

Escape route technology Technical information





About us.



Whatever you want to secure, protect, maintain – we have technology you require.



Arsenal Stadium, London



Court of Justice, Antwerpen



Emirates Towers, Dubai



Airport Zurich

Breaking new grounds, implementing new technologies, developing new ideas. Founded in 1936, the company effeff based in Albstadt became the market leader in the field of door control systems by following a consistent strategy. After starting the electric strike production in 1947, a comprehensive product range has been gradually developed, which enables effeff to offer suitable solutions for every door.

February 1st, 2000, effeff joined the ASSA ALBOY Group based in Stockholm, Sweden and merged at the beginning of 2005 with IKON GmbH Präzisionstechnik, Berlin who also belong to the group to become ASSA ABLOY Sicherheitstechnik GmbH.

IKON and effeff, both renowned and well-established brands within the market remain under ASSA ABLOY Sicherheitstechnik GmbH as do the production sites of Berlin and Albstadt and a sales office in Ratingen.

ASSA ABLOY is the leading manufacturer and supplier of mechanical and electromechanical locks and related products worldwide. Our customers benefit from the extensive know-how of the largest international group of companies, meeting every requirement in terms of total security and comfort throughout the world.



4 Escape Route Technology

# We assist you with words and deeds

**Hotline** Technical advice

+49 7431 123-381

Hotline Sales/order processing

+49 7431 123-700

The experts at ASSA ABLOY Sicherheitstechnik would be pleased to advise you which electric strike model is most suitable for which installation position.

#### **Technical advice**

In the matter of technical advice, with us you will be supported by professionals who will continue to help you on every question on technical details. Of course you can also be put into contact with specialists for questions of detail in the matter of technical risk assessment or key accounts.

#### Sales advice/order processing

With our commercial customer services you can deal with all questions to do with your purchase order, for example the status of the order processing, the delivery date, purchase order changes, but also returns or guarantee issues. Use this simple and quick option to get information or help from our specialists. We will do that with pleasure.

#### **Trade fairs**

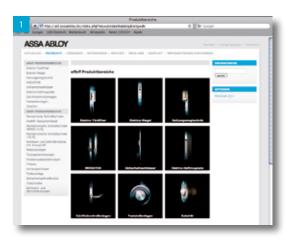
You will find effeff at many national and international trade fairs. You can obtain the exact dates from our website www.assaabloy.de

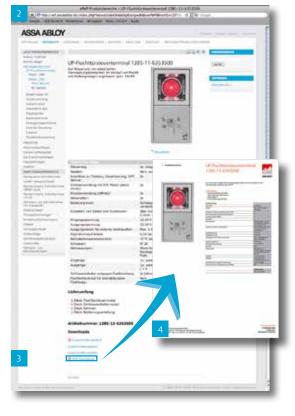
# Our product catalogue online at

### www.assaabloy.de

Fast and up-to-date comprehensive product information at any time

- Clearly arranged layout according to our different product areas...
- the submenu will help you navigate through our database...
- 3 to find the model you need.
- 4
  By just clicking on the article, you can generate a detailed specification sheet.





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### Our strength lies in our specialist knowledge

### Escape Route Technology from effeff

#### effeff - The technology leader

People must be able to leave a building quickly in the event of an emergency. However, building managers also want to protect their facilities from unauthorized access – to prevent theft, for instance. This leads to a conflict of objectives, between the need for safe evacuation and the requirement for protection against misuse. effeff offers several solutions which cater for both concerns.

#### **System solutions section**

The system solutions section is divided up into subsections featuring the most frequently used applications in door solutions, networked systems and special applications, and describes the solutions in detail.

### Section on electric door locking systems along escape routes

effeff's electric locking systems for doors along escape routes are reliable solutions for locking doors which can be released using an emergency button in the event of an emergency. This additional operating unit also acts as a psychological deterrent against misuse. To ensure systems provide security, the effeff escape route securing systems are tested in compliance with the German guideline for electric locking systems for doors along escape routes (EltVTR, Richtlinie über elektrische Verriegelungssysteme von Türen in Rettungswegen) and are also monitored. effeff supplies products which allows doors to be operated and monitored centrally. They can also be connected to higher level systems, using OPC, for example.

#### **Section on door monitoring**

In this system, the escape door is not locked in the direction of escape, but the door status is monitored. An optical and audible alarm is triggered on the door if the system is misused. In networked systems, the alarm is also activated at a central point.

Compared with electric locking systems on doors along escape routes, having only a door monitoring system is less of a deterrent against misuse. Most fire or smoke protection doors can also be retrofitted without losing certification provided such a retrofit is limited to a door contact being installed on the door (e.g. magnetic contact).



### We have created something especially for you –

### System solutions for practical use

#### System solutions for practical use

Functional requirements for doors are becoming increasingly complex. It is precisely along escape routes where different functional specifications converge and some are even in conflict with one another.

Our practical system solutions allow us to show operators, planners and installers time-tested applications which include doors, networked systems and special uses.

In the system overview and functions sections we describe functions and generally show the solution in different variations. The most suitable version can then be easily selected based on the different performance features.

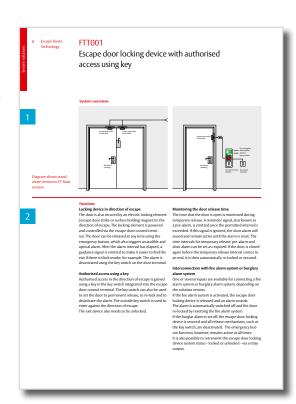
The required system components are listed in the same table. The ASSA ABLOY Solution Code is used to identify the system solution you have selected. The code allows you to request

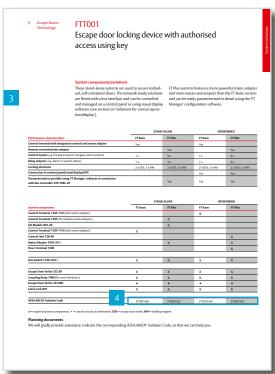
further information, such as texts for bidding processes, and wiring and connection diagrams.

This system enables you to meet complex requirements easily without needing to reinvent the wheel.

Each example solution is divided into:

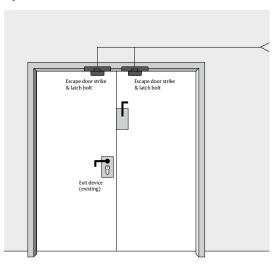
- 1. System overview The system configuration is shown in a clear diagram of the door setting.
- 2. Function
  This section explains the door structure and indicates special features.
- 3. Performance features and system components All the devices required for the door solution in question are listed in a clearly arranged table.
- 4. Solution code This code allows you to obtain further information.





# Escape door locking device with authorised access using key

#### **System overview:**



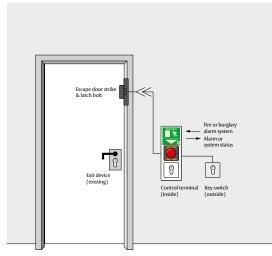


Diagram shows standalone version in FT Basic version

#### **Function:**

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. The locking element 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. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example. The alarm is deactivated using the key switch on the door terminal.

#### Authorised access using a key

Authorised access in the direction of escape is gained using a key in the key switch 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 outside key switch is used to enter against the direction of escape.

The exit device also needs to be unlocked.

#### Monitoring the door release time

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated. The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device with authorised access using key

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature a more powerful mains adapter and more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' configuration software.

	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter	Yes		Yes	
Seperate control/mains adapter		Yes		Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	1 x	9 x	1 x	4 x
Relay outputs (e.g. alarm or system status)	1 x	3 x	1 x	4 x
Locking elements	2 x EDS, 1 x HM	2 x EDS, 2 x HM	2 x EDS, 1 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20		Yes	Yes	Yes

	STAND-ALONE		NE	NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Control Terminal 1385-11N (with mains adapter)			Х		
Control Terminal 1385-11 (without mains adapter)		Х			
I/O Module 901-20		Х			
Control Terminal 1384-11N (with mains adapter)	Х				
Control Unit 720-40				Х	
Mains Adapter 1003-24-1		Х		Х	
Door Terminal 1380				X	
Key Switch 1140-10/11	X	X	X	X	
Escape Door Strike 332.80	X	X	X	X	
Coupling Relay 7480 (for two-leaf doors)	X	X	X	X	
Escape Door Strike 331U80	•	•	•	•	
Latch Lock 807	Х	Х	X	Х	
ASSA ABLOY Solution Code	FTT001SB1	FTT001SE1	FTT001VB1	FTT001VE1	

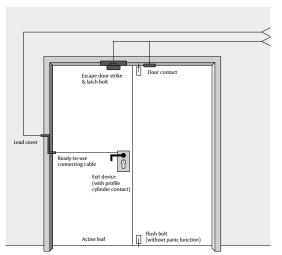
**x** = required system components, • = can be used as an alternative, **EDS** = escape door strike, **HM** = holding magnet

#### **Planning documents**

#### **FTT002**

# Escape door locking device with electrically monitored exit device (profile cylinder contact) and authorised entry using key

#### System overview:



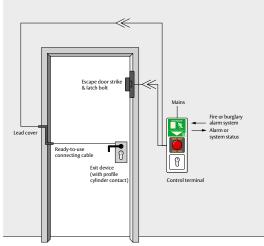


Diagram shows standalone version in FT Basic version

#### **Function:**

#### **Burglary protection and panic function**

The mechanical exit device offers burglary protection and controlled access from the outside. Its latch and bolt can be drawn back using the profile cylinder in the lock (the so-called transmission function). The door can be opened in the direction of escape at any time using the lock's panic function.

When the door is closed, the bolt extends again automatically (self-locking). A lead cover with clamp-plug connection technology enables the door to be dismantled completely, for maintenance, for example.

#### Securing in the direction of escape

The door is also secured in the direction of escape with an electric locking element (escape door strike or surface holding magnet). The locking element 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. After the alarm interval has elapsed, a guidance signal is emitted to make it easier tofind the exit if there is thick smoke, for example. The alarm is deactivated using the key switch on the door terminal.

#### Authorised access using key

Authorised access in the direction of escape is gained using a key in the key switch 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. When entering against the direction of escape, the lock is released via the profile

cylinder in the lock (so-called transmission function). The escape door locking device is also released for a short time by the integrated cylinder contact.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated. The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

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#### FTT002

# Escape door locking device with electrically monitored exit device (profile cylinder contact) and authorised entry using key

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature a more powerful mains adapter and more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' configuration software.

	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter	Yes		Yes	
Seperate control/mains adapter		Yes		Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	1 x	9 x	1 x	4 x
Relay outputs (e.g. alarm or system status)	1 x	3 x	1 x	4 x
Locking elements	2 x EDS, 1 x HM	2 x EDS, 2 x HM	2 x EDS, 1 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20		Yes	Yes	Yes
	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)

	ST	AND-ALONE	N	ETWORKED
System components	FT Basic	FT Plus	FT Basic	FT Plus
Control Terminal 1385-11N (with mains adapter)			Х	
Control Terminal 1385-11 (without mains adapter)		Х		
I/O Module 901-20		Х		
Control Terminal 1384-11N (with mains adapter)	Х			
Control Unit 720-40				Х
Mains Adapter 1003-24-1		Х		Х
Door Terminal 1380				X
Escape Door Strike 332.80	X	X	X	X
Escape Door Strike 331U80	•	•	•	•
Latch Lock 807	Х	Х	Х	Х
Door Contact 10380A for two-leaf doors	Х	Х	Х	X
Lock 409X + striking plate + connection cable	X	X	X	X
Fitting in compliance with EN 179 (front door furniture)	X	X	X	X
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•
Lead cover (pluggable) 10314-20	X	X	X	X
ASSA ABLOY Solution Code	FTT002SB1	FTT002SE1	FTT002VB1	FTT002VE1

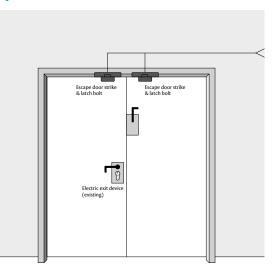
 $\mathbf{x} =$  required system components,  $\bullet =$  can be used as an alternative, **EDS** = escape door strike, **HM** = holding magnet

#### **Planning documents**

#### FTT003

# Escape door locking device with authorised entry using access control system

#### **System overview:**



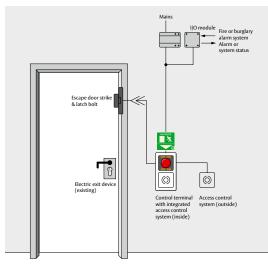


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. The locking element is powered and controlled via the escape door control terminal connected to an external mains adapter. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

## Authorised entry using integrated access control system

An electric access control system (card reader, access code or similar) is installed on the inside and outside to provide authorised access. This enables an access control system to be integrated into the escape door control terminal in place of a key switch to carry out the temporary release, permanent release, re-locking and alarm re-set functions.

The outside access control system is used to enter against the direction of escape.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated. The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device with authorised entry using access control system

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature a more powerful mains adapter and more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' configuration software.

	STAND	)-ALONE	NETW	ORKED
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter	Yes		Yes	
Seperate control/mains adapter		Yes		Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	None	8 x	None	3 x
Relay outputs (e.g. alarm or system status)	1 x	3 x	1 x	4 x
Locking elements	2 x EDS, 1 x HM	2 x EDS, 2 x HM	2 x EDS, 1 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20		Yes	Yes	Yes

	STAND-ALONE		NI	NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Control Terminal 1384-11N (with mains adapter)	Х				
Control Terminal 1385-11 (without mains adapter)		Х	Х		
I/O Module 901-20		X			
Control Unit 720-40				Х	
Mains Adapter 1003-24-1		Х		Х	
Door Terminal 1380				х	
Escape Door Strike 332.80	X	X	X	X	
Coupling Relay 7480 (for two-leaf doors)	Х	Х	Х	Х	
Escape Door Strike 331U80	•	•	•	•	
Latch Lock 807	Х	Х	Х	х	
ASSA ABLOY Solution Code	FTT003SB1	FTT003SE1	FTT003VB1	FTT003VE1	

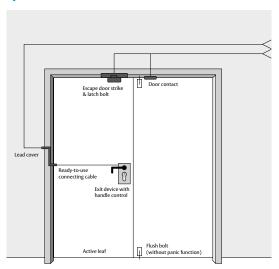
 $\mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{EDS} = \text{escape door strike}, \mathbf{HM} = \text{holding magnet}$ 

#### **Planning documents**

#### **FTT004**

# Escape door locking device with electric exit device (handle control) and authorised entry using access control system

#### **System overview:**



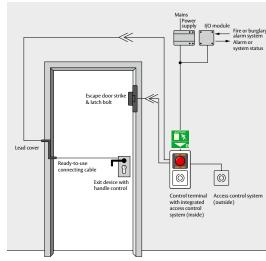


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### **Burglary protection and panic function**

The handle-controlled exit device offers burglary protection and controlled access from the outside. The outside handle is engaged or disengaged electro-mechanically. The latch and bolt can be drawn back when it is engaged. The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. The locking element is powered and controlled via the escape door control terminal connected to an external mains adapter. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

## Authorised entry using integrated access control system

An electric access control system (card reader, access code or similar) is installed on the inside and outside to provide authorised access. The access control system can be integrated into the escape door control terminal in place of the key switch and carries out the temporary release, permanent release, re-locking and alarm re-set functions. The escape door locking device is released and the exit device's outside handle is disengaged in the case of authorised entry (temporary release) against the direction of escape and in the case of permanent release. The lock is powered and controlled via the escape door control terminal or an

external mains adapter. In the event of a failure in the access control system, authorised entry, permanent release/relocking and alarm deactivation are actuated via the profile cylinder or the integrated cylinder contact in the lock.

#### Monitoring the door release time

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version. If the fire alarm system is activated, the escape door locking device is released and an alarm sounds.

The alarm is automatically switched off and the door re-locked by resetting the fire alarm system.

If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated.

The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device with electric exit device (handle control) and authorised entry using access control system

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' software.

	STAND	-ALONE	NETW	ORKED
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter				
Seperate control/mains adapter	Yes	Yes	Yes	Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	None	8 x	None	3 x
Relay outputs (e.g. alarm or system status)	None	2 x	None	3 x
Locking elements	2 x EDS, 2 x HM			
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20		Yes	Yes	Yes
Version available for two-leaf doors	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)
Version available with lock as multi-point lock	Yes (819)	Yes (819)	Yes (819)	Yes (819)

	STAND-ALONE		NE	NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Control Terminal 1384-11 (without mains adapter)	Х				
Control Terminal 1385-11 (without mains adapter)		X	Х		
I/O Module 901-20		Х			
Control Unit 720-40				Х	
Mains Adapter 1003-24-2	Х	Х	Х	Х	
Door Terminal 1380				Х	
Escape Door Strike 332.80	X	X	X	Х	
Escape Door Strike 331U80	•	•	•	•	
Latch Lock 807	Х	Х	Х	Х	
Door Contact 10380A for two-leaf doors	Х	X	Х	Х	
Lock 709X + striking plate + connection cable	X	X	X	Х	
Fitting in compliance with EN 179 (front door furniture)	X	Х	Х	Х	
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•	
Lead Cover (pluggable) 10314-20	Х	X	Х	X	
ASSA ABLOY Solution Code	FTT004SB1	FTT004SE1	FTT004VB1	FTT004VE1	

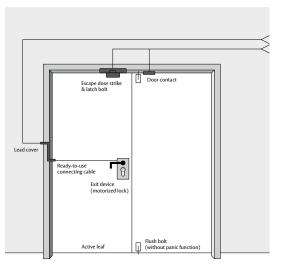
**x** = required system components, • = can be used as an alternative, **EDS** = escape door strike, **HM** = holding magnet

#### **Planning documents**

#### **FTT005**

# Escape door locking device with electric exit device (motorized lock) and authorised access using access control system

#### **System overview:**



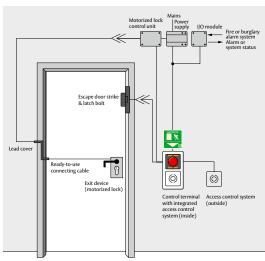


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### **Burglary protection and panic function**

The motorized lock offers burglary protection and controlled access from the outside. The motorized system also retracts or releases the bolt and latch. The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. The locking element is powered and controlled via the escape door control terminal connected to an external mains adapter. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

### Authorised entry using integrated access control system

An electric access control system (card reader, access code or similar) is installed on the inside and outside to provide authorised access. This enables an access control system to be integrated into the escape door control terminal in place of the key switch to carry out the temporary release, permanent release, re-locking and alarm re-set functions. The escape door locking device is released and the motorized lock is unlocked electrically in the case of authorised entry (temporary release) against the direction of escape and in the case of permanent release. The lock is powered and controlled via the escape door control

terminal or an external mains adapter. In the event of a failure in the access control system, authorised entry, permanent release/relocking and alarm deactivation are actuated via the profile cylinder or the integrated cylinder contact in the lock.

#### Monitoring the door release time

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated. The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device with electric exit device (motorized lock) and authorised access using access control system

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' configuration software.

	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter				
Seperate control/mains adapter	Yes	Yes	Yes	Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	None	8 x	None	3 x
Relay outputs (e.g. alarm or system status)	None	2 x	None	3 x
Locking elements	2 x EDS, 2 x HM			
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20		Yes	Yes	Yes
Version available for two-leaf doors	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)
Version available with lock as multi-point lock	Yes (519)	Yes (519)	Yes (519)	Yes (519)

	ST	AND-ALONE	N	NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Control Terminal 1384-11 (without mains adapter)	Х				
Control Terminal 1385-11 (without mains adapter)		X	Х		
I/O Module 901-20		X			
Control Unit 720-40				X	
Mains Adapter 1003-24-2	Х	Х	Х	Х	
Door Terminal 1380				X	
Escape Door Strike 332.80	X	Х	X	X	
Escape Door Strike 331U80	•	•	•	•	
Latch Lock 807	Х	Х	Х	Х	
Door Contact 10380A for two-leaf doors	Х	X	Х	Х	
Lock 509X + striking plate + connection cable	X	X	X	X	
Motorized lock control unit	Х	Х	Х	Х	
Smoke protection switch on fire retardant doors	•	•	•	•	
Fitting in compliance with EN 179 (front door furniture)	Х	Х	Х	Х	
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•	
Lead Cover 10312-20	X	X	Х	X	
ASSA ABLOY Solution Code	FTT005SB1	FTT005SE1	FTT005VB1	FTT005VE1	

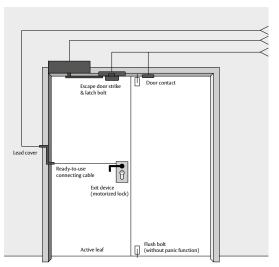
**x** = required system components, • = can be used as an alternative, **EDS** = escape door strike, **HM** = holding magnet

#### **Planning documents**

#### **FTT006**

# Escape door locking device with electric exit device (motorized lock), swing door operator and authorised entry using access control system

#### System overview:



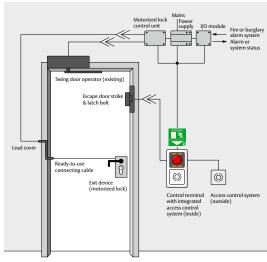


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### **Burglary protection and panic function**

The motorized lock offers burglary protection and controlled access from the outside. The motorized system also retracts or releases the bolt and latch. The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. The locking element is powered and controlled via the escape door control terminal connected to an external mains adapter. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

### Authorised entry using integrated access control system

An electric access control system (card reader, access code or similar) is installed on the inside and outside for authorised entry. This enables an access control system to be integrated into the escape door control terminal in place of a key switch to carry out the temporary release, permanent release, re-locking and alarm re-set functions. In the event of a failure in the access control system, authorised entry, permanent release/relocking and alarm deactivation are activated using the profile cylinder or the integrated cylinder contact in the lock.

#### Convenient entry with automatic swing door operator

The escape door locking device is released and the swing door operator activated in the case of authorised entry (temporary release) in or against the direction of escape. When the escape door locking device is in permanently open mode, the automatic door operator is connected and is activated by the system's own radar sensors, independently of the escape door locking device. Swing door operator activation when the emergency button is used or the fire alarm triggered can be adjusted as required using the configuration software.

#### Monitoring the door release time

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

Performance characteristics

#### **FTT006**

# Escape door locking device with electric exit device (motorized lock), swing door operator and authorised entry using access control system

STAND-ALONE

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the 'FT Manager' configuration software.

NETWORKED

FT Plus

Performance characteristics	FI Plus	FI Plus
Control terminal with integrated controls and mains adapter		
Seperate control/mains adapter	Yes	Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	8 x	3 x
Relay outputs (e.g. alarm or system status)	1 x	2 x
Locking elements	2 x EDS, 2 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC		Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	Yes	Yes
Version available for two-leaf doors	Yes (partially panic)	Yes (partially panic)
Version available with lock as multi-point lock	Yes (519)	Yes (519)
_	STAND-ALONE	NETWORKED
System components	FT Plus	FT Plus
Control Terminal 1385-11 (without mains adapter)	X	
I/O Module 901-20	X	
Control Unit 720-40		X
Mains Adapter 1003-24-2	X	Х
Door Terminal 1380		Х
Escape Door Strike 332.80	X	X
Escape Door Strike 331U80	•	•
Latch Lock 807	X	X
Door Contact 10380A for two-leaf doors	X	Х
Lock 509X + striking plate + connection cable	X	X
Motorized lock control unit	X	X
Smoke protection switch on fire retardant doors	•	•
Fitting in compliance with EN 179 (front door furniture)	X	X
Fitting in compliance with EN 1125 (panic bar)	•	•
Lead Cover 10312-20	X	X
Bus Controller 970-TSBC with FT Manager	Р	
ASSA ABLOY Solution Code	FTT006SE1	FTT006VE1

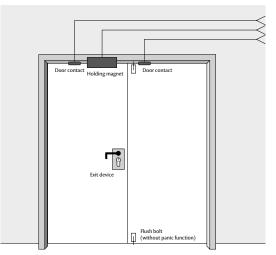
x = required system components, • = can be used as an alternative, EDS = escape door strike, HM = holding magnet, P = Optional for parameterisation

#### **Planning documents**

#### **FTT007**

# Escape door locking device with mechanical exit device for retrofit to existing doors

#### System overview:



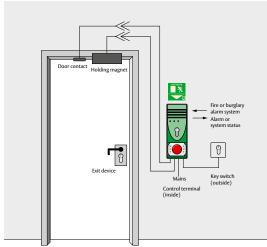


Diagram shows stand-alone version in FT Basic version

#### **Function:**

#### **Burglary protection and panic function**

The mechanical exit device offers burglary protection and controlled access from the outside. To do so, the latch and bolt are pulled back by the profile cylinder (so-called transmission function).

The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Locking device in direction of escape

The door is also secured by an electric locking element (surface holding magnet) in the direction of escape. The locking element 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 deactivated using the key switch on the door terminal.

#### Authorised access using key

Authorised access in the direction of escape is gained using a key in the key switch 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 outside key switch is used to enter against the direction of escape. The exit device also needs to 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 a 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.

#### Interconnection with fire alarm system

A separate input is available for connecting a fire alarm system. If the fire alarm system is activated, the escape door locking device is released 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 with mechanical exit device for retrofit to existing doors

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature a more powerful mains adapter than the FT Basic version.

	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus
Control terminal with integrated controls and mains adapter	Yes		Yes	
Seperate control/mains adapter		Yes		Yes
Control inputs (e.g. fire alarm system, access control)	3 x	3 x	3 x	3 x
Relay outputs (e.g. alarm or system status)	2 x	2 x	2 x	2 x
Locking elements	2 x EDS, 1 x HM	2 x EDS, 2 x HM	2 x EDS, 1 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC			Yes	Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	No	No	No	No

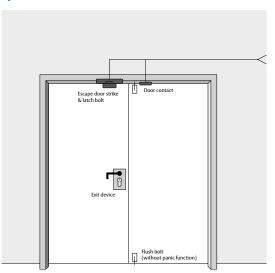
	STA	STAND-ALONE		NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Control Terminal 1338-14/15 (with mains adapter)	X				
Control Terminal 1340- 14/15 (without mains adapter)		X			
Control Terminal 1338-20/21 (with mains adapter)			Х		
Control Terminal 1340-20/21 (without mains adapter)				X	
Mains Adapter 1003-24-1		X		X	
Key Switch 1140-10/11	Х	X	X	X	
Surface Holding Magnet 827HA	X	Х	X	Х	
Installation Kit 827-6-1	X	Х	Х	Х	
Door Contact 10380A (2 units for two-leaf doors)	Х	X	X	X	
Lock 309X + striking plate	X	X	X	X	
Fitting in compliance with EN 179 (front door furniture)	X	Х	Х	Х	
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•	
ASSA ABLOY Solution Code	FTT007SB1	FTT007SE1	FTT007VB1	FTT007VE1	

 $<sup>\</sup>mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{EDS} = \text{escape door strike}, \mathbf{HM} = \text{holding magnet}$ 

#### **Planning documents**

# Escape door locking device for doors with direction of escape from outside to the inside

#### **System overview:**



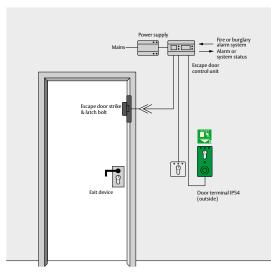


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape.

The locking element is powered and controlled via the escape door control terminal connected to an external mains adapter. A waterproof door terminal is installed to operate the door in the direction of escape. The door can be released at any time using the emergency button, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example. The alarm is deactivated using the key switch on the door terminal. Please note that the door provides no protection against burglary due to the lock's panic function and because the door can be released using the emergency button on the outside.

#### Authorised access using key

A key is used in the key switch integrated into the escape door control terminal to gain authorised access in the direction of escape. The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm. The inside key switch is used to enter against the direction of escape.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds. The alarm is automatically switched off and the door re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated. The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device for doors with direction of escape from outside to the inside

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software

(see section on 'Solutions for central operation/display').

	STAND-ALONE	NETWORKED
Performance characteristics	FT Plus	FT Plus
Control terminal with integrated controls and mains adapter		
Seperate control/mains adapter	Yes	Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	4 x	4 x
Relay outputs (e.g. alarm)	4 x	4 x
Locking elements	2 x EDS, 2 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC		Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	Yes	Yes

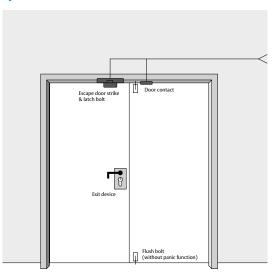
	STAND-ALONE	NETWORKED	
System components	FT Plus	FT Plus	
Control Unit 720-40	X	Х	
Mains Adapter 1003-24-1	Х	X	
Door Terminal 11337-12-10	Х	Х	
Key Switch 1332-10/11	Х	Х	
Escape Door Strike 332.80	X	X	
Escape Door Strike 331U80	•	•	
Latch Lock 807	X	X	
Door Contact 10380A for two-leaf doors	X	X	
Lock 309X + striking plate	X	Х	
Fitting in compliance with EN 179 (handle/handle)	Х	Х	
ASSA ABLOY Solution Code	FTT008SE1	FTT008VE1	

x = required system components, • = can be used as an alternative, EDS = escape door strike, HM = holding magnet

#### **Planning documents**

# Escape door locking device for doors with direction of escape from both ways (bidirectional escape route)

#### **System overview:**



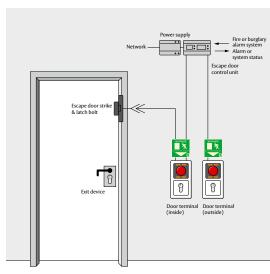


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### Locking device in direction of escape

A door featuring a direction of escape from both sides is also secured by an electric locking element (escape door strike or surface holding magnet). The locking element is powered and controlled via the escape door controls connected to an external mains adapter. A door terminal is fitted to either side of the door. The door can be released at any time using the emergency buttons, which also triggers an audible and optical alarm. After the alarm interval has elapsed, a guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

Please note that the door provides no protection against burglary due to the lock's panic function on both sides and because the door can be released using the emergency button.

#### Authorised access using key

The key switch integrated into escape door control terminal is used to gain authorised entry in both directions The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm. Alternatively, an access control reader or similar can be used in place of the key switch to carry out the temporary release, permanent release, re-locking and alarm re-set functions.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

## Interconnection with fire alarm system or burglary alarm system

One or several inputs are available for connecting a fire alarm system or burglary alarm system, depending on the solution version.

If the fire alarm system is activated, the escape door locking device is released and an alarm sounds.

The alarm is automatically switched off and the door

re-locked by resetting the fire alarm system. If the burglar alarm is set off, the escape door locking device is secured and all release mechanisms, such as the key switch, are deactivated.

The emergency button function, however, remains active at all times. It is also possible to retransmit the escape door locking device system status - locked or unlocked - via a relay output.

# Escape door locking device for doors with direction of escape from both ways (bidirectional escape route)

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled

and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

	STAND-ALONE	NETWORKED
Performance characteristics	FT Plus	FT Plus
Control terminal with integrated controls and mains adapter		
Seperate control/mains adapter	Yes	Yes
Control inputs (e.g. fire alarm system, burglary alarm system)	4 x	4 x
Relay outputs (e.g. alarm)	4 x	4 x
Locking elements	2 x EDS, 2 x HM	2 x EDS, 2 x HM
Connection to control panel/visual display/OPC		Yes
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	Yes	Yes

	STAND-ALONE	NETWORKED	
System components	FT Plus	FT Plus	
Control Unit 720-40	X	Х	
Mains Adapter 1003-24-1	X	Х	
Door Terminal 1380-15	X	Х	
Adapter Cable 1385EVL5 and Adapter Terminal Board 1385EAP for use with 1380-15	•	•	
Escape Door Strike 332.80	X	X	
Escape Door Strike 331U80	•	•	
Latch Lock 807	X	x	
Door Contact 10380A for two-leaf doors	X	X	
Lock 309X + striking plate			
Fitting in compliance with EN 179 (handle/handle)	X	X X	
	X	Α	
ASSA ABLOY Solution Code	FTT009SE1	FTT009VE1	

**x** = required system components, • = can be used as an alternative, **EDS** = escape door strike, **HM** = holding magnet

#### **Planning documents**

# Escape door locking device for nursery schools with Mediator exit device and authorised access using access control system

#### System overview:

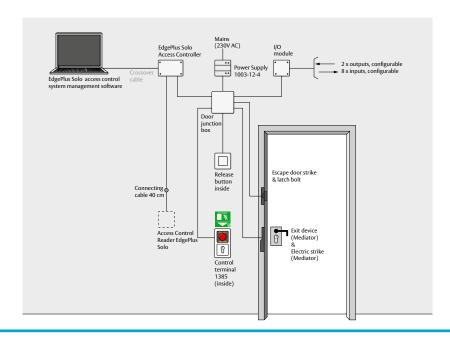


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### Locking device in direction of escape

Doors are also secured by an electric locking element (escape door strike). The locking element is powered and controlled via the escape door control terminal. The door can be released at any time using the emergency button, even by children. An audible and optical alarm is also triggered at the same time. After the alarm interval has elapsed, a continual guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

#### Authorised usage

The door is authorised for use from the inside using a release button, which is installed at a height of about 1.80 m and thus cannot be reached by children. An electric access control system (card reader) which releases the escape door locking device while unlocking the exit device at the same time is installed to gain authorised entry from the outside.

The management software enables you to issue different access authorisations. Parents thus gain entry during drop-off and pick-up times only, whereas nursery staff are authorised at all times.

#### **Burglary protection and panic function**

The exit device offers burglary protection and controlled access from the outside. The lock is released using a special electric strike (Mediator). The door can be used in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking). No wiring is required in the door leaf with the Mediator solution.

#### Monitoring of door release interval

The time that the door is open is monitored when it is released temporarily using a button or card reader. A reminder signal (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. This prevents the door from being open for a long period of time and ensures children are not able to leave the premises unnoticed.

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.

### Interconnection with fire alarm system or burglary alarm

Several inputs and outputs are available for connecting a fire alarm system or burglary alarm system in the FT Plus 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.

If the burglar alarm is set, the escape door locking device is secured and all local release mechanisms, such as buttons and access control units, are deactivated. The emergency button function, however, remains active at all times.

It is also possible to retransmit the escape door locking device system status - 'locked' or 'unlocked' - via a relay output.

## Escape door locking device for nursery schools with Mediator exit device and authorised access using access control system

#### **System components/variations**

FT Plus systems feature more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the FT Manager software.

	STAND-ALONE		
Performance characteristics	FT Basic	FT Plus	
Control inputs (e.g. fire alarm system, burglary alarm system)	None	8 x	
Relay outputs (e.g. alarm or system status)	None	2 x	
Locking elements	Max. 2 x EDS	Max. 2 x EDS	
Parameterisation using FT Manager software		Yes	
Mediator available as a mechanical multi-point lock	Yes	Yes	
Max. no. of persons to be managed	1,000	1,000	

	ST	AND-ALONE	
System components	FT Basic	FT Plus	
Control Terminal 1384-11 (without mains adapter)	Х		
Control Terminal 1385-11 (without mains adapter)		Х	
I/O Module 901-20		Х	
Mains Adapter 1003-12-4	Х	X	
Escape Door Strike 332.80 12V	X	X	
Escape Door Strike 331U80 12V	•	•	
Latch Lock 807	Х	X	
Mediator Lock 609	X	Х	
Mediator Electric Strike, 12V	Х	Х	
Fitting in compliance with EN 179 (front door furniture)	Х	Х	
Fitting in compliance with EN 1125 (panic bar)	•	•	
Release button, inside	X	X	
System EdgePlus 481-20 consisting of Access Controller ES 400 + Access Control Reader R10	Х	х	
ID Cards 470-5-1IC00	Х	Х	
Key Tag 470-5-2-IC000	•	•	
ASSA ABLOY Solution Code	FTT010SB1	FTT010SE1	

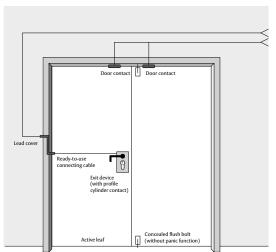
 $\mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{EDS} = \text{escape door strike}, \mathbf{HM} = \text{holding magnet}$ 

#### Planning documents

#### FTT011

# Door monitoring system with electrically monitored exit device (profile cylinder) and authorised access using key

#### **System overview:**



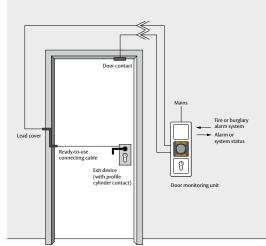


Diagram Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### **Burglary protection and panic function**

The mechanical exit device offers burglary protection and controlled access from the outside. Its latch and bolt can be drawn back using the profile cylinder in the lock (so-called transmission function).

The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking). A lead cover with clamp-plug connection technology enables the door to be dismantled completely, for maintenance, for example.

#### Door monitoring unit

Unlike an escape door locking device where the door is secured with an additional electric locking element, this system monitors the door status using a door contact, i.e. the door is not locked in the direction of escape. However, if the door is opened using the key switch without identification, the alarm is activated.

#### Authorised access using key

The secured door is authorised for use in the direction of escape using a key in the key switch integrated into the door monitoring unit. The key switch can also be used to set the door to permanent release, to secure the door and to deactivate the alarm. When entering against the direction of escape, the lock is released via the profile cylinder in the lock (so-called transmission function). The door monitoring system is also released for a short time by the integrated cylinder contact.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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 secured.

# Door monitoring system with electrically monitored exit device (profile cylinder) and authorised access using key

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature more inputs and outputs than the FT Basic version.

	STAND	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus	
Door monitoring system with integrated controls and mains adapter	Yes	Yes	Yes	Yes	
Seperate control/mains adapter					
Control inputs (e.g. timer switch)	1 x	9 x	1 x	9 x	
Relay outputs (e.g. alarm, door status)	1 x	3 x	1 x	3 x	
Connection to control panel/visual display/OPC			Yes	Yes	
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	Yes	Yes	Yes	Yes	
Version available for two-leaf doors	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	

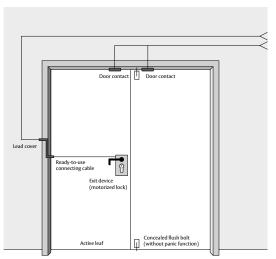
	STA	AND-ALONE	NE	NETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Door Monitoring Unit 1385T11N (with mains adapter)	Х	Х	Х	Х	
I/O Module 901-20		X		Х	
Door Contact 1,380A	X	Х	X	X	
Lock 409X + striking plate + connection cable	X	X	X	X	
Fitting in compliance with EN 179 (front door furniture)	X	X	X	X	
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•	
Lead cover 10314-20 (pluggable)	X	X	X	X	
ASSA ABLOY Solution Code	FTT011SB1	FTT011SE1	FTT011VB1	FTT011VE1	

 $<sup>\</sup>mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{EDS} = \text{escape door strike}, \mathbf{HM} = \text{holding magnet}$ 

#### **Planning documents**

# Door monitoring system with electric exit device (motorised lock) and authorised access using access control system

#### **System overview:**



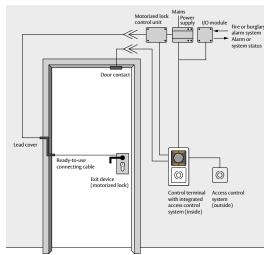


Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### **Burglary protection and panic function**

The motorized lock offers burglary protection and controlled access from the outside. The motorized system also retracts or releases the bolt and latch. The door can be opened in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Door monitoring unit

Unlike an escape door locking device where the door is secured with an additional electric locking element, this system monitors the door status using a door contact, i.e. the door is not locked in the direction of escape. However, if the door is opened using the key switch without identification, the alarm is activated.

## Authorised entry using integrated access control system

An electric access control system (card reader, access code or similar) is installed on the inside and outside to provide authorised access. This means the access control system can be integrated into the escape door control terminal in place of the key switch and carry out the temporary release, permanent release,

securing and alarm resetting functions. The door monitoring system is released and the motorized lock is unlocked in the case of authorised entry (temporary release) against the direction of escape or permanent release.

The lock is powered and controlled via the door monitoring system or an external mains adapter. In the event of a failure in the access control system, authorised entry, permanent release/relocking and alarm deactivation are actuated via the profile cylinder or the integrated cylinder contact in the lock.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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 secured.

# Door monitoring system with electric exit device (motorised lock) and authorised access using access control system

#### System components/variations

These stand-alone systems are used to secure individual, self-contained doors. The network-ready solutions are fitted with a bus interface and can be controlled and managed on a control panel or using visual display software (see section on 'Solutions for central operation/display').

FT Plus systems feature more inputs and outputs than the FT Basic system.

	STAND	STAND-ALONE		NETWORKED	
Performance characteristics	FT Basic	FT Plus	FT Basic	FT Plus	
Door monitoring system with integrated controls and mains adapter					
Remote controls/mains adapter	Yes	Yes	Yes	Yes	
Control inputs	None	8 x	None	8 x	
Relay outputs (e.g. alarm, door status)	None	2 x	None	2 x	
Connection to control panel/visual display/OPC			Yes	Yes	
Parameterisation possible using 'FT Manager' software in connection with Bus Controller 970-TSBC-20	Yes	Yes	Yes	Yes	
Version available for two-leaf doors	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	Yes (partially panic)	
Version available with lock as multi-point lock	Yes (519)	Yes (519)	Yes (519)	Yes (519)	

	STAND MONE		•••		
	STA	AND-ALONE	NI	ETWORKED	
System components	FT Basic	FT Plus	FT Basic	FT Plus	
Door Monitoring Unit 1385T11 (without mains adapter)	Х	Х	Х	Х	
I/O Module 901-20		X		Х	
Mains Adapter 1003-24-1	Х	Х	Х	X	
Door Contact 1,380A	Х	Х	X	X	
Lock 509X + striking plate + connection cable	X	Х	X	Х	
Motorized lock control unit	Х	X	X	X	
Smoke protection switch on fire retardant doors	•	•	•	•	
Fitting in compliance with EN 179 (front door furniture)	X	Х	Х	Х	
Fitting in compliance with EN 1125 (panic bar)	•	•	•	•	
Lead cover 10312-20	Х	Х	Х	Х	
ASSA ABLOY Solution Code	FTT012SB1	FTT012SE1	FTT012VB1	FTT012VE1	

 $\mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{EDS} = \text{escape door strike}, \mathbf{HM} = \text{holding magnet}$ 

#### **Planning documents**

# Escape door locking device for nursery schools with electric strike

#### **System overview:**

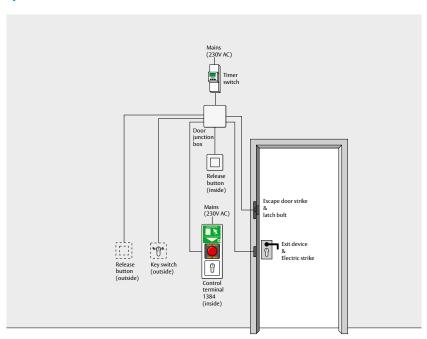


Diagram Diagram shows stand-alone version in an FT Plus design

#### **Function:**

#### Locking device in direction of escape

Doors are also secured by an electric locking element (escape door strike). The locking element is powered and controlled via the escape door control terminal. The door can be released at any time using the emergency button, even by children. An audible and optical alarm is also triggered at the same time. After the alarm interval has elapsed, a continual guidance signal is emitted to make it easier to find the exit if there is thick smoke, for example.

#### **Authorised usage**

The door is authorised for use from the inside using a release button, which is installed at a height of about 1.80 m and thus cannot be reached by children. A release button which releases the escape door locking device while unlocking the door strike in the main door at the same time is also installed to gain authorised entry from the outside. This button is activated by a timer switch during drop-off and pick-up times only. Outside these hours, entry can be gained using the outside key switch.

#### Monitoring of door release interval

The time that the door is open is monitored when it is released temporarily using a button or key switch. A reminder signal (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. This prevents the door from being open

for a long period of time and ensures children are not able to leave the premises unnoticed.

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.

## Interconnection with fire alarm system or burglary alarm

Several inputs and outputs are available for connecting a fire alarm system or burglary alarm system in the FT Plus 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.

If the burglar alarm is set off, the escape door locking device is secured and all local release mechanisms, such as buttons and key switches, are deactivated. The emergency button function, however, remains active at all times.

It is also possible to retransmit the escape door locking device system status - 'locked' or 'unlocked' - via a relay output.

# Escape door locking device for nursery schools with electric strike

#### **System components/variations**

FT Plus systems feature more inputs and outputs than the FT Basic version and can be easily parameterised in detail using the FT Manager software.

STAND-ALON
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lana.	
None	8x
None	2x
Max. 2 x EDS	Max. 2 x EDS

#### STAND-ALONE

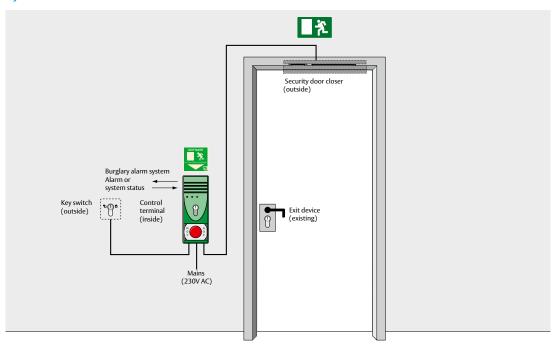
System components	FT Basic	FT Plus		
Control Terminal 1384-11N (with mains adapter)	Х			
Control Terminal 1385-11 (without mains adapter)		Х		
I/O Module 901-20		Х		
External Mains Adapter 1003-24-1		Х		
Escape Door Strike 332.80 (24V)	X	X		
Escape Door Strike 331U80 (24V)	•	•		
Latch Lock 807	Х	Х		
Electric Strike 11805 (24V), coil version	Х	X		
Button inside	X	X		
Button outside	Х	Х		
Outside Key Switch 1140-1X	Х	Х		
Timer Switch (weekly schedule) 2032-10	Х	Х		
Timer Switch (annual schedule) 2035-10	•	•		
ASSA ABLOY Solution Code	FTT013SB1	FTT013SE1		

 $<sup>\</sup>mathbf{x} = \text{required system components}$ ,  $\bullet = \text{can be used as an alternative}$ ,  $\mathbf{EDS} = \text{escape door strike}$ ,  $\mathbf{HM} = \text{holding magnet}$ 

#### **Planning documents**

### Escape door locking device for retrofitting to fire doors

#### **System overview:**



#### **Function:**

#### Retrofitting in fire doors

According to the latest information by the German Institute for Building Technology (DIBT), it is no longer generally permitted to retrofit electric locking elements to fire doors. Since January 2010, the option of retrofitting holding magnets or similar devices must already be specified for new approvals in document A of a door's approval and suitable fastening points must be provided, thus making a retrofit considerably more difficult

The security door closer uses the standardised fastening points that are often already in place (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 contravening the door's approval.

#### Locking in the direction of escape

The door is also secured by the door closer with integrated escape route locking system, allowing it to be locked in the direction of escape. The locking element 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 reset using the key button on the door terminal.

#### Authorised access using a key

Authorised access in the direction of escape is gained using a key in the key switch 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 outside key button is used to enter against the direction of escape.

The exit device 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 a 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.

#### Interconnection 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.

### FTT014 Escape door locking device for retrofitting to fire doors

#### **System components/variations**

These stand-alone systems can be used to secure individual, self-contained doors - the network-ready solutions have a bus interface and can be controlled and managed on a control panel or using visual display software.

(see section entitled "Solutions for central operation/ display" in the escape route technology catalogue).

	STAND-ALONE	NETWORKED
Performance characteristics	FT Basic	FT Basic
Control terminal with integrated controls and mains adapter	Yes	Yes
Seperate control/mains adapter		
Control inputs (e.g. fire alarm system, access control)	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 control panel/visual display/OPC		Yes

	STAND-ALONE	NETWORKED
System components	FT Basic	FT Basic
Control Terminal 1338-14/15 with mains adapter	Х	
Control Terminal 1338-20/21 with mains adapter		X
Key Switch 1140-10/11	Х	Х
Security Door Closer DC700G-FT	X	X
Mounting Plate DCFAxx	•	•
ASSA ABLOY Solution Code	FTT014SB1	FTT014VB1

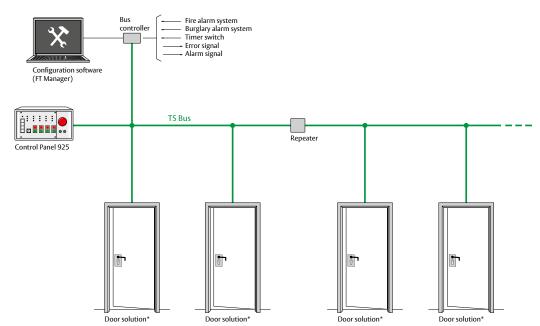
 $\mathbf{x}$  = required system components, ullet = can be used as an alternative

#### **Planning documents**

### FTV001

## Networked system with control panel for up to 70 doors

#### **System overview:**



\* Consult the 'Door solutions' section for system equipment on individual doors.

#### **Functionality:**

### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000 m long. Repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000 m with each repeater.

A control panel can be used to manage up to 70 doors. The bus controller serves as the central interface with adjacent systems and as a connection to the configuration software.

#### Displays on the control panel

Three LEDs (red, green, yellow) signal the door statuses 'locked', 'unlocked', 'temporarily unlocked' and 'alarm'. An alarm status is also signalled by an integrated buzzer.

#### Control using the control panel

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door.

There are two control keys to carry out each of these functions. All doors can also be locked or unlocked together at the same time using a central button. All the aforementioned control functions can be blocked using the integrated key switch. Alternatively, the system can also be blocked using an external key switch with a profile cylinder or an external card reader. An optional emergency button can be used to unlock all doors in an emergency.

#### **Parallel panels**

The system can be extended to integrate up to ten control panels in addition to the main panel. These can be used to display status, control functions and manage doors in smaller, subordinate sections.

## Networked system with control panel for up to 70 doors

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock protocols between different doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the remaining doors in the corresponding interlock group are blocked. A blocked door can be opened using the emergency button in the event of an emergency.

Performance characteristics	NETWORKED
Maximum number of bus devices in the bus system	70
Central inputs	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs	3 x (e.g. alarm, error)
Maximum length of bus system line	1,000 m (can be extended using repeaters)

System components	NETWORKED
Control Panel 925	Х
Mains Adapter 1001-24-1	X
Bus Controller 970-TSBC-20 (FT Manager included)	X
Mains Adapter 470-9-2-0300	X
Repeater 901-35	X
Mains Adapter 1001-12-1	X
ASSA ABLOY Solution Code	FTV001

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

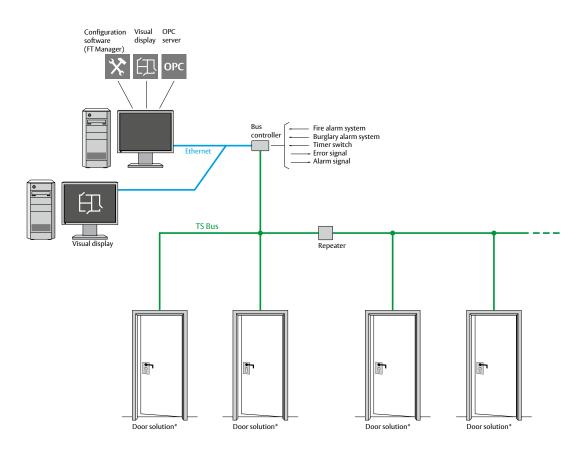
#### **Planning documents**

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

### FTV002

## Networked system with visual display software / OPC server for up to 110 doors

#### System overview:



\* Consult the 'Door solutions' section for system equipment on individual doors.

#### **Functionality:**

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000 m long. Repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000 m with each repeater.

The Visual Display Software WEB FT can be used to manage up to 110 doors. Here, the bus controller acts as an interface with adjacent systems and is also used to connect to the PC.

#### Visual display using the WEB FT software

This software offers two display modes:

- 1.Floor plan display, where building floor plans are integrated into the software user interface. The status of individual doors 'unlocked', 'temporarily unlocked' and 'alarm' is displayed using colour-coded buttons in red, green or yellow for each door.
- 2.Display in table format where the individual buttons are laid out in a table (without a floor plan) on the software user interface.

Door statuses are also displayed on colour-coded buttons in this format.

The door status is also displayed in text for both formats and an alarm status is also signalled over the PC loudspeaker.

#### Control using the WEB FT software visual display

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door. The system is operated intuitively using virtual operational elements which simulate the actual devices they correspond to. All actions are also logged in a log window. The user administration function can be used to deactivate the controls.

#### Further operator stations

Additional operator stations can be used to extend the system and offer parallel display, control and management functions for smaller, subordinate sections in the system.

#### Data exchange via OPC server

The OPC server software provides all system statuses (door statuses, alarms) as OPC data points, so statuses can be transmitted to central building control systems using the OPC standard. It is also possible to receive control commands (such as lock or unlock) from higher level systems.

### **FTV002**

## Networked system with visual display software / OPC server for up to 110 doors

#### **Functionality**

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock dependencies between individual doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the rest of the doors in the corresponding interlock group are blocked.

A blocked door can be opened using the emergency button in the event of an emergency.

Performance characteristics	NETWORKED
Maximum number of bus devices in the bus system	110
Central inputs	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs	3 x (e.g. alarm, error)
Maximum length of bus system line	1 000 m (can be extended using repeaters)

System components	NETWORKED
Bus Controller 970-TSBC-20 (FT Manager included)	X
Mains Adapter 470-9-2-0300	X
Repeater 901-35	X
Mains Adapter 1001-12-1	X
Visual Display Software WEB FT	X
OPC Server Software	•
ASSA ABLOY Solution Code	FTV002

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

### **Planning documents**

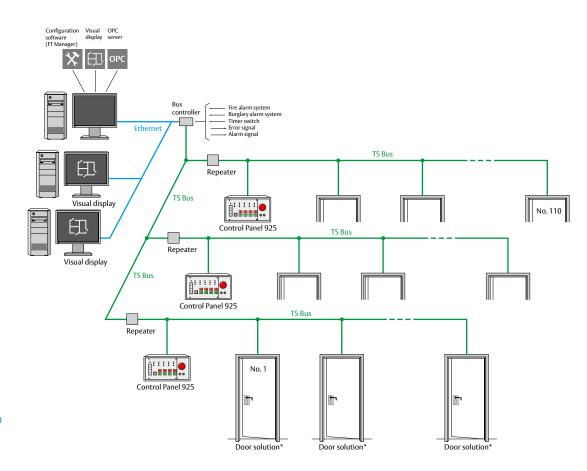
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### **FTV003**

## Networked system with visual display software / OPC and subordinate panels for up to 110 doors

#### System overview:



\* Consult the 'Door solutions' section for system equipment on individual doors.

#### **Functionality:**

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000 m long and repeaters can be used to cover longer distances. These can also be used to disconnect

different sub-sections, i.e. if there is a bus failure or short circuit in a particular sub-section, the other subsections are unaffected and the bus system function is maintained.

Visual Display Software WebFT can be used to manage up to 110 doors. Here, the bus controller acts as an interface with adjacent systems and is also used to connect to the PC.

#### Visual display and control using the WEB FT software

The visual display software serves as a central, crossdepartmental operation point for all doors. It offers two display modes for this purpose:

1.Floor plan display, where building floor plans are integrated into the software software user interface. The status of individual doors - 'unlocked', 'temporarily unlocked' and 'alarm' - is displayed using colourcoded buttons in red, green or yellow for each door. 2. Display in table format where the individual buttons are laid out in a table (without a floor plan) on the software user interface. Door statuses are also displayed on colour-coded buttons in this format.

The door status is also displayed in text for both formats and an alarm status is also signalled over the PC loudspeaker.

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door. The system is operated intuitively using virtual operational elements which simulate the actual devices they correspond to. All actions are also logged in a log window. The user administration function can be used to deactivate the controls.

Additional operator stations can be used to extend the system and offer parallel display and control functions.

### FTV003

## Networked system with visual display software / OPC and subordinate panels for up to 110 doors

#### **Functionality**

#### Displays and controls using the control panel

Control panels are used to control subordinate sections. Three LEDs (red, green, yellow) signal the door statuses 'locked', 'unlocked', 'temporarily unlocked' and 'alarm'. An alarm status is also signalled by an integrated buzzer.

The software can be used to control the lock, unlock and temporary unlock functions on each door. There are two control keys to carry out each of these functions. All doors can also be locked or unlocked together at the same time using a central button. All the aforementioned control functions can be blocked using the integrated key switch. Alternatively, the system can also be blocked using an external key switch with a profile cylinder or an external card reader. An optional emergency button can be used to unlock all doors in an emergency.

#### Data exchange via OPC server

The OPC server software provides all system statuses (door statuses, alarms) as OPC data points, so statuses can be transmitted to central building control systems using the OPC standard. It is also possible to receive control commands (such as lock or unlock) from higher level systems.

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock protocols between different doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the rest of the doors in the corresponding interlock group are blocked. A blocked door can be opened using the emergency button in the event of an emergency.

Performance characteristics	NETWORKED
Maximum number of bus devices in the bus system	110
Central inputs (bus controller)	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs (bus controller)	3 x (e.g. alarm, error)
Central inputs (control panel)	3 x (fire alarm system, burglary alarm system, timer switch)
Central outputs (control panels)	2 x (alarm, error)
Maximum length of bus system line	1,000 m (can be extended using repeaters)

System components	NETWORKED	
Bus Controller 970-TSBC-20 (FT Manager included)	Х	
Mains Adapter 470-9-2-0300	X	
Control Panel 925	X	
Mains Adapter 1001-24-1	X	
Repeater 901-35	X	
Mains Adapter 1001-12-1	X	
Visual Display Software WEB FT	X	
OPC Server Software	•	
ASSA ABLOY Solution Code	FTV003	

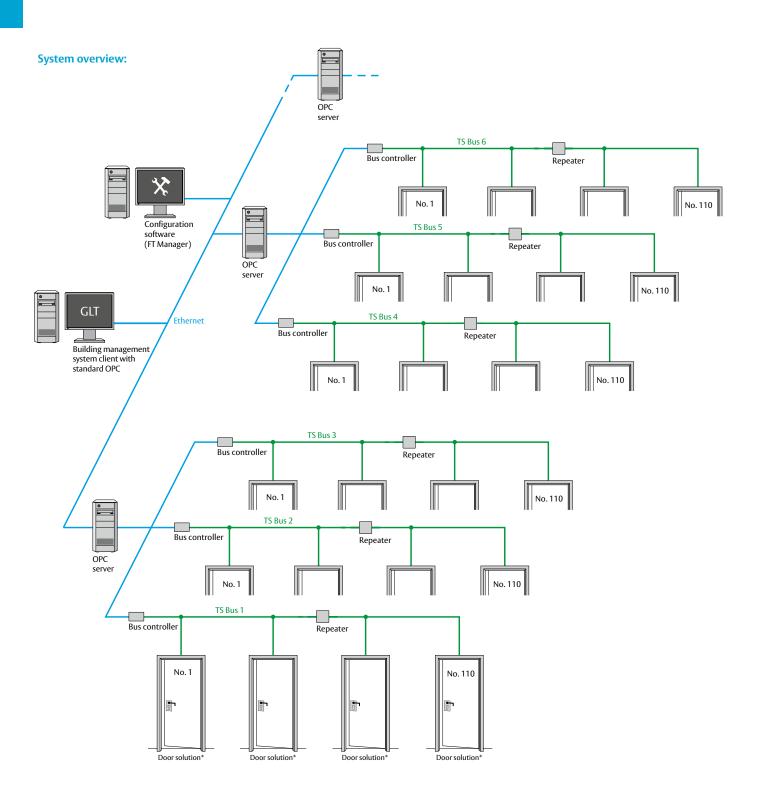
x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

**Planning documents:** We will gladly provide assistance. Indicate the corresponding ASSA ABLOY Solution Code, so that we can help you.

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### **FTV004**

Networked system with data exchange via an OPC server for large premises with up to 1,000 doors



<sup>\*</sup> Consult the 'Door solutions' section for system equipment on individual doors.

### FTV004

## Networked system with data exchange via an OPC server for large premises with up to 1,000 doors

#### **Functionality:**

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000 m long. Repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000 m with each repeater.

#### Data exchange via OPC server

The OPC server software provides all system statuses (door statuses, alarms) as OPC data points, so statuses can be transmitted to central building control systems using the OPC standard. It is also possible to receive control commands (such as lock or unlock) from higher level systems.

To do so, several bus systems, each with 110 doors, are grouped together via an OPC server. An Ethernet connection allows users to access the OPC server from the client PC and thus also access OPC data points corresponding to individual doors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

Performance characteristics	NETWORKED
Maximum number of bus devices in the bus system	110
Central inputs (bus controller)	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs (bus controller)	3 x (e.g. alarm, error)
Maximum length of bus system line	1,000 m (can be extended using repeaters)

System components	NETWORKED
Bus Controller 970-TSBC-20 (FT Manager included)	Х
Mains Adapter 470-9-2-0300	Х
Repeater 901-35	X
Mains Adapter 1001-12-1	Х
OPC Server Software	Х
ASSA ABLOY Solution Code	FTV004

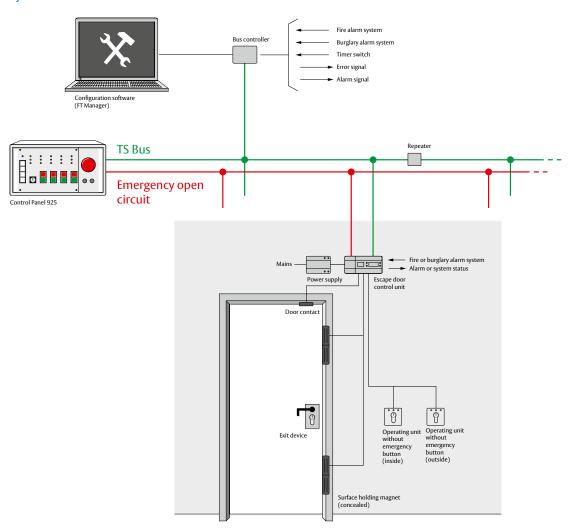
 $\mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{FAS} = \text{fire alarm system}, \mathbf{BAS} = \text{burglary alarm system}, \mathbf{TS} = \text{timer switch}$ 

#### **Planning documents**

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

Solution with no emergency button on door (psychiatric units, forensics departments and similar)

#### System overview:



## Solution with no emergency button on door (psychiatric units, forensics departments and similar)

#### **Function:**

#### Securing in the direction of escape

The door is also secured in the direction of escape by concealed, surface holding magnets (each with a holding force of 2,500N). The holding magnets are powered and controlled via the escape door control terminal. There is no emergency button on the door for reasons of safety and security. In the event of an emergency, the door is released using a central emergency button.

Please note that authorisation is always required from the relevant authorities in each individual case if no emergency button is fitted to the door. Such circumstances normally require a central control point which is manned at all times and from which the escape route doors concerned can be viewed.

## Central released via emergency button/emergency open circuit

Door release using the central emergency button is activated through an emergency open circuit and special safety relay modules, which ensure a safety-relevant interruption in the mains adapter to locking elements.

Up to eighteen doors can be integrated into an emergency open circuit.

#### Authorised access using key

Authorised access through secured doors is gained by inserting a key in the key switch. The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

#### Displays on the control panel

Three LEDs (red, green, yellow) signal the door statuses 'locked', 'unlocked', 'temporarily unlocked' and 'alarm'. An alarm status is also signalled by an integrated buzzer.

#### Control using the control panel

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door.

There are two control keys to carry out each of these functions. All doors can also be locked or unlocked together at the same time using a central button. All the aforementioned control functions can be blocked using the integrated key switch. Alternatively, the system can also be blocked using an external key switch with a profile cylinder or an external card reader.

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock dependencies between individual doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the rest of the doors in the corresponding interlock group are blocked.

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000 m long and repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000m with each repeater.

A control panel can be used to manage up to 70 doors. The bus controller serves as the central interface with adjacent systems and as a connection to the configuration software.

# Solution with no emergency button on door (psychiatric units, forensics departments and similar)

#### Performance characteristic

On the door	
Control inputs (e.g. fire alarm system, burglary alarm system)	4 x
Relay outputs (e.g. alarm)	4 x
Locking elements	4 x HM
Central system	
Max. number of doors in emergency open circuit	18 (extendable)
Central inputs	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs	3 x (e.g. alarm, error)
Maximum length of bus system line	1,000m (can be extended using repeaters)

#### **System components**

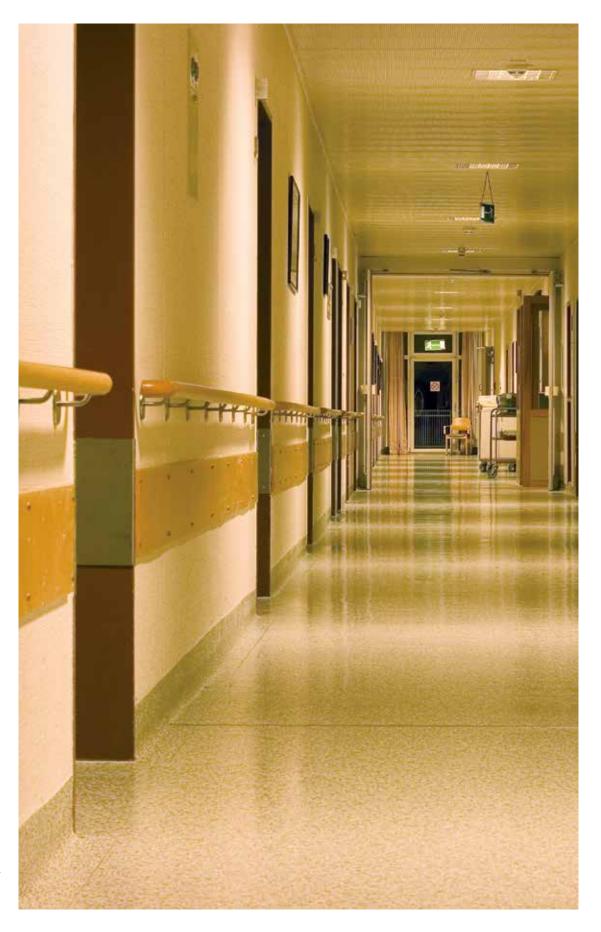
On the door	
Control Unit 720-42	Х
Mains Adapter 1003-24-1/1003-24-2	Х
Key Switch 1332-10/11 (robust design)	X
Key Switch 1380E03 (lightweight design, switch range)	•
Concealed Surface Holding Magnet 827HA	X
Door Contact 10380A	X
Central system	
Control Panel 925 with emergency button	X
Mains Adapter 1001-24-1 (control panel)	X
Mains Adapter 1003-24-2 (emergency open circuit)	X
Bus Controller 970-TSBC-20 (FT Manager included)	X
Mains Adapter 470-9-2-0300	X
Repeater 901-35	X
Mains Adapter 1001-12-1	Х
ASSA ABLOY Solution Code	FTS001

 $<sup>\</sup>mathbf{x} = \text{required system components}, \bullet = \text{can be used as an alternative}, \mathbf{FAS} = \text{fire alarm system}, \mathbf{BAS} = \text{burglary alarm system}, \mathbf{TS} = \text{timer switch}$ 

### Planning documents

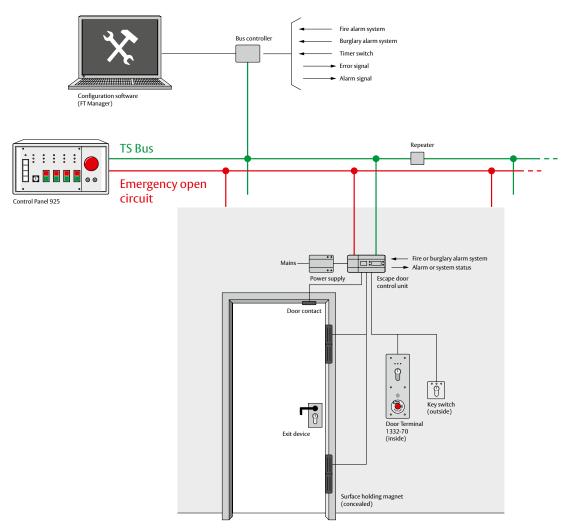
We will gladly provide assistance. Indicate the corresponding ASSA ABLOY Solution Code, so that we can help you.

Solution with emergency call function on emergency button on door (psychiatric units, forensics departments and similar)



Solution with emergency call function on emergency button on door (psychiatric units, forensics departments and similar)

#### System overview:



## Solution with emergency call function on emergency button on door (psychiatric units, forensics departments and similar)

#### **Function:**

#### Securing in the direction of escape

The door is also secured in the direction of escape by concealed, surface holding magnets (each with a holding force of 2,500N). The holding magnets are powered and controlled via the escape door control terminal. There is no emergency button on the door for reasons of safety and security. In the event of an emergency, the door is released using a central emergency button.

The emergency button serves an emergency function to trigger an alarm at the door and at the control point only.

Please note that authorisation is always required from the relevant authorities in each individual case if no emergency button is fitted to the door. Such circumstances normally require a central, permanently manned control point from which the escape route doors concerned can be viewed.

## Central released via emergency button/emergency open circuit

Door release using the central emergency button is activated through an emergency open circuit and special safety relay modules, which ensure a safety-relevant interruption in the mains adapter to locking elements.

Up to eighteen doors can be integrated into an emergency open circuit.

#### Authorised access using key

Authorised access through secured doors is gained by inserting a key in the key switch. The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm.

#### Monitoring of door release interval

The time that the door is open is monitored during temporary release. A reminder signal, also known as a 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.

#### Displays on the control panel

Three LEDs (red, green, yellow) signal the door statuses 'locked', 'unlocked', 'temporarily unlocked' and 'alarm'. An alarm status is also signalled by an integrated buzzer.

#### Control using the control panel

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door.

There are two control keys to carry out each of these functions. All doors can also be locked or unlocked together at the same time using a central button. All the aforementioned control functions can be blocked using the integrated key switch. Alternatively, the system can also be blocked using an external key switch with a profile cylinder or an external card reader.

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock dependencies between individual doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the rest of the doors in the corresponding interlock group are blocked.

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000m long and repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000m with each repeater.

A control panel can be used to manage up to 70 doors. The bus controller serves as the central interface with adjacent systems and as a connection to the configuration software.

## Solution with emergency call function on emergency button on door (psychiatric units, forensics departments and similar)

#### Performance characteristics

On the door	
Control inputs (e.g. fire alarm system, burglary alarm system)	4x
Relay outputs (e.g. alarm)	4x
Locking elements	4×HM
Central system	
Max. number of doors in emergency open circuit	18 (extendable)
Central inputs	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs	3 x (e.g. alarm, error)
Maximum length of bus system line	1,000m (can be extended using repeaters)

#### **System components**

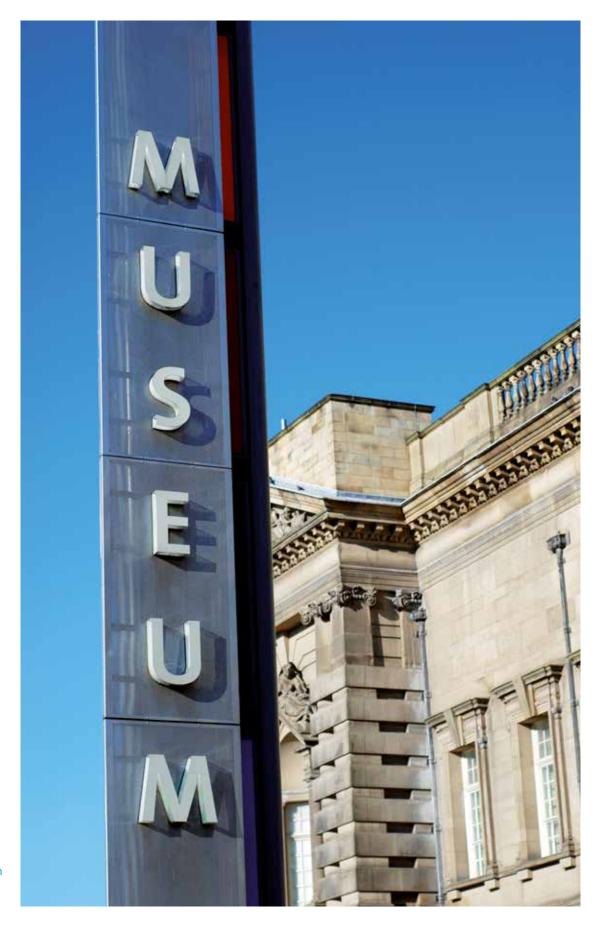
On the door	
Control Unit 720-42	X
Mains Adapter 1003-24-1/1003-24-2	X
Door Terminal 1332-70 (robust design)	X
Door Terminal 1337-10/11 (lightweight design)	•
Concealed Surface Holding Magnet 827HA	X
Door Contact 10380A	х
Central system	
Control Panel 925 with emergency button	X
Mains Adapter 1001-24-1 (control panel)	X
Mains Adapter 1003-24-2 (emergency open circuit)	Х
Bus Controller 970-TSBC-20 (FT Manager included)	X
Mains Adapter 470-9-2-0300	х
Repeater 901-35	X
Mains Adapter 1001-12-1	Х
ASSA ABLOY Solution Code	FTS002

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

#### **Planning documents**

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Solution with delayed release in emergency button on door (museums, courts and similar)

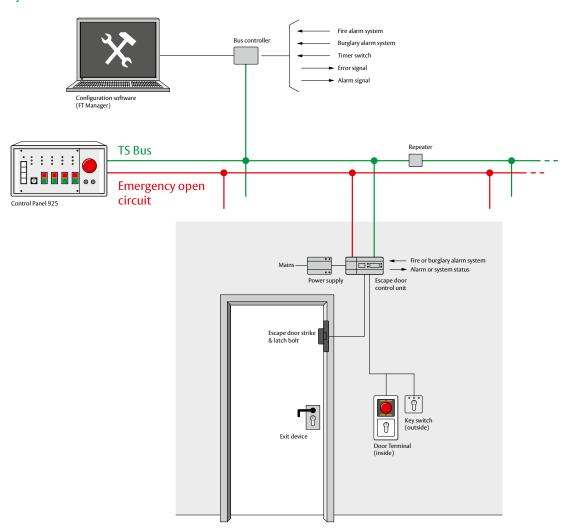


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### FTS003

# Solution with delayed release in emergency button on door (museums, courts and similar)

#### System overview:



#### **Function:**

#### **Burglary protection and panic function**

The mechanical exit device offers burglary protection and controlled access from the outside. Its latch and bolt can be drawn back using the profile cylinder in the lock (so-called transmission function).

The door can be used in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Locking device in direction of escape

The door is also secured by an electric locking element (escape door strike or surface holding magnet) in the direction of escape. If the emergency button is pressed, an alarm is triggered immediately. The door,

however, is not released until after an adjustable delay interval (1–60 seconds), which can be extended again using the control panel. Doors can be released instantly using the central emergency button in the event of an emergency.

Please note that authorisation is always required from the relevant authorities in each individual case if a delayed release function on the emergency button is fitted to the door. Such circumstances normally require a central, permanently manned control point from which the escape route doors concerned can be viewed.

## Solution with delayed release in emergency button on door (museums, courts and similar)

#### **Function:**

## Central released via emergency button/emergency open circuit

Door release using the central emergency button is activated through an emergency open circuit and special safety relay modules, which ensure a safety-relevant interruption in the mains adapter to locking elements. Up to eighteen doors can be integrated into an emergency open circuit.

#### Authorised access using key

A key is used in the key switch integrated into the escape terminal to gain authorised access in the direction of escape.

The key switch can also be used to set the door to permanent release, to re-lock and to deactivate the alarm. The outside key switch is used to enter against the direction of escape. The exit device also needs to 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 a 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.

#### Displays on the control panel

Three LEDs (red, green, yellow) signal the door statuses 'locked', 'unlocked', 'temporarily unlocked' and 'alarm', and also warn that the delay interval is about to end ten seconds before it finishes.

An alarm status is also signalled by an integrated buzzer.

#### Control using the control panel

The software can be used to control the 'lock', 'unlock' and 'temporary unlock' functions on each door and reactivate the time interval for delayed release. There are two control keys to carry out each of these functions. All doors can also be locked or unlocked together at the same time using a central button.

All the aforementioned control functions can be blocked using the integrated key switch. Alternatively, the system can also be blocked using an external key switch with a profile cylinder or an external card reader.

#### Central inputs and outputs

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data.

#### Implementing interlock dependencies

The bus controller and the FT Manager configuration software can be used to set up interlock dependencies between individual doors, whereby doors are assigned to different interlock groups. Whenever one door is opened, the rest of the doors in the corresponding interlock group are blocked.

#### Networking via bus system

Components are networked using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000m long and repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000m with each repeater.

A control panel can be used to manage up to 70 doors. Here, the bus controller serves as the central interface with adjacent systems and as a connection to the configuration software.

# Solution with delayed release in emergency button on door (museums, courts and similar)

#### Performance characteristics

On the door	
Control inputs (e.g. fire alarm system, burglary alarm system)	4 x
Relay outputs (e.g. alarm)	4 x
Locking elements	2 x EDS/2 x HM
Max. number of doors in emergency open circuit	18 (extendable)
Central inputs	5 x (e.g. fire alarm system, burglary alarm system, timer switch)
Central outputs	3 x (e.g. alarm, error)
Maximum length of bus system line	1,000m (can be extended using repeaters)

#### **System components**

X X X	
X X	
Х	
X	
X	
•	
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FTS003	
	• X X X X X X X X X X X X X X X X X X X

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

#### **Planning documents**

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

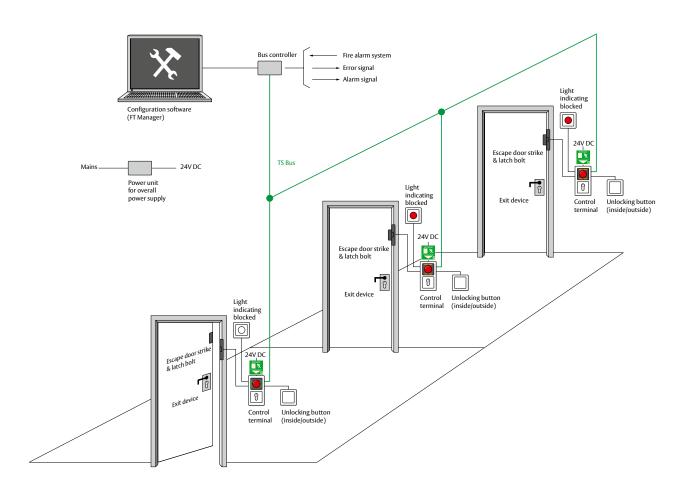
# Escape door locking device for doors with interlock function – Laboratory areas



Interlocking doors are used to segregate areas and can also ensure that there is no direct exchange of air, a prerequisite for creating clean rooms.

# Escape door locking device for doors with interlock function – Laboratory areas

#### **System overview:**



## Escape door locking device for doors with interlock function – Laboratory areas

#### **Function:**

#### Authorised access with an interlock function

Doors are equipped with panic fittings and handles on both sides. They are also secured with electric locking elements (escape door strike or surface holding magnet) to provide the interlock function. All doors are closed and locked when in their initial state. The unlocking button is pressed and the door is unlocked to release the door or gain access. The door can now be used. If a door is unlocked or opened, the interlocking door unlocking functions are deactivated and an indicator display signals that the door concerned is blocked (indicator is red). The key switch on the door control terminal can be used to deactivate the interlock function for transport or maintenance purposes. To do so, the key switch for permanent unlocking needs to be activated for five seconds. The doors are then permanently released and can be opened and used irrespective of interlocking dependencies.

#### Released using emergency button

All doors can be released using the emergency button on the door control terminal in the event of an emergency and then used irrespective of interlock dependencies. The alarm is also triggered.

#### Monitoring of door release interval

The time that the door is open is monitored when a user enters, thus preventing interlock doors from being blocked unnecessarily for a long time and hindering the normal course of day-to-day operations. A reminder signal, also known as a pre-alarm, is emitted once the max. period for door open mode 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.

#### Networking via bus system

Components are networked and the interlock dependencies are set up using an integrated 2-wire bus, which can be installed in a star-shaped, line or tree structure. The bus line can be up to 1,000m long and repeaters can be used to cover longer distances, thus enabling a bus system to be extended 1,000m with each repeater. Here, the bus controller serves as the central interface with adjacent systems and as a connection to the configuration software. Up to 110 doors can be managed in 64 groups of interlocking systems.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data. This enables interlock dependencies to be changed at a later date, for example, or allows cleaning or waiting

#### Central inputs and outputs

intervals to be established.

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

Maximum length of bus system line

# Escape door locking device for doors with interlock function – Laboratory areas

FT Basic	FT Plus
None	3x
None	3x
2 x EDS/1 x HM	2 x EDS/1 x HM
Yes	
	Yes
5x (e.g. fire alarm system)	5x (e.g. fire alarm system)
3x (e.g. alarm, error)	3x (e.g. alarm, error)
	None None 2 x EDS/1 x HM Yes  5x (e.g. fire alarm system)

1,000m (can be extended using

1,000m (can be extended using repeaters)

FTS004VE1

System components	FT Basic	FT Plus		
On the door				
Control Terminal 1385-11	Х			
Control Unit 720-40		Х		
Door Terminal 1380		Х		
Escape Door Strike 332.80	Х	Х		
Escape Door Strike 331U80	•	•		
Latch Lock 807	Х	X		
Release Button 1011	X	X		
Display 1050R	Х	X		
Central system				
Bus Controller 970-TSBC-20 (FT Manager included)	Х	Х		
Mains Adapter 470-9-2-0300	Х	Х		
Mains Adapter 1003-24-4 (as central mains adapter for up to 3 doors)	Х	Х		
Repeater 901-35	X	X		
Mains Adapter 1001-12-1	Х	Х		

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

#### **Planning documents**

ASSA ABLOY Solution Code

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

FTS004VB1

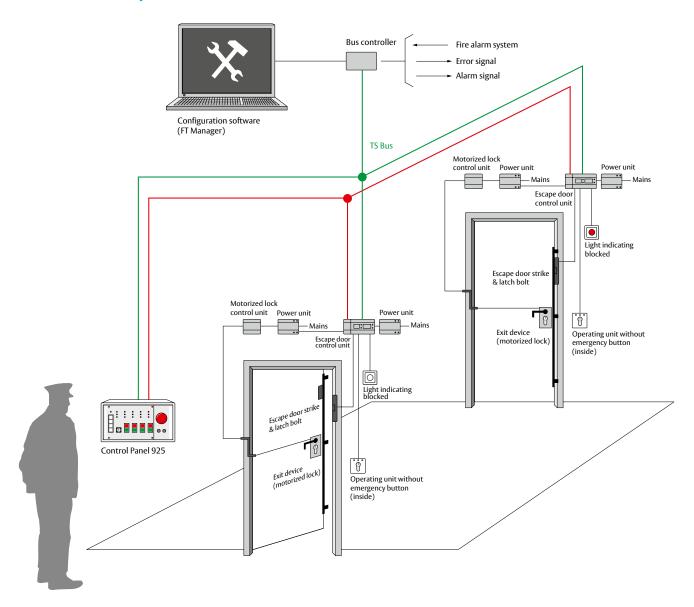
## FTS005 Escape door locking device for doors with interlock function – Security interlocks



Security interlocks offer effective protection for entrances to embassies, police stations and other sensitive areas.

# Escape door locking device for doors with interlock function – Security interlock

#### **System overview:**



## Escape door locking device for doors with interlock function – Security interlock

#### **Function:**

#### **Burglary protection and panic function**

The motorized lock offers burglary protection and controlled access from the outside. The motorized system also retracts or releases the bolt and latch. The door can be used in the direction of escape at any time using the lock's panic function. When the door is closed, the bolt extends again automatically (self-locking).

#### Authorised access with an interlock function

They are also secured with electric locking elements (escape door strike or surface holding magnet) to provide the interlock function. All doors are closed and locked when in their initial state.

In normal mode, a door is unlocked using the control panel operated by building security or using a key switch on the door or the cylinder contact in the lock at the start or end of a working day. The door can now be used. If a door is unlocked or opened, the interlock door unlocking functions are deactivated and an indicator display signals that the door concerned is blocked (indicator is red). The key switch on the door control terminal or the control panel can be used to deactivate the interlock function for transport or maintenance purposes.

To do so, the permanent unlock needs to be pressed for five seconds. The doors are then permanently released and can be opened and used irrespective of interlocking dependencies.

## Central released via emergency button/emergency open circuit

All doors can be released using the emergency button on the building security control panel in the event of an emergency and then used irrespective of interlock dependencies. The alarm is also triggered. Door release using the central emergency button is activated through an emergency open circuit and special safety relay modules, which ensure a safety-relevant interruption in the mains adapter to locking elements.

Please note that authorisation is always required from the relevant authorities in each individual case if no emergency button release function is provided on the door. Such circumstances normally require a central, permanently manned control point from which the escape route doors concerned can be viewed.

#### Monitoring of door release interval

The time that the door is open is monitored when a user enters, thus preventing interlock doors from being blocked unnecessarily for a long time andhindering the normal course of day-to-day operations. A reminder signal, also known as a pre-alarm, is emitted once the max. period for door open mode 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.

#### Networking using a bus system

Components are networked and the interlock dependencies are set up using an integrated 2-wire bus, The bus controller serves as the central interface with adjacent systems and as a connection to the configuration software.

#### Main system configuration

The web-based configuration software integrated into the bus controller, FT Manager, can be used to configure the whole system centrally and conveniently on a PC and also to save or import system data. This enables interlock dependencies to be changed at a later date, for example, or allows cleaning or waiting

#### Central inputs and outputs

intervals to be established.

The panel contains inputs for connection to adjacent systems, such as emergency release activated by the fire alarm system, locking activated by the burglar alarm system and unlocking activated by a timer. These affect all doors which are connected to the bus system. Doors can also be grouped together in sub-sections, which can each be controlled via a separate input. Doors can thus be assigned to different fire compartments in a fire alarm system or surveillance sections in a burglary alarm system. There are also relay outputs to transmit system statuses, such as alarm or errors.

# Escape door locking device for doors with interlock function – Security interlock

#### Performance characteristics

On the door	
Control inputs (e.g. fire alarm system)	3x
Relay outputs (e.g. alarm)	2x
Locking elements	2 x EDS/2 x HM
Central system	
Central inputs	5x (e.g. fire alarm system)
Central outputs	3x (e.g. alarm, error)

#### System components

system components	
On the door	
Control Unit 720-42	Х
Mains Adapter 1003-24-1	X
Key Switch 1332-10/11	Х
Display 1050R	X
Escape Door Strike 332.80	Х
Escape Door Strike 331U80	•
Latch Lock 807	X
Lock 519X + striking plate + connection cable	X
Motorized lock control unit	X
Smoke protection switch on fire retardant doors	•
Fitting in compliance with EN 179 (front door furniture)	Х
Fitting in compliance with EN 1125 (panic bar)	•
Lead Cover 10312-20	X
Central system	
Control Panel 925 with emergency button	X
Mains Adapter 1003-24-1 (panel + emergency open circuit)	X
Bus Controller 970-TSBC-20 (FT Manager included)	X
Mains Adapter 470-9-2-0300	X
ASSA ABLOY Solution Code	FTS005

x = required system components, • = can be used as an alternative, FAS = fire alarm system, BAS = burglary alarm system, TS = timer switch

#### **Planning documents**

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

# Electric door locking systems along escape routes

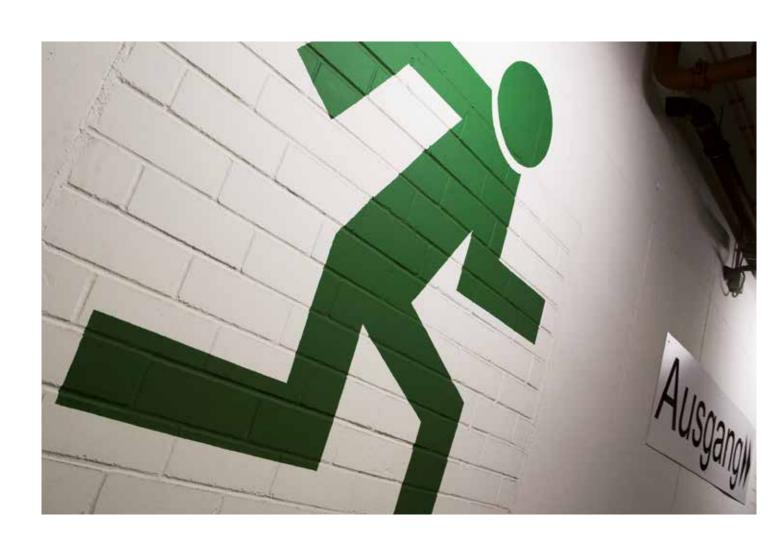
## Electric door locking systems along escape routes

It is a good idea to use additional electric locking systems when an escape door needs to be securely protected against misuse. In addition to the normal lock, a door can thus also be secured with an escape door strike or holding magnet, for instance. In the event of an emergency, the door can be opened using the emergency open 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 danger management system.

The building management 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 electric locking systems must be tested and approved in compliance with the German guideline for electric locking systems for doors along escape routes (EltVTR, Richtlinie über elektrische Verriegelungssysteme von Türen in Rettungswegen). This guideline is included in the German Building Rules List A, part 1.6.19. These items are thus regulated construction products. The electric 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 electric locking systems on escape routes, prEN 13367 and prEN 13633, which will replace the German guideline once they are published and the transition period is complete.

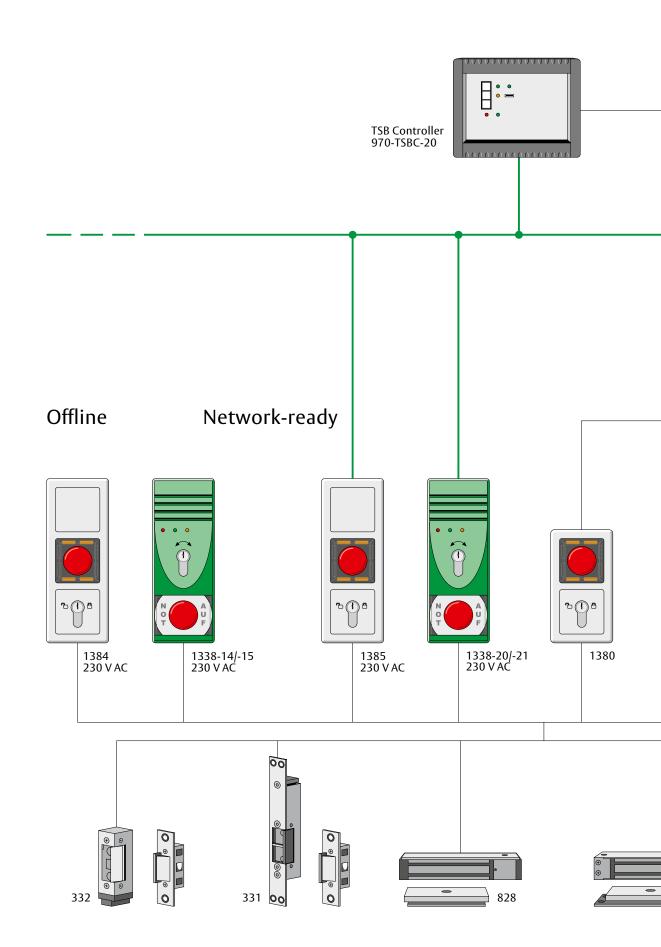
Safety standards must not only be complied with during manufacture, but must also be sustained through regular maintenance. For this reason, the building management must test the system on a monthly basis and a specialist must carry out an inspection once a year.



Electric locking devices

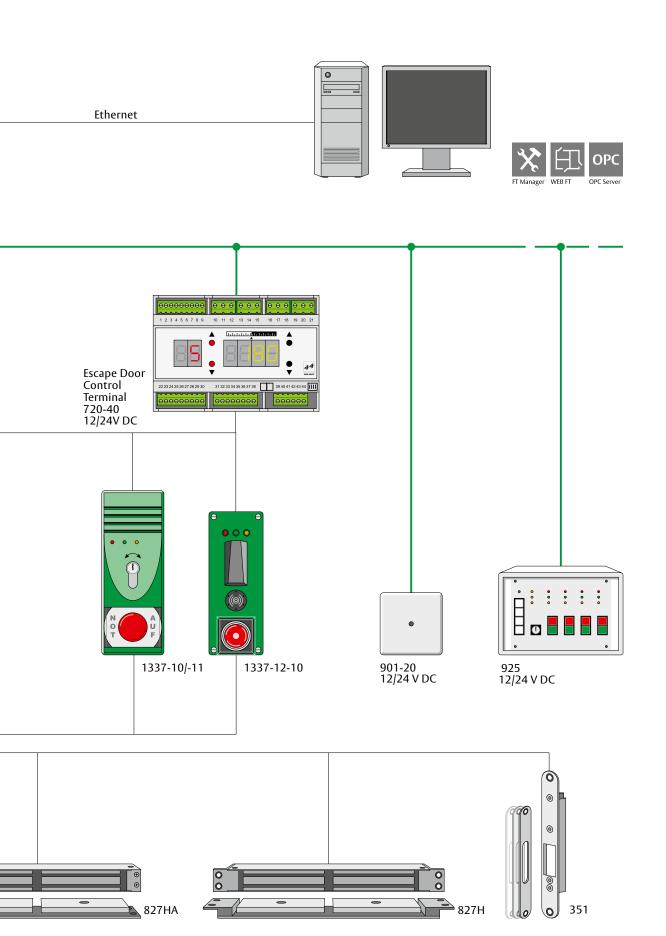
## System overview

of effeff components for electric escape door locking-systems



## System overview

# of effeff components for electric escape door locking-systems



## Overview of uses

# of effeff components for electric escape door locking-systems

		CONTROL UNITS	CONTROL TERMINALS / MODULES			
Direct release		720-40	1338-14/15/20/21 1340-14/15/20/21	1383E1N	1384E1N	1385E1N 1385E1T
Terminals						
Escape Door Terminal	1337-10/11	X	_	_	_	_
Escape Door Terminal	1337-12-10	Х	_	_	_	_
Escape Door Terminal	1370-10	Х	_	_	_	_
Escape Door Terminal	1380¹	Х	_	_	_	_

 $<sup>^{\</sup>rm 1}$  Consists of Emergency Button 1380 E 10 and Operating Unit 1380 E 01/03/04/06

Operating units						
Key switch	1380E01	Х	X*	Х	Х	Х
Key switch	1380E03	Х	x*	_	_	-
Key switch	1380E04	Х	x*	Х	Х	Х
Key switch	1380E06	Х	x*	_	_	-
Key switch	1385ES1	Х	_	Х	X	Х
	nent in compliance with EN 60950-1 on, with potential-free mechanical	Х	-	Х	х	х
Operating Unit	1332-10/11	Х	x*	_	_	_

<sup>&</sup>lt;sup>2</sup> Using Connector Board 1385EAP

Extensions						
Security relay module	720-32-SRM	Х	х	Х	х	Х
Locking elements						
Escape door strike	331	Х	х	Х	Х	Х
Escape door strike	332	Х	х	Х	Х	Х
Swing door strike	351	<b>X</b> <sup>3</sup>	х	-	_	<b>X</b> <sup>3</sup>
Holding magnet	827	Х	х	Х	Х	Х
Holding magnet	827H/827HA	Х	х	Х	Х	Х
Holding magnet	828	Х	х	Х	Х	Х

 $<sup>^{\</sup>rm 3}$  Only with configuration using FT Manager

Keys: X = possible to use

— = cannot be combined

 $<sup>\</sup>ensuremath{^{*}}$  Tampering analysis and audible alarm on operating units not possible

## Overview of uses

# of effeff components for electric escape door locking-systems

		CONTROL UNITS	CONTROL TERMINALS / MODULES			
Indirect release		720-40	1338-14/15/20/21 1340-14/15/20/21	1383E1N	1384E1N	1385E1N 1385E1T
Operating units for indirect	release					
Emergency button	1380 E 10	Х	_	Х	Х	Х
Emergency open module	725-NAM	Х	_	х	Х	Х

Supplementary units for indi	rect release					
Security relay module	720-32-SRM	Х	-	X	Х	X
Operating unit with call button	1332-70	Х	-	_	_	_

There is no need to install a terminal at the door in the case of indirect release if existing regulations are complied with and if the following unit combinations using the devices listed above are used:

#### Permitted unit combinations:

- $a. \quad 1383E1N, 1384E1N, 1385E1N + operating unit + operating unit for indirect release + 720-32-SRM + locking element$
- b. 1385E1T + operating unit + operating unit for indirect release + 720-32-SRM + locking element
- c. 720-40 + operating unit/terminal + operating unit for indirect release + 720-32-SRM + locking element

If a terminal with an emergency open element is used instead of an operating unit, it can be used to request the door be unlocked from the main control centre and alarm signals ensure security staff are alerted to control doors.

This ensures hazardous situations are detected more quickly while operational reliability is also enhanced.

## Modular design -

## for greater flexibility

Whether it's a question of choosing the right switch range or deciding on an operational control, Terminal 1385 offers users optimum flexibility.

These terminals feature an attractive, comprehensive switch range thanks to their seamless integration into products made by Jung and Gira, the electric installation and building systems manufacturers. Although based on the 55 series system used by many switch manufacturers, they can also be integrated into other switch ranges.

As far as operational controls are concerned, planners and fitters can choose between the standard key switch model and keypad or RFID-module operation.

The most important features are very much in the foreground in the new terminal range. Controls are already integrated into the emergency switch, meaning the basic model only requires a single installation box when it is operated by an external device. The user can use up to three installation boxes according to requirements.

## Greater safety and easy operation – Every requirement catered for

In additions effeff's established quality standards guaranteeing safe terminal operation, Terminal 1385 offers other features which further improve safety in the event of an emergency. Multi-tone sirens and an acoustic signal for the blind ensure that people are alerted to danger and that the way to the escape door is easy to find for the visually impaired or if there is thick smoke.

Our innovative LED lighting concept has proven successful and is thus also used in the 1385: with LED lighting, the door status is also immediately clear to those suffering from colour blindness.



An upright, green bar indicates free access



while the red, crosswise bar warns that access is blocked.

## Many benefits in a single solution

## Escape Route Technology from effeff

Compatible with switch ranges from leading manufacturers

Setting up operation is also easier:

Configuration is completed centrally.

To make installation easier, modules are connected using ready-to-fit cables with pin-and-socket connectors. This ensures mistakes are not made during installation.

#### Overview of product advantages:

- · Modules of 1-3 switch boxes
- · Integrated controls
- · Different switch ranges available
- · Integrated TS bus interface for building management systems - can be used for visual display and voice communication
- · An input/output module can be connected in standalone mode with additional inputs and outputs
- · Other safety features multi-tone siren and acoustic signal for the blind
- · Easy to use
- · Clear signals on LED strip
- $\cdot \ Central\ configuration$
- $\cdot$  Set-up operation and configuration using key switch
- · 12 different profiles with unit configurations based on practical use
- · Easy installation
- · A wide range of monitoring options











Our standard switch systems by Jung und Gira

- 1 Jung AS500, alpine white 1384-11-1--0400
- 2 Jung AS500, green 1384-11-1--1800
- 3 Jung LS990, alpine white 1384-11-6--0400
- 4 Jung LS990, stainless steel 1384-11-6353500









- 5 Gira E2, glossy pure white 1384-11-2--0400
- 6 Gira E2, aluminium colour 1384-11-2--3500
- 7 Gira Standard 55, glossy pure white 1384-11-3--0400
- 8 Gira Stainless Steel Series 21 1384-11-5353500



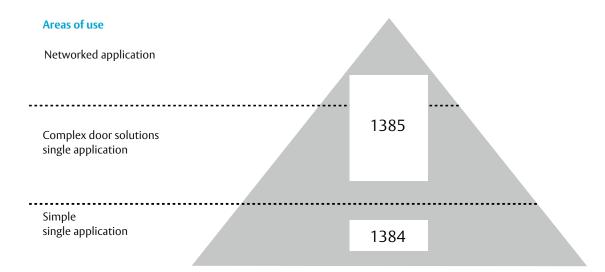






## Many benefits in a single solution

## Escape Route Technology from effeff



#### Unit 1385 (networked operation)

- · Network-ready application for central configuration (FT Manager) and visual display (WebFT)
- · Link to higher level systems via OPC.
- · Implementation of both simple and complex door solutions.
- · Can be extended with Input/Output Module 901-20.
- $\cdot$  Delayed release after emergency open is activated (special function)

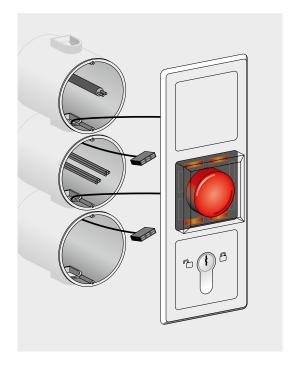
#### Unit 1385 (stand-alone operation)

- · Implementation of complex, individual applications.
- · Can be extended with Input/Output Module 901-20.
- · Interlock function.
- · Set-up operation and configuration using key switch or PC (TSB controller required).

#### Unit 1384 (offline version)

- · Implementation of simple, individual applications without network.
- · Set-up operation and configuration using a key switch.

Plug-in screw terminals make installation easy and safe.



#### Simple wiring

The modules are connected using ready-to-fit cables. Plug-in screw terminals make it easy to connect to permanent installations.

The SYSCON-4 Cable for mains adapter and the SYSCON-5 Cable to the operational unit ensure installation can be completed in seconds.

## Introduction

## Escape door terminals



In addition to actuation and alert functions on individual doors, the following cross-system functions are also offered on the central bus controller:

- · Input for emergency release using fire alarm systems
- · Input for lock mode using burglary systems
- · Output for system error (e.g. bus short circuit) Output for system alarm (collective alarm)

The system also offers central visual display or connection to adjacent systems via an OPC server. FT Manager can be used to adjust settings on individual doors from a central point (PC or control panel).

Functions can be assigned to the inputs and outputs on the escape door control terminal and can be extended using an input/output module if required. This also enables complex requirements for the door function to be implemented without reducing flexibility, thus assuring greater planning reliability.

The inputs and outputs are available for different functions, such as:

- · Transmission of defined system statuses and implementing different control commands in connection with a higher level building management system
- · Connection to adjacent systems, such as burglary alarm and fire alarm systems
- · Integration of other door components such as swing door operators, electromechanical locks, arrestor systems and access control units

### Switch fitting, 12/24 V DC



#### Flush-Mounted Control Terminal Model 1384-11

To control electric locking systems in doors along escape routes; certified.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or
- Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system
- With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Collective alarm, or

Activation of electric strike/motorised lock/door automatics

· Connections:

SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Ma- nager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 2 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Double frame in switch range; installation in 2 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Jung AS500 - alpine white	1 3 8 4 - 1 1 - 1 0 4 0 0
Jung AS500; green	1384-11-11800
Jung LS990 - alpine white	1384-11-60400
Jung LS990 - stainless steel	1384-11-6353500
Gira E2 - gloss pure white	1 3 8 4 - 1 1 - 2 0 4 0 0
Gira E2 – aluminium finish	1 3 8 4 - 1 1 - 2 3 5 0 0
Gira Standard 55 - glossy, pure white	1384-11-30400
Gira Stainless Steel Series 21	1384-11-5353500

# Flush-Mounted Control Terminal Model 1384-11N with power supply



## Flush-Mounted Control Terminal Model 1384-11N with power supply

To control electric locking systems in doors along escape routes; certified.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or
- Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system
- With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Collective alarm, or Activation of electric strike/motorised lock/door automatics

Connections:
 SYSCON-4: power supply
 SYSCON-5: operating unit
 Plug-in screw terminals

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

#### Power supply module

- Current limit on the output current, with automatic restarting
- · Connection wires for 230V
- System connection cable (SYSCON4) for internal wiring
- Central cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	Max. 0.4 A (depending on external power supply)
Power consumption	0,1 A
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Triple frame in switch range; installation in 3 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Jung AS500 - alpine white	1384-11N10400
Jung AS500; green	1384-11N11800
Jung LS990 - alpine white	1 3 8 4 - 1 1 N 6 0 4 0 0
Jung LS990 - stainless steel	1384-11N6353500
Gira E2 - gloss pure white	1 3 8 4 - 1 1 N 2 0 4 0 0
Gira E2 – aluminium finish	1384-11N23500
Gira Standard 55 - glossy, pure white	1 3 8 4 - 1 1 N 3 0 4 0 0
Gira Stainless Steel Series 21	1384-11N5353500

### Surface-Mount Switch Fitting 12/24 V DC



#### **Surface-Mounted Control Terminal Model 1384-11**

To control electric locking systems in doors along escape routes; certified.

#### **Escape door control module**

- · Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- · Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- · With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system

With a relay output featuring adjustable parameters

Door locked/unlocked, or Collective alarm, or

Activation of electric strike/motorised lock/door automatics

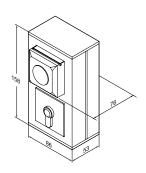
Connections:

SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

- · For locking/unlocking, temporary unlocking, alarm resetting
- Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 2 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In double, surface-mounted module, Gira Profile 55 fitting
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Gira Profil 55, pure white	1384-11-70400
Gira Profil 55, aluminium finish	1 3 8 4 - 1 1 - 7 3 5 0 0



### Surface-Mount Switch Fitting 230 V AC



# Surface-mounted Control Terminal Model 1384-11N with power supply

To control electric locking systems in doors along escape routes; certified.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system

With a relay output featuring adjustable parameters for:

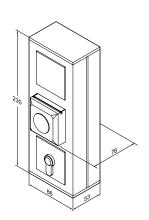
Door locked/unlocked, or Collective alarm, or Activation of electric strike/motorised lock/door automatics

Connections: SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	Max. 0.4 A (depending on external power supply)
Power consumption	0,1 A
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In triple, surface-mounted module, Gira Profile 55 range
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Gira Profil 55, pure white	1384-11N70400
Gira Profil 55, aluminium finish	1 3 8 4 - 1 1 N 7 3 5 0 0



### Switch fitting, 12/24 V DC with TS bus



#### Flush-mounted Control Terminal Model 1385-11

To control electric locking systems in doors along escape routes; certified.

#### **Escape door control module**

- · Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- · Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- · Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system, or Unlocking via timer and many other systems

With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- · TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- · Connections:

SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

- · For locking/unlocking, temporary unlocking, alarm resetting
- Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 2 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Double frame in switch range; installation in 2 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Jung AS500 - alpine white	1 3 8 5 - 1 1 - 1 0 4 0 0
Jung AS500; green	1385-11-11800
Jung LS990 - alpine white	1385-11-60400
Jung LS990 - stainless steel	1385-11-6353500
Gira E2 - gloss pure white	1 3 8 5 - 1 1 - 2 0 4 0 0
Gira E2 – aluminium finish	1385-11-23500
Gira Standard 55 - glossy, pure white	1385-11-30400
Gira Stainless Steel Series 21	1385-11-5353500

### Switch fitting, 230 V AC with TS bus



## Flush-Mounted Control Terminal Model 1385-11N with power supply

To control electric locking systems in doors along escape routes; certified.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system, or Unlocking via timer and many other systems

· With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- Connections: SYSCON-4: power supply

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0,4 A
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Triple frame in switch range; installation in 3 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Jung AS500 - alpine white	1 3 8 5 - 1 1 N 1 0 4 0 0
Jung AS500; green	1385-11N11800
Jung LS990 - alpine white	1385-11N60400
Jung LS990 - stainless steel	1385-11N6353500
Gira E2 - gloss pure white	1385-11N20400
Gira E2 – aluminium finish	1385-11N23500
Gira Standard 55 - glossy, pure white	1385-11N30400
Gira Stainless Steel Series 21	1385-11N5353500

#### Power supply module

- Current limit on the output current, with automatic restarting
- · Connection wires for 230V
- System connection cable (SYSCON4) for internal wiring
- Central cover which matches the corresponding switch fitting

### Surface-mounted switch fitting, 12/24 V AC with TS bus



#### **Surface-Mounted Control Terminal Model 1385-11**

To control electric locking systems in doors along escape routes; certified.

#### **Escape door control module**

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards)
- Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system, or Unlocking via timer and many other systems

 With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server

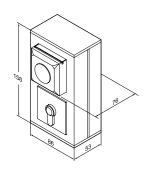
Connections:

SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 2 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In double, surface-mounted module, Gira Profile 55 fitting
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Gira Profil 55, pure white	1385-11-70400
Gira Profil 55, aluminium finish	1385-11-73500



### Switch fitting, 230 V AC with TS bus



# Surface-mounted Control Terminal Model 1385-11N with power supply

To control electric locking systems in doors along escape routes; certified.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system, or Unlocking via timer and many other systems

With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- Connections: SYSCON-4: power supply

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0,4 A
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In triple, surface-mounted mo- dule, Gira Profile 55 range
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Gira Profil 55, pure white	1385-11N70400
Gira Profil 55, aluminium finish	1 3 8 5 - 1 1 N 7 3 5 0 0

#### Power supply module

- Current limit on the output current, with automatic restarting
- · Connection wires for 230V
- System connection cable (SYSCON4) for internal wiring
- Central cover which matches the corresponding switch fitting

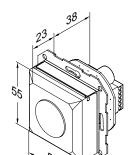


### Individual modules



#### **Escape Door Control Module Model 1384E1N**

Individual module with optimised operational concept to control locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or to control via a conventional system using integrated key switches certified.



#### **Escape door control module**

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Controlled via external operating unit, or Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system
- With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Activation of electric strike/motorised lock/door automatics Connections:

SYSCON-4: power supply SYSCON-5: operating unit

Plug-in screw terminals

Technical attributes	
Connection to panel, visualisation system, OPC server	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	No, external operating unit required
Setting of times and functions	Via key switch
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Frame or surface-mounted module required to install flush-mounted switch boxes 45 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Standard for 55 mm modules	1 3 8 4 E 1 N 0 0

### Individual modules



#### **Escape Door Control Module Model 1384E1N**

Individual module with optimised operational concept to control locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or to control via a conventional system using integrated key switches certified.



#### Escape door control module

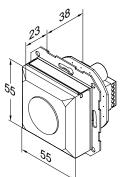
- · Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- · Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- Emergency button sign (arrow pointing downwards)
- · Multi-tone signal and tampering contact
- · Adjustable time period for max. continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- · Monitoring of time door is open in the case of temporary unlocking
- · With an input featuring adjustable parameters for: Controlled via external operating unit, or Temporary release using an access control system, or Emergency release via fire alarm system, or Priority locking via burglar alarm system, or Unlocking via timer and many other systems
- · With a relay output featuring adjustable parameters

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or Activation of electric strike/motorised lock/door automatics/arrestor system

- · TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- · Connections: SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

Technical attributes	
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	No, external operating unit required
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Frame or surface-mounted module required to install flush-mounted switch boxes 45 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

E 1 N 0 0



### Individual modules



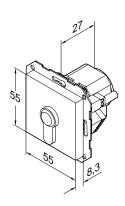
#### Key switch module model 1385ES1

Key switch for connection to an effeff escape door control module or door monitoring module for controlling unlocking, locking, temporary unlocking and alarm resetting, integrated tamper contact

- For standard flush-mounted boxes: 45 mm depth, with Euro profile half-cylinder, cam position 180°, length 30.5 mm
- · Connection: SYSCON-5

Technical attributes	
Tampering contact key switch	Yes
Connections (key switch)	Screw/ plug-in terminals

Article / Feature	Order no.
Jung AS500 - alpine white	1385ES1-10400
Jung AS500; green	1385ES1-11800
Jung LS990 - alpine white	1385ES1-60400
Jung LS990 - stainless steel	1385ES1-6353500
Gira E2 - gloss pure white	1385ES1-20400
Gira E2 – aluminium finish	1385ES1-23500
Gira Standard 55 - glossy, pure white	1385ES1-30400
Gira Stainless Steel Series 21	1385ES1-5353500



### Individual modules



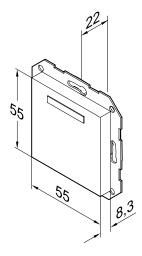
#### Optical and acustic alarm signal

For connection to an escape door control module or door monitoring module to provide additional signal-ling for acustic and optical alarms.

Power supplied via SYSCON 4 and system activation via the universal output on the escape door control terminal.

Technical attributes	
Input voltage	12-24 V DC
Stand-by current power input	20 mA
Power input when alarm	50 mA
LED display	Yellow
Actuation input (optocoupler)	Max. 30 V DC 7 mA
Sound pressure at 12 V DC and 1m distance	About 80 dB A
Sound pressure at 24 V DC and 1m distance	About 92 dB A
SYSCON 4 connections	2

Article / Feature	Order no.
Jung AS500 - alpine white	1385EB1-10400
Jung AS500; green	1385EB1-11800
Jung LS990 - alpine white	1385EB1-60400
Jung LS990 - stainless steel	1385EB1-6353500
Gira E2 - gloss pure white	1385EB1-20400
Gira E2 – aluminium finish	1385EB1-23500
Gira Standard 55 - glossy, pure white	1385EB1-30400
Gira Stainless Steel Series 21	1385EB1-5353500



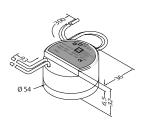
#### Power Supply Module Model 1003FT, 24 V

Power supply for connection to an effeff escape door control module or door monitoring module Excess output current limiter with automatic restarting;

For standard flush-mounted boxes: 62.5 mm depth Connections: connection wires 230 V and connection wires SYSCON-4: 24 VDC

Technical attributes	
Input voltage (power supply)	230 V AC
Output voltage (power supply)	24 V DC stabilised
Output current (power supply)	0,5 A
Temperature range (power supply)	-5 °C to +50 °C

Article / Feature	Order no.
24 V DC / 0.5 A	1003FT-24-05-10



# **Escape Door Control Terminals** Individual modules



#### Main Cover Model 1385EZA

To cover the power supply module

Technical attributes	
System	55 mm

Article / Feature	Order no.
Jung AS500 - alpine white	1385EZA-10400
Jung AS500; green	1385EZA-11800
Jung LS990 - alpine white	1385EZA-60400
Jung LS990 - stainless steel	1385EZA-6353500
Gira E2 - gloss pure white	1385EZA-20400
Gira E2 – aluminium finish	1385EZA-23500
Gira Standard 55 - glossy, pure white	1385EZA-30400
Gira Stainless Steel Series 21	1385EZA-5353500

### Light switch design accessories



#### **Connector Board Model 1385EAP**

SYSCON 4 / 5 Connector Board. Serves as an adapter to connect devices to SYSCON 4 or SYSCON 5 connecting cable. Connections are carried to screw terminals

Technical attributes	
Connections	Screw terminals
	-
Article / Feature	Order no.



#### Syscon 4 Connecting Cable Model 1385EVL4

To connect modules.

Technical attributes	
Sockets	SYSCON 4 on both sides

Article / Feature	Order no.
Syscon-4; double sided; 4-pin female	1 3 8 5 E V L 4 0 0
connector	



#### **Syscon 5 Connecting Cable Model 1385EVL5**

To connect escape door control modules with key switch module.

Technical attributes	
Sockets	SYSCON 5 on both sides

Article / Feature	Order no.
Syscon-5; double-sided; 5-pin female connector	1 3 8 5 E V L 5 0 0



#### I/O Extension Model 901-20

I/O extension with TS bus interface; 8 inputs: low-active; 2 outputs: switching contact as changeover contact, max 24 V / 2 A; 4 outputs: semi-conductors

Technical attributes	
Input operating voltage	12 / 24 V DC stabilised
Current consumption	Max. 0.1 A
Mounting method	Wall mount
Housing material	Plastic
Width	118 mm
Height	118 mm
Depth	30 mm

Article / Feature	Order no.
E/A - Extension	9 0 1 - 2 0 0 0

# Light switch design accessories



#### Frame Model 1380EF1

Single frame

Technical attributes	
Frame	Single

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF1-10400
Jung AS500; green	1380EF1-11800
Jung LS990; alpine white	1380EF1-60400
Jung LS990; stainless steel	1380EF1-6353500
Gira E2; gloss pure white	1380EF1-20400
Gira E2; aluminium colour	1380EF1-23500
Gira standard 55; gloss pure white	1380EF1-30400
Gira Series 21, stainless steel	1380EF1-5353500



#### **Double frame Model 1380EF2**

Dual frame

Technical attributes	
Frame	Dual

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF2-10400
Jung AS500; green	1380EF2-11800
Jung LS990; alpine white	1380EF2-60400
Jung LS990; stainless steel	1380EF2-6353500
Gira E2; gloss pure white	1380EF2-20400
Gira E2; aluminium colour	1380EF2-23500
Gira standard 55; gloss pure white	1380EF2-30400
Gira Series 21, stainless steel	1380EF2-5353500



#### Frame Model 1380EF3

Triple frame

Technical attributes	
Frame	Triple

Article / Feature	Order no.
Jung AS500; alpine white	1380EF3-10400
Jung AS500; green	1380EF3-11800
Jung LS990 alpine white	1380EF3-60400
Jung LS990; stainless steel	1380EF3-6353500
Gira E2; gloss pure white	01380EF3-20400
Gira E2; aluminium colour	1380EF3-23500
Gira E2/ standard 55, pure white	1380EF3-30400
Gira Series 21, stainless steel	1380EF3-5353500



#### **Intermediary Frame Model 1385EF1Z**

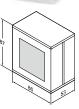
Intermediary frame for 55 mm switch modules.

Technical attributes	
System	55 mm

Article / Feature	Order no.
Jung LS990 - alpine white	1380EF1Z600
Jung LS990 - stainless steel	1380EF1Z63500
Gira Stainless Steel Series 21	1380EF1Z500

# Light switch design accessories





**Housing for Model 1385EG1** Housing

Technical attributes	
Frame	Single
Mounting method	Surface-mounted

Article / Feature	Order no.
Gira - glossy pure white	1385EG1-70400
Gira - aluminium colour	1385EG1-73500



Housing for Model 1385EG2 Housing

Technical attributes	
Frame	Dual
Mounting method	Surface-mounted

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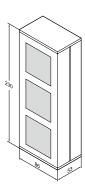
Order no. Article / Feature 1 3 8 5 E G 2 - 7 - - 0 4 0 0 Gira - glossy pure white 1385EG2-7--3500 Gira - aluminium colour



**Housing for Model 1385EG3** Housing

Technical attributes	
Frame	Triple
Mounting method	Surface-mounted

Article / Feature	Order no.
Gira - glossy pure white	1385EG3-70400
Gira - aluminium colour	1385EG3-73500



### Light switch design accessories



#### **Key Switch Model 1140**

An operating unit to release doors against direction of escape (outdoors) in conjunction with escape door control unit.

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	No
Buzzer	No
Sabotage switch	No
Class of protection	IP 54
Dimensions	Surface-mounted (Wx- HxD): 73.5x73.5x45mm; flush-mounted (WxHxD): 90x100x55.5mm; flush-moun- ted switch box: 60x55mm

Article / Feature	Order no.
Surface-mounted	1140-1000
Flush-mounted	1140-1100



#### **Escape Route Sign Model 1385-FTS**

The mandatory pictogram is printed on a  $74 \times 74$  mm surface on a transparent acrylic panel measuring  $100 \times 100 \times 3$  mm.

The imprint becomes luminescent after exposure to light for a certain period of time.

Technical attributes	
Dimensions	100 x 100 x 3 mm
Article / Feature	Order no.

1 3 8 5 - F T S - - - - 0 0



Plastic Sign Model 2.1504-000

Technical attributes	
Colour	green
Version	Emergency button

Article / Feature	Order no.
Arrow pointing left, German	2.1504-00061800
Arrow pointing right, German	2.1504-00071800
Arrow pointing downwards, German	2.1504-00091800
Arrow pointing downwards, English	2.1504-00141800
Arrow pointing downwards, French	2.1504-00161800



**Inspection Sticker Model 2.1502-00030000**For all terminals

Technical attributes	
Compatible with:	All terminals

Article / Feature	Order no.
1 Piece	2.1502-00030000



### Escape Route Technology Test Log Book Model D00579

For keeping a record of a door regarding its initial inspection and subsequent periodical tests.

Technical attributes	
Version	Test book

Article / Feature	Ord	ler no				
Escape route technology	D	0	0	4	0	7

### Introduction

### Compact units

#### Compact units

The compact unit is ideal for retrofits, since it contains all the functions required to control and operate doors in a single casing.

It is available with or without an integrated mains adapter. The only other thing required to ensure a complete escape route securing system is a suitable locking element.

Parameters are configured and set in a conventional way using jumpers and rotary switches.



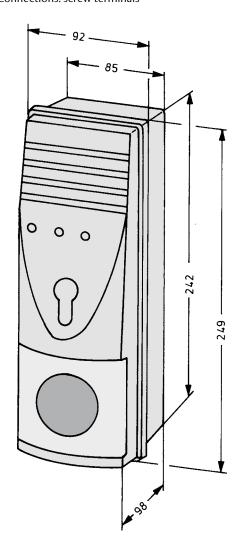
# Surface-mounted escape door terminals, 230 V AC with TS bus



# Surface-Mounted Control Terminal Model 1338-20 with power supply

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release
- TS bus interface for parallel operation of visualisation software, panel and OPC server
- · Connections: screw terminals



Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0.32 A
Power consumption	0.15 A
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 249x92x98 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Surface-mounted	1338-20F90

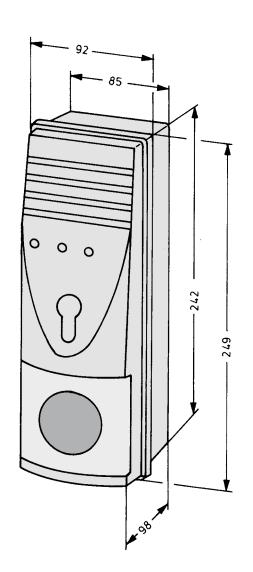
# Surface-Mounted Control Terminal, 12/24 V DC with TS bus



Surface-Mounted Control Terminal Model 1340-20
To control electric locking systems in doors along es-

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release.
- TS bus interface for parallel operation of visualisation software, panel and OPC server
- · Connections: screw terminals



Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Ma- nager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	12 or 24 V DC
Output voltage	12 or 24 V DC
Output current for external devices	Max. 0.64 A (depending on external power supply)
Power consumption	0.2 A at 12 V / 0.15 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 249x92x98 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
12 V DC, surface mounted	1 3 4 0 - 2 0 E 9 0
24 V DC, surface mounted	1 3 4 0 - 2 0 F 9 0

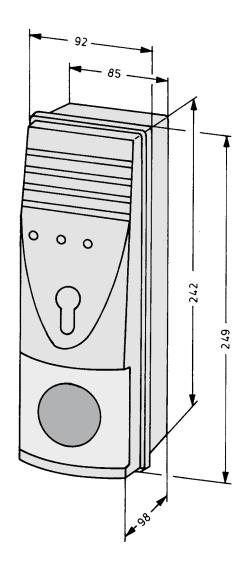
### Surface-mounted control terminal, 230 V AC



# Surface-Mounted Control Terminal Model 1338-14 with power supply

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release
- · Connections: screw terminals



Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Ma- nager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0.32 A
Power consumption	0.15 A
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 249x92x98 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Offline terminal	1338-14F90

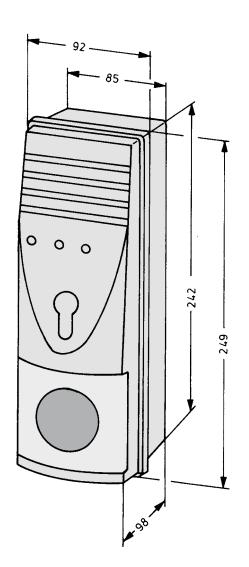
### Surface-mounted control terminal, 12/24 V DC



#### **Surface-Mounted Control Terminal Model 1340-14**

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- · Monitoring of time door is open during temporary release.
- · Connections: screw terminals



Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Ma- nager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	12 or 24 V DC
Output voltage	12 or 24 V DC
Output current for external devices	Max. 0.64 A (depending on external power supply)
Power consumption	0.2 A at 12 V / 0.15 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 249x92x98 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
12 V DC	1340-14E90
24 V DC	1 3 4 0 - 1 4 F 9 0

### Flush-mounted control terminal, 230 V AC with TS bus



#### Flush-Mounted Control Terminal Model 1338-21 with power supply

To control electric locking systems in doors along escape routes; certified.

- · Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary
- · TS bus interface for parallel operation of visualisation software, panel and OPC server
- · Connections: screw terminals

Cable diameter max. 10 mm	45 85
242	
	122

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0.32 A
Power consumption	0.15 A
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 279x122x51 mm; flush-mounted case (HxWxD) 242x85x51 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Flush-mounted	1338-21F90

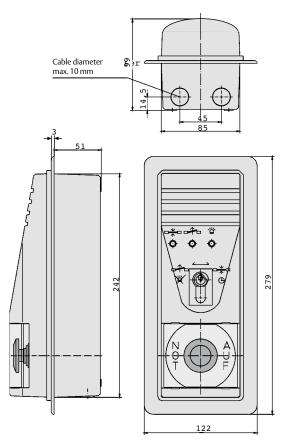
# Flush-Mounted Control Terminal 12/24 V DC with TS bus



#### Flush-mounted Control Terminal Model 1340-21

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release.
- TS bus interface for parallel operation of visualisation software, panel and OPC server
- · Connections: screw terminals



Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	12 or 24 V DC
Output voltage	12 or 24 V DC
Output current for external devices	Max. 0.64 A (depending on external power supply)
Power consumption	0.2 A at 12 V / 0.15 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 279x122x51 mm; flush-mounted case (HxWxD) 242x85x51 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
12 V DC, flush mounted	1 3 4 0 - 2 1 E 9 0
24 V DC, flush mounted	1 3 4 0 - 2 1 F 9 0

### Flush-mounted control terminal, 230 V AC



# Flush-mounted Control Terminal Model 1338-15 with power supply

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release
- · Connections: screw terminals

Cable diameter max. 10 mm	ger	
→ 3 → 51	45 85	
	242 42 42 42 42 43 442	279
•	122	_ <del>_</del>

Control	Yes, integrated
Power supply	Yes, integrated
,	No.
Connection to panel, visualisation system, OPC server	NO
Configured centrally using FT Ma- nager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0.32 A
Power consumption	0.15 A
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 279x122x51 mm; flush-mounted case (HxWxD) 242x85x51 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
230 V	1338-15F90

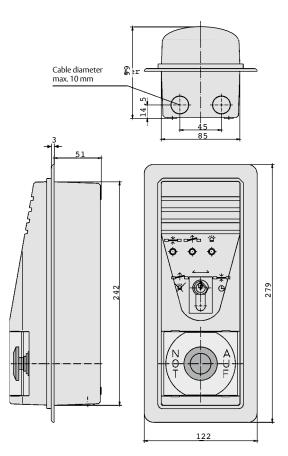
### Flush-mounted control terminal, 12/24 V DC



#### Flush-mounted Control Terminal Model 1340-15

To control electric locking systems in doors along escape routes; certified.

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated door status indicator (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),
- · alarm signal and tampering contact;
- · Key switch to control door
- · With Euro profile half cylinder, including 3 keys
- · Adjustable time intervals for temporary release, prealarm, alarm interval
- Monitoring of time door is open during temporary release.
- · Connections: screw terminals



Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	No
Configured centrally using FT Manager	No
Stand-alone operation with I/O module	No
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via DIP switches
Input voltage	12 or 24 V DC
Output voltage	12 or 24 V DC
Output current for external devices	Max. 0.64 A (depending on external power supply)
Power consumption	0.2 A at 12 V / 0.15 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	(HxWxD) 279x122x51 mm; flush-mounted case (HxWxD) 242x85x51 mm
Inputs	E1: temporary release; E2: fire alarm system; E3: timer
Outputs	A1: locked/unlocked; A2: collective alarm as 24 V / 1 A potential-free contacts
Key switch on opposite side to direction of escape	Yes
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
12 V DC	1340-15E90
24 V DC	1 3 4 0 - 1 5 F 9 0

### Operating units



#### **Surface-Mounted Key Switch Model 1332-10**

An operating unit to release doors against direction of escape (outdoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.

#### Key switch module

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12 or 24V DC
Power consumption	0.05 A at 24 V DC
Dimensions	(WxHxD): 100x155x50mm

Article / Feature	Order no.
Surface-mounted	1 3 3 2 - 1 0 0 0



#### Flush-Mounted Key Switch Model 1332-11

An operating unit to release doors against direction of escape (outdoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.

#### Key switch module

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- Metal housing
- Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12 or 24V DC
Power consumption	0.05 A at 24 V DC
Dimensions	(WxHxD): 115x170x35mm; flush-mounted case: 94x149x47mm

Article / Feature	Order no.
Flush-mounted	1 3 3 2 - 1 1 0 0



#### **Security Screw Set Model ZS.1332**

Snake-eye security screw set to fasten the cover plate for key switches in Model Series 1332.

Technical attributes	
Version	Snake-eye

Article / Feature	Order no.
High-security screw kit	Z S . 1 3 3 2 - 1 0 0

55

### Compact units

# Flush-mounted key switch



#### Flush-Mounted Key Switch Model 1380E01

An operating unit to release doors against direction of escape (indoors) in conjunction with escape door control unit.

#### Key switch module

- · With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting
- · Connections: plug-in screw terminals

Technical attributes	
Profile cylinder	Designed for use with client- supplied profile half-cylinder; adjustable cam position: 8 x 45°; 35 mm long
LED display	No
Buzzer	No
Sabotage switch	Yes
Dimensions	To install in a flush-mounted switch box 62.5 mm deep; frame required

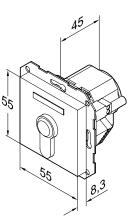
Article / Feature	Order no.
Jung AS500; gloss alpine white	1380E01-10400
Jung AS500; green	1380E01-11800
Jung LS990; alpine white	1380E01-60400
Jung LS990; stainless steel	1380E01-6353500
Gira E2; gloss pure white	1380E01-20400
Gira E2; aluminium colour	1380E01-23500
Gira standard 55; gloss pure white	1380E01-30400
Gira Series 21, stainless steel	1380E01-5353500



#### Flush-Mounted Key Switch Model 1380E03

An operating unit to release doors against direction of escape (indoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting
- · Connections: plug-in screw terminals



Technical attributes	
Profile cylinder	Designed for use with client- supplied profile half-cylinder; adjustable cam position: 8 x 45°; 35 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12-24 V DC
Power consumption	0.04 A at 24 V DC
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	To install in a flush-mounted switch box 62.5 mm deep; frame required

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380E03-10400
Jung AS500; green	1380E03-11800
Jung LS990; alpine white	1380E03-60400
Jung LS990; stainless steel	1380E03-6353500
Gira E2; aluminium colour	1380E03-23500
Gira E2; gloss pure white	1380E03-20400
Gira standard 55; gloss pure white	1380E03-30400
Gira Series 21, stainless steel	1380E03-5353500

# Flush-mounted key switch



Frame Model 1380EF1
Single frame

Technical attributes	
Frame	Single

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF1-10400
Jung AS500; green	1380EF1-11800
Jung LS990; alpine white	1380EF1-60400
Jung LS990; stainless steel	1380EF1-6353500
Gira E2; gloss pure white	1380EF1-20400
Gira E2; aluminium colour	1380EF1-23500
Gira standard 55; gloss pure white	1380EF1-30400
Gira Series 21, stainless steel	1380EF1-5353500

# Key-operated switch



#### **Key Switch Model 1140**

An operating unit to release doors against direction of escape (outdoors) in conjunction with escape door control unit.

- · With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	No
Buzzer	No
Sabotage switch	No
Class of protection	IP 54
Dimensions	Surface-mounted (Wx- HxD): 73.5x73.5x45mm; flush-mounted (WxHxD): 90x100x55.5mm; flush-moun- ted switch box: 60x55mm

Article / Feature	Order no.
Surface-mounted	1 1 4 0 - 1 0 0 0
Flush-mounted	1140-1100

### External control unit

### Accessories 1338 / 1340



**Replacement Cover Model Z1337-10-1**For Terminals in Type Series 1337, 1338 and 1340.

1337, 1338, 1340
Order no.
Z 1 3 3 7 - 1 0 - 1 0 0



#### **Plastic EMERGENCY-OPEN Sign** Model 2.1504-001318

For Terminals 1337, 1338, 1340

1337, 1338, 1340

Article / Feature	Order no.
German	2.1504-00131800
- English	2.1504-00151800
French	2.1504-00171800



#### Flush-mounted case Model 1337.112102

Flush-mounted case for door terminal model 1337/1338/1340

Technical attributes	
Material housing	sheet steel
Surface	Galvanized

Article / Feature	Order no.
galvanized	1 3 3 7 . 1 1 2 1 0 2

### Light switch design accessories



#### **Escape Route Sign Model 1385-FTS**

The mandatory pictogram is printed on a  $74 \times 74$  mm surface on a transparent acrylic panel measuring  $100 \times 100 \times 3$  mm.

The imprint becomes luminescent after exposure to light for a certain period of time.

Technical attributes	
Dimensions	100 x 100 x 3 mm

Article / Feature	Order no.
	1385-FTS00



#### Plastic Sign Model 2.1504-000

Technical attributes	
Colour	green
Version	Emergency button

Article / Feature	Order no.
Arrow pointing left, German	2.1504-00061800
Arrow pointing right, German	2.1504-00071800
Arrow pointing downwards, German	2.1504-00091800
Arrow pointing downwards, English	2.1504-00141800
Arrow pointing downwards, French	2.1504-00161800



### **Inspection Sticker Model 2.1502-00030000**For all terminals

Technical attributes	
Compatible with:	All terminals

Article / Feature	Order no.
1 Piece	2.1502-00030000



### Escape Route Technology Test Log Book Model

For keeping a record of a door regarding its initial inspection and subsequent periodical tests.

Technical attributes	
Version	Test book

Article / Feature	Ord	ler no				
Escape route technology	D	0	0	4	0	7

### Introduction

### **External Control Unit**

#### **External Control Unit**

Greater flexibility is offered for installation, since the operational and display elements and the controls are separated.

The FT Control Unit 720-40 can be effortlessly installed in a mains distribution box on a 35mm DIN rail, neatly tucked away to save space. Bulky, special housing is now a thing of the past. Installation in a distribution box also makes wiring easier and reduces costs. Powering several escaped door control units from a central mains adapter offers further savings potential.

Besides housing the control unit in the electrics room where it is protected, it is also advantageous to create the link to the access control units from this unit.

The control unit also offers flexible functions, something which the effeff Escape Route Terminal Model Series 1385 also excels at.

As the unit is generally compatible with all effeff escape route terminal operating units, it can be used with products with a light-switch format and a compact design as well as for outside use.

Version 720-42 has been combined with a safety relay module for special applications, such as those for forensics departments.



### **External Control Unit**

### Escape Door Units 720-40



#### **Escape Door Control Model 720-40**

To control electric locking systems in doors along escape routes; certified.

- Can be connected to door terminals and operating components
- · Can be connected to locking components
- Adjustable time period for max. continuous release, delay in continuous release, temporary release, prealarm, alarm interval, guidance signal,
- · Monitoring of time door is open during temporary release.
- · With 4 inputs featuring adjustable parameters for:
- Control of locking and unlocking, temporary release, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units.
- · Temporary release using an access control system, or
- · Emergency release via fire alarm system, or
- · Priority locking via burglar alarm system, or
- · Unlocking via timer and many other systems
- · With 4 relay outputs featuring adjustable parameters for:
- · Door locked/unlocked, or
- Door open/closed, or
- · Collective alarm, or individual alarm,
- Activation of electric strike/motorised lock/door automatics/arrestor system.
- TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- · Connections: plug-in screw terminals

Technical attributes			
Control	Yes		
Power supply	No, external power supply required		
Connection to panel, visualisation system, OPC server	Yes		
Stand-alone operation with I/O module	Yes		
Stand-alone operation (offline)	Yes		
Emergency switch	No, external door terminal required		
Control element	No, external door terminal required		
Setting of times and functions	Via menu buttons and display on device using FT Manager (together with bus controller)		
Input voltage	12-24 V DC		
Output voltage	12-24 V DC		
Output current for external devices	Max. 2 A (depending on external power supply)		
Power consumption	0.1A at 24V		
Operating temperature range	-20 °C to +40 °C		
Class of protection	IP 30		
Dimensions	WxHxD: 159x90x60mm; for installation on DIN rail (9 HP)		
Inputs	4x; adjustable parameters		
Outputs	4x; adjustable parameters, 30 V / 1 A switchover contact		
Key switch on opposite side to direction of escape	Yes		
Escape door terminal with bi-directional escape route	Yes		
Applications without local emergency button	No		
Applications featuring local emergency button with delayed release	No		

Article / Feature	Order no.
Escape door control unit	7 2 0 - 4 0 0 0

### **External Control Unit**

### Escape Door Control Model 720-42



#### **Escape Door Control Model 720-42**

To control electric locking systems in doors along escape routes in conjunction with applications without local emergency button, or applications with local emergency button and delayed release; certified.

- Can be connected to door terminals and operating components
- · Can be connected to locking components
- Adjustable time period for max. continuous release, delay in continuous release, temporary release, prealarm, alarm interval, guidance signal,
- Monitoring of time door is open during temporary release
- · With 4 inputs featuring adjustable parameters for:
- Control of locking and unlocking, temporary release, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units.
- · Temporary release using an access control system, or
- · Emergency release via fire alarm system, or
- · Priority locking via burglar alarm system, or
- · Unlocking via timer and many other systems
- With 4 relay outputs featuring adjustable parameters for:
- · Door locked/unlocked, or
- Door open/closed, or
- · Collective alarm, or individual alarm,
- Activation of electric strike/motorised lock/door automatics/arrestor system.
- TS bus interface for parameterisation using software (FT Manager) and networks for parallel operation of visual display software, panel and OPC server
- Security relay module to install applications without emergency button at door
- · Connections: plug-in screw terminals

C l	V	
Control	Yes	
Power supply	No, external power supply required	
Connection to panel, visualisation system, OPC server	Yes	
Stand-alone operation with I/O module	Yes	
Stand-alone operation (offline)	Yes	
Emergency switch	No, external door terminal required	
Control element	No, external operating unit/ door terminal required	
Setting of times and functions	Via menu buttons and display on device using FT Manager (together with bus controller)	
Input voltage	12-24 V DC	
Output voltage	12-24 V DC	
Output current for external devices	Max. 2 A (depending on external power supply)	
Power consumption	0.2 A at 24V (including safety relay module)	
Operating temperature range	-20 °C to +40 °C	
Class of protection	IP 30	
Dimensions	Control unit: WxHxD: 159x90x60mm; for installation on DIN rail (9 HP), safety relay module: WxHxD: 87x97x63mm or installation on DIN rail (5HP)	
Inputs	4x; adjustable parameters	
Outputs	4x; adjustable parameters, 30 V / 1 A switchover contact	
Key switch on opposite side to direction of escape	Yes	
Escape door terminal with bi-direc- tional escape route	Yes	
Applications without local emergency button	Yes, in conjunction with central emergency button	
Applications featuring local emergency button with delayed release	Yes, in conjunction with central emergency button and FT- Manager	

Article / Feature	Order no.
Escape door control device	7 2 0 - 4 2 0 0

### **External Control Unit**

# Power supply units



#### Power supply device model 1003 24 V

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Technical attributes	
Mounting method	Surface-mounted / top hat rail
Overload protection	Electronic
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 00
Protection rating	II/Insulation protection
Housing	Plastic
Casing colour	RAL 7035
Input operating voltage	100-240 V AC
Output voltage	24 V DC (regulated)

Article / Feature	Order no.
1 A, dimens.: (W/L/H) 94x36x68 mm	1003-24-110
2 A, dimens.: (W/L/H) 70x68,5x93mm	1003-24-210
4 A, dimens.: (W/L/H) 92x70x68 mm	1003-24-410

## Surface-mounted housing



#### **Surface-Mounted Housing Model 720-VT**

To install escape door control unit 720-40/42 and power supply.

Technical attributes	
Version	Surface-mounted
Class of protection	IP 44

Article / Feature	Order no.
Surface-mounted distribution board; single row; 12 HP	7 2 0 - V T 1 - I P 4 4 - 0 0
Surface-mounted distribution board; two rows; 24 HP	7 2 0 - V T 2 - I P 4 4 - 0 0
Surface-mounted distribution board; 3 rows; 36 HP	7 2 0 - V T 3 - I P 4 4 - 0 0

### Flush-mounted door terminal



#### Flush-Mounted Door Terminal Model 1380-11

An operating unit to release doors in direction of escape in conjunction with external escape door control unit.

#### Escape door control module

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 35 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes (emergency button+key switch)
Operating voltage	12-24 V DC
Power consumption	0.09 A at 24 V DC
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	Double frame in switch range; installation in 2 flush-mounted switch boxes 62 5 mm deep

Article / Feature	Order no.
Jung AS500; gloss alpine white	1 3 8 0 - 1 1 - 1 0 4 0 0
Jung AS500; green	1380-11-11800
Jung LS990; alpine white	1380-11-60400
Jung LS990; stainless steel	1380-11-6353500
Gira E2; gloss pure white	1380-11-20400
Gira E2; aluminium colour	1380-11-23500
Gira E2/ standard 55, pure white	1380-11-30400
Gira Series 21, stainless steel	1380-11-5353500

# Flush-Mounted Door Terminal 1380-15, shallow installation depth



#### Flush-Mounted Door Terminal Model 1380-15

An operating unit to release doors in direction of escape in conjunction with external escape door control unit.

#### **Escape door control module**

- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting

Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes (emergency button+key switch)
Operating voltage	12-24 V DC
Power consumption	0.09 A at 24 V DC
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	Double frame in switch fitting; installation in 2 flush-mounted

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380-15-10400
Jung AS500; green	1380-15-11800
Jung LS990; alpine white	1380-15-60400
Jung LS990; stainless steel	1380-15-6353500
Gira E2 - gloss pure white	1380-15-20400
Gira E2 – aluminium finish	1380-15-23500
Gira Standard 55 - glossy, pure white	1380-15-30400
Gira Stainless Steel Series 21	1380-15-5353500



#### Syscon 5 Connecting Cable Model 1385EVL5

To connect escape door control modules with key switch module.

Technical attributes	
Sockets	SYSCON 5 on both sides

Article / Feature	Order no.
Syscon-5; double-sided; 5-pin female connector	1 3 8 5 E V L 5 0 0



#### **Connector Board Model 1385EAP**

SYSCON 4 / 5 Connector Board. Serves as an adapter to connect devices to SYSCON 4 or SYSCON 5 connecting cable. Connections are carried to screw terminals.

Technical attributes	
Connections	Screw terminals

Article / Feature	Order no.
Syscon-4/-5; connecting terminal, 5-pin	1 3 8 5 E A P 0 0

### Surface-Mounted Door Terminal 1380-15



#### **Surface-Mounted Door Terminal Model 1380-15**

An operating unit to release doors in direction of escape in conjunction with external escape door control unit.

#### Escape door control module

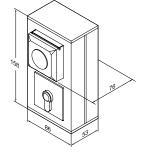
- Emergency button lights up; features reusable, nondetachable, shatterproof protective cover
- Integrated visual door status indicator with highperformance LEDs (green / red / yellow) signalling unlocked / locked / alarm status
- · Emergency button sign (arrow pointing downwards),

#### Key switch module

- For locking/unlocking, temporary unlocking, alarm resetting
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes (emergency button+key switch)
Operating voltage	12-24 V DC
Power consumption	0.09 A at 24 V DC
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	In double, surface-mounted module, Gira Profile 55 fitting

Article / Feature	Order no.
aluminium	1380-15-73500
White	1380-15-70400



#### Syscon 5 Connecting Cable Model 1385EVL5

To connect escape door control modules with key switch module.

Technical attributes	
Sockets	SYSCON 5 on both sides

Article / Feature	Order no.
Syscon-5; double-sided; 5-pin female connector	1 3 8 5 E V L 5 0 0



#### **Connector Board Model 1385EAP**

SYSCON 4 / 5 Connector Board. Serves as an adapter to connect devices to SYSCON 4 or SYSCON 5 connecting cable. Connections are carried to screw terminals.

Technical attributes	
Connections	Screw terminals

Article / Feature	Order no.
Syscon-4/-5; connecting terminal, 5-pin	1 3 8 5 E A P 0 0

### **Emergency button**

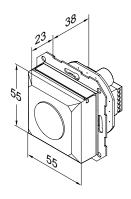


### Flush-Mounted Emergency Button Model 1380E10

For connection to the effeff escape door control device, with reusable, cannot be lost, splinter-proof emergency switch protective bonnet and integrated optical door status display with symbolic disposed, super-light high power LED series with sabotage switch.

Technical attributes	
Operating voltage	12 V to 24 V DC (+/- 15%)
Sabotage switch	24 V DC/0.1 A max. ohmic load
Switching element	2 strikes, spring-loaded acc. to EN 60947-1, EN 60947-5-1 EN 60947-5-1, EN 418, DIN EN 60204-1; 24 V DC / 2 A max. ohmic load

Article / Feature	Order no.
Standard	1380E1000
Gira Series 21, stainless steel	1380E10-500



### Door Terminal 1337-1X

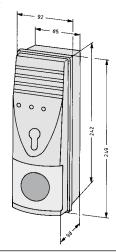


#### **Door Terminal Model 1337-10**

An operating unit to release doors in direction of escape in conjunction with external escape door control unit.

#### Escape door control module

- Emergency button with re-usable, non-splintering, protective emergency switch cover and integrated visual door status indicator with high-performance LEDs
- · Key switch to control door,
- · With Euro profile half cylinder, including 3 keys
- · Emergency button sign (arrow pointing downwards),
- · Plastic housing



Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	24 V DC
Power consumption	0.06 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	Surface-mounted: (HxWxD) 249x92x98 mm

Article / Feature	Order no.
Surface-mounted	1 3 3 7 - 1 0 0 0
Surface mount, RAL9002 grey white	1 3 3 7 - 1 0 9 3 - 0 0



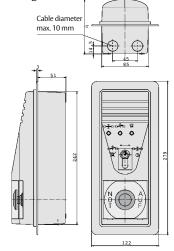
#### **Door Terminal Model 1337-11**

An operating unit to release doors in direction of escape in conjunction with external escape door control unit.

#### Escape door control module

- Emergency button with re-usable, non-splintering, protective emergency switch cover and integrated visual door status indicator with high-performance LEDs
- · Key switch to control door,
- · With Euro profile half cylinder, including 3 keys
- · Emergency button sign (arrow pointing downwards),

· Plastic housing



Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	24 V DC
Power consumption	0.06 A at 24 V
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	Flush-mounted: (HxWxD) 249x92x47 mm; flush-mounted case: (HxWxD) 242x85x51 mm

Article / Feature	Order no.
Flush-mounted	1 3 3 7 - 1 1 0 0

### Accessory Door Terminal 1337-1X



#### Replacement Cover Model Z1337-10-1

For Terminals in Type Series 1337, 1338 and 1340.

Technical attributes	
Compatible with:	1337, 1338, 1340

Article / Feature	Order no.
1 Piece	Z 1 3 3 7 - 1 0 - 1 0 0



#### Plastic EMERGENCY-OPEN Sign Model 2.1504-001318

For Terminals 1337, 1338, 1340

Technical attributes	
Compatible with:	1337, 1338, 1340

Article / Feature	Order no.
German	2.1504-00131800
English	2.1504-00151800
French	2.1504-00171800



#### Flush-mounted case Model 1337.112102

Flush-mounted case for door terminal model 1337/1338/1340

Technical attributes	
Material housing	sheet steel
Surface	Galvanized

Article / Feature	Order no.
galvanized	1 3 3 7 . 1 1 2 1 0 2

### Escape Door Terminal 1370-12



#### **Surface-Mounted Door Terminal Model 1337-12**

An operating unit in direction of escape in conjunction with external escape door control unit; suitable for outdoor use.

EltVTR-certificate has been applied for.

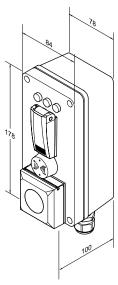
#### Escape door control module

Illuminated emergency button Status display (LED)

Key switch with twin protection cover to control door With Euro profile half cylinder, including 3 keys Emergency button sign (arrow pointing downwards), Metal housing

Technical attributes	
Control	No, external escape door control unit required
Emergency switch	Yes
Control element	Key switch with Euro Profile cylinder & escutcheon with twin protection cover; cam position adjustable: 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes (casing lid)
Operating voltage	24 V DC
Power consumption	0.11 A at 24 V
Operating temperature range	-25 °C to 55 °C
Class of protection	IP54 when cylinder cover is closed
Dimensions	(WxHxD): 85x205x101 mm

Article / Feature	Order no.
Escape door terminal	1337-12-1000



#### I/O Extension Model 901-20

I/O extension with TS bus interface; 8 inputs: lowactive; 2 outputs: switching contact as changeover contact, max 24 V / 2 A; 4 outputs: semi-conductors

Technical attributes	
Input operating voltage	12 / 24 V DC stabilised
Current consumption	Max. 0.1 A
Mounting method	Wall mount
Housing material	Plastic
Width	118 mm
Height	118 mm
Depth	30 mm

Article / Feature	Order no.
E/A - Extension	9 0 1 - 2 0 0 0

### Operating units



#### **Surface-Mounted Key Switch Model 1332-10**

An operating unit to release doors against direction of escape (outdoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.

#### Key switch module

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12 or 24V DC
Power consumption	0.05 A at 24 V DC
Dimensions	(WxHxD): 100x155x50mm

Article / Feature	Order no.
Surface-mounted	1 3 3 2 - 1 0 0 0



#### Flush-Mounted Key Switch Model 1332-11

An operating unit to release doors against direction of escape (outdoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.

#### Key switch module

- · With a momentary n.o. contact which can be operated to the left or right,
- For locking/unlocking, temporary releasing
- Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12 or 24V DC
Power consumption	0.05 A at 24 V DC
Dimensions	(WxHxD): 115x170x35mm; flush-mounted case: 94x149x47mm

Article / Feature	Order no.
Flush-mounted	1 3 3 2 - 1 1 0 0



#### **Security Screw Set Model ZS.1332**

Snake-eye security screw set to fasten the cover plate for key switches in Model Series 1332.

Technical attributes	
Version	Snake-eye

Article / Feature	Order no.
High-security screw kit	Z S . 1 3 3 2 - 1 0 0

### Operating units



#### **Operating element 1332-70**

As an operating element for authorised unlocking in the direction of escape (interior) in conjunction with an escape door control unit.

With an emergency button to trigger the alarm in conjunction with a central emergency button and a permanently manned control centre.

Emergency button (illuminated/with positive drive) for controlling an alarm,

Key switch to control door,

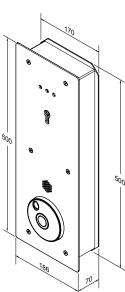
LED door status indicator released / locked / alarm, (operating element 1332-11)

Alarm sirens,

Sabotage contact; with shatterproof protective cover for the emergency switch which can only be removed with a key; emergency button cover breakable or shatterproof depending on installation location;

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	Yes (red, green, yellow)
Emergency button	To activate an alarm
Buzzer	Yes
Sabotage switch	Yes
Dimensions, flush-mounted	(WxHxD): 185x500x130mm

Article / Feature	Order no.
Flush-mounted	1 3 3 2 - 7 0 0 0



### Flush-mounted key switch



#### Flush-Mounted Key Switch Model 1380E01

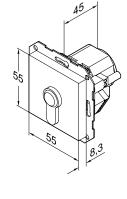
An operating unit to release doors against direction of escape (indoors) in conjunction with escape door control unit.

#### Key switch module

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting
- · Connections: plug-in screw terminals

Technical attributes	
Profile cylinder	Designed for use with client- supplied profile half-cylinder; adjustable cam position: 8 x 45°; 35 mm long
LED display	No
Buzzer	No
Sabotage switch	Yes
Dimensions	To install in a flush-mounted switch box 62.5 mm deep; frame required

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380E01-10400
Jung AS500; green	1380E01-11800
Jung LS990; alpine white	1380E01-60400
Jung LS990; stainless steel	1380E01-6353500
Gira E2; gloss pure white	1380E01-20400
Gira E2; aluminium colour	1380E01-23500
Gira standard 55; gloss pure white	1380E01-30400
Gira Series 21, stainless steel	1380E01-5353500

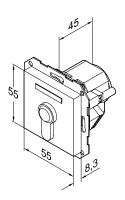


#### Flush-Mounted Key Switch Model 1380E03

An operating unit to release doors against direction of escape (indoors) or an operating unit in direction of escape for applications without local emergency button; in conjunction with escape door control unit.



- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting
- · Connections: plug-in screw terminals



Technical attributes	
Profile cylinder	Designed for use with client- supplied profile half-cylinder; adjustable cam position: 8 x 45°; 35 mm long
LED display	Yes (red, green, yellow)
Buzzer	Yes
Sabotage switch	Yes
Operating voltage	12-24 V DC
Power consumption	0.04 A at 24 V DC
Operating temperature range	0 °C to +40 °C
Class of protection	IP 30
Dimensions	To install in a flush-mounted switch box 62.5 mm deep; frame required

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380E03-10400
Jung AS500; green	1380E03-11800
Jung LS990; alpine white	1380E03-60400
Jung LS990; stainless steel	1380E03-6353500
Gira E2; aluminium colour	1380E03-23500
Gira E2; gloss pure white	1380E03-20400
Gira standard 55; gloss pure white	1380E03-30400
Gira Series 21, stainless steel	1380E03-5353500

### Light switch design accessories



#### Frame Model 1380EF1

Single frame

Technical attributes	
Frame	Single
Article / Feature	Order no.

Order no.
1380EF1-10400
1380EF1-11800
1380EF1-60400
1380EF1-6353500
1380EF1-20400
1380EF1-23500
1380EF1-30400
1380EF1-5353500



#### **Double frame Model 1380EF2**

Dual frame

Technical attributes	
Frame	Dual

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF2-10400
Jung AS500; green	1380EF2-11800
Jung LS990; alpine white	1380EF2-60400
Jung LS990; stainless steel	1380EF2-6353500
Gira E2; gloss pure white	1380EF2-20400
Gira E2; aluminium colour	1380EF2-23500
Gira standard 55; gloss pure white	1380EF2-30400
Gira Series 21, stainless steel	1380EF2-5353500



#### Frame Model 1380EF3

Triple frame

Technical attributes	
Frame	Triple

Article / Feature	Order no.
Jung AS500; alpine white	1380EF3-10400
Jung AS500; green	1380EF3-11800
Jung LS990 alpine white	1380EF3-60400
Jung LS990; stainless steel	1380EF3-6353500
Gira E2; gloss pure white	01380EF3-20400
Gira E2; aluminium colour	1380EF3-23500
Gira E2/ standard 55, pure white	1380EF3-30400
Gira Series 21, stainless steel	1380EF3-5353500



#### **Intermediary Frame Model 1385EF1Z**

Intermediary frame for 55 mm switch modules.

Technical attributes	
System	55 mm

Article / Feature	Order no.
Jung LS990 - alpine white	1380EF1Z600
Jung LS990 - stainless steel	1380EF1Z63500
Gira Stainless Steel Series 21	1380FF17500

### Key-operated switch



#### **Key Switch Model 1140**

An operating unit to release doors against direction of escape (outdoors) in conjunction with escape door control unit.

#### Key switch module

- With a momentary n.o. contact which can be operated to the left or right,
- · For locking/unlocking, temporary releasing
- · Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	No
Buzzer	No
Sabotage switch	No
Class of protection	IP 54
Dimensions	Surface-mounted (Wx- HxD): 73.5x73.5x45mm; flush-mounted (WxHxD): 90x100x55.5mm; flush-moun- ted switch box: 60x55mm

Article / Feature	Order no.
Surface-mounted	1140-1000
Flush-mounted	1140-1100

### Light switch design accessories



#### **Escape Route Sign Model 1385-FTS**

The mandatory pictogram is printed on a 74 x 74 mm surface on a transparent acrylic panel measuring 100 x 100 x 3 mm.

The imprint becomes luminescent after exposure to light for a certain period of time.

Technical attributes	
Dimensions	100 x 100 x 3 mm
Article / Feature	Order no.
	1385-FTS00



#### Plastic Sign Model 2.1504-000

Technical attributes	
Colour	green
Version	Emergency button

Article / Feature	Order no.
Arrow pointing left, German	2.1504-00061800
Arrow pointing right, German	2.1504-00071800
Arrow pointing downwards, German	2.1504-00091800
Arrow pointing downwards, English	2.1504-00141800
Arrow pointing downwards, French	2.1504-00161800



### Inspection Sticker Model 2.1502-00030000

For all terminals

Technical attributes	
Compatible with:	All terminals

Article / Feature	Order no.
1 Piece	2.1502-00030000



### Escape Route Technology Test Log Book Model D00579

For keeping a record of a door regarding its initial inspection and subsequent periodical tests.

Technical attributes	
Version	Test book

Article / Feature	Ord	ler no				
Escape route technology	D	0	0	4	0	7

Introduction



#### **Locking elements**

Electric door locking systems along escape routes function based on the fail-unlocked operating principle. This ensures that the door can be safely opened when unlocked or in the event of an emergency or power failure.

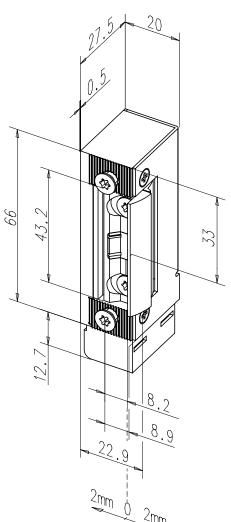
A suitable, electric locking system is selected according to the type of use and building structure. effeff supplies both electro-mechanical (positive-fit) and electromagnetic (force-fit) locking elements.

Electromechanical locking devices such as escape door strikes are always used when a concealed installation is required for reasons of aesthetics or security. A surface-mounted version is also available.

Electromagnetic locking devices are often used where doors need to be retrofitted with an escape route securing system. The force fit is monitored using a Hall effect sensor when surface holding magnets are

## Escape door strike 332.80 Fail-unlocked





#### Certified escape door strike 332

The compact design of the new effeff escape door strike 332 is comparable with a standard electric strike, thus guaranteeing fast, simple installation in a wide variety of different profiles and frames.

#### The advantages at a glance

- · Radius latch
- · Compact design
- $\cdot$  Min. 2000 N, max. 3000 N holding power according to prEN13633 and prEN 13637
- · Unlocking under preload with 100% holding power
- · Monitoring contact is potential-free and armature contact is non-isolated \*
- · Suitable for DL/DR and horizontal installation
- · Low power consumption
- Compact fitting dimensions
- · Adjustable FaFix® latch: 2 mm adjustment range with 0.5 mm increments
- · Adjustable via Fix grooves in housing

Electrical data	12 V DC	24 V DC
Input operating voltage	± 10%	± 10%
Rated resistance	63 Ω	260 Ω
Current consumption DC (stabilised)	200 mA	100 mA

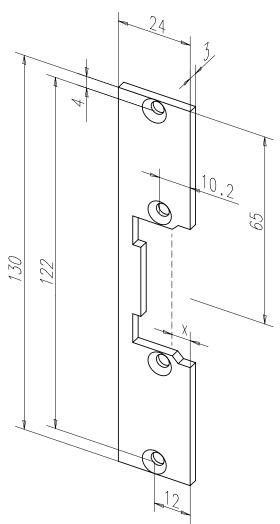
Monitoring contact (RI	R)	•
Diode (05)		•
Fail-locked		
Fail-unlocked		•
DIN door swing direc	tions	
Universal		1
Voltage		
12 V DC	E9	
24 V DC	F9	
		- 1
	$\forall \forall$	*
Order no.	₩	*

Characteristics

Adjustable latch (FF, FaFix®)

Technical attributes	
Break-in resistance	3000 N
Height	77,6 mm
Width	28 mm
Depth	20 mm
Latch bolt engaging depth	6 mm
FaFix® adjustment range	2 mm
Max. pre-load	3000 N
Operating temperature range	-15 °C to +40 °C
Continuous function load cycles	200000
Load cycles for in-plant test	500000
Installation position	vertical and horizontal
Anchor contact	Yes
Switching capacity - monitoring contact	24 V/ 1 A

### Short flat striking plate no. 096, square-cut



Short flat striking plate with latch bolt aperture.

#### The advantages at a glance

· DIN left and right usable

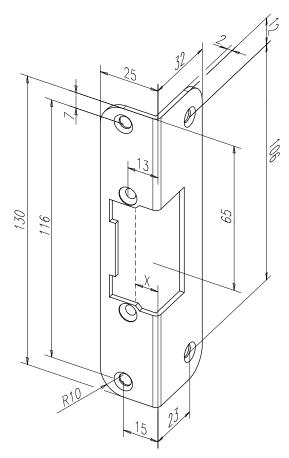
Technical attributes	
Length	130 mm
Width	24 mm
Thickness	3 mm
Dead bolt cutout	No
Latch bolt guide	No
x measurement	0 - 4 mm

Finish	DIN direction	Order no.
01 Ducat gold	1 Universal	09601-01
02 Dusty grey	1 Universal	09602-01
35 Stainless steel	1 Universal	09635-01
40 Smoothed, galvanise	d1 Universal	09640-01

#### Compatible electric strike models

• 332.80

### Short angled striking plate no. 603



Short angled striking plate with latch bolt aperture.

#### The advantages at a glance

· Can be used for left and right hand doors

Technical attributes	
Length	130 mm
Width	25/32 mm
Thickness	2 mm
Dead bolt cutout	No
Latch bolt guide	Yes

Finish	DIN direction	Order no.
35 Stainless steel	1 Universal	60335-01

#### Compatible electric strike models

• 332.80

### Fail-Unlocked 332.208 ProFix® 1



#### Certified escape door strike 332

The compact design of the new effeff Escape Door Strike 332 is comparable with a standard electric strike, thus guaranteeing fast, simple installation in a wide variety of different profiles and frames.

#### The advantages at a glance

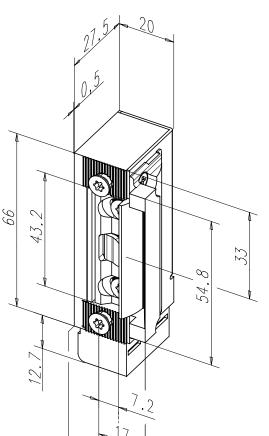
· Radius latch

Characteristics

Adjustable latch (FF, FaFix®)

- · Compact symmetrical design
- $\cdot$  Min. 2000 N, max. 3000 N holding power according to prEN13633 and prEN 13637
- · Unlocking under preload with 100% holding power
- · Monitoring contact is potential-free and armature contact is non-isolated \*
- · Suitable for DL/DR and horizontal installation
- · Compact fitting dimensions
- · Adjustable FaFix® latch: 2 mm adjustment range with 0.5 mm increments
- · Adjustable via Fix grooves in housing
- · Compatible with ProFix® 1 striking plates

Electrical data	12 V DC	24 V DC
Input operating voltage	± 10%	± 10%
Rated resistance	63 Ω	260 Ω
Current consumption DC (stabilised)	190 - 200 mA	95 - 100 mA

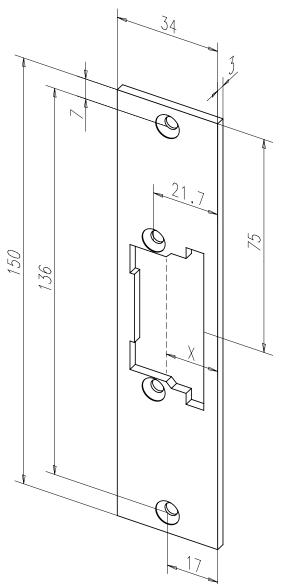


1mm 0 1mm

Order no.		
	VV	$\forall$
24 V DC	F9	
12 V DC	E9	
Voltage		
Universal		1
DIN door swing direct	ions	
Fail-unlocked		•
Fail-locked		
Diode (05)		•
Monitoring contact (RR	)	•

Technical attributes	
Break-in resistance	3000 N
Height	77,6 mm
Width	28 mm
Depth	20 mm
Latch bolt engaging depth	6 mm
FaFix® adjustment range	2 mm
Max. pre-load	3000 N
Operating temperature range	-15 °C to +40 °C
Continuous function load cycles	200000
Load cycles for in-plant test	500000
Installation position	vertical and horizontal
Anchor contact	Yes
Recovery diode	Yes
Switching capacity - monitoring contact	24 V/ 1 A

### Flat striking plate no. 522, ProFix® 1, square-cut



Short flat striking plate with latch bolt aperture.

#### The advantages at a glance

- · DIN left and right usable
- For ProFix® model variations

Technical attributes	
Length	150 mm
Width	34 mm
Thickness	3 mm
Dead bolt cutout	No
Latch bolt guide	No
x measurement	13,5-15,5 mm

Finish	DIN direction	Order no.
35 Stainless steel	1 Universal	52235-01

#### Compatible electric strike models

332.208

### Accessories



#### **Coupling Relay Model 7480**

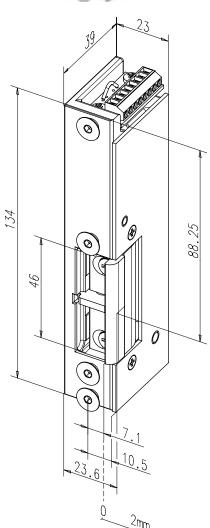
The coupling relays (coupling module) are required to provide potential-free relay contacts to external units. The armature contact of Model 332 is not potential-free; if necessary use a coupling relay.

Technical attributes	
Switching current	1 A

Article / Feature	Order no.
12 V	7 4 8 0 E 0 0
24 V	7 4 8 0 F 0 0

### Fail-Unlocked 331U80





#### High-security fail-unlocked strike

Escape Door Strike 331U80 is especially designed to lock doors along escape routes. Our Model 331U80 is also suitable as an additional locking device for fire doors. Thanks to its reliable unlocking under preload (max. 5,000 N), it is primarily used in doors which are subject to escape route requirements. The 331U Model Series is guaranteed to work reliably in interlock systems, on soundproof doors and on doors where pressure is expected to act on the electric strike latch due to the structural design.

#### The advantages at a glance

- · FaFix® latch with 2 mm adjustment range
- · Integrated monitoring and armature contact
- Sturdy design for demanding requirements

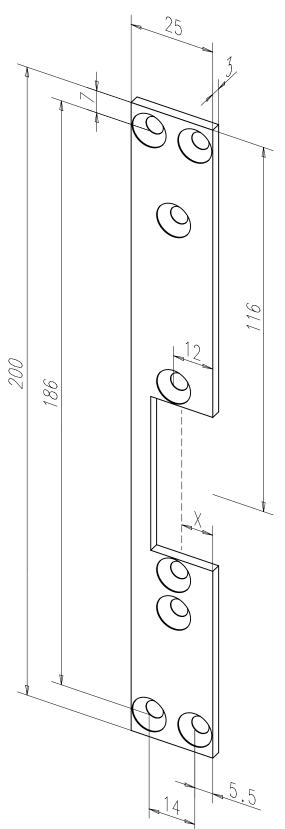
Electrical data	12 V DC	24 V DC
Operating voltage tolerance range	±1V	±2V
Rated resistance	37,5 Ω	150 Ω
Current consumption DC (stabilised)	320 mA	160 mA
Max. latch preload DC (stabilised)	5000 N	5000 N

Characteristics	
Adjustable latch (FF, FaFix®)	•
Monitoring contact (RR)	•
Diode (05)	•
Armature monitoring contact	•
Fail-locked	
Fail-unlocked	•

DIN door swing directions		
Left-hand		4
Voltage		
12 V DC	E9	
24 V DC	F9	
	$\overline{V}$	$\forall$
Order no.		
331U80F	* *	*

Technical attributes	
Break-in resistance	5000 N
Height	134 mm
Width	39 mm
Depth	23 mm
Operating temperature range	-15 °C to +40 °C
Installation position	vertical and horizontal

### Flat striking plate no. 116 For high-security applications



Short flat striking plate with latch bolt aperture.

#### The advantages at a glance

· For escape door electric strikes from the 331U Model Range as well as Security Electric Strike 131

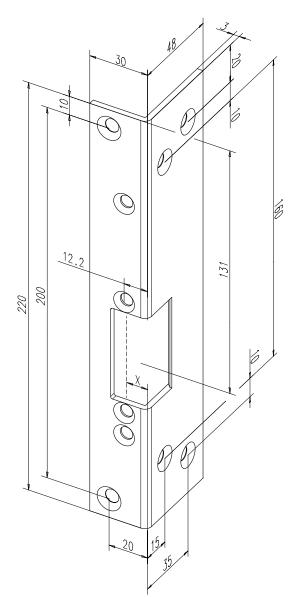
Technical attributes	
Length	200 mm
Width	25 mm
Thickness	3 mm
Dead bolt cutout	No
Latch bolt guide	No
x measurement	2,9-4,9 mm

Finish	DIN direction	Order no.
02 Dusty grey	4 Left-hand	11602-04
02 Dusty grey	5 Right-hand	11602-05
35 Stainless steel	4 Left-hand	11635-04
35 Stainless steel	5 Right-hand	11635-05
40 Smoothed, galvanised	14 Left-hand	11640-04
40 Smoothed, galvanised	15 Right-hand	11640-05

#### Compatible electric strike models

- · 331U80
- · 331U80F

# Angled striking plate no. 090 For high-security applications



Short angled striking plate with latch bolt aperture.

#### The advantages at a glance

· For fire protection door openers

Technical attributes	
Length	220 mm
Width	30 mm
Thickness	3 mm
Depth	48 mm
Dead bolt cutout	No
Latch bolt guide	No
x measurement	3,1-5,1 mm

Finish	DIN direction	Order no.
35 Stainless steel	4 Left-hand	09035-04
35 Stainless steel	5 Right-hand	09035-05

#### Compatible electric strike models

- · 331U80
- · 331U80F

### Mating components for escape door strikes

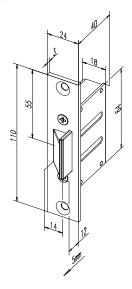


#### Mating component model 807 angular

Mortise latch bolt locks for Model Series 807 are tested in accordance with applicable regulations and are approved as suitable mating components for electrical locking systems in doors along escape routes. The latch bolt is adjustable from 12 mm to 17 mm (projection). This means that it can be adapted to the door gap on site thus ensuring actuation of the monitoring contact.

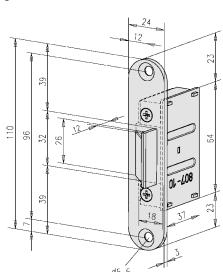
Technical attributes	
Fixing holes	2
Depth	40 mm
Version	Adjustable
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Article / Feature	Order no.
Faceplate 110 x 24 mm	8 0 7 - 1 0 0 0
Faceplate 135 x 20 mm	8 0 7 - 1 1 0 0



#### **Mating Component Model 807 Radius**

Mortise latch bolt locks for Model Series 807 are tested in accordance with applicable regulations and are approved as suitable mating components for electrical locking systems in doors along escape routes. The latch bolt is adjustable from 12 mm to 17 mm (projection). This means that it can be adapted to the door gap on site thus ensuring actuation of the monitoring contact.



Technical attributes	
Fixing holes	2
Depth	40 mm
Version	Adjustable

Article / Feature	Order no.
Faceplate 110 x 24 mm	8 0 7 - 1 2 0 0
Faceplate 110 x 20 mm	8 0 7 - 1 3 0 0



### Mounting accessories for escape door strikes



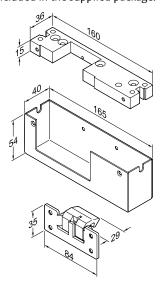
#### **Surface-Mounted Housing Model A01**

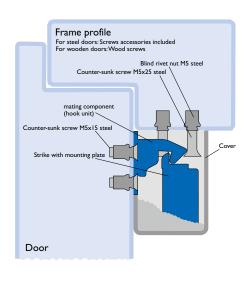
The solution to installation situations where electric door strikes cannot be installed due to technical difficulties or legal provisions. Installed as an additional locking element, the door is secured in the direction of entry and exit. It is especially suitable for combining with effeff escape route and access control systems. Surface-Mounted Housing A01 integrates Escape Door Electric Strike 331U to safeguard escape routes. Always order compatible Electric Strike Models 131, 141 and 331U with a DIN left handing (4) and in a FaFix design (FF).

Comprehensive installation material and drilling template are included in the supplied package.

For metal and wood structures, plastic and aluminium profiles
165 x 57 x 40 mm
Stainless steel

Article / Feature	Order no.
1 surface-mounted casing set	A 0 1 3 5 - 0 4





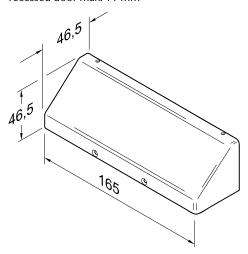


#### **Mounting Bracket Model A03**

Compatible with Models A01 und A02 for flush-fitted frame-to-door leaf structures.

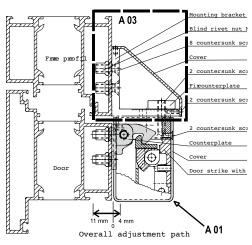
Comprehensive installation material and drilling template are included in the supplied package.

Adjustable throw for projecting door max. 4 mm, for recessed door max. 11 mm



Technical attributes	
Dimensions	165 x 46.5 x 46.5 mm
Surface	Stainless steel

Article / Feature	Order no.
includes installation material and drilling template	A 0 3 3 5 - 0 1



### Mounting accessories for escape door strikes



#### **Stainless Steel Adhesive Plate Model A04**

Adhesive stainless steel plate to fasten the hook bolt in surface mount casing A01 to glass doors and mounting bracket A 03 to the top pane on all-glass doors

A combination of adhesive plate A04 with surface mount casing A01 replaces adhesive model A02. Adhesive Plate A04 can also be used to fasten Mounting Bracket A03.

Technical attributes	
Dimensions	165 x 45 x 3 mm
Version	Corner radius 2 mm
System endurance test	250 000 cycles
Load per cycle	140 N (open - close)
Holding force	6000 N
Glass door leaf clearance for full glass doors	0 to max. 10 mm
Adhesive plate clearance	2 mm – 6 mm

Article / Feature	Order no.
Adhesive panel incl. accessories	A 0 4 3 5 - 0 1



#### Adhesive Set Model 760-RK1500

Two-component adhesive, consisting of adhesive and activator.

Installation using adhesive without mixing two components (adhesive and activator).

Adhesive set contains sufficient adhesive for about 4 Adhesive Plate Model A04.

Six cleaning cloths are included as accessories.

Article / Feature	Order no.
Adhesive kit	7 6 0 - R K 1 5 0 0 0 0

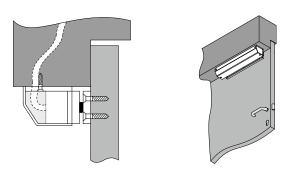
### Holding magnets



#### **Holding Magnet Model 827HA**

Holding magnets are suitable for securing doors using an electro-magnetic system. They are easy to install, as there is no need to make modifications or cut-outs in door frames.

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Technical attributes	
Version	surface
Holding force	2500 N
Connecting cable	4 m
Colour	neutral anodized
Length	301 mm
Width	52 mm
Height	43 mm
Rated current consumption 12 V DC	500 mA
Rated current consumption 24 V DC	250 mA
Input operating voltage	24 V DC / 12 V DC

Article / Feature	Order no.
Hall effect sensor, silver	8 2 7 H A 4 4 F 9 0
Hall effect sensor, white	8 2 7 H A 9 3 F 9 0

### Mounting accessories for Model 827HA

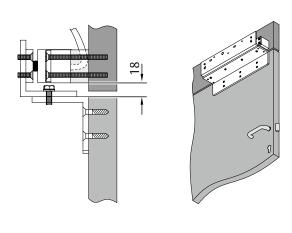


#### **Door Fastening Installation Set Model 827-6-1**

For fitting Holding Magnets 827HA onto flush-fitted door structures.

300 ° 60 ± 5
300 60 ± 5
15 6 40

Technical attributes	
Version	Adjustable
Article / Feature	Order no.
Set	8 2 7 - 6 - 1 0 0

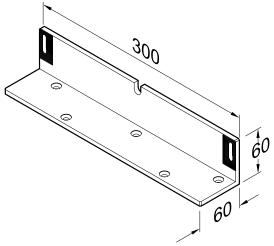


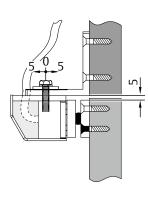


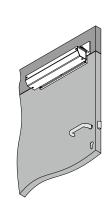
#### **Surface L-Bracket Model 827-7**

For fitting Holding Magnets 827HA onto flush-fitted door structures.

Technical attributes	
Version	Adjustable
Article / Feature	Order no.
Set	8 2 7 - 7 0 0





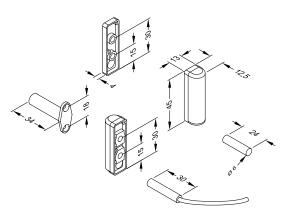


## Mounting accessories for Model 827HA



#### Reed contact model 10380A VdS class A

The set consists of a round reed contact, permanent magnet, 2 flange casings, 2 surface-mounted casings and 2 spacers; it is thus suitable for surface-mounted and mortise fitting in wood or aluminium windows and doors.



200 V DC/ 500 mA/ 10 W
15 mm
IP 67
Class A
G104729
6 m
2-wire
grey white
Plastic
0 to +40 °C
0,15 Ω

Article / Feature	Order no.
Normal open	10380A-600

### Holding Magnet Model 828



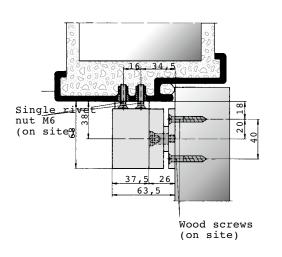
#### **Holding Magnet Model 828**

Holding magnets are suitable for securing doors using an electro-magnetic system. They are easy to install, as there is no need to make modifications or cut-outs in door frames. Electro-Magnet 828 contains an integrated contact to monitor locking status (Hall effect sensor).

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Article / Feature	Order no.
neutral anodized	8 2 8 4 4 F 9 0



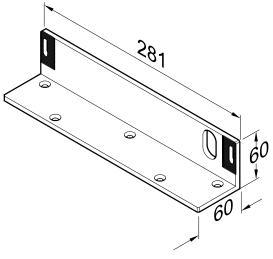
#### L-Bracket Model 828-7

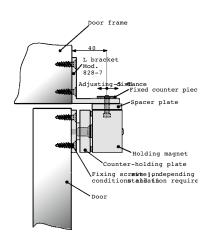
For fitting Holding Magnets 827A and 828 onto flush-fitted door structures.

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Technical attributes	
Height	60 mm
Width	281 mm
Depth	60 mm

Article / Feature	Order no.
1 set	8 2 8 - 7 0 0





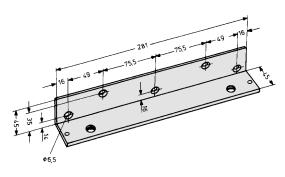
### Mounting accessories for Model 828

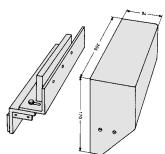
#### **Z-Bracket Model 828-6**

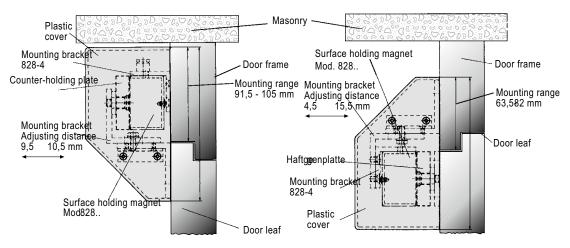
For fitting Holding Magnets 827A and 828 onto flush-fitted door structures.

Technical attributes	
Height	170 mm
Width	306 mm
Depth	94 mm

Article / Feature	Order no.
set	8 2 8 - 6 4 4







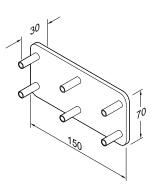


#### **Counter Fitting Bracket 828-5**

Counter fitting brackets 828-5 enable seamless screw joints to be fitted onto wood doors. This leads to greater stability when fastening holder strike plates to wood doors (not suitable for fire doors).

Technical attributes	
Height	70 mm
Width	150 mm
Depth	5 mm

Article / Feature	Order no.
1 set	8 2 8 - 5 4 4

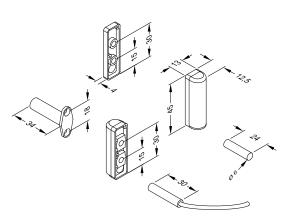


### Accessories



#### Reed contact model 10380A VdS class A

The set consists of a round reed contact, permanent magnet, 2 flange casings, 2 surface-mounted casings and 2 spacers; it is thus suitable for surface-mounted and mortise fitting in wood or aluminium windows and doors.



Technical attributes	
Max. contact rating	200 V DC/ 500 mA/ 10 W
Max. sensing distance	15 mm
Class of protection	IP 67
VdS class	Class A
VdS-approval	G104729
Connecting cable	6 m
Number of wires	2-wire
Colour	grey white
Material housing	Plastic
Operating temperature range	0 to +40 °C
Contact resistance	0,15 Ω

Article / Feature	Order no.
Normal open	10380A-600

### Holding Magnet Model 827-GP



#### Handle-Profile Holding Magnet Model 827-GP

827H in handle profile, 0.4. Electric magnetic locking device with Compact Holding Magnet 827 for securing doors along escape routes. In handle profile for installation against the direction of escape on flush-surface mounted doors. With integrated locking system monitoring (Hall effect sensor) and magnetic contact.

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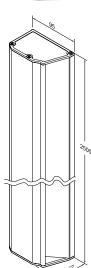
Technical attributes	
Continous duty	100 % ED
Holding force	2500 N
Connecting cable	4 m
Colour	neutral anodized
Height of handle profile	400 mm
Handle profile width	95 mm
Depth of handle profile	62 mm
Locking system monitoring	Hall sensor
Door status	Magnetic contacts
Rated current consumption 12 V DC	500 mA
Rated current consumption 24 V DC	250 mA
Input operating voltage	24 V DC / 12 V DC

Article / Feature	Order no.
1 set	827H1GP04044F90



#### **Handle-Profile Holding Magnet Model 827-GP**

827H in handle profile, 2.5 m, electro-magnetic locking system with two Compact Holding Magnets 827 for securing doors along escape routes; in handle profile for installation against the direction of escape on flush-fitted doors; with integrated locking system monitoring (Hall effect sensor) and magnetic contact.





Technical attributes	
Continous duty	100 % ED
Holding force	2 x 2,500 N
Connecting cable	4 m
Colour	neutral anodized
Height of handle profile	2500 mm
Handle profile width	95 mm
Depth of handle profile	62 mm
Locking system monitoring	Hall sensor
Door status	Magnetic contacts
Rated current consumption 12 V DC	1,000 mA
Rated current consumption 24 V DC	500 mA
Input operating voltage	24 V DC / 12 V DC

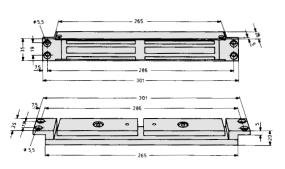
Article / Feature	Order no.
1 set	827H2GP25044F90

### Compact Holding Magnet Model 827H



#### **Compact Holding Magnet Model 827H**

Holding magnet in compact design which provides a concealed securing system for doors along escape routes. Inherently stable aluminium housing for flush mount, including holder counterplate. A monitoring contact, such as Model 10380A, is not included in the supplied package.



Technical attributes	
Continous duty	100 % ED
Holding force	2500 N
Connecting cable	4 m
Colour	neutral anodized
Length of holding magnet	301 mm
Width of holding magnet	28 mm
Height of holding magnet	35 mm
Length of mating component	301 mm
Width of mating component	20 mm
Height of mating component	35 mm
Rated current consumption 12 V DC	500 mA
Rated current consumption 24 V DC	250 mA
Input operating voltage	24 V DC / 12 V DC

Article / Feature	Order no.
Built-in fitting, hall sensor	8 2 7 H 4 4 F 9 0



#### **Accessory Bag Model 827ZB-M**

Mounting spacer plates, 10 units, 0.5 mm for Counter Holding Plate Model 827.

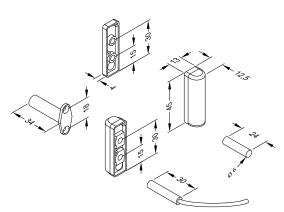
Technical attributes	
Thick spacer plates	0.5 mm

Article / Feature	Order no.
Accessory bag	8 2 7 Z B - M 0 0



#### Reed contact model 10380A VdS class A

The set consists of a round reed contact, permanent magnet, 2 flange casings, 2 surface-mounted casings and 2 spacers; it is thus suitable for surface-mounted and mortise fitting in wood or aluminium windows and doors.



Technical attributes	
Max. contact rating	200 V DC/ 500 mA/ 10 W
Max. sensing distance	15 mm
Class of protection	IP 67
VdS class	Class A
VdS-approval	G104729
Connecting cable	6 m
Number of wires	2-wire
Colour	grey white
Material housing	Plastic
Operating temperature range	0 to +40 °C
Contact resistance	0,15 Ω

Article / Feature	Order no.
Normal open	10380A-600

### Door closer Model DC700G-FT



#### ASSA ABLOY DC700G-FT

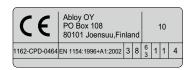
- ASSA ABLOY door closer with CAM Motion technology, extended mounting plate and integrated latch bolt lock, extended guide rail with integrated escape door electric strike
- Suitable for retrofitting to fire doors with guide rail door closers and fastening using drilling template acc. to DIN EN 1154, Supplementary Sheet 1:2003-11
- · Certified in compliance with DIN EN 1154, size 3-6
- Escape Door Electric Strike 332, tested in compliance with the German 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 Electric 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
- $\boldsymbol{\cdot}$  Suitable for left and right hand 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

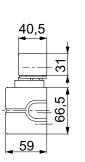
### Performance characteristics for guide rail

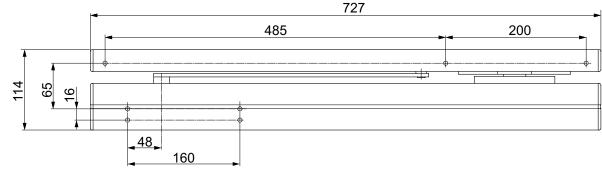
- · Height-adjustable by 2 mm for tolerance
- Concealed fastening screws



### Characteristics of escape door locking system

- · Holding force of 2,000 N
- Latch throw continuously adjustable between 12 mm and 17 mm
- Latch throw 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 electric strike using FaFix





### Door closer Model DC700G-FT

Technical attributes	
Variable adjustable closing force	EN 3-6
Door widths up to	850 mm - 1,200 mm
Fire and smoke protection	Yes
DIN door swing directions	DIN left / DIN right
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
Escape door strike	
Holding power	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 im compliance with EltVTR	Escape route controller

#### Specifications for DC700G-FT

ASSA ABLOY door closer with CAM Motion technology; extended mounting plate and integrated latch bolt lock, guide rail with integrated effeff Escape Door Electric 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 DIN EN 1154, Supplementary Sheet 1:2003-11;

- · Closing force continuously adjustable, EN size 3-6
- Door closer approved in line with DIN EN 11544, with CF mark
- Escape door electric strike tested in compliance with the German guideline for electrical locking systems for doors along escape routes
- Closing speed, latching speed and backcheck continuously adjustable
- Continuous height adjustment for door closer axis up to 14 mm
- Suitable for fire and smoke protection doors
- Recommended door width: at least 850mm max.
   1,200mm
- Latch throw continuously adjustable between 12 mm and 17 mm
- Latch throw 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 electric strike using FaFix
- $\boldsymbol{\cdot}$  Suitable for left and right hand doors
- · Standard installation on hinge side

#### Accessories:

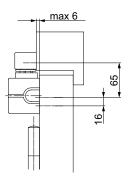
- ☐ 5 mm Spacer Plate (narrow rebate) DCFA01
- ☐ 15 mm Spacer Plate (wide rebate) DCFA02
- ☐ Replacement plate, 5 mm, for Drilling Template DCFA03
- ☐ Replacement plate, 15 mm, for External Drilling Template DCFA04
- ☐ Mounting / replacement plate, 5 mm, for Narrow Frame DCFA05
- ☐ Mounting / replacement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

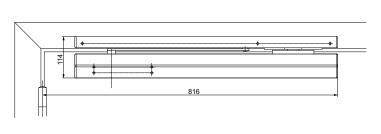
#### Colour:

☐ Silver EV1

complete specifications on the Internet at: www.assaabloy.de, under "Service" in the support section.

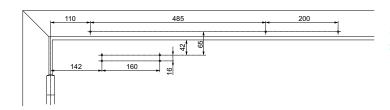
### Door closer Model DC700G-FT





Space required on doors for standard installation on hinge side

DIN left shown in diagram DIN right is the reverse



Installation dimensions in compliance with DIN EN 11544 Supplementary Sheet 1; standard hingeside installation

DIN left shown in diagram DIN right is the reverse

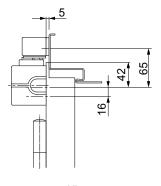
### Door closer Model DC700G-FT

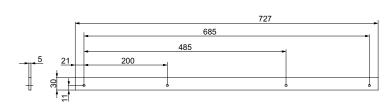
#### Notice

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

Adjustment option on electric strike (FaFix In the case of doors with an overlapping door leaf (narrow or wide rebate), the following spacer plates

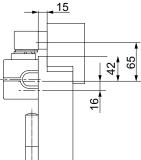
must be used to ensure that the guide rail and mounting plate are in a flush position when on top of one another.

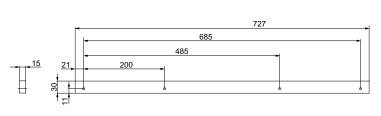




#### Spacer Plate DCFA01

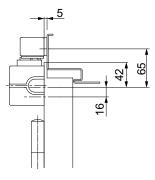
For shimming guide rails. For use on narrow-rebate doors with a max. door leaf overlap of 8 mm

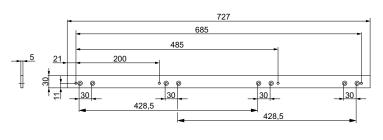




### Spacer Plate DCFA02

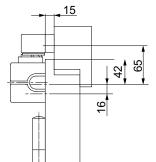
For shimming guide rails. For use on wide-rebate doors with a max. door leaf overlap of 18 mm.

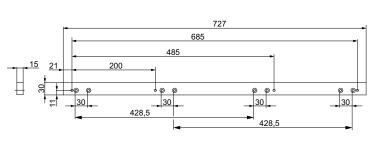




### Replacement Plate DCFA03

For mounting guide rail over ASSA ABLOY drilling pattern and over existing drill holes from other manufacturers, for flushfit doors and narrow rebate doors with door leaf overlap up to 8 mm.

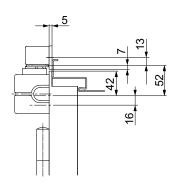


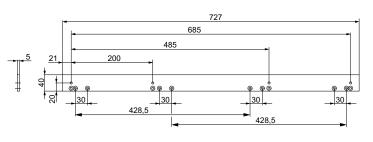


### Replacement Plate DCFA04

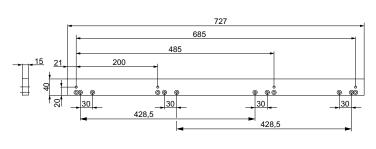
For mounting guide rail over existing drilling template by other manufacturers, for wide-rebate doors with door leaf overlap up to 18 mm.

### Door closer Model DC700G-FT





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### Mounting and Replacement Plate DCFA05

Mounting plate for narrow frames. For mounting over ASSA ABLOY drilling template and over existing drill holes from other manufacturers 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 template and over existing drill holes from other manufacturers 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 DC700F, complete, 24V DC, silver EV1	DC700F001F1EV1-
Security Door Closer Model DC700F, complete, 12V DC, silver EV1	DC700F001E1EV1-
5 mm spacer plate for narrow-rebate doors, silver EV1	DCFA01EV1-
15 mm spacer plate for wide-rebate doors, silver EV1	DCFA02EV1-

Description	Order no.
5 mm spacer plate for competitor's guide rail drilling template, silver EV1	DCFA03EV1-
15 mm spacer plate for competitor's guide rail drilling template, silver EV1	DCFA04EV1-
Mounting / replacement plate, 5 mm, for narrow frame, silver EV1	DCFA05EV1-
Mounting / replacement plate, 15 mm, for narrow frame, silver EV1	DCFA06EV1-

### 1. **FTV001**

Escape door locking device with authorised access using key.

Detailed information starting on page 38.

### 2. **FTV002**

Networked system with visual display software / OPC server for up to 110 doors

Detailed information starting on page 40.

### 3. **FTV003**

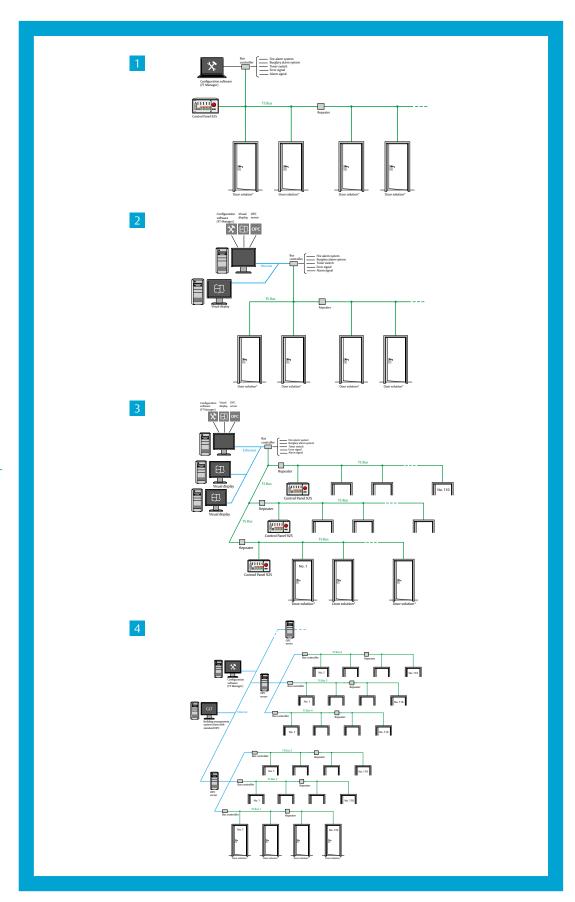
Networked system with visual display software / OPC and subordinate panels for up to 110 doors

Detailed information starting on page 42.

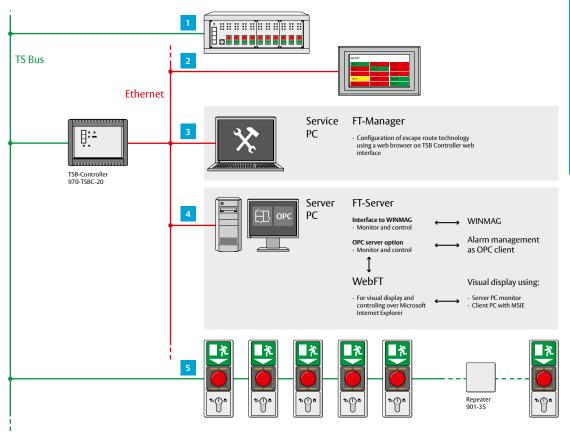
### 4. **FTV004**

Networked system with data exchange via OPC server for large premises with up to 1,000 doors

Detailed information starting on page 44.



### The interfaces



### **Technical requirements**

Item	Product	970- TSBC	TS bus	Ethernet	Computer requirements	Client computer	Work- stations	Max. doors
1	Control Panel Module Model 925	Х	Х	No	_	-	about 10	about 20
	Control Panel Model 925	Х	Х	No	_	-	about 10	about 70
2	FT Touch Panel	х		Yes	_	-	on request	on request
3	FT - Manager	х		Yes	TSB Controller web interface	Internet browser, e.g. IE 7 and above	1 simult- aneous	110
	FT Server	Х		Yes	Windows XP Prof.	Windows XP Prof.	1	110
	FT Server with OPC option	Х		Yes	Windows XP Prof.	Windows XP Prof.	1	110
	WebFT single user solution	Х		Yes	Windows XP Prof.	-	1	110
4	WebFT multi-user solution	х		Yes	Windows Server operating system	Windows XP Prof.	3 standard, more on request	110
	WebFT multi-user solution with several BUS lines	х		Yes	Windows Server operating system	Windows XP Prof.	on request	about 1000
5	Escape door control or monitoring unit	х	х	No	_	_	_	110 TSB devices

### TSB Controller Model 970-TSBC



#### **TSB Controller Model 970-TSBC**

Processor-controlled bus – Master to operate TS Bus networks with up to 110 devices.

With Ethernet interface to connect to a PC to use visualisation software, configuration software or an OPC server.

With five parameterisable inputs for emergency release activated by fire alarm system, priority locking activated by burglar alarm system and unlocking activated by timer switch.

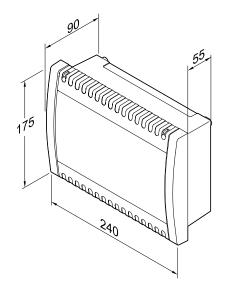
With three parameterisable relay outputs for system signals which indicate collective alarm, individual alarms and system failure

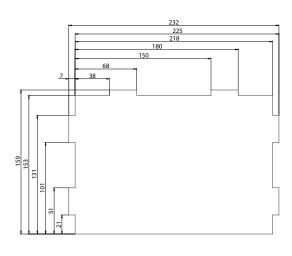
Integrated grouping function to implement interlock sequences (sequential locking), fire alarm groups (emergency unlocking), security zones equipped with burglary alarm systems (priority locking), timed release zones equipped with timer switches (permanent release) and group-related alarm and fault signals With USB interface for system backup and data import In surface-mounted, PVC housing Including crossover cable (RJ45)

Includes FT Manager software as integrated, webbased application to centrally configure networked escape door control units or FT II Generation door monitoring units (Type Series 1385, 720-40 and higher)

Technical attributes	
Dimensions	(HxWxD) 175x240x90 mm
Operating voltage	12 - 30 V DC (± 10 %)
Max. power consumption	9.7 W

Article / Feature	Order no.
In plastic housing; H/W/D: 175/240/90 mm	9 7 0 - T S B C - 2 0 0 0
With 3U front panel, HP 42 for 19" rack	970-TSBC-201900
TSB Controller in 19" module rack, closed type, 84 HP	970-TSBC-BT1900





### Control Panel Module Model 925



#### **Control Panel Module Model 925**

Central operating and display unit for 4 doors with escape door controls connected to TS bus network. Can be used in combination with TSB Controller 970-TSBC.

Processor-controlled central module with: Buzzer as an audible collective fault alarm, Buttons to re-set the alarm, Two potential-free relay contacts to forward locking status signals, LED operating mode display, Three LEDs to indicate status, Button to test LED indicators, Key switch to authorise/block operator buttons to control doors.

With operating and display devices for four doors featuring:

Three LEDs (red, green, yellow) to indicate door status Two buttons to lock/unlock doors or re-set device Can be extended with control panel module, extensions up to about 20 doors

Technical attributes	
Version	Basic unit for 4 doors.
Rated voltage	12 V (- 10 %) to 24 V DC (+ 10 %)
Article / Feature	Order no.

Basic unit for 4 doors, 12/24 V DC

92571A000000000



#### **Control Panel Extension Model 925**

For extending Control Panel Module Basic Unit 925 to provide central operation and display for other doors. With 50 cm connecting cable

Technical attributes	
Version	In plastic housing
Dimensions	H/W/D: 175/240/90 mm

Article / Feature	Order no.
3 doors	925710101000000
6 doors	925710200000000



### **Control Panel Module Add-On Emergency Button**

For adding an emergency button to Control Panel Module Basic Unit 925 to provide central release for escape door securing devices without emergency buttons via a security relay circuit.

With shatterproof emergency button protection cover.

Technical attributes	
Version	In plastic housing
Dimensions	H/W/D: 175/240/90 mm
Article / Feature	Order no.
EMERGENCY button	925710001A00000



### **Control Panel Module Add-On Emergency Button** and 3-Door Model 925

For adding an emergency button to Control Panel Module Basic Unit 925 to provide central release for escape door securing devices without emergency buttons via a security relay circuit and central operation and display for three other doors.

With shatterproof emergency button protection cover. With 50 cm connecting cable

Technical attributes	
Version	In plastic housing
Dimensions	H/W/D: 175/240/90 mm
Article / Feature	Order no.



#### Installation Kit Model 1370-00-01

Assembly set for mounting the model 1370 door terminal on a cavity wall.

lechnical attributes	
Colour	black
Article / Feature	Order no.
1 set	1370-00-0100

### Control Panel Model 925



Control Panel Module Model 925 for switchboard installation

#### **Control Panel Module Model 925**

Central operating and display unit on doors with escape door control units and TS bus network.

Can be used as the main or parallel control panel in combination with TSB Controller 970-TSBC.

Processor-controlled central module with:

Buzzer as an audible collective fault alarm

Buttons to re-set the alarm

Two potential-free relay contacts to forward locking status signals

LED operating mode display

Three LEDs to indicate status

Button to test LED indicators

Key switch to authorise/block operator buttons to control doors.

With operating and display devices for four doors featuring:

Three LEDs (red, green, yellow) to indicate door status Two buttons to lock/unlock doors or re-set device

Technical attributes	
Rated voltage	12 V (- 10 %) to 24 V DC (+ 10 %)

Article / Feature	Order no.
For switchboard installation; 4 doors, H/W/D: 170 x 270 x 176 mm	92511A0000000000
For switchboard installation; 4 doors; with emergency-opening module, H/W/D: 170 x 376 x 176 mm	92512A000A00000
For switchboard installation; 7 doors, H/W/D: 170 x 376 x 176 mm	92512A100000000
For switchboard installation; 7 doors; with emergency-opening module, H/W/D: 170 x 483 x 176 mm	92513A100A00000
For switchboard installation; 10 doors, H/W/D: 170 x 483 x 176 mm	9 2 5 1 3 A 2 0 0 0 0 0 0 0 0
For switchboard installation; 13 doors; with emergency-opening module, H/W/D: 303 x 376 x 176 mm	92514A300A00000
For switchboard installation; 16 doors H/W/D: 303 x 376 x 176 mm	9 2 5 1 4 A 4 0 0 0 0 0 0 0 0
For switchboard installation; 19 doors; with emergency-opening module, H/W/D: 303 x 483 x 176 mm	92515A500A00000
For switchboard installation; 22 doors H/W/D: 303 x 483 x 176 mm	92515A600000000



Control Panel Module Model 925 In wall / desk housing combinations

Article / Feature	Order no.
In wall / desk housing combination; 4 doors, H/W/D: 152 x 259 x 269 mm	9 2 5 3 1 A 0 0 0 0 0 0 0 0 0
In wall / desk housing combination; 4 doors; with emergency-opening module, H/W/D: 152 x 366 x 269 mm	92532A000A00000
In wall / desk housing combination; 7 doors, H/W/D: 152 x 366 x 269 mm	9 2 5 3 2 A 1 0 0 0 0 0 0 0 0
In wall / desk housing combination; 7 doors; with emergency-opening module, H/W/D: 152 x 473 x 269 mm	92533A100A00000
In wall / desk housing combination 10 doors, H/W/D: 152 x 473 x 269 mm	9 2 5 3 3 A 2 0 0 0 0 0 0 0 0
In wall / desk housing combination 13 doors; with emergency-opening module, H/W/D: 285 x 366 x 269 mm	92534A300A00000
In wall / desk housing combination 16 doors, H/W/D: 285 x 366 x 269 mm	9 2 5 3 4 A 4 0 0 0 0 0 0 0 0
In wall / desk housing combination 19 doors; with emergency-opening module, H/W/D: 285 x 473 x 269 mm	92535A500A00000
In wall / desk housing combination 22 doors, H/W/D: 285 x 473 x 269 mm	9 2 5 3 5 A 6 0 0 0 0 0 0 0 0

### Control Panel Model 925



Control Panel Module Model 925 frame component for 19" cabinet

#### **Control Panel Module Model 925**

Central operating and display unit on doors with escape door control units and TS bus network.

Can be used as the main or parallel control panel in combination with TSB Controller 970-TSBC.

Processor-controlled central module with:

Buzzer as an audible collective fault alarm

Buttons to re-set the alarm

Two potential-free relay contacts to forward locking status signals

LED operating mode display Three LEDs to indicate status Button to test LED indicators

Key switch to authorise/block operator buttons to control doors.

With operating and display devices for four doors featuring:

Three LEDs (red, green, yellow) to indicate door status Two buttons to lock/unlock doors or re-set device

Article / Feature	Order no.
Frame component for 19" cabinet (open version); 4 doors, H/W/D: 133 x 270 x 176 mm	92541A0000000000
Frame component for 19" cabinet (open version); 4 doors; with emergency-opening module, H/W/D: 133 x 376 x 176 mm	9 2 5 4 2 A 0 0 0 A 0 0 0 0 0
Frame component for 19" cabinet (open version); 7 doors; with emergency-opening module, H/W/D: 133 x 376 x 176 mm	9 2 5 4 3 A 1 0 0 A 0 0 0 0 0
Frame component for 19" cabinet (open version); surface installation; 7 doors, H/W/D: 133 x 483 x 269 mm	92542A100000000
Frame component for 19" cabinet (open version); surface installation; 10 doors, H/W/D:133 x 483 x 176 mm	92543A200000000
Frame component for 19" cabinet (open version); surface installation; 13 doors; with emergency-opening module, H/W/D: 266 x 376 x 176 mm	92544A300A00000
Frame component for 19" cabinet (open version); surface installation; 16 doors, H/W/D: 266 x 376 x 176 mm	92544A400000000
In 19" rack, open version; 19 doors; with emergency open module, H/W/D: 266 x 483 x 176 mm	92545A500A00000
Frame component for 19" cabinet (open version); surface installation; 22 doors, H/W/D: 266 x 483 x 176 mm	92545A600000000

### Accessories



#### **Bus Repeater Model 901-35**

When installing an escape door control system, the total cabling length can very easily add up to several hundred metres. A BUS repeater must be installed for larger systems featuring more than 1,000 metres of cabling (per BUS line). Such BUS repeaters boost the BUS signal, thus enabling escape door BUS systems to be installed with cabling lengths of several kilometres. A further advantage of the BUS repeater is the electrical separation in the BUS line. This enables large system installations to be divided, e.g. into floors. In the event of a breakdown, only the affected section will fail thanks to electrical separation; the rest of the BUS system will remain fully functional.

Technical attributes	
Max. power consumption	720 mW
Class of protection	IP 40
Operating temperature range	0 to +40 °C
Storage temperature	-25 ° C to +60 °C
Height	120 mm
Width	120 mm
Depth	30 mm
Weight in kg	200 g
Colour	RAL 9002
Input operating voltage	12 / 24 V DC stabilised
Rated current consumption	60 mA

Article / Feature	Order no.
Bus repeater	9 0 1 - 3 5 0 0



#### **Universal Bus Module Model 901-50**

The 901-50 universal BUS module (UBM) provides the opportunity for additional control and monitoring tasks, independently of or additional to escape door applications. 2 operating modes are available - door status indicator and door control.

Technical attributes	
Contact rating relay	24 V/ 3 A
Maximum load output	Max. 50 mA for 2.5 V voltage drop (inside device, drop is 0.5 V per 10 mA load current)
Class of protection	IP 40
Operating temperature range	0 to +40 °C
Storage temperature	-25 ° C to +60 °C
Height	120 mm
Width	120 mm
Depth	30 mm
Colour	Grey white (RAL 9002)
Input operating voltage	12 / 24 V DC stabilised
Operating voltage range	± 10%
Rated current consumption	100 mA
Rated output	1,2 W

Article / Feature	Order no.
Universal bus module	9 0 1 - 5 0 0 0



### I/O Extension Model 901-20

I/O extension with TS bus interface; 8 inputs: low-active; 2 outputs: switching contact as changeover contact, max 24 V / 2 A; 4 outputs: semi-conductors

Technical attributes	
Input operating voltage	12 / 24 V DC stabilised
Current consumption	Max. 0.1 A
Mounting method	Wall mount
Housing material	Plastic
Width	118 mm
Height	118 mm
Depth	30 mm

Article / Feature	Order no.
E/A - Extension	9 0 1 - 2 0 0 0

### Accessories model 925



### Plug-In Power Unit Model 470-9-2-03

Power supply to power units with stabilised direct

Technical attributes	
Version	Plug-in power supply
Operating voltage	230 V DC
Output voltage	28 V DC
Output current (power supply)	0.64 A

Article / Feature	Order no.
Plug-in power supply, 28 V DC.	470-9-2-0300



### Power supply device model 1003 24 V

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Surface-mounted / top hat rail
Electronic
-5 °C to +40 °C
IP 00
II/Insulation protection
Plastic
RAL 7035
100-240 V AC
24 V DC (regulated)

Article / Feature	Order no.
1 A, dimensions: (W/L/H) 94x36x68 mm	1 0 0 3 - 2 4 - 1 1 0
2 A, dimensions: (W/L/H) 70x68,5x93 mm	1 0 0 3 - 2 4 - 2 1 0
4 A, dimensions: (W/L/H) 92x70x68 mm	1 0 0 3 - 2 4 - 4 1 0

### Visual display / WebFT



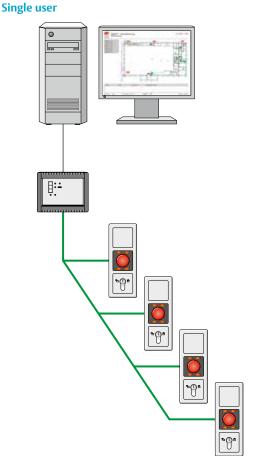
### Floor plan view

The respective door status can be displayed on a building floor plan to ensure optimum monitoring and control of large and medium-sized premises. The current door status is shown using a colour code. If you click on the door status icon, a window will open up containing detailed information which can then be used to control the door.

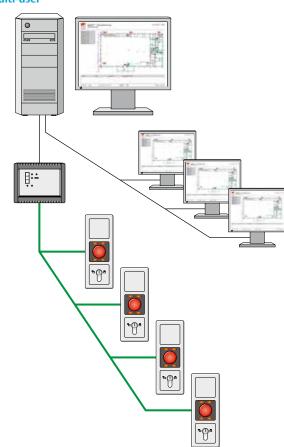
The menu can be used to select several different views of the building, such as different floors.

Any alarm messages will also be displayed in the status bar, thus ensuring nothing remains unseen in the system.

effeff's visual display software will give you a clear system overview, whether you have a single user or multi-user configuration.



#### Multi-user



### Visual display / WebFT



#### WebFT Software Model 970-20

Web-based visualisation software enabling users to conveniently control and monitor effeff systems on Windows PCs using MS Internet Explorer. Display in table or floor plan format, depending on the option ordered.

Table format: push-buttons arranged in a matrix with status indicators.

Floor plan format: push-buttons positioned on floor plan with status indicators. The floor plan is supplied by the client (DXF format).

With alarm and events list for logging. Versions available for single-user or multi-user system.

30 reporting points are included in the basic design. The floor plan version also features three floor plans while multi-user systems allow three workstations/

Other configurations on request.

#### System requirements

Operating system for single workstation / client

- Microsoft® Windows XP Professional, 32 bit with Service Pack 3
- Microsoft® Windows 7<sup>™</sup>, Professional Edition and higher, 32 bit
- Microsoft® Windows 7<sup>™</sup>, OPC-Server 3.9.0 or higher,
   32 bit and 64 bit

#### Server operating system

- · Microsoft® Windows Server 2003 with Service Pack 1
- · Microsoft® Windows Server 2008 R2, 32 bit
- Microsoft® Windows Server 2008, OPC-Server 3.9.0 or higher, 32 bit and 64 bit

#### Required installations

- Internet Information Server (IIS) and Microsoft Message Queue (MSMQ) Server
- · MS .NET Framework 3.5 with Service Pack 1
- MS Internet Explorer 7 or higher with current service pack
- · Silverlight in its current version (http://www.silverlight.net)
- · Adobe Reader version 9

#### Hardware

- PC with Intel® Pentium with at least 2.6 GHz (Dual Core), a corresponding processor or faster.
- Min. 1 GB RAM, min. 2 GB RAM for Windows Vista und Windows 7; recommended: 4 GB RAM.
- · 10 GB of free disk space
- · DVD ROM drive
- · Ethernet connection

Technical attributes	
Operating system	Windows XP Prof. and later versions

Article / Feature	Order no.
Single user - a layout view	970-20-ETG-1-00
Single user - max. 3 layout views	970-20-ETG-3-00
Multiple user - max. 3 floor plan views and 3 users	9 7 0 - 2 0 - M T G - 3 - 0 0
Additional layout view	970-20-TG-100
10 additional reporting points	970-20-MP1000
Additional workstation/ user	9 7 0 - 2 0 - U S E R 0 0

### Technology

### Networked escape route technology Interfaces



#### **OPC Server Software Model 970-OPC**

OPC server software to incorporate effeff TS bus devices in building management systems.

Detailed technical specifications on request.

System requirements

Operating system

OPC server can be run on a PC using the following operating systems:

Windows XP Professional SP3 (32 Bit) and higher

Windows Server 2003 (32 Bit)

Windows 7 Professional (32 bit) and higher

Windows Server 2008 (32 Bit)

Hardware

PC with Intel® Pentium 3 or higher, or an equivalent processor

1 GB RAM

50 MB free hard disk storage space (installation and operating data)

Screen resolution at least 1024 x 768, 16-bit graphics card

CD ROM drive

Technical attributes	
Operating system	Windows XP Prof. and later versions
Article / Feature	Order no.

OPC server software

9 7 0 - O P C - - - - 0 0



#### WinFT/WINMAG - Interface Model 970-FT-Serv

Software interface to connect the specified systems with TSB Controller 970-TSBC.

Included in supply package for 970-TSBC-20

Technical attributes	
Version W	VINMAG

Article / Feature	Order no.
	970-FT-Serv00

# locking systems in doors along escape routes (German: EltVTR)<sup>1)</sup>

# Mitteilungen

### Deutsches Institut für Bautechnik

Anstalt des öffentlichen Rechts

#### Contents

- 1. Area of use
- 2. Terms
- 3. Technical requirements
- 4. Testing
- 5. Installation guide
- 6. Operating instructions
- 7. Entry into force

#### 1. Area of use

These guidelines contain the building code regulation requirements for manufacturing and testing electric locking systems for doors along escape routes. As regards the standards, other documents and technical requirements specified in these guidelines which refer to building products or test procedures, products or testing procedures must be used which comply with the standards or other and/or technical regulations of other EU member states or other EEA states, so that the required level of protection with regard to safety, health and usability is achieved to a similar degree on a permanent basis.

#### 2. Terms

#### 2.1 Electric locking system

An electric locking system is a combination of devices which locks doors along escape routes and unlocks them in the event of an emergency when required, by those fleeing, for example. As a minimum, an electric locking system consists of a control unit, an emergency button and an electric locking device based on the fail-unlocked operating principle.

### 2.2 Control unit

A control unit is a device which is used to supply power to the locking device and the emergency button. The control unit can also trigger switching operations; for example, it may trigger an audible or optical signal device or re-lock the door after the key switch has been activated.

A difference is made between the following types of control unit:

a. Local control units which are fitted immediately

- next to the door and are only used for unlocking.
- b. Central control. This is a control unit which is installed at a central point and can activate or release multiple local control units or release multiple electric locking systems.

#### 2.3 Emergency button

An emergency button is a device which activates the release on a locking device when used.

#### 2.4 Electrical locking system

An electric locking system secures doors in addition to normal, mechanical locks. A difference should be made between force-fit locking systems, e.g. holding magnets, and positive-fit locking systems. An electric locking system usually consists of two parts - a securing element and a secured element.

#### 2.5 Signalling device

Signalling devices are units which produce optical and/or audible signals, such as a horn, siren or indicator lights to display operating statuses.

#### 2.6 Unlocking

Unlocking is a security-relevant interruption in the mains adapter to an electric locking system. A difference is made between the following types of release: a.Direct release, when the electric locking system's mains adapter circuit is interrupted by a normally closed contact when an emergency button is activated.

b.Indirect release, when a normally closed contact in an emergency button triggers another switching operation when activated, which then interrupts the electric locking system's mains adapter.

#### December 1997

Notice from the German Federal Ministry for Transport, Building and Urban Development.

# locking systems in doors along escape routes (German: EltVTR)<sup>1)</sup>

#### 2.7 Unlocking

Unlocking is non-security-relevant interruption in the mains adapter to an electric locking system, e.g. interrupted by a key switch. Emergency opening takes place when a door is unlocked by a hazard alert system or similar automatic safety equipment, such as a sprinkler system.

#### 3. Technical requirements

- 3.1 Electric locking system
- 3.1.1 Door release must not be prevented or delayed by an electric locking system. The electric locking system controls must be designed in such a way that a failure does not prevent or delay the door release (failsafe system).
- 3.1.2 The electric locking system must be equipped with an emergency button according to Paragraph 3.3 immediately next to the door or on the door leaf and must be designed in such a way that it is possible to connect an automatic safety device for emergency door release.
- 3.1.3 Electric locking systems which are unlocked from a central, permanently manned control point, such as a porter's office or control office, must be designed according to Paragraph 3.2.2.
- 3.1.4 Once the door is released, it may only be relocked manually on the door itself. A suitable switch, such as a key switch, should provided on the door for this purpose. The switch can also be installed inside the control unit housing at the door.
- 3.1.5 The electric locking system needs to be equipped with signalling devices to indicate the door's locking status, which are to be fitted very close to the door. Electric locked status in the door will be indicated by a red light diode, while door release will be indicated by a green light diode.

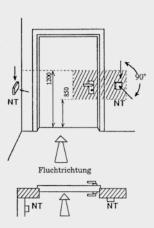
### 3.2 Control unit

- 3.2.1 If the control unit is designed for indirect release, a minimum of two relays must be provided to interrupt the electric lock power supply circuit. The relay function must be monitored when it is switched on. The locking system must not function if one of the relays does not work.
- 3.2.2 If the control unit includes an external mains adapter, it must comply with DIN EN 60950: 1997-11. The manufacturer must indicate mains adapter requirements in the electric locking system's operating instructions.

3.2.2 If the control unit contains an integrated emergency mains adapter, the mains adapter must be designed in accordance with DIN VDE 0833-1: 1989-01, Part 3.9, and DIN VDE 0833-2: 1992-07, Part 3.4. It must be able to provide back-up power for at least 15 minutes. The emergency mains adapter must not affect the release of an electric locking system.

#### 3.3 Emergency button

- 3.3.1 The emergency button must be illuminated, include a red, mushroom-shaped operating component and feature a spring-loaded switching component The requirements under EN 60947-5-1: 1991 also apply to emergency-off control devices. The emergency button must contain an inside light.
- 3.3.2 The emergency button must be fitted with a transparent cover to protect it against accidental activation
- 3.3.3 The force required to activate the emergency button, including the force to open the cover, must not exceed 80 N.
- 3.3.4 The mushroom-shaped operating component must be at least 25 mm in diameter.
- 3.3.5 Emergency buttons must be fitted next to doors or on the door leaf in accordance with the diagram below. They must be accessible for children and the disabled, such as those in wheelchairs. They must be no higher than 1,200 mm above floor level. It is recommended to place them at a height of 850 mm (see DIN 18024-2: 1996-11).



# locking systems in doors along escape routes (German: EltVTR)<sup>1)</sup>

3.3.6 The emergency button must be labelled with the following sign:



The sign is green in compliance with DIN 4844-2: 1982-11, while lettering and symbols are featured in contrasting white. The arrow must point to the emergency button. The sign must measure at least 7 cm x 7 cm.

#### 3.4 Electrical locking system

3.4.1 The mechanical components in the electric locking system must be fail-safe. Certification is provided based on an endurance test in accordance with Section 4.2.1, Letter d.

- 3.4.2 In the event of a failure in its power supply or the emergency button being activated, the electric locking system must be deactivated and users must then be able to open the door by hand. This applies to emergency mains adapter in the case of Section 3.2.3.
- 3.4.3 The force required to release the de-energised locking system must be no greater than 50 N after one second (e.g. to overcome the remaining magnetic force).
- 3.4.4 The electric locking system's holding force must not exceed 2.0 kN.
- 3.4.5 Electric locking systems must also be able to guarantee release in the case of an applied load in the direction of escape equalling 90 % of the existing holding force, up to a maximum of 3 kN.

#### 4. Testing

4.1 Technical documentation

The following technical documents in particular are required for the certification process:

- Description of design and mode of operation
- Design und assembly drawings
- Details on electric equipment, including a wiring diagram, a circuit diagram and a summary of the electric systems and the manufacturer's electric specifications
- Installation guide
- Operating instructions

#### 4.2 Completing tests

4.2.1 Testing the electric locking system

- a. The electric locking system release is to be assessed using the wiring diagrams. A check must be carried out on an installed electric locking system to determine whether a single error in the system's electric and electronic components prevents or delays the electric locking system release. Possible types of test which may be used are error analysis and/or error simulation.
- b. The effects of environmental influences on the electric locking system must be tested as follows:
  - It must be determined whether the electric locking system functions within the ambient temperature and air humidity range specified by the manufacturer. To do so, the electric locking system or individual components must be stored in an energised state for six hours at the specified temperatures and air humidity levels.
  - The electric locking system must undergo a corrosion test in an energised state (rated voltage) in compliance with DIN EN ISO 6988: 1997-03 and include five test cycles. It passes the test if the locking system can be opened using a force <= 50 N five seconds after release once the corrosion test is complete.
- c. The electric systems must be tested with regard to safety according to DIN EN 60950: 1997-11. Tests must also show that:
  - The energy supply does not overload or overheat in any way when in an idle state, at full load or if there is a short circuit; that the manufacturer's specifications are complied with and that the control unit is operational after a short circuit in the energy supply, once a safety fuse is replaced if necessary.
- d. The following endurance test must be carried out: · The test door should consist of a warp-resistant frame structure with a door leaf measuring 1,000 mm wide and 2,000 mm high. The door leaf should weigh 80 kg. The centre of mass should be roughly in the middle. The door should be equipped with a lock in compliance with DIN 18250-1: 1979-07 and a fitting in compliance with DIN 18272: 1987-08-FE/KO or similar. A DIN 18272-KO/ KO fitting may also be used in conjunction with a door closer in compliance with DIN 18263: 1997-05-Z4 in place of a DIN 18272-FE/KO fitting. The spring hinge is to be positioned in such a way that the door can be securely closed from an opening angle of 30° (door in rest position). The door closer should be adjusted, so that the door opened to 90° can be closed within about five seconds from an open position and damping

stops about 7° before the door meets the frame.

# locking systems in doors along escape routes (German: EltVTR)<sup>1)</sup>

• The electric locking system should be fitted to the test door according to the manufacturer's instructions. The emergency button should also be fitted if it is designed to be mounted onto the door leaf. The endurance test must be carried out on three different test pieces of the locking system. The locking system should be powered by the control unit or an external source of supply at the rated voltage. A simulated key switch is used to release the lock.

#### Test procedure

- Before the test, the door is closed, the latch bolt is engaged in the lock hole and the electric locking system is energised.
- Withdraw the latch bolt or press it in, release, open the door leaf to about 90°. Energise the electric locking system; the door should close automatically, so that the latch bolt locks into place with two seconds off-time.
- The system must undergo 200,000 test cycles.
   It passes the test if no errors arise during testing when the electric locking system is released and no damage to the electric locking system is detected after the tests, and the electric locking system can then be unlocked.

#### 4.2.2 Testing on the control unit

The electric locking system control unit must be tested as follows:

- · Check circuit diagram and function control, with a fault simulation if necessary
- Determine whether the charging process, total discharge and overload protection comply with DIN VDE 0833-1: 1989-01 and DIN VDE 0833-2: 1992-07.
- Functional test when emergency mains adapter is connected

### 4.2.2 Testing the emergency button

The force required to activate the emergency button must be tested as follows:

The emergency button is installed in its housing and features a cover where required. It is subjected to a slowly, but continually increasing force. The force must be applied to the centre of the operating component in the direction of operation. Enough force is applied to trigger the opener switching element in the emergency button. The power supply circuit to the electric locking system must be permanently interrupted. The test should be carried out on three emergency buttons with three individual tests on each emergency button (after replacing the cover if necessary). The emergency button passes the test if none of the individual values in the force measurements exceeds 80 N.

#### 4.2.1 Testing the electric locking system

a. Residual magnetic force
Before the test is started, the electric locking system is placed in a state which is equal to the one reached after 5,000 unlocking procedures where the door is opened and then locked again. The electric locking system should be mounted on a testing device according to the manufacturer's instructions. The testing device must not affect the forces being applied. The electric locking system is de-energised after operating for twenty-four hours at rated supply voltage increased by

15%. A force is applied which is equal to the maxi-

mum force required to deactivate the locking sys-

tem one second after it is released.

- b. Determining the holding force
  The electric locking system's holding force as specified by the manufacturers is determined using a testing device. The increase in force should be 200 N/s during the test, which must be carried out using the supply voltage limits specified by the manufacturer (minimum and maximum values). If no information is given regarding limit values, +/- 15 % of the rated value should be used as limits. The electric locking system must be operated using the respective voltage until the operating temperature is reached (permitted test room temperature 15 35 °C). Three tests should be performed per voltage value in limit cases.
- c. Unlocking under different loads

  The electric lock system is subjected to a steadily increasing load on the testing equipment described in Section 4.2.1, Letter d. The increase in force should be 200 N/s. When the load reaches 90% of the holding force, up to a maximum of 3.0 kN, the electric locking system should be denergised. The process is repeated 1,000 times. The system passes the test if it can be unlocked without any problems and there is no discernible damage to the system during and after the test.

### 5. Installation guide

The manufacturer must include an installation guide with each electric locking system. The installation guide must indicate that the electric locking system can only be used on fire or smoke protection doors if the door's product use certification states that such a system can be used for such doors and must be installed as required by the certification.

#### 6. Operating instructions

The manufacturer must include operating instructions with each electric locking system which contains information on maintenance and testing, a description of the system's functions, instructions for setting up

# locking systems in doors along escape routes (German: EltVTR)<sup>1)</sup>

operation and action to be taken in the event of faults and repairs. The servicing periods should also be indicated.

### 7. Entry into force

These guidelines enter into force on the day following their publication.

1) The obligations under Council Directive 83/189/ EEC dated March 28, 1983, regarding the procedure for provision of information in the field of technical standards and regulations (OJ EU No. L 109 p.8), last amended by the European Parliament and Council Directive 94/10/EC dated March 23, 1994 (OJ EC No. L 100 p. 30), are taken into consideration.

### Introduction

### Door monitoring unit

#### **Door monitoring unit**

Electrical door surveillance is the simplest way of providing a deterrent against misuse of escape routes. In this system, the escape door is not locked in the direction of escape, but the door status is monitored.

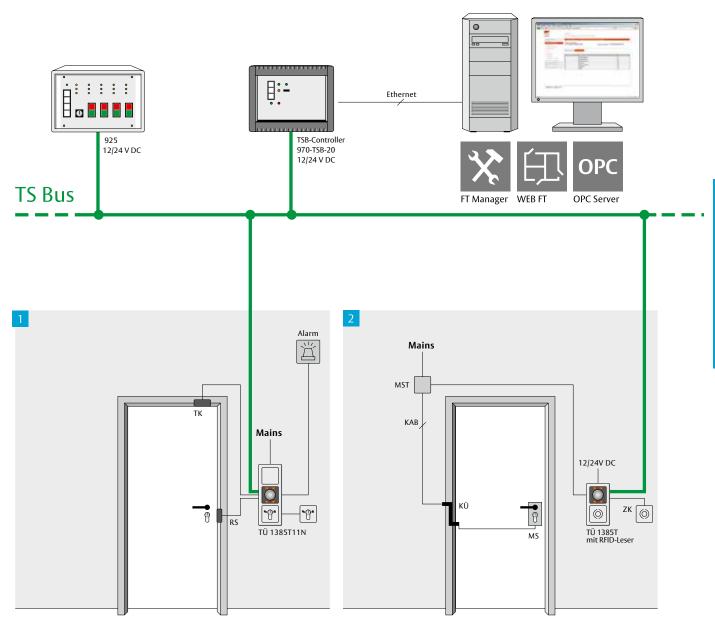
A door contact monitoring device can easily detect if a door is misused and then trigger an optical and audible alarm. In networked systems the alarm is also activated centrally. A pre-alarm function can be included when locks are combined with a handle monitoring system.

Compared with electric locking systems on doors along escape routes, having only a door monitoring system is less of a deterrent against misuse. Most fire or smoke protection doors can also be retrofitted with such a system without losing certification, provided the system is limited to a door contact being installed on the door (e.g. magnetic contact).



### Door monitoring unit

### Two examples of practical use



#### Motorized lock control MLC unit CAB System connection cable Lock CG Lead Cover Motorized lock ML AC Access control DM Door monitoring unit DC Door contact Bolt switch contact

### Example 1

The door status is monitored via door or bolt contacts and shown on a control panel or visual display. The door can be authorised for release using a key switch either at the door itself or on a control panel or visual display at a central point. The system monitors the time that the door is open or whether the time is exceeded. An alarm is triggered if the door is opened without authorisation.

### Example 2

The door is locked with an electric security lock (e.g. motorized lock) and its status is monitored. The door status is displayed and the lock is controlled on a central panel or visual display and at the door using suitable operating units (e.g. access control unit). The system monitors the time that the door is open or whether the time is exceeded. An alarm is triggered if the door is opened without authorisation.

### Model 1385T, 12/24 V DC with TS-Bus



### Flush-Mounted Door Monitoring Unit Model 1385T-11

To monitor status of doors via door or bolt contacts and control electro-mechanical locking components, such as electric strikes, motorised locks and electric door bolts.

#### Door monitoring module

- With integrated door status display featuring highperformance LED indicators (green / red / yellow) signalling unlocked / locked / alarm status
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Unlocking via timer and many other systems

• With a relay output featuring adjustable parameters for:

Door locked/unlocked, or

Door open/closed, or Collective alarm, or

Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- With TS bus interface for parameterisation using software (FT Manager) and networking for parallel operation of visual display software, panel and OPC server
- · Connections:

SYSCON-4: power supply

SYSCON-5: operating unit

Plug-in screw terminals

- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Ma- nager	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	No
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 0.4 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Double frame in switch range; installation in 2 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch exterior side	Yes (without display)

Article / Feature	Order no.
Jung AS500 - alpine white	1385T11-10400
Jung LS990 - alpine white	1385T11-60400
Jung LS990 - stainless steel	1385T11-6353500
Gira E2 - gloss pure white	1385T11-20400
Gira E2 – aluminium finish	1385T11-23500
Gira Standard 55 - glossy, pure white	1385T11-30400
Gira Stainless Steel Series 21	1385T11-5353500

### Model 1385T, 230 V AC with TS Bus



### Flush-Mounted Door Monitoring Unit Model

To monitor status of doors via door or bolt contacts and control electro-mechanical locking components, such as electric strikes, motorised locks and electric door bolts.

#### Door monitoring module

- With integrated door status display featuring highperformance LED indicators (green / red / yellow) signalling unlocked / locked / alarm status
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or
   Temporary release using an access control system, or
- Temporary release using an access control system, o Unlocking via timer and many other systems
- With a relay output featuring adjustable parameters for:

Door locked/unlocked, or

Door open/closed, or

Collective alarm, or

Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- With TS bus interface for parameterisation using software (FT Manager) and networking for parallel operation of visual display software, panel and OPC server
- Connections:
   SYSCON-4: power supply
   SYSCON-5: operating unit
   Plug-in screw terminals

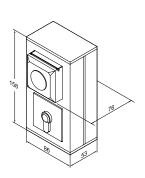
- For locking/unlocking, temporary unlocking, alarm resetting
- · Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Ma- nager	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	No
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0,4 A
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Triple frame in switch range; installation in 3 flush-mounted switch boxes, 62.5 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch exterior side	Yes (without display)

Article / Feature	Order no.
Jung AS500 - alpine white	1385T11N10400
Jung LS990 - alpine white	1385T11N60400
Jung LS990 - stainless steel	1385T11N6353500
Gira E2 - gloss pure white	1385T11N20400
Gira E2 – aluminium finish	1385T11N23500
Gira Standard 55 - glossy, pure white	1385T11N30400
Gira Stainless Steel Series 21	1385T11N5353500

### Model 1385T, 12/24 V DC with TS-Bus





### Surface-Mounted Door Monitoring Unit Model

To monitor status of doors via door or bolt contacts and control electro-mechanical locking components, such as electric strikes, motorised locks and electric door bolts.

#### Door monitoring module

- With integrated door status display featuring highperformance LED indicators (green / red / yellow) signalling unlocked / locked / alarm status
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Unlocking via timer and many other systems

· With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- With TS bus interface for parameterisation using software (FT Manager) and networking for parallel operation of visual display software, panel and OPC server
- Connections:

SYSCON-4: power supply SYSCON-5: operating unit Plug-in screw terminals

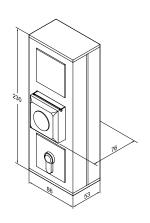
- For locking/unlocking, temporary unlocking, alarm resetting
- Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- · Cover which matches the corresponding switch fitting

Control	Yes, integrated
	, 0
Power supply	No, external power supply required
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Ma- nager	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	No
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	12-24 V DC
Output voltage	12-24 V DC
Output current for external devices	Max. 2 A (depending on external power supply)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In double, surface-mounted module, Gira Profile 55 fitting
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch exterior side	Yes (without display)

Article / Feature	Order no.
GIRA Profile 55 - pure white	1385T11-70400
GIRA Profile 55 - aluminium finish	1385T11-73500

### Model 1385T, 230 V AC with TS Bus





### Surface-Mounted Door Monitoring Unit Model

To monitor status of doors via door or bolt contacts and control electro-mechanical locking components, such as electric strikes, motorised locks and electric door bolts.

#### Door monitoring module

- With integrated door status display featuring highperformance LED indicators (green / red / yellow) signalling unlocked / locked / alarm status
- · Multi-tone signal and tampering contact
- Adjustable time period for max. continuous release, delay in continuous release, temporary unlocking, pre-alarm, alarm interval, guidance signal
- Monitoring of time door is open in the case of temporary unlocking
- With an input featuring adjustable parameters for: Control of locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or

Temporary release using an access control system, or Unlocking via timer and many other systems

· With a relay output featuring adjustable parameters for:

Door locked/unlocked, or Door open/closed, or Collective alarm, or Individual alarm, or

Activation of electric strike/motorised lock/door automatics/arrestor system

- With TS bus interface for parameterisation using software (FT Manager) and networking for parallel operation of visual display software, panel and OPC server
- Connections:
   SYSCON-4: power supply
   SYSCON-5: operating unit
   Plug-in screw terminals

- For locking/unlocking, temporary unlocking, alarm resetting
- Sabotage switch
- · With Euro profile half cylinder, including 3 keys
- Cover which matches the corresponding switch fitting

Technical attributes	
Control	Yes, integrated
Power supply	Yes, integrated
Connection to panel, visualisation system, OPC server	Yes
Configured centrally using FT Manager	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	No
Control element	Key switch with Euro profile cylinder; cam position 8 x 45°; 30.5 mm long
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Input voltage	230 V AC
Output voltage	24 V DC stabilised
Output current for external devices	0,4 A
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	In triple, surface-mounted module, Gira Profile 55 range
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch exterior side	Yes (without display)

Article / Feature	Order no.
GIRA Profile 55 - pure white	1385T11N70400
GIRA Profile 55 - aluminium finish	1385T11N73500

55

### **Door monitoring**

### Individual modules



### **Door Monitoring Module Model 1385E1T**

Individual module with optimised operational concept to control locking and unlocking, temporary unlocking, alarm acknowledgement via a potential-free contact in operating devices, such as card readers and keypad units, or to control via a conventional system using integrated key switches

Technical attributes	
Connection to panel, visualisation system, OPC server	Yes
Stand-alone operation with I/O module	Yes
Stand-alone operation (offline)	Yes
Emergency switch	Yes
Control element	No, external operating unit required
Setting of times and functions	Via key switch, via FT Manager (together with bus controller)
Power consumption	0.1A at 24V
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 30
Dimensions	Frame or surface-mounted module required to install flush-mounted switch boxes 45 mm deep
Inputs	1x; adjustable parameters
Outputs	1x; 30 V / 1 A switchover contact; adjustable parameters
Key switch on opposite side to direction of escape	Yes (without display)
Escape door terminal with bi-directional escape route	No

Article / Feature	Order no.
Compact System 55	1 3 8 5 E 1 T 0 0

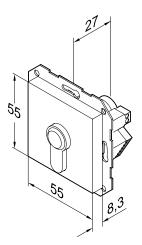


### Key switch module model 1385ES1

Key switch for connection to an effeff escape door control module or door monitoring module for controlling unlocking, locking, temporary unlocking and alarm resetting, integrated tamper contact



- For standard flush-mounted boxes: 45 mm depth, with Euro profile half-cylinder, cam position 180°, length 30.5 mm
- · Connection: SYSCON-5



Technical attributes	
Tampering contact key switch	Yes
Connections (key switch)	Screw/ plug-in terminals

Article / Feature	Order no.
Jung AS500 - alpine white	1385ES1-10400
Jung AS500; green	1385ES1-11800
Jung LS990 - alpine white	1385ES1-60400
Jung LS990 - stainless steel	1385ES1-6353500
Gira E2 - gloss pure white	1385ES1-20400
Gira E2 – aluminium finish	1385ES1-23500
Gira Standard 55 - glossy, pure white	1385ES1-30400
Gira Stainless Steel Series 21	1385ES1-5353500

### Individual modules

**Door monitoring** 



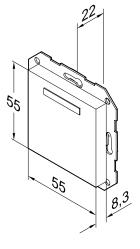
### Optical and acustic alarm signal

For connection to an escape door control module or door monitoring module to provide additional signalling for acustic and optical alarms.

Power supplied via SYSCON 4 and system activation via the universal output on the escape door control terminal.

Technical attributes	
Input voltage	12-24 V DC
Stand-by current power input	20 mA
Power input when alarm	50 mA
LED display	Yellow
Actuation input (optocoupler)	Max. 30 V DC 7 mA
Sound pressure at 12 V DC and 1m distance	About 80 dB A
Sound pressure at 24 V DC and 1m distance	About 92 dB A
SYSCON 4 connections	2

Article / Feature	Order no.
Jung AS500 - alpine white	1385EB1-10400
Jung AS500; green	1385EB1-11800
Jung LS990 - alpine white	1385EB1-60400
Jung LS990 - stainless steel	1385EB1-6353500
Gira E2 - gloss pure white	1385EB1-20400
Gira E2 – aluminium finish	1385EB1-23500
Gira Standard 55 - glossy, pure white	1385EB1-30400
Gira Stainless Steel Series 21	1385EB1-5353500



### Power Supply Module Model 1003FT, 24 V

Power supply for connection to an effeff escape door control module or door monitoring module Excess output current limiter with automatic restarting;

For standard flush-mounted boxes: 62.5 mm depth Connections: connection wires 230 V and connection wires SYSCON-4: 24 VDC

Technical attributes	
Input voltage (power supply)	230 V AC
Output voltage (power supply)	24 V DC stabilised
Output current (power supply)	0,5 A
Temperature range (power supply)	-5 °C to +50 °C





# Door monitoring Individual modules



### Main Cover Model 1385EZA

To cover the power supply module

Technical attributes	
System	55 mm

Article / Feature	Order no.
Jung AS500 - alpine white	1385EZA-10400
Jung AS500; green	1385EZA-11800
Jung LS990 - alpine white	1385EZA-60400
Jung LS990 - stainless steel	1385EZA-6353500
Gira E2 - gloss pure white	1385EZA-20400
Gira E2 – aluminium finish	1385EZA-23500
Gira Standard 55 - glossy, pure white	1385EZA-30400
Gira Stainless Steel Series 21	1385EZA-5353500

### Door monitoring Individual modules



### Connector Board Model 1385EAP

SYSCON 4 / 5 Connector Board. Serves as an adapter to connect devices to SYSCON 4 or SYSCON 5 connecting cable. Connections are carried to screw terminals.

Technical attributes	
Connections	Screw terminals
Article / Feature	Order no.
Syscon-4/-5; connecting terminal,	1385EAP00



### Syscon 4 Connecting Cable Model 1385EVL4

To connect modules.

Technical attributes	
Sockets	SYSCON 4 on both sides
	_

Article / Feature	Order no.
Syscon-4; double sided; 4-pin female	1385EVL400
connector	



### Syscon 5 Connecting Cable Model 1385EVL5

To connect escape door control modules with key switch module.

Technical attributes	
Sockets	SYSCON 5 on both sides

Article / Feature	Order no.
Syscon-5; double-sided; 5-pin female	1385EVL500
connector	

### Individual modules



### Frame Model 1380EF1

Single frame

Technical attributes	
Frame	Single

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF1-10400
Jung AS500; green	1380EF1-11800
Jung LS990; alpine white	1380EF1-60400
Jung LS990; stainless steel	1380EF1-6353500
Gira E2; gloss pure white	1380EF1-20400
Gira E2; aluminium colour	1380EF1-23500
Gira standard 55; gloss pure white	1380EF1-30400
Gira Series 21, stainless steel	1380EF1-5353500



### **Double frame Model 1380EF2**

Dual frame

Technical attributes	
Frame	Dual

Article / Feature	Order no.
Jung AS500; gloss alpine white	1380EF2-10400
Jung AS500; green	1380EF2-11800
Jung LS990; alpine white	1380EF2-60400
Jung LS990; stainless steel	1380EF2-6353500
Gira E2; gloss pure white	1380EF2-20400
Gira E2; aluminium colour	1380EF2-23500
Gira standard 55; gloss pure white	1380EF2-30400
Gira Series 21, stainless steel	1380EF2-5353500



### Frame Model 1380EF3

Triple frame

Technical attributes	
Frame	Triple

Article / Feature	Order no.
Jung AS500; alpine white	1380EF3-10400
Jung AS500; green	1380EF3-11800
Jung LS990 alpine white	1380EF3-60400
Jung LS990; stainless steel	1380EF3-6353500
Gira E2; gloss pure white	01380EF3-20400
Gira E2; aluminium colour	1380EF3-23500
Gira E2/ standard 55, pure white	1380EF3-30400
Gira Series 21, stainless steel	1380EF3-5353500



### **Intermediary Frame Model 1385EF1Z**

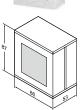
Intermediary frame for 55 mm switch modules.

Technical attributes	
System	55 mm

Article / Feature	Order no.
Jung LS990 - alpine white	1380EF1Z600
Jung LS990 - stainless steel	1380EF1Z63500
Gira Stainless Steel Series 21	1380EF1Z500

### Door monitoring Individual modules





**Housing for Model 1385EG1** Housing

Technical attributes	
Frame	Single
Mounting method	Surface-mounted

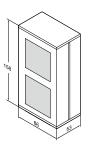
Article / Feature	Order no.
Gira - glossy pure white	1385EG1-70400
Gira - aluminium colour	1385EG1-73500



Housing for Model 1385EG2 Housing

Technical attributes	
Frame	Dual
Mounting method	Surface-mounted

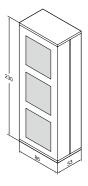
Article / Feature	Order no.
Gira - glossy pure white	1385EG2-70400
Gira - aluminium colour	1385EG2-73500



**Housing for Model 1385EG3** 







Technical attributes	
Frame	Triple
Mounting method	Surface-mounted

Article / Feature	Order no.
Gira - glossy pure white	1385EG3-70400
Gira - aluminium colour	1385EG3-73500

### Individual modules

Door monitoring



#### **Key Switch Model 1140**

An operating unit to release doors against direction of escape (outdoors) in conjunction with escape door control unit.

### Key switch module

- · With a momentary n.o. contact which can be operated to the left or right,
- For locking/unlocking, temporary releasing
- · Metal housing
- · Connections: screw terminals

Technical attributes	
Profile cylinder	Designed for with profile half- cylinder; cam position 8 x 45°; 30.5 mm long
LED display	No
Buzzer	No
Sabotage switch	No
Class of protection	IP 54
Dimensions	Surface-mounted (Wx- HxD): 73.5x73.5x45mm; flush-mounted (WxHxD): 90x100x55.5mm; flush-moun- ted switch box: 60x55mm

Article / Feature	Order no.
Surface-mounted	1140-1000
Flush-mounted	1140-1100



The set consists of a round reed contact, permanent magnet, 2 flange casings, 2 surface-mounted casings and 2 spacers; it is thus suitable for surface-mounted and mortise fitting in wood or aluminium windows and doors.

Technical attributes	
Max. contact rating	200 V DC/ 500 mA/ 10 W
Max. sensing distance	15 mm
Class of protection	IP 67
VdS class	Class A
VdS-approval	G104729
Connecting cable	6 m
Number of wires	2-wire
Colour	grey white
Material housing	Plastic
Operating temperature range	0 to +40 °C
Contact resistance	0,15 Ω

Article / Feature	Order no.
Normal open	10380A-600



### Networking



#### **TSB Controller Model 970-TSBC**

Processor-controlled bus – Master to operate TS Bus networks with up to 110 devices.

With Ethernet interface to connect to a PC to use visualisation software, configuration software or an OPC server.

With five parameterisable inputs for emergency release activated by fire alarm system, priority locking activated by burglar alarm system and unlocking activated by timer switch.

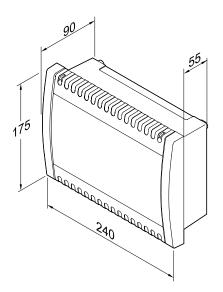
With three parameterisable relay outputs for system signals which indicate collective alarm, individual alarms and system failure

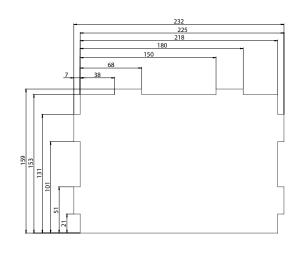
Integrated grouping function to implement interlock sequences (sequential locking), fire alarm groups (emergency unlocking), security zones equipped with burglary alarm systems (priority locking), timed release zones equipped with timer switches (permanent release) and group-related alarm and fault signals With USB interface for system backup and data import In surface-mounted, PVC housing Including crossover cable (RJ45)

Includes FT Manager software as integrated, webbased application to centrally configure networked escape door control units or FT II Generation door monitoring units (Type Series 1385, 720-40 and higher)

Technical attributes	
Dimensions	(HxWxD) 175x240x90 mm
Operating voltage	12 - 30 V DC (± 10 %)
Max. power consumption	9.7 W

Article / Feature	Order no.
In plastic housing; H/W/D: 175/240/90 mm	9 7 0 - T S B C - 2 0 0 0
With 3U front panel, HP 42 for 19" rack	970-TSBC-201900
TSB Controller in 19" module rack, closed type, 84 HP	9 7 0 - T S B C - B T 1 9 0 0





### Networking



#### **Control Panel Module Model 925**

Central operating and display unit for 4 doors with escape door controls connected to TS bus network.

Can be used in combination with TSB Controller 970-TSBC.

Processor-controlled central module with: Buzzer as an audible collective fault alarm Buttons to re-set the alarm

Two potential-free relay contacts to forward locking status signals

LED operating mode display Three LEDs to indicate status

Button to test LED indicators

Key switch to authorise/block operator buttons to

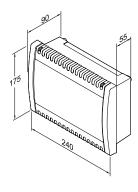
control doors.
With operating and display devices for four doors

With operating and display devices for four doors featuring:

Three LEDs (red, green, yellow) to indicate door status Two buttons to lock/unlock doors or re-set device Can be extended with control panel module, extensions up to about 20 doors

Technical attributes	
Version	Basic unit for 4 doors.
Rated voltage	12 V (- 10 %) to 24 V DC (+ 10 %)

Article / Feature	Order no.
Basic unit for 4 doors, 12/24 V DC	92571A000000000



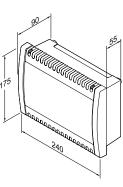
#### **Control Panel Extension Model 925**

For extending Control Panel Module Basic Unit 925 to provide central operation and display for other doors. With 50 cm connecting cable

Technical attributes	
Version	In plastic housing
Dimensions	H/W/D: 175/240/90 mm
Dimensions	H/W/D: 175/240/90 mm

Article / Feature	Order no.
3 doors	925710101000000
6 doors	925710200000000





### Networking



### I/O Extension Model 901-20

I/O extension with TS bus interface; 8 inputs: lowactive; 2 outputs: switching contact as changeover contact, max 24 V / 2 A; 4 outputs: semi-conductors

Technical attributes	
Input operating voltage	12 / 24 V DC stabilised
Current consumption	Max. 0.1 A
Mounting method	Wall mount
Housing material	Plastic
Width	118 mm
Height	118 mm
Depth	30 mm

Article / Feature	Order no.
E/A - Extension	9 0 1 - 2 0 0 0



#### **Bus Repeater Model 901-35**

When installing an escape door control system, the total cabling length can very easily add up to several hundred metres. A BUS repeater must be installed for larger systems featuring more than 1,000 metres of cabling (per BUS line). Such BUS repeaters boost the BUS signal, thus enabling escape door BUS systems to be installed with cabling lengths of several kilometres. A further advantage of the BUS repeater is the electrical separation in the BUS line. This enables large system installations to be divided, e.g. into floors. In the event of a breakdown, only the affected section will fail thanks to electrical separation; the rest of the BUS system will remain fully functional.

Technical attributes	
Max. power consumption	720 mW
Class of protection	IP 40
Operating temperature range	0 to +40 °C
Storage temperature	-25 ° C to +60 °C
Height	120 mm
Width	120 mm
Depth	30 mm
Weight in kg	200 g
Colour	RAL 9002
Input operating voltage	12 / 24 V DC stabilised
Rated current consumption	60 mA

Article / Feature	Order no.
Bus repeater	9 0 1 - 3 5 0 0



### **Universal Bus Module Model 901-50**

The 901-50 universal BUS module (UBM) provides the opportunity for additional control and monitoring tasks, independently of or additional to escape door applications. 2 operating modes are available - door status indicator and door control.

Technical attributes	
iccinical attributes	
Contact rating relay	24 V/ 3 A
Maximum load output	Max. 50 mA for 2.5 V voltage drop (inside device, drop is 0.5 V per 10 mA load current)
Class of protection	IP 40
Operating temperature range	0 to +40 °C
Storage temperature	-25 ° C to +60 °C
Height	120 mm
Width	120 mm
Depth	30 mm
Colour	Grey white (RAL 9002)
Input operating voltage	12 / 24 V DC stabilised
Operating voltage range	± 10%
Rated current consumption	100 mA
Rated output	1,2 W

Article / Feature	Order no.
Universal bus module	9 0 1 - 5 0 0 0

### Accessories



### Plug-In Power Unit Model 470-9-2-03

Power supply to power units with stabilised direct

Technical attributes	
Version	Plug-in power supply
Operating voltage	230 V DC
Output voltage	28 V DC
Output current (power supply)	0.64 A

Article / Feature	Order no.	
Plug-in power supply, 28 V DC.	470-9-2-0300	



### Power supply device model 1003 24 V

There is a suitable power supply unit for each type of use. The individual power supply units stand out due to their constant output voltage during fluctuations in mains voltage and load alternation.

Technical attributes	
Mounting method	Surface-mounted / top hat rail
Overload protection	Electronic
Operating temperature range	-5 °C to +40 °C
Class of protection	IP 00
Protection rating	II/Insulation protection
Housing	Plastic
Casing colour	RAL 7035
Input operating voltage	100-240 V AC
Output voltage	24 V DC (regulated)

Article / Feature	Order no.		
1 A, dimensions: (W/L/H) 94x36x68 mm	1 0 0 3 - 2 4 - 1 1 0		
2 A, dimensions: (W/L/H) 70x68,5x93 mm	1 0 0 3 - 2 4 - 2 1 0		
4 A, dimensions: (W/L/H) 92x70x68 mm	1 0 0 3 - 2 4 - 4 1 0		

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### Order form

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



Customer-No.: Address:	Company  Branch  Contact  Telephone  Fax  Email  Street / POB	-	ASSA ABLOY Sicherheitstechnik GmbH Bildstockstraße 20 72458 Albstadt GERMANY Tel. +49 7431 123-700 Fax +49 7431 123-258 export.effeff@assaabloy.co
Order Date:		-	
	Order Number		Pce.

Urgent orders can also be placed via email:

As a proven supplier of door release systems, ASSA ABLOY 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.effeff@assaabloy.com** 

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

### Our products –

### quality, know-how and innovation



#### **Electric strikes**

With electric strikes, you can unlock a door at the push of a button – without needing to go to the actual door yourself.

effeff electric strikes offer high standards of security and convenience and a suitable electric strike for every installation location. This we can guarantee worldwide as effeff takes into consideration both national and international rules and regulations.

effeff wins over with its certified and security electric strikes due to its sophisticated solutions for smoke protection doors, fire protection doors and doors along escape routes. Our wide range for high security areas provides solutions for glass doors, sliding doors and clean room doors as well as for explosive areas or seal door systems.

- · Standard electric strikes
- · Smoke and fire protection electric strikes
- · Escape door electric strikes
- · Special electric strikes
- · Accessories



#### **MEDIATOR**

Entrance doors to apartment buildings – an issue which is always causing problems. Some people always lock the door, others never do.

With MEDIATOR, ASSA ABLOY Sicherheitstechnik now offers a simple, yet brilliant solution:

This innovative system ensures doors always lock automatically as soon as they close due to the self-locking escape door lock and an effeff linear electric strike. The door can also be opened for visitors from inside apartments using the electric strike.

MEDIATOR can do much more than this, however. It also ensures doors can be opened from the inside at any time using the door handle, even when doors are locked.

This means everyone can leave the building in the event of an emergency, whether they have a key or not. Apartment block entrance doors can be retrofitted with MEDIATOR quickly and easily at a very reasonable price.



#### **Security locks**

"Security lock" is the most accurate description of effeff locks. Security provides protection against intrusion, thus ensuring people and valuables are safe from harm. effeff lock products provide such comprehensive protection for you and your property. With their anti-panic function and self-locking systems, effeff's security locks guarantee maximum mechanical security combined with maximum convenience for users.

- · Mechanical security locks
- · Microswitch security locks
- · Motorized security locks
- Electric security locks
- · Multipoint security locks
- Accessories



#### **Access control**

Whether the main or side entrance, strongroom, development department or laboratory, there are certain areas in buildings which need to be locked at all times.

Access control systems regulate access to protected areas, limiting entrance to authorised groups of people without needlessly disrupting their day-to-day business

A straightforward solution for greater security, effeff access control systems protect and control buildings, individual rooms or other security-relevant areas. We supply a comprehensive range of different technolo-

gies, devices and systems, which can be tailored to meet respective specific security needs. effeff access control systems meet our clients' individual requirements and are used in private and public buildings, the health sector, leisure facilities, industrial facilities and production plants.

- · Access control door fittings
- · Access control systems



#### **Escape route technology**

effeff's escape route systems fully comply with requirements for uncompromising personal safety and maximum protection for property.

You can depend on effeff's expertise and reliability in emergency situations. Our escape route systems guarantee safe operation of escape route doors, even though under normal circumstances doors may have integrated automatic locking systems or can only be opened by authorised users. Safer use of escape routes is assured at all times in the event of an emergency. effeff electric escape door control systems provide protection and safety in places such as department

stores, schools, kindergartens, office buildings, airports and exhibition halls.

We also supply ideal solutions for specific uses such as restricted areas in hospitals.

- · Escape door locking systems
- · Escape door monitoring



#### **Electric bolt**

effeff electric deadbolts are a reliable complement to locks and strikes used for specific requirements. They can be fitted to special doors such as swing doors or sliding doors, where they are often used as an additional locking device. Where doors are locked with an integrated monitoring contact, the locking status can be monitored, meaning, for instance, a system or machine can only start up if the door concerned is securely locked.

The bolt is suitable for a wide variety of uses, ranging from mere drawers through to doors in lifts and high security areas.

- · Door dead bolts
- · High security dead bolts
- · Motorized dead bolts
- · Cabinet locks



#### **Electric holding magnets**

A large selection of electric holding magnets is an important part of effeff's locking systems range. The effeff range includes authorised models for locking escape route doors as well as standard magnets. Thanks to low-noise operation and the benefits of retro-fitting, magnets are highly suitable as additional locking devices in doors.

- · Electric magnets for inside and outside doors
- · Electric magnets for escape door applications
- · Electric magnets for holding doors open
- · Accessories



#### **Arrester systems**

Whether the main or side entrance, strongroom, development department or laboratory, there are certain areas in buildings which need to be locked at all times. Access control systems regulate access to protected areas, limiting entrance to authorised groups of people without needlessly disrupting their day-to-day business. A straightforward solution for greater security, effeff access control systems protect and control buildings, individual rooms or other security-relevant areas. We supply a comprehensive range of different technologies, devices and systems, which can be tailored to meet respective specific security needs.

effeff access control systems meet our clients' individual requirements and are used in private and public buildings, the health sector, leisure facilities, industrial facilities and production plants.

- · Access control door fittings
- Access control systems

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### Notes

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ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-user needs for security, safety and convenience



ASSA ABLOY
Sicherheitstechnik GmbH

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