WWW.FUHR.DE

7V08 / DIN 18251-3, Class 3

autotronic 834

Installation, operation and maintenance instruction

Please also note the detailed information at www.fuhr.de

Additional Information 834P

Declaration of performance according 834/834P

These instructions are to be passed on by the fitter to the user.

www.fuhr.de

FUHR

MBW15-GB/02.19-9

Content

www.fuhr.de

For this manual in other languages see www.fuhr.de

1 Introduction

The FUHR **autotronic** 834 multipoint locking system locks doors automatically by means of magnetic triggering upon closing over the door. The convenient unlocking operation is motor-driven with two parallel high performance drives – reliable, strong and fast. One can choose between different opening versions:

- By means of the two-way intercom system
- Via FUHR access control systems such as radio keys, radio finger scans, radio transponders, radio keyboards, SmartTouch or SmartConnect easy
- Via all kinds of external access control systems

Automatic locking system advantages:
- Conserves energy as the door always closes imperviously
- Always ensures secure locking of main entrance doors, apartment doors, construction project doors or back doors
- Suitable for use with all door materials

Mechanical opening with the standard profile cylinder's key (a non-restricted cylinder is not required) is also possible at any time; e.g. in the event of power failure. The door can be opened easily using the lever-handle on the internal side of the door.

The standard locking and unlocking functions in detail:

The special functions are described in chapter 6.

Locking (closing):
When closing over the door, the robust latching deadbolts extend automatically to 20 mm and are safeguarded against being pushed back.

By triggering the central deadbolt via the profile cylinder, the total locking system is mechanically safeguarded. All possibilities of opening by means of the drive unit are deactivated.
At the same time the internal lever handle is blocked for control purposes or as a child safety lock.

Unlocking (opening) from the outside:
- By using the profile cylinder's key
- Optionally, via FUHR radio access control or any other access control system

Unlocking (opening) from the inside:
- Using the lever handle or the key of the profile cylinder as usual
- Optionally, via intercom system for home use
- Optionally, via an access control system or a building management system

Further electrical connections are available for:
(some only possible with control unit)
- Alarm systems
- Access control systems
- Electrically operated swing door drives
- Time switches (permanent unlocking)
- External indicator LED
- Access control system's electronic shut down signal for alarm systems

2 Important information/safety instructions

These instructions contain important information regarding installation, commissioning and operation pertaining to the FUHR **autotronic** 834 multipoint locking system. Please read carefully **prior** to installation and commissioning. The points raised here provide supplementary information to the FUHR Product Liability Information for door locks, see **www.fuhr.de**. The importance of their compliance must be pointed out to builders and end-users. In the event of non-compliance with these imperative instructions, faultless system operation cannot be warranted. We assume that the installation as well as commissioning is carried out exclusively by professional staff.

Text passages denoting this symbol are relevant to safety and must be strictly adhered to.

The FUHR **autotronic** 834 multipoint locking system has been designed and manufactured taking safety-related regulations and harmonised standards into account.

The FUHR **autotronic** 834 multipoint locking system has been engineered to be used in conjunction with the provided FUHR **autotronic** components. We accept no liability for improperly installed systems and/or the use of non-original or non factory approved system accessory parts. The modification of components or the use of non approved accessory components can cause malfunctions. Material damage or personal injury resulting from non-compliance with the installation, operation and maintenance instructions or inappropriate operation invalidates the warranty. We assume no liability for any consequential damage.

The FUHR **autotronic** 834 multipoint locking system must be protected from humidity. It is not suitable for areas with high humidity and chemical substances.

The FUHR **autotronic** 834 multipoint locking system has been designed for installation in main entrance doors, apartment doors, construction project doors and back doors. The system with 2 latching deadbolts and 92 mm hole-distance (type 4) is regularly subjected to both internal and external tests. For this purpose durability testing in the highest grade (grade 7) with 200,000 operations was carried out successfully.

The installation steps depicted on the following pages serve as a schematic diagram. Due to the numerous profiles available on the market, there may be slight deviations in specific points. Please feel free to request a profile-related routing drawing! Please contact your sales partner or the manufacturer in the event of discrepancies or queries.

The indicated sequence in these installation instructions is exemplary. The sequence may be varied if required.

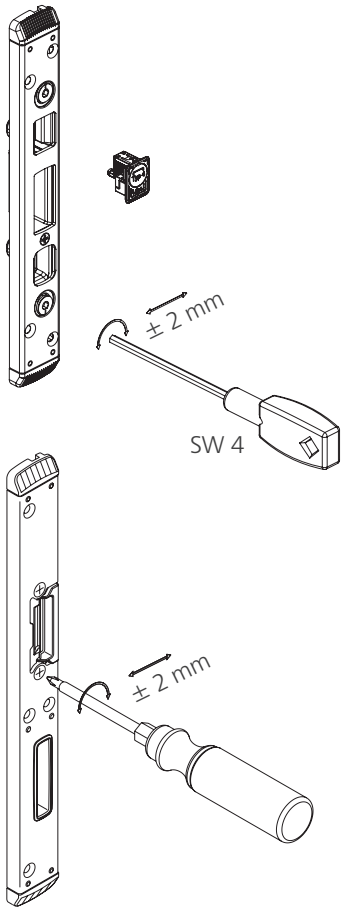
IMPORTANT!
In order to ensure that the door can be opened in the event of an emergency (e.g. power failure), the profile cylinder key should always be carried in addition to the radio key.

The safety of the FUHR autotronic product largely depends on its correct installation and regular maintenance! The installation of the electronic components requires particular care, since abrasion points, defective cables, damaged contacts, etc. affect security and can lead to the malfunction of the system. Please ensure that all components are in perfect functioning condition prior to installation. Damaged or defective components may not be used under any circumstances. Only use the locking system in technical perfect working order! Malfunctions that impair security are to be eliminated immediately. Until the malfunction has been eliminated, the drive unit is to be switched off and operated mechanically! The power supply unit's power feed is to be disconnected when working on the locking system and live components.

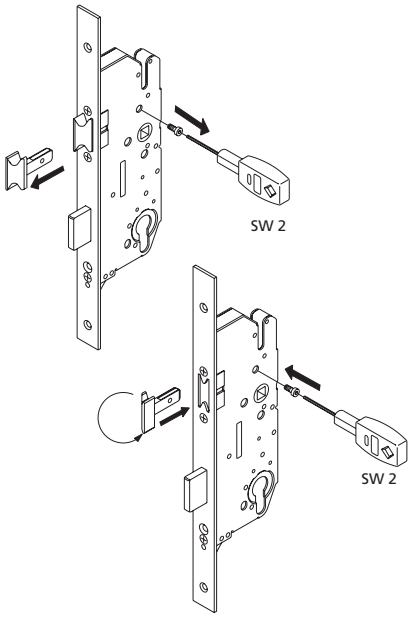
What the delivery contents include depends on the respective version.
The basic components are depicted below.

FUHR autotronic 834 multipoint locking system with one-piece keep or individual keeps

Adjustment of keepers/ one-piece keep Typ 4/10/11



Latch conversion on the main lock and on the additional lock casings



3 Installation examples

3.1 VERSION 1 – STANDARD – WITH CABLE JUNCTION/WITHOUT CONTROL UNIT

Functions:
- Opening impulse via a two-way intercom system
- Connects up to external indicator LED part no. NZ80067

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

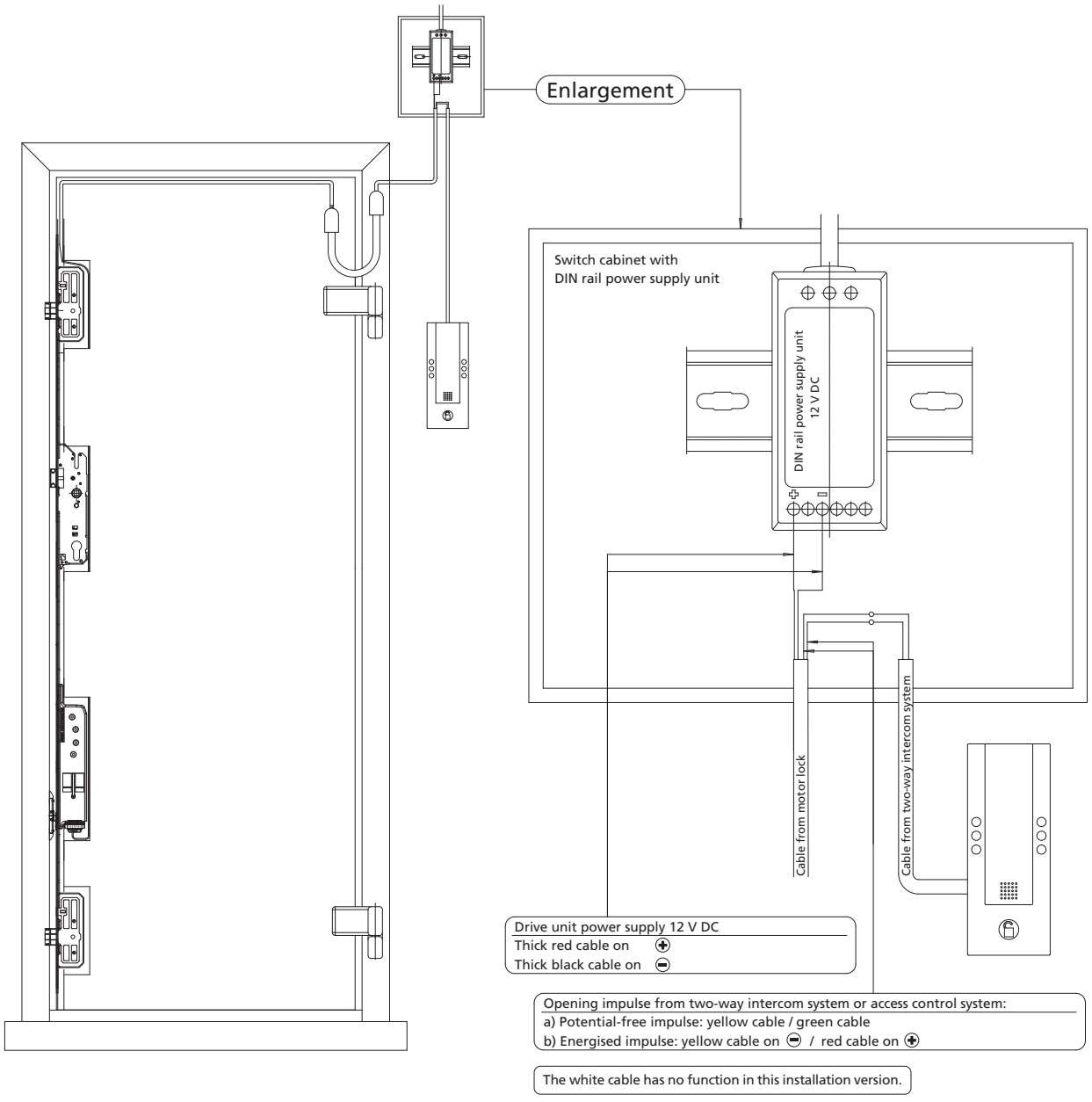
Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

Concealed or surface-mounted cable junction
Part no. NZ80090/NZ80089

DIN rail power supply unit
Part no. NZT80086/NZT80191

Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022

6-core connection cable | 10 m | with one coupler
Part no. NZ80075


Enlargement
Switch cabinet with
DIN rail power supply unit
DIN rail power supply unit
12 V DC
Cable from motor lock
Cable from two-way intercom system
Drive unit power supply 12 V DC
Thick red cable on ⊕
Thick black cable on ⊖
Opening impulse from two-way intercom system or access control system:
a) Potential-free impulse: yellow cable / green cable
b) Energised impulse: yellow cable on ⊖ / red cable on ⊕
The white cable has no function in this installation version.

3.2 VERSION 2 – STANDARD – WITH TAPPET CONTACT/WITHOUT CONTROL UNIT

Functions:
- Opening impulse via a two-way intercom system
- Connects up to external indicator LED part no. NZ80067

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

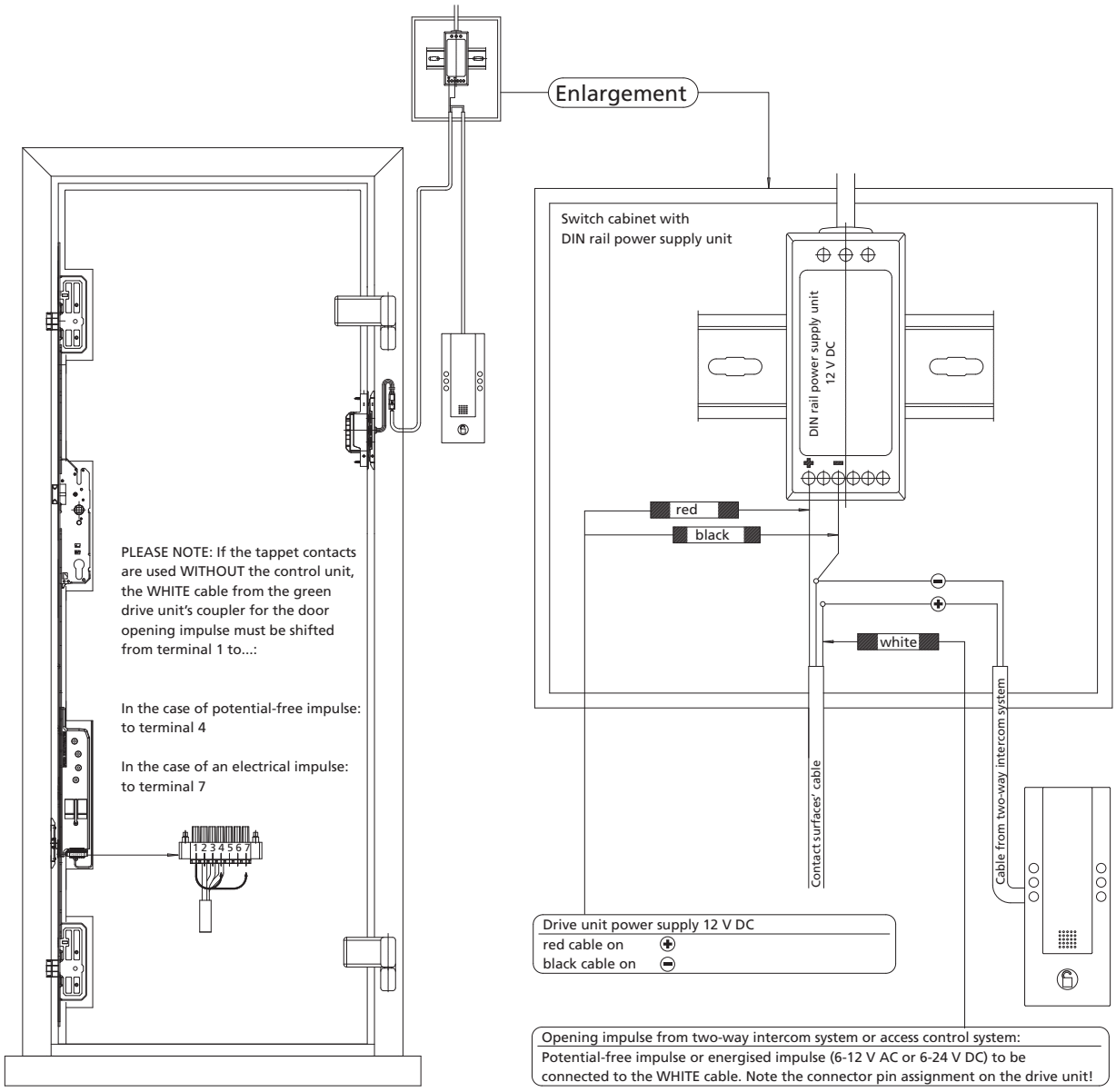
Profile related tappet contacts
Cable connector (length 4000 mm) with preassembled multi-functional jack

Contact surface
Cable connector (length 250 mm) preassembled

DIN rail power supply unit
Part no. NZT80086/NZT80191

Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022

3-core connection cable | 8 m | with one coupler
Part no. NZ80063A


Enlargement
Switch cabinet with
DIN rail power supply unit
DIN rail power supply unit
12 V DC
red
black
white
PLEASE NOTE: If the tappet contacts are used WITHOUT the control unit, the WHITE cable from the green drive unit's coupler for the door opening impulse must be shifted from terminal 1 to...:
In the case of potential-free impulse: to terminal 4
In the case of an electrical impulse: to terminal 7
1 2 3 4 5 6 7
Contact surfaces' cable
Cable from two-way intercom system
Drive unit power supply 12 V DC
red cable on ⊕
black cable on ⊖
Opening impulse from two-way intercom system or access control system:
Potential-free impulse or energised impulse (6-12 V AC or 6-24 V DC) to be connected to the WHITE cable. Note the connector pin assignment on the drive unit!

3.3 VERSION 3 – STANDARD – WITH TAPPET CONTACT AND SWITCHING POWER SUPPLY UNIT ON THE FRAME/WITHOUT CONTROL UNIT

Functions:
- Opening impulse via a two-way intercom system
- Connects up to external indicator LED part no. NZ80067

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

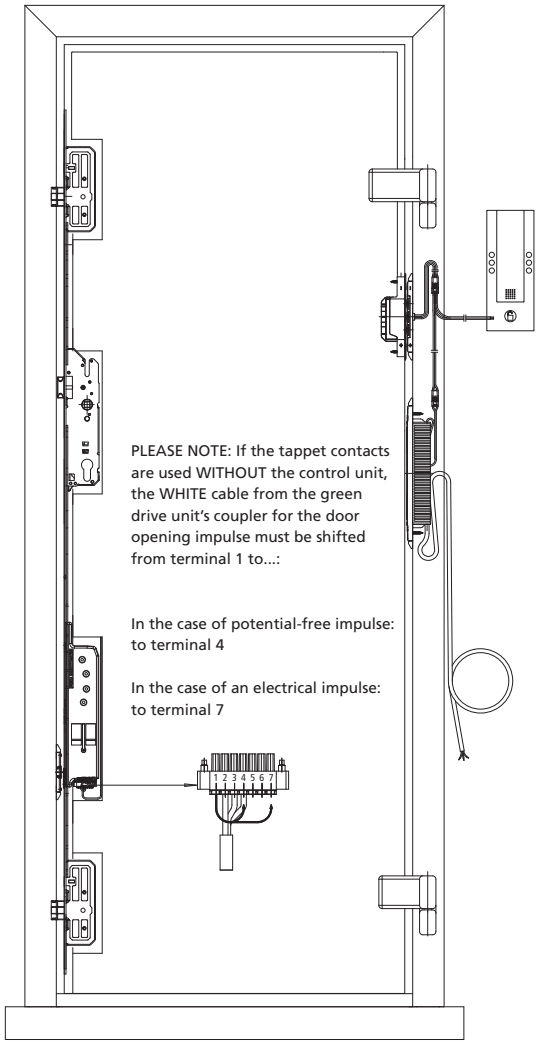
Profile related tappet contacts
Cable connector (length 4000 mm) with preassembled multi-functional jack

Contact surface
Cable connector (length 250 mm) preassembled

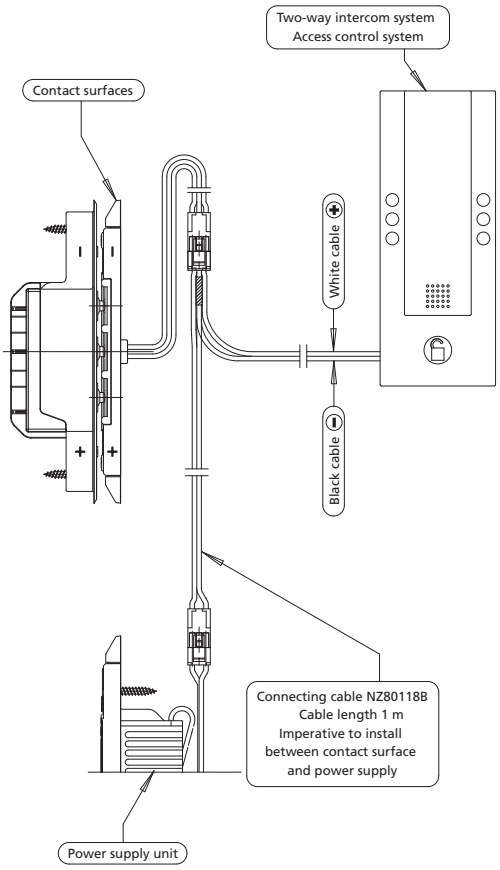
Profile related switching power supply unit
For installation in the door frame
230 V AC input/12 V DC output,
Cable connectors 230 V
(length 3,000 mm - surface-mounted cable), Earth cable (length 400 mm) and 12 V (length 200 mm)
Preassembled

Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022

4-core connection cable | 1 m | with two couplers
Part no. NZ80118B



Opening impulse from two-way intercom system or access control system:
Potential-free or energised impulse (6-12 V AC or 6-24 V DC)
Note the connector pin assignment on the drive unit!



3.4 VERSION 4 – PROJECT – ALL-INCLUSIVE FOR INSTALLATION IN THE DOOR

Functions:

- Opens via FUHR radio-controlled access control modules such as radio key, fingerprint scanner or transponder
- Integration in facility management systems
- Connection to external access control systems
- Connects up to an alarm system
- Connects up to a swing door opener
- Connects up to time switches (permanently-open function)
- Connects up to external indicator LED part no. NZ80067
- Input signal to electronically disconnect the access control systems for alarm systems

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

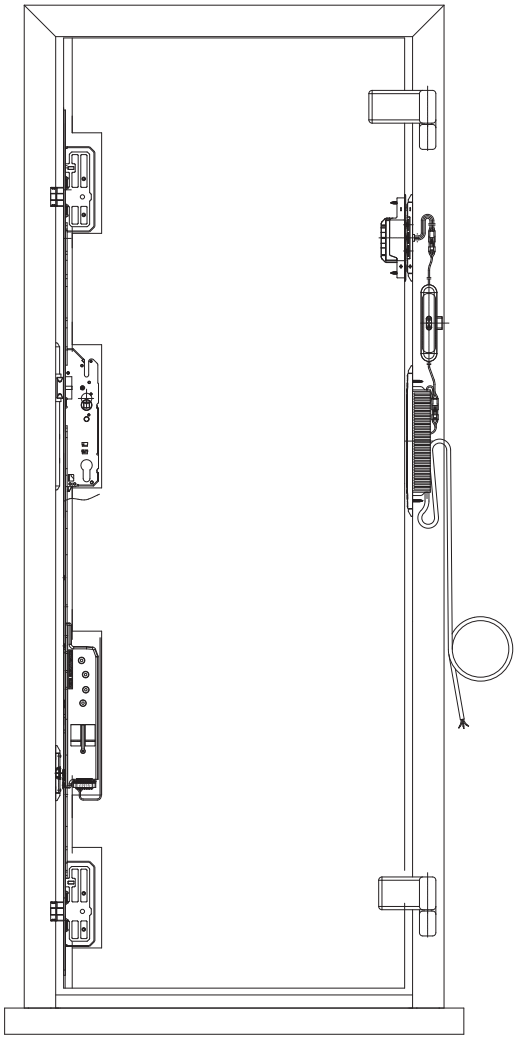
Profile related tappet contacts
Cable connector (length 4000 mm) with preassembled multi-functional jack

Contact surface
Cable connector (length 250 mm) preassembled

Control unit with master radio key
For installation in the door frame
Cable connectors (length 300 and 200 mm), preassembled
Part no. NZASTP0017/NZASTP0019

Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022

Profile related switching power supply unit
For installation in the door frame
230 V AC input/12 V DC output,
Cable connectors 230 V (length 3,000 mm - surface-mounted cable), Earth cable (length 400 mm) and 12 V (length 200 mm)
Preassembled



3.5 VERSION 5 – PROJECT – ALL-INCLUSIVE WITH DIN RAIL COMPONENTS

Functions:

- Opens via FUHR radio-controlled access control modules such as radio key, fingerprint scanner or transponder
- Integration in facility management systems
- Connection to external access control systems
- Connects up to an alarm system
- Connects up to a swing door opener
- Connects up to time switches (permanently-open function)
- Connects up to external indicator LED part no. NZ80067
- Input signal to electronically disconnect the access control systems for alarm systems

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

Profile related tappet contacts
Cable connector (length 4000 mm) with preassembled multi-functional jack

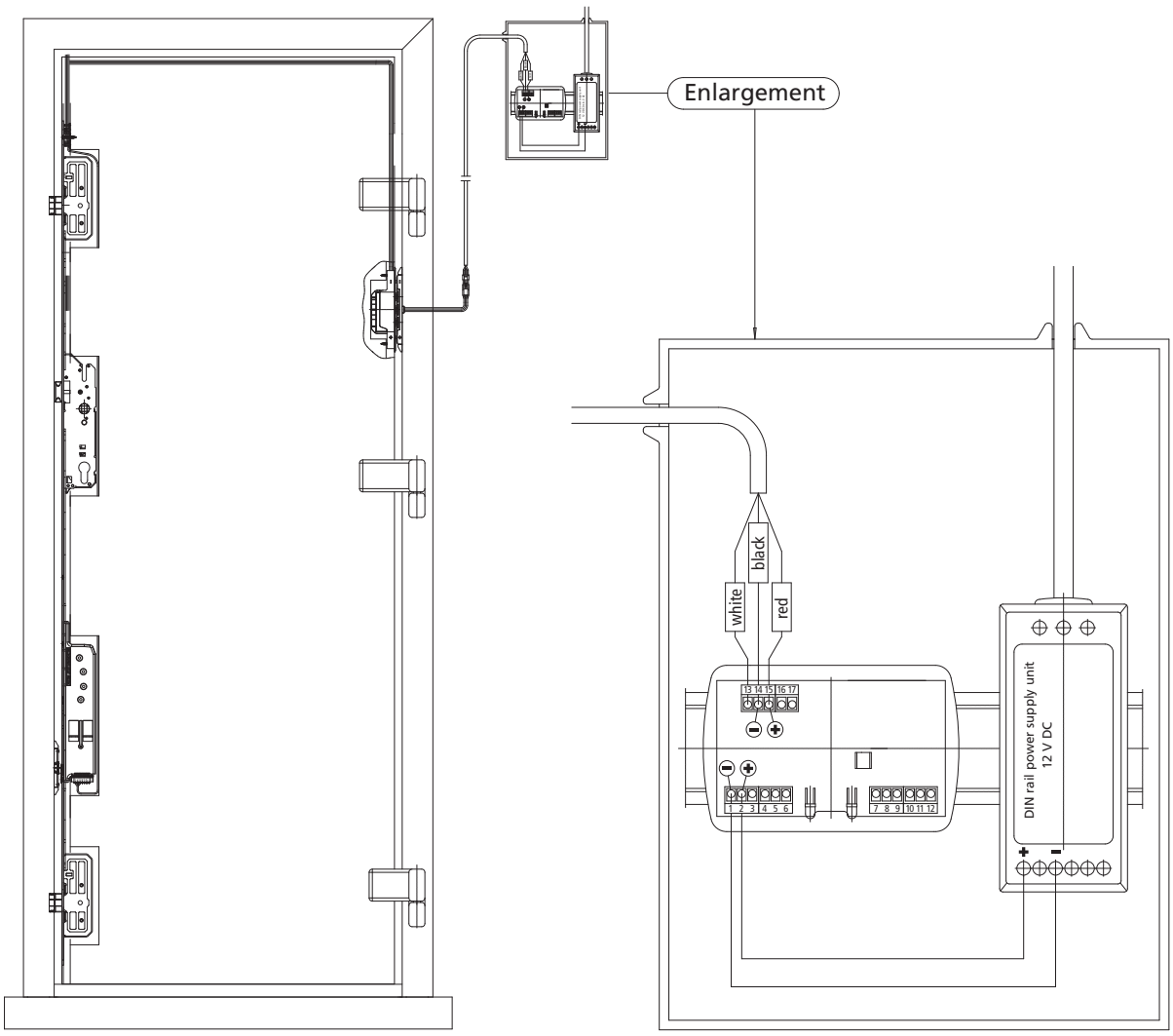
Contact surface
Cable connector (length 250 mm) preassembled

DIN rail control unit with master radio key
Part no. NZASTP80257

3-core connection cable | 8 m | with one coupler – Part no. NZ80063A (refer to the illustration on page 8)

Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022
(refer to the illustration on page 8)

DIN rail power supply unit
Part no. NZT80086/NZT80191


Enlargement
black
white
red
13 14 15 16 17
1 2 3 4 5 6
7 8 9 10 11 12
DIN rail power supply unit
12 V DC

3.6 VERSION 6 – PROJECT – ALL-INCLUSIVE WITH CONTROL BOX

Functions:

- Opens via FUHR radio-controlled access control modules such as radio key, fingerprint scanner or transponder
- Integration in facility management systems
- Connection to external access control systems
- Connects up to an alarm system
- Connects up to a swing door opener
- Connects up to time switches (permanently-open function)
- Connects up to external indicator LED part no. NZ80067
- Input signal to electronically disconnect the access control systems for alarm systems

System components:

Multipoint locking system FUHR autotronic 834
incl. electromotive drive unit

Profile related one-piece keep + magnetic contact for the drive unit to be ordered separately
Part no. NZM14195

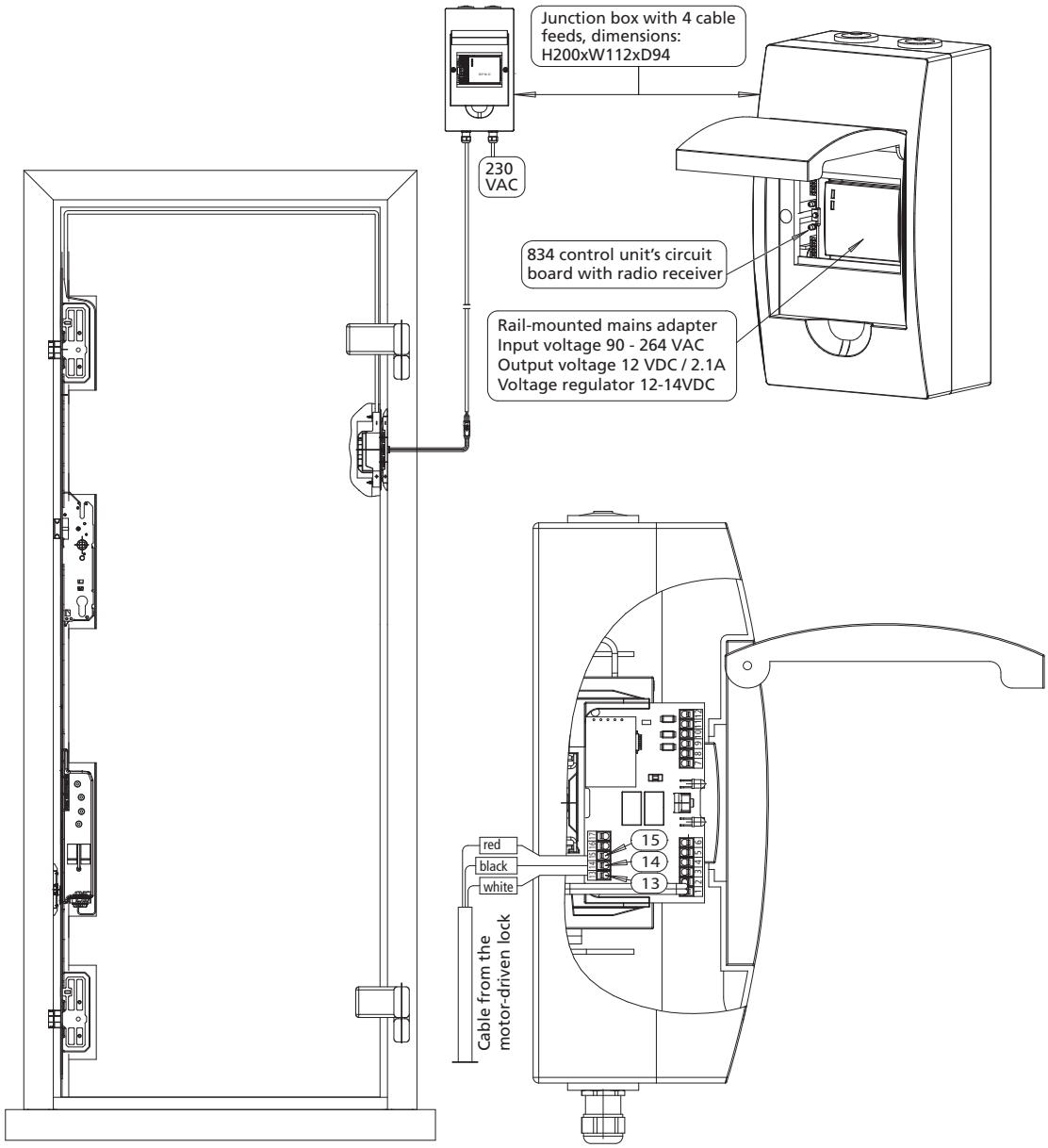
Profile related tappet contacts
Cable connector (length 4000 mm) with preassembled multi-functional jack

Contact surface
Cable connector (length 250 mm) preassembled

Control box with integrated mains adapter and master radio key
Part no. NZASTP043

3-core connection cable | 8 m | with one coupler
Part no. NZ80063A (refer to the illustration on page 8)

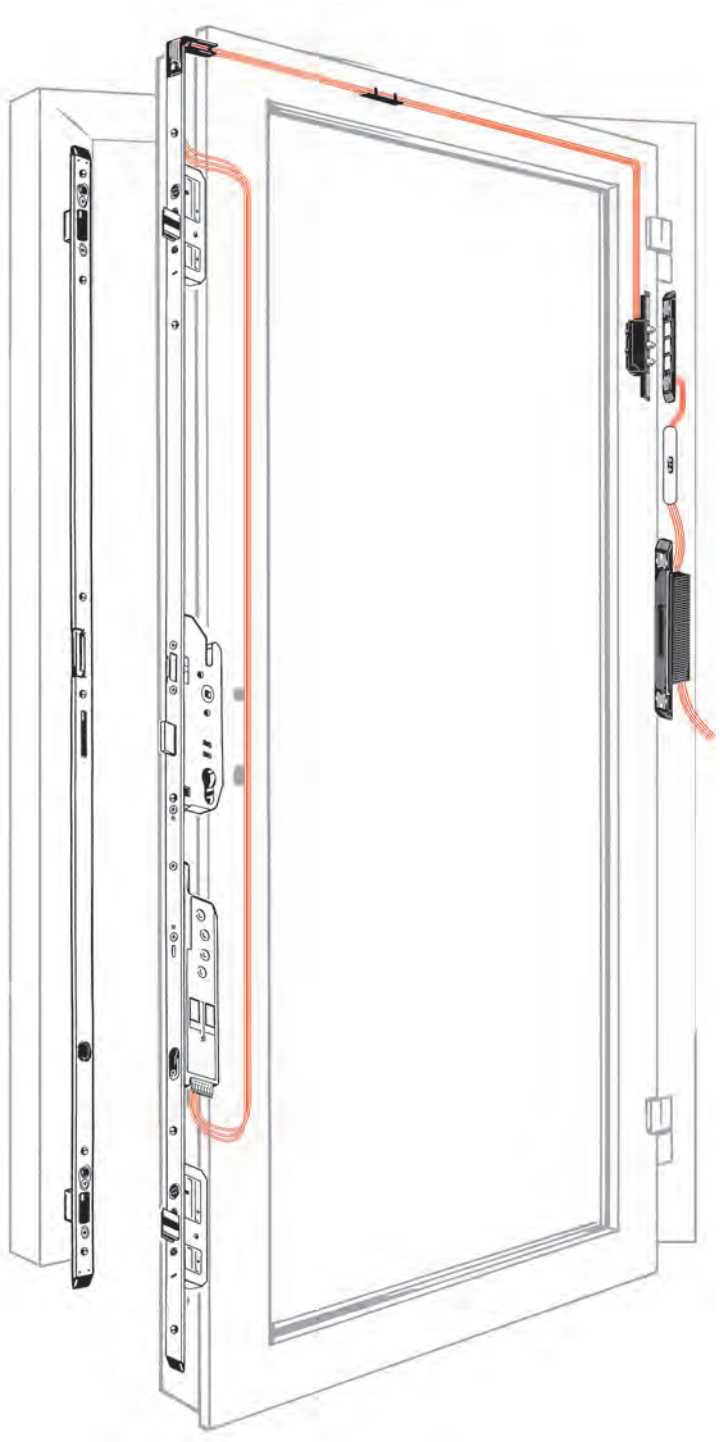
Cable protection elements for secure cable laying:
Cover plate | 2 m | F16 – Part no. NZ33171X | F20 – Part no. NZ33172X | F24 – Part no. NZ33173X
Double cable guides
for Euro-groove – Part no. NZ13845
End caps for cover plate | F16 – Part no. NZ13846 | F20 – Part no. NZ13847
Cable protection sleeves – Part no. NZ80022
(refer to the illustration on page 8)


Junction box with 4 cable feeds, dimensions: H200xW112xD94
230 VAC
834 control unit's circuit board with radio receiver
Rail-mounted mains adapter
Input voltage 90 - 264 VAC
Output voltage 12 VDC / 2.1A
Voltage regulator 12-14VDC
red
black
white
15
14
13
Cable from the motor-driven lock

4 Installation instructions

4.1 ROUTING AND DRILLING OPERATIONS FOR ALL INSTALLATION VERSIONS

Make cut-outs for the FUHR **autotronic** 834 multipoint locking system and the matching locking strip or locking parts.



4.1.1 CABLE–LAYING DEPENDING ON THE DOOR DESIGN FOR ALL INSTALLATION VERSIONS

Version A – e.g. for PVC doors:
Cable-laying in the Euro groove.

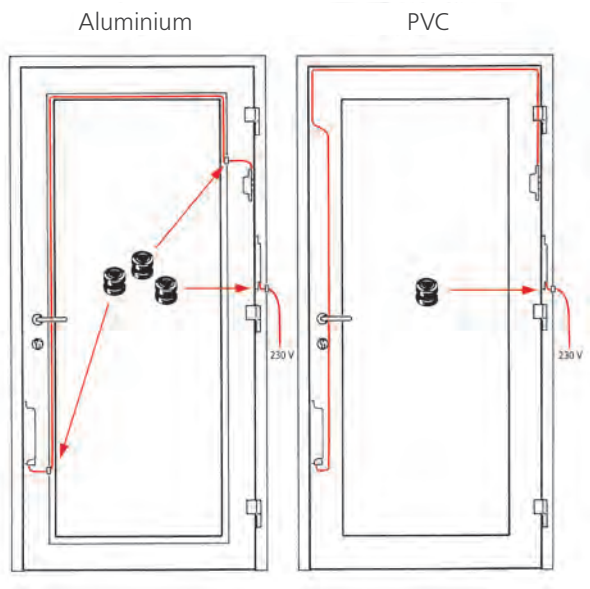
Deburr the cable feedthrough hole and insert the cable protection sleeves provided.

Version B – e.g. for aluminium doors:
If the cable is to be laid in the glazing rebate's Euro groove, a Ø 10 mm drill hole is to be drilled in the glazing rebate area.

Deburr the cable feedthrough hole and insert the cable protection sleeves provided.

The 230 V electricity cable is a surface–mounted cable. Conduit must be used for concealed cabling. The door frame must be earthed.

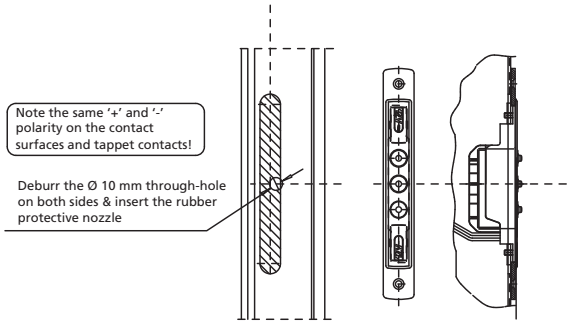
The cable–laying for version A is described in the following installation steps.



4.1.2 ROUTING FOR THE TAPPET CONTACTS IN THE DOOR LEAF FOR INSTALLATION VERSIONS 2 – 6

Routing on the hinge side of the door leaf

Make sure that the surface-contact device and the tappet contact device are aligned accurately horizontally. Refer to chapter 4.1.3.

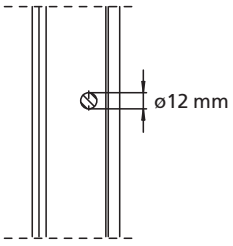


Exemplary routing. Please ask for the particular profile-related routing dimensions.

4.1.3 DRILL HOLE FOR THE SURFACE-CONTACT'S CABLE FOR INSTALLATION VERSIONS 2 – 6

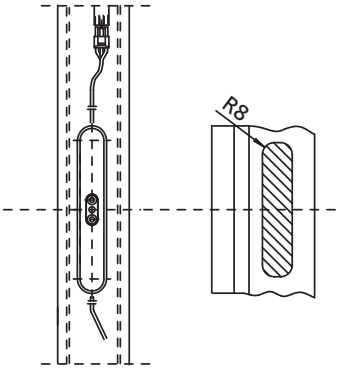
Drilling in the frame profile, laterally at the same height as the tappet contact device

Care must be taken to ensure that the surface-contact device and the tappet contact device are aligned accurately horizontally. Refer to chapter 4.1.2.



4.1.4 ROUTING FOR THE CONTROL UNIT CASING IN THE FRAME FOR INSTALLATION VERSION 4

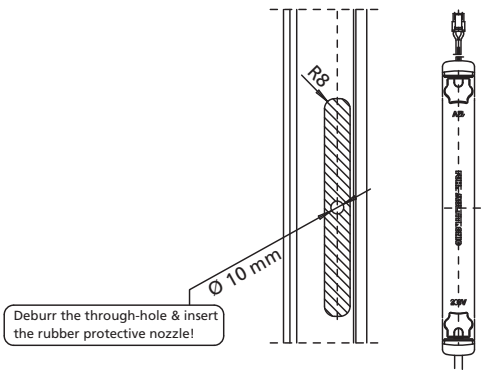
Routing on the hinge side of the door frame face **inside of the building**



Exemplary routing. Please ask for the particular profile-related routing dimensions.

4.1.5 ROUTING FOR THE SWITCHING POWER SUPPLY UNIT IN THE FRAME FOR INSTALLATION VERSIONS 3 AND 4

Routing on the hinge side of the frame profile



Exemplary routing. Please ask for the particular profile-related routing dimensions.

4.1.6 DRILL HOLE FOR THE 230 V CABLE FOR INSTALLATION VERSIONS 3 AND 4

Drill hole on the reverse side of the profile within the routed opening for the switching power supply unit

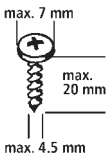
This drill hole must deburred carefully at both ends! Insert the cable protection sleeve provided in the drill hole to protect the 230 V cable. The cable must be protected against abrasion and securely fixed in order to prevent tractive forces.

4.1.7 SAFETY INSTRUCTIONS

All routing and drilling work must be deburred carefully. The cables must be securely fixed in this area in order to prevent abrasion. All routing and drilling swarf must carefully removed from the profiles.

4.1.8 SCREWS FOR FIXING INDIVIDUAL COMPONENTS

Conventional fenestration screws with a maximum screw head diameter of 7 mm and a maximum screw diameter of 4.5 mm may be used. The PVC components (switching power supply unit, surface-contact device etc.) are to be fixed with screws with a **maximum length of 20 mm.** To fix the metal components (faceplates, keeps etc.) select a screw length according to the requirements.
Depending on the profile material, screw holes may have to be pre-drilled with an appropriate drill.



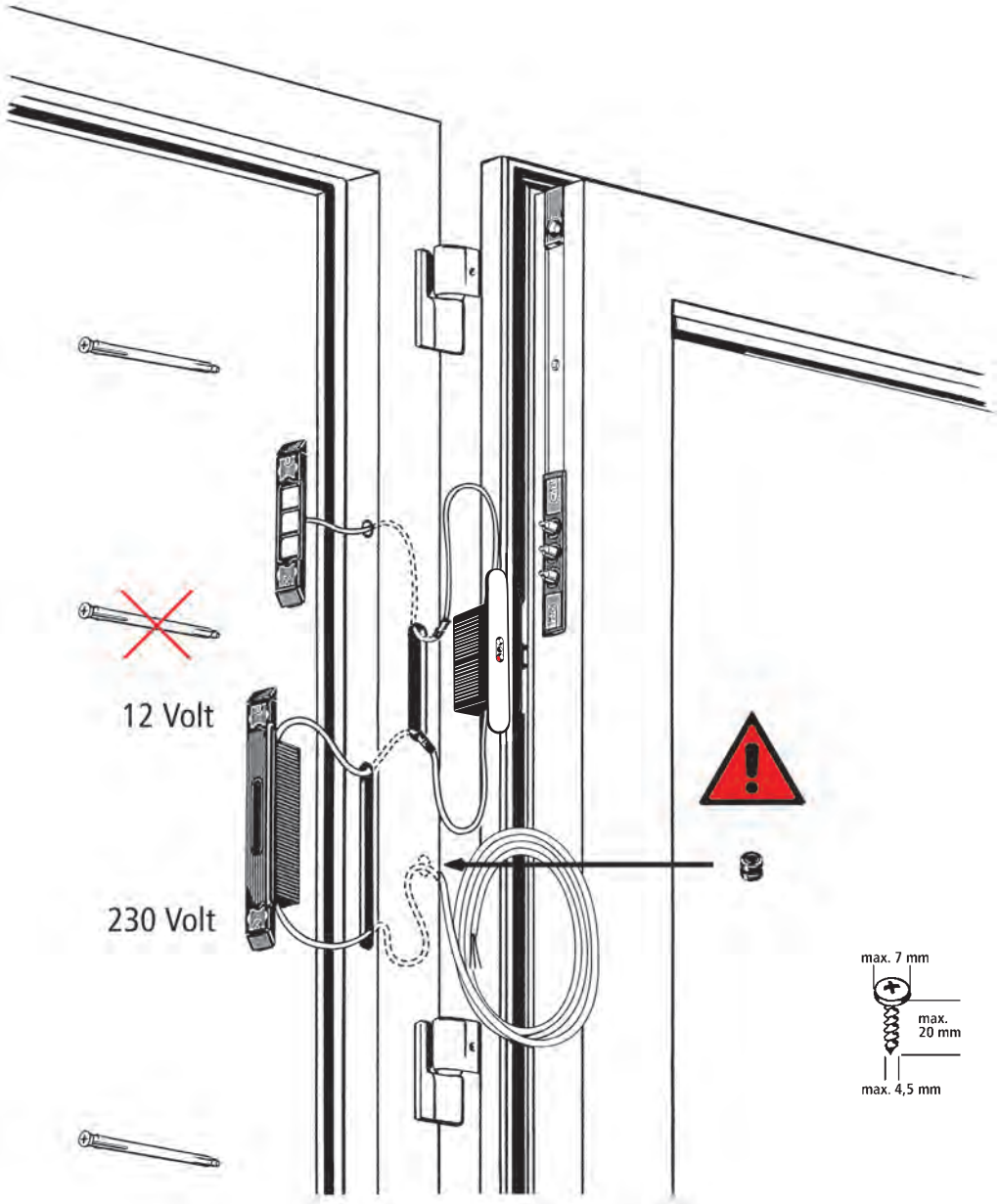
It is imperative that all screws are hand-tightened (maximum torque 1 Nm), as some components are made of PVC and may be damaged by the excessive force that a cordless screwdriver can exert.

It is essential that the surface-contact device and the tappet contact device are aligned accurately.

4.2 INSTALLATION ON INSTALLATION VERSION 4

The installation requires exceptional care. This applies particularly to the electronic components, as routing and drilling swarf, abrasion points, defective cables and damaged contacts etc. can lead to the device malfunctioning.

Avoid positioning fixing materials (e.g. frame-fixing screws) in areas where electronic components are located!

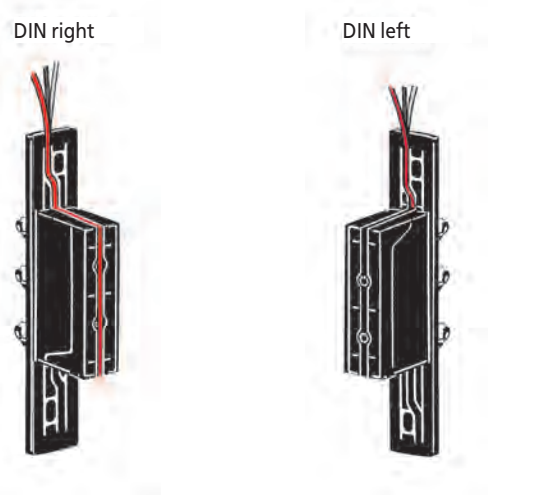


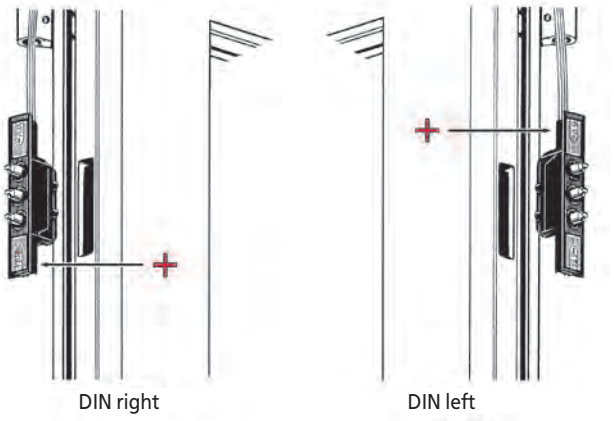
4.2.1 INSTALLATION OF THE TAPPET CONTACTS IN THE DOOR LEAF FOR INSTALLATION VERSIONS 2 – 6

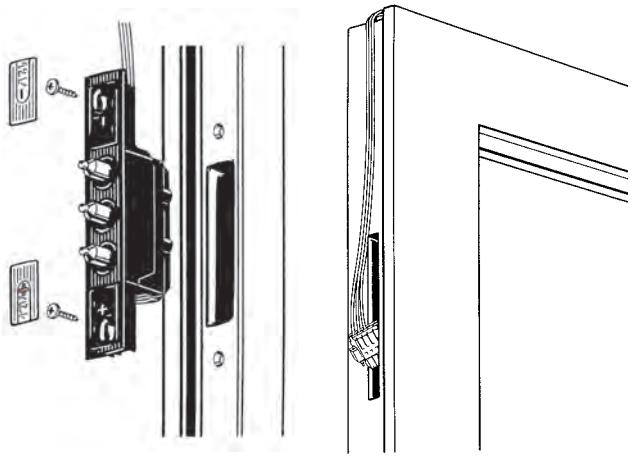
The electricity and data transfer control unit of the FUHR **autotronic** can be used for left handed as well as right handed doors.
On right handed doors the tappet contact device is installed as supplied.
On right handed doors the cable is placed in the guide channel on the rear side of the casing.

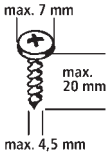
Check the polarity (plus/minus) before installing the tappet contacts, refer to the component's identification marking:
DIN right = Plus symbol on the bottom
DIN left = Plus symbol on the top

1. Remove the silver covers from the tappet contact device.
2. Insert the tappet contact device into the door leaf's routed recess.
3. Lay the cable with the green plug in the channel above the door.
4. Screw-fix the casing to the door leaf profile.
5. Replace the covers.
6. Insert the green plug in the additional locking point's top routing and lead it down to the routed recess for the electrical drive unit.









4.2.2 INSTALLATION OF THE MULTIPOINT LOCKING SYSTEM IN THE DOOR LEAF

1. Connect the tappet contact device's green plug to the corresponding contact plug on the electrical drive unit. As the case may be, please note deviating cable assignment on the multifunctional jack when using this without a control unit, refer to chapter 3.

2. Screw-fix the plugs with a small screwdriver.

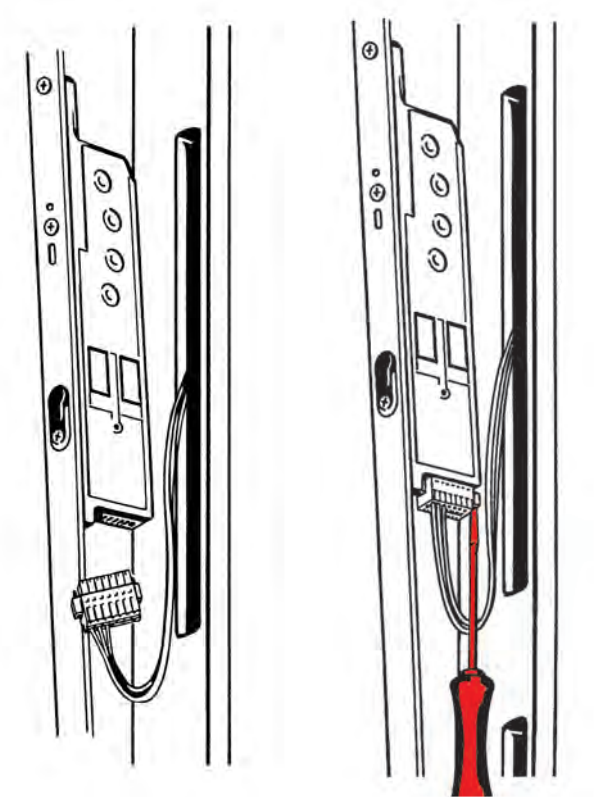
Please note! It is imperative to carry out this screw-fixing. The screw-fixing warrants permanent contact for the electricity and data transfer, and safeguards against vibration and shock.

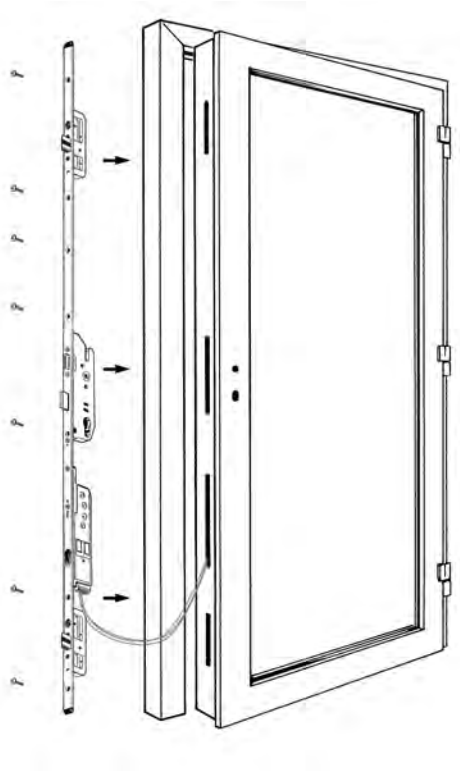
3. Insert the cable and FUHR **autotronic** 834 multipoint locking system into the routed recess. Leave a **spare cable loop** below the green drive unit's coupler in the profile in order to be able to remove the lock at a later stage.

In doing so, ensure that the cables are neither kinked, trapped nor damaged.

4. Screw-fix the multipoint locking system's faceplate. Fix the screws in a straight manner in order to prevent the connecting-rods being jammed by the screws.

Please note! The connecting-rods have to be able to move unhindered. Friction caused by screws or too narrow profile guide grooves cause operational malfunction.





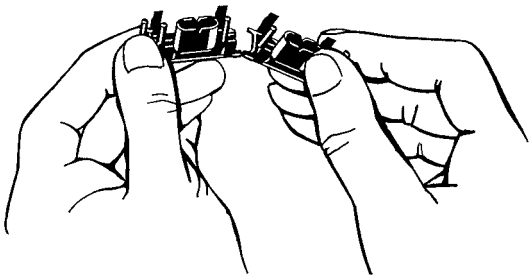
4.2.3 INSTALLATION OF THE CABLE GUIDES, END CAPS AND COVER PLATES IN THE DOOR LEAF

1. Fold the enclosed PVC cable guides for the profile corners in half and break them in two for the centre profile area.

2. Clip in each of the cable guides into the top door leaf corners, and depending on the door width and height, also in the Euro groove channel.

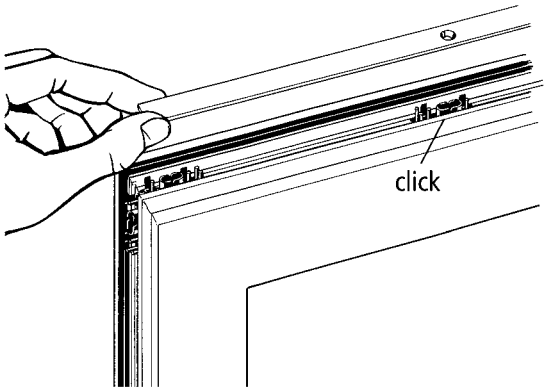
3. Lay the cable through the cable guide and loop the surplus cable between two cable guides.

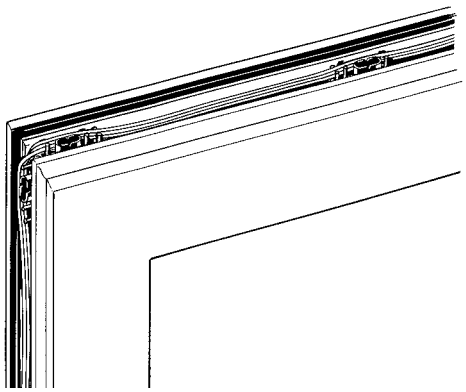
4. Crop and screw-fix the cover plate according to the door width or height.

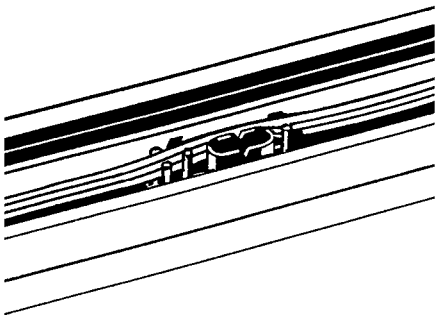


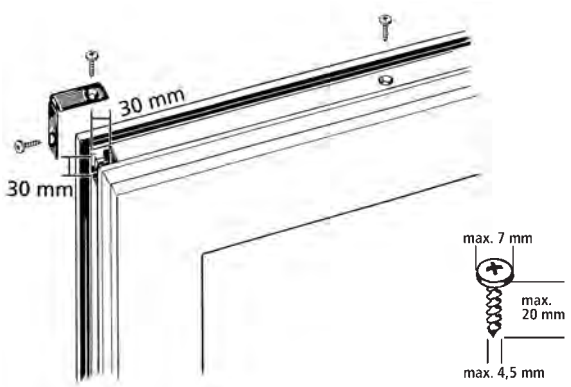
Ensure that the screws are screw-fixed through the cable guides' elongated holes. Non-compliance can lead to damaged cables.

5. Put on the end caps and screw-fix through the cable guides.





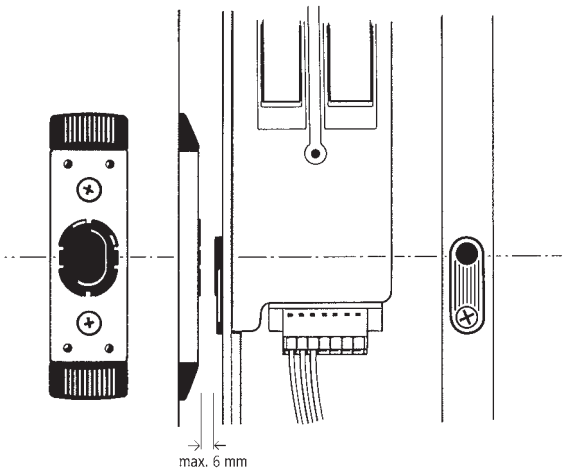




4.2.4 INSTALLATION OF THE MAGNETIC CONTACT IN THE DOOR FRAME

1. Install the magnetic contact in accordance with the routing drawing. The exact drawing dimension must be adhered to in order to warrant perfect contact with the electromotive drive's reed switch.

Ensure that the reed switch and magnet are aligned horizontally at the same height.

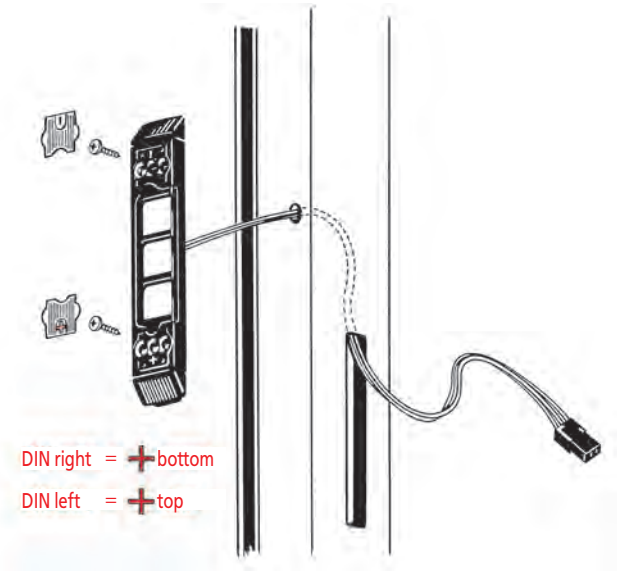


For one-piece keeps:
The installation of the one-piece keep is to be carried out in compliance with the routing drawing. The magnetic contact must be ordered separately (Part no. NZM14195) and installed.

4.2.5 INSTALLATION OF THE SURFACE–CONTACT DEVICE IN THE DOOR FRAME

1. Remove the silver covers.
2. Feed the surface-contact device's 3-core cable (red, black, white) through the frame profile's drill hole and back outside through the control unit casing's routed opening. Pull the cable all the way through the routed opening so that the surface-contact device is located level on the profile.
3. Screw fix the surface-contact device to the frame profile.
4. Replace the covers.

In order to ensure proper contact and durable operation, the contact surface has been pre-treated with contact lubricant. Please do not remove this lubricant film! Adhere to the regular maintenance instructions in compliance with chapter 8.1.



4.2.6 MONTAGE DES STEUERUNGSGEHÄUSES IM BLENDRAHMEN

1. Remove the stainless steel cover before mounting the control unit housing. This is held by two magnets and can be easily removed. To do this, carefully grasp the recess in the cover plate with a small screwdriver or fingernail and remove the cover plate.

2. Connect up the surface-contact device's 3-core cable plug (red, black, white) with the control unit casing's 3-core cable plug. The plug clicks in audibly.

3. Insert the 2-core control unit casing cable into the routed recess, guide the cable downwards, and exit through the switching power supply unit's routed recess.

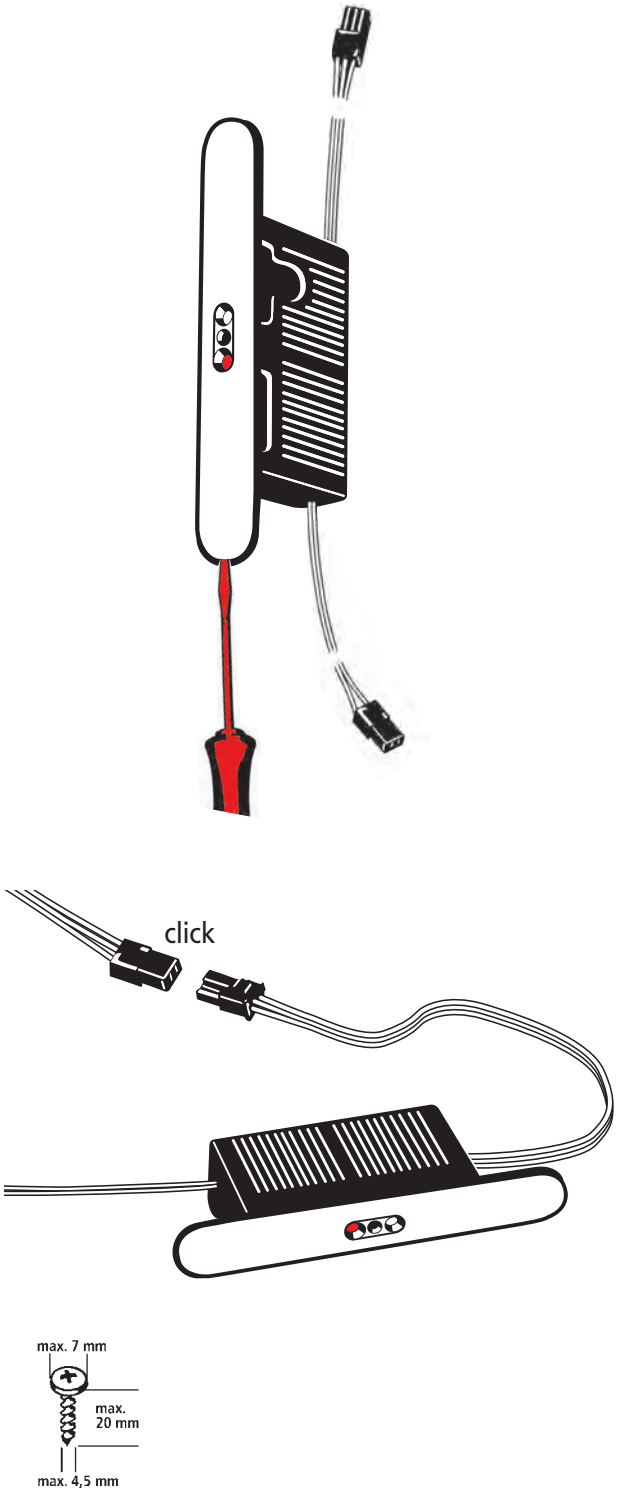
4. Carefully feed the control unit casing's cable back into the frame profile so that the control unit casing fits comfortably in the routed recess.

Please ensure that the cables are neither kinked, trapped nor damaged by sharp profile edges.

5. Screw-fix the control unit casing into the frame profile.

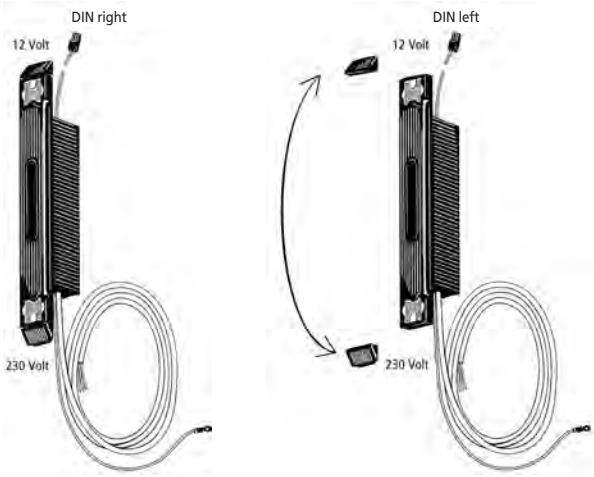
Ensure that the cables are not damaged when screw-fixing.

6. Replace the control unit casing's cover cap.



4.2.7 INSTALLATION OF THE SWITCHING POWER SUPPLY UNIT (TRANSFORMER) IN THE DOOR FRAME

The FUHR **autotronic's** switching power supply unit can be used for left handed as well as right handed doors. **On right handed doors** the switching power supply unit is installed as supplied.
On left handed doors the top profile-related end cap is swopped with the bottom one.



1. Remove the silver covers.

2. The green/yellow earth cable is to be electroconductively connected with the door's metal frame.

3. Connect up the control unit casing's 2-core cable (red/black) with the switching power supply unit's cable counterpart. The plug clicks in audibly.

4. Feed the cable carefully back into the frame profile, **ensuring that the switching power supply unit fits comfortably into the routed recess.**

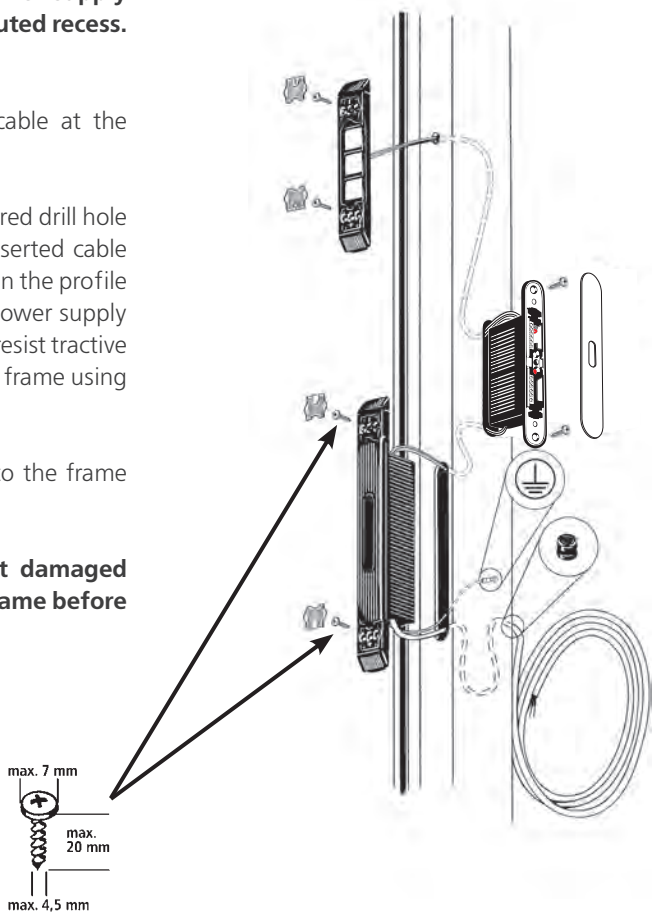
   Depending on the profile type, loop the cable at the bottom of the profile.

5. Guide the 230 V cable out through the deburred drill hole at the bottom of the profile (through the inserted cable protection sleeve). Leave a **spare cable loop** in the profile in order to be able to remove the switching power supply unit at a later stage. Fix the rolled up cable to resist tractive forces and fasten it to the outside of the door frame using a cable tie.

6. Screw-fix the switching power supply unit to the frame profile (maximum torque 1 Nm).

Ensure that the cables are not damaged when screw-fixing. Earth the frame before commissioning.

7. Replace the covers.



5 Commissioning

5.1 OPERATION VERIFICATION CHECK ON THE FABRICATOR'S PREMISES

1. After all of the FUHR autotronic components have been installed, check that the door leaves and frames are aligned parallel.

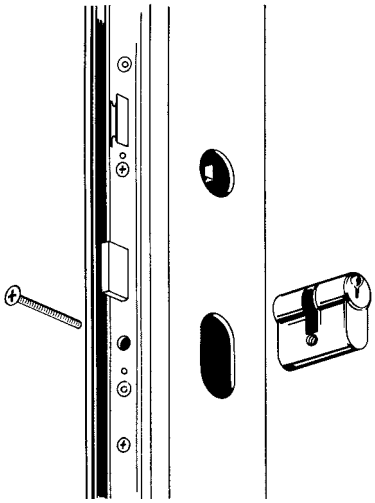
2. Install a profile cylinder in the centre lock.

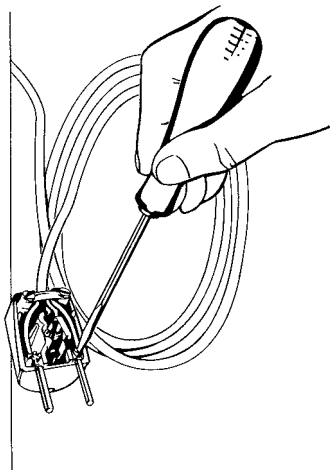
3. Subsequently connect the 230 V cable to the mains voltage by means of a two-pin earthed plug for testing purposes (only to be carried out by qualified personnel).

4. The green LED will light up as soon as the operating voltage is applied. Upon closing over the door, the latching deadbolts extend 20 mm. The lock is now automatically locked and the red LED lights up.

5. In order to test all functions, the door should be opened and locked several times in the door factory via the drive unit, the profile cylinder, and via the lever-handle. In the event of any problems arising, please proceed in accordance with chapter 9.

6. If the FUHR **autotronic** lock is fully operational, the two-pin earthed plug can be removed and the door can be despatched.





5.2 COMMISSIONING ON SITE

1. Install the door in the wall opening in the usual manner, guiding the 230 V cable to the internal side of the wall. Ensure that fixing materials (e.g. wall anchors) are not located where the electronic components are.

2. An electrician must connect up the 230 V cable to the power supply. The door frame's earthing is to be professionally checked. Conduit must be used for 230 V concealed cabling.

3. In order to be able to warrant the power supply of all electronic components, also in the case of a network operator's power failure, fire doors in accordance with DIN 4102 and DIN EN 1634 should be equipped with an emergency power supply. The door can be opened at any time via the profile cylinder.

6 Function and connection possibilities for the control unit and the radio receiver module

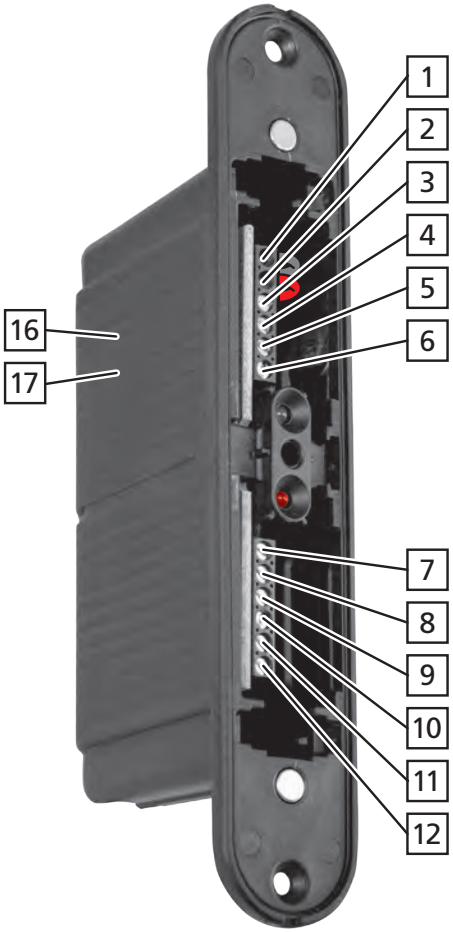
6.1 THE MULTIFUNCTIONAL CONTROL UNIT

The FUHR **autotronic** multifunctional control unit is equipped with an integrated radio receiver as well as a large number of inputs and outputs for connecting additional components (e.g. transponder, eyescan, fingerprint, code locks, swing door drives, alarm systems, facility management systems etc.). The input and output sockets are located:

- On the frame: under the surface-mounted **control unit casing's** cover plate (refer to 6.1.1)
- On the door leaf: **multi–functional jack** of the FUHR **autotronic** drive unit (refer to 6.3).

6.1.1 THE CONTROL UNIT CASING'S CIRCUIT BOARD

Outlined below are some examples of the potential allocation of the control unit's connection terminals.



Control box with integrated mains adapter

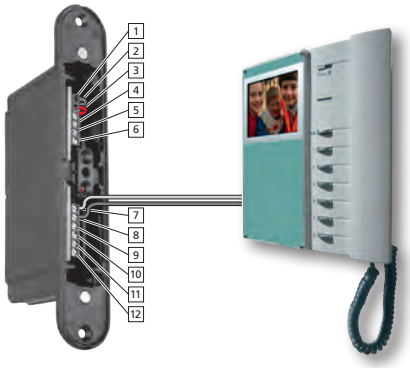
DIN rail controller

Terminal/ Function	Assignment
Grid	
1(GND) + 2(+12 V)	Stabilized power supply 12 V DC ±4 %.
Outputs	**Output, e. g. for electric swing door opener´s**
3 + 4	**Make contact**
Switching output	• **Function 1:** Immediately after the FUHR **autotronic** lock has been opened via radio control, transponder etc., a relay triggers the make contact for 1 second. This impulse is processed by the swing door opener's control unit and triggers the swinging movement of the door leaf. • **Function 2:** The 'DRT' jumper can be removed if required (refer to the wiring diagram on page 49), enabling the swing door opener's output to be triggered just as long as a continuous signal is applied to the latch retaining function (terminal 9 + 10).
5 + 6	**Output door leaf position, e. g. for alarm systems**
Alarm output	**Break contact** Unlocking the lock and opening the door leaf triggers the related opener contact within 1 second. This remains triggered until the door leaf is closed. An alarm system control unit digitally processes the signal status and reports back 'OPEN' or 'CLOSED'.
Inputs	**Input** 6–12 V AC oder 6–24 V DC
7 + 8	For **non-isolated opening pulses** by access control systems, e. g. of intercom or building control
Door opening	systems.
9 + 10	**Input potential-free**
Door opening	For **potential-free opening pulses** by access control systems for short-time and permanent unlocking: • **Function 1:** **Standard opening** If a **potential-free impulse ⩽ 1 second** is applied to this input (e.g. controlled via an access control system), the FUHR **autotronic** lock will open. • **Function 2:** **Permanently-open function** If a **potential-free continuous signal** is applied to this input (e.g. controlled via a time switch) the FUHR **autotronic** lock will open. All locking components remain completely withdrawn as long as the continuous signal is applied.
11 + 12	**Input potential-free**
Door opening	If a **potential-free impulse** is applied to this input (e.g. controlled via an access control system), the FUHR **autotronic** lock will open.
16 + 17	**Input potential-free**
Deactivation	For the duration of the pending signal, all motor opening functions (control: radio receiver and input terminals 7–12/control in motor drive: terminals 4 and 7) are deactivated, e. g. to prevent the motorized door opening after arming an alarm system. The red LED of the control unit and, if applicable, the connected external control LED flash permanently.
Jumper DRT	If the **jumper DRT is removed**, the output at terminal 3 + 4 remains connected as long as a continuous signal at terminal 9 + 10 is applied.
Radio receiver	For **opening pulses via FUHR rolling code access control systems**, refer to page 37 ff.

6.1.2 APPLICATION EXAMPLES FOR THE CIRCUIT BOARD'S ASSIGNMENT

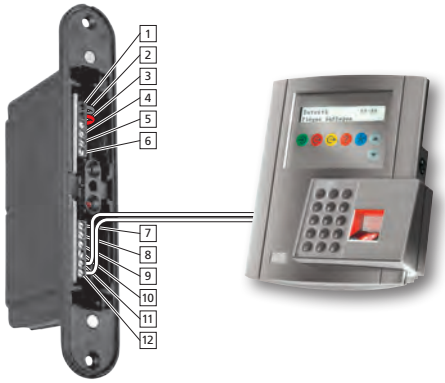
Application example – two-way intercom system:
For example the door shall be opened via radio key from the outside.
The opening is triggered from the inside by means of an existing two-way intercom system with a 12 V AC control cable. This was, as the case may be, used previously for an electrical door opener.

Terminal assignment:
Connect the two-way intercom system's cables to terminal 7 + 8.



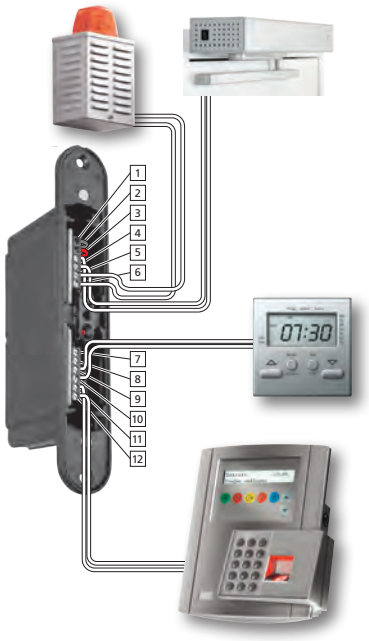
Application example – external access control:
The opening shall be triggered from the outside by means of an access control system (e.g. numeric code lock or finger print).

Terminal assignment:
Connect up the access control system with potential-free impulse to terminals 11 + 12.



Application example in construction projects:
For example: the door is switched to the 'permanently-open function' in the 'day operation mode', in the 'night operation mode' the lock shall always lock both completely and fully automatically.
Opening from the outside is triggered by means of an access control system (e.g. numeric code lock or transponder). In addition, an electrical swing door opener shall automatically open the door leaf and the door leaf setting for the alarm system is monitored.

Terminal assignment:
Connect the time switch with potential-free continuous signal to terminals 9 + 10 for function 2.
Connect the access control system with potential-free continuous impulse to terminals 11 + 12 for function 1.
Connect the swing door opener to terminals 3 + 4. Connect the alarm system to terminals 5 + 6.



6.2 THE RADIO RECEIVER

If only a radio signal is required to open the door, the radio receiver module can be used as an alternative to the control unit.

The radio receiver module NBFP490 **(1)** receives the radio signal and forwards it to the motor for door opening. It has a transparent programming button with red control LED **(2)** for pairing the FUHR radio transmitters and a 3-wire connection cable **(3)**, which is connected to the green plug of the motor drive.

To position and fix the drive unit, the radio-controlled module's housing is equipped with an insertion channel and a catch spring **(4)**. The drive unit is equipped with appropriate mounting areas*. Slide the radio receiver module downwards along the insertion channel until the catch spring in the motor drive's housing positively engages into place.

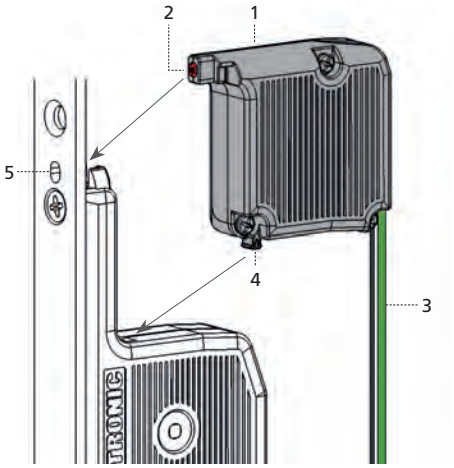
There is an opening* **(5)** in the lock faceplate located above of the drive unit, through which one can activate the **LED tune-in button (2)** in a built-in state from the outside with a thin object. This LED tune-in button must be pressed first for disassembly, before the radio receiver module can be removed towards the top.

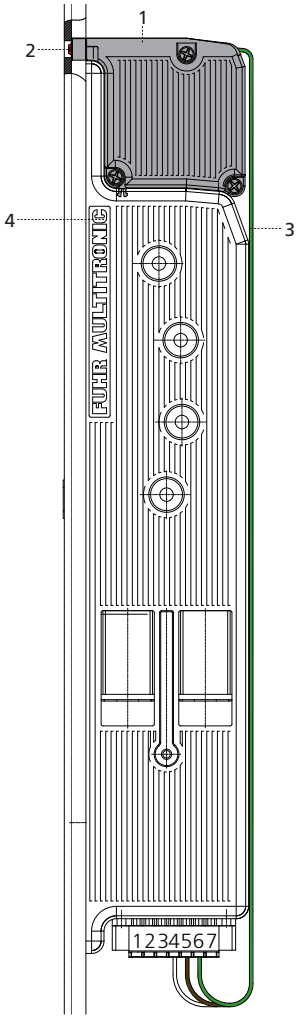
* from date of manufacture: 04/2010

Connecting the cables
Three cables are located on the back of the radio receiver: white, brown & green. Please connect these three cables in the correct arrangement to the following screw terminals of the multifunction plug of the motor drive:

Terminal 4 – white cable
Terminal 5 – brown cable
Terminal 6 – green cable

After the motorised lock's 12 V DC power supply has been connected (terminal 2-3 refer to page 36), the radio receiver is operational.





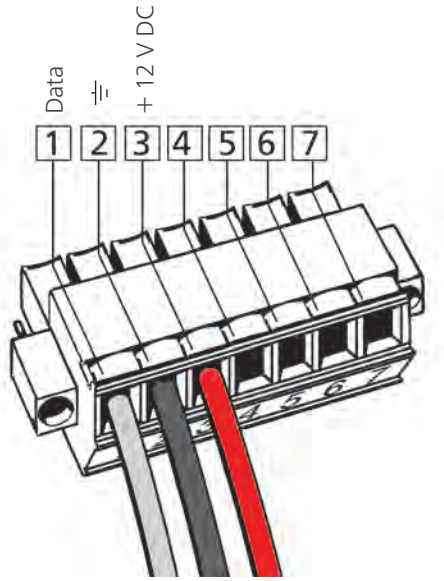
Detailed **installation, operating and maintenance instructions MBW24** of the radio receiver module NBFP490: www.fuhr.de

6.3 THE DRIVE UNIT'S MULTI–FUNCTIONAL JACK

The below-mentioned applications are merely intended as application examples of common connections. Furthermore there is a multitude of other possible applications.

It is important that the respective switching signal (e.g.: the 12 V DC impulse or the potential–free contact etc.) is connected to the appropriate terminal.

1 + 2 + 3	Already occupied by the 12 V DC drive unit's power and data supply cable.
4 + 5	**Input** (impulse < 1 second) – e.g. for **external access control systems (transponders, code locks, finger print, eye scan etc.),** that are mounted directly on the door leaf. ➢ The FUHR **autotronic** lock opens motor-driven by means of a potential-free impulse from the two-way intercom system or the access control system.
5 + 6	**Output** ideally used for the power supply of **illuminated fixed pad handles or illuminated glazed panels.** ➢ Terminal 5 = GND (earth) and terminal 6 = 12 V DC (max. 350 mA).
5 + 7	**Input** (impulse < 1 second) – e.g. for **external access control systems (transponders, code locks, finger–print recognition, eye scanners etc.),** that are mounted directly on the door leaf. ➢ The FUHR **autotronic** lock opens motor-driven by means of an energised impulse from the two-way intercom system or the access control system. ➢ Terminal 5 = GND (earth) and terminal 7 = 6-12 V AC or 6-24 V DC.



We recommend the use of shielded cables in order to avoid interference from external sources and ensure proper functioning.

7 Control via FUHR radio access control systems

A control unit or a radio receiver module comes with a master radio key with red keys. With the help of the master radio key, additional 24 user radio control keys or any other FUHR access system can be tuned in. All radio keys are copy protected by means of a 'rolling code system'. The middle button of the master key has already been programmed to the control unit or the radio receiver module in the factory.

In the following, the pairing and deletion of 4-channel radio keys is described. Each of the keys (channels) can be assigned individually, e.g. for front door, garage door, property gate and lighting.

The handling of other FUHR radio transmitters (finger scan, keyboard, transponder etc.) is analogous. Detailed information:

For the connection of external access controls, please refer to the wiring diagram on page 49 and the corresponding instructions.

The master key cannot be deleted or switched at a later stage.
The master key should therefore be kept safely, as additional keys cannot be tuned in or deleted should it be lost.

7.1 THE PROGRAMMING KEYS

DIN rail controller

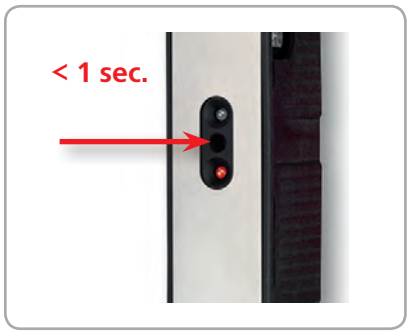
Integrated radio receiver

Radio receiver module

7.2 TUNING IN AND DELETING USER RADIO KEYS

7.2.1 TUNING IN INDIVIDUAL USER RADIO KEYS (MAX. 24)

For safety reasons, all radio keys must be deleted when the device is put into operation for the first time (see page 40). Then, proceed as follows.



1. **Briefly (max. 1 s)** press the programming button on the control unit or radio receiver module with a thin object.

» The green LED (control) or the red LED (radio receiver module) flashes slowly.

2. Now press the master key's middle button **within 20 sec.**

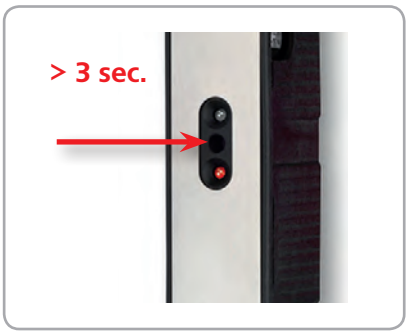
» If the control unit or the radio receiver module accepts the master key, the green LED lights up for 2 seconds and then continues to flash slowly.

3. **Within 20 seconds**, press a key of the radio key to be paired **twice** in succession. The tuning in procedure is aborted if the 20 second time limit is exceeded.

» If the new radio key has been accepted by the control unit or the radio receiver module, the green LED (controller) lights up for 1 second and the red LED (radio receiver module) for 4 seconds.

4. Repeat from step 1, should you wish to tune in another radio key.

7.2.2 DELETING INDIVIDUAL USER RADIO KEYS



1. Press the programming button of the control unit or the radio receiver module **until (longer than 3 sec.) the green LED** (control unit) **or red LED** (radio receiver module) **flashes quickly**.

2. Now, press the middle button of the master key **within 20 seconds**.

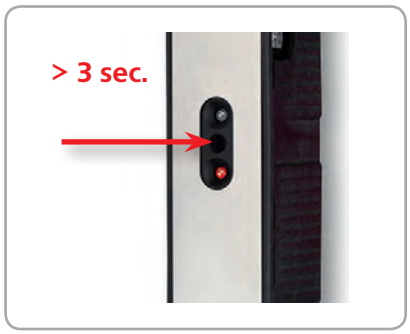
   » If the control unit or the radio receiver module accepts the master key, the green LED initially lights up for 2 seconds and then continues to flash quickly.

3. **Within 20 seconds**, press the corresponding key of the radio key to be deleted. The deleteprocess is aborted if the 20 second time limit is exceeded.

   » If the transmission code has been successfully deleted, the green LED lights up for 1 second and then goes out.

4. Repeat from step 1, should you wish to delete another radio key.

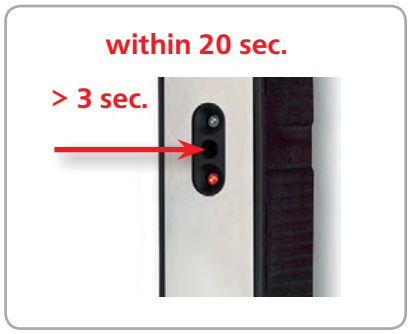
7.2.3 DELETING ALL USER RADIO KEYS



1. Press the programming button of the control unit or the radio receiver module **until (longer than 3 sec.) the green LED** (control unit) **or red LED** (radio receiver module) **flashes quickly**.

2. Now, press the middle button of the master key **within 20 seconds**.

   » If the control unit or the radio receiver module accepts the master key, the green LED initially lights up for 2 seconds and then continues to flash quickly.



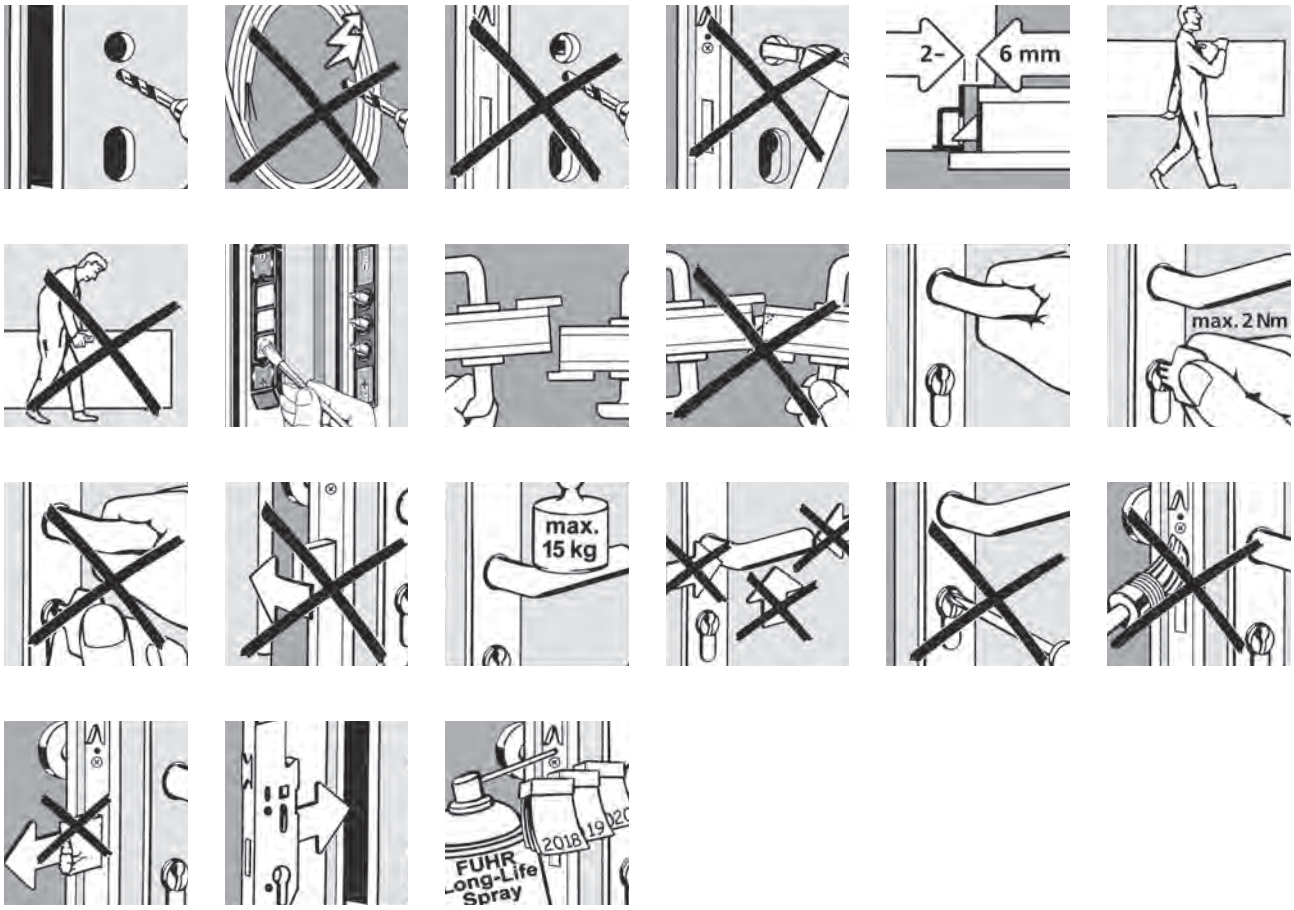
3. Now press the programming button on the control unit again **within 20 seconds** for **longer than 3 seconds**. The delete process is aborted if the 20 second time limit is exceeded.

   » If all transmitter codes (except the master transmitter code) have been successful, the green LED (control unit) lights up for 1 s and the red LED (radio receiver module) lights up for 4 seconds.

Note:
If the master key is not recognised during the tuning-in and delete processes, the respective function is aborted.

8 Maintenance and care

The further points raised here provide supplementary information to the FUHR Product Liability Information for door locks, see www.fuhr.de. The importance of their compliance must be pointed out to builders and users alike. In the event of non-compliance with these imperative instructions, faultless system operation cannot be warranted. The FUHR autotronic lock may only be used in conjunction with the components supplied. Failure to do so invalidates warranty issues.



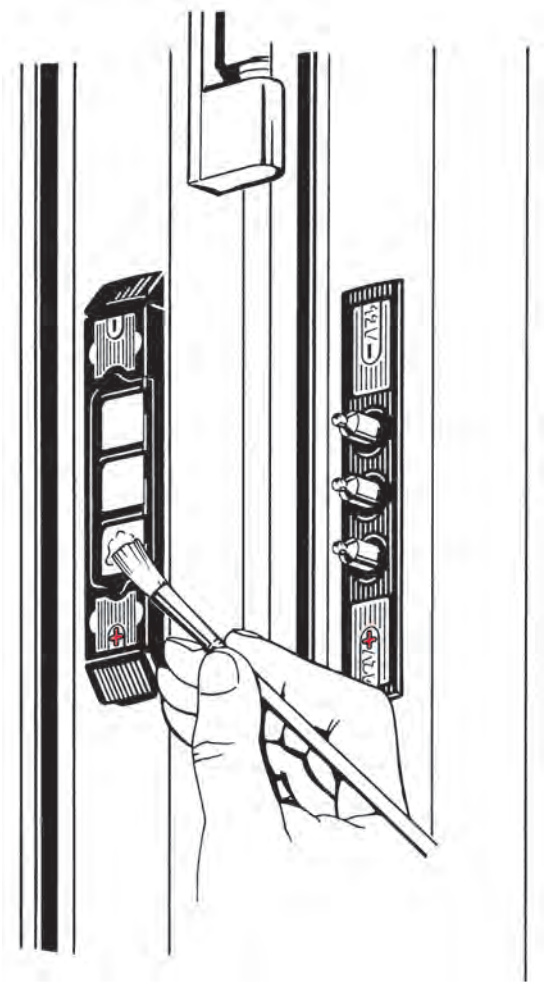
All safety-relevant hardware must be checked at least annually for both wear and tear, and if mechanically secured. Depending on the requirements, fixing screws must be tightened or the damaged or worn parts exchanged for original parts by a specialised company.
Additionally all movable parts and locking points must be lubricated and their function must be checked. Only cleaning and maintenance agents that do not damage the corrosion protection of the hardware components are to be used.
Hardware adjustments as well as replacing hardware components must be carried out by a specialist company.

We recommend ensuring and documenting the maintenance via a maintenance contract with a specialist company.

8.1 CONTACT DEVICE

In order to ensure perfect contact between the contact surfaces and the tappet contacts, we recommend that the surfaces are treated with the provided contact lubricant twice a year.

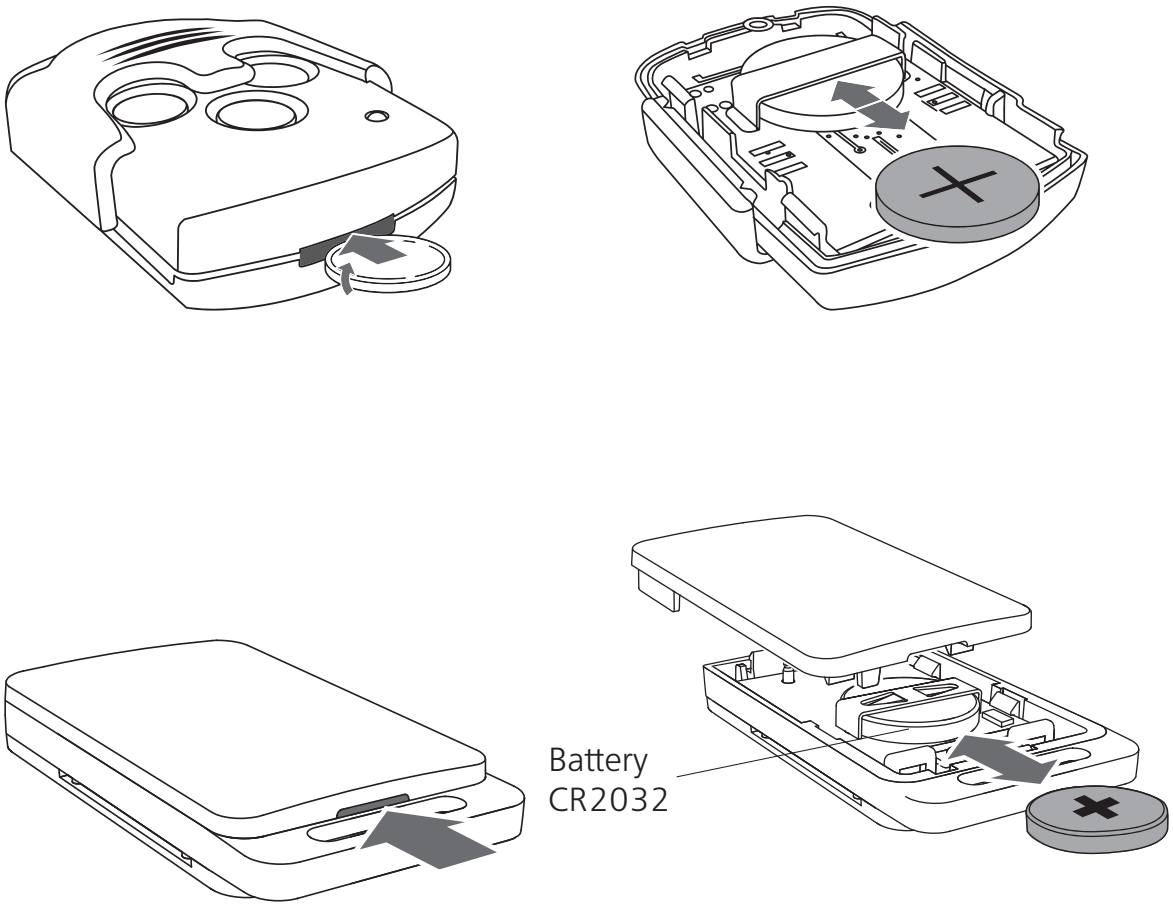
(The contact lubricant can be reordered under part no. NZ80077.)



8.2 BATTERY CHANGE OF THE RADIO KEYS

The radio keys are particularly energy-saving and have a battery indicator light. The battery is sufficient for approx. 50,000 operations. Check the battery indicator light regularly to avoid failure. To change the 3- or 4-channel radio key battery, follow the steps below:

1. Carefully open the radio key housing with a coin (3-channel radio key) or a narrow object, e.g. a slotted screwdriver (4-channel radio key).
2. Push out the battery.
3. New battery (type: CR 2032). The plus symbol must point upwards.
4. Press the radio key housing together again.



9 Troubleshooting

In the event that your FUHR **autotronic** lock should fail to function properly, please refer to the table below to find and rectify the fault.

IMPORTANT! The entire FUHR autotronic lock has been subject to extensive inspectionsby the manu-facturer. If faults are found once installed,the installation should be checked to begin with. The FUHR autotronic lock must never be opened forcefully using the lever-handle! All components have been designed for smooth-running operation. The FUHR autotronic lock has not been designed to straighten out warped or distorted doors! Careful and proper installation and maintenance of the door is a prerequisite for durable, trouble free operation.

9.1 USE WITH THE CONTROL UNIT

The lock does not lock motor-driven.	Green and red LEDs flash alternately.	Deadbolt doesn't run smoothly.	Check the door installation and possibly adjust.
		The door is warped.	Check the door installation and possibly adjust.
		The keeps have been adjusted too tightly.	Readjust/loosen keeps
		The central deadbolt has been protracted.	Retract the central deadbolt.
The lock does not lock or unlock.	Green and red LEDs light up.	Data connection between the electronic drive unit and the control unit is interrupted.	Check if the spring-loaded tappet contacts are correctly poled (note +/-; refer to 4.2.1 and 4.2.5).
			Are the spring-loaded tappet contact pins meeting the flat surface contact when the door is closed over?
		One or more cables are damaged.	Check all cables and plug-and-socket connections.
		Tappet contacts and contact surfaces have no contact.	Lubricate the contact surfaces refer to 8.1).
The lock does not lock.		Magnets in the keeps are out of range.	Readjust the keepers and/or door. Check the clearance.
The lock does not lock motor-driven.	No LED lights up.	Power and data connection between the electronic drive unit and the control unit has short-circuited.	Check if the spring-loaded tappet contacts are correctly poled (note +/-; refer to 4.2.1 and 4.2.5).
			Connect the cable properly to the green multi-functional jack (refer to 6.3).

The door cannot be opened by the radio key or by an external opening impulse.	Red LED lights up.	The radio key is not tuned in.	Tune in the radio key.
		The distance to the receiver is too large.	Hold the radio key closer to the door.
		The batteries in the radio key are too weak.	Hold the radio key closer to the door and replace the battery.
Retracting time is too short for the motorised opening of the latching deadbolts.	Green LED lights up in the closed door leaf setting.	The magnetic contact for the drive unit is missing.	Install the magnetic contact on the frame and/or insert into the one-piece keep.
Door was opened.	Green and red LEDs light up	This is not a fault. A signal is being transmitted to indicate that the door has been open for more than 20 seconds.	Close the door. The lock will lock automatically.
The latch remains retracted.		The connecting rods are blocked by faceplate screws.	Insert the screws perpendicular to the faceplate.
		External control signal is applied to terminals 9-10 for too long.	Reduce the impulse duration to ⩽1 second.

9.2 USE WITH THE RADIO RECEIVER MODULE

The following LED signals can only be checked after connecting the 12 V DC power supply.

LED is lit continuously	No master key has been paired yet. **Note:** The first station you pair is the future master station!
LED lights up for 2 sec.	A previously paired transmission signal has been received, the lock is unlocked by motor.
LED lights up for 0.5 sec.	A still unpaired transmission signal was received, the lock does not unlock.
LED does not light at all.	In the non-actuated basic position, the LED does not light up because no transmission signal is received. However, if the LED does not light up despite the transmission of an opening signal, the radio receiver or the motor lock has not yet been connected to the operating voltage of 12 V DC or the cables on the motor plug have been connected incorrectly.

10 Technical data

10.1 MASTER RADIO KEY

The radio keys conform to the R&TTE guideline 1999/5/EG

Coding:	Not necessary as the transmission code will be tuned in
Channel:	868.3 MHz
Channels:	3
Modulation:	FSK (frequency shift keying)
Security:	Rolling code
Power supply:	1 x 3 V battery, CR 2032
Operating control:	Light emitting diode (LED)
Temperature range:	-10 °C to +50 °C
Dimensions:	53 x 36 x 15 mm
Weight:	Approx. 20 g. (including battery)

10.2 4-CHANNEL RADIO KEY

The radio keys conform to the R&TTE guideline 1999/5/EG

Channel:	868.3 MHz
Modulation:	FSK (frequency shift keying)
Security:	Rolling code
Channels:	4
Power supply:	1 x 3 V battery, CR 2032
Operating control:	Red light emitting diode (LED)
Temperature range:	-10°C to +50°C
Dimensions:	61.5 x 37 x 10.5 mm
Weight:	Approx. 11 g

10.3 FUHR autotronic CONTROL UNIT WITH RADIO RECEIVER

Coding:	Not necessary as the transmission code will be tuned in
Channel:	868.3 MHz
Modulation:	FSK (frequency shift keying)
Aerial:	On board
Power supply:	12 V DC
Operating control:	2 light emitting diodes (LEDs)
Temperature range:	-10 °C to +50 °C
Dimensions:	120 x 45 x 25 mm
Weight:	Approx. 75 g. (incl. cable and casing)
IP rating:	IP 20
Alarm output:	Max. contact load capacity 125 V AC/1 A/62 VA

10.4 RADIO RECEIVER

Channel:	868.3 MHz
Modulation:	FSK (frequency shift keying)
Sicherheit:	Rolling code with master transmission principle
Aerial:	On board
Power supply:	12 V DC
Current consumption:	15 mA
Operating control:	Red light emitting diode (LED)
Temperature range:	-10°C to +50°C
Dimensions:	43 x 40 x 15 mm
Connection cable:	3-core, approx. 320 mm long
Weight:	Approx. 50 g
IP rating:	IP 20
Switching impulse:	Potential-free

10.5 FUHR autotronic DRIVE UNIT

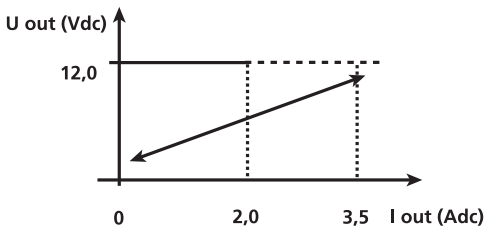
Dimension:	50 x 206 x 15.5 mm
Weight:	Approx. 500 g. (only electrical locking unit)
Power supply:	12 V DC
Signalling:	1 piezo buzzer
Temperature range:	-10 °C to +50 °C
Relay contact load capacity:	60 V DC/1 A/30 W

10.6 FUHR autotronic SWITCHING POWER SUPPLY UNIT (INSTALLATION IN THE DOOR FRAME)

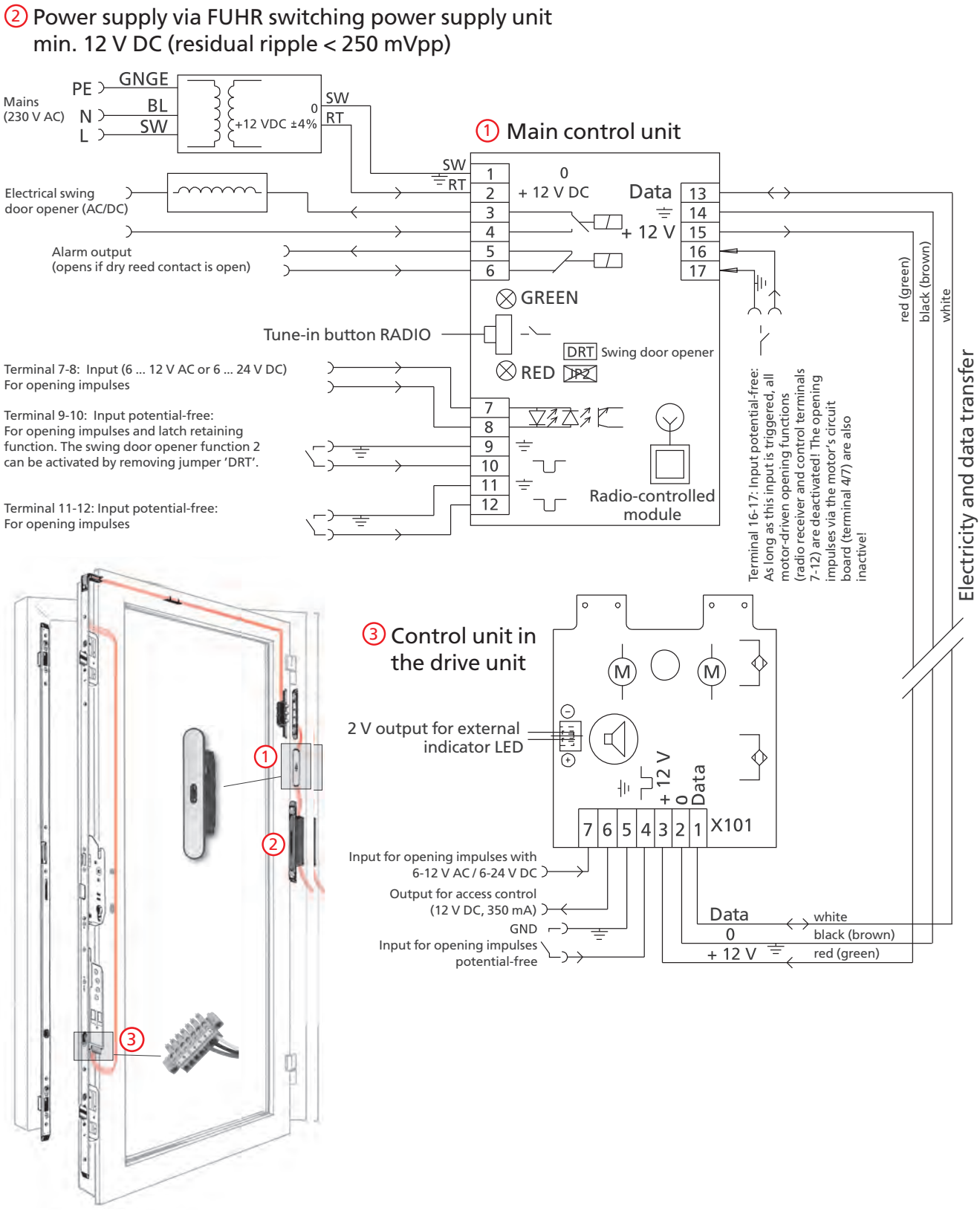
Type: Primary switching controller (single phase, primary clocked built-in power supply) Impulse load capacity, short circuit protected, open-circuit proof, high efficiency, thermal overload protection

Tested in accordance with:	EN 60950
EMV:	EN 50081-2 (emitted interference)
	EN 61000-6-2 (interference resistance)
Test voltage:	4.2 KV
Type of construction:	Cable cast in the contact
IP rating:	IP 20 with plug (IP 53 without plug)
Protection grade:	Prepared for protection grade I devices and systems
Ambient temperature:	-20 °C to +60 °C (0 °C to 40 °C without derating)
Relative humidity:	5 to 80 %
Cooling method:	Self-cooling by means of natural convection
Storage temperature:	-25 °C to +85 °C
Input voltage range:	230 V AC input (180 to 264 V input voltage range)
Channel:	50 to 60 Hz
Input current:	Type 0.7 A at 230 V AC
Switch-on current:	<15 Ap
Mains power failure bridging:	>20 ms at 230 V AC nominal voltage
Overvoltage protection:	Yes
Connections:	3 m cable with 3 x 0.75 mm^2
Output voltage:	12 V DC stabilised 2 % (SELV)
Output current:	2.0 A 100 % ED
	3.5 A at 5 % ED
Ripple:	<100 m Vpp (at 20 MHz bandwidth)
Control deviation:	Max. 2 %
Current limiting:	Refer to the characteristic line in the diagram
Efficiency:	Type 79 %
Connections:	300 mm x 0.75 mm^2
Dimension:	230 x 25 (29) x 35 mm
Weight:	Approx. 350 g. (including cable)

U/I characteristic line:



11 Wiring diagram



12 Optional accessories

Further accessories you will find on www.fuhr.de.

12.1 Radio fingerprint scanner

Biometric system for convenient, keyless access control. With 2 channel technology, opening impulse via rolling code process. With flat stainless steel cover.

Item no. NB870N

12.2 Radio transponder reader

For non-contact code trans-mission of transponders to the control unit. With 2 channel technology, opening impulse via rolling code process. With flat stainless steel cover.

Item no. NB693N

Additional user transponder
Item no. NZ80104

12.3 Radio keypad

For a code transmission by entering a numeric combination. With 2-channel technology and an additional radio gong channel. Opening impulse via rolling-code process. With flat stainless steel cover.

Item no. NB702N

12.4 Comfort access system SmartTouch

Active transponder system offering keyless door opening. The set consists of receiver module, sensor and master transponder.

Item no. NB506NR

Also available as KeylessGo stainless steel door handle. Please refer to our catalogue for item number.

12.5 SmartConnect easy

Convenient door opening and monitoring via smartphone. Intelligent access control system via WLAN. Controls FUHR motor locks, garage doors, electric door openers, roller shutters, lighting and much more.

Item no. NB821
Item no. NB820 (Comfortset)

12.6 Radio receiver modul

Pluggable onto the motor drive, compatible with all FUHR radio control moduls. A separate control is not necessary. Connects directly to the motor drive socket. 2-wire technology between mains adapter and motor drive is sufficient. 25 transmitters programmable. For motor drives with plug-in device. With master radio key.

Item no. NBFP490

12.7 3-channel radio key

With turquoise buttons.

Item no. NZ80062

12.8 4-channel radio key

Schwarz, mit 4 weißen Tasten.

Item no. NZ80182F

12.9 4-channel radio key with wall bracket

4-channel radio key for convenient door opening from the inside. Flexible wall positioning due to high transmission range. Each of the 4 keys can be assigned individually.

Item no. NZ80293

12.10 Buffer module

In the event of a power failure, the 12 V DC supply is used once to move the motorised lock to a defined limit position.

Frame-side installation
Item no. NZP0607

Top hat rail installation
Item no. NZP0632F

12.11 Power socket radio receiver

Designed for use with two-pin earthed/grounded plug-sockets. For triggering existing electrical drive units via radio key, e.g. garage doors.

Item no. NZ80088

12.12 Plug socket radio gong

Suitable for Schuko electric plug sockets. Receives the signal emitted by radio keypad or radio wall-mounted switch. Also applicable for doors in nursery schools.

Item no. NZ80122

12.13 Built-in transmitter for intercom systems

For installation in intercom systems. Sends a signal to open the door when powered with a voltage between 5-24 V AC or 6-32 V DC. With pre-assembled connection cable.

Item no. NZ80123

12.14 Universal adapter

Optional extra to connect to existing control units (e.g. from garage door drive units). External power supply necessary (12-24 V AC/DC).

Item no. NZ80023

12.15 Kontroll-LED für die Türaußenseite

Optional einsetzbar für die optische Anzeige der Verriegelung.

Item no. NZ80067

12.16 Cover for the control unit with sliding switch and connection cable

Enables the manual activation of the permanent unlocking, connection to terminals 9 + 10. Stainless steel.

Item no. NZSTZ0459

12.17 Contact grease

For contact areas to guarantee connection between the contact surfaces and tappet contacts.

Item no. NZ80077

Certificate of constancy of performance for electromechanical multipoint locking systems

1309 - CPR - 0274	2015
EN 14846:2008	3 - X - 8 - C - 0 - M - 3/4 - 1 - 3

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