Verrouillage des issues de secours

Tecnica delle uscite di sivurezza

Rettungswegtechnik

Escape door systems

Sistemas para salida de emergencia

ESCAPE ROUTE SYSTEM

Breaking new grounds, making use of new technologies, developing new ideas.
Founded in 1936, the company effeff from 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. ASSA ABLOY is the leading manufacturer and supplier of mechanical and electromechanical locks and related products worldwide.

Airport Hamburg

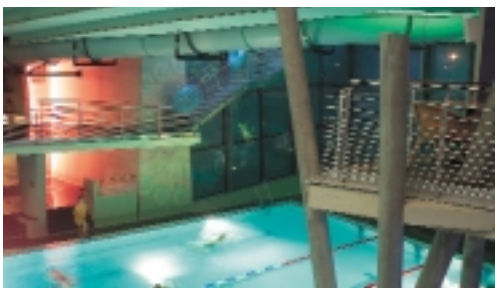
Old Opera, Frankfurt

effeff's customers now profit from the group's wide know-how, offering everything for total security and comfort throughout the world.

With worldwide sales activities in more than 75 countries and with high experience make effeff – the expert for electromechanical security – a reliable and competent partner in all areas. The company attaches great importance to customer orientation and service.

Whatever you want to safeguard, protect, preserve – effeff offers the right solution!

British embassy, Berlin



Lake Constance thermae, Überlingen

NOT AUF

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Workers, hotel guests or visitors to public buildings must be assured that they can escape from the building in case of danger. Escape routes do just that. Doors that are located in escape routes must open easily in the direction of escape and without any additional assistance. This, however, often contradicts the security requirements of the building operator as emergency exits are virtually open to misuse. For example, in supermarkets where the emergency exits that are located at the back of the building provide the perfect opportunity to avoid the cash desks.

To meet this requirement, the product “Electrical locking systems for doors in escape routes” has been defined in the Building Rules List. This enables safe and secure escape in case of emergency and simultaneously prevents misuse of emergency exits.

All effeff escape door systems comply with the “Guideline on electrical locking system of doors in escape routes (ElttVTR)” defined as the relevant technical regulation for this product in the Building Rules List A, Part 1, No. 6.19 and bear the corresponding compliance mark.

The systems and its components

To ensure that doors in escape routes equipped with an effeff escape door system conform with the required regulations, only three components are required as the control electronics are already integrated in the terminal.

Central systems, e. g. building control system, hazard detection systems etc. can be connected to the control electronics. The panel for central monitoring and control is in BUS technology.

Fail-unlocked principle

Systems for locking escape routes operate according to the fail-unlocked principle. In case of release, emergency unlocking or current failure, the door is released without immediately.

The locking elements

The actual electrical locking mechanism is selected according to use and the local conditions. effeff provides both electromechanical (form locked) and electromagnetic (frictionally locked) locking elements. The former are only used when flush mounting is necessary for optical or security reasons. A surface mounting version is also available.

The electromagnetic door locking mechanisms are used when doors in fire barriers are upgraded with escape door systems or when subsequent installation of an escape door system does not require any structural changes to the door leaf and frame. Surface holding magnets are also advantageous for doors that are frequently entered and exited thanks to their virtually silent operation.

The hall sensor integrated in surface holding magnets activates a status check to the control device and thus ensures protection against tamper and manipulation. A microswitch is responsible for this function in escape doors and panic strikes.

effeff – The leader in escape route technology

No other manufacturer offers a greater choice of locking elements for escape routes than effeff. effeff has long since pointed the way to the future as far as escape route technology is concerned, in fact effeff was the first manufacturer in Germany to integrate the power supply in the terminal. The compact terminal is space-saving but nevertheless fulfils all technical requirements.

Evidence that effeff is not only a pioneer in technical matters, is the new terminal 1370. effeff was successful in engaging the renowned industrial designer Professor Rido Busse for designing this terminal. Busse is keen to express the individuality of the product through its design. The optical shape of the terminal enhances its appearance and clearly underlines its reliable technical function. Simple and logic in its operation, it gains the confidence and acceptance of the user for the technology behind the facade.

effeff is well prepared for the future: the effeff FT products are network-capable and can be integrated in building management systems.

Our catalogue

effeff products are state-of-the-art. Illustrations in this catalogue are product models that may deviate in certain details from standard products. effeff reserves the right to make alterations that serve technical progress.

Dimensions, technical data etc. are non-binding and are intended to serve as a guide.

This catalogue contains just a small section of the extensive effeff range. We will be glad to provide you with further non-binding information and special catalogues, e. g. on electric door strikes, arrester systems, access control systems, electric bolts and security locks as well as the currently valid price list and main catalogue.

ESCAPE ROUTE SYSTEMS

OVERVIEW OF OPTIONS

Systems with integrated control

Modular system with external power supply

Power supply module
1370-40

Additional alarm signalling

Flashing beacon
1055-24

Multi-tone siren
1200-10

Compact system with integrated power supply

Control terminal
1338-20 surface mounted
1338-21 flush mounted

Control module
1370-20

Control terminal
1340-20 surface mounted
1340-21 flush mounted

Locking elements

Escape door strike 331U
331U RR/AKRR + 807-10

Surface holding magnet
828-44

Surface holding magnet
827-44

ESCAPE ROUTE SYSTEMS

Systems with external control

with on-site emergency button

Optical smoke detector
60030

Control unit
720-30

Operating elements

Terminal
1337-10 surface mounted
1337-11 flush mounted

Terminal module
1370-10

with central emergency button provided on site

Optical smoke detector
60030

Control unit
720-32

Operating element
1332-10/11

Panel for 4 doors and central emergency open button in the wall / table housing

Central control and monitoring

Strike for swing doors
351U AKRR

Escape route visualization WinFT

Control panel for all systems

Panel for 4 doors in the wall/table housing

Panel for 4 doors and central emergency open button in the wall/table housing

DESIGN

COLOUR OPTIONS

Green is a thing of the past – multicolours are now in!

Nowadays colours are playing an increasingly important role in architecture and room design. Not only in private buildings but also in facilities open to the public, colour is an effective design element.

In order to achieve an overall attractive appearance, the installation components, e.g. light switch and sockets must be included in this concept.

For this reason, we are also treading new paths in this sector with the terminal generation 1370. These requirements can already be given consideration during the planning phase of an escape door control system.

Apart from the basic colours (white, green and stainless steel optic) the devices of the Series 1370 can be ordered in any colour in the RAL table. This means no additional lacquering is required on site. effeff also offers a genuine stainless steel version.

Standard colours

Stainless steel

1370-2035-35-00

Grey white

1370-20---04-00

CONTROL MODULES

Standard colours

Stainless steel optic

1370-20---35-00

Special colours

If you require a special colour from the RAL colour range, simply add the corresponding RAL No. on the colour cards to the effeff no.

e.g. the module in ultramarine blue

1370-20- **xxxx** **-00**

Enter
RAL-No. 5002

Green

1370-20---97-00

Ultramarine blue

1370-20-5002-00

CONTROL MODULES

CONTROL MODULE 1370

The escape door control module 1370-20

All the control and monitoring functions as well as the interface for connecting to the effeff TS bus (WinFT and control panel 925) that are required for the security and safety of escape routes are already integrated in this module. The module can be operated with stabilized voltages between 12 V and 24 V.

The power supply module 1370-40 matches the control unit in appearance. Both modules can be installed above one another or next to one another as well as horizontally or vertically.

Technical data	
Rated operating voltage	12 V DC -15 % to 24 V DC +15 % stabilized DC voltage (low voltage wiring)
Max. internal current consumption at 12 V DC	Approx. 140 mA
Max. internal current consumption at 24 V DC	Approx. 85 mA
Max. output current for locking components	2 A
Contact load capacity of potential-free relay contacts	24 V/2 A
Protection class as per DIN VDE 0470-1: 1992-11 with integrated locking cylinder	IP 40
Operating temperature range	0 °C to +40 °C
Storage temperature range	-20 °C to +60 °C
Profile semi-cylinder as per DIN 18252	Locking bit position 90° left Length 27 - 32 mm
Dimensions	Approx. 175 x 100 x 95 mm
Frame for flush and cavity wall mounting	Approx. 190 x 105 x 12 mm
Housing material	Plastic Bayblend FR90
Standard surfaces	Pure white (similar to RAL 9010) Stainless steel optic Green (similar to RAL 6032)
Included in scope of delivery	Frame for flush and cavity wall mounting
The sign "Emergency button" is enclosed with the terminal.	

Stainless steel

1370-1035-35-00

The escape door power supply module 1370-40

Specially designed power supply for the voltage supply of the control module 1370-20. 24 V output voltage and 0.7 A output current.

Accessories required for the mechanical connection to the control module are included in the scope of delivery of the power supply module.

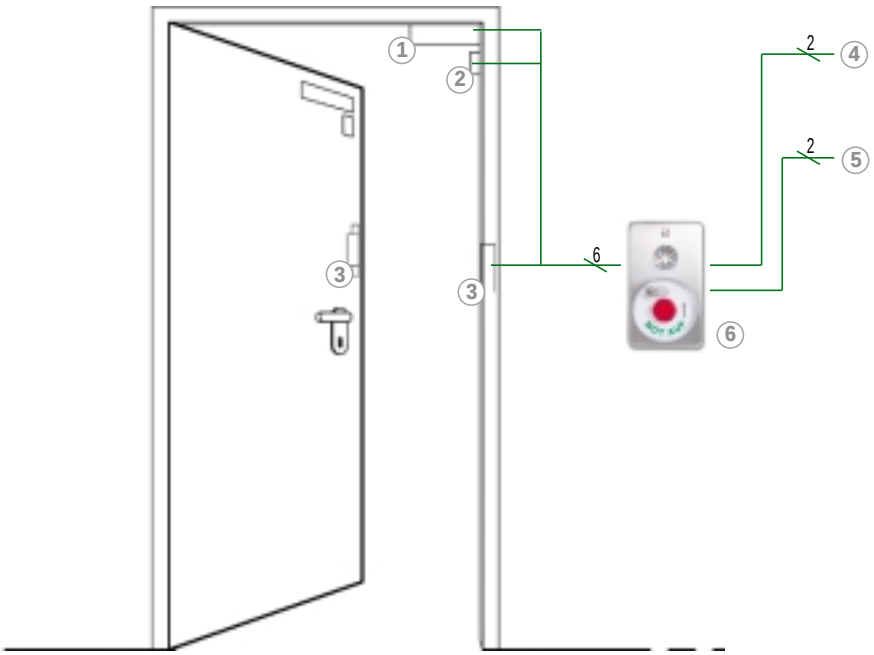
Technical data	
Connection voltage	230 V AC +6 %/-10 %/50 Hz
Max. current consumption at 230 V input voltage	0.4 A
Output voltage	24 V DC
Max. overall output current at Tu = 40 °C	1 A
Protection class as per DIN VDE 0470-1: 1992-11	IP 40
Operating temperature range	0 °C to +40 °C
Storage temperature range	-20 °C to +60 °C
Dimensions	Approx. 170 x 85 x 80 mm
Frame dimensions for flush and cavity wall mounting	Approx. 190 x 105 x 12 mm
Housing material	Plastic Bayblend FR90
Standard surfaces	Pure white (similar to RAL 9010) Stainless steel optic Green (similar to RAL 6032)
Included in scope of delivery	Frame for flush and cavity wall mounting; 2 pce. clip and connector for connection to Model 1370-20

1370-40---97-00

CONTROL MODULES

FUNCTIONAL DIAGRAM

Functional diagram of the escape door locking mechanism of a 1-leaf door



①

Holding magnet 828-44

②

Reed contact assembly 10365U

or

③

Escape door strike
331U RR/AKRR
and latch bolt 807-10

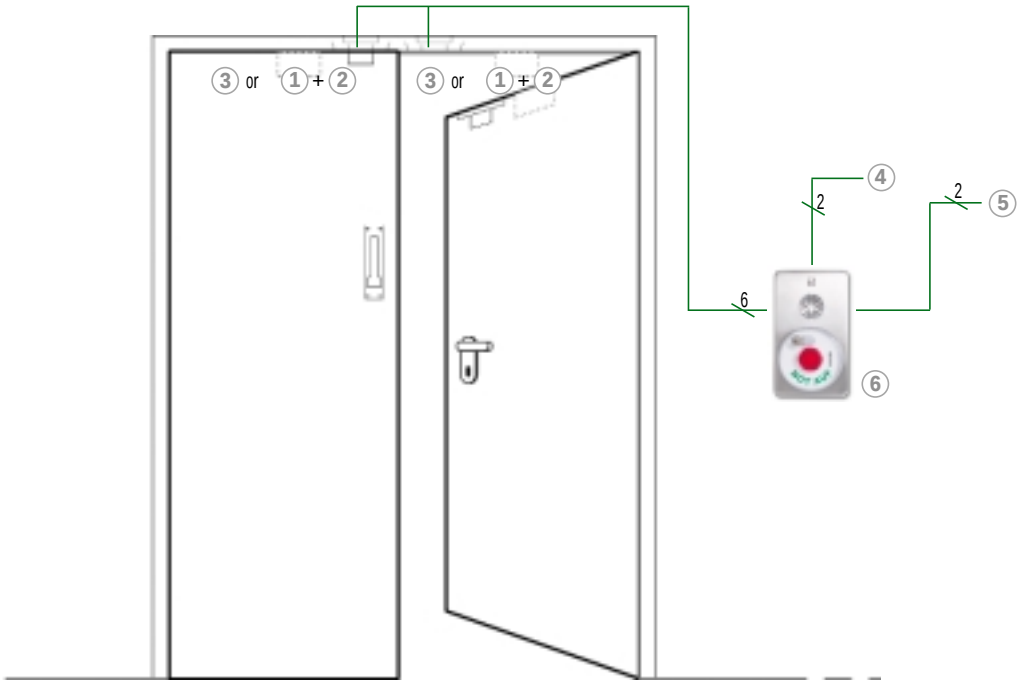
④ 12 V or 24 V stab. DC voltage
e. g. 1370-40

⑤ Panel (BUS technology), WinFT

⑥ Terminal 1370-20
Configuration and connection possibilities of the system:

- Connection to fire detection system
- Connection for external operating element (manual unlocking/locking mechanism)
- Control panel BUS technology
- Monitoring contact unlocked/locked
- Monitoring contact alarm
- Authorized release by external switching device e. g. access control
- Permanent unlocking by external switching device, e. g. timer
- "Door open" monitoring

Functional diagram of the escape door locking mechanism of a 2-leaf door



CONTROL UNIT

EAC 1 INTEGRA

Access control for
escape door terminal Series 1370

Access control with integrated reader

Type 481-10-FT Order no.

481-10-FT----00

The advantages of Integra:

- Compatible with other contactless effeff access control systems
- Simple retrofitting
- Easy to handle
- Reliable monitoring and maximum security for escape routes
- No compatibility problems
- No wear thanks to contactless data transmission
- Meets high demands on design
- No additional access control required
- Two devices in one

Technical data	
Connection voltage	12 to 24 V DC
Rated current consumption	Approx. 70 mA (typ.) approx. 150 mA (max.)
Inputs	Possible connection for additional reading antenna
Reading distance	Approx. 60 mm
Operating temperature range	0 °C to +40 °C
Protection class	IP 40
Dimensions L x W x H	Approx. 93.6 x 95.2 x 7.7 mm

2 in 1 – access control for integration in escape door systems

The effeff EAC I Integra combines both access control and escape door systems in one device. This means that you can effectively control access and simultaneously comply with all statutory regulations for escape doors.

EAC I Integra is a complete stand-alone access control system that can be installed in the effeff escape door controls of the Series 1370.
The access control is simply placed over the "EMERGENCY-OFF" button under the plexiglass cover. The device is supplied with voltage from the escape door terminal and switched to the input "Temporary release". In other words it is simple to mount and requires no additional voltage supply. An additional reading antenna (e.g. for outdoors) can be connected to the control unit. The set comprises a control unit, master card, user card and connecting cable.

- Contactless system
- Single card clearing of lost cards via digital display
- 199 cards programmable
- Only one master card required for programming
- Control unit with integrated reader for use indoors
- Extendible with reading antenna
- Programming directly at control unit
- Settable unlocking time

Note!
The device was optimized specially for integration in the effeff escape door terminals of the Series 1370. The escape door terminal is not included in the scope of delivery.

Scope of delivery

- EAC I Integra access control for integration in escape door terminals of the Series 1370
- 1 user card
- 1 master card
- Connecting cable

CONTROL UNIT

User card

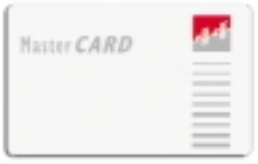
Type 481-10-4, Order no.

481-10-4-----00

Key fob

Type 481-10-5, Order no.

481-10-5----00



Master card

Type 481-10-3, Order no.

481-10-3-----00

EAC I reading antenna

Type 481-10-1 Order no.

481-10-1-----00

Protection class IP 65
Operating temperature range: -20 °C to +60 °C
Dimensions approx. 80 x 80 mm

Connecting cable

For retrofitting FT control devices of the Series 1370-20 manufactured **before** 2004

Type 481, Order no.

481-FT-KAB01-00

Preformed with connector and screwing terminal

Our leaflet "Access controls systems" contains further information and a detailed product overview.

Connecting cable

for connecting the EAC I antenna 481-10-1

Type 481-FT-KAB03, Order no.

481-FT-KAB03-00

CONTROL TERMINAL

CONTROL TERMINAL 1338/1340

Control terminal 1338-2x for 230 V mains voltage

The control terminal combines both the control device and the door terminal in one housing.

Technical data	
Connection voltage	230 V AC (+10%/-15%)
Rated operating voltage	24 V DC
Internal current consumption	300 mA
Max. load current	Max. 320 mA
Housing	Sturdy plastic housing with transparent, non-splitter cover for emergency button (re-usable), incl. profile semi-cylinder
Housing colour	Green (similar to RAL 6032) or grey white (similar to RAL 9002), other RAL colours on request
Housing dimensions	See dimension drawings, Page 21
Profile semi cylinder	Locking bit position 90° left, length 30-35 mm
Emergency button lighting	Multi-LED
Protection class DIN 40050	IP 30
Humidity class DIN 40040	Class F
Operating temperature range	0 °C to +40 °C

Control terminal 1340-2x for 12 V/24 V stab. DC voltage

Same as Model 1338-2x however without integrated power supply.

Technical data	
Connection voltage	230 V AC (+10%/-15%)
Rated operating voltage	12 V/24 V DC
Current consumption	200 mA
Max. load current	1 A at 12 V/640 mA at 24 V
Housing	Sturdy plastic housing with transparent, non-splintering cover of emergency button (re-usable), incl. profile semi-cylinder
Housing colour	Green (similar to RAL 6032) or grey white (similar to RAL 9002) other RAL colours on request
Housing dimensions	See dimension drawings, Page 21
Profile semi cylinder	Locking bit position 90° left, length 30-35 mm
Emergency button lighting	Multi-LED
Protection class DIN 40050	IP 30
Humidity class DIN 40040	Class F
Operating temperature range	0 °C to +40 °C

1320 Surface mounted

1338-20-----F90

1321 Flush mounted

1338-21-----F90

1350 set

comprising 1338-20/21 and an already pre-formed escape door strike 331U with connection lead and mortise latch bolt lock 807-10.

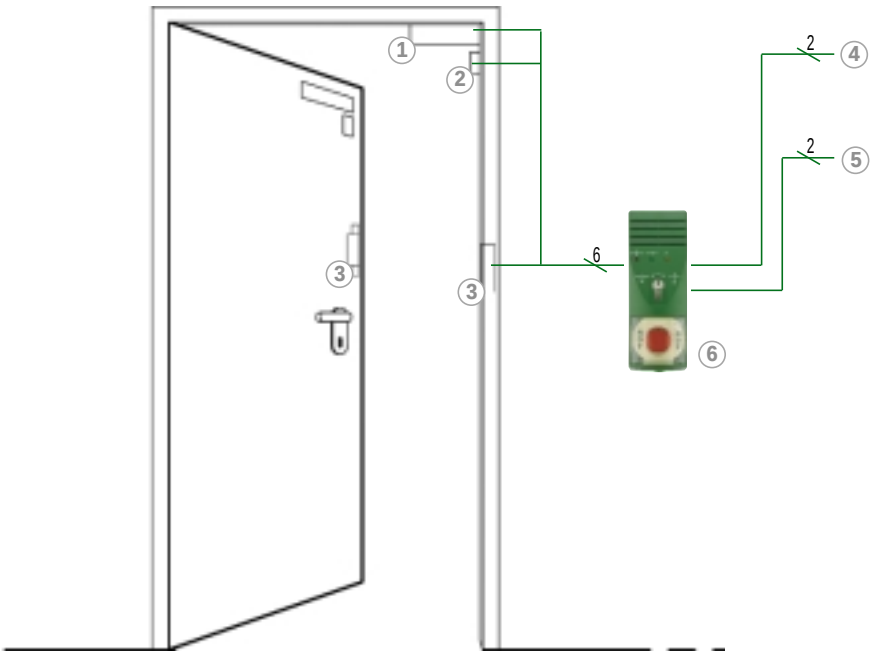
1350-20------04 Surface mounted version

1350-21------04 Flush mounted version

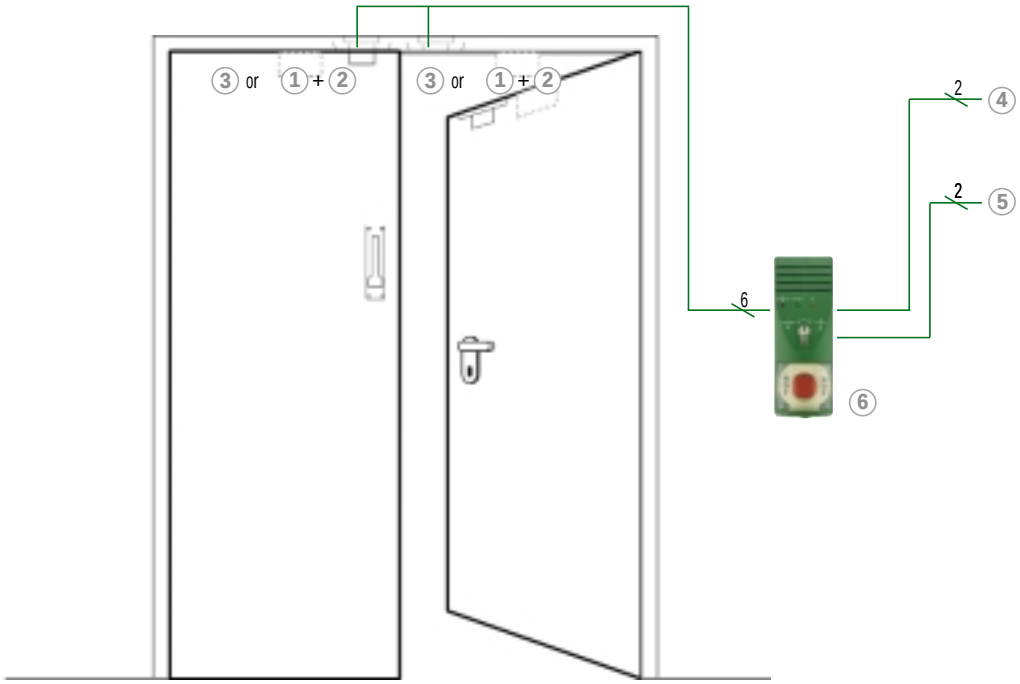
The sign "Emergency button" is enclosed with the control terminals.

CONTROL TERMINAL

Functional drawing of escape door locking mechanism of a 1-leaf door



Functional diagram of the escape door locking mechanism of a 2-leaf door



①

Holding magnet 828-44

②

Reed contact assembly 10365

or

③

Escape door strike
331U RR/AKRR
and latch bolt 807-10

④ 1338-2x - mains 230 V AC
1340-2x - 12 V or 24 V stab. DC voltage
e. g. 1370-40

⑤ Panel (BUS technology), WinFT

⑥ Terminal 1338-2x/1340-2x
Configuration and connection possibilities of the system:

- Connection to fire detection system
- Connection for external operating element (manual unlocking/locking)
- Control panel BUS technology
- Monitoring contact unlocked/locked
- Monitoring contact alarm
- Authorized release by external switching device e. g. access control
- Permanent unlocking by external switching device
- "Door open" monitoring

CONTROL DEVICE

CONTROL DEVICE 720-30

Escape door control device 720-30

The control device is the central control unit of the entire system. It is designed for controlling one door. The integrated power supply is designed for 2 locking elements and the emergency current supply via two integrated batteries.

Please order the batteries separately.

018002-------00

Technical data	
Connection voltage	230 V AC (+6 % / -10 %)
Rated operating voltage	24 V DC
Rated load	1.1 A
Operating temperature range	0 °C to +40 °C
Protection class as per DIN 40050	IP 20
Humidity class as per DIN 40040	Class F
Dimensions (W x H x D)	300 x 186 x 125 mm
Accessories	2 x batteries 18002
Total battery capacity	24 V DC/2 Ah
Bridging time at rated load	Approx. 15 minutes

720-30-------00

Escape door control unit for central release 720-32

Based on the control unit 720-30; with additional security relay circuit as slot-in PCB for central release on site without emergency button.
Application example and functional drawing **"Central release",** see Page 32.

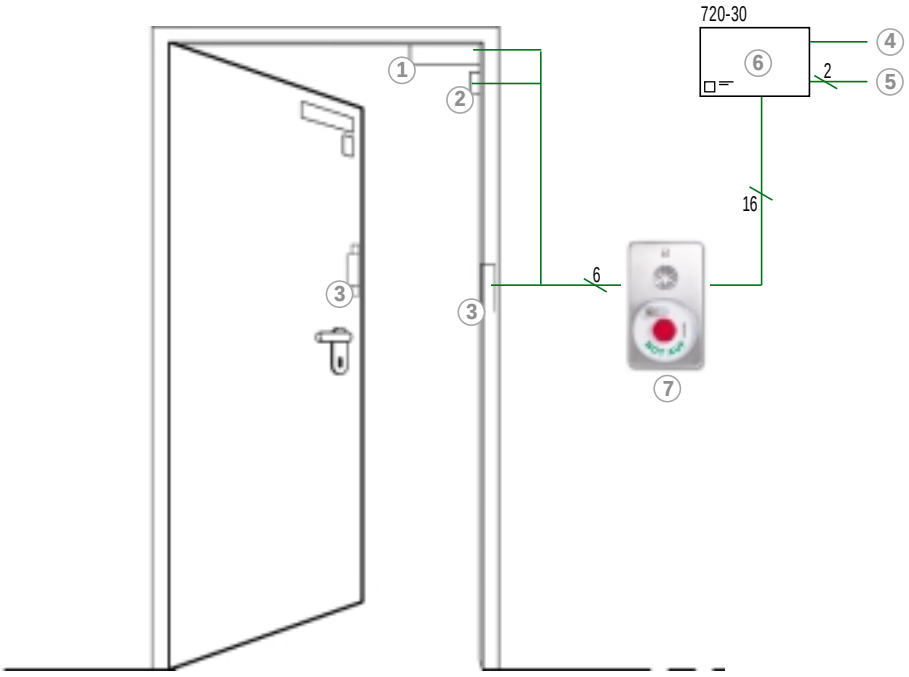
Technical data	
Connection voltage	230 V AC (+6 % / -10 %)
Rated operating voltage	24 V DC
Rated load	1.1 A
Current consumption of security relay circuit	110 mA
Operating temperature range	0 °C to +40 °C
Protection class as per DIN 40050	IP 20
Humidity class as per DIN 40040	Class F
Dimensions (W x H x D)	300 x 186 x 125 mm
Accessories	2 x batteries 18002
Total battery capacity	24 V DC/2 Ah
Bridging time at rated load	Approx. 15 minutes

720-32-------00

CONTROL DEVICE

FUNCTIONAL DRAWING

Functional drawing of escape door locking mechanism of a 1-leaf door with Model 720-30



1

Holding magnet 828-44

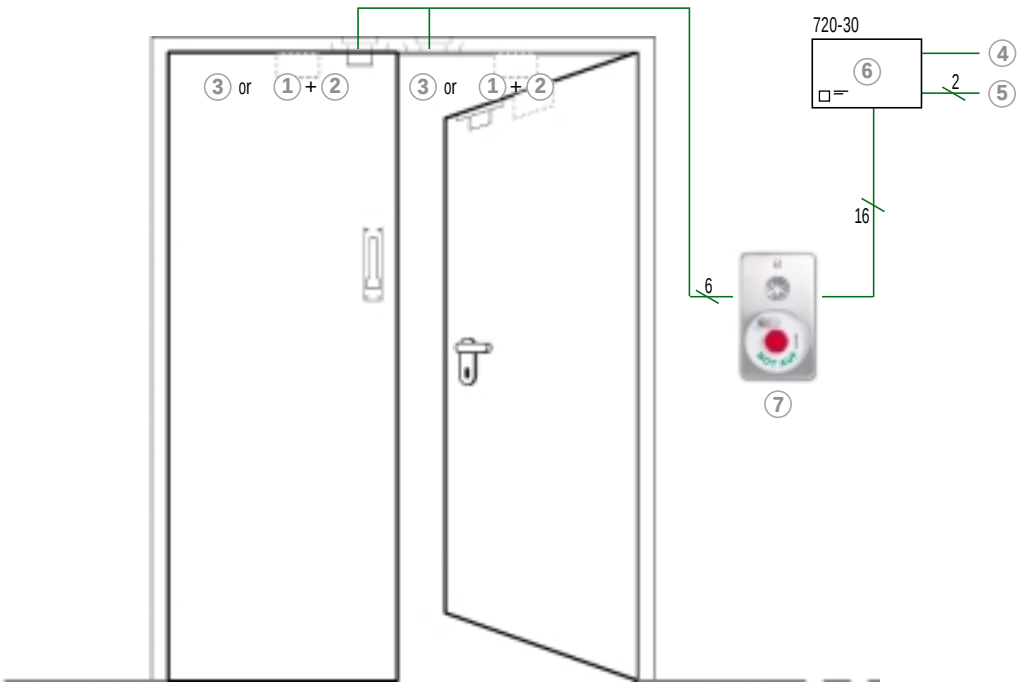
2

Reed contact assembly 10365U

or

3

Functional diagram of the escape door locking mechanism of a 2-leaf door with Model 720-30



Escape door strike
331U RR/AKRR
and latch bolt 807-10

4 230 V AC

5 Panel (BUS technology), WinFT

6 Escape door control unit 720-30
Configuration and connection possibilities of the system:
- Connection to fire detection system
- Connection for external operating element (manual unlocking/locking)
- Flashing beacon
- Control panel BUS technology
- Monitoring contact unlocked/locked
- Monitoring contact alarm
- 5 fire detectors
- Authorized release by external switching device e.g. access control
- Permanent unlocking by external switching device e.g. timer
- "Door open" monitoring
- Connection of external alarm
- Integrated emergency current supply (battery optional)

7 Escape door terminal module 1370-1035

OPERATING ELEMENT

MODEL 1370-10/1337-1x

The terminal module 1370-10

Door terminal without control electronics matching appearance of control module. It can be combined with the control module 1370-20 (e.g. for applications with an escape route on both sides) and is compatible with the familiar escape door control unit 720-30.

Technical data	
Rated operating voltage	12 V DC -15 % to 24 V DC +15 %
Max. internal current consumption at 12 V DC	Approx. 55 mA
Max. internal current consumption at 24 V DC	Approx. 55 mA
Protection class as per DIN VDE 0470-1: 1992-11 with integrated locking cylinder	IP 40
Operating temperature range	0 °C to +40 °C
Storage temperature range	-20 °C to +60 °C
Profile semi-cylinder	Same as 1370-20
Dimensions	Same as 1370-20
Housing material	Plastic Bayblend FR90
Standard surfaces	Pure white (similar to RAL 9010) Stainless steel optic Green (similar to RAL 6032)
Included in scope of delivery	Frame for flush and cavity wall mounting
The sign "Emergency button" is enclosed with the terminal.	

1370-1035-35-00

Further housing colours, see Page 11.

Terminal for indoor use 1337-IX

The door terminal 1337-IX is a combination of an emergency button and control and monitoring elements and is compatible with the escape door control unit 720-3X.

The special shape is suitable for surface mounting as well as flush mounting with housing.

The following functions are integrated:

Emergency button with cover (is not destroyed when operated) for releasing the doors in case of panic.

Key switch for the functions:

Door locking On/Off - alarm reset - temporary release.

Light diodes for displaying:

Door locked - unlocked - alarm

Cover contact for tamper monitoring and siren.

Technical data	
Rated operating voltage	24 V DC (±15 %)
Housing	Sturdy plastic housing with transparent, non-splitter cover of emergency button (re-usable), incl. profile semi-cylinder
Housing colour	Green (similar to RAL 6032) or grey white (similar to RAL 9002) other RAL colours on request
Profile semi cylinder	Locking bit position 90° left, length 30-35 mm
Emergency button lighting	Multi-LED
Protection class DIN 40050	IP 30
Humidity class DIN 40040	Class F
Operating temperature range	0 °C to +40 °C
The sign "Emergency button" is enclosed with the door terminal.	

1337-10 Surface mounting

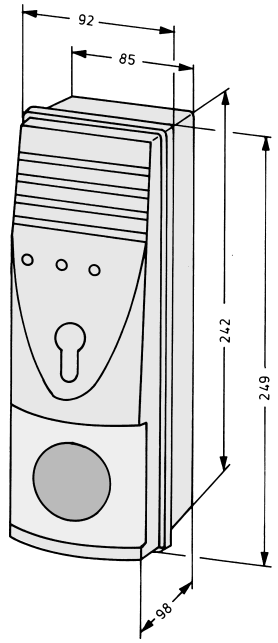
1337-10------00

1337-11 Flush mounting

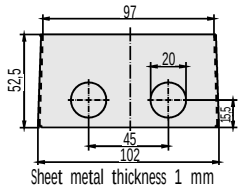
1337-11------00

OPERATING ELEMENT

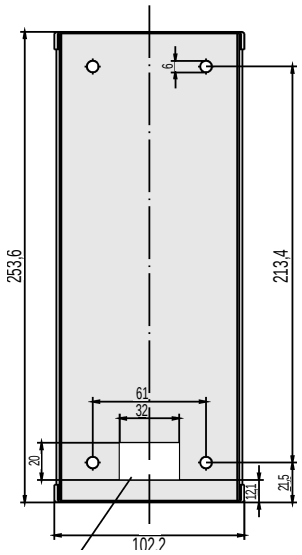
DIMENSIONS 1370-10/1337-1x



Dimensions for control terminal 1337-10, 1338-20 and 1340-20

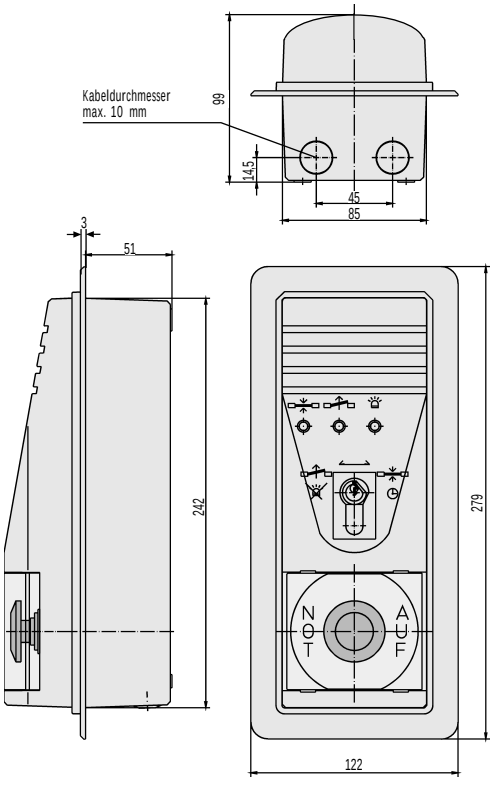


Sheet metal thickness 1 mm

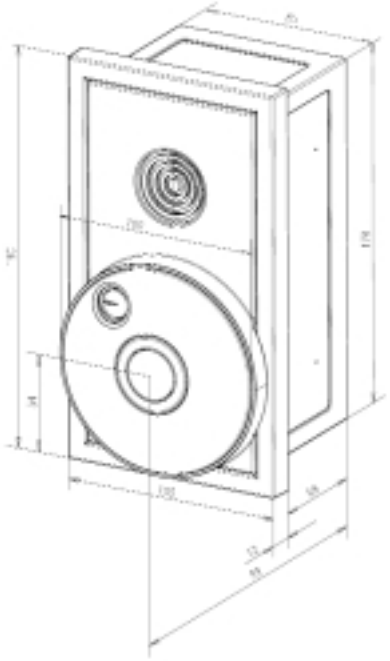


Cable entry

Flush mounted housing 13xx-x1 flush mounted version (Included in scope of delivery of Model 1337-11, 1338-21 and 1340-21)



Dimensions for control terminals 1337-11, 1338-21 and 1340-21



Dimensions for control modules, Series 1370

OPERATING ELEMENT

MODEL 1332

Operating element 1332

The operating element in the metal housing is available for surface or flush mounting. It is used for controlling escape door locking mechanisms in the direction opposite that of escape. It is also used in systems with central release instead of door terminals.

The following functions are integrated:

Key switch for the functions:
Door locking On/Off - alarm reset - temporary release.
Light diodes for displaying:
Door locked - unlocked - alarm
Cover contact for tamper monitoring and buzzer.

The standard operating element is supplied without a cylinder.

Without cylinder – surface mounted

1332-10------00

Without cylinder – flush mounted

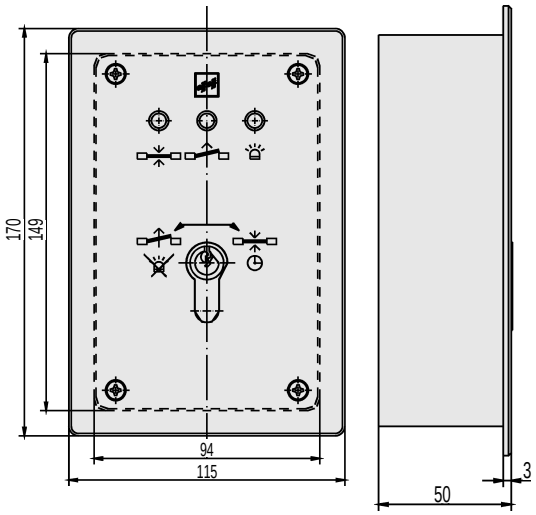
1332-11------00

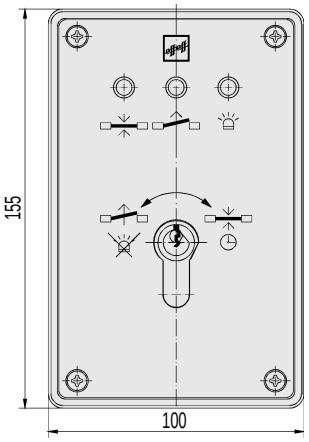
Matching profile semi-cylinder

2.0507-0030000

1332-11Zy flush mounted

1332-10Zy surface mounted





Housing depth 52 mm

COMBINATION MATRIX

Connectable locking elements

Control unit/control terminal					Locking element (max. number)			
Connection voltage	Rated operating voltage	Type	Type of mounting		Escape door strike Type 331U	Strike for swing doors Type 351	Holding magnet	
			surface	flush			828	827
230 V AC	24 V DC	720-30	•		2	2	2	2
		720-32	•		2	2	2	2
		1338-20	•		2	2	1	2
		1338-21		•	2	2	1	2
24 V DC	24 V DC	1340-20	•		2	2	2	2
		1340-21		•	2	2	2	2
12 V DC	12 V DC	1340-20	•		2	2	1	2
		1340-21		•	2	2	1	2

Control module 1370						Locking element (max. number)			
Voltage supply	Connection voltage	Rated operating voltage	Type	Type of mounting		Escape door strike Type 331U	Strike for swing doors Type 351	Holding magnet	
				surface	flush			Type 828	Type 827
External supply	12V–24V DC (2 A)	12 V	1370-20	•	•	6	6	3	4
		24 V				12	12	6	8
Power supply Module 1370-40	230 V AC	24 V				4	4	2	3

The special advantages...
... of the escape door strike

The outstanding features of the effeff escape door strike are its concealed mounting and the integrated monitoring contacts (door position and locking indication) that ensure extensive protection against manipulation. An additional door contact is not required.

The clear door height and width of the escape door is not affected. Due to the low current consumption, several escape door strikes can be used for e.g. for the security and safety of double-leaf doors.

In addition to the normal panic lock, the escape door strike is installed in the door frame and the latch bolt 807-10 as the mating part in the door leaf. The escape door strike is similar in shape to a commercially available security strike. This means simple, uncomplicated and quick installation in the different profiles, irrespective of the integrated panic lock as well as high stability and resulting additional fire safeguard against break-in. An important point that underlines the functionality of this escape door strike, is the secure unlocking even when the current is switched off and when counter pressure of up to 5000 N is applied to the door.

Note: When installing in fire-rated doors, observe the approval regulations for fire-rated doors. See also information provided by the Institute for Building Technology.

The special advantages ...
... of the surface holding magnet

Surface holding magnets are particularly suitable for retrofitting (surface mounting). No alterations or recesses are required in the door frames. They can also be installed in doors in escape routes that simultaneously act as fire-rated doors (see Page 30, 52). Please observe the approval of the relevant door element. Due to its silent operation, this locking element is predestined for use, for example in living areas.

The surface holding magnet and the counter holding plate form the complete locking unit. The holding power of the magnet combined with the counter plate provide additional break-open protection. A monitoring contact in the device ensures extensive protection against manipulation. The surface holding magnet is mounted on the door frame or in the door passage and the counter holding plate on the door leaf. An additional door contact is required.

Note: A clear height of min. 2 m is stipulated in the Workshop Guidelines (§ 10 WG 10/1 Doors, Gates). The escape door strike is a recommended alternative to mounting in the door passage.

The special advantages ...
... of the strike for swing doors

The strike for swing doors is flush mounted (concealed) in the same manner as the escape door strike. When the door is closed, the element installed in addition to the panic lock remains concealed.

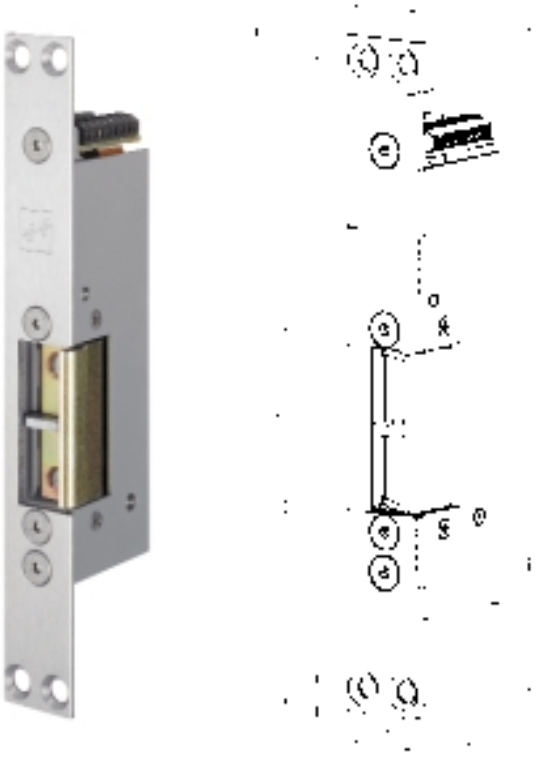
The swing door strike provides additional break-open protection. The integrated monitoring contact (locking signal) ensures extensive protection against manipulation. An additional door contact is required.

ESCAPE DOOR STRIKE MODEL 331U

Escape door strike Model 331U

The escape door strike 331U is specially designed for locking doors in escape routes. The situation as far as building codes is concerned as well as the application in fire-rated doors is explained on Page 52. Due to secure unlocking under side load (max. 5000 N) it is used above all in doors without escape route requirements. In interlocking systems, sound-insulated doors and doors where pressure is to be expected on the door keeper, the 331U Series functions reliably.

331U80F09035F94



331U80F11635F94

Electrical data

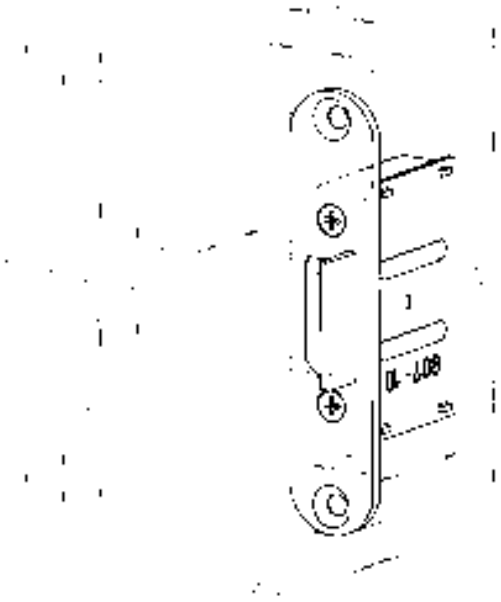
At 20 °C Model Series: 331U	Rated operating voltage Tolerance range	Rated resistance in ohm	Rated current consumption DC in mA
12 V	±1 V	37.5	320
24 V	±2 V	150.0	160

ESCAPE DOOR STRIKE MODEL 807-10

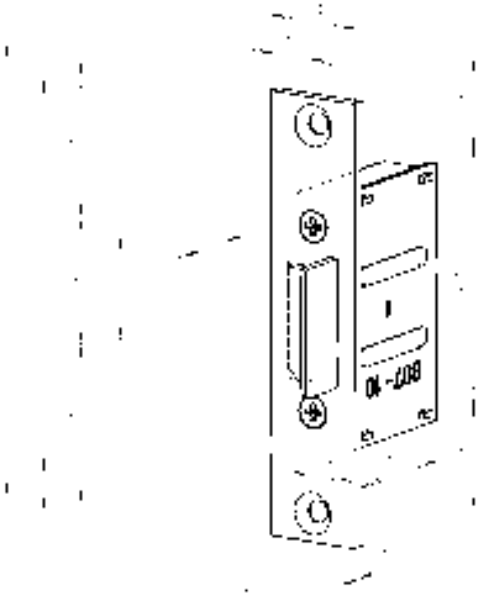
Technical data	
Strength against break-open – standard	7500 N
Material: Housing/latch – standard	High grade cast steel/steel
Material: Housing/latch/surface mounted attachment FaFix	High grade cast steel/high grade cast steel/steel
Operating temperature range	-15 °C to +40 °C
Installation – irrespective of position	Yes
Latch side load max. in N	5000 N

Important!

The escape door strike is intended exclusively as an additional locking mechanism of the fire-rated door irrespective of the main lock. It should never be used as a mating part to the main lock as otherwise the function of the fire-rated door is no longer ensured. The escape door strike and the corresponding mating part 807-10 are tested according to the valid regulations and approved as suitable for the electrical locking of doors in escape routes.



807-12-------00



807-10-------00

Mating part for escape door strike Model

807-12-------00

LOCKING ELEMENTS

SURFACE MOUNTED HOUSING

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.

A01 for metal doors, wood doors, plastic profiles and aluminium profiles

A03 Mounting bracket for A01 for flush-surface frames/door leaf constructions

A04 Stainless steel adhesive plate for attaching the hook catch of the surface mounted housing A01 to glass doors and the mounting bracket A03 to the fanlight of fully glazed doors.

Note: When using fail-locked door strikes the door is locked when the current fails and cannot be opened electrically. Mechanical emergency unlocking is possible on the mounting side with suitable tools. We recommend operating the system with an emergency current supply when using fail-locked mechanisms. When using fail-unlocked door strikes, the door is unlocked when the current fails.

A01

for metal doors, wood doors, plastic profiles and aluminium profiles

------- A0135-04

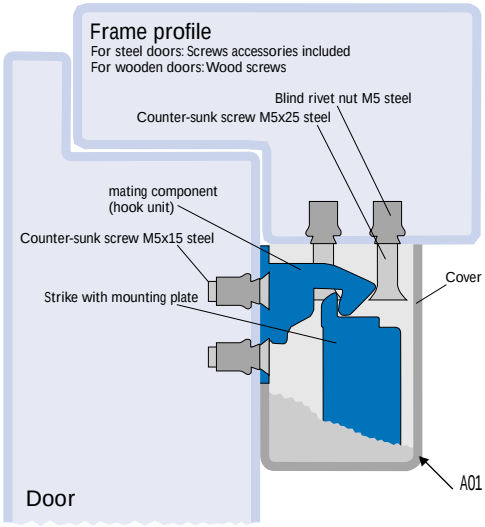
Order the matching door strike Model 131, 141 and 331U always left (4) and in FaFix version (FF).
Dimensions: 165 x 57 x 40 mm
Surface: Stainless steel
Extensive mounting material and drilling template are included in the scope of delivery.

A03

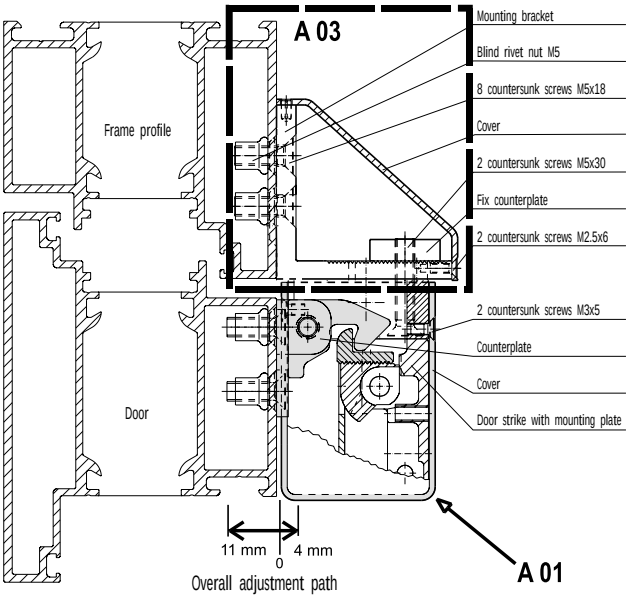
Mounting bracket for A01 and A02 for flush-surface frames/door leaf constructions

------- A0335-01

Dimensions: 165 x 46.5 x 46.5 mm
Surface: Stainless steel
Extensive mounting material and drilling template are included in the scope of delivery.
Adjustment path for protruding door max. 4 mm, for recessed door max. 11 mm



The surface mounted housing A01 integrates the escape door strike 331U for securing escape routes.



A04

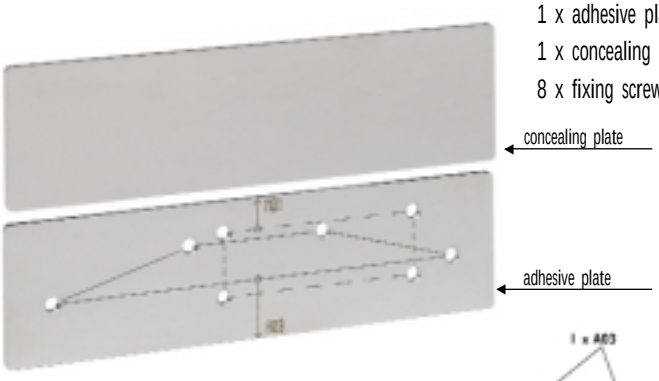
Stainless steel adhesive plate for attaching the hook catch of the surface mounted housing A01 to glass doors and the mounting bracket A03 to the fanlight of fully glazed doors.

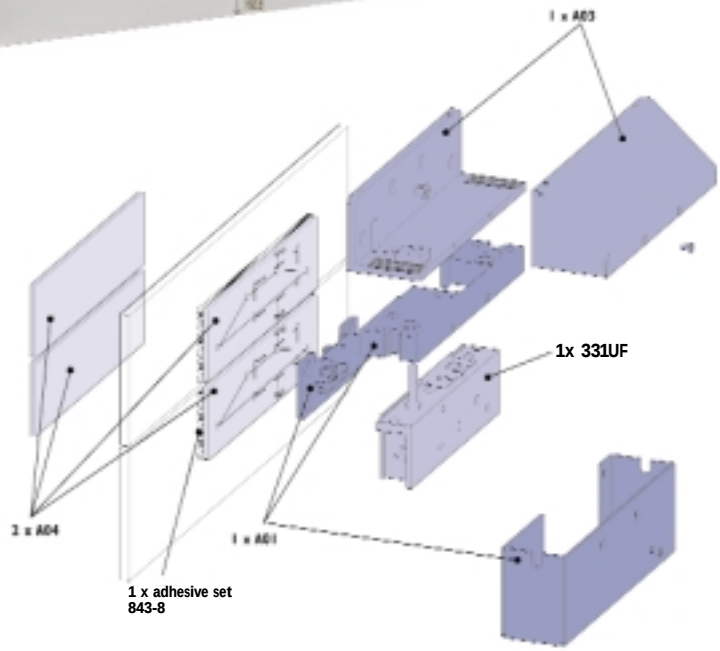
-------A0435-01

The combination of the adhesive plate A04 with the surface mounted housing A01 replaces the adhesive version A02.
The adhesive plate A04 can also be used for fixing the mounting bracket A03.
Dimensions 165 x 45 x 3 mm
Corner radius 2 mm
System durability test 250 000 cycles
140 N load per cycle open - closed
Holding power 6000 N
Distance between glass panes of fully glazed doors 0 to max. 10 mm
Adhesive plate distance 2 mm – 6 mm

A04 comprises:

1 x adhesive plate EST
1 x concealing plate
8 x fixing screws





System assembly for a glass door with steel or wood frame

1 x A04
1 x A01
1 x 331U80F-----F94 or other versions
1x 843-8..

System assembly for a fully glazed door

2 x A04
1 x A01
1 x A03
1 x 331U80F-----F94
1x 843-8..

Adhesive set

For gluing stainless steel to glass, we offer the adhesive set 843-8. This polyurethane glue specially developed for this type of application ensures that materials are bonded securely.

843-8--------00

The adhesive set 843-8 comprises:

310 ml polyurethane glue in a cartridge, 30 ml cleaner, 30 ml primer, abrasive pad, cleaning cloth, primer applicators, cartridge nozzle, glue pads and instructions for use (sufficient for gluing approx. 5 x A04 plates).

LOCKING ELEMENTS

HOLDING MAGNET MODEL 828

Surface holding magnet 828

Surface holding magnets are suitable for locking doors electromagnetically and are easy to mount. No alterations or recesses are required in the door frames. According to the information dated 24 March 1991 issued by the Institute for Building Technology, Berlin, electric magnets can also be attached to fire-rated doors. The electric surface holding magnet 828 has an integrated contact for the locking signal (Hall sensor). The magnet has a sturdy aluminium housing and is available in natural colour as well as in dark bronze, anodized.

The rated voltage can be set on the magnet at either 24 V DC or 12 V DC. The counter holding plate 828-2 is included in the scope of delivery.

Note:
In addition to the integrated locking signal, an additional door contact must also be ordered.

Order numbers

Surface holding magnet 828
natural colour, anodized

828-------44F90

Surface holding magnet 828
dark bronze, anodized

828-------47F90

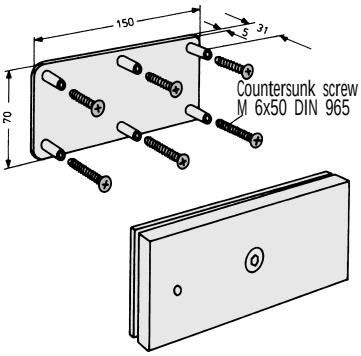
Corresponding magnetic contact (see Page 46)

10365-6------00

Technical data	
Rated operating voltage	24 V DC / 12 V DC
Rated current consumption	315 mA / 630 mA
Rated output	7.5 W
Duty cycle	100 % ED
Holding power	5000 N
Residual holding power	0 N
Switching contact	Potential-free relay change-over contact, max. switching current 2 A resistive load

Accessories

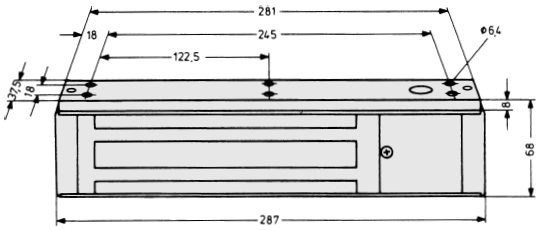
Mounting set 828-6 for mounting surface holding magnet 828 to surface mounted door elements. The set comprises: Adjustable mounting bracket, mounting bracket 828-4 and plastic cover.

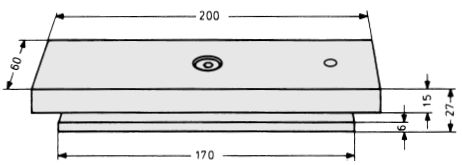


Fixing plate 828-5 for through screwing wood doors.
For achieving higher stability when fixing the counter holding plate to wood doors (not suitable for fire-rated doors).

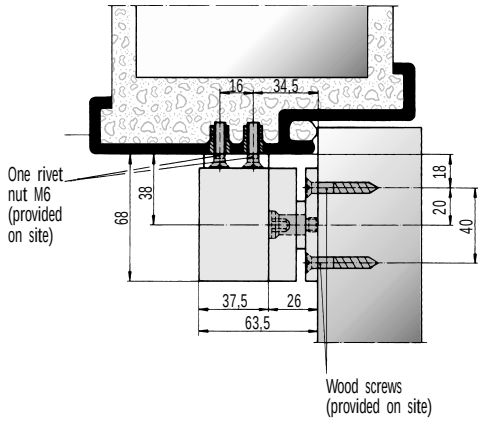
Fixing plate 828-5 for counter holding plate 828-2. Delivery complete with mounting screws (countersunk screws M 6x50 DIN 965). Dimensions 150x70 mm. Threaded sleeve length 31 mm.

Mounting bracket 828-7 for mounting the surface holding magnet 828 to surface mounted door elements. Complete with spacer plates and Fix mating part.

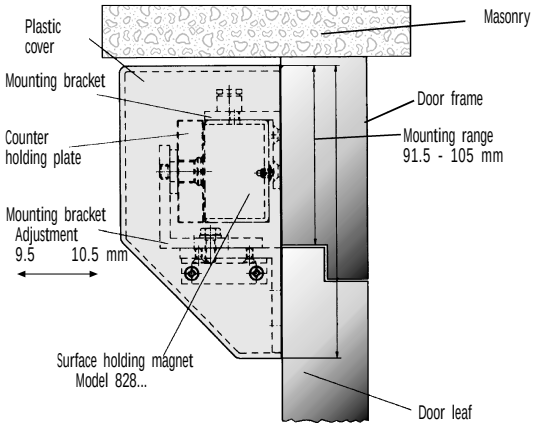




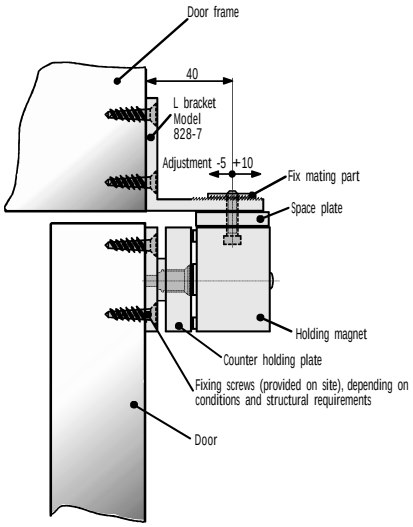
Installation diagram



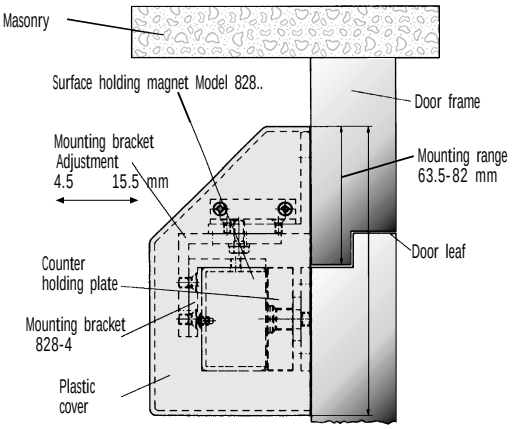
Surface holding magnet 828, profile cross-section



Model 828 with set 828-6
Version A: Door opens inwards

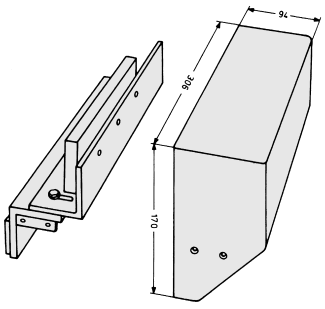


Model 828 with bracket 828-7



Model 828 with set 828-6
Version B: Door opens outwards

Bracket 828-7



Mounting set 828-6

LOCKING ELEMENTS

HOLDING MAGNETS MODEL 827

Compact surface holding magnet 827

For concealed mounting of doors in escape routes

Compact surface holding magnet. Without monitoring contacts with narrow counter holding plate for installing in door frames, sturdy aluminium housing for flush mounting.

Compact surface holding magnet 827

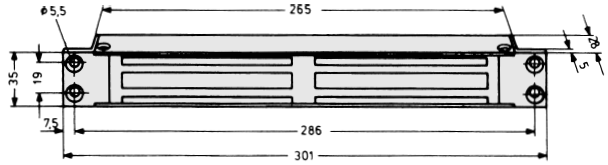
Order numbers

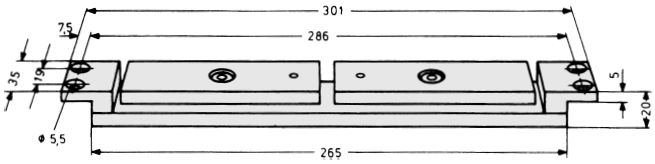
Surface holding magnet 827, natural colour anodized

827-------44F90

Corresponding magnetic contact (Page 26)

10365-6------00





Compact surface holding magnet 827, surface mounted

In the surface mounted housing e. g. for sliding doors

Complete with counter holding plate in the surface mounted housing, sturdy version in surface mounted sheet steel housing.

Order numbers

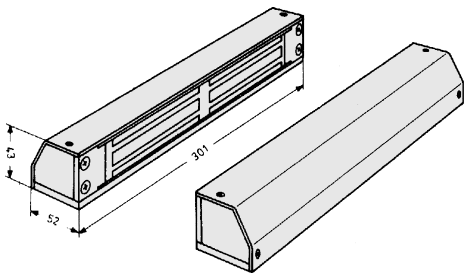
In the surface mounted housing, grey white

827AP-----93F90

Corresponding reed contact (Page 26)

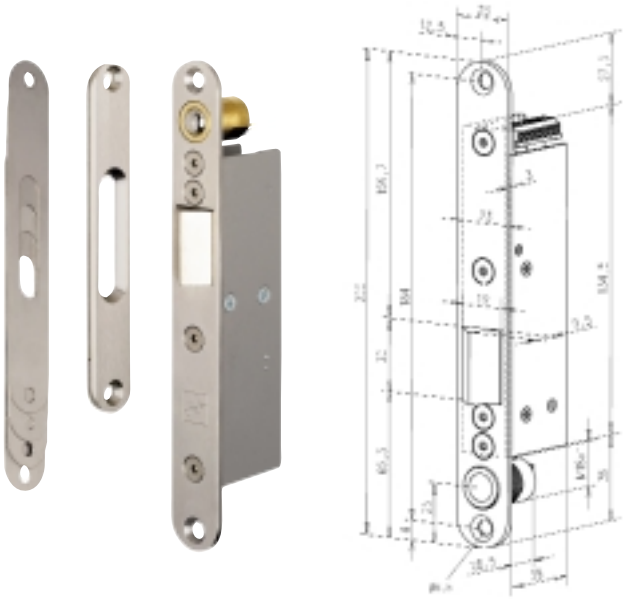
10365-6------00

Technical data	
Rated operating voltage	24 V DC/12 V DC
Rated current consumption	250 mA/500 mA
Rated output	6 W
Duty cycle	100 % ED
Holding power	2500 N
Residual holding power	0 N
Connection lead - length	4 m

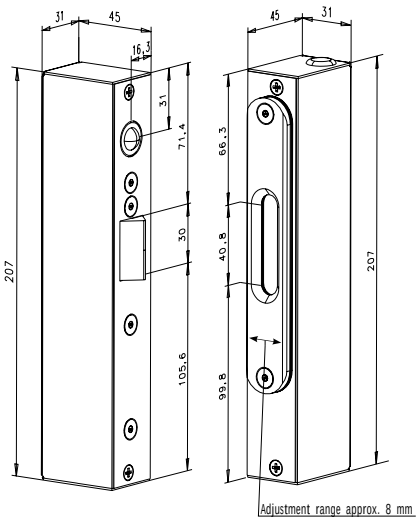


Fail-unlocked door strike for swing doors

- Adapted to effeff escape door systems with system approval and test certificate
- The locking prism is held in the locking position by spring force. When the door is closed the prism engages in the striking plate.
- When the door strike is energized, the prism is arrested and the door locked.
- For models with integrated door contact, the activation of the locking mechanism that is controlled via the door contact can be limited to the state “Door closed”.
- The integrated armature contact (25 V/I A) can be used for electronically monitoring the locking state.
- System prerequisite: Swing door closer with adjustable locking force and locking speed for securely positioning the door leaf ready for locking.
- Door contact 10405.II with terminals. Mounting distance between face plate and striking plate 3 mm (min. 2 mm, max. 4.5 mm)



351U66-80135F91



Surface mounting set A05

351U66-A0535F91

Technical data	
Rated operating voltage	24 V DC/12 V DC
Rated current consumption	160 mA/320 mA
Installation position	Universal
Door gap	2 – 4.5 mm; 3 mm recommended
Dead bolt throw	10 mm
Secure unlocking with counter pressure of up to	5000 N
Pressure resistance to attempted intrusion	5000 N
Operation	Fail-unlocked principle
Max. load of armature contact	25 V/1 A

CENTRAL CONTROL

BUS CONTROL PANEL 925

BUS control panel 925

The BUS control panel 925 for central control and monitoring of maximum 70 effeff escape door locking mechanisms.

Simple wiring thanks to 2-wire data line between escape door control units/escape door control terminals and the BUS control panel 925.

The following versions of the frame components are available:

- Combined wall/door housing
- Frame component for installing switchboard panel (closed version)
- Frame component for 19" cabinet (open version)
- Frame component for 19" cabinet (closed version)

In addition to the models mentioned on Page 14 and 15, we can design the control panel specially for your application. In order to ideally coordinate the specifications to make a project-specific quotation, we require information on the function and number of doors.

Modules of project-specific control panels
(the modules are equipped at the factory)

- **BUS control module (BSM)**

The BUS control module is the central unit of the panel. It contains the processor functions that are required for BUS communication and the general display and operating elements for the panel, as well as a button for testing the LED displays and a key switch for releasing/blocking the operating keys. Also 3 LEDs each for 4 doors for the status display and two buttons for locking/unlocking.

There are two versions of control module: The BSM-01 is used in the control panel, the BSM-02 in the parallel panel.

- **BUS door module (BTM)**

Extension of the BUS control module with operating and display elements for 3 doors with 3 LEDs each for displaying the state of door and two buttons for locking/unlocking per door.

- **BUS controller (BCM)**

The BUS controller has a serial RS 232 interface that enables the visualization and control of escape door controls at a PC when used with the corresponding software. All the processor functions required for BUS communication are already integrated in the BUS controller. Further modules are not required.

In case the connected escape door controls should be additionally displayed on one or several panels, they should be configured as parallel panels.

- **Emergency open module with emergency button**

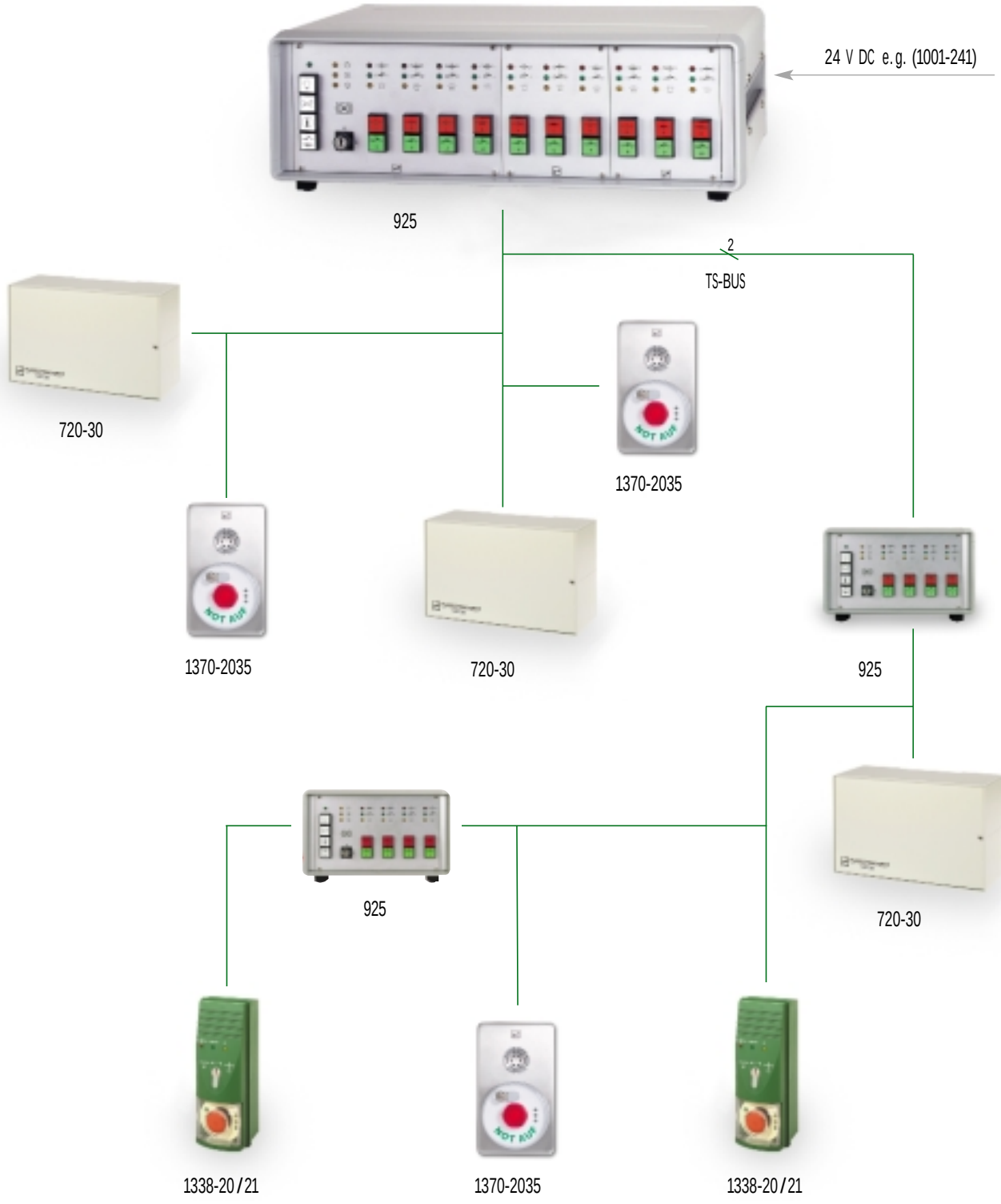
For central (indirect) release of effeff escape door locking mechanisms via the security relay circuit in the control unit 720-32 (additional wiring required).

- **Blind modules**

As a cover for partly equipped frame components.

CENTRAL CONTROL

BUS CONTROL PANEL 925



Thanks to bus technology, wiring is even simpler and more efficient

Corresponding accessories, see Page 49

CENTRAL CONTROL

MODEL OVERVIEW

Control panel versions

Installation in switchboard panel			
	External dimensions (H x W x D), mm	**Recess (H x W), mm**	**Order No.**
4 doors	170 x 270 x 176	134 x 231	**925-111-000-000**
7 doors	170 x 376 x 176	134 x 338	**925-121-100-000**
10 doors	170 x 483 x 176	134 x 444	**925-131-200-000**
16 doors	303 x 376 x 176	267 x 338	**925-141-400-000**
22 doors	303 x 483 x 176	267 x 444	**925-151-600-000**

Combined wall/table housing		
	External dimensions (H x W x D), mm	**Order No.**
4 doors	152 x 259 x 269	**925-311-000-000**
7 doors	152 x 366 x 269	**925-321-100-000**
10 doors	152 x 473 x 269	**925-331-200-000**
16 doors	285 x 366 x 269	**925-341-400-000**
22 doors	285 x 473 x 269	**925-351-600-000**

19" frame components – open		
	External dimensions (H x W x D), mm	**Order No.**
4 doors	133 x 270 x 176	**925-411-000-000**
7 doors	133 x 376 x 176	**925-421-100-000**
10 doors	133 x 483 x 176	**925-431-200-000**
16 doors	266 x 376 x 176	**925-441-400-000**
22 doors	266 x 483 x 176	**925-451-600-000**

Corresponding power supply for BUS control panel	
	Order No.
Rectifier unit/transformer	**1001-241-000000**
Emergency power supply including two batteries 18003	**1006-24020-0000**

Panel for 10 doors in the housing for installation in switchboard panel

925-131-200-000

Panel for 4 doors in wall/table housing

925-311-000-000

Control panel versions with emergency open module

Installation in switchboard panel			
	External dimensions (H x W x D), mm	**Recess (H x W), mm**	**Order No.**
4 doors	170 x 376 x 176	134 x 338	**925-121-010-100**
7 doors	170 x 483 x 176	134 x 444	**925-131-110-100**
13 doors	303 x 376 x 176	267 x 338	**925-141-310-100**
19 doors	303 x 483 x 176	267 x 444	**925-151-510-100**

Combined wall/table housing		
	External dimensions (H x W x D), mm	**Order No.**
4 doors	152 x 366 x 269	**925-321-010-100**
7 doors	152 x 473 x 269	**925-331-110-100**
13 doors	285 x 366 x 269	**925-341-310-100**
19 doors	285 x 473 x 269	**925-351-510-100**

19” frame components – open		
	External dimensions (H x W x D), mm	**Order No.**
4 doors	133 x 376 x 176	**925-421-010-100**
7 doors	133 x 483 x 176	**925-431-110-100**
13 doors	266 x 376 x 176	**925-441-310-100**
19 doors	266 x 483 x 176	**925-451-510-100**

Corresponding power supply for BUS control panel 925 with emergency open module
On request

Panel for 7 doors with emergency open module in wall/table housing

925-331-110-100

Further models and configurations on request.
Panels can have special modular configuration depending on the requirements.

CENTRAL CONTROL

ESCAPE ROUTE VISUALIZATION

Escape route visualization WinFT

WinFT is a visualization software for WINDOWSTM PCs.
Its functions are basically equivalent to those of the familiar BUS control panel 925 so that combinations of WinFT with up to 10 parallel panels and 110 escape door systems of the model series 925 are easy to realize.

The basis is a building floor plan on which the door symbols are arranged.

After installation, three authorization levels are available: For daily operation, a choice can be made between the authorization levels "Supervision" and "Control". The locking status and the door position of every individual door is displayed via symbols.
The authorization level "Control" enables the individual doors to be unlocked/locked and alarm states to be reset.

The user authorization level "Edit" also enables specific system settings e.g. changing floor plans and shifting, reinserting or deleting of door symbols.

All procedures are fully logged by the software.

The BUS controller 925-BCM acts as an interface between the effeff TS bus and WinFT and is supplied already installed in the combined wall/table housing (19" technology).

As the costs for the central control unit technology with this modern and innovative solution do not depend on the number of the connected doors, WinFT is an extremely attractive alternative to the control panel 925, especially for large buildings.

Scope of delivery

The WinFT set Model 970-10 comprises:

- Basic software and building-specific data on CD-ROM
- Manual
- BUS controller Model 925 310 000 001 000
  (925-BCM in wall/table housing; incl. PC cable)
  External dimensions: (H x W x D) = 152 x 259 x 269 mm
- Power supply 1001-241
- Editing and insertion of up to 3 building floor plans in Bitmap format (.bmp)
- Placement of up to 30 door symbols.

It is also possible to read in additional floor plans as well as to insert further door symbols.

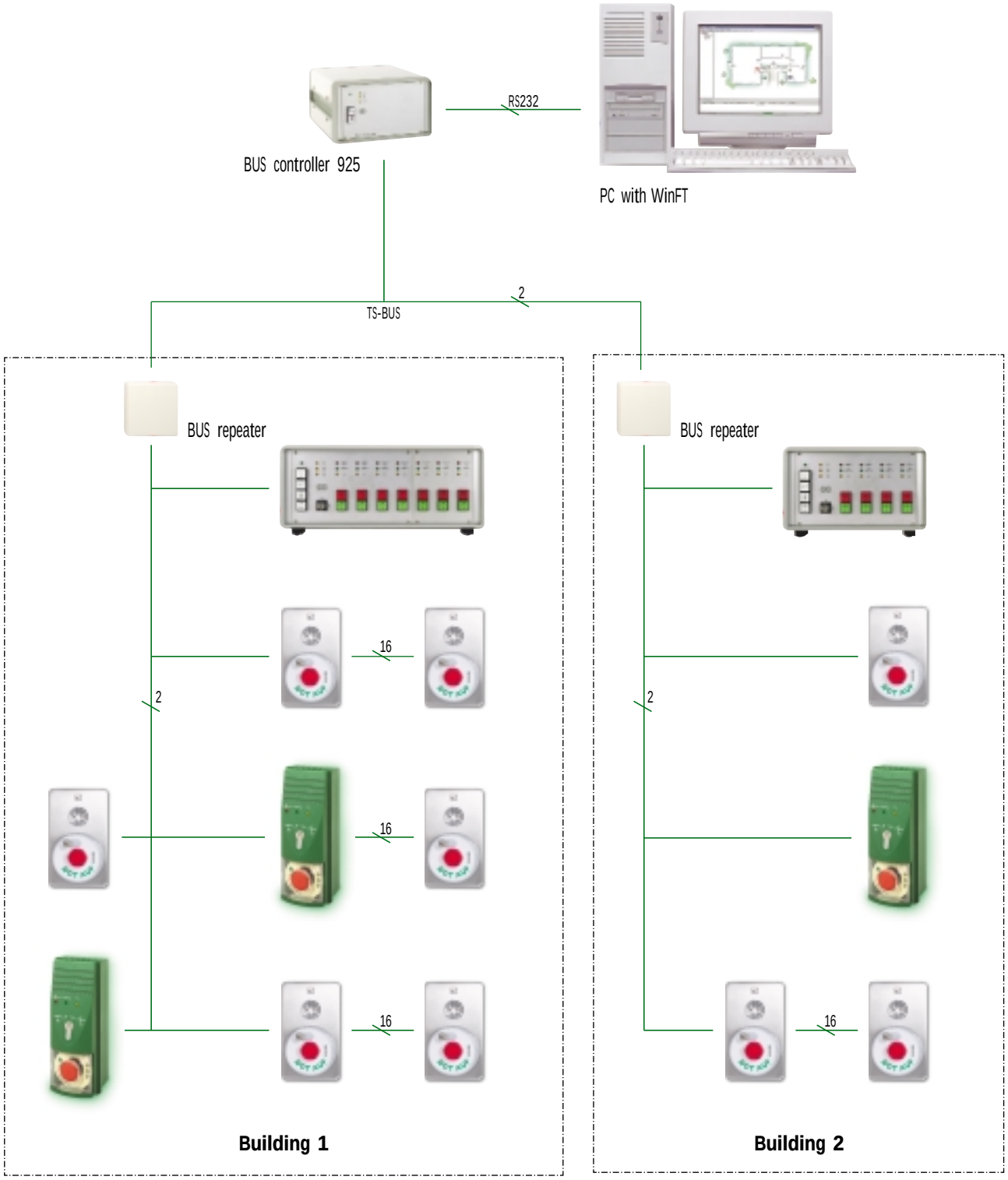
Data processing

For processing building-specific data, we require the following information:

- Building floor plans in Bitmap format (.bmp)
- Position of doors that require visualizing
- The bus addresses of the escape door systems
  (if already exist or defined)

CENTRAL CONTROL

ESCAPE ROUTE VISUALIZATION



Corresponding accessories see Page 49

APPLICATIONS

KINDERGARTEN SOLUTION

More security for kindergartens

In kindergartens children are not allowed to exit the building unaccompanied. At the same time, the exit route out of the building must be free in case of danger.

The following requirements for main entry doors to kindergartens/day care centres are therefore compulsory:

- It must be possible to enter the door from the outside during opening hours but the door must be locked at all times for the children from the inside.
- It must be possible for adults to open the door easily from the inside at all times.
- In case of danger, e.g. fire or other panic situations, the door must also function as an escape route.

In addition to these functions, the statutory "Federal German Building Regulations pertaining to the electrical locking of doors in escape routes", must be complied with. effeff offers a tested and approved door locking mechanism for this application.

Mechanical door requirements

The door must be equipped with a latch bolt or a latch bolt panic lock and front door furniture (inside: Panic bar, outside: Door knob). The lock can always be opened in the escape direction by the panic bar.

The door is locked and controlled via an additional escape door locking mechanism that is attached separately from the main lock.

In order for the door to be pulled open from outside when it is released, a door strike is also installed opposite the main lock.

Function

In its basic state the door is closed and additionally locked by the escape door locking mechanism.

A button is mounted on the outside that is only activated during certain periods as desired via a timer or a switch. The door can be unlocked and thus opened via this button by everyone during the defined period. After closing, the door is immediately relocked automatically. In order for the door to be unlocked outside the operating times (button) by authorized persons (e.g. in the morning before opening hours) a key switch is also required outside.

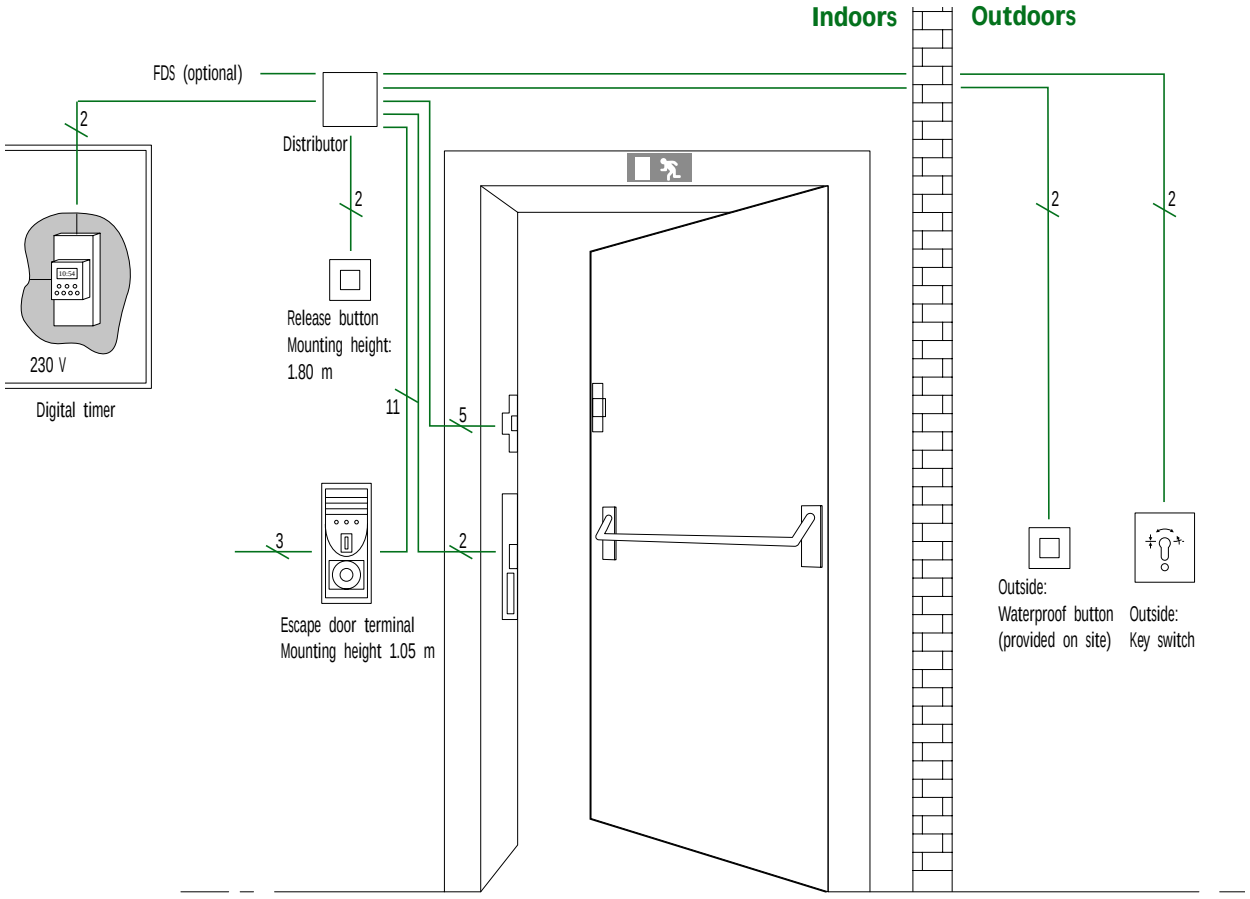
A button is also mounted on the inside for unlocking the door. To prevent children from reaching the button, it should be mounted at a height of e.g. 1.80 m. The functioning of this button is usually not affected by the operating times, i.e. the door can be unlocked at all times by adults.

In addition to the door, a door terminal or control terminal is also installed. The terminal has an emergency button with a plexiglass cover for securely unlocking the escape door locking mechanism in case of panic. The emergency button should not be mounted higher than 1.05 m so that it can also be activated by children. When the emergency button is activated, the acoustical signal transmitter integrated in the terminal is actuated and triggers an alarm signal. A potential-free monitoring contact (closer) is available for further alarm evaluations.
After releasing via the emergency button, the door can be opened from the inside via the panic bar . Relocking is only possible via the key switch integrated in the control terminal.

For a detailed description, request the corresponding application sheet.

APPLICATIONS

FUNCTIONAL DIAGRAM



Central release without emergency button on site

For the safety of humans, doors in escape routes must be easy to open from the inside and without additional assistance according to the regulations in the special building directives. Basically, these requirements mean that these exits are open to misuse. In certain applications the misuse of emergency exits can have disastrous consequences. For example, an emergency button cannot be installed for obvious reasons in closed departments so that indirect release from a permanently occupied central point is the only possibility. If this type of release is required for all doors, the circuit must be state-of-the-art and provide maximum security.

As specialists for escape door locking mechanisms, we naturally offer solutions for this type of application. effeff has developed a self-monitoring security relay circuit that is directly connected to the electric circuit of the electrical locking mechanism as is the emergency button (in the standard application) and releases it when activated.

We would like to mention however, that renouncing on the emergency button at the door, in other words renouncing on the most important link in the escape door locking mechanism, must be clarified with the relevant inspection authorities and approved accordingly. This special concept of the escape door control system is used everywhere where the local emergency button at the door cannot be used, e.g. in

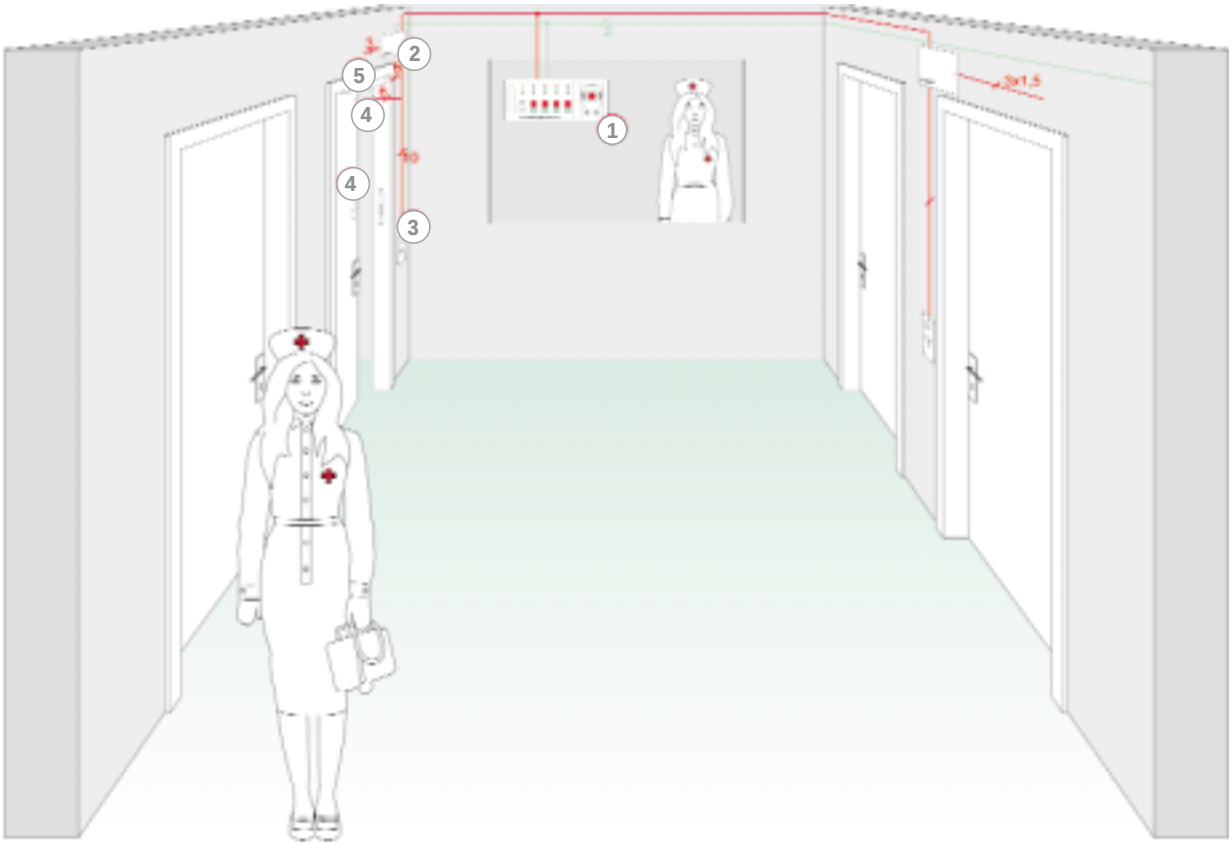
- Closed departments in hospitals
- Psychiatric institutes
- Sheltered workshops

The requirements for secure accommodation must be fulfilled and unintentional or unwanted operation prevented.

Features of the escape door control unit 720-32

- Central release
- Connection to fire detection system
- Connection for external operating element (manual unlocking/locking)
- Flash lamp
- Control panel BUS technology
- Monitoring contact unlocked/locked
- Monitoring contact alarm
- 5 fire detectors
- Authorized temporary release by external switching element, e.g. access control
- Permanent unlocking by external switching element, e.g. timer
- “Door open” monitoring
- Connection of external alarm elements
- Integrated emergency current supply (battery optional)

APPLICATIONS



①

Bus control panel 925
with emergency open module

②

Escape door control unit 720-32

③

Operating element 1332-1x

④

Holding magnet 828-44

Reed contact assembly 10365U

or

⑤

Escape door strike
331U RR/AKRR
and latch bolt 807-10

APPLICATIONS

ESCAPE ROUTE SECURITY FOR MAXIMUM SECURITY ZONE

Misuse of escape doors

In order to prevent the misuse of escape doors, effeff offers a solution for deactivating the emergency open button at the door for a specific period of time and transferring the possibility to open the door to a central control centre.

If a critical situation occurs in a room that requires securing, the person responsible on site presses a request button.
The security personnel at the control centre switch the system and thus deactivate the emergency open button at the door.
The escape doors can then only be unlocked centrally from the control centre or via the key switch at the door terminals.
If a person then presses the emergency open switch at the site in question, the escape door remains locked. At the same time, an alarm is triggered at the security control centre. The security personnel decide whether there is an emergency and reacts accordingly. This central releasing process is limited in time.
If it is not manually extended or terminated when it has expired, the system switches automatically and the doors can be opened by the emergency open button.

The described "locking system for central locking with direct and indirect release" complies with the "Guideline on electrical locking systems of doors in escape routes". This was confirmed by the Certificate R 60003659 issued by TÜV Rhineland (German Technical Incorporate).

A system of this type must always be approved by the relevant inspection authorities. A condition for this is usually a central, permanently occupied centre where the relevant escape route doors can be monitored.

Application areas

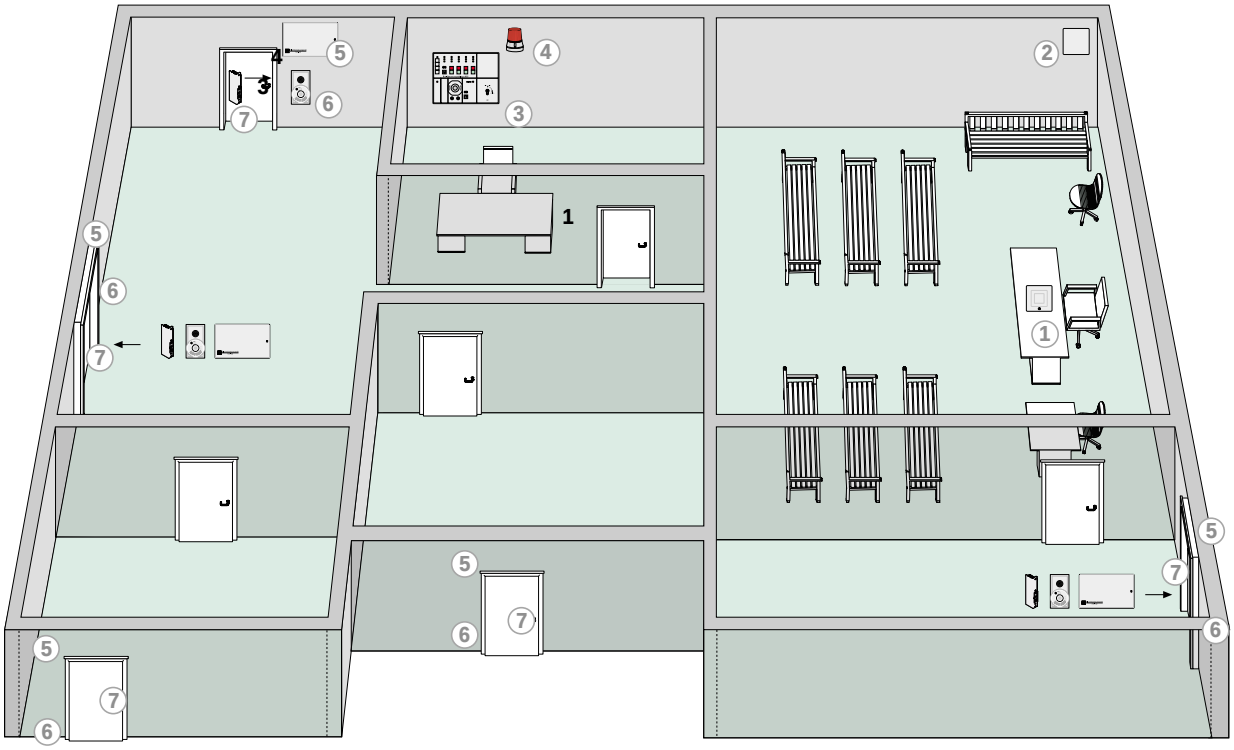
- Police station
- Museum
- Justice building (e.g. court)
- Banks
- Laboratories
- Transport companies (transport of valuables)

For a detailed description, please request the corresponding application sheet.

APPLICATIONS

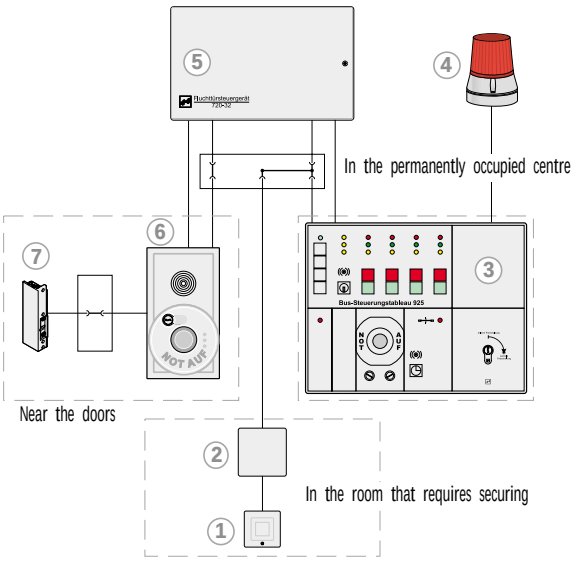
ESCAPE ROUTE SECURITY FOR MAXIMUM SECURITY ZONE

Functional diagram



1. Button Model 1011
2. Universal bus module Model 901-50
   Power supply Model 1002-12-0.5
3. Bus panel
4. Flashing beacon Model 1055-24
5. Escape door control Model 720-32
6. Door terminal Model 1370-10
7. Locking element

Installation plan



Door contacts

Electromechanical contact

The door contact is installed in the door frame and enables the door position to be evaluated by the escape door control.

Model	Connection technology	Face plate
10405.10-----00	Cable (4 m)	With square face plate
10405.11-----00	Terminals	With square face plate
10405.10R----00	Cable (4 m)	With radiused face plate
10405.11R----00	Terminals	With radiused face plate

10405

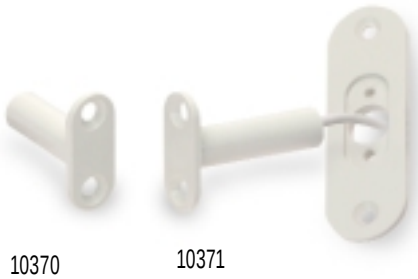
Magnetic contacts (reed contacts)

are melted into a glass tube and are both dust and water-proof. A reed contact is activated by a permanent magnet and is thus contactless. The reed contact is recessed e. g. in a door frame on the opposite side of the hinge and the corresponding magnet on the opposite side in the door leaf. When installing in steel profiles (magnetic materials) only use block reed assemblies (Order no. 10365) with surface mounted base (Order no. 10366). The available surface mounted bases and fixings are intended to facilitate flat fitting and aid in mounting the magnetic contacts.

10361 10360

Note:
Magnetic materials affect the magnetic fields required for the switching operation. This reduces the defined switching interval. The reed contact cannot be switched if it is fully surrounded by magnetic materials. Use non-magnetic screws for fixing the magnetic contacts. If installation in magnetic materials cannot be avoided, a test should be carried out to determine the resulting switching interval. Further information can be obtained from our Technical Sales Dept.

10366 10365



10370 10371

Technical data	
Electromechanical contact	
Response distance	Approx. 2 mm
Switching current	2 A
Switching voltage	25 V ≈
Connection leads	Approx. 10 cm
Magnetic contacts	
Switching current	max. 0.5 A
Switching voltage	25 V ≈
Connection lead length	6 m

Order numbers		
Flat reed contact assembly	Switching interval approx. 10 mm	**10360-6-----00**
Accessories	1 fixation	**10361-------00**
Block reed assembly	Approx. 20 mm	**10365-6-----00**
Accessories	1 set, surface mounted base, 6 pce.	**10366-------00**
Circular reed contact	with flange approx. 5 mm	**10370-6-----00**
Accessories	1 fixation	**10371-------00**

ACCESSORIES

Fire detector

Optical smoke detector

Optical smoke detector with base and LED display for connecting to escape door control unit 720-30/32

60030--------00

Technical data	
Rated operating voltage	12 V DC
Operating temperature range	0 °C to +50 °C
Housing colour	White

Multi-tone siren Model 1200-10

In plastic housing for mounting indoors.

1200-10------00

Technical data	
Rated operating voltage	12 – 24 V DC stabilized DC voltage
Rated current consumption	at 12 V 90 mA / 24 V 80 mA
Audio frequency and pulsating alarm signalling	Settable
Protection class	IP 33
Loudness level (at 1 m distance)	100 dB (A) at 24 V (±10 %)
Colour	Grey
Dimensions	H 80 x W 70 x D 78 mm
Duty cycle	100 % ED
Temperature range	-20 °C to +50 °C

Additional alarm transmitter

Flashing beacon

Optical signal transmitter in plastic housing for mounting on the wall. Thanks to its high light efficiency, this flashing beacon is also easily visible in well lit rooms. It is also suitable for mounting in dry and moist rooms and outdoors.

1055-24------00

Technical data	
Indicator	Macralon, transparent, red
Dimensions	Ø 114 mm, height 173 mm
Rated operating voltage	24 V DC
Rated current consumption	250 mA
Flashing frequency	1 to 1.5 Hz ≙ 60 to 90 flashes/minute
Protection class	IP 54

ACCESSORIES

Replacement emergency button cover, 2 pce.
for terminal 1370
Art. No. **1370-20-01---00**

Replacement cover
for terminal 1370
Art. No. **1370-20-02---00**

Insertion label EMERGENCY OPEN for terminal 1370
with European profile cylinder
Art. No. **1370-20-03---00**
Swiss circular profile cylinder
Art. No. **1370-70-03---00**

Replacement seal for power supply module 1370
e.g. stainless steel optic
Art. No. **1370-40-0104-00**

Flush mounted housing for 1370
white
Art. No. **01370.202001**

Cavity wall mounting set 1370
Art. No. **1370-00-01---00**

Replacement cover
for terminal 1337, 1338, 1340
Art. No. **Z1337-10-1---6**

Plastic sign EMERGENCY OFF
for terminal 1337, 1338, 1340
Art. No. **2.1504-00131800**

Test badge
for all terminals
Art. No. **2.1502-00030000**

Plastic sign EMERGENCY BUTTON
Arrow pointing downwards, green
Art. No. **2.1504-00091800**

Plastic sign EMERGENCY BUTTON
Arrow pointing to the left, green
Art. No. **2.1504-00061800**

Plastic sign EMERGENCY BUTTON
Arrow pointing to the right, green
Art. No. **2.1504-00071800**

ACCESSORIES

Universal BUS module

In addition to the visualization of escape door systems, electric door strikes and electric security locks can be controlled and door and bolt switch contacts monitored via the universal bus module 901-50. The number of 110 connectable escape door systems is thus reduced accordingly.

Technical data	
Connection voltage	12 V AC/DC ± 10 % uncontrolled or 12 V DC controlled +15/-10 %
Rated operating voltage	12 V
Rated current consumption	max. 100 mA
Power consumption	1.2 W
Contact load capacity of relay	24 V/3A
Capacity of output “acoustical alarm” (terminal 25)	max. 50 mA at 2.5 V voltage drop (inside device 0.5 V drop per 10 mA load current)
Protection class as per DIN 40050	IP 40
Operating temperature range	0 °C to +40 °C
Storage temperature range	-25 °C to +60 °C
Dimensions	120 x 120 x 30 mm
Weight	200 g
Colour	RAL 9002

901-50-------00

BUS repeater escape door control

When installing an escape door system, the overall length of the lines soon amounts to several hundred meters. For larger systems a BUS repeater must be installed for lengths longer than 1000 m (per bus phase). With this BUS repeater, the BUS signal is amplified and the escape door BUS systems can thus be realized with lines several kilometres in length. A further advantage of the BUS repeater is the galvanic insulation of the BUS line. This means that the installation of large systems can be divided amongst e. g. floors. In case of a fault, only the relevant phase fails due to the galvanic insulation, the remaining section of the BUS system continues to function fully.

Technical data	
Connection voltage	12 V AC/DC ±10 % uncontrolled or 12 V DC controlled
Rated operating voltage	12 V
Rated current consumption	max. 60 mA
Power consumption	720 mW
Protection class as per DIN 40050	IP 40
Operating temperature range	0 °C to +40 °C
Storage temperature range	-25 °C to +60 °C
Dimensions	120 x 120 x 30 mm
Weight	200 g
Colour	RAL 9002

901-35-------00

ESCAPE DOOR MONITORING

DAY ALARM

Day alarm Model 7450

Two emergency exit doors can be monitored with the day alarm that according to valid regulations should not be closed. The device is easy to mount on site. Only 230 V AC/50 Hz are required as a supply voltage thanks to the integrated power supply. The doors are monitored via door contacts. If the door is opened, the door contacts trigger an alarm. The day alarm device can be switched on/off via an integrated key switch.

Equipped with:

- Key switch on/off
- Operating state display via green LED
- Special display for alarm triggering (2 red LEDs)
- 2 door contact connections (fail-unlocked loop)
- Integrated acoustical alarm transmitter (buzzer)
- Output for external buzzer;
- Semi-conductor outputs for "Alarm" and "Operating state OFF"
- Potential-free relay changeover contacts for "Alarm"

Application areas:

The day alarm is used to monitor escape doors, e.g. with a reed contact. The day alarm is used preferably in escape route doors that should not be additionally locked with a conventional escape door locking mechanism as per the Guidelines on Electrical Locking Systems. As only one contact is attached to the door, the function of the escape doors is not affected. This means that these devices present a cost-favourable alternative to conventional escape door systems as per the Guidelines on Electrical Locking Systems.

Technical data	
Rated operating voltage	230 V AC; +10 % to -15 %, 50 Hz
Rated current consumption	Fail-unlocked approx. 10 mA Alarm approx. 20 mA
Output for operating state OFF	Max. 12 V DC / 40 mA
Relay contact load capacity:	2 A / 30 V DC 0.5 A / 125 V AC
Relay contact load capacity:	2 A / 30 V DC 0.5 A / 125 V AC
Operating temperature range	-5 °C to +50 °C
Storage temperature range	-25 °C to +70 °C
Protection class as per DIN 40 050	IP 30
Output for operating state OFF:	12 V DC / max. 40 mA
Output for alarm:	12 V DC / max. 80 mA
Output for "external buzzer":	12 V DC / max. 50 mA
Contact version:	Soldered connections
Dimensions (W x H x D):	200 x 146 x 55 mm

7450---------00

Parallel panel Model 7452

The parallel panel Model 7452 is used for remote individual indication of one to 8 day alarm systems. It has a display (2 LEDs) for each connected door contact as well as an acoustical collective alarm (buzzer).

Equipped with:

- Operating state and alarm display of each individual detector by green and red LED
- Alarm indication of each individual detector
- Acoustical collective alarm by integrated buzzer
- Key switch for buzzer control "On/Off"

Application areas

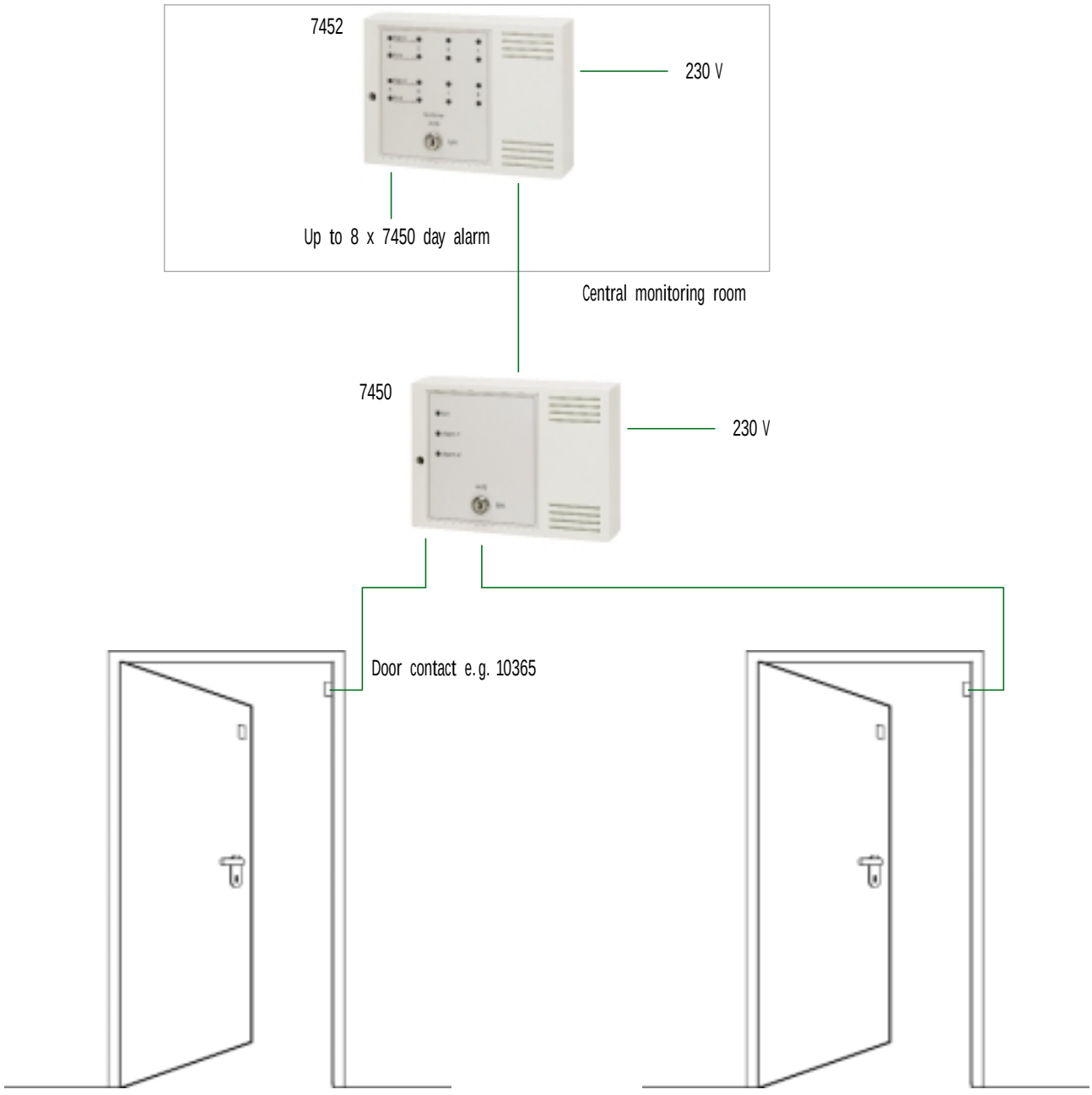
For the central indication of several day alarm devices (escape doors). Examples:

- Gate
- Monitoring room
- Nurse's staff room

Technical data	
Rated operating voltage:	12 V DC, 10 V to 15 V DC
Rated current consumption:	Per LED approx. 10 mA Buzzer approx. 20 mA
Operating temperature range	-5 °C to +45 °C
Storage temperature range	-20 °C to +70 °C
Contact version:	Soldered connections
Protection class	As per DIN 40 050 IP 30
Dimensions (W x H x D):	200 x 146 x 55 mm

7452---------00

ESCAPE DOOR MONITORING



Locking of emergency exits

All effeff escape door locking mechanisms comply with the "Guideline on electrical locking systems of doors in escape routes". The certificates are filed in the collection of test certificates D00070 that we can send to you on request. These certificates are proof of the suitability of all the systems contained in this catalogue for securing escape routes. They can be used throughout the Federal Republic of Germany.

With the "C" sign and the corresponding declaration of compliance, effeff guarantees a continuous high standard of quality.

The use and thus the installation, acceptance and recurring tests of escape door locking mechanisms are subject to the regional building laws. The regional building regulations and the technical test regulations of the different states are applicable and are usually based on the sample decree "Federal German Building Requirements for the electrical locking of doors in escape routes" dated June 1988.

Should you have any questions on the "Guidelines on electrical locking systems of doors in escape routes" relating to the application of effeff escape door locking mechanisms, just call our specialists at:

Escape route hotline: 07431 123-381

Additional locking of doors with surface holding magnets

As the locking element of an escape door locking mechanism is always installed in the fire-rated door in addition to the main lock, this means that the door is kept securely closed even in case of fire.

The materials testing office of Nordrhein-Westfalen refers explicitly in test certificate No. 120418792-01 to the non-objection of the use of the combined escape door strike 331U and latch bolt 807-10 in fire-rated doors.

As regards the installation in fire-rated doors, observe the information issued by the German Institute for Building Technology, Berlin "Modifications to fire barriers".

According to the German Institute for Building Technology, surface holding magnets may also be installed in already manufactured fire barriers in addition to the existing lock system.

"In addition to the existing lock system, installation of holding plates for holding magnets of electromagnetic locking equipment. The holding plate must be fixed to the door leaf using min. four screws of max. 6 mm Ø; for sheet steel doors these screws should be replaced by rivet nuts. Do not drill through the fire-rated doors!".

ADVANCED TRAINING

Depending on the target group, effeff offers different seminars referring to specific areas of escape route technology.

Should you wish to deepen your knowledge of “Locking of escape routes”, please contact our training department:

Tel. 07431 123-870
Fax 07431 123-333
E-Mail: training@effeff.com

ELECTRIC DOOR STRIKE

effeff door strikes offer a high degree of security and are easy to use. Our wide range fulfils all requirements and includes models for all types of installation.
This applies worldwide as effeff products comply with both national and international regulations. effeff's convincing solutions for smoke protection doors, fire rated doors and doors in escape routes.

ELECTRIC BOLTS

effeff electric bolts reliably complement locks and door strikes and are used for special applications e.g. swing doors or sliding doors where they act as an additional locking mechanism. For door bolts with integrated monitoring contact, the locking state can be monitored so that e.g. a system can only start when the corresponding door is also securely locked.
Application possibilities range from the simple drawer to elevator doors and high security zones.

ESCAPE DOOR SYSTEMS

When danger is imminent have confidence in effeff's know-how and reliability. Our rescue path systems ensure secure operation of the escape route door irrespective of whether the door requires locking or may only be used by authorized persons. Absolute secure use of escape routes in case of danger is ensured at all times.
effeff escape door control systems ensure protection and security e.g. in hospitals, schools, kindergarten, office buildings, airports and exhibition halls. For your special applications too, we have the fitting solutions e.g. closed departments in clinics.

SECURITY LOCKS

First and foremost security: The effeff electric security locks with anti-panic function and self-locking mechanism ensure maximum mechanical security in conjunction with high operating comfort for the user. The effeff range of locks is suitable for use both in fire doors and escape and rescue routes.

MAGNETS

A wide variety of magnets is an integral part of the effeff range of locking mechanisms.
Thanks to the virtually silent function and special advantages of subsequent mounting, magnets present an excellent additional locking mechanism. The outstanding feature of the effeff magnets is the high-quality surface and attractive design.

DOOR AUTOMATICS

It is hard to imagine many buildings today without automatic power-operated doors. They facilitate free entry without barriers and thus simultaneously save energy. The effeff electromechanical and electrohydraulic swing door operators for one and two leaf swing doors are suitable for both private and commercial areas of application.

ACCESS CONTROL SYSTEMS

The simple solution for maximum security! effeff access control systems protect and monitor buildings, individual rooms or other security-relevant zones.
effeff offers a wide range of varying technologies, devices and systems that are aligned to the special security requirements. effeff access control systems meet the special requirements of our customers and are used in private, official and industrial zones.

AUTOMATIC DOOR ARRESTER SYSTEMS

effeff automatic door arrester systems secure fire-retardant doors that must remain open for daily use. As soon as smoke is signalled, the arrester mechanism releases the door. The fire doors close and prevent fire and smoke gases from reaching adjoining rooms and buildings and fire from spreading.

Company ..... Branch ..... E-mail .....

Contact ..... Telephone ..... Fax .....

Street/POB ..... Customer No. .....

Postal code/Town ..... Order date .....

Order No.	Pce.

Verrouillage des issues de secours

Tecnica delle uscite di sivurezza

Rettungswegtechnik

Escape door systems

Sistemas para salida de emergencia

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