

Contrôle d'accès

Impianti di controllo accessi

Zutrittskontrollanlagen

Access control systems

Sistemas de control de accesos

ACCESS CONTROL SYSTEMS



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.



The Ritz-Carlton, Wolfsburg



Airport Hamburg



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 highly 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!



Airport Munich



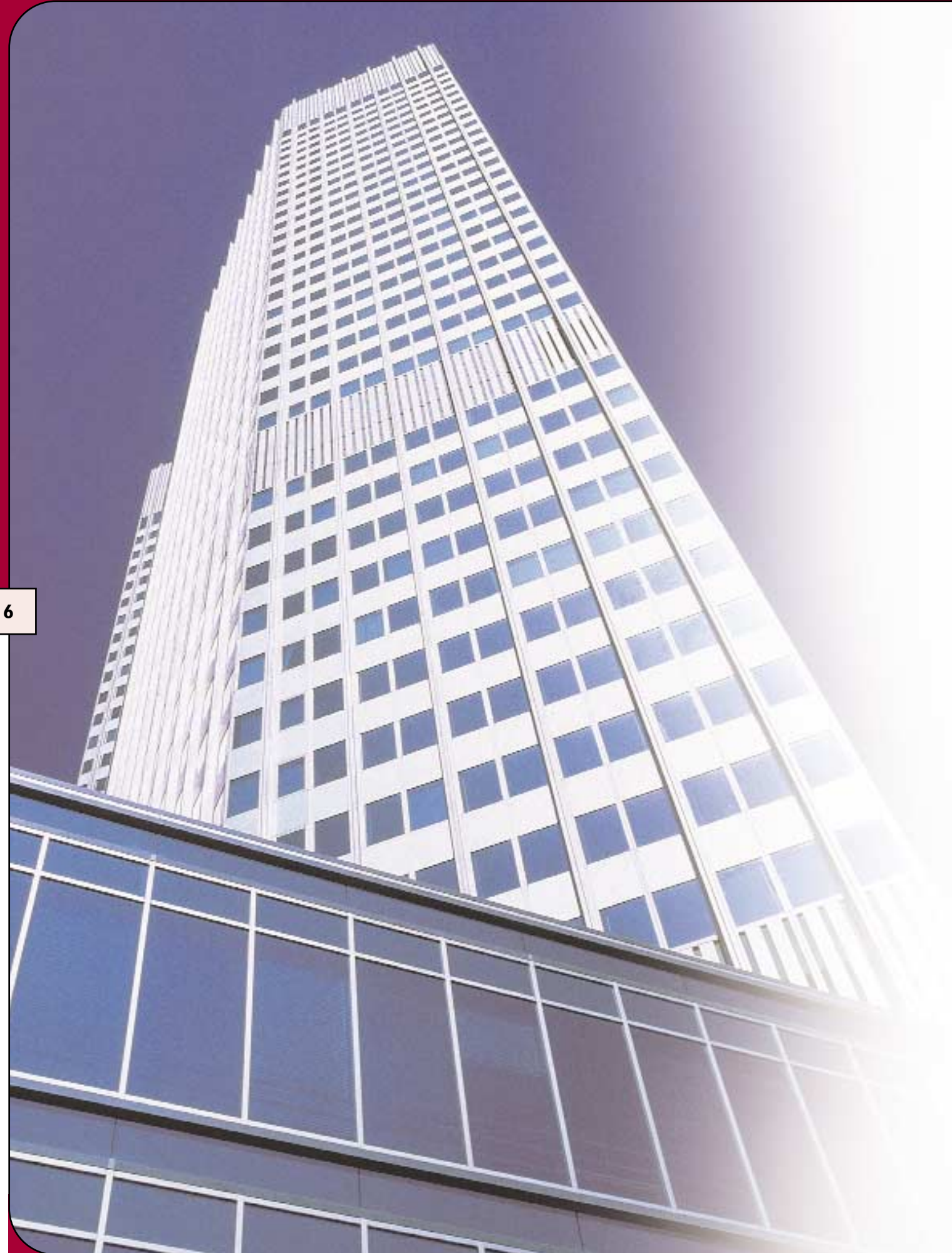
Trade Fair, Leipzig



TABLE OF CONTENTS

SEEK AND FIND

ALL ABOUT US	2
Contents	5
Access control systems	7
ACCESS-CODE DOOR CONTROL SYSTEMS	8
Door code armature	8
Miniature door code device	12
Compact door code device	13
Door code device	14
Operating elements	16
ACCESS CONTROL SYSTEMS WITH CARD READER	18
ACD	18
EAC 1	20
EAC 1 Integra	22
EAC 2	24
ACU	30
Magnetic card reader	32
ELECTRIC DOOR STRIKE	34
PRODUCT OVERVIEW	38



Open and close – reliably and securely

Whether a strongroom, development department or laboratory, there are zones where the major concern is a “a matter of locking” and simply because attacks on property are increasing from year to year. effeff access control systems effectively control the access of authorized persons to protected zones without unnecessary obstruction in the form of complicated methods and annoying rattling of keys.

effeff access control systems provide a high degree of security and are superior to conventional locking systems in many fields. A solution in keeping with the times, not only for doors but also for door operators, elevators and car park barriers as well as multi-storey car parks and underground car parks. They are also reliable “helpers” for machine control and activation of electronic equipment.

The demands on security and the particular environments are always unique and so effeff systems offer exactly those features that you require – from the central keypad to non-authorized code evaluation, from alarm code to door interlock function. Or just in case you are never present on Fridays, the time and week-dependent unlocking mechanism is the right solution for you.

Make your choice

The effeff access control systems can be specially adapted to your requirements. Depending on the specific security requirements, different technologies, devices and systems can be put into use. The well-proven technology ranges from the stand-alone system for one door to the large complex, interlinked system for up to 100 doors. effeff systems are thus not only suitable for use in industry and trade but also for public authorities and protecting private property.

Security through and through

The effeff systems comply fully with the required security regulations. An extensive range of card readers with magnetic cards and contactless identification techniques complements the range of products.

All illustrations in this catalogue are product examples and slight details may deviate from the standard products. Dimensions, technical data etc. are not binding and serve purely as a guide. Consistent improvement and optimization ensure quality and point the way ahead – and for this very reason, effeff’s products are subject to alterations that serve technical progress.

Warranty

effeff guarantees the perfect functioning of all components subject to use in accordance with the regulations and observance of the installation drawings, installer manuals, connection diagrams etc. Installation must be carried out by skilled personnel in accordance with the relevant standards, regulations and statutory instruments. Applications that deviate from these regulations are subject to confirmation. Contact effeff for detailed information on installation, commissioning, maintenance etc.

ACCESS-CODE DOOR CONTROL SYSTEMS

DOOR CODE ARMATURE



Door code armatures – minimum effort maximum effect

You want to protect certain rooms as quickly and easily as possible?

With the effeff door code armature, mortise locks for indoor use can be subsequently retrofitted without additional electrical installation and a mains supply.

Prevent unauthorized persons from entering your property by simply retrofitting door locks for indoor use from 55 mm backset onward with the effeff door code armature.

Retrofitting is based on a standard lock with standardized profile cylinder and a distance of 72 mm to 92 mm.

Compact and complete

By exchanging the armature, you obtain a compact and integrated access control system. No alterations are required to the existing lock.

How it functions

The mechanical function remains the same.

The door can be opened from the inside in the usual manner with the door handle. The door handle on the outside is connected electrically by entering the correct code number and disconnected after 3 seconds. The electronics ensure that the door can only be opened once during this period.

With 9 volts to security throughout the year

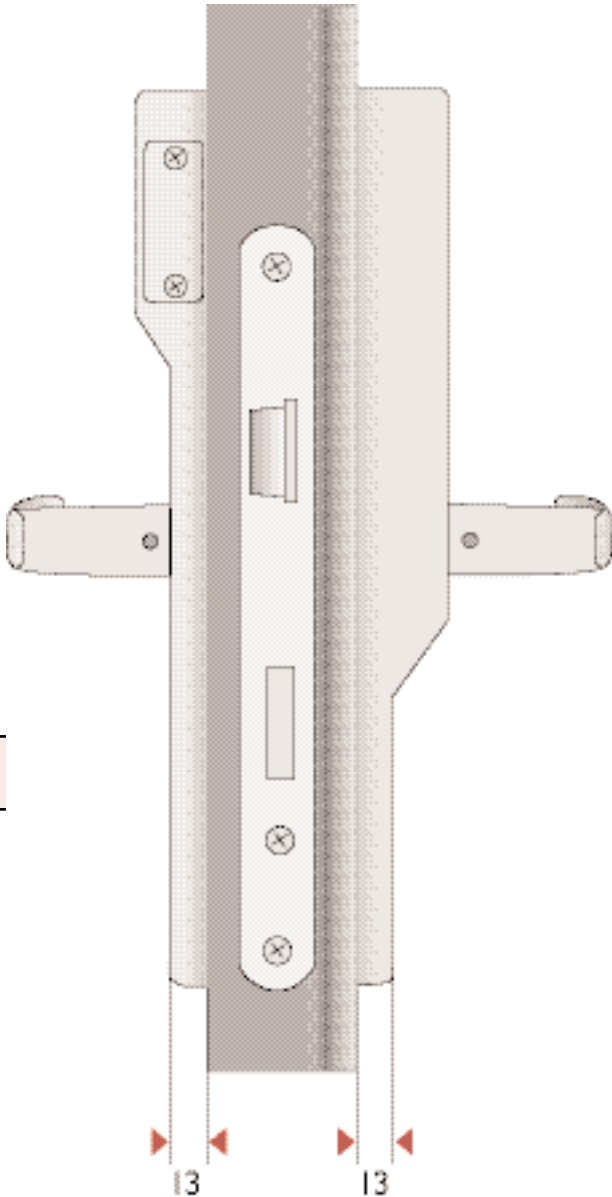
A 9-volt battery block in the door code armature reliably provides the required current supply. An operating time of approx. one year is possible assuming activation 15 x a day.

An optical signal indicates when it is time to change the battery. In order to avoid a “bouncer”, the door can still be opened 50 times.

- ▶ 2 to 6-digit programmable alteration code
- ▶ Up to 3 different user codes
- ▶ 1.000.000 different codes
- ▶ External lever set with foil keypad
- ▶ Internal lever set with battery compartment
- ▶ Door strike/door strike combination
- ▶ Door plate with different rosette inserts
- ▶ Versions for Swiss circular profile cylinder available

ACCESS-CODE DOOR CONTROL SYSTEMS

DOOR CODE ARMATURE



10

Your advantages

- ▶ Can be used as a means of organization for daily operation
- ▶ For all zones, that are only accessible to authorized persons
- ▶ For memory-aided locking
- ▶ Code management via alteration code
- ▶ 3 user codes
- ▶ Simple retrofitting on existing doors
- ▶ No cables/lines required. Highly suitable for doors that cannot/should not be wired
- ▶ Low installation expenditure

Door code armature for inside doors with door leaf thickness of 38 mm to 50 mm. Protection class IP 40 for 8 mm, 8.5 mm and 9 mm follower. 7 mm follower on request.

Version A

Type 495-10-8, silver metallic, Order No.

495108----91B86

Type 495-10-8, grey white, Order No.

495108----93B86

Type 495-10-8, grey brown, Order No.

495108----95B86

Door code armature for inside doors with door leaf thickness from 50 mm to 70 mm. Protection class IP 40, for 8 mm, 8.5 mm and 9 mm follower. 7 mm follower on request.

Version A

Type 495-10-8, silver metallic, Order No.

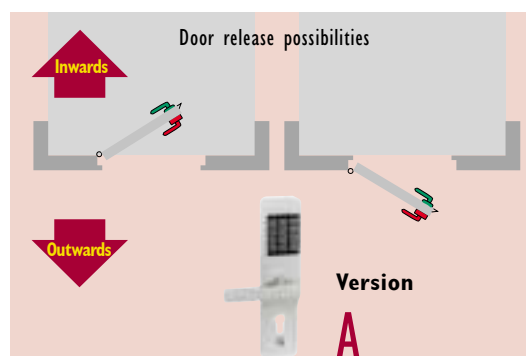
495118----91B86

Type 495-10-8, grey white, Order No.

495118----93B86

Type 495-10-8, grey brown, Order No.

495118----95B86



ACCESS-CODE DOOR CONTROL SYSTEMS

DOOR CODE ARMATURE

Door code armature for inside doors with door leaf thickness from 38 mm to 50 mm.

Protection class IP 40, for 8 mm, 8.5 mm and 9 mm follower. 7 mm follower on request.

Version B

Type 495-10-8, silver metallic, Order No.

495108----91B87

Type 495-10-8, grey white, Order No.

495108----93B87

Type 495-10-8, grey brown, Order No.

495108----95B87

Door code armature for inside doors with door leaf thickness from 50 mm to 70 mm.

Protection class IP 40, for 8 mm, 8.5 mm and 9 mm follower. 7 mm follower on request.

Version B

Type 495-10-8, silver metallic, Order No.

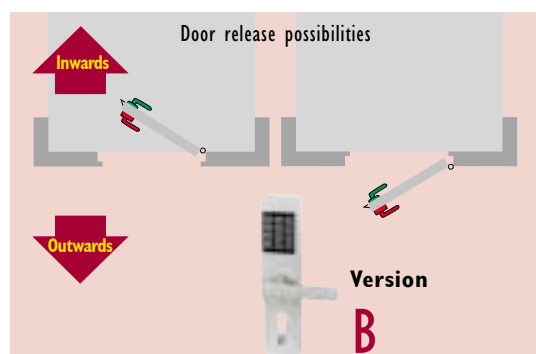
495118----91B87

Type 495-10-8, grey white, Order No.

495118----93B87

Type 495-10-8, grey brown, Order No.

495118----95B87



Rosette inserts for door code armature

Rosette insert for 72 mm distance

Type 495-10-3, silver metallic, Order No.

49510-3-7291-00

Type 495-10-3, grey white, Order No.

49510-3-7293-00

Type 495-10-3, grey brown, Order No.

49510-3-7295-00

Rosette insert for 92 mm distance

Type 495-10-3, silver metallic, Order No.

49510-3-9291-00

Type 495-10-3, grey white, Order No.

49510-3-9293-00

Type 495-10-8, grey brown, Order No.

49510-3-9295-00

Rosette insert as dummy cover

Type 495-10-7, silver metallic, Order No.

49510-7---91-00

Type 495-10-7, grey white, Order No.

49510-7---93-00

Type 495-10-7, grey brown, Order No.

49510-7---95-00

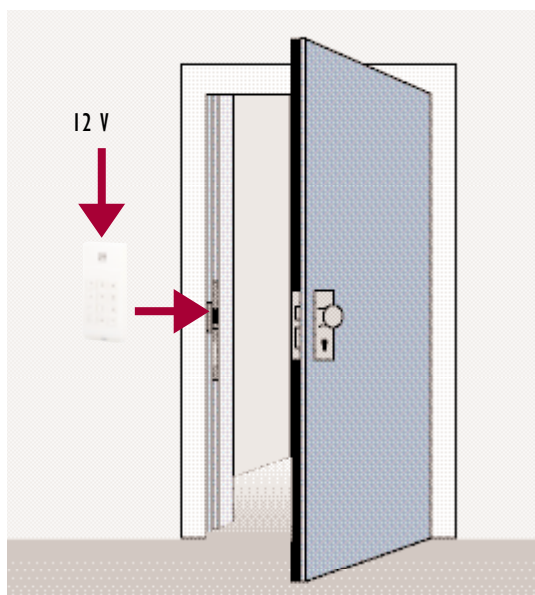
Further rosette inserts with distances from 72 mm to 92 mm on request.

Note!

The rosette insert must be ordered separately. The rosette insert is not included in the scope of delivery of the door code armature.

ACCESS-CODE DOOR CONTROL SYSTEMS

MINIATURE DOOR CODE DEVICE



Mini door code device for connection to 12 V

This efficient door code device is installed next to the door. The matching electric door strike is installed as a counter unit to the door lock in the door frame. effeff provides water-proof versions for outdoor use. Keypad and control electronics are both accommodated in one housing.

The code number can be programmed via the keypad after entering a main code.

Version for outdoor use

Water-proof, Protection Class IP 42



Surface mounted door code device

Type 421-41, Order No.

42141-----00



Flush mounted door code device

Type 421-43, Order No.

42143-----00

Version for indoor use

Not water-proof, Protection Class IP 30



Surface mounted door code device

Type 421-40-10, Order No.

42140-10-----00



Flush mounted door code device

Type 421-42-10, Order No.

42142-10-----00

Recommended power supply

(without illustration)

Dimensions (L x W x H) 106 x 70 x 73 mm

Type 1001-121, Order No.

1001-12-1-----00

Technical data

Input voltage	12 V DC
Current consumption	Approx. 60 mA
Release time door strike relay	3 seconds
Operating temperature range	
421-40/42	0 °C to +40 °C
421-41/43	-15 °C to +40 °C
Protection class	
421-40/42	IP 30
421-41/43	IP 42
Relay contact / changeover contact potential-free	
Max. switching voltage	24 V
Max. switching current	1 A
Housing	
Material	Zinc die cast, powder-coated
Colour	Grey white RAL 9002
Dimensions W x H x D	see Page 16/17

Your advantages

- ▶ 4-digit code number for 10.000 different codes
- ▶ Up to 3 different user codes, 1 main code
- ▶ Temporary or continuous unlocking via keypad
- ▶ Can be used as organization means for daily operation
- ▶ Mental locking
- ▶ Low installation expenditure

Note: Use door strike with recovery diode, suitable for 100% duty cycle

ACCESS-CODE DOOR CONTROL SYSTEMS

COMPACT DOOR CODE DEVICE

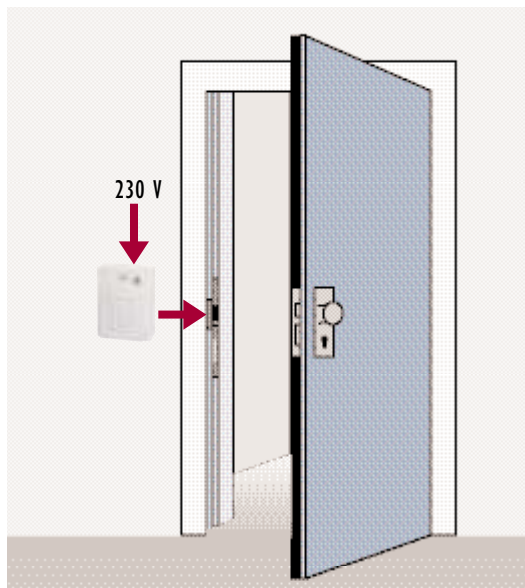
Compact door code device with integrated keypad

Beginner model with professional features: The door code device for all internal building zones at a favourable price, designed for mains operation with 230 V. Keypad, programming button, evaluation electronics and power supply unit are accommodated in one housing.

The door code device is installed next to the door frame and connected to the power. The matching electric door strike is installed as a counter unit to the door lock in the door frame.

Your advantages

- ▶ 2 to 6-digit code number for 1 million different codes
- ▶ Up to 3 different user codes, 1 main code
- ▶ Simple code management via main code (alteration via programming button in the device)
- ▶ Temporary or continuous unlocking via keypad
- ▶ Evaluation of door strike monitoring contact
 - Reset of release time when door is opened
 - One entry per release
 - Secure locking of the door
- ▶ Can be used as organization means for daily operation
- ▶ For all zones that are only accessible to authorized persons
- ▶ Mental locking
- ▶ Low installation expenditure



Technical data

Input voltage	230 V AC \pm 10%
Frequency	50-60 Hz
Max. current consumption	11.5 VA
Operating voltage	12 V DC
Max. load	0.25 A
Release time door strike relay	1-30 sec.
Operating temperature range	0 °C to +40 °C
Protection class	IP 30
Relay contact / changeover contact potential-free	
Max. switching voltage	24 V
Max. switching current	1 A
Housing	
Material	Zinc die cast, powder-coated
Colour	Grey white RAL 9002
Dimensions W x H x D	120 x 156 x 67 mm

Note: Use door strike with recovery diode, suitable for 100% duty cycle and with monitoring contact

**1-channel compact door code system,
2-6 digit code,
incl. power supply unit, 12V/0.25 A**

Type 421-30-10, Order No.

42130-10-----00

ACCESS-CODE DOOR CONTROL SYSTEMS

DOOR CODE CONTROL DEVICE

Door code control device for one and two doors

This 2-channel version of the door code control device is designed for controlling up to two doors. A separate code number can be entered for each channel. A higher security standard and separate location of the control device and keypad unit enable it to be used both indoors and outdoors. The complete system comprises a control device, two keypad units and two locking elements, e.g. electric door strike or electric safety lock.

Control device 421-12

Make (working) life easy: The code number can be changed in no time using the digital switch. The set code number can be read directly and can be set for each channel separately.

Your advantages

- ▶ 4-digit code number for 10.000 different codes
- ▶ Door-open monitoring
- ▶ Temporary or continuous unlocking via keypad
- ▶ Continuous unlocking via external time switch
- ▶ Central keypad
- ▶ Door interlock function
- ▶ Code evaluation
 - ▶ Evaluation of the door monitoring contact
 - Resetting of the release time when the door is opened
 - One entry per release
 - Secure locking of the door
- ▶ Control device with maximum security requirement for two doors
- ▶ For tamper and manipulation-protected zones that are only accessible to authorized persons
- ▶ Ideal for controlling two separately located doors via a control device
- ▶ For two doors that have a door interlock function or that can be opened via a central keypad with two different codes
- ▶ Memory-aided locking
- ▶ Simple code allocation via code switch

2-channel door code device, 4-digit code, incl. 230 V power supply unit

Type 421-12, Order No.

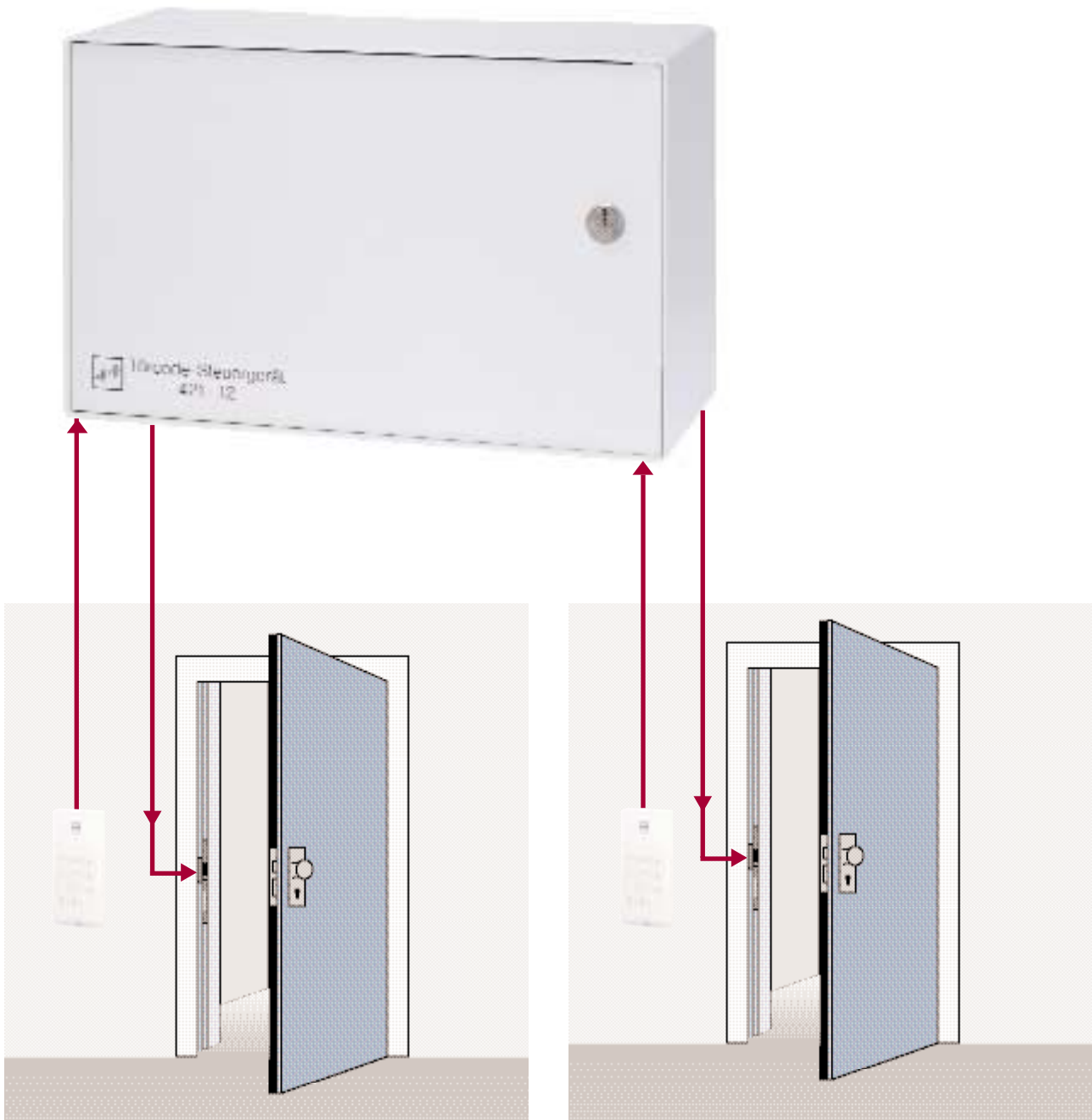
42112-----00

Technical data

Connection voltage	230 V - ± 10%
Operating voltage	12 V DC
Max. load per channel	1 A
Release time door strike relay	1-99 sec.
Connection for external emergency power supply	12 V DC
Operating temperature range	0 °C to +40 °C
Protection class	IP 30
Relay contact / changeover contact potential-free	
Max. switching voltage	24 V
Max. switching current	1 A
Housing	
Material	Sheet steel, powder-coated
Colour	Grey white RAL 9002
Dimensions W x H x D	300 x 186 x 125 mm

ACCESS-CODE DOOR CONTROL SYSTEMS

DOOR CODE CONTROL DEVICE



Required keypad units see Page 16/17

Note: Use door strike with recovery diode, suitable for 100% duty cycle and with monitoring contact

ACCESS-CODE DOOR CONTROL SYSTEMS

OPERATING ELEMENTS

Keypad units for access code door control systems

effeff offers keypad units especially adapted for the different ranges of application and installation conditions. The keypads are designed as a 12-key block with the numbers 0 to 9 and the characters + and -.

The individual keys are interwired (downward) in x/y matrix (3 x 4) with a 7-pole connection.

All connections are screw connections.

- ▶ Keypad unit housing and flush mounted frame are of zinc die cast, powder-coated in grey white (RAL 9002)
- ▶ The flush mounted socket is of plastic
- ▶ < 1 million activations
- ▶ Switching function: NO contact

Operating elements for control device
421-12, see Page 14/15

Indoor version

- ▶ Protection Class IP 30
- ▶ Plastic keypad button, black numbers on white background

16



Surface mounted door code device

Type 412-12, Order No.

41212-----00



Flush mounted door code device

Type 414-12, Order No.

41412-----00

Outdoor version

- ▶ Protection class IP 42
- ▶ The keys are protected against being removed or turn off
- ▶ Keypad buttons of anodized black aluminium, laser-inscripted numbers, light aluminium



Surface mounted keypad

Type 413-12, Order No.

41312-----00



Flush mounted keypad

Type 415-12, Order No.

41512-----00

ACCESS CONTROL ...

ACCESS CONTROL ARMATURE

ACD



A daily situation

When you're in a hurry, your hands are either full or you cannot find the key and it takes ages to open the door.

The disadvantages of conventional access rights:

- Awkward to handle
- Heavy
- Time-intensive
- Inflexible
- Difficult to extend



Everywhere where special, secure and uncomplicated access is required, the compact and intelligent effeff ACD locking system is the solution.

Examples of in-house applications:

- ▶ Document archives
- ▶ EDP rooms
- ▶ Seminar and training rooms
- ▶ Personnel and development
- ▶ Store rooms etc.

in the buildings of public authorities, offices, commercial buildings, banks, surgeries, service companies, schools, commercial and industrial companies etc.

Intelligent locking and identification system

The mechanical function of the door lock remains the same.

The external handle is free-running and is connected after authorization by the card or the key tag.



ACD contactless

After briefly passing the ID carrier (card, key fob) in front of the armature, the external handle is connected for activating once.

... WITH CARD READER

ACD

ACCESS CONTROL ARMATURE

Performance features

- ▶ Simple installation
- ▶ No wiring
- ▶ Easy programming
- ▶ Service life of battery up to 2 years
- ▶ Programmable continuous release
- ▶ Continuous release without additional battery drainage
- ▶ Attractive design
- ▶ For all DIN-standard door locks from backset 55 mm onwards
- ▶ Rosettes for 72 mm, 92 mm distance and a dummy cover are included



ACD contactless Model 494
Up to 99 identification carriers
 Type 494-10, Order No.

494109-----93U21

Note!

Please note that 3 cards 481-10-4 or key tag 481-10-5 are required for programming the system and cannot be used for the access control.

- ▶ Can be used as an organisation means for daily operation
- ▶ For all zones that are only accessible to authorized persons
- ▶ Simple user management of maintenance-free ID carriers via programming card set directly at lever set
- ▶ Simple retrofitting on existing doors
- ▶ No wiring/lines required, ideal for doors that should not/cannot be wired
- ▶ Thanks to compatibility of ID carriers, can also be combined with other effeff access control systems
- ▶ Low installation expenditure



User card,
coded, contactless

Type 481-10-4, Order No.

481-10-4-----00



Key tag,
coded, contactless

Type 481-10-5, Order No.

481-10-5-----00

Technical data

Prepared for European profile cylinder as per	DIN 18252
Colours	Grey white RAL 9002
Door handle powder-coated on outside and inside	
Dimensions (W x H x D) in mm	
External lever set	65 x 289 x 27
Internal lever set	65 x 289 x 12
Range of application	Indoors
Temperature range	-5 °C to +55 °C
Voltage supply	3 x alkali-manganese batteries, 1.5 V mignon cells
Reading range	Approx. 70 mm
Door leaf thickness	38–60 cm

ACCESS CONTROL ...

ACCESS CONTROL SYSTEM

EAC I

EACI control unit with integrated reader



Type 481-10, Order No.

481-10-----00

Control unit, 1 master, 3 user cards, flush mounted socket Ø 65 mm

- Single card deletion via digital display
- 199 programmable cards
- Office function
- Key switch function
- Continuous release and locking function

20

Reading antenna for maximum security and outdoor use



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
- Connection lead: 1 m

EAC I

EAC I is a complete stand-alone access control system and can be mounted in 65 mm flush mounted sockets. An additional reading antenna can also be connected to the control unit. Thanks to the modular structure, the system can be used as a compact system indoors and as a system with separately located control unit and reading unit. The protection class of the reading antenna allows it to be used both indoors and outdoors.

Your advantages

- ▶ Can be used both as organization means for daily operation (only control unit) as well as a system with maximum security requirements (with additional reading antenna)
- ▶ For all zones that are only accessible to authorized persons
- ▶ Simple user management or specific deletion of wear-free ID carriers via the integrated display and ENTER and SELECT key directly at the control device
- ▶ Can also be combined with other effeff access control systems thanks to compatibility of ID carriers
- ▶ Layout of wiring to locking element and to distributor (network rectifier) or reading antenna necessary
- ▶ Low installation expenditure depending on version

Note: Use door strike with free-running diode, suitable for 100% duty cycle and with monitoring contact

Technical data	
Control unit 481-10	
Connection voltage	12 V DC
Operating voltage range	9.5 V DC to 16 DC
Rated current consumption	Approx 70 mA (typ.) approx 150 mA (max.)
Outputs	1 potential-free relay output for door strike actuation 30 V/2 A
Input	Time-control input/monitoring contact
Reading distance	Approx. 60 mm
Operating temperature range	0 °C to +60 °C
Protection class	IP 50
Dimensions	Approx. 80 x 80 mm

Accessories

User card



Type 481-10-4, Order No.

481-10-4-----00

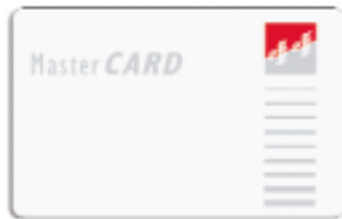
Key tag



Type 481-10-5, Order No.

481-10-5-----00

Master card



Type 481-10-3, Order No.

481-10-3-----00

Surface mounted frame for surface mounting

Type 481-10-2, Order No.

481-10-2-----00

(no illustration)

Dimensions (L x W x D) approx 84 x 84 x 35 mm

Recommended power supply

Type 1001-121, Order No.

1001-12-1-----00

(no illustration)

Dimensions (L x W x H) 106 x 70 x 73 mm

ACCESS CONTROL ...

EAC I INTEGRA



Control unit integrated in effeff rescue door terminal 1370 series

2 in 1 access control for integration in rescue route technology

The effeff EAC I Integra combines access control and rescue route technology in one device. This means that you can effectively control access and simultaneously comply with the legal stipulations for rescue doors.

EAC I Integra is a complete stand-alone access control system for mounting in effeff rescue door controls of the 1370 series. The access control is simply mounted under the Plexi glass cover round the "EMERGENCY-OFF" button. The device is supplied with voltage from the rescue door terminal and switched to the input "Temporary release" – in other words, it is easy to mount and no further voltage supply is required.

An additional reading antenna (e.g. for outdoors) can also be connected to the control unit. The set comprises a control unit, master card and a user card as well as a connecting cable.

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

Note!

The device was specially optimized for integration in effeff rescue door terminals of the 1370 series. The rescue door terminal is not included in the scope of delivery.

Control unit with integrated reader

Type 481-10-FT Order No.

481-10-FT----00

Advantages of the Integra:

- ▶ Compatible with other contactless effeff access control systems
- ▶ Simple retrofitting
- ▶ Simple handling
- ▶ Reliable control and maximum security for rescue routes
- ▶ No compatibility problems
- ▶ No wear due to contactless data transmission
- ▶ Fulfills highest demands on design
- ▶ Easy to operate
- ▶ 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	Connection possibility 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

Scope of delivery

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





User card

Type 481-10-4, Order No.

481-10-4-----00



Key tag

Type 481-10-5, Order No.

481-10-5----00



Master card

Type 481-10-3, Order No.

481-10-3-----00



Reading antenna, illustration see Page 20

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 1370-20 Series manufactured **before** 2004

Type 481, Order No.

481-FT-KAB01-00



Preconfigured with plug and screw terminal

Our leaflet "Rescue route technology" contains further information and a detailed product overview.



ACCESS CONTROL ...

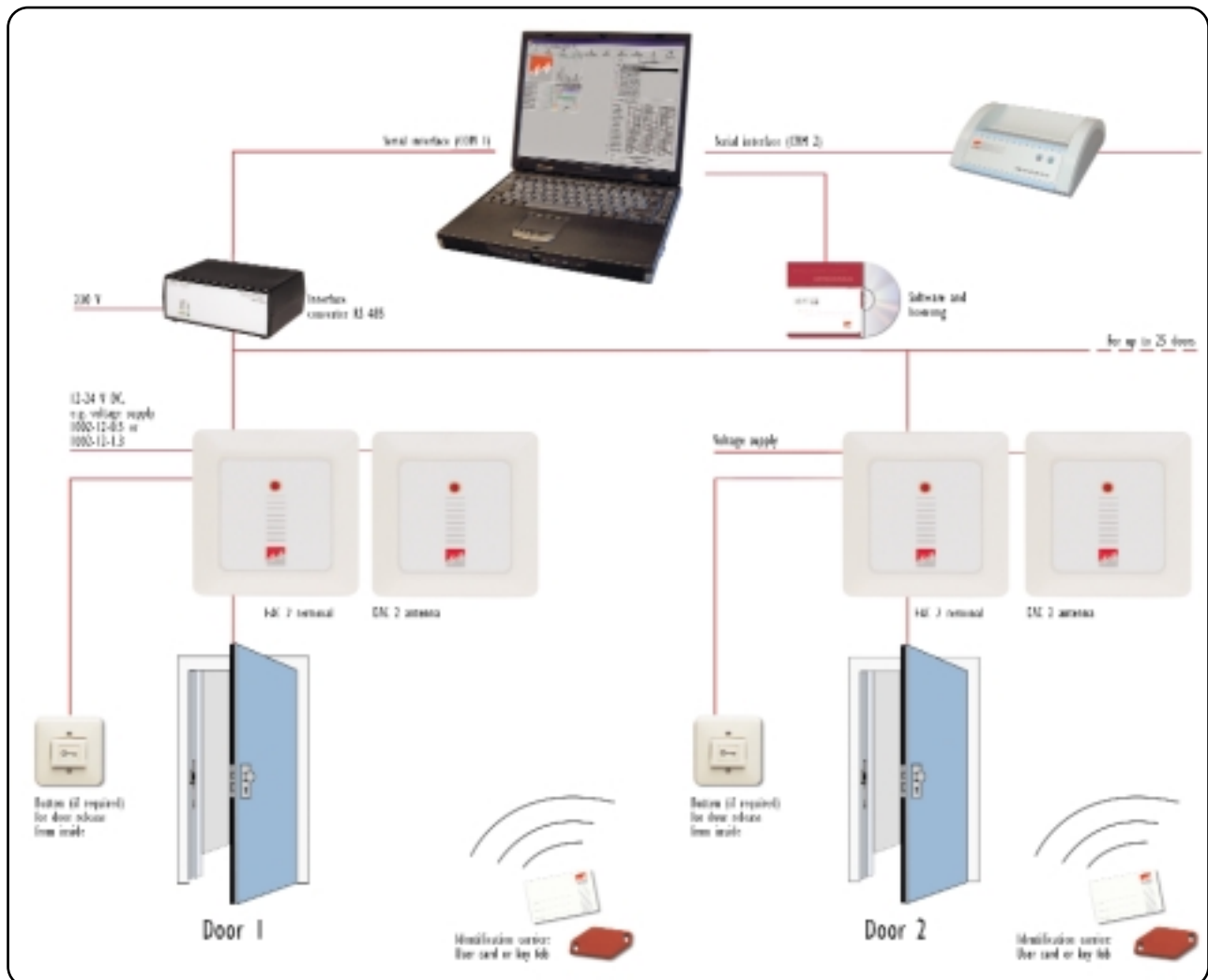
An intelligent system

The EAC 2 access control system is the ideal solution for large office and residential buildings for factory plants and departmental stores.

EAC 2 manages a maximum of 25 doors and up to 500 persons. A local event memory provides information on the last 500 events.

EAC 2 operates without contact. The door is either released by a user card or by a key tag.

Programming is extremely simple and logical via a PC. After programming, the EAC 2 terminals are also offline capable which means that they function fully even when connection to the PC is interrupted. With the EAC 2 you have full control of your entries at all times.



Note: Use door strike with free-running diode, suitable for 100% duty cycle and with monitoring contact

Performance features:

- ▶ 25 standard terminals (doors)
(can be extended to 100 doors)
- ▶ 500 persons
- ▶ 10 personnel time schedules
- ▶ 9 schedules each with 3 time zones per day
- ▶ 1 general authorization schedules
- ▶ 5 additional special days each with 3 time zones per day
- ▶ 10 schedules for time-controlled continuous release
- ▶ Event memory for up to 500 events per terminal
- ▶ Event memory of terminals up load via EAC 2 software
(evaluation with filter)
- ▶ High operating reliability due to offline capability
- ▶ Diverse adaptable switch programs
- ▶ Authorization of individual persons from or up to a specific date
- ▶ Settable unlocking time
- ▶ Settable "Door open" alarm
- ▶ "Door open" monitoring
- ▶ Connectable to fail locked or fail unlocked electric strike
(Definition via software and programming bridge at terminal)
- ▶ Two programmable inputs (NC contact or NO contact definable via software)
 - Door release
 - Evaluation of door strike monitoring contact
 - External permanent blocking
- ▶ "Anti Pass Back" (prevention of entering twice without previously exiting)
- ▶ Automatic change to summer/winter time
- ▶ Communication via serial interface
- ▶ Setting of date and time in the terminals
- ▶ Read-in station for easy reading of data carriers

A complete EAC 2 system comprises min:

1...n x EAC 2 terminal	483-10-----00
1 x EAC 2 read-in station	483-10-3-----00
1 x EAC 2 interface converter	483-10-4-----00
1 x EAC 2 software	483-10-5-----00
1 x EAC 2 licensing	483-10-6-----00

1...n x locking element (e.g. door strike with monitoring)	See Page 34
1 x 12 volt power supply	1002-12-0.5—00 or 1001-12-1.3-00 depending on the system configuration
1...n x user card or key tag	481-10-4----00 (card), 481-10-5----00 (key tag)

Optional:

1...n x EAC 2 antenna	483-10-1-----00
1...n x EAC 2 surface mounted frame	483-10-2-----00
1...n x door release button (e.g. Model 1010)	1010-----00

Important!

Previous knowledge is required to operate the EAC 2 system. We, therefore really recommend training beforehand. Should support nevertheless be required on site, we do provide an installation and support service subject on payment.

ACCESS CONTROL ...

EAC 2 terminal

The EAC 2 terminal is the compact control unit for one door.

The terminal has an integrated reading antenna for identifying a user when the user holds the card or the key tag in front of it. An additional, second reading antenna (Art. No. 483-10-1----00) can be connected to the EAC 2 terminal which enables the terminal to be installed in the secured zone to protect the terminal against tamper. Only the connected second reading antenna is then installed in the unsecured zone.

The EAC 2 terminal can be mounted in 60 mm flush mounted standard sockets with a depth of 41 mm. Use the surface-mounted frame 483-10-2----00 for surface mounted installation.



EAC 2 terminal

Type 483-10, Order No.

483-10-----00

Technical data	
EAC 2-Terminal 483-10-----00	
Connection voltage	12/24 V DC
Operating voltage range	12 V DC or 24 V DC stabilized
Rated current consumption without additional antenna with additional antenna	Up to 60/100 mA at 24/12 V Up to 70/110 mA at 24/12 V
Outputs	1 potential-free relay output for door strike actuation 30 V/2 A
Inputs	Additional antenna, door acknowledgement unlocking button, programmable
Card reading distance	Approx. 60 mm
Operating temperature range	- 20 °C to +70 °C
Protection class	IP 40
Dimensions L x W x H	Electronics approx. 70 x 70 x 36 mm Cover frame approx. 80 x 80 mm

The following switch programs of different manufacturers can be used for the EAC 2:

Switch programs	
Manufacturer	Model
Busch-Jäger	Duro 2000 Si, Alpha nea
Berker	Module 2, Arslys, Cliptec, SI
Jung	CD 500, ST 550
Feller	Standard, Edizio
Legrand	Creo, Tenara
GIRA	Standard 55, E2, surface switch

EAC 2 antenna

Serves as an additional reading antenna for maximum security

Technical data	
EAC 2-Antenne 483-10-1-----00	
Rated current consumption	Approx. 10 mA
Reading distance	Approx. 60 mm
Operating temperature range	-20 °C to +70 °C
Protection class	IP 40
Dimensions L x W x H	Electronics approx. 70 x 70 x 10 mm Cover frame approx. 80 x 80 mm



EAC 2 reading antenna

Type 483-10-1, Order No.

483-10-1-----00

EAC 2 software

Quick and easy programming and configuration of the EAC 2 terminal is possible with the EAC 2 software. A well structured interface allows authorized access to be allocated at the individual terminals to the relevant users via clearly defined cross tabulation.

All events that occur at a terminal (access attempt, manipulation attempt etc.) are recorded in the terminal and can be up loaded and evaluated as a list by the EAC 2 software.

A user name and password are required for access to a configuration table. Several users can be defined.

Five special days can be defined per weekly plan, e.g. holiday/public holidays that can be randomly allocated to the days of a year via the integrated calendar. On these days, the normally valid time patterns can be overwritten and special time patterns are used for checking authorization.

The EAC 2 software is based on the software "GAT Access Easy" by Gantner Technologies.

System prerequisites:

- Pentium II, 500 MHz
- Working memory (RAM) min. 64 Mbyte
- CD-ROM drive
- Free hard disk space min. 40 Mbyte
- Colour monitor with a resolution of 800 x 600 or higher
- Min. two free serial memory locations (COM / RS232) or with USB / RS232 converter
- Windows® 98
- Windows® 2000 server/professional (Service pack 2 or higher)
- Windows® NT4 server/workstation (service pack 6 or higher)
- Windows® XP professional (English or German versions)
- Internet Explorer 5.0 or higher

Important!

The software supplied by effeff is a demonstration version. The full version requires a licence and a read-in station: See under software licensing type 483-10-6 or Page 28 Type 483-10-3.

EAC 2 software (Demo version)

Type 483-10-5, Order No.

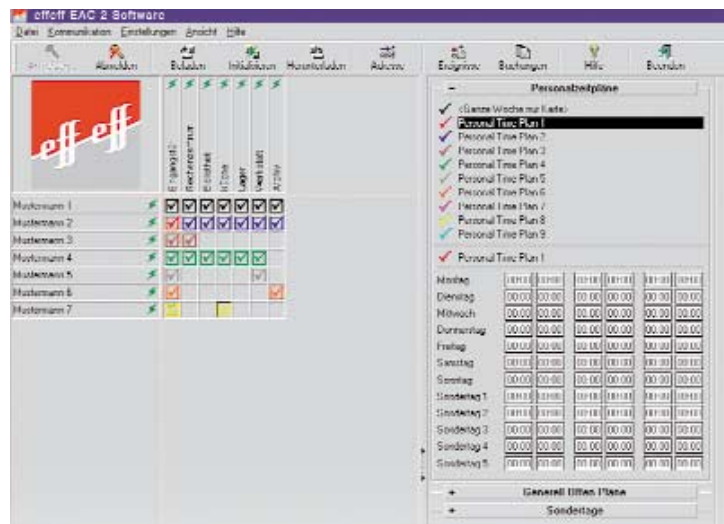
483-10-5-----00



Software licensing

Type 483-10-6, Order No.

483-10-6-----00



Accessories

Identification carrier



User card

Type 481-10-4, Order No.

481-10-4-----00



Key tag

Type 481-10-5, Order No.

481-10-5-----00

User card, blank

Type 481-10-7, Order No.

481-10-7-----00

EAC 2 surface mounted frame

A frame for surface mounting of EAC 2 terminal or EAC 2 reading antenna

Dimensions:

(L x W x H) approx. 83 x 83 x 41 mm
(53 mm including supplied cover)



EAC 2 surface mounted frame

Type 483-10-2, Order No.

483-10-2-----00

Recommended power supplies for EAC 2 terminal:

The required model type depends on the system configuration (observe current consumption of used devices).



Power supply

Type 1002-12-0.5: Order No.

1002-12-0,5--00

1002-12-0.5: 12 V, 0.5 A
(L x W x H) 152 x 79 x 45 mm



Power supply

Type 1002-12-1.3: Order No.

1002-12-1,3--00

1002-12-1.3: 12 V, 1.3A
(L x W x H) 88 x 98 x 63 mm

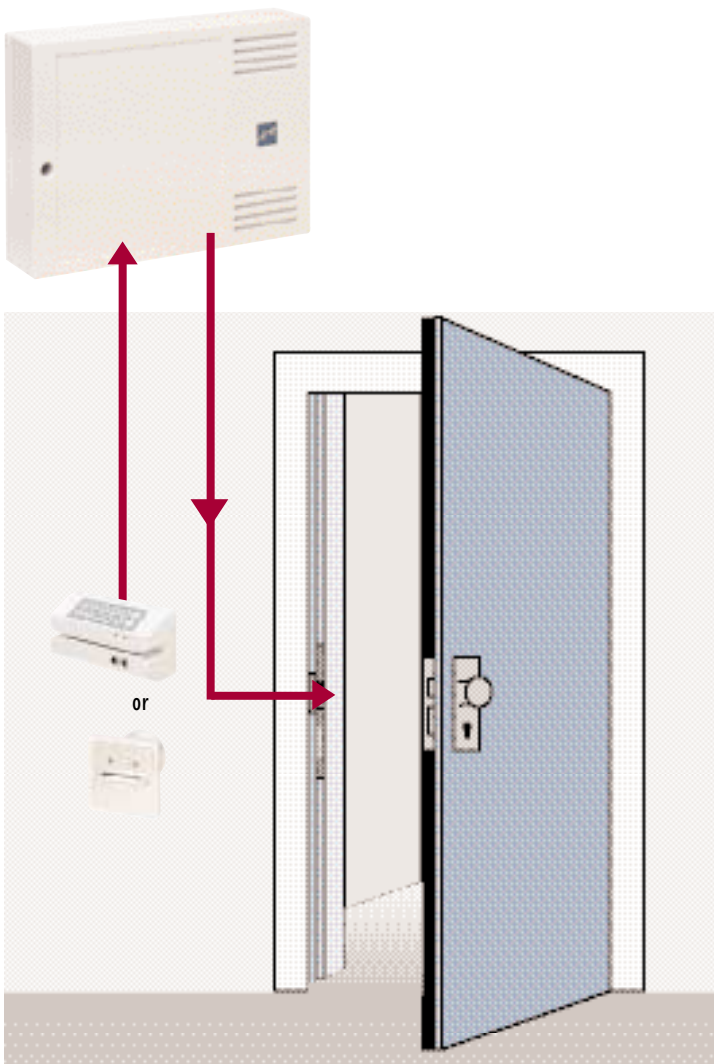
ACCESS CONTROL ...

ACCESS CONTROL SYSTEM

ACU

Access control system ACU with magnetic reader

A system that is designed for controlling a door.
As the control device is installed separately from the reader, a high manipulation security is achieved.
This system is thus suitable for outdoor use.



The complete system comprises

- ▶ 1 control device
- ▶ 1 card reader
- ▶ Programming card set
- ▶ 1 Electric door strike
- ▶ Corresponding number of user cards

Simple, uncomplicated programming of the system

The ACU is programmed with the programming card set

For card reader without keypad = 3 programming cards

For card reader with keypad = 6 programming cards

1. Program card

When this card is read, the device switches to a "Learn mode". All identification cards that are now read in, are stored in the memory as authorized. If the program card is read in again, the device switches back to "Basic mode".

2. Clear card

When this card is read, the device switches to "Clear mode". All identification cards that are now read in, are cleared from the memory and therefore no longer have access rights. If the clear card is read in again, the device switches back to "Basic mode".

The device also switches back to "Basic mode" for security reasons, if a card is not read in after 30 seconds.

3. Reset card

After this card has been read, all saved data are cleared, i.e. all access rights are annulled and the device has reverted to "Basic mode".

The use of the reset card is necessary if e.g. the cards that require clearing from the access rights are no longer available.

Card reader with keypad

Manual programming is possible via the integrated keypad by selecting the memory location allocated to the card number. Authorization/clearing of an individual card or programming in blocks is then possible.

Code card

Additional door code function. If this function is active, the 1–8-digit code number must be entered to open the door.

Time card

The time function must be activated if the printer is required to print out the date and time for the booking protocol.

Print card

When this card is read, a system print-out is started via the connected printer.

Function

After identifying an authorized card or the input of a correct code, the device actuates the integrated relay for the set time. This relay supplies the door strike with power and the door can be opened.

Two memories for different authorizations

An external contact (e.g. timer switch) allows a choice to be made between two memories so that a time zone can be determined for access rights. Example: A card is read into both memories (read-in when contact is closed and open), a second card is read into the first memory only (read-in when contact is closed). A timer switch is programmed so that between 8.00 and 16.00 h the contact is closed and the second card can open between 8.00 and 16.00 h. For the remaining period of time, this card is blocked whereas the first card opens at all times.

Technical data	
Input voltage	230 VAC
Operating voltage	12 V
Max. load	0.4 A
Operating temperature range	0 °C to + 45 °C
Relay contact / changeover contact, potential-free	
Max. switching voltage	24 V
Max. switching current	1 A
Housing	
Colour	Grey white RAL 9002
Dimensions L x H x D	196 x 150 x 55 mm

ACU control device

Control device with power supply unit for access control system for controlling one door

Magnetic card reader as card read for external connection.
Setting of connected kind of reader via DIP switch.
Housing for surface mounting.

Control device

Type 482-10, Order No.

48210-----00

Note: Use door strike with recovery diode, suitable for 100% duty cycle and with monitoring contact

Your advantages

- ▶ 230 V integrated power supply unit
- ▶ Door release for up to 99 DIN-coded ID magnetic cards or 2000 effeff cards
- ▶ Simple programming
- ▶ Simple connection technology via terminals
- ▶ Actuation of door strike via integrated relay
- ▶ Relay output for alarm signal
- ▶ Connection for door acknowledgement (open/closed) and door release from inside
- ▶ Status indicator via three LEDs in the reader
 - Yellow = Ready for operation
 - Green = Release door
 - Red = No release
- ▶ Zone switch-over via external input
- ▶ Settable door release time
- ▶ Control device with maximum security requirements for one door
- ▶ For all zones that are accessible to authorized persons
- ▶ Simple user management or specific clearing of individual ID carriers via programming card set and keypad

ACCESS CONTROL ...

MAGNETIC CARD READER

Magnetic card reader track 2

for DIN ISO 3554 coded magnetic cards, e.g. EC cards, credit cards

Status indicator with LEDs	
Protection class	IP 33
Operating temperature range	-15 °C to +55 °C
Colour	Grey white RAL 9002
Label of flush mounted version	Natural aluminium

Programming card set (3 magnetic cards) for system with magnetic card reader without keypad

Type 492-32, Order No.

49232-----00

Simple user card

Type 492-35, Order No.

49235-----00

Swipe reader surface mounted

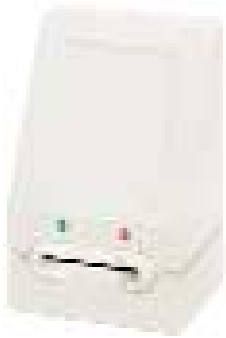


Type 486D-10, Order No.

486D10-----00

W x H x D: 152 x 80 x 65 mm

Mortise reader surface mounted



Type 486A-10, Order No.

486A10-----00

W x H x D: 103 x 159 x 81 mm

Mortise reader flush mounted



Type 486A-20, Order No.

486A20-----00

W x H x D: 100 x 100 x 103 mm

... WITH CARD READER

MAGNETIC CARD READER

Magnetic card reader track 2

for DIN-coded magnetic cards or effeff magnetic cards

Status indicator with LEDs	
Protection class	IP 33
Operating temperature range	-15 °C to +55 °C
Colour	Grey white RAL 9002
Label of flush mounted version	Natural aluminium

Programming card set (6 magnetic cards) for system with magnetic card reader with keypad

Type 493-32, Order No.

49332-----00

Simple user card

Type 493-37, Order No.

49337-----00

Stick-in reader with keypad surface mounted



Type 486AT-10 Order No.

486AT-10-----00

W x H x D: 103 x 159 x 81 mm

Swipe reader with keypad surface mounted



Type 486DT-10 Order No.

486DT-10-----00

W x H x D: 152 x 80 x 65 mm

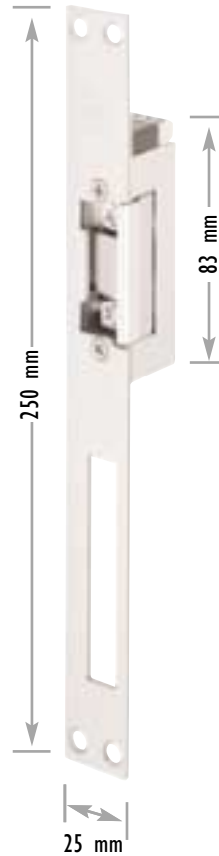
ELECTRIC DOOR STRIKE

DOOR STRIKE FOR ACCESS CONTROL SYSTEMS

Universal standard door strike

- ▶ Load current version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With free-running diode

Rated voltage	12 V DC
Rated current	270 mA
Rated resistance	44 Ω
Continuous duty	100 %
Combined with	Flat striking plate with dead bolt cutout and 4 fixation holes
Surface	Stainless steel



Order No.

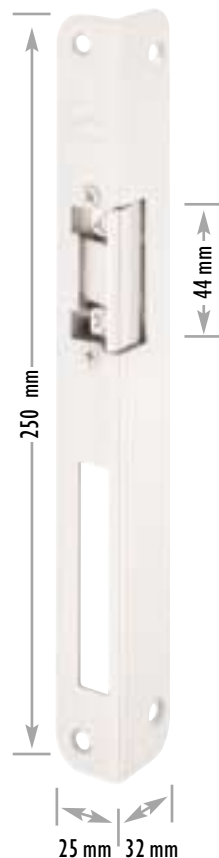
I705RR-02I35E4I

34

Universal standard door strike

- ▶ Load current version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With free-running diode
- ▶ DIN specification required

Rated voltage	12 V DC
Rated current	270 mA
Rated resistance	44 Ω
Continuous duty	100 %
Combined with	Angled striking plate with dead bolt cutout and 4 fixation holes
Surface	Stainless steel



Order No.

I705RR-32435E44

DIN Left

I705RR-32435E45

DIN Right

ELECTRIC DOOR STRIKE

DOOR STRIKE FOR ACCESS CONTROL SYSTEMS

Profix universal door strike with radius keep

- ▶ Fail locked version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With cover latch bolt guide
- ▶ With recovery diode
- ▶ DIN specification required

Voltage	12 V DC
Current	270 mA
Resistance	44 Ω
Continuous duty	100 %
Combined with	Angled striking plate for door strike with cover latch bolt guide bolt cutout and 4 fixation holes
Surface	Stainless steel



Order No.

116.61-52535E44

DIN Left

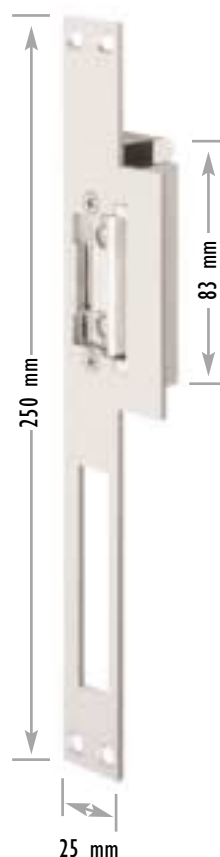
116.61-52535E45

DIN Right

Profix universal door strike with radius keep

- ▶ Fail locked version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With cover latch bolt guide
- ▶ With recovery diode

Voltage	12 V DC
Current	270 mA
Resistance	44 Ω
Continuous duty	100 %
Combined with	Flat striking plate with face plate flanges for door strike with cover latch bolt guide, dead bolt cutout and 4 fixation holes
Surface	Stainless steel



Order No.

116.60-52135E41

ELECTRIC DOOR STRIKE

DOOR STRIKE FOR ACCESS CONTROL SYSTEMS

Universal standard door strike

- ▶ No load current version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With free-running diode

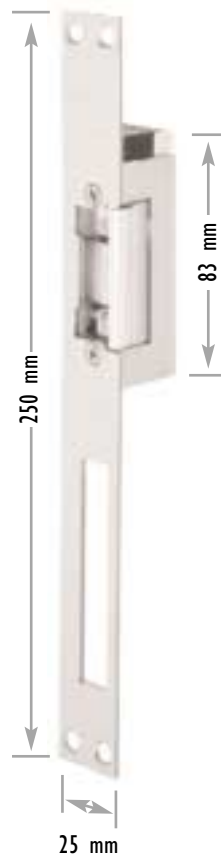
Rated voltage	12 V DC
Rated current	235 mA
Rated resistance	51 Ω
Combined with	Flat striking plate with dead bolt cutout and 4 fixation holes
Surface	Stainless steel

For applications used on rescue routes, only use no load current door strikes that have been tested and approved according to the valid regulations (Guidelines on electrical locking systems of doors on rescue routes). Information on tested and approved door strikes for use on rescue routes can be found in our catalogue on door strikes and rescue route technology.

Electric door strike – water-proof version

- ▶ Load current version
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With free-running diode
- ▶ DIN specification required

Rated voltage	12 V DC
Rated current	200 mA
Rated resistance	60 Ω
Continuous duty	100 %
Combined with	Flat striking plate with dead bolt cutout and 4 fixation holes
Surface	Stainless steel



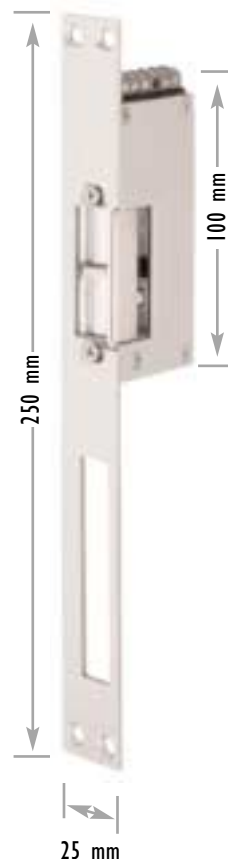
Order No.

3705RR02 I 35E94

DIN Left

3705RR02 I 35E95

DIN Right



Order No.

I 205RRF05 I 35E44

DIN Left

I 205RRF05 I 35E45

DIN Right

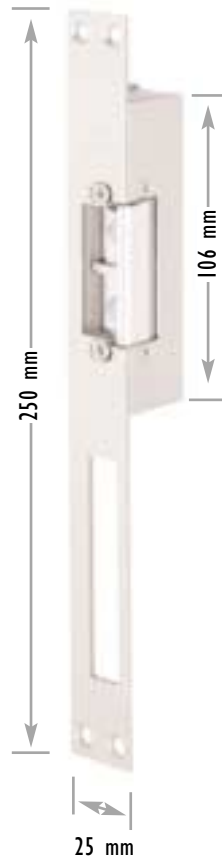
ELECTRIC DOOR STRIKE

DOOR STRIKE FOR ACCESS CONTROL SYSTEMS

Compact security door strike

- ▶ Extremely sturdy mortise door opener
- ▶ Fail locked version
- ▶ For vertical and horizontal installation
- ▶ Connection terminals on short side
- ▶ Suitable for installation in fire barrier doors
- ▶ Test certificate No. P-12 0389 0 96 – universal version
- ▶ With adjustable and fixed latch bolt
- ▶ With integrated monitoring contact (door open/closed)
- ▶ Low current consumption and suppressor protection by suppressor diode, thus also suitable for access control systems

Voltage	12 and 24 V AC/DC (switchable)
Current (12V)	200 mA DC; 130 mA AC
Current (24V)	100 mA; 70 mA AC
Resistance (12V)	60 Ω
Resistance (24V)	240 Ω
Combined with	Flat striking plate with fixed grooves, dead bolt cutout and 4 fixation holes
Surface	Stainless steel



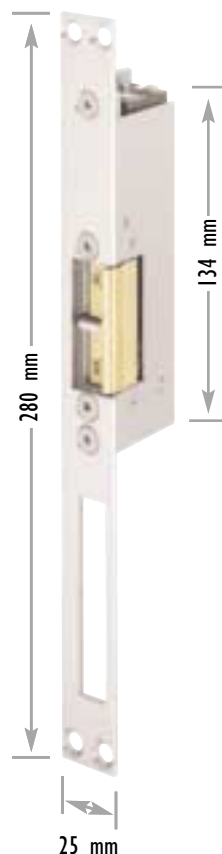
Order No.

I42UR--05I35Q34

Standard security door strike

- ▶ Fail locked version
- ▶ Heavy-duty version
- ▶ Suitable for installation in fire barrier doors
- ▶ With integrated monitoring contact (door open/closed)
- ▶ As potential-free change-over contact
- ▶ With adjustable and fixed latch bolt
- ▶ Secure unlocking even when latch bolt is subject to preload up to 150 N
- ▶ With recovery diode
- ▶ DIN specification required

Voltage	12 V DC
Current	285 mA
Resistance	42 Ω
Continuous duty	100 %
Combined with	Flat striking plate with dead bolt cutout and 4 fixation holes
Surface	Stainless steel



Order No.

I3I06FF02835E34

DIN Left

I3I06FF02835E35

DIN Right

ELECTRIC STRIKES

By activating an electric strike, you unlock your door at the push of a button without having to go to the door.

effeff electric strikes offer total security and comfort. Our wide product range meets every requirement and offers the suitable strike for any application. This can be guaranteed world-wide as effeff takes national and international regulations completely into account.



HIGH SECURITY STRIKES

Even the most peculiar requirements are not a problem to us: within the wide range of special and fire door electric strikes, effeff offers complete solutions. Our comprehensive product range for particular high security requests needs every legal regulation and offers high level solutions for fire doors and escape doors to our own high quality standards. Besides, effeff provides the right product even for special applications such as interlock control, clean room doors and other applications.



DOOR AND MOTORIZED BOLTS

effeff door bolts and motorized power bolts are a reliable complement to locks and strikes. They are suitable for applications on special doors (e.g. swing and sliding doors) where they are often installed as additional locking.

In case of door bolts with integrated monitoring contact, the locking status can be monitored so that a system can start only when the relevant door is safely locked.

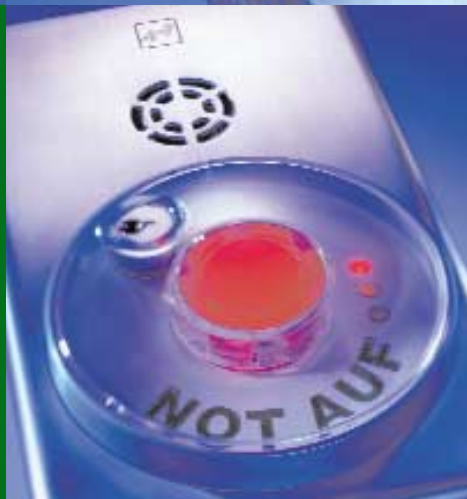
The applications vary from simple drawers to elevator doors and high-security areas.



ESCAPE DOOR SYSTEMS

Thanks to the comprehensive escape door systems range, effeff meets every demand for people's security and secure the environment. You can trust effeff's know-how and reliability even in case of danger. Our escape door systems always guarantee the correct functioning of the escape doors: this concerns the authorized unlocking of the door as well as its locking. In case of danger, absolutely safe use of the escape door is totally granted.

effeff escape door systems guarantee protection and security in department stores, schools, nursery schools, premises, airports and fair pavilions as well. Besides, we offer solutions even for special applications such as protected areas of clinics.



SECURITY LOCKS

Just rely on security: thanks to the panic function and the automatic locking, effeff electric security locks guarantee the highest mechanical security as well as the most convenient service for the customers.

effeff's lock range is suitable for application in fire doors as well as for use on escape doors.



MAGNETS

One of the important elements of the effeff locking devices range is the wide variety of magnets in different shape.

Thanks to a low noise mechanism and the comfort of a simple mounting, the magnets are extremely suitable for additional door locking. Moreover, effeff offers high-quality surface magnets. Their modern design fits harmoniously to the environment.



ACCESS CONTROL SYSTEMS

Easy solutions for more security! effeff access control systems are designed to protect and control buildings, rooms or high-security areas.

Different technologies, devices and systems are available and fitting every specific requirement. effeff access control systems made to our customer's requests and can be used in private, official and industrial areas.



ARRESTER SYSTEMS

effeff arrester systems secure fire doors that have to be left open during normal use. As soon as smoke is detected, the arrester system mechanism releases the door. The fire doors then close avoiding smoke and fumes spreading to rooms and buildings nearby and restricting the spreading fire as well.



NOTES

Company Sector e-mail

Contact Tel. Fax

Street/PO box Customer number

Post code/City Order date

Order no.	Qty.
Further orders	Qty.

Contrôle d'accès

Impianti di controllo accessi

Zutrittskontrollanlagen

Access control systems

Sistemas de control de accesos

effeff Fritz Fuss GmbH & Co.
Kommanditgesellschaft auf Aktien
Bildstockstraße 20
72458 Albstadt
GERMANY
Tel. +49 7431 123-0
Fax +49 7431 123-240
info@effeff.com
www.effeff.com

An ASSA ABLOY Group company

2.1901-069000.00