

## 9 Technical data

### 9.1 FUHR multitronic SET

#### Power consumption

for standby operation including the 12 V DC mains adapter:	Approx. 65 mA
during the closing movement:	Approx. 450 mA
during the opening movement:	Approx. 400 mA
while the latch retracts for approx. 5 seconds:	Approx. 250 mA
Start-up current of motor:	Approx. 1 A
Brief current peak while blocked:	Approx. 1.7 A
Temperature range:	-10 °C to +50 °C
Door leaf weight:	Max. 200 kg

### 9.2 FUHR multitronic RADIO KEY (REMOTE CONTROL)

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)
Range:	Up to approx. 50 m. depending on the installation circumstances
Power supply:	1 x 3 V battery, CR 2032
Operating control:	Light emitting diode (LED)
Temperature range:	-10 °C to +50 °C
Dimension:	53 x 36 x 15 mm
Weight:	Approx. 20 g. (including battery)
Delivery scope:	1 master radio key with red buttons and 2 radio keys with turquoise buttons (all supplied with battery)

### 9.3 FUHR multitronic 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:	Cable aerial approx. 110 mm
Power supply:	12 V DC
Operating control:	2 light emitting diodes (LEDs)
Temperature range:	-10 °C to +50 °C
Dimension:	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

### 9.4 FUHR multitronic DRIVE UNIT

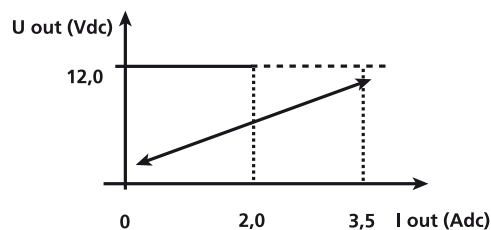
Dimension:	50 x 206 x 15.5 mm
Weight:	Approx. 500 g. (only electrical locking unit)
Power supply:	12 V DC via power and data transfer cable
Signalling:	1 piezo buzzer
Temperature range:	-10 °C to +50 °C
Relay contact load capacity:	60 V DC/1 A/30 W

## 9.5 FUHR multitronic SWITCHING POWER SUPPLY UNIT

Model: 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
Oversvoltage protection:	Yes
Connections:	3 m cable with 3 x 0.75 mm <sup>2</sup>
Output voltage:	12 V DC stabilised 2% (SELV)
Output current:	2.0 A 100 % ED/Duty Cycle 3.5 A at 5 % ED/Duty Cycle
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 <sup>2</sup>
Dimension:	230 x 25 (29) x 35 mm
Weight:	Approx. 350 g. (including cable)

U/I characteristic line:

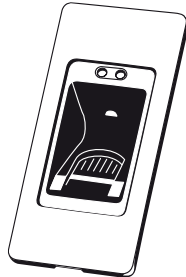


## 10 Optional accessories

### 10.1 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. NB649N

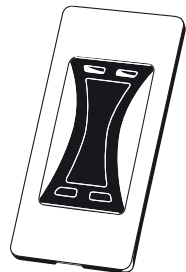


### 10.2 Radio transponder reader

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

Item no. NB693N

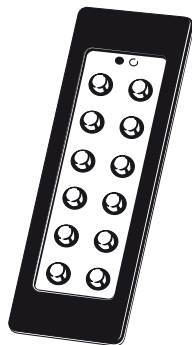
Additional user transponder  
Item no. NZ80104



### 10.3 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.

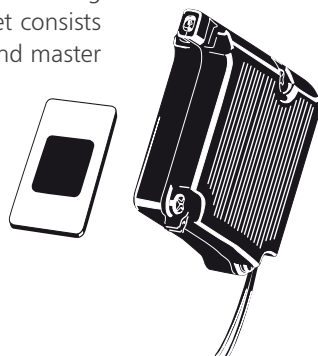
Item no. NB702N



### 10.4 Comfort access system SmartTouch

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

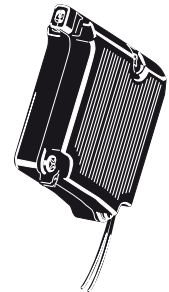
Item no. NB506N



### 10.5 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.

Item no. NBFP490



### 10.6 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



### 10.7 Radio keys

Additional radio key with turquoise buttons.

Item no. NZ80062



### 10.8 4 channel radio key

Radio key, black, with 4 white buttons.

Part no. NZ80182F



### 10.9 User transponder

Additional user transponder (3 user transponders are included in delivery of transponder reader).

Part no. NZ80104

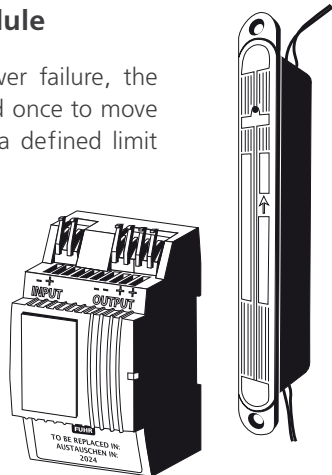


### 10.10 Buffer module

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

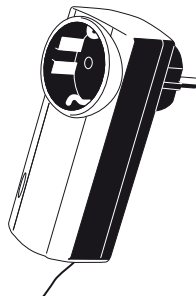
Top hat rail installation  
Item no. NZP0632F



### 10.11 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.

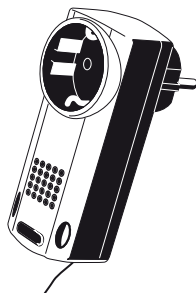
Item no. NZ80088



### 10.12 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



### 10.13 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



### 10.14 Indicator LED for the exterior side of the door

Can be used optionally as a visual indicator of the locking status.

Item no. NZ80067



### 10.15 Cover for the control unit with sliding switch and connection cable

Enables the manual activation of the day latch function (connection to terminals 11 + 12) or daylatch retaining function (connect to terminals 9 + 10).

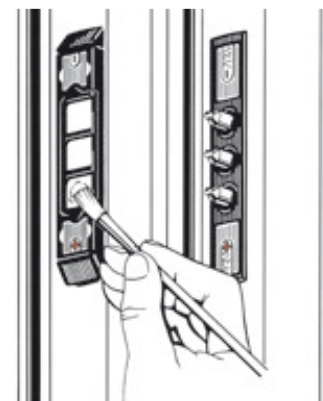
Silver Item no. NZSTZ0265  
Stainless steel Item no. NZSTZ0459



### 10.16 Contact grease

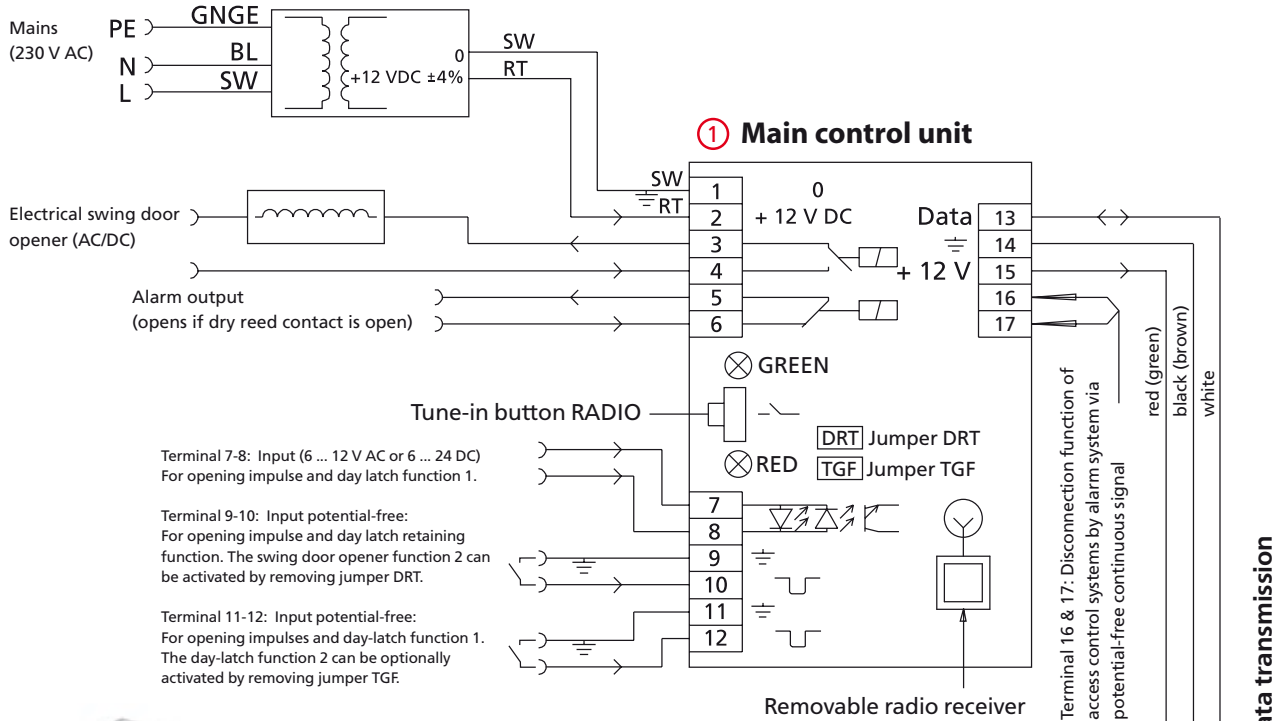
For contact areas to guarantee connection between the contact surfaces and tappet contacts.

Item no. NZ80077



# 11 Wiring diagram

## ② Power supply via FUHR switching power supply unit min. 12 V DC (residual ripple < 250 mVpp)



Electricity and data transmission

## ③ Control unit in the drive unit

