Uniclass L4181 CI/SfB (31.59) X April 2010

# **Briton**

Overhead Door Controls







# **Briton 2700** Features & Functions

#### Versatile and elegant

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,

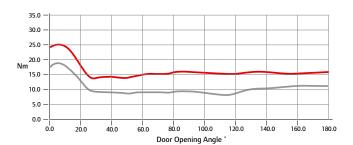
#### Easy Opening, Reliable Closing

In contrast to a conventional rack and pinion door closer in a slide channel application, the linear cam action principle of the Briton 2700 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.

#### **Force Profile**

Closer 2720 set to EN 3 Power setting

Opening MomentClosing Moment





### Features & Benefits

- A Briton 2700 Series cast iron door closers have a naturally high graphite content that lubricates inner components with every use, resulting in high levels of durability and long life performance
- B High performance cam action technology is extremely efficient, allowing the closer to be set to provide reliable closing power for fire door applications yet still be easy to open
- Full complement bearings provide increased bearing load for efficient operation and improved reliability
- PAST™ PowerAdjust dial feature allows installers to see the current power setting and adjust the spring power to suit door conditions
- Coil springs manufactured in silicon chrome alloy steel for superior strength and reliability
- F High quality hydraulic fluid with built-in temperature compensation ensures reliable performance in temperatures from -15°C to +40°C without the need for seasonal adjustments

- G Accufit Peel & Stick template, together with easy-to-read instructions assist quick and easy installation
- Accufit mounting plate, with universal hole pattern incorporates dowel fixings to position the closer body and a spring clip mechanism for a quick and positive fixing of the body cover
- Distinctive all-over metal 'snap-on' cover in a smooth, contemporary design; secured by simple, unobtrusive spring-clips to conceal the main door closer fixings
- Co-ordinated track design, provides smooth operation of the opening and closing cycle
- | Briton 2700 Series door controls are packed complete reducing the possibility of lost or missing parts
- A wide range of adjustable functions for easy adaptation to specific door applications

# **Briton 2700 Series** Features & Functions

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.





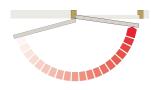


**(5**)

#### **Closer Adjustments**

### Adjustable Closing Power

The closer power is adjustable using the innovative 'FAST™ PowerAdjust' mechanism at the end of the closer. The mechanism provides a visual guide on the EN power level at which the closer has been adjusted.



# $\begin{pmatrix} \mathbf{1} \end{pmatrix}$ Adjustable Closing Speed

The closing speed adjustment is adjustable from 120° opening





#### **Adjustable Latch Action**

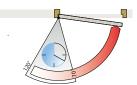
The speed of closing in the last  $7^{\circ}$ can be adjusted to overcome seals and latches





## **3** Adjustable Delayed Action

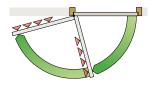
The closer can be set to close more slowly to give people extra time to pass through the doorway. The time delay is adjustable and can be set between 70° and 120°





#### 4 Adjustable Backcheck

To prevent damage to the door, hardware and adjacent walls, caused by the door being flung open or caught by a gust of wind. The angle of backcheck is adjustable between 70° and 180°



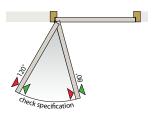


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D

# (5) Adjustable Hold-Open

Mechanical and Electromagnetic hold-open variants are available to keep the door in the open position.





### Mechanical hold open - 120° Max **Electromagnetic Hold Open**

Door Mount Pull Side 80°-120° approx Door Mount Push Side (Face Fix ) 80°-120° approx Door Mount Push Side (Upward Fix) 80°-120° approx

Above angles are subject to hinge projection and surrounding structures.







Adjustment by allen key



Order sequence at installation



# **Briton 2700 Series** Access & Installation



#### Access For All

Improved accessibility in and around a building is becoming an increasing requirement in many environments. For some building users a self-closing fire door can become a barrier – or at least an obstacle. Many countries are introducing laws or building regulations to ensure building owners take reasonable measures to avoid this situation. The Briton 2700 Series door closer helps the building owner meet his responsibilities and enhances user experience.

#### Opening v Closing Forces

For accessibility Approved Document M and **BS8300** stipulate opening forces whereas for fire safety, EN 1154 quotes closing moment. The two forces are not comparable.

Doors which need to be fire resisting must satisfy both the requirements of the maximum opening force for accessibility and minimum closing moment for fire safety. Non fire resisting doors only need to satisfy the maximum opening force requirements of BS8300.

#### **BS8300 Incorporating Amendment No.1 – 7.3.1** states:

"For disabled people to have independent access through single or double swing doors, the opening force, when measured at the leading edge of the door, should not be more than 30N from  $0^{\circ}$  (door in the closed position) to  $30^{\circ}$  open, and not more than 22.5N from  $30^{\circ}$  to  $60^{\circ}$  of the opening cycle."

"The ability of a controlled door closing device to close effectively while keeping within the opening force limits depends on its efficiency and the resistances from edge seals, hinge friction, latch resistance and differential air pressure. The opening force should be checked using a plunger type force measuring instrument."

#### Installation

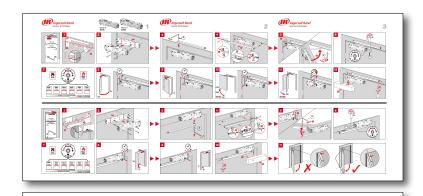
At Ingersoll Rand Security Technologies we identified that 95% of all problems associated with door closers were due to incorrect installation rather than a fault in the closer itself.

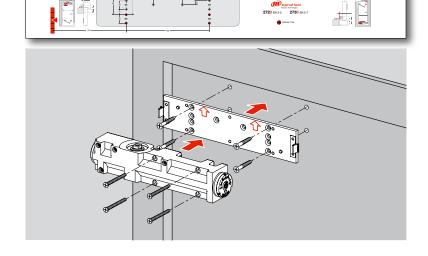
The *Accufit* System is designed to address this deficiency and in addition to savings in installation time, the efficiency of the installed closer is greatly increased by this method of fixing.

The Briton 2700 Series includes fast, accurate and easy-to-use fixing instructions and self-adhesive template.

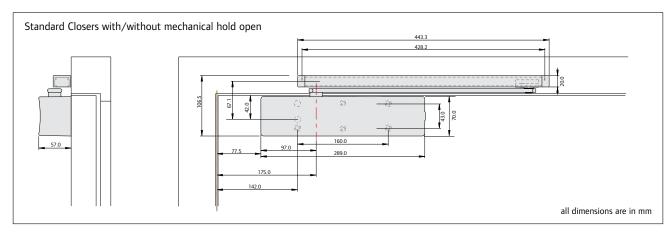
### **Closer Mounting Plate**

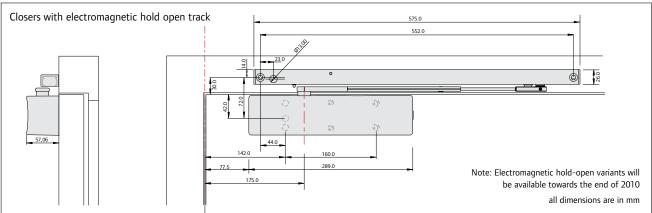
The mounting plate has a universal DIN hole pattern which ensures accuracy of installation every time and is common to all the closer variants. Dowel fixings in the closer body align the body perfectly on the mounting plate.

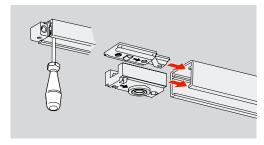




# **Briton 2700 Series** Dimensions & Specification







#### Specification

The **Briton 2700 Series** is CE marked to EN1154 (performance) and certified to EN1634 (fire) and EN1155 (electromechanical hold-open variant).

- Adjustable EN power sizes 2 to 5.
- 'FAST PowerAdjust' <sup>™</sup> function in built visible strength regulator
- Cast iron mechanism with cam action technology
- Unique slimline metal all over cover in a range of finishes
- 'Accufit' M Installation self-adhesive template for quick and accurate positioning and first fix mounting plate for easy installation
- Backcheck and delayed action as standard
- Optional mechanical and electromagnetic hold open facility
- Two separate models, one for push and one for pull applications
- 10 year\* performance guarantee for reassurance.
   \*2 year electrical guarantee

#### Mechanical Hold Open Unit

The hold open unit is achieved by use of a conversion kit which can be installed into the slide track of the mechanical closers in place of the standard pivot block. It enables doors to be securely held in the open position at the required pre-set angle (adjustable on installation up to 120° depending on model and the mounting application).

The hold open facility can be easily switched on/off and the force required to release the hold open action can be adjusted to suit the weight of door.

Conversion Kit reference 2720.HP

Please note, mechanical hold open is not permitted on fire door applications.

#### Maintenance

Door closers are crucial to the safety of a building and its occupants and consequently the correct operation of the door should be checked regularly against the effects of wear & tear and abuse.

Only non corrosive and non abrasive cleaning agents should be used.

- Check all fixings are secure and make a visual check for faults and
  wear
- Check the correct functioning of the door; that the door closes properly into the frame and the latch, if fitted, secures the door firmly in position
- Make any adjustments as necessary for closing power/closing speed and latch action
- · Lubricate all external moving parts on the arm and pivot linkage
- · Ensure the closer is clean and free from all debris
- For electromagnetic hold open closers ensure the system is operating correctly by using the test button located on the underside of the track

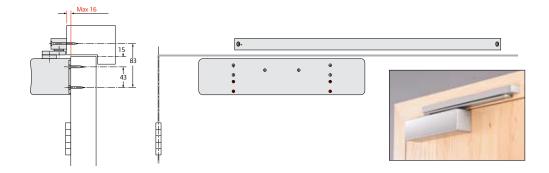


# **Briton 2700 Series** Mounting Applications

#### Briton 2720 Pull Side Door Mounted

With the closer body mounted on the door leaf and the slide track mounted on the transom frame or overpanel.

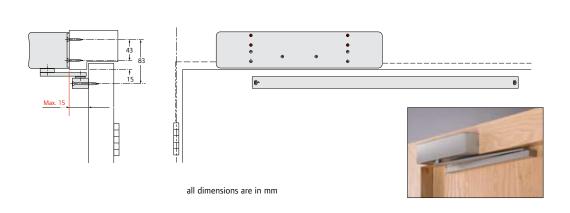
Door opening angle is limited to 180° max.



#### Briton 2720 Push Side Transom Mounted

With the closer body mounted on the transom frame and the slide track mounted on the door leaf.

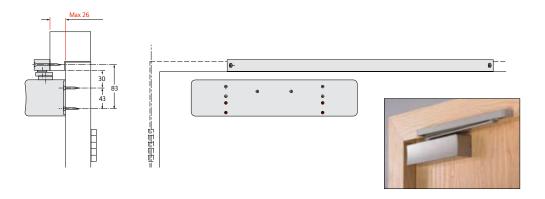
Door opening angle is limited to 120° max.



#### Briton 2721 Push Side Door Mounted

With the closer body mounted on the door leaf and the slide track mounted on the transom frame or overpanel.

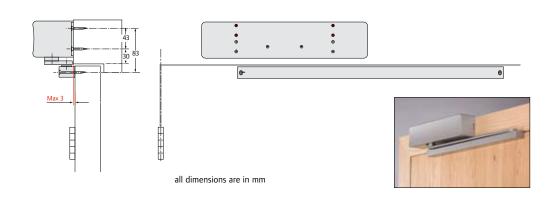
Door opening angle is limited to 120° max.



#### Briton 2721 Pull Side Transom Mounted

With the closer body mounted on the transom frame and the slide track mounted on the door leaf.

Door opening angle is limited to 180° max.



# **Briton 2700 Series** Product Selector

The Briton 2700 Series is available in 3 models:

**Standard Model** - Overhead door closer with slide channel conforming to the requirements of EN 1154, with adjustable power sizes 2 to 5. The closer and slide track are suitable for both left and right hand applications and can be installed on the push or pull side of the door or to the transom.

**Mechanical Hold-Open Application** - Overhead door closer with slide track incorporating an adjustable mechanical hold-open device. Hold-open angle can be adjusted from 75° to 120° and allows the door to be manually released from the hold-open position with adjustable power sizes 2 to 5.

The closer and slide channel are suitable for both left and right hand applications and can be installed on the push or pull side of the door or to the transom.

Additional hold-open/conversion kit required Ref: 2720.HP

Mechanical hold-open models must not be used on fire and smoke doors.

**Electromagnetic Hold-Open Application** - Overhead door closer with slide track incorporating an electromagnetic hold-open device. Hold-open angle can be adjusted from approximately 80° to 120° and allows the door to be manually released from the hold-open position. The closer conforms to the requirements of EN 1154, with adjustable power sizes 3 to 5 and to the requirements of EN 1155 for electromagnetic hold-open devices. The closer and slide channel are suitable for both left and right hand applications and can be installed on the push or pull side of the door. Suitable for fire and smoke doors when connected to an alarm system.

#### **Product Selector**

product features		product references			
closer size	max. door size width - weight	2720BD.T	2721BD.T	2720BD.TE	2721BD.TE
1	750mm - 20kg				
2	850mm - 40kg	•	•		
3	950mm - 60kg	•	•	•	•
4	1100mm - 80kg	•	•	•	•
5	1250mm - 100kg	•	•	•	•
6	1400mm - 120kg				
main features		2720BD.T	2721BD.T	2720BD.TE	2721BD.TE
Pull door / Push transom mounted		•		Door mount only	
Push door / Pull transom mounted			•		Door mount only
Variable closing power EN sizes		2 - 5*	2 - 5	3 - 5	3 - 5
FAST™ Power Adjust		•	•	•	•
Low-tac adhesive template		•	•	•	•
Accufit mounting plate		•	•	•	•
Angle of opening		180°	180°	120°	120°
Separate latch/closing speed adjustment		•	•	•	•
Adjustable backcheck as standard		•	•	•	•
Adjustable delayed action as standard		•	•	•	•
In-built temperature compensation		•	•	•	•
Manual hold-open option					
Electromagnetic hold-open option				•	•
Slide channel application		•	•	•	•
Matching channel, arm and cover finish		•	•	•	•
Weight (kg)		3.5	3.5	3.5	3.5
Dimensions (mm) Length x Depth x Height		289x57x70	289x57x70	289x57x70	289x57x70
Warranty period		10yr	10yr	10yr mech. + 2yr electrical	

\* EN 2 - 4 when push-side transom mounted

#### Certification

The Briton 2700 Series is type tested and independently certified for conformity to all the requirements of EN 1154 and EN 1155. They are CE marked and classified as shown (figures in brackets indicate the range of codings where the higher numbers indicate a higher rating).

#### PLEASE NOTE:

DOOR CLOSERS FITTED WITH MECHANICAL HOLD-OPEN CANNOT be CE marked

EN classifications (range shown in brackets)
(3/4) (8) (1-7) (0/1) (1) (0/4)

2720BD.T 4 8 2-5 1 1 3 2720BD.TE 3 8 3-5 1 1 3

2721BD.T 4 8 2-5 1 1 3
2721BD.TE 3 8 3-5 1 1 3

# **Briton 2700 Series** Finishes

The Briton 2700 Series is available in the following standard finishes.

#### Electroplated metallic finishes







satin stainless steel (SSS)

polished stainless steel (PSS)

polished bra (PBS)

### Standard sprayed finishes















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