitted) and adjust the time delay if necessary.

Check that the door or hardware does not come into contact with the door frame or the surrounding structure.



QUARTERLY

The fixings of the closer body and the bracket or slide track are subject to stress and should be checked carefully to make sure they are tight.



Periodically apply a little light machine oil to the moving joints of the arm and bracket or arm and slide track.



Check any fire and smoke seals to ensure they do not foul the action of the door.



Check for any loss of fluid from the door closer body which would indicate a failing device.

Clean the closer body, arms and bracket/track if necessary following the guidance on "Care of Finishes" on page 16 of the 'Service & Maintenance Guide'.



FIRE DOOR APPLICATIONS

When installed as part of a fire precaution system the door closing mechanism, including the door selector if used on a double door arrangement, should be checked in accordance with standing periodic fire testing procedures.

Electromagnetic hold-open units should be tested weekly in accordance with the procedures described in the "fire precautions (workplace) regulations 1997" or the "fire precautions (workplace) (amendment) regulations 1999".

Routinely check that all fixings of the closer body and bracket/track are tight.

Routine care of finishes as necessary.

Electromagnetic Hold-Open Maintenance



WEEKLY

It is vitally important that the integrity of a fire door is maintained in the event of a fire. All electromagnetic hold-open devices and the ancillary equipment, including the transformer/rectifier (power supply) must be tested weekly in accordance with the procedures set out in the fire precautions regulations.

It is recommended that the following procedure be followed:

- With the door in the hold-open position simulate the fire alarm activation and check that the door is released immediately and closes fully into the frame, fully engaging the latch if fitted. The fire alarm may be simulated in a number of ways including activation of a break glass unit or by a built-in test switch on the hold-open device.
- With the door in the hold-open position switch off the power to the hold-open devices to simulate power failure. The door should be released and close fully as above.
- With the door in the hold-open position check that the door can be pulled manually off the hold-open and close fully into the frame.

In situations where a fire door in a high traffic area is fitted with a door closer an electromagnetic hold-open device may be fitted which allows the door to be held open or allowed to swing free during normal use.

However, in the event of a fire, the electromagnetic hold-open device will be deactivated allowing the door to close under the action of the door closer.

- The system is powered by a 24v supply which is normally located close to the door either in the ceiling void or convenient cupboard
- The system must be connected to a separate smoke detection system and/or the building's fire alarm system

ANY FAILURE OF THE DOOR TO CLOSE MUST BE RECTIFIED IMMEDIATELY

Firstly check that the failure is due to the electromagnetic device failing to release or whether the closing mechanism failed to close the door properly for some reason.

Electronic failure should be checked by a qualified technician to determine the fault.

if the closer fails to close the door properly please refer to the Door Closer section of our 'Service and Maintenance Guide' for further information.