An essential element in safeguarding lives and property

EN 1154 – A harmonised standard designed for life safety

The principal objective of a door closer is to close a door and in the case of unattended fire doors in a corridor, to keep the doors closed in the event of a fire. Most applications where the specification of a door closing device is mandatory, must use a product which conforms to the requirements of European Standard EN 1154 (or EN 1155 for electrically controlled units) and be CE marked accordingly.

Within EN 1154, certain recommendations are made for closing devices used on fire door assemblies. These include:

- All doors without springs.
- Do not include a hold-open device unless it is an electrically powered device connected to the building fire alarm system.

All forms of “Controlled Door Closing Device” are covered by a harmonised European Standard, EN 1154. It provides details on product types and classes products by use, test cycles, door mass, corrosion resistance and product performance requirements using a six digit classification code.

Closing force v Opening force

The closing force required to fulfill the life saving fire-safety function demanded by EN 1154 for, some elderly or disabled people, be difficult to overcome and the door can become a barrier to safe and easy access for them.

Within the detail of BS 8300 and Approved Document M of Building Regulations, there is a requirement to achieve low opening forces to satisfy the need for easy and universal accessibility. As a consequence there is a conflict between the required closing force for fire safety and the desirable opening resistance to which requires special consideration in the specification process.

We strongly recommend you discuss such applications with an Allegion Specification Consultant who can advise on the most appropriate solution.

Mounting positions and closer power

Where closer power is stated it will usually apply to a closer fitted either in Regular fixing applications (in the case of projecting arm closers) or in Door mounted pull side applications (for slide arm closers).

The closer power may vary for other mounting applications and consequently we recommend you check with your Allegion Specification Consultant or technical team.
A guide to specifying door closers

Selecting the right closer

In most cases selecting the most appropriate door control will be dependent on a number of factors and the priority of each. These will include:

- Frequency of use
- Type of application (e.g. schools, library, factory)
- User profile - The Equality Act consideration
- Door situation/size/weight/height of resistance
- Budget
- Aesthetics
- Operating characteristics and other features

The importance of accessibility

The Equivalences Act – disability legislation

Legislation aimed at providing universal accessibility of buildings requires service providers to make “reasonable adjustments” to the physical features of their premises to overcome barriers to access. Approved Part of the Building Regulations and BS 8300 both provide guidance in establishing recommended maximum opening forces for door control to assist less able users.

Approved Part of the Building Regulations and BS 8300 both provide guidance in establishing recommended maximum opening forces for door control to assist less able users.

High efficiency Briton closers which are capable of meeting the required levels of opening and closing forces are marked with the ‘Wheelchair Symbol’. But accurate installation, hinge friction, door seals and variable air pressure can all have a bearing on the opening resistance of the final doorset.

For doors which must also meet the stringent closing force requirements of EN 1514 for fire door applications, it may be more appropriate to use electromagnetic hold open or swing free closers or a powered opening solution. These must be CE marked in accordance with the requirements of EN 1514. All these options are available within the Allegion product portfolio.

For additional guidance in the selection process please contact Allegion on 01922 707400.

Use and abuse

For some applications; schools, colleges and leisure facilities, it is not only the opportunity for and likelihood of abusive use of the door is relatively high in comparison with an office suite. In reality, any application where there is little incentive to exercise care upon the door closer being subjected to some extreme behaviour in these cases we would recommend the following features:

- Very high
- High
- Medium
- Low
- Very low

Durability and heavy use

Concealed closers – When the door is closed a concealed closer has no projecting arms and the closer body cannot be accessed from either side of the door. This makes it particularly resistant to vandalism and tampering.

Slide arm – Unlike projecting arm closers, the slide arm and track reduces the possibility of damage. Slide arm closers also provide a hydraulic dampening to avoid such damage. This is not intended to replace a doorstop.

Hold open – For doors which are subjected to high frequency or constant use, the option to keep the door in the open position is both convenient and prevents excessive wear. This feature is not permitted on fire doors. For the door applications, the hold-open (or swing-free) feature may be achieved through use of an electromagnetic hold open or swing free function which is bled to the building fire alarm or detection system. This option is available on several Briton and LCN series door closers.
Briton 2700 Series - offering the benefits of easy opening and reliable closing

The Briton 2700 Series is a precision manufactured cam-action, slide channel door closer, in a compact, overhead, surface fixed unit. Providing exceptional ease of use by reducing the resistance encountered when opening the door, the Briton 2700 Series bridges the gap between the requirements for fire and smoke control and ease of operation required for accessibility.

Features & Benefits

- Cast iron body with a naturally high graphite content is self lubricating, providing high levels of durability and long life performance.
- High performance cam action technology allows reliable closer power setting for fire door applications yet still be easy to open.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- FAST PowerAdjust dial feature allows installers to see the current power setting.
- Silicon chrome alloy steel springs for superior strength and reliability.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- High quality hydraulic fluid with built-in temperature compensation.
- Unique ‘Accufit’ installation template and mounting plate ensures a quick, simple and accurate installation.

All-over ‘A-line’ metal cover in a smooth, contemporary design; secured by simple, unobtrusive spring-clips to conceal the main door closer fixings (A-line cover only).

- Optional ‘Softline’ cover design to suite with most other Briton closers.
- Co-ordinated track design with concealed fixings.
- A wide range of adjustable functions for easy adaptation to specific door applications - see specification table.
- Optional mechanical hold-open facility (Not to be used on fire door applications) or electromagnetic hold-open option available.

The Briton 2700 Series is CE marked to EN1154 (EN1155 for electronic variants) and fire tested to EN1634 on timber doors to achieve a 2 hour fire rating, and 1 hour for metal doors.

See how easy it is to install. Scan the link or go to: http://tinyurl.com/pqc9eb5
Briton 2300 Series - Easy opening cam action technology in a simple, slimline package

Features & Benefits

- Extruded aluminium body.
- High performance cam action technology allows reliable closer power setting for fire door applications yet remains easy to open.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- Adjustable power, EN 2-4.
- Silicon chrome alloy steel springs for superior strength and reliability.
- Full complement bearings provide increased bearing load for efficient operation and improved reliability.
- Adjustable backcheck
- Adjustable delayed action
- In-built temperature compensation
- Mechanical hold-open
- Matching slide channel, arm & cover finish
- All-over metal cover
- Dimensions (with trimplate L x D x H mm) 240 x 56 x 49 240 x 56 x 49
- Dimensions (with cover L x D x H mm) 270 x 68 x 63 270 x 68 x 63
- Channel/slide arm 444 x 20 444 x 20
- Warranty period 10yrs 10yrs
- CE Classification 4 8 2-4 1 1 3

The Briton 2300 Series incorporates the same high efficiency cam action as the Briton 2700 Series, providing the same exceptional ease of use by reducing the resistance encountered when initialising the opening of the door.

The Briton 2300 Series is offered as a simplified version of the Briton 2700 and is available with either a slide in trimplate or with a curved ‘Softline’ all-over cover which will suite with other Briton overhead door controls.

Easy Opening, Reliable Closing

In contrast to a conventional rack and pinion door closer in a slide channel application, the linear cam action principle of the Briton 2300 Series is extremely efficient. The initial opening force decreases very rapidly as the door opens allowing, in particular, children and the elderly to overcome the closing power without any problem.

The Briton 2300 Series is CE marked to EN1154 and fire tested to EN1634 on timber doors to achieve a 2 hour fire rating. Certifire approval pending.

See how easy it is to install. Scan the link or go to: http://tinyurl.com/l2rraa5f
Briton 2400 Series - Cam action

Cam action in a compact concealed overhead closer

Features & Benefits
- Compact, extruded aluminium body and slide track requiring minimal removal of material from the door and frame.
- High performance cam action technology allows reliable closer power setting for fire door applications yet still be easy to open.
- Suitable for non-fire doors 44mm thick and fire doors 54mm thick.
- Needle roller bearings provide increased bearing load for efficient operation and improved reliability.
- Adjustable power, EN 2-4.
- Silicon chrome alloy steel springs for superior strength and reliability.
- High quality hydraulic fluid with built-in temperature compensation.
- Powder coated or plated steel track arm with nylon runner.
- Non handed design is suitable for all applications and has a maximum opening angle of 120°.
- Optional cushion stop (ref: 2420.CS) helps prevent doors coming into contact with adjacent walls (note: this is not a backcheck function).
- Optional mechanical hold-open unit can be retrofitted into the slide track (Not to be used on fire door applications).

Versatile and elegant
The Briton 2400 Series is a precision manufactured cam-action, slide channel door closer, in a compact concealed unit. With the closer body mounted within the top of the door and the slide track within the head frame, the Briton 2400 Series offers high resistance to abuse and being fully concealed when the door is closed, offers a highly aesthetic solution.

Providing exceptional ease of use by reducing the resistance encountered when opening the door, the Briton 2400 Series bridges the gap between the requirements for fire and smoke control and ease of operation required for accessibility.

Due to the door and frame preparation required, the Briton 2400 is ideally suited to factory door preparation.

The Briton 2400 Series is CE marked to EN1154 and fire tested to EN1634-1 on 54mm timber doors to achieve a 90 minute fire rating when installed with the approved intumescent gasket set (Briton 2420.IP). Certifire approval pending.

<table>
<thead>
<tr>
<th>Product features</th>
<th>Product ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE marked and EN 1154 compliant</td>
<td>2420T</td>
</tr>
<tr>
<td>Variable closing power EN size</td>
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<td>Min. door thickness:</td>
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<td>- FD60 - timber doors</td>
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<td>- FD90 - composite doors</td>
<td>60mm</td>
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<td>Maximum angle of opening</td>
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<td>Separate closing speed &amp; latch action adjustment</td>
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<tr>
<td>Cushion stop</td>
<td></td>
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<tr>
<td>Hold open facility</td>
<td></td>
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<tr>
<td>Arm &amp; track finish</td>
<td>SS or PS</td>
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<td>Dimensions (L x D x H mm)</td>
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<td>Channel/slide arm</td>
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<td>Warranty period</td>
<td>10yrs</td>
</tr>
<tr>
<td>CE Classification</td>
<td>3 8 2-4 113</td>
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</table>

Specification Tip
Intumescent gasket set (2420.IP)
A significant amount of fire resisting doorset material is removed when concealed closers are mortised into the door leaf. The intumescent gasket set will provide the additional performance that is required to protect the door from integrity failure during fire conditions.

It is particularly important with these closers to check that the details of the fire test certification are relevant to your intended door application.
The LCN 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The LCN 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The LCN 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.

The LCN 4040 Series is LCN’s most durable and flexible heavy duty closer, fully certified to both EN 1154 and to ANSI A156.4. With over 10 million test cycles undertaken, the LCN4040 will cope with even the most gruelling applications and has earned an unrivalled reputation for extreme durability and reliability in use.

Available for regular, transom and parallel mounting applications plus versions with track arm and electromagnetic hold-open.

The LCN 4040 Series is tested and certified under ANSI Standard A156.4 and UL listed for use on timber doors to achieve a 2 hour fire rating and 1 hour for steel doors.
Briton 2130 Series - offering the highest quality of performance and design choice

The Briton 2130 Series of door controls has been created to offer a comprehensive package of solutions to suit any door closing application. Developed in conjunction with installers, the 2130 Series builds on the engineering excellence of previous Briton door controls by incorporating one of the simplest, quickest and most accurate installation systems available. This combination of engineering quality and good looks - with three body cover options and over 15 finishes - creates a truly versatile architectural solution for any ‘Extra Heavy Duty’ application.

The highly versatile 2130 Series was designed to combat the practical and economic concerns with conventional door closer installation. As a result it can demonstrate an average 30 - 35% labour saving on installation. But the benefits are much deeper than this. The increased degree of accuracy achieved when installing a Briton 2130 Series closer dramatically improves its efficiency and longevity.

Features & Benefits

- Cast iron body provides rugged durability.
- Hardened steel rack and pinion mechanism with needle roller bearings for exceptionally smooth and efficient operation and high levels of durability.
- Silicon chrome alloy steel springs for superior strength and reliability.
- High quality hydraulic fluid with built-in temperature compensation.
- Quick release arm assembly allows the closer to be disconnected and reconnected quickly without the need to alter the arm arrangement. This speeds up the installation process and enables the closer body and bracket to be fixed independently allowing for much greater accuracy.
- Unique Accufit backplate system reduces installation time and dramatically improves accuracy of fitting.
- Choice of ‘all-over’ cover options in a range of architectural finishes with matching arms.
- Fixed or power adjustable depending on model from EN 2 - 6 (refer to specification table).
- Also available as a slide track closer.
- Multiple adjustable functions depending on model (refer to specification table).
- Optional hold open armset is adjustable from 80° to 180° opening angle. *(Not to be used on fire door applications).*

Briton 2130B.T with ‘L’ cover in satin stainless steel.

Briton 2130B.T with ‘C’ cover in satin stainless steel.

Electromagnetic hold open option, Briton 2130B. TE with L cover in satin stainless steel finish. Also available with Classic square cover.
Briton

Combining high performance with a variety of design options to suit all applications

Within the Briton 2130 Series there are a number of options to choose from to suit your application. These include:

- Projecting arm or slide track options which provide a neat architectural look and reduce the chances of misuse.
- Three cover options, offering the Classic Briton closer cover which will suit with other Briton ranges, the rounded L cover and the gently curved S cover.
- Metallic covers are available in 5 finishes with matching arms and bracket or track.
- Electromagnetic slide track hold-open option.

<table>
<thead>
<tr>
<th>Closest ref.</th>
<th>Body cover</th>
<th>x</th>
<th>y</th>
<th>z</th>
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<tbody>
<tr>
<td>2130B</td>
<td>C</td>
<td>66</td>
<td>310</td>
<td>55</td>
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<tr>
<td>2130B.T</td>
<td>L</td>
<td>62</td>
<td>318</td>
<td>42</td>
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<tr>
<td>2130B.TE</td>
<td>S</td>
<td>71</td>
<td>318</td>
<td>76</td>
</tr>
</tbody>
</table>

Product features

- **CE marked**: Standard
- **Variable closing power EN size**: 2 - 6, 2 - 4, 3 - 4
- **Power adjustment by spring or template**: Spring, Spring, Spring
- **Accufit template & Accufit mounting plate**: Standard
- **Maximum angle of opening**: 180°, 180°, 110°
- **Adjustable closing speed & latch action**: Available as an option/variant
- **Adjustable backcheck**: Standard
- **Adjustable delayed action**: Available as an option/variant
- **Mechanical hold open facility (non fire doors)**: Available as an option/variant
- **Electromagnetic hold open facility**: Standard
- **Projecting arm closer**: Standard
- **Slide channel and arm**: Available as an option/variant
- **Cover variants available (C; L; S)**: C/L/S, C/L/S, C/L/S
- **Warranty period**: 10yrs, 10yrs, 10yrs/2yrs

**CE Classification**

- 4 B 2-6113
- 4 B 2-113
- 3 B 3-4113

Standard □ Available as an option/variant
Briton 1100 Series - a comprehensive range of medium duty overhead closers

The Briton 1100 Series is designed to provide a mid-range product with a choice of the most popular options, in a concise, cost-effective package. The Briton 1100 Series is a simple system which comprises 3 body sizes, each available as standard with a slide-in trimplate or with optional classic square or softline all-over covers.

The combinations of performance and cover options provides a highly comprehensive series of closers which can be suited across a wide range of functions and applications.

Note: All covered variants have a flatarm arm as standard. All trimplate variants have screw thread arms as standard.

The Briton 1100 Series is CE marked to EN 1154, fire tested to EN 1634 and Certifire Approved for use on timber doors to achieve a 2 hour fire rating and 4 hours on steel doors.

Features & Benefits

- Cast aluminium body
- Precision needle roller bearings allied with rack and pinion mechanism provides efficient operation and high levels of durability.
- High quality silicon chrome alloy steel used for the coil spring.
- High quality hydraulic fluid with built-in temperature compensation.
- Screw thread armset manufactured from forged steel for additional strength and durability supplied for all trimplate variants (see above).
- Available with snap joint arm for quick and easy installation and future maintenance.
- All-over cover option in classic square or rounded softline variants to conceal all fixings and adjustment screws providing a neat appearance and reducing the risk of vandalism and tampering.
- Trimplate option is a simple and cost effective means of concealing fixing and adjustment screws.
- Adjustable power variants.
- Separate closing speed and latch action adjustment provides total accuracy of adjustment of the full closing cycle.
- Adjustable backcheck (1120B & 1130B) minimises the risk of damage to the door, its hardware and the surrounding structure.
- Optional hold-open armset allows the door to be held in the open position for convenience. (Not to be used on fire door applications).

Briton 1130B.T with Softline cover in satin stainless steel finish.
Briton

With enough performance and design options to suit virtually any application

The Briton 1100 Series provides a wide choice of trimplate, classic or softline cover available in a selection of sprayed and metallic finishes which will satisfy the large majority of applications. Because of the comprehensive nature of the design and performance options, closers can be selected to suit their location in the knowledge that they will remain visually consistent throughout the building.

From left to right: Briton 1110.S, Briton 1130B.T.S, Briton 1110.C, Briton 1130B.T.C and below, Briton 1130B.TE & Briton 1130B.TE.S

Briton 1130B.TE Electromagnetic hold-open

An electromagnet in the slide track is designed to hold the door open during normal use and is connected to the building fire alarm system. On sounding the fire alarm, or in the event of power failure, the electromagnet is deactivated and releases the door closer mechanism to close the door in the normal controlled manner.

It is particularly suited for use in areas where a standard door closer could be inconvenient or would impede the flow of people in medium or high traffic applications such as a cinema foyer or hospital corridor. The use of electromagnetic hold-open door closers are recommended in applications which are designed to meet the levels of accessibility called for in Approved Document M Access to and use of Buildings.

Features of the Briton 1130B.TE closer

- Designed to, and fully compliant with EN 1155.
- Satisfies the requirements of Approved Document M Access to and use of Buildings.
- Fail safe electronics guarantee door release in the event of a fire or power failure.
- Alarm activation
- Track mounted 24v DC solenoid with an effective and reliable holding force.
- Manual override allows the door to be pulled closed at any time.
- On-board test switch simulates fire condition to check operation.
- Fully adjustable hold-open angle from 85° to 110°.
- 24v transformer/rectifier power supply unit available.

Features

- Designed to, and fully compliant with EN 1155.
- Satisfies the requirements of Approved Document M Access to and use of Buildings.
- Fail safe electronics guarantee door release in the event of a fire or power failure.
- Alarm activation
- Track mounted 24v DC solenoid with an effective and reliable holding force.

Features of the Briton 1130B.TE closer

- Designed to, and fully compliant with EN 1155.
- Satisfies the requirements of Approved Document M Access to and use of Buildings.
- Fail safe electronics guarantee door release in the event of a fire or power failure.
- Alarm activation
- Track mounted 24v DC solenoid with an effective and reliable holding force.
- Manual override allows the door to be pulled closed at any time.
- On-board test switch simulates fire condition to check operation.
- Fully adjustable hold-open angle from 85° to 110°.
- 24v transformer/rectifier power supply unit available.

Features

- Designed to, and fully compliant with EN 1155.
- Satisfies the requirements of Approved Document M Access to and use of Buildings.
- Fail safe electronics guarantee door release in the event of a fire or power failure.
- Alarm activation
- Track mounted 24v DC solenoid with an effective and reliable holding force.
- Manual override allows the door to be pulled closed at any time.
- On-board test switch simulates fire condition to check operation.
- Fully adjustable hold-open angle from 85° to 110°.
- 24v transformer/rectifier power supply unit available.
Briton 996 Series - a dedicated electro-magnetic hold-open or swing-free closer

Typically used on fire rated doors where the hold-open or swing-free feature is required either in high traffic areas for convenience or in situations where it would be difficult to satisfy the maximum opening force requirements of Part M of The Building Regulations.

The Briton 996 Series is a range of closers with an integrated electro-magnetic hold open mechanism. Each unit can be set to either ‘hold-open’ or ‘swing-free’ operation, in either case the spring closing function of the closer can be temporarily disabled to allow free passage. 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 in the normal manner to maintain fire safety.

The Briton 996 Series is CE marked to EN 1154 and EN 1155 for electrically controlled closing devices, fire tested to EN 1634 and Certifire Approved for use on timber doors to achieve a 2 hour fire rating.