

# The ASSA ABLOY Security door closers



NEW AND  
UNIQUE!

The first door closer with an integrated  
escape door locking system

**ASSA ABLOY**

For easy retrofit in fire doors

The global leader in  
door opening solutions

## The challenge: Retrofit in fire doors

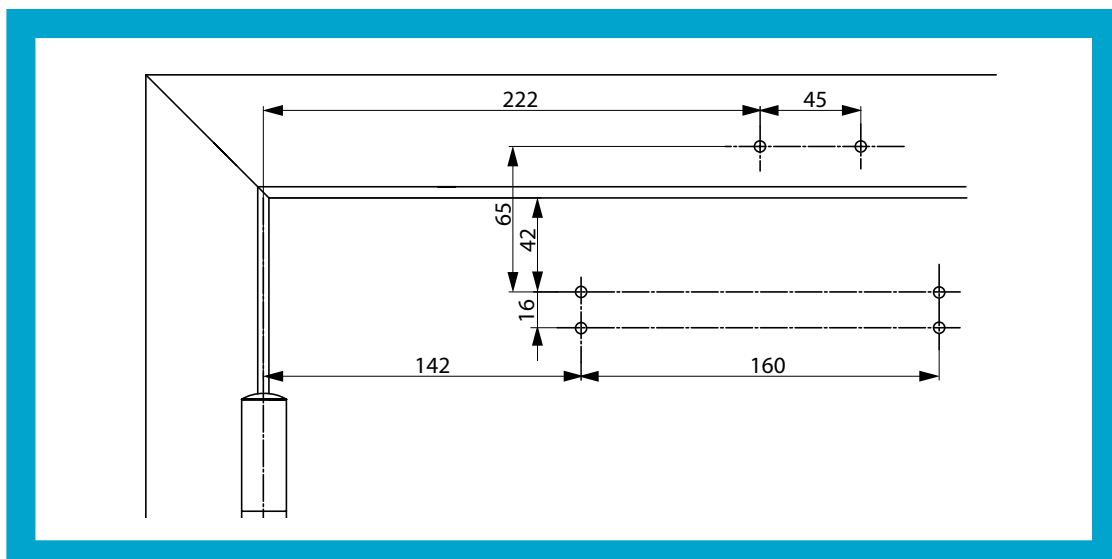
Building operators are frequently faced with situations where fire doors have to be retrofitted with an electrical locking mechanism. This can be the case premises are to be used for a different purpose or if there is a new tenant. Fire doors must be approved by the local authority. If changes are made to fire doors, there is a risk of losing the approval – a hole drilled in the wrong place can be enough.

Fire doors must close on their own and are therefore normally fitted with common door closers.



DIN EN 1154, Supplementary Sheet 1 regulates the fitting of door closers at fire doors on the door leaf and door frame.

Figure DIN left, DIN right mirror-imaged"



## The solution:

### ASSA ABLOY security door closer with integrated escape door locking system

The new solution for retrofit in fire doors is, in principle, a new breed of product and thus a real innovation for which a patent has been applied for: The ASSA ABLOY security door closer is the first door closer – in the form of a slide arm door closer – with an integrated escape door locking system.

How is this possible? The mounting plate and the slide arm of the DC700 door closer in the standard ASSA ABLOY range have been enlarged. The escape door strike is integrated in the lengthened slide arm and the latch bolt is fixed to the lengthened mounting plate. The door leaf is locked via the escape door locking system.

The ASSA ABLOY security door closer is mounted to the fire door on the existing fixing points in accordance with DIN EN 1154 Supplementary Sheet 1.



#### Fire door approval is retained

The security door closer fulfils the requirements specified by DIN EN 1154 for the possibility of retrofitting a slide arm door closer. DIN EN 1154 Supplementary Sheet 1 regulates the fixing dimensions of door closers by means of defined drilling patterns. If a fire door is already designed to comply with the DIN EN 1154 drilling pattern, this is simply used for the security door closer. No structural modifications must be made to the fire protection door. The use of adapter plates means that ASSA ABLOY can also use the existing fixing holes when replacing the slide arm.

Longer slide arm and escape door locking system integrated in the longer mounting plate of the ASSA ABLOY security door closer.



## Installation: no drilling, no milling no filing, grinding or sawing

Retrofit the ASSA ABLOY security door closer is incredibly easy:

Unscrew the existing door closer and slide arm, screw on the ASSA ABLOY security door closer. Without the risk of losing fire door approval – and taking only around fifteen minutes for the pure installation. The existing

fixing points can be used when replacing the slide arm thanks to the special adapter plates from ASSA ABLOY. For easy installation, the ASSA ABLOY security door closer is supplied as a set complete with cables. The original sophisticated design is retained thanks to an end-to-end cover.

- 1 Removal of the existing door closer



- 2 Fixing points complying with DIN EN 1154



- 3 Screwing on the base-plate of the security door closer



- 4 Fixing the closer



- 5 Positioning the slide arm



- 6 Installation of the slide arm



- 7 Settings  
Electric strike, latch bolt and door closer



- 8 Fixing the cover



## Sophisticated design, additional functions

Along with the retrofitted escape route locking system in fire doors, as specified by DIN EN 1154, the ASSA ABLOY security door closer opens up additional possibilities: Locking by means of a retrofitted access control system in a fire door as well as a locking system for air-lock doors. The ASSA ABLOY security door closer is characterised by its sophisticated, slim design and, compared

to other systems, is the most optically attractive solution for fire and escape doors.

It goes without saying that it has all the benefits of all ASSA ABLOY door closers in terms of technology, comfort and functional reliability.

An escape door control function allows the locked door to be unlocked at any time.

The ASSA ABLOY security door closer can also be used when retrofitting an access control system in fire doors.





CE	Abloy OY PO Box 108 80101 Joensuu, Finland			10			
	1162-CPD-0464	EN 1154:1996+A1:2002	3	8	6 3	1	4

#### ASSA ABLOY DC700G-FT

- ASSA ABLOY door closer with Cam-Motion technology, extended mounting plate and integrated latch bolt, extended guide rail with integrated escape door strike
- Suitable for retrofit to fire doors with guide rail door closers and fastening using drilling template acc. to EN 1154, Supplementary Sheet 1:2003-11
- Certified in compliance with EN 1154, size 3-6
- Escape door strike 332, tested in compliance with the guideline for electrical locking systems for doors along escape routes
- For single leaf doors, doors between 850 - 1,200 mm wide

#### Characteristics DC700G-FT

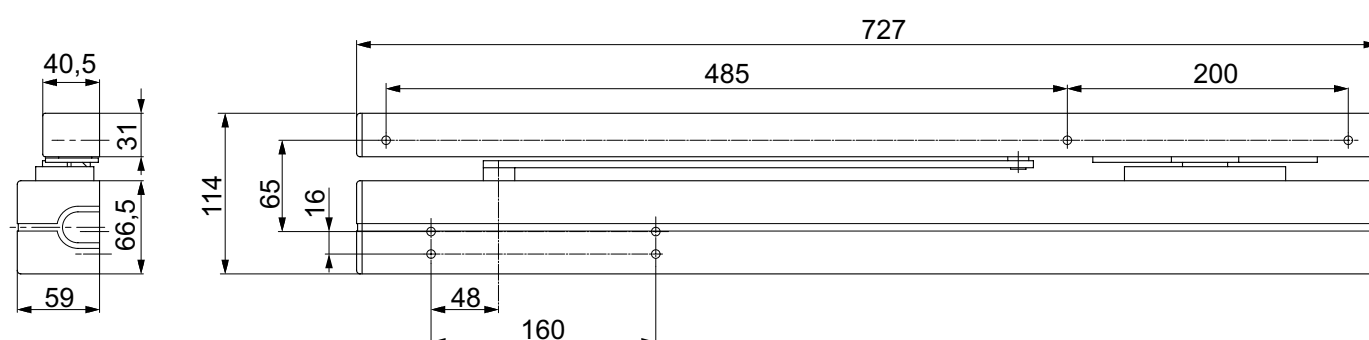
- Integrated escape door strike 332 in extended guide rail
- Integrated latch bolt lock 807 on extended mounting plate
- with 4 m connecting cable
- Flush or surface installation of wiring possible
- Suitable for fire and smoke protection doors
- Suitable for left and right handed doors
- Standard installation on hinge side
- Variable adjustable closing force
- Closing speed, latching speed and backcheck continuously adjustable
- Thermodynamic valves for consistent performance
- Door closer axis height continuously adjustable by 14 mm
- Standard colours: silver EV1

#### Characteristics of escape door locking system

- Holding force of 2,000 N
- Latch position continuously adjustable between 12 mm and 17 mm
- Latch position adjustable horizontally between -3 mm and +6 mm
- Latch bolt lock can be adjusted vertically in 4 mm increments (-4/0/+4/+8)
- Escape door strike using FaFix®, adjustable by 2 mm (0.5 mm steps)

#### Characteristics of guide rail

- Height-adjustable by 2 mm for tolerance
- Concealed fastening screws





## Technical attributes

Technical attributes	
Variable adjustable closing force	EN 3-6
Door width up to	850 mm - 1,200 mm
Fire and smoke protection	Yes
Door swing directions	Left / right handed
Standard installation on hinge side	Yes
Closing speed	Variable between 170°-0°
Latching speed	Variable between 15°-0°
Backcheck	Variable above 75°
Opening angle hinge side	ca. 170°
Certified in compliance with	EN 1154
CE marking for building products	Yes
Mounting plate dimensions	see dimensional drawings
Dimensions of guide rail	see dimensional drawings
<b>Escape door strike</b>	
Holding force	2000 N
Rated voltage	12 V DC / 24 V DC
Rated current	190 mA / 12 V; 95 mA / 24 V
Rated operational voltage tolerance	+/- 10%
Operating temperature range	-15 °C to +40 °C
Switching capacity - monitoring contact	24V, 1 A
Armature contact not potential-free	Yes
Recovery diode	Yes
Certified in compliance with	EltVTR
Approved system in compliance with EltVTR	Escape route controller

You can find the complete specification on the internet at: [www.assaabloy.de](http://www.assaabloy.de)

## Specifications for DC700G-FT

ASSA ABLOY door closer with Cam-Motion technology; extended mounting plate and integrated latch bolt, guide rail with integrated effeff escape door strike 332, 24V DC. End-to-end protective cover for door closers and guide rails; suitable for retrofitting to fire doors with guide rail door closers and for fastening using drilling template acc. to EN 1154, Supplementary Sheet 1:2003-11;

- Closing force continuously adjustable, EN size 3-6
- Door closer approved in line with EN 11544, with CE mark
- Escape door strike tested in compliance with the guideline for electrical locking systems for doors along escape routes
- Closing speed, latching speed and backcheck continuously adjustable
- Suitable for fire and smoke protection doors
- Recommended door width: at least 850 mm - max. 1,200 mm
- Latch position continuously adjustable between 12 mm and 17 mm
- Latch position adjustable horizontally between -3 mm and +6 mm
- Latch bolt can be adjusted vertically in 4 mm increments (-4/ 0/ +4/ +8)
- Escape door strike using FaFix®, adjustable by 2 mm
- Suitable for left and right handed doors
- Standard installation on hinge side

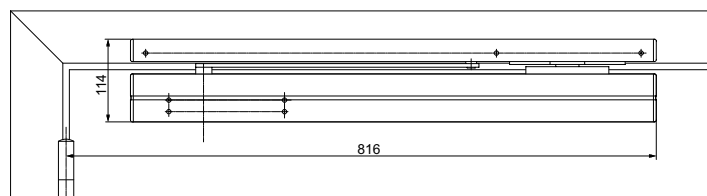
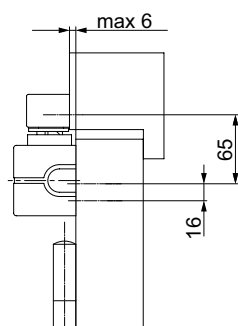
## Accessories:

- ☐ 5 mm Spacer Plate (narrow rebate) DCFA01
- ☐ 15 mm Spacer Plate (wide rebate) DCFA02
- ☐ Replacement plate, 5 mm, for Drilling Template DCFA03
- ☐ Replacement plate, 15 mm, for External Drilling Template DCFA04
- ☐ Mounting / replacement plate, 5 mm, for Narrow Frame DCFA05
- ☐ Mounting / replacement plate, 15 mm, for Narrow Frame DCFA06

## Colour:

- ☐ Silver EV1

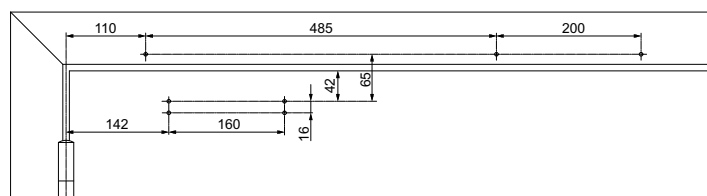
## Dimensional drawings



Space required on doors  
for standard mounting  
on hinge side

Left handed shown in  
diagram

Right handed is the  
reverse



Installation dimensions in  
compliance with EN 1154  
Supplementary Sheet  
1; standard hinge-side  
mounting

Left handed shown in  
diagram

Right handed is the  
reverse



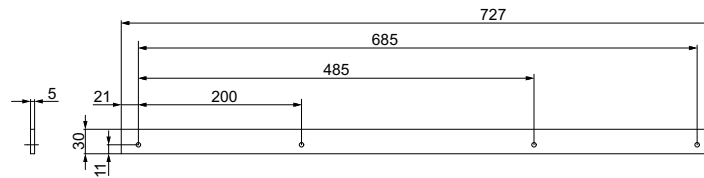
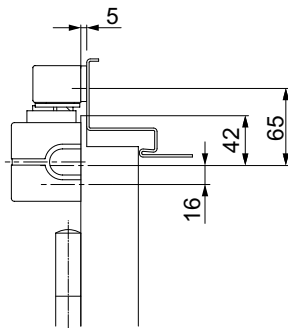
## Accessories

**Notice**

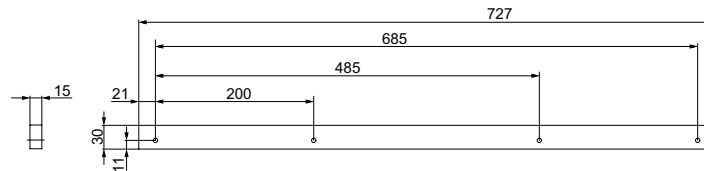
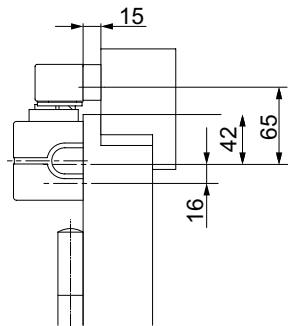
The positions of the locking components on the guide rail and mounting plate are designed in such a way that escape door strikes and latch bolt are correctly aligned when installed in a flush position (flush-fitted doors).

Adjustment option on electric strike (FaFix®) of  $\pm 1$  mm and latch bolt of  $\pm 6/3$  mm mean that smaller differences in measurements can be compensated for.

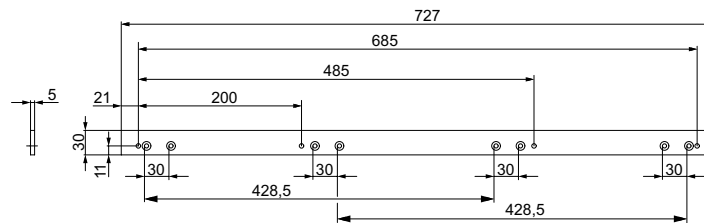
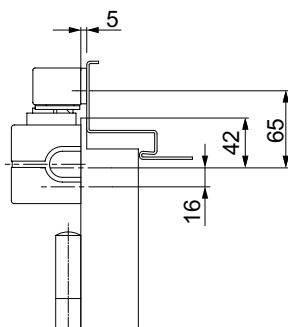
In the case of doors with an overlapping door leaf (narrow or wide rebate), the following spacer plates must be used to ensure that the guide rail and mounting plate are in a flush position when on top of one another.

**Spacer Plate DCFA01**

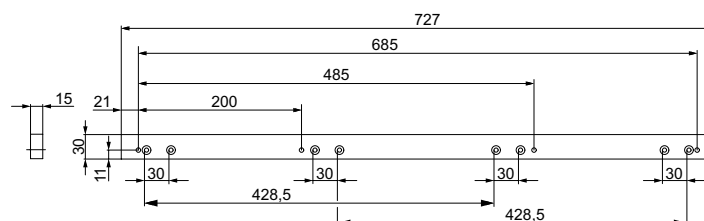
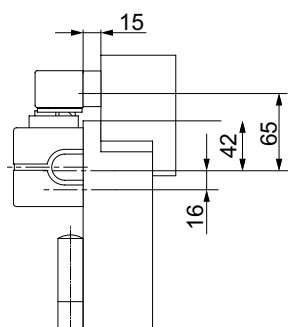
For shimming guide rails over ASSA ABLOY drilling pattern. For use on narrow-rebate doors with a max. door leaf overlap of 8 mm.

**Spacer Plate DCFA02**

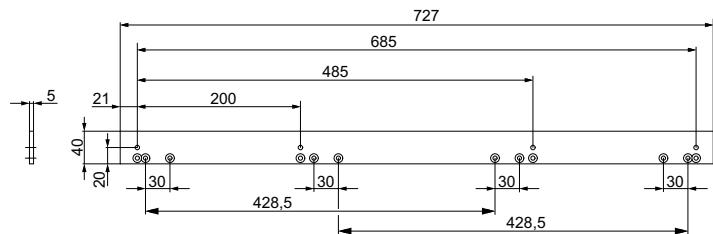
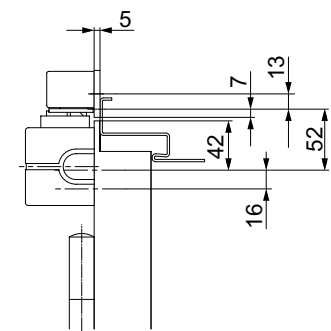
For shimming guide rails over ASSA ABLOY drilling pattern. For use on wide-rebate doors with a max. door leaf overlap of 18 mm.

**Replacement Plate DCFA03**

For mounting guide rail over existing drill holes for flush-fit doors and narrow rebate doors with door leaf overlap up to 8 mm.

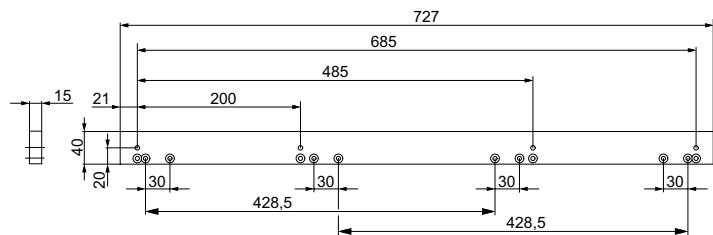
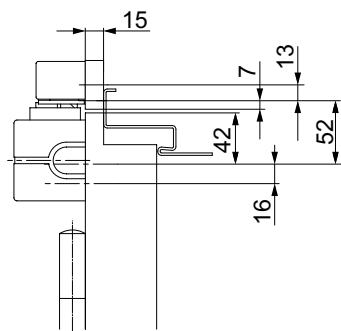
**Replacement Plate DCFA04**

For mounting guide rail over existing drilling pattern for wide-rebate doors with door leaf overlap up to 18 mm.



Mounting and Replacement Plate  
DCFA05

Mounting plate for narrow frames. For mounting over ASSA ABLOY drilling pattern and over existing drill holes when the guide rail is replaced. For use on narrow-rebate doors with a max. door leaf overlap of 8 mm



Mounting and Replacement Plate  
DCFA06

Mounting plate for narrow frames. For mounting over ASSA ABLOY drilling pattern and over existing drill holes when the guide rail is replaced. For use on wide-rebate doors with a max. door leaf overlap of 18 mm.

Description	Order no.
Security Door Closer Model DC700G-FT, complete, 24V DC, silver EV1	DC700F001F1EV1-
Security Door Closer Model DC700G-FT, complete, 12V DC, silver EV1	DC700F001E1EV1-
5 mm spacer plate for narrow-rebate doors, silver EV1	DCFA01-----EV1-
15 mm spacer plate for wide-rebate doors, silver EV1	DCFA02-----EV1-

Description	Order no.
5 mm spacer plate for guide rail drilling template, silver EV1	DCFA03-----EV1-
15 mm spacer plate for guide rail drilling template, silver EV1	DCFA04-----EV1-
Mounting / replacement plate, 5 mm, for narrow frame, silver EV1	DCFA05-----EV1-
Mounting / replacement plate, 15 mm, for narrow frame, silver EV1	DCFA06-----EV1-

## Electric door locking systems along escape routes

### Electric door locking systems along escape routes

It is a good idea to use additional electrical locking systems when an escape door needs to be securely protected against misuse. A security door closer, for example, can also be used to secure a door in addition to the normal lock. In the event of an emergency, the door can be opened using the emergency open push button on the escape route terminal, which is installed next to the door. The need to push the emergency button, along with an audible and optical alarm, provides an extra psychological barrier against misuse and also prevents unintentional use. Such systems can also be monitored using a central display and operator panel, and can be easily integrated into a building management system.

The building management system can open the door without triggering the alarm at any time - using a key, for example. A timer switch or an access control system can also be used to release doors.

Supplementary electrical locking systems must be tested and approved in compliance with the guide-

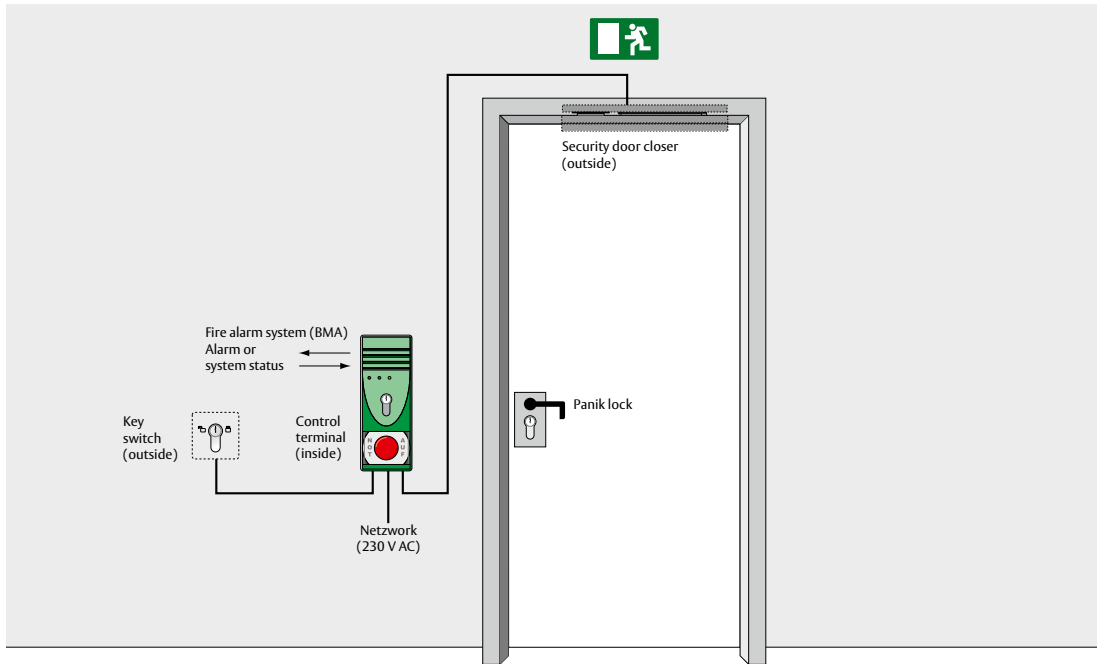
line for electrical locking systems for doors along escape routes. This guideline is for example included in the German Building Rules List A, part 1.6.19. The electrical system guideline should be regarded as an additional set of regulations to those governing exit devices in compliance with DIN EN 179 and DIN EN 1125. The European Committee for Standardization is currently working on the final version of standards for electrical locking systems on escape routes, prEN 13367 and prEN 13633, which will replace the existing guideline once they are published and the transition period is complete.

Safety standards must not only be complied with during manufacture, but must also be sustained through regular maintenance. For this reason, the building manager must test the system on a monthly basis and a specialist must carry out an inspection once a year.



## Escape door locking device for retrofitting in fire doors

### System overview:



### Function:

#### Retrofitting in fire doors

The security door closer uses the standardised fixing points that are often already available (drilling pattern according to **DIN EN 1154: Supplementary sheet 1**) **and can thus be retrofitted easily to almost any fire door with slide arm door closers without endangering the door's approval.**

#### Locking in the direction of escape

The door is also secured by the door closer with integrated escape door locking system allowing it to be locked in the escape direction. The locking component is powered and controlled via the escape door control terminal. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. The alarm is acknowledged via the key button of the door terminal.

#### Authorised access via a key

Authorised access in the direction of escape is gained using a key in the key button integrated into the escape door control terminal. The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm. The outer key button is used to enter against the direction of escape. The panic lock must also be unlocked.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as the pre-alarm, is emitted once the permitted interval is exceeded. If this signal is ignored, the door alarm will sound and remain active until the alarm is reset. The time intervals for temporary release, pre-alarm and door alarm can be set as required. If the door is closed again before the temporary release interval comes to an end, it is then automatically re-locked or secured.

#### Link-up with a fire alarm system

One or several inputs are available for connecting a fire alarm system, depending on the solution version. If the fire alarm system is activated, the escape door locking device is released in emergency mode and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system.

# Escape door locking device for retrofit fire doors

## System components/variations

The stand-alone systems can be used to secure individual independent doors – the network solutions have a bus interface and can be controlled and managed on a panel or using visual display software.  
(see section entitled "Solutions for central operation/display" in the effeff escape route technology catalogue).

	STAND-ALONE	NETWORKED
Performance characteristics	FT Basic	FT Basic
Control terminal with integrated controls and power supply	Yes	Yes
Remote controls/power supply		
Control inputs (e. g. fire alarm system, access control etc.)	3 x	3 x
Relay outputs (e.g. alarm or system status)	2 x	2 x
Locking elements	1 x DC 700G-FT	1 x DC 700G-FT
Connection to panel/Visual Display/OPC		Yes

	STAND-ALONE	NETWORKED
System components	FT Basic	FT Basic
Control Terminal 1338-14/15 with power supply	X	
Control Terminal 1338-20/21 with power supply		X
Key Switch 1140-10/11	X	X
Security door closer DC700G-FT	X	X
Mounting plate DCFaxx	●	●
ASSA ABLOY Solution Code	FTT014SB1	FTT014VB1

x = required system components, ● = can be used as an alternative

## Planning documents

We will gladly provide assistance. Please indicate the corresponding ASSA ABLOY Solution Code, so that we can help you.



## Order form

**ASSA ABLOY**

Please copy formular, complete and  
fax it back to ASSA ABLOY!

Customer no.:

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Sender:

Company

---

Branch

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Contact

---

Telephone

---

Fax

---

Email

---

Street / POB

---

Postal Code / Town

---

Date:

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ASSA ABLOY  
Sicherheitstechnik GmbH  
Bildstockstraße 20  
72458 Albstadt  
GERMANY  
Tel. +49 7431 123-700  
Fax +49 7431 123-258  
export@assaabloy.de

Order Number	Quantity

Just fax send a fax to:

**+49 7431 123-171** (Germany)

**+49 7431 123-258** (worldwide)

Fast ordering by email as  
well:

As a proven supplier of door release systems, effeff is known for reliable and prompt deliveries. We offer you two methods of ordering: You can fax us the completed form or send us details of your requirements via email to the following address: [export@assaabloy.de](mailto:export@assaabloy.de)

Quotations and deliveries are made in accordance with our conditions of delivery and payment.





Originally part of the ZEISS IKON AG company founded in 1926, **IKON** is ASSA ABLOY's most successful brand for locking and security technology in Germany. The IKON brand offers state-of-the-art products and solutions at the cutting edge of technology. The brand product range includes high-quality mechanical and mechatronic locking cylinders, auxiliary locks and security devices, door fittings and door closers. They provide active burglary protection and safeguard both people and property.



Founded as a precision engineering and electrical engineering workshop in 1936, **effeff** is a global leading brand for electromechanical locking and unlocking devices. Electric strikes, electric bolts, security locks, access control systems and escape route technology are among the effeff brand products which today provide security and convenience in over 75 countries throughout the world.

**ASSA ABLOY Sicherheitstechnik GmbH** is the professional partner worldwide in mechanical and electromechanical security solutions for safety, security and convenience in buildings. The company develops, produces and markets high-quality products and multi-purpose systems under the established IKON and effeff brand names for the private, commercial and public sectors.

**ASSA ABLOY** is the world's leading manufacturer and supplier of door opening solutions, meeting tough enduser demands for safety, security and convenience.

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