# ekey
## YOUR FINGER. YOUR KEY.

# ekey finger scanners

Solutions for the electrical industry - ekey home | ekey multi

www.ekey.net

2017

# Europe's No. 1 for fingerprint access solutions

More than one million satisfied customers are the best possible recommendation for our products! For many years, both private households and leading companies alike, along with organizations such as fire and rescue services, have been putting their trust in proven ekey finger scanners.

ekey was founded in 2002 and is now Europe's No. 1 for fingerprint access solutions. ekey puts authorization into the customer's hands! Keys, cards, codes, etc. can be lost, forgotten, or stolen. "Your finger is always on hand!" ekey's wide range of products includes finger scanners for doors, gates, alarm systems and time recording.

The international company currently has 80 employees at its 5 locations in Austria, Germany, Liechtenstein/Switzerland, Italy, and Slovenia and exports its products to over 70 countries, with exports making up 73% of its business. ekey's main sales markets include Spain and the USA, in addition to Austria, Germany, Switzerland, Slovenia, and Italy.

## QUALITY

All ekey products undergo a rigorous endurance test before they reach the market. The test involves intensive simulations of blazing heat, biting cold, and high humidity, and every finger scanner is subjected to these conditions, along with all of its components, countless times before reaching the customer.

Our quality formula comprises the highest standards of functionality, reliability, and security, which are refined by means of extensive testing.

Quality-tested products from ekey – you can count on us!

### CERTIFIED QUALITY MADE IN AUSTRIA:

- Extensive production, manufacturing, and functional testing (zero tolerance)
- Testing for environmental and temperature resistance
- Vibration- and shock-tested
- Tested for penetration of water and mechanical parts
- Quality management system in accordance with EN ISO 9001:2008
- CE-compliant

# **Good reasons** for
# ekey finger scanners

## Unique comfort
## with highest security

More than one million satisfied customers in over 70 countries around the world prove that ekey products are quickly becoming widespread among end users and companies. The many benefits of the finger scanner speak for themselves.

**UNIQUE COMFORT**
You can't lock yourself out:
your finger is always at hand!

**HIGHEST SECURITY**
• No lost or stolen keys!
• Maximum protection against fake fingers thanks to liveness detection with RF sensor technology!
• Access rights (e. g. card or key) cannot be transferred!
• 1,000 times more secure than a 4-digit code!

**USER-FRIENDLY**
Easy installation and administration!

**INTELLIGENT SOFTWARE**
The ekey software is learning all the time – it can detect the growth of children's fingers as well as minor injuries and changes to users' habits.

**KNOW WHO IS COMING HOME**
By using the ekey fingerprint access control system, building control systems can now detect which person triggers an action.

**5-YEAR QUALITY GUARANTEE**
for all ekey products!

**ekey**
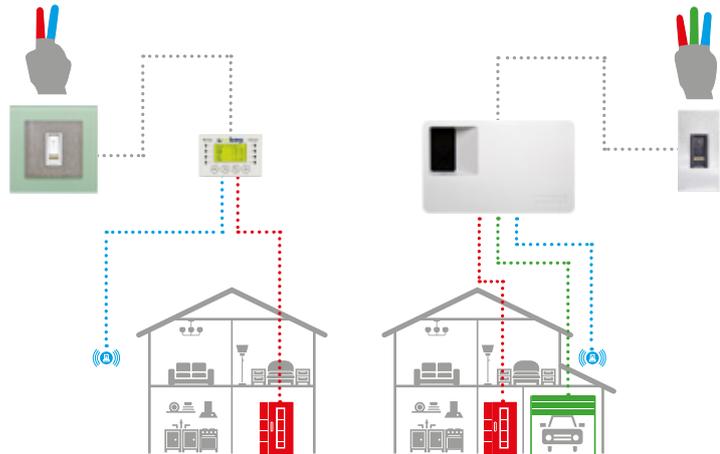**5-YEAR**
QUALITY
GUARANTEE

**ekey media center**
You can find all the information on our products on our website at
www.ekey.net/en/media_center

# Content

## ekey home
### Single-point access solutions.

**Control up to 3 functions
with just one finger scanner*.**

• can store up to 99 fingerprints
• can be used to control from 1 to 3 functions
  (e.g. door, gate and alarm system)
• easy to operate with central user
  administration directly via the control panel
• or by using the ekey home app (ekey finger
  scanner integra Bluetooth)
• optional: Card access (RFID) is possible
  -> can also store up to 99 cards

## ekey multi
### Multi-point access solutions.

**4 finger scanners* are managed by a
single control panel.**

• can store up to 99 fingerprints
• supports up to 4 finger scanners
• can be used to control up to 4 functions
• individually programmable time slots
• access log recording for every finger scanner
• easy to operate with central user
  administration directly via the control panel
• user permissions can be assigned on a perso-
  nalized basis (based on location and time)
• vacation or permanent program
• optional: Card access (RFID) is possible
  -> can also store up to 99 cards
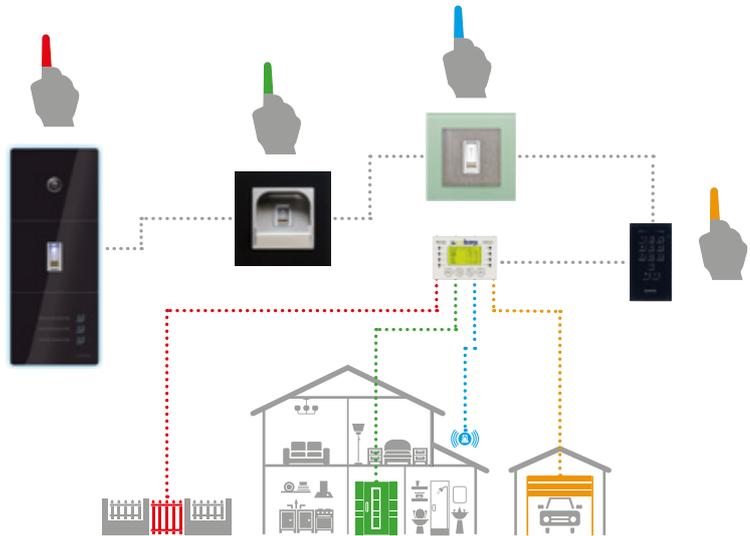
See the **"ekey net"** catalog for
networkable access solutions!

## ekey net
### Network access solutions.

**The networkable access solution for
companies, organizations and discerning
households.**

• each finger scanner* can store up to
  2,000 fingerprints
• supports up to 80 finger scanners
• can be used to control up to 4 functions
• programmable time slots
• access log recording for every finger scanner
• supports cross-site administration
• central administration via PC
• calendar function
• interfaces for establishing external connections
• optional: Card access (RFID) is possible
  -> can also store up to 2,000 cards
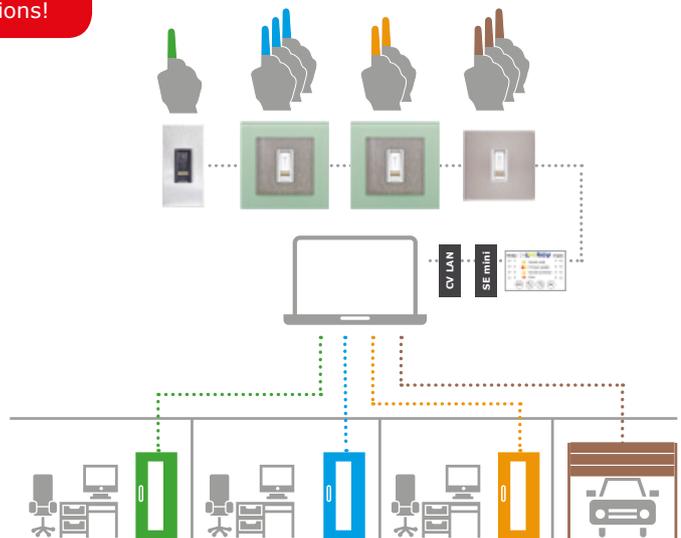
*alternatively: Code pad (keypad) -> can store up to 99 or 2,000 codes

# Planning steps
## for a successful project

**1**

**Select the system that suits the size of the project and meets customer requirements:**
a) single-point access solutions ekey home
a) multi-point access solutions ekey multi

**2**

**Select a suitable finger scanner make or makes and function (Bluetooth/RFID):**
a) Wall-Mounted (WM)
b) Outlet-Mounted E inside a design switch frame or Outlet-Mounted I for mounting inside the door station (OM)
c) integra and integra BT with app (IN)
d) keypad (KP)

Select suitable accessories, if required: weather shield, wall mounting set, mounting frame, etc.

**3**

**Select a suitable control panel based on the following criteria:**
a) WM (wall-mounted) or DRM (DIN-rail mounted) inside the control cabinet
b) Consider the number of functions required: 1, 2, or 3 functions with ekey home and 4 functions with ekey multi

⚠ **ATTENTION:** 1 - 3 functions with different fingers possible on only 1 finger scanner, e.g., index finger on right hand = front door, ring finger on left hand = garage door, ring finger on right hand = alarm system (see the example application in the "Single family house" project on page 7).

**4**

**Select a suitable power supply:**
a) simple wall power supply
b) convenient DIN-rail mounted power supply inside the control cabinet
c) outlet-mounted power supply
d) uninterruptible power supply (UPS)

⚠ **ATTENTION:** A suitable power supply is often included in the scope of delivery for mounting inside door stations. Check the voltage and current needed to control the consumers (door opener, motorized lock).

**5**

**Select a suitable interface, if required:**
a) for connection to home automation systems
b) for connection to third-party systems

**!**

**For door openers and motorized locks, please note:**
a) Although door openers are relatively inexpensive, they do not lock the door (you may not be protected in the event of a break-in).
b) A motorized lock engages automatically (via mechanical or motorized means) and opens electronically (via motorized means). Advise your customers to purchase a motorized lock or an electronic door strike when buying a door!
c) Use our ekey lock upgrade solution for existing doors (no wiring in the door).

# ekey home
## Single-point access solutions.

### The right access solution for my private space.

ekey home is the innovative finger scanner set* for your front door or office door. The key features of the system are the ease with which it is installed and the intuitive user administration. Finger scanners are available in a variety of models to suit different areas of application.

### Short facts:

**Control up to 3 functions with just one finger scanner*.**

- can store up to 99 fingerprints
- can be used to control from 1 to 3 functions (e.g. door, gate and alarm system)
- easy to operate with central user administration directly via the control panel
- or by using the ekey home app (ekey finger scanner integra Bluetooth)
- optional: Card access (RFID) is possible -> can also store up to 99 cards
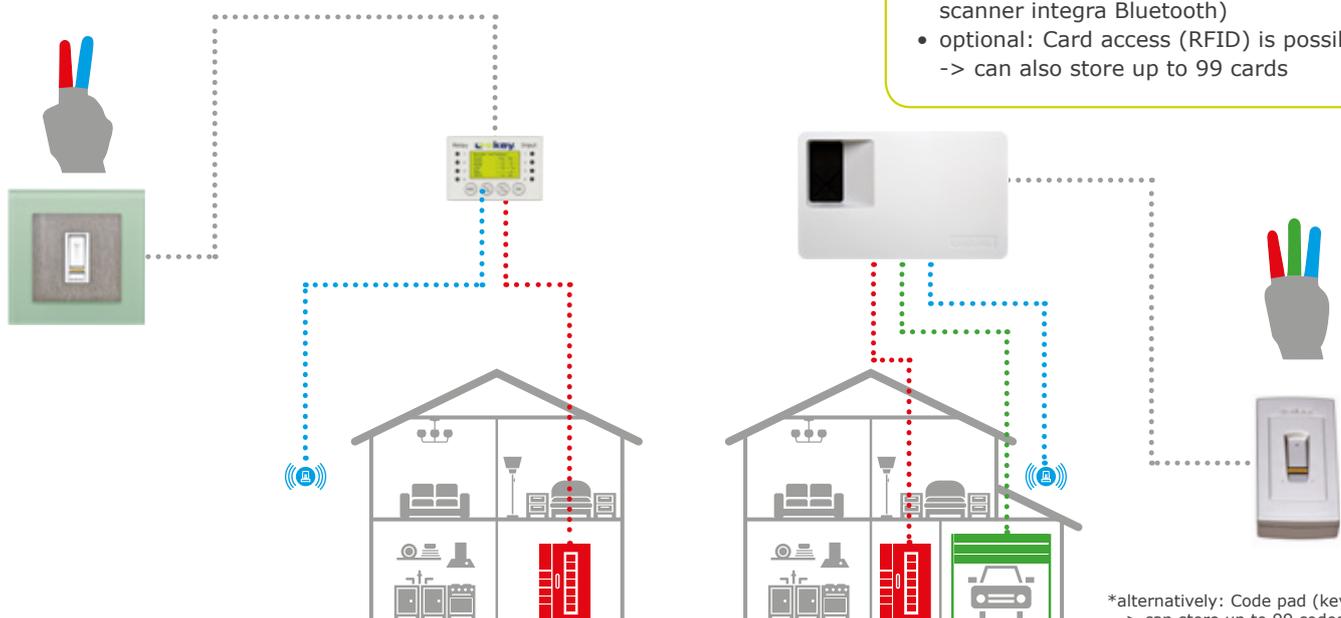
*alternatively: Code pad (keypad) -> can store up to 99 codes

## 👍 Example: Single family house

**Customer requirements:**

Keyless access for the whole family. The customer wants to be able to operate the front door, garage door and alarm system from the finger scanner at the front door with three different fingers.

The index will open the front door with relay 1. The middle finger will open the garage door with relay 2, and the ring finger will activate or deactivate the alarm system with relay 3.

| Mounting frame | Finger scanner | Control panel | Power supply |
|---|---|---|---|

## 👍 ekey operating concepts

It is very important to us that ekey products are always easy and intuitive to use. With this in mind, we have developed a range of operating concepts to suit all sorts of different requirements and applications.

**ekey home app**

The innovative and convenient solution for ekey finger scanner administration. All of the ekey finger scanner access control system functions can be set in a flash via your smartphone or tablet. You can also use the app to unlock your front door. Available for Apple iOS and Google Android.

**ekey classic**

The proven, easy-to-use system. All settings and access rights can be administered conveniently via the control panel.

**ekey administrator finger**

The affordable entry-level solution. Access rights can be saved directly on the finger scanner with defined administrator fingers.

# ekey finger scanner **Wall-Mounted**

For wall-mounting and easy retrofitting.

## Finger scanner

| Part no. | Description |
|----------|-------------|
| **101 405** | **ekey home FS WM 2.0,** steel-gray |
| **101 667** | **ekey home FS WM 2.0 RFID incl. 2 RFID cards,** steel-gray |

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions WxHxD:
  45x81.6x60.3 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- IP code: IP44
- Recommended mounting height:
  135 cm (lower edge)
- Display: 3 multicolor LEDs
- Tamper-proof, data retained in the event of a power failure, bus termination can be deactivated on the device

| Part no. | Description |
|----------|-------------|
| **101 690** | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| **101 692** | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| **101 691** | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory

| Part no. | Description |
|----------|-------------|
| **101 406** | **ekey weather shield WM 2.0 ST,** brushed stainless steel |

- Dimensions WxHxD:
  110x170x95 mm
- Recommended mounting height:
  130 cm (lower edge)

- Scope of delivery: Weather shield ST, 4 chipboard screws 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

| Part no. | Description |
|----------|-------------|
| **101 418** | **ekey cover WM 2.0 ST,** brushed stainless steel |

- Dimensions WxHxD:
  89x87x103 mm
- Recommended mounting height:
  110 cm (lower edge)

- Scope of delivery: Stainless steel housing, 4 chipboard screws, 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

## Control panel

### DIN-rail mounted control panel

| Part no. | Description |
|---|---|
| 101 162 | **ekey home CP DRM 1,** 1 relay |
| 101 312 | **ekey home CP DRM 2,** 2 relays |

- Dimensions WxHxD:
  70x86x54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Max. relay voltage, max. relay current:
  42 VAC/DC; 2 A
- Operation: 4 buttons

- Inputs (door opener):
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Display: LCD 106x56 pixels,
  7 lines/21 characters + 2x4 status LEDs
- RS-485 termination: switchable
- Enroll users, delete individual users, set relay
  times (0-99 s), change security code, adjust
  LED brightness, reset, test mode, convenient
  backlit text display, configurable inputs
- KNX compatible

### Wall-mounted control panel

| Part no. | Description |
|---|---|
| 100 478 | **ekey home CP WM 1,** 1 relay |
| 100 479 | **ekey home CP WM 3,** 3 relays |

- Dimensions WxHxD:
  180x110x41 mm
- Power consumption: approx. 1 W
- Supply voltage: 9-12 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP WM 1, 1x potential-free
  CP WM 3, 3x potential-free

- Max. relay voltage, max. relay current:
  42 VAC/DC; 5 A
- Inputs (door opener): -
- Display: 2x7-segment LED
- Operation: 4 buttons
- RS-485 termination: fixed
- Enroll users, delete individual users, set relay
  times (0-99 s), change security code, reset

## Power supply

| Part no. | Description |
|---|---|
| 101 700 | **ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply |

- Dimensions WxHxD:
  52x78.5x45 mm
- Supply voltage: 230 VAC

- Output voltage, output current:
  12 VDC; 800 mA
- Cable length: 3.5 m

| Part no. | Description |
|---|---|
| 100 204 | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply |

- Dimensions øxH:
  54x31 mm
- Supply voltage: 230 VAC

- Output voltage, output current: 12 VDC; 2 A
- Temperature range: -5°C to 50°C

| Part no. | Description |
|---|---|
| 100 205 | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted |

- Dimensions WxHxD:
  52.5x93x68.5 mm (3 HP)
- Supply voltage: 230 VAC

- Output voltage, output current: 12 VDC; 2 A
- Temperature range: -10°C to 45°C
- IP code: IP20

| Part no. | Description |
|---|---|
| 100 891 | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* |

- Dimensions WxHxD:
  70x93x66.5 mm (4 HP)
- Supply voltage: 230 VAC

- Output voltage, output current: 24 VDC; 2 A
- Temperature range: -5°C to 50°C

**!** **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description |
|---|---|
| **101 559** | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted |

<table>
<tr><td>
• Dimensions WxHxD:<br>UPS: 140x93x66.5 mm (8 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A
</td><td>
• Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock.
</td></tr>
</table>

| Part no. | Description |
|---|---|
| **101 593** | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted* |

<table>
<tr><td>
• Dimensions WxHxD:<br>UPS: 210x93x66.5 mm (12 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A
</td><td>
• Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock.
</td></tr>
</table>

⚠ **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## Complete set

### Complete set for DIN rail mounting

| Part no. | Description |
|---|---|
| **101 409** | **ekey home set WM 2.0 DRM 1,** with DIN-rail mounted control panel, 1 relay |

| | |
|---|---|
| **The complete set includes:** | • ekey home FS WM 2.0<br>• ekey home CP DRM 1<br>• ekey PS DRM |

### Complete set for wall mounting

| Part no. | Description |
|---|---|
| **101 407** | **ekey home set WM 2.0 WM 1,** with wall-mounted control panel, 1 relay |
| **101 408** | **ekey home set WM 2.0 WM 3,** with wall-mounted control panel, 3 relays |

| | |
|---|---|
| **The complete set includes:** | • ekey home FS WM 2.0<br>• ekey home CP WM<br>• ekey PS WPS |

## Interface

# Interface for connecting the equipment to home automation systems

| Part no. | Description | |
|---|---|---|
| **100 460** | **ekey home CV LAN RS-485** | |
| | RS-485/LAN interface for connection to external systems (e.g. KNX) with UDP protocol | Scope of delivery: LAN converter, software |

**"home" protocol**

| 1 | 0046 | 4 | 80004426110003 | 1 | 2 |
|---|---|---|---|---|---|
| Packet type | User ID | Finger ID | Finger scanner serial number | Action | Relay output |

| Part no. | Description | |
|---|---|---|
| **101 719** | **ekey home CV KNX RS-485** | |
| | The ekey KNX converter is used to trigger functions in home automation systems based on the KNX home automation bus.<br><br>• Makeup: DIN-rail mounted<br>• Dimensions W x H x D: 18 x 98 x 61 mm (1 HP)<br>• Supply voltage: 12–24 VDC<br>• Mounting type: DIN rail | • RS-485 cable length: 10 m<br>• Number of RS-485 interfaces: 1<br>• RS-485 protocol: ekey home<br>• 12 events (10 free, 1 unrecognized, 1 tampering)<br>• in addition to the relays of the control panel<br>• specific application for ETS (ETS 5)<br>• functions: switching, sending values, activating scenarios<br>• assigning an event to a finger |

# Interface for connecting the equipment to alarm systems or other access control systems

| Part no. | Description | |
|---|---|---|
| **101 582** | **ekey home CV WIEG RS-485** | |
| | The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. The product can be configured with the CV USB RS-485 (100 433). | Scope of delivery: Wiegand converter, software |

# ekey finger scanner **Outlet-Mounted**

For integration in door stations of well-known manufacturers.

## Finger scanner OM I

| Part no. | Description |
|---|---|
| 101 310 | **ekey home FS OM I,** for integration in door stations |
| 101 671 | **ekey home FS OM I RFID incl. 2 RFID cards,** for integration in door stations |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD: 50.4x50.4x30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- Recommended mounting height: 155 cm Be sure that the device remains easy to access and operate
- Display: 3 multicolor LEDs
- Tamper-proof, data retained in the event of a power failure, bus termination can be deactivated on the device, compatible with many door station build-in modules, letterboxes, wall mounting sets, etc.

| | | |
|---|---|---|
| 101 690 | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| 101 692 | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| 101 691 | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory ❗ **Important:** availability of build-in modules varying from country to country!

| Part no. | Description |
|---|---|
| | **Door station build-in modules GIRA** |
| 101 380 | **ekey Modul GIRA TX44 AL,** aluminum color |
| 101 381 | **ekey Modul GIRA TX44 AN,** anthracite |
| 101 382 | **ekey Modul GIRA TX44 PW,** pure white |
| | **Door station build-in modules SIEDLE** |
| 101 376 | **ekey Modul SIEDLE Vario DG,** micaceous dark gray |
| 101 378 | **ekey Modul SIEDLE Vario W,** white |
| 101 379 | **ekey Modul SIEDLE Vario SM,** silver metallic |
| 101 858 | **ekey Modul SIEDLE Vario AG,** anthracite gray |
| | **Door station build-in modules Elvox** |
| 101 552 | **ekey Modul Elvox 8000 series GR,** gray |
| | **Door station build-in modules bticino** |
| 101 533 | **ekey Modul bticino Sfera AME,** Allmetal |
| 101 534 | **ekey Modul bticino Sfera AWH,** Allwhite |
| 101 535 | **ekey Modul bticino Sfera AST,** Allstreet |
| 101 536 | **ekey Modul bticino Sfera ROB,** Robur |
| | **Door station build-in modules Comelit** |
| 101 473 | **ekey Modul Comelit ikall BL,** black, ekey finger scanner OM I built-in |
| 101 629 | **ekey Modul Comelit metal,** metallic, ekey finger scanner OM I built-in |

❗ **Attention:** RFID function is not available behind stainless steel or aluminum!

**Well-known manufacturers build ekey finger scanners into door stations and letterboxes:**

bticino  Telecom Behnke  urmet  Comelit  ELCOM.  FERMAX  ELVOX  KOCH  MOBOTIX

SYSTEMS EPPIG  SiBLiK Wir schalten schneller.  SIEDLE  RiTTO  STR ELEKTRONIK  Stentofon Baudisch  GIRA  RENZ  TCS  wantec

❗ Upgrading a door station? Build-in module (parts shown in red) is available from ekey or the door station manufacturer.

## Finger scanner OM E

| Part no. | Description |
|---|---|
| 101 148 | **ekey home FS OM E,** for integration in ekey ModulS Siedle Vario |
| 101 673 | **ekey home FS OM E RFID incl. 2 RFID cards,** for integration in ekey ModulS Siedle Vario |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD: 50.4x50.4x30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- Recommended mounting height: 155 cm Be sure that the device remains easy to access and operate
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device

| Part no. | Description |
|---|---|
| 101 690 | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| 101 692 | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| 101 691 | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory ❗ **Attention:** This accessory is only available in combination with ekey FS OM E (101 148 and 101 673)!

| Part no. | Description |
|---|---|
| | **Build-in modules for door stations Siedle Vario flush mounted*** |
| 101 892 | **ekey ModulS Siedle Vario DG,** micaceous dark gray |
| 101 893 | **ekey ModulS Siedle Vario W,** white |
| 101 894 | **ekey ModulS Siedle Vario SM,** silver metallic |
| 101 895 | **ekey ModulS Siedle Vario AG,** anthracite gray |
| 101 897 | **ekey ModulS Siedle Vario DG LED,** micaceous dark gray with alarm LEDs |
| 101 898 | **ekey ModulS Siedle Vario W LED,** white with alarm LEDs |
| 101 899 | **ekey ModulS Siedle Vario SM LED,** silver metallic with alarm LEDs |
| 101 900 | **ekey ModulS Siedle Vario AG LED,** anthracite gray with alarm LEDs |

❗ ***Important:** Not compatible with the Siedle Vario surface mounted model.

## Control panel

### DIN-rail mounted control panel

| Part no. | Description |
|---|---|
| 101 162 | **ekey home CP DRM 1,** 1 relay |
| 101 312 | **ekey home CP DRM 2,** 2 relays |

- Dimensions WxHxD:
  70x86x54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Max. relay voltage, max. relay current:
  42 VAC/DC; 2 A
- Operation: 4 buttons

- Inputs (door opener):
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Display: LCD 106x56 pixels,
  7 lines/21 characters + 2x4 status LEDs
- RS-485 termination: switchable
- Enroll users, delete individual users, set relay times (0-99 s), change security code, adjust LED brightness, reset, test mode, convenient backlit text display, configurable inputs
- KNX compatible

### Wall-mounted control panel

| Part no. | Description |
|---|---|
| 100 478 | **ekey home CP WM 1,** 1 relay |
| 100 479 | **ekey home CP WM 3,** 3 relays |

- Dimensions WxHxD:
  180x110x41 mm
- Power consumption: approx. 1 W
- Supply voltage: 9-12 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP WM 1, 1x potential-free
  CP WM 3, 3x potential-free

- Max. relay voltage, max. relay current:
  42 VAC/DC; 5 A
- Inputs (door opener): -
- Display: 2x7-segment LED
- Operation: 4 buttons
- RS-485 termination: fixed
- Enroll users, delete individual users, set relay times (0-99 s), change security code, reset

# Power supply

| Part no. | Description |
|---|---|
| **101 700** | **ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply |
| | • Dimensions WxHxD: 52x78.5x45 mm<br>• Supply voltage: 230 VAC<br>• Output voltage, output current: 12 VDC; 800 mA<br>• Cable length: 3.5 m |
| **100 204** | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply |
| | • Dimensions øxH: 54x31 mm<br>• Supply voltage: 230 VAC<br>• Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -5°C to 50°C |
| **100 205** | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted |
| | • Dimensions WxHxD: 52.5x93x68.5 mm (3 HP)<br>• Supply voltage: 230 VAC<br>• Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 45°C<br>• IP code: IP20 |
| **100 891** | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* |
| | • Dimensions WxHxD: 70x93x66.5 mm (4 HP)<br>• Supply voltage: 230 VAC<br>• Output voltage, output current: 24 VDC; 2 A<br>• Temperature range: -5°C to 50°C |

⚠ **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

# UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description |
|---|---|
| **101 559** | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted |
| | • Dimensions WxHxD:<br>  UPS: 140x93x66.5 mm (8 HP)<br>  Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |
| **101 593** | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted* |
| | • Dimensions WxHxD:<br>  UPS: 210x93x66.5 mm (12 HP)<br>  Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A<br>• Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |

⚠ **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## Complete set

| Part no. | Description |
|----------|-------------|
| 101 426 | **ekey home set OM I DRM 1,** with DIN-rail mounted control panel, 1 relay |
| 101 660 | **ekey home set OM I DRM 2,** with DIN-rail mounted control panel, 2 relays |
| | **The complete set includes:** • ekey home FS OM I <br>• ekey home CP DRM - number of relays determined by version |

**! Attention:** A suitable power supply is often included in the scope of delivery for mounting inside door stations. Check the voltage and current needed to control the consumers (door opener, motorized lock).

## Interface

### Interface for connecting the equipment to home automation systems

| Part no. | Description |
|----------|-------------|
| 100 460 | **ekey home CV LAN RS-485** |
| | RS-485/LAN interface for connection to external systems (e.g. KNX) with UDP protocol | Scope of delivery: LAN converter, software |

**"home" protocol**

| 1 | 0046 | 4 | 80004426110003 | 1 | 2 |
|---|------|---|----------------|---|---|
| Packet type | User ID | Finger ID | Finger scanner serial number | Action | Relay output |

| Part no. | Description |
|----------|-------------|
| 101 719 | **ekey home CV KNX RS-485** |

The ekey KNX converter is used to trigger functions in home automation systems based on the KNX home automation bus.

- Makeup: DIN-rail mounted
- Dimensions WxHxD: 18x98x61 mm (1 HP)
- Supply voltage: 12–24 VDC
- Mounting type: DIN rail
- assigning an event to a finger

- RS-485 cable length: 10 m
- Number of RS-485 interfaces: 1
- RS-485 protocol: ekey home
- 12 events (10 free, 1 unrecognized, 1 tampering)
- in addition to the relays of the control panel
- specific application for ETS (ETS 5)
- functions: switching, sending values, activating scenarios

### Interface for connecting the equipment to alarm systems or other access control systems

| Part no. | Description |
|----------|-------------|
| 101 582 | **ekey home CV WIEG RS-485** |
| | The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. The product can be configured with the CV USB RS-485 (100 433). | Scope of delivery: Wiegand converter, software |

# ekey finger scanner **Outlet-Mounted E**

## For integration into switch frames of well-known manufacturers.

### Finger scanner

| Part no. | Description |
|---|---|
| **101 148** | **ekey home FS OM E,** for in-wall mounting in outlet |
| **101 673** | **ekey home FS OM E RFID incl. 2 RFID cards,** for in-wall mounting in outlet |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD:
  50.4x50.4x30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C
- IP code: IP44
  (depending on the switch range)

- Recommended mounting height: 155 cm
  Be sure that the device remains easy to
  access and operate
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event
  of a power failure, bus termination can be
  deactivated on the device, compatible with
  many switch ranges with 50 x 50 mm internal
  dimension.
- Incl. bezel, mounting bracket, spacers, sealing
  flange

| | | |
|---|---|---|
| **101 690** | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| **101 692** | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| **101 691** | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory - Bezel

| 101 166 | **ekey bezel FS OM PW 50x50,** plastic pure white |
| 101 167 | **ekey bezel FS OM AL 50x50,** plastic aluminium color |
| 101 168 | **ekey bezel FS OM AN 50x50,** plastic anthracite |

BUSCH-JAEGER

**merten**
by **Schneider** Electric

**B.**
**Berker**
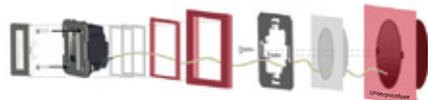
**JUNG**

**GIRA**

**:hager**

! **Parts shown in red** must be purchased from the switch manufacturer.

! The ekey FS OM E has been designed and built for in-wall mounting in electric gang boxes in accordance with DIN 49073.

Cavity wall box

60 mm

Electric gang box for plastering

## Accessory - Frame

| Part no. | Description | |
|---|---|---|
| **101 372** | **ekey frame FS OM ST,** brushed stainless steel* | |
| | • Dimensions WxHxD: 85x85x7.2 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet. |
| **101 702** | **ekey frame FS OM GL WHI,** glass white | |
| **101 703** | **ekey frame FS OM GL BL,** glass black | |
| **101 704** | **ekey frame FS OM GL MI,** glass mint | |
| | • Dimensions WxHxD: 100x100x7.5 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet. |
| **101 705** | **ekey frame FS OM503 GL WHI,** glass white | |
| **101 706** | **ekey frame FS OM503 GL BL,** glass black | |
| **101 707** | **ekey frame FS OM503 GL MI,** glass mint | |
| | • Dimensions WxHxD: 125x100x7.5 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the 503 electrical outlet. |

! ***Attention:*** RFID function is not possible with ekey frame FS OM ST (101 372)!

## Accessory - Mounting frame

| Part no. | Description | |
|---|---|---|
| **101 779** | **ekey mounting frame FS OM GL WHI,** glass white | |
| **101 780** | **ekey mounting frame FS OM GL AN,** glass anthracite | |
| **101 781** | **ekey mounting frame FS OM GL MI,** glass mint | |
| **101 785** | **ekey mounting frame FS OM GL MI LED,** glass mint with alarm LEDs | |
| **101 786** | **ekey mounting frame FS OM GL AN LED,** glass anthracite with alarm LEDs | |
| **101 787** | **ekey mounting frame FS OM GL WHI LED,** glass white with alarm LEDs | |
| | • Dimensions WxHxD: Mounting frame: 105x105x54 mm Flush mount back box: 73x73x57 mm • Material: Glass, plastic | • Minimum mounting height: 100 cm • Scope of delivery: Mounting frame and flush mount back box. A standard flush mount back box is not suitable. |
| **101 838** | **ekey cavity wall box WHI,** for mounting frame FS OM | |
| | • Dimensions WxHxD: Cavity wall box: 83x83x65mm | Material: Plastic |

## Control panel

### DIN-rail mounted control panel

| Part no. | Description |
|----------|-------------|
| **101 162** | **ekey home CP DRM 1,** 1 relay |
| **101 312** | **ekey home CP DRM 2,** 2 relays |

- Dimensions WxHxD:
  70x86x54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Max. relay voltage, max. relay current:
  42 VAC/DC; 2 A
- Operation: 4 buttons

- Inputs (door opener):
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Display: LCD 106x56 pixels,
  7 lines/21 characters + 2x4 status LEDs
- RS-485 termination: switchable
- Enroll users, delete individual users, set relay
  times (0-99 s), change security code, adjust
  LED brightness, reset, test mode, convenient
  backlit text display, configurable inputs
- KNX compatible

### Wall-mounted control panel

| Part no. | Description |
|----------|-------------|
| **100 478** | **ekey home CP WM 1,** 1 relay |
| **100 479** | **ekey home CP WM 3,** 3 relays |

- Dimensions WxHxD:
  180x110x41 mm
- Power consumption: approx. 1 W
- Supply voltage: 9-12 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP WM 1, 1x potential-free
  CP WM 3, 3x potential-free

- Max. relay voltage, max. relay current:
  42 VAC/DC; 5 A
- Inputs (door opener): -
- Display: 2x7-segment LED
- Operation: 4 buttons
- RS-485 termination: fixed
- Enroll users, delete individual users, set relay
  times (0-99 s), change security code, reset

## Power supply

| Part no. | Description | |
|---|---|---|
| 101 700 | **ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply | |
| | • Dimensions WxHxD: 52x78.5x45 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 800 mA<br>• Cable length: 3.5 m |
| 100 204 | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply | |
| | • Dimensions øxH: 54x31 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -5°C to 50°C |
| 100 205 | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted | |
| | • Dimensions WxHxD: 52.5x93x68.5 mm (3 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 45°C<br>• IP code: IP20 |
| 100 891 | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* | |
| | • Dimensions WxHxD: 70x93x66.5 mm (4 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 24 VDC; 2 A<br>• Temperature range: -5°C to 50°C |

⚠ **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description | |
|---|---|---|
| 101 559 | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted | |
| | • Dimensions WxHxD:<br>UPS: 140x93x66.5 mm (8 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |
| 101 593 | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted* | |
| | • Dimensions WxHxD:<br>UPS: 210x93x66.5 mm (12 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |

⚠ **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## Complete set

| Part no. | Description | |
|---|---|---|
| 101 165 | **ekey home set OM E DRM 1,** with DIN-rail mounted control panel, 1 relay | |
| | **The complete set includes:** | • ekey home FS OM E<br>• ekey home CP DRM 1<br>• ekey PS DRM<br>• ekey bezel OM PW |

## Interface

# Interface for connecting the equipment to home automation systems

| Part no. | Description | |
|---|---|---|
| **100 460** | **ekey home CV LAN RS-485** | |
| | RS-485/LAN interface for connection to external systems (e.g. KNX) with UDP protocol | Scope of delivery: LAN converter, software |

**"home" protocol**

| 1 | 0046 | 4 | 80004426110003 | 1 | 2 |
|---|---|---|---|---|---|
| Packet type | User ID | Finger ID | Finger scanner serial number | Action | Relay output |

| Part no. | Description | |
|---|---|---|
| **101 719** | **ekey home CV KNX RS-485** | |
| | The ekey KNX converter is used to trigger functions in home automation systems based on the KNX home automation bus.<br><br>• Makeup: DIN-rail mounted<br>• Dimensions WxHxD: 18x98x61 mm (1 HP)<br>• Supply voltage: 12-24 VDC<br>• Mounting type: DIN rail | • RS-485 cable length: 10 m<br>• Number of RS-485 interfaces: 1<br>• RS-485 protocol: ekey home<br>• 12 events (10 free, 1 unrecognized, 1 tampering)<br>• in addition to the relays of the control panel<br>• specific application for ETS (ETS 5)<br>• functions: switching, sending values, activating scenarios<br>• assigning an event to a finger |

# Interface for connecting the equipment to alarm systems or other access control systems

| Part no. | Description | |
|---|---|---|
| **101 582** | **ekey home CV WIEG RS-485** | |
| | The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. The product can be configured with the CV USB RS-485 (100 433). | Scope of delivery: Wiegand converter, software |

# ekey finger scanner **integra**

For wall/outlet mounting with stainless steel accessories.

**Finger scanner**

| Part no. | Description |
|---|---|
| 101 794 | **ekey home FS IN 2.0,** incl. 8 m connection cable |
| 101 795 | **ekey home FS IN 2.0 Bluetooth,** incl. 8 m connection cable |
| 101 797 | **ekey home FS IN 2.0 RFID incl. 2 RFID cards,** incl. 8 m connection cable |
| 101 796 | **ekey home FS IN 2.0 Bluetooth RFID incl. 2 RFID cards,** incl. 8 m connection cable |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD:
  Housing 43.6x89x17.3 mm
  with design element: 45.5x91.5x17.3 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC

- Temperature range: -25°C to +70°C
- IP code: IP54
- Recommended mounting height: 155 cm
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device
- Design element not contained within scope of delivery

| 101 690 | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| 101 692 | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| 101 691 | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory - Design element

| Part no. | Description |
|---|---|
| | **Design elements FS IN** |
| 101 254 | ekey design element FS IN ST, stainless steel |
| 101 305 | ekey design element FS IN BL, black |
| 101 304 | ekey design element FS IN WHI, white |
| 101 303 | ekey design element FS IN GO, gold |
| | **Design element FS IN RFID** |
| 101 688 | ekey design element FS IN ST RFID, stainless steel |

**❗ Notice:** Special colors on request!

## Accessory - Mounting frame

| Part no. | Description |
|---|---|
| 101 716 | **ekey mounting frame FS IN GL AN,** glass anthracite |
| 101 717 | **ekey mounting frame FS IN GL WHI,** glass white |
| 101 801 | **ekey mounting frame FS IN GL AN LED,** glass anthracite with alarm LEDs |
| 101 802 | **ekey mounting frame FS IN GL WHI LED,** glass white with alarm LEDs |
| | • Dimensions WxHxD: 53.5x127x24 mm    • Material: Stainless steel, glass <br>• Minimum mounting height: 155 cm |

## Accessory - Mounting frame with bell module

| Part no. | Description |
|---|---|
| 101 803 | **ekey mounting frame FS IN BeM GL WHI,** glass white |
| 101 804 | **ekey mounting frame FS IN BeM GL AN,** glass anthracite |
| 101 807 | **ekey mounting frame FS IN BeM GL WHI LED,** glass white with alarm LEDs |
| 101 808 | **ekey mounting frame FS IN BeM GL AN LED,** glass anthracite with alarm LEDs |
| | • Dimensions WxHxD: 53.5x171x24 mm    • Material: Stainless steel, glass <br>• 2 buttons to trigger a bell electronically |

## Accessory - Wall mounting set

| Part no. | Description | |
|---|---|---|
| 101 302 | **ekey wall mounting set FS IN ST,** stainless steel | |
| 101 301 | **ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs | |
| | Housing: WxHxD: 60x122x36 mm | Faceplate WxHxD: 96x142x2 mm |
| 101 147 | **ekey weather shield FS IN ST,** stainless steel incl. wall mounting set | |
| | Housing WxHxD: 60x122x36 mm | Faceplate WxHxD: 126x142x65 mm |
| 101 300 | **ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet | |
| | Housing WxHxD: 42x87x25 mm | |

## Control panel

### DIN-rail mounted control panel

| Part no. | Description |
|----------|-------------|
| 101 162 | **ekey home CP DRM 1,** 1 relay |
| 101 312 | **ekey home CP DRM 2,** 2 relays |

- Dimensions WxHxD:
  70x86x54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Max. relay voltage, max. relay current:
- 42 VAC/DC; 2 A
- Operation: 4 buttons

- Inputs (door opener):
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Display: LCD 106x56 pixels,
  7 lines/21 characters + 2x4 status LEDs
- RS-485 termination: switchable
- Enroll users, delete individual users, set relay times (0-99 s), change security code, adjust LED brightness, reset, test mode, convenient backlit text display, configurable inputs
- KNX compatible

### Wall-mounted control panel

| Part no. | Description |
|----------|-------------|
| 100 478 | **ekey home CP WM 1,** 1 relay |
| 100 479 | **ekey home CP WM 3,** 3 relays |

- Dimensions WxHxD:
  180x110x41 mm
- Power consumption: approx. 1 W
- Supply voltage: 9-12 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP WM 1, 1x potential-free
  CP WM 3, 3x potential-free

- Max. relay voltage, max. relay current:
  42 VAC/DC; 5 A
- Inputs (door opener): -
- Display: 2x7-segment LED
- Operation: 4 buttons
- RS-485 termination: fixed
- Functions: Enroll users, delete individual users, set relay times (0-99 s), change security code, reset

### Control panel mini

| Part no. | Description |
|----------|-------------|
| 101 626 | **ekey home CP mini 1,** 1 relay |
| 101 770 | **ekey home CP mini 2,** 2 relays |

- Dimensions WxHxD:
  25x60x42 mm (1 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- normally open contact (NO/C)

- Relays:
  CP mini 1, 1x potential-free
  CP mini 2, 2x potential-free
- Inputs (door opener): 1x potential-free
- Max. relay voltage, max. relay current:
  42 VAC/DC; 2 A
- Reset button on the control panel

## Power supply

| Part no. | Description |
|---|---|
| **101 700** | **ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply |
| | • Dimensions WxHxD: 52x78.5x45 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 800 mA<br>• Cable length: 3.5 m |
| **100 204** | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply |
| | • Dimensions øxH: 54x31 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -5°C to 50°C |
| **100 205** | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted |
| | • Dimensions WxHxD: 52.5x93x68.5 mm (3 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 45°C<br>• IP code: IP20 |
| **100 891** | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* |
| | • Dimensions WxHxD: 70x93x66.5 mm (4 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 24 VDC; 2 A<br>• Temperature range: -5°C to 50°C |

**!** **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description |
|---|---|
| **101 559** | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted |
| | • Dimensions WxHxD:<br>UPS: 140x93x66.5 mm (8 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours.Suitable for use in conjunction with a motorized lock. |
| **101 593** | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted* |
| | • Dimensions WxHxD:<br>UPS: 210x93x66.5 mm (12 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |

**!** **\*Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

## Complete set

| Part no. | Description |
|---|---|
| **101 313** | **ekey home set IN 2.0 DRM 1,** with DIN-rail mounted control panel for, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 E<br>• ekey design element stainless steel<br>• 8 m connection cable<br>• ekey home CP DRM 1<br>• ekey PS DRM 230 VAC/12 VDC/2 A |

| Part no. | Description |
|---|---|
| **101 583** | **ekey home set IN 2.0 BT mini 1,** with control panel mini, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 BT<br>• ekey design element stainless steel<br>• 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS DRM 230 VAC/12 VDC/2 A |

| Part no. | Description |
|---|---|
| **101 287** | **ekey home set IN 2.0 WM 1,** with wall-mounted control panel, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 E<br>• ekey design element stainless steel<br>• 8 m connection cable<br>• ekey home CP WM 1<br>• ekey PS WPS 230 VAC/12 VDC/800 mA |

| Part no. | Description |
|---|---|
| **101 863** | **ekey home set IN BT RFID mini 1 GL AN,** with control panel mini, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 BT RFID<br>  incl. mounting frame FS IN GL AN<br>• 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS WPS 230 VAC/12 VDC/800 mA |

| Part no. | Description |
|---|---|
| **101 864** | **ekey home set IN BT RFID mini 1 GL WHI,** with control panel mini, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 BT RFID<br>  incl. mounting frame FS IN GL WHI<br>• 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS WPS 230 VAC/12 VDC/800 mA |

| Part no. | Description |
|---|---|
| **101 865** | **ekey home set IN BT RFID mini 1 BeM GL AN,** with control panel mini, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 BT RFID<br>  incl. mounting frame FS IN BeM GL AN<br>• 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS WPS 230 VAC/12 VDC/800 mA |

| Part no. | Description |
|---|---|
| **101 866** | **ekey home set IN BT RFID mini 1 BeM GL WHI,** with control panel mini, 1 relay |
| **The complete set includes:** | • ekey home FS IN 2.0 BT RFID<br>  incl. mounting frame FS IN BeM GL WHI<br>• 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS WPS 230 VAC/12 VDC/800 mA |

## Interface

# Interface for connecting the equipment to home automation systems

| Part no. | Description | |
|---|---|---|
| **100 460** | **ekey home CV LAN RS-485** | |
| | RS-485/LAN interface for connection to external systems (e.g. KNX) with UDP protocol | Scope of delivery: LAN converter, software |

**"home" protocol**

| 1 | 0046 | 4 | 80004426110003 | 1 | 2 |
|---|---|---|---|---|---|
| Packet type | User ID | Finger ID | Finger scanner serial number | Action | Relay output |

| Part no. | Description | |
|---|---|---|
| **101 719** | **ekey home CV KNX RS-485** | |
| | The ekey KNX converter is used to trigger functions in home automation systems based on the KNX home automation bus. <br><br>• Makeup: DIN-rail mounted <br>• Dimensions WxHxD: 18x98x61 mm (1 HP) <br>• Supply voltage: 12–24 VDC <br>• Mounting type: DIN rail | • RS-485 cable length: 10 m <br>• Number of RS-485 interfaces: 1 <br>• RS-485 protocol: ekey home <br>• 12 events (10 free, 1 unrecognized, 1 tampering) <br>• in addition to the relays of the control panel <br>• specific application for ETS (ETS 5) <br>• functions: switching, sending values, activating scenarios <br>• assigning an event to a finger |

# Interface for connecting the equipment to alarm systems or other access control systems

| Part no. | Description | |
|---|---|---|
| **101 582** | **ekey home CV WIEG RS-485** | |
| | The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. The product can be configured with the CV USB RS-485 (100 433). | Scope of delivery: Wiegand converter, software |

# ekey home app



## GET CONNECTED!



## Simple, secure, convenient.

**ACCESS**
- Open doors via app (smartphone/tablet device)
- Assign access authorization with a user code
- Provide temporary access (while on vacation, for example)

**USER ADMINISTRATION**
- Easy to create, manage, and delete users
- Enable or disable users at the touch of a button
- Assign authorization for defined access
- Finger enrollment is controlled via the app
- Easy administration of up to 99 fingerprints
- Administration of up to 99 RFID cards*

**SECURITY**
- Administrator and user level
- 4 to 6-digit app security code
- Enhanced security thanks to 6-digit coupling code
- Administrator is able to change and administer security codes
- Deactivate the finger scanner's Bluetooth function

**USEFUL TOOLS**
- Adjustable LED brightness on the finger scanner
- Relay switching times can be set individually
- Reset the system to default settings

The *ekey home app* is only compatible with the
*ekey home – single-point access solutions* system!

\* only in the case of ekey finger scanner integra BT/RFID

**FREE for ANDROID and iOS >>>**

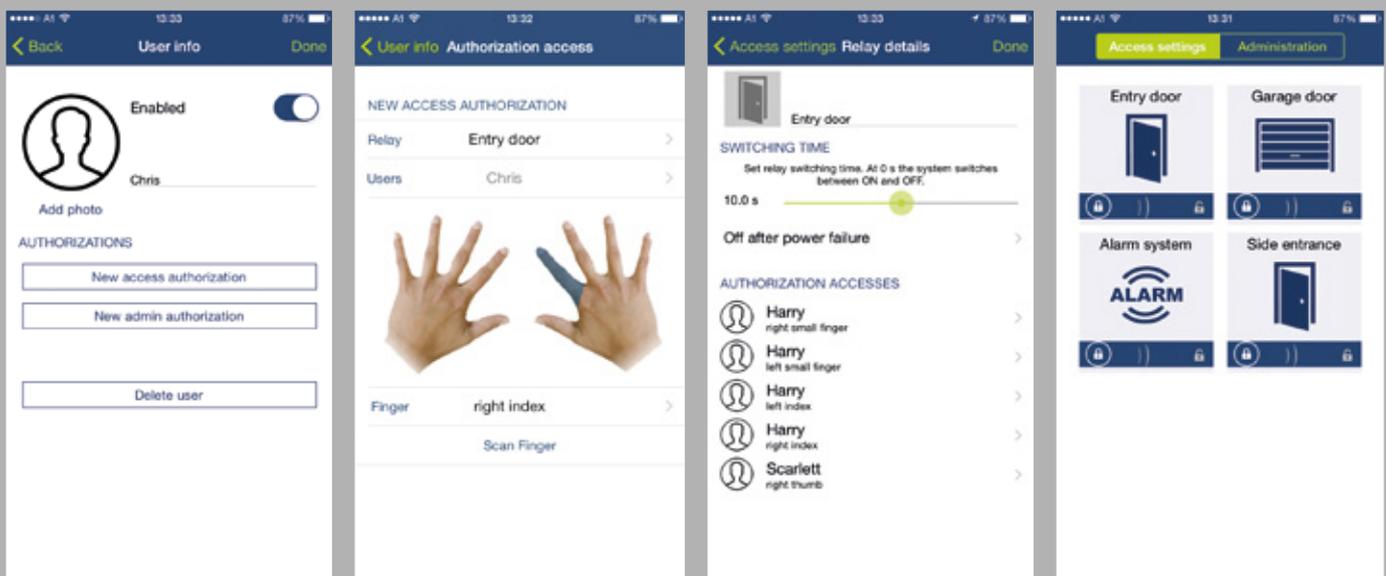**Available languages:**
DE | EN | IT | FR | ES | CS | PL | RU



Google Play Store



App Store

## ekey home app – fool-proof menu navigation:

# ekey **keypad integra**

## The alternative to the finger scanner.

**Code pad**

| Part no. | Description |
|---|---|
| **101 809** | **ekey home KP IN 2.0,** incl. 8 m connection cable |

- Keypad: capacitive touchpad
- Dimensions WxHxD:
  51.7x97.1x21.4 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24VDC
- Temperature range: -25°C to +70°C
- IP code: IP54

- Display: 3 multicolor LEDs
- Up to 99 different 4- to 8-digit codes can be programmed simultaneously, tamper-proof, data is retained in the event of a power failure, optical and acoustic signals, modern back-lighting (configurable)
- Design element not contained within scope of delivery

## Accessory - Design element

| Part no. | Description |
|---|---|
| 101 677 | **ekey design element KP IN GL SG,** glass stainless steel gray |
| 101 678 | **ekey design element KP IN GL WHI,** glass white |
| 101 679 | **ekey design element KP IN GL AN,** glass anthracite |

## Accessory - Mounting frame

| Part no. | Description |
|---|---|
| 101 714 | **ekey mounting frame KP GL AN,** glass anthracite |
| 101 715 | **ekey mounting frame KP GL WHI,** glass white |
| 101 799 | **ekey mounting frame KP GL AN LED,** glass anthracite with alarm LEDs |
| 101 800 | **ekey mounting frame KP GL WHI LED,** glass white with alarm LEDs |
| | • Dimensions WxHxD: 53.5x127x24 mm     • Material: Stainless steel, glass |

## Accessory - Mounting frame with bell module

| Part no. | Description |
|---|---|
| 101 782 | **ekey mounting frame KP BM GL AN,** glass anthracite |
| 101 783 | **ekey mounting frame KP BM GL WHI,** glass white |
| 101 805 | **ekey mounting frame KP BM GL WHI LED,** glass white with alarm LEDs |
| 101 806 | **ekey mounting frame KP BM GL AN LED,** glass anthracite with alarm LEDs |
| | • Dimensions WxHxD: 53.5x171x24 mm     • Material: Stainless steel, glass • 2 buttons to trigger a bell electronically |

## Accessory - Wall mounting set

| Part no. | Description | |
|---|---|---|
| 101 302 | **ekey wall mounting set FS IN ST,** stainless steel | |
| 101 301 | **ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs | |
| | Housing: WxHxD: 60x122x36 mm | Faceplate WxHxD: 96x142x2 mm |
| 101 147 | **ekey weather shield FS IN ST,** stainless steel incl. wall mounting set | |
| | Housing WxHxD: 60x122x36 mm | Faceplate WxHxD: 126x142x65 mm |
| 101 300 | **ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet | |
| | Housing WxHxD: 42x87x25 mm | |

**Control panel**

## DIN-rail mounted control panel

| Part no. | Description |
|----------|-------------|
| **101 162** | **ekey home CP DRM 1,** 1 relay |
| **101 312** | **ekey home CP DRM 2,** 2 relays |

- Dimensions WxHxD:
  70x86x54 mm (4 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Max. relay voltage, max. relay current:
- 42 VAC/DC; 2 A
- Operation: 4 buttons

- Inputs (door opener):
  CP DRM 1, 1x potential-free
  CP DRM 2, 2x potential-free
- Display: LCD 106x56 pixels,
  7 lines/21 characters + 2x4 status LEDs
- RS-485 termination: switchable
- Enroll users, delete individual users, set relay
  times (0-99 s), change security code, adjust
  LED brightness, reset, test mode, convenient
  backlit text display, configurable inputs
- KNX compatible

## Wall-mounted control panel

| Part no. | Description |
|----------|-------------|
| **100 478** | **ekey home CP WM 1,** 1 relay |
| **100 479** | **ekey home CP WM 3,** 3 relays |

- Dimensions WxHxD:
  180x110x41 mm
- Power consumption: approx. 1 W
- Supply voltage: 9-12 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- Relays:
  CP WM 1, 1x potential-free
  CP WM 3, 3x potential-free

- Max. relay voltage, max. relay current:
  42 VAC/DC; 5 A
- Inputs (door opener): -
- Display: 2x7-segment LED
- Operation: 4 buttons
- RS-485 termination: fixed
- Functions: Enroll users, delete individual users,
  set relay times (0-99 s), change security code,
  reset

## Control panel mini

| Part no. | Description |
|----------|-------------|
| **101 626** | **ekey home CP mini 1,** 1 relay |
| **101 770** | **ekey home CP mini 2,** 2 relays |

- Dimensions WxHxD:
  25x60x42 mm (1 HP)
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -20°C to 70°C
- IP code: IP20
- normally open contact (NO/C)

- Relays:
  CP mini 1, 1x potential-free
  CP mini 2, 2x potential-free
- Inputs (door opener): 1x potential-free
- Max. relay voltage, max. relay current:
  42 VAC/DC; 2 A
- Reset button on the control panel

# Power supply

| Part no. | Description |
|---|---|
| 101 700 | **ekey PS WPS 230 VAC/12 VDC/800 mA,** wall power supply |
| | • Dimensions WxHxD: 52x78.5x45 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 800 mA<br>• Cable length: 3.5 m |
| 100 204 | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply |
| | • Dimensions øxH: 54x31 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -5°C to 50°C |
| 100 205 | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted |
| | • Dimensions WxHxD: 52.5x93x68.5 mm (3 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 45°C<br>• IP code: IP20 |
| 100 891 | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* |
| | • Dimensions WxHxD: 70x93x66.5 mm (4 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 24 VDC; 2 A<br>• Temperature range: -5°C to 50°C |

**! *Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

# UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description |
|---|---|
| 101 559 | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted |
| | • Dimensions WxHxD:<br>UPS: 140x93x66.5 mm (8 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours.Suitable for use in conjunction with a motorized lock. |
| 101 593 | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted* |
| | • Dimensions WxHxD:<br>UPS: 210x93x66.5 mm (12 HP)<br>Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |

**! *Important:** Not compatible with ekey home CP WM 1 (100 478) and ekey home CP WM 3 (100 479).

# Complete set

| Part no. | Description |
|---|---|
| 101 584 | **ekey home set keypad mini 1,** with control panel mini 1, 1 relay |
| | **The complete set includes:** | • ekey home KP IN 2.0 incl. ekey design element KP IN GL AN and 8 m connection cable<br>• ekey home CP mini 1<br>• ekey PS DRM 230 VAC/12 VDC/2 A |

# ekey multi
## Multi-point access solutions.

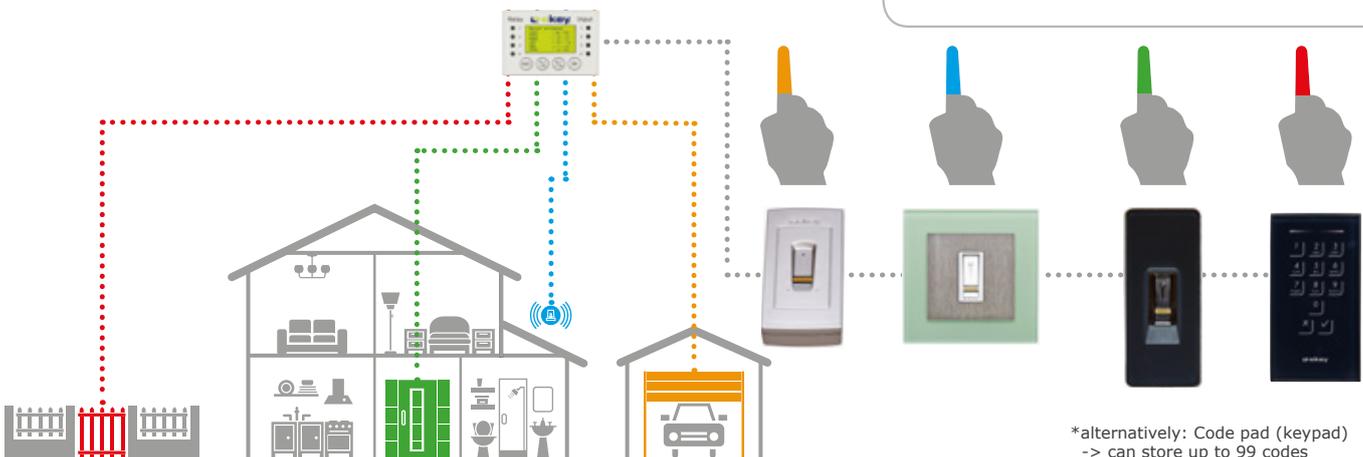### The ideal solution for private homes and companies.

ekey multi is a revolutionary access control system which can be used for the administration of up to 4 finger scanners* on a small network. What makes ekey multi really special is that it is programmed directly on an associated control panel without the need for a PC.

Each user is able to trigger several actions. Individual access rights (including time slots) are easy to assign to specific users (family members and guests or employees and cleaning staff, for example) via the control panel.

### Short facts:

**4 finger scanners* are managed by a single control panel.**

- can store up to 99 fingerprints
- supports up to 4 finger scanners
- can be used to control up to 4 functions
- individually programmable time slots
- access log recording for every finger scanner
- easy to operate with central user administration directly via the control panel
- user permissions can be assigned on a personalized basis (based on location and time)
- vacation or permanent program
- optional: Card access (RFID) is possible -> can also store up to 99 cards

*alternatively: Code pad (keypad) -> can store up to 99 codes

## Example: Single family house

**Customer requirements:**

The customer wants to use ekey multi and finger scanners to control three entrance points and the alarm system. There should be only one way to activate or deactivate the alarm system: from the finger scanner at the front door with a separate finger.

Martha and Frank must be able to access all areas. Lucas is not allowed to open the garage door.
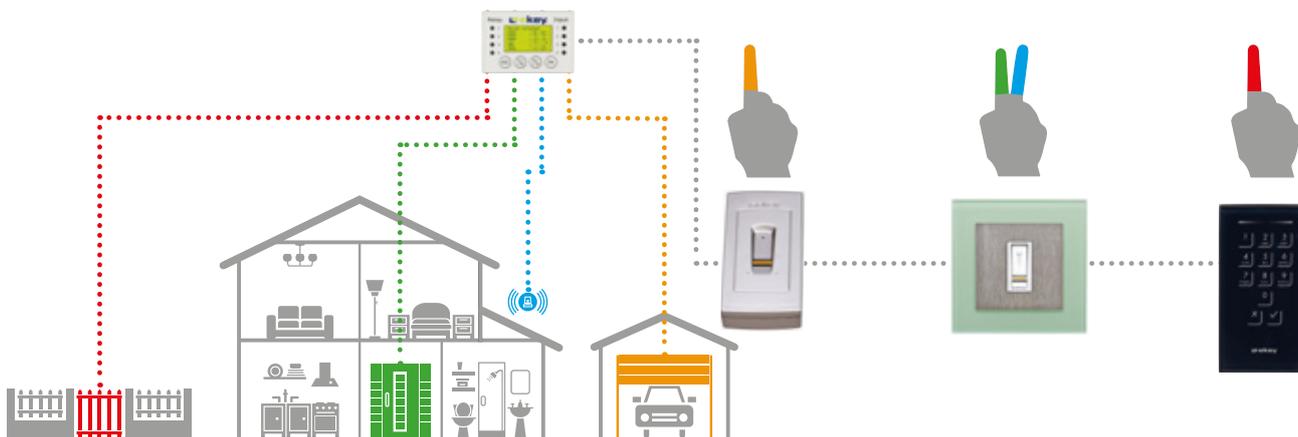


|  | **Frank** | **Martha** | **Lucas** |  |
|---|---|---|---|---|
| **Front door** | | | | |
| **Alarm system** | | | | |
| **Garage door** | | | | |
| **Garden gate** | | | | |

| Front door | Garage door | Garden gate | Control panel | Power supply |
|---|---|---|---|---|

# Planning steps

## How to plan the right way!

**1** **Select 1–4 suitable devices according to make and function (Bluetooth/RFID):**
a) Wall-Mounted (WM)
b) Outlet-Mounted E inside a design switch frame or Outlet-Mounted I for for mounting
   inside the door station (OM)
c) integra (IN)
d) keypad (KP)
Select suitable accessories, if required: weather shield, wall mounting set, mounting frame, etc.

**2** **Select the ekey multi control panel!**

**3** **Select a suitable power supply:**
a) outlet-mounted power supply
b) convenient DIN-rail mounted power supply inside the control cabinet
c) uninterruptible power supply (UPS)
❗ **ATTENTION:** A suitable power supply is often included in the scope of delivery for mounting inside door stations.
Check the voltage and current needed to control the consumers (door opener, motorized lock). The scope of delivery for
motorized locks usually includes a power supply.

**4** **Select a suitable interface, if required:**
a) for connection to home automation systems
b) for connection to third-party systems

**!** **For door openers and motorized locks, please note:**
a) Although door openers are relatively inexpensive, they do not lock the door (you may not be protected
   in the event of a break-in).
b) A motorized lock engages automatically (via mechanical or motorized means) and opens electronically
   (via motorized means). Advise your customers to purchase a motorized lock or an electronic door
   strike when buying a door!
c) Use our ekey lock upgrade solution for existing doors (no wiring in the door).

# Step 1: Select 1-4 suitable finger scanners.

## Finger scanner Wall-Mounted

| Part no. | Description |
|----------|-------------|
| 101 405 | **ekey home FS WM 2.0,** steel-gray |
| 101 667 | **ekey home FS WM 2.0 RFID incl. 2 RFID cards,** steel-gray |

- FAR: 1:10,000,000/FRR: 1:100
- Dimensions WxHxD:
  45x81.6x60.3 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- IP code: IP44
- Recommended mounting height:
  135 cm (lower edge)
- Display: 3 multicolor LEDs
- Tamper-proof, data retained in the event of a power failure, bus termination can be deactivated on the device

| Part no. | Description |
|----------|-------------|
| 101 690 | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| 101 692 | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| 101 691 | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory

| Part no. | Description |
|----------|-------------|
| 101 406 | **ekey weather shield WM 2.0 ST,** brushed stainless steel |

- Dimensions WxHxD:
  110x170x95 mm
- Recommended mounting height:
  130 cm (lower edge)

- Scope of delivery:
  Weather shield ST, 4 chipboard screws 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

| Part no. | Description |
|----------|-------------|
| 101 418 | **ekey cover WM 2.0 ST,** brushed stainless steel |

- Dimensions WxHxD:
  89x87x103 mm
- Recommended mounting height:
  110 cm (lower edge)

- Scope of delivery: Stainless steel housing, 4 chipboard screws, 4x35, 4 screw anchors S5, 3 countersunk head screws M3x16, 3 Torx countersunk head screws M3x6 GU

## Finger scanner Outlet-Mounted

### Outlet-Mounted I for integration into door stations

| Part no. | Description |
|---|---|
| **101 310** | **ekey home FS OM I,** for integration in door stations |
| **101 671** | **ekey home FS OM I RFID incl. 2 RFID cards,** for integration in door stations |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD: 50.4x50.4x30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- Recommended mounting height: 155 cm Be sure that the device remains easy to access and operate
- Display: 3 multicolor LEDs
- Tamper-proof, data retained in the event of a power failure, bus termination can be deactivated on the device, compatible with many door station build-in modules, letterboxes, wall mounting sets, etc.

| Part no. | Description |
|---|---|
| **101 690** | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| **101 692** | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| **101 691** | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

### Accessory   ❗ **Important:** availability of build-in modules varying from country to country!

| Part no. | Description |
|---|---|
| | **Door station build-in modules GIRA** |
| **101 380** | **ekey Modul GIRA TX44 AL,** aluminum color |
| **101 381** | **ekey Modul GIRA TX44 AN,** anthracite |
| **101 382** | **ekey Modul GIRA TX44 PW,** pure white |
| | **Door station build-in modules SIEDLE** |
| **101 376** | **ekey Modul SIEDLE Vario DG,** micaceous dark gray |
| **101 378** | **ekey Modul SIEDLE Vario W,** white |
| **101 379** | **ekey Modul SIEDLE Vario SM,** silver metallic |
| **101 858** | **ekey Modul SIEDLE Vario AG,** anthracite gray |
| | **Door station build-in modules Elvox** |
| **101 552** | **ekey Modul Elvox 8000 series GR,** gray |
| | **Door station build-in modules bticino** |
| **101 533** | **ekey Modul bticino Sfera AME,** Allmetal |
| **101 534** | **ekey Modul bticino Sfera AWH,** Allwhite |
| **101 535** | **ekey Modul bticino Sfera AST,** Allstreet |
| **101 536** | **ekey Modul bticino Sfera ROB,** Robur |
| | **Door station build-in modules Comelit** |
| **101 473** | **ekey Modul Comelit ikall BL,** black, ekey finger scanner OM I built-in |
| **101 629** | **ekey Modul Comelit metal,** metallic, ekey finger scanner OM I built-in |

❗ **Attention:** RFID function is not available behind stainless steel or aluminum!

## Outlet-mounted E for integration into door station Siedle Vario flush mounted

| Part no. | Description |
|---|---|
| **101 148** | **ekey home FS OM E,** for integration in ekey ModulS Siedle Vario |
| **101 673** | **ekey home FS OM E RFID incl. 2 RFID cards,** for integration in ekey ModulS Siedle Vario |

- FAR: 1:10,000,000
- FRR: 1:100
- Dimensions WxHxD: 50.4x50.4x30.1 mm
- Power consumption: approx. 1 W
- Supply voltage: 8-24 VDC
- Temperature range: -25°C to +70°C

- Recommended mounting height: 155 cm Be sure that the device remains easy to access and operate
- Display: 3 multicolor LEDs
- Tamper-proof, data is retained in the event of a power failure, bus termination can be deactivated on the device

| Part no. | Description |
|---|---|
| **101 690** | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| **101 692** | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| **101 691** | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory  ❗ **Attention:** This accessory is only available in combination with ekey FS OM E (101 148 and 101 673)!

| Part no. | Description |
|---|---|
| | **Build-in modules for door stations Siedle Vario flush mounted\*** |
| **101 892** | **ekey ModulS Siedle Vario DG,** micaceous dark gray |
| **101 893** | **ekey ModulS Siedle Vario W,** white |
| **101 894** | **ekey ModulS Siedle Vario SM,** silver metallic |
| **101 895** | **ekey ModulS Siedle Vario AG,** anthracite gray |
| **101 897** | **ekey ModulS Siedle Vario DG LED,** micaceous dark gray with alarm LEDs |
| **101 898** | **ekey ModulS Siedle Vario W LED,** white with alarm LEDs |
| **101 899** | **ekey ModulS Siedle Vario SM LED,** silver metallic with alarm LEDs |
| **101 900** | **ekey ModulS Siedle Vario AG LED,** anthracite gray with alarm LEDs |

❗ **\*Important:** Not compatible with the Siedle Vario surface mounted model.

**Well-known manufacturers build ekey finger scanners into door stations and letterboxes:**

bticino | Telecom Behnke | urmet | Comelit | ELCOM. | FERMAX | ELVOX | KOCH | MOBOTIX

L SYSTEMS EPPIG | SiBLiK Wir schalten schneller. | SIEDLE | RiTTO | STR ELEKTRONIK | Stentofon Baudisch | GIRA | RENZ | TCS | wantec

❗ Upgrading a door station? Build-in module (parts shown in red) is available from ekey or the door station manufacturer.

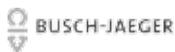## Finger scanner Outlet–Mounted E

### For integration into switch frames

| Art.-Nr. | Beschreibung |
|---|---|
| 101 148 | **ekey home FS OM E,** for in-wall mounting in outlet |
| 101 673 | **ekey home FS OM E RFID incl. 2 RFID cards,** for in-wall mounting in outlet |

| | |
|---|---|
| • FAR: 1:10,000,000<br>• FRR: 1:100<br>• Dimensions WxHxD:<br>  50.4x50.4x30.1 mm<br>• Power consumption: approx. 1 W<br>• Supply voltage: 8-24 VDC<br>• Temperature range: -25°C to +70°C<br>• IP code: IP44 (depending on the switch range)<br>• Display: 3 multicolor LEDs | • Recommended mounting height: 155 cm<br>  Be sure that the device remains easy to<br>  access and operate<br>• Tamper-proof, data is retained in the event<br>  of a power failure, bus termination can be<br>  deactivated on the device, compatible with<br>  many switch ranges with 50 x 50 mm internal<br>  dimension.<br>• Incl. bezel, mounting bracket, spacers, sealing<br>  flange |

| | |
|---|---|
| 101 690 | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| 101 692 | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| 101 691 | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

### Accessory - Bezel

| Part no. | Description |
|---|---|
| 101 166 | **ekey bezel FS OM PW 50x50,** plastic pure white |
| 101 167 | **ekey bezel FS OM AL 50x50,** plastic aluminium color |
| 101 168 | **ekey bezel FS OM AN 50x50,** plastic anthracite |

BUSCH-JAEGER    merten by Schneider Electric    B. Berker    JUNG    GIRA    :hager

Cavity wall box

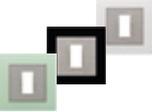**!** **Parts shown in red** must be purchased from the switch manufacturer.

**!** The ekey FS OM E has been designed and built for in-wall mounting in electric gang boxes in accordance with DIN 49073.

60 mm

Electric gang box for plastering

## Accessory - Frame

| Part no. | Description | |
|---|---|---|
| **101 372** | **ekey frame FS OM ST,** brushed stainless steel* | |
| | • Dimensions WxHxD:<br>  85x85x7.2 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet. |
| **101 702** | **ekey frame FS OM GL WHI,** glass white | |
| **101 703** | **ekey frame FS OM GL BL,** glass black | |
| **101 704** | **ekey frame FS OM GL MI,** glass mint | |
| | • Dimensions WxHxD:<br>  100x100x7.5 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the electrical outlet. |
| **101 705** | **ekey frame FS OM503 GL WHI,** glass white | |
| **101 706** | **ekey frame FS OM503 GL BL,** glass black | |
| **101 707** | **ekey frame FS OM503 GL MI,** glass mint | |
| | • Dimensions WxHxD:<br>  125x100x7.5 mm | • Cover provides the device with IP44 protection for use outdoors on exterior rendering with max. 1.5 mm masonry graining around the 503 electrical outlet. |

⚠ **\*Attention:** RFID function is not possible with ekey frame FS OM ED (101 372)!

## Accessory - Mounting frame

| Part no. | Description | |
|---|---|---|
| **101 779** | **ekey mounting frame FS OM GL WHI,** glass white | |
| **101 780** | **ekey mounting frame FS OM GL AN,** glass anthracite | |
| **101 781** | **ekey mounting frame FS OM GL MI,** glass mint | |
| **101 785** | **ekey mounting frame FS OM GL MI LED,** glass mint with alarm LEDs | |
| **101 786** | **ekey mounting frame FS OM GL AN LED,** glass anthracite with alarm LEDs | |
| **101 787** | **ekey mounting frame FS OM GL WHI LED,** glass white with alarm LEDs | |
| | • Dimensions WxHxD:<br>  Mounting frame: 105x105x54 mm<br>  Flush mount back box: 73x73x57 mm<br>• Material: Glass, plastic | • Minimum mounting height: 100 cm<br>• Scope of delivery: Mounting frame and flush mount back box. A standard flush mount back box is not suitable. |
| **101 838** | **ekey cavity wall box WHI,** for mounting frame FS OM | |
| | • Dimensions WxHxD:<br>  Cavity wall box: 83x83x65 mm | Material: Plastic |

## Finger scanner integra

| Part no. | Description |
|---|---|
| **101 794** | **ekey home FS IN 2.0,** incl. 8 m connection cable |
| **101 797** | **ekey home FS IN 2.0 RFID incl. 2 RFID cards,** incl. 8 m connection cable |
| | • FAR: 1:10,000,000<br>• FRR: 1:100<br>• Dimensions WxHxD:<br>  Housing 43.6x89x17.3 mm<br>  with design element: 45.5x91.5x17.3 mm<br>• Power consumption: approx. 1 W<br>• Supply voltage: 8-24 VDC<br>• Temperature range: -25°C to +70°C<br><br>• IP code: IP54<br>• Recommended mounting height: 155 cm<br>• Display: 3 multicolor LEDs<br>• Tamper-proof, data is retained in the event<br>  of a power failure, bus termination can be<br>  deactivated on the device<br>• Design element not contained within scope of<br>  delivery |
| **101 690** | **ekey RFID card MIFARE DESFire EV1 2K logo,** with printed ekey logo, ISO 14443A |
| **101 692** | **ekey RFID card MIFARE DESFire EV1 2K WHI,** white, ISO 14443A |
| **101 691** | **ekey RFID fob MIFARE DESFire EV1 2K BL,** black, ISO 14443A |

## Accessory - Design element

| Part no. | Description |
|---|---|
| | **Design elements FS IN** |
| **101 254** | ekey design element FS IN ST, stainless steel |
| **101 305** | ekey design element FS IN BL, black |
| **101 304** | ekey design element FS IN WHI, white |
| **101 303** | ekey design element FS IN GO, gold |
| | **Design element FS IN RFID** |
| **101 688** | ekey design element FS IN ST RFID, stainless steel |

**!** **Notice:** Special colors on request!

## Accessory - Mounting frame

| Part no. | Description |
|---|---|
| **101 716** | **ekey mounting frame FS IN GL AN,** glass anthracite |
| **101 717** | **ekey mounting frame FS IN GL WHI,** glass white |
| **101 801** | **ekey mounting frame FS IN GL AN LED,** glass anthracite with alarm LEDs |
| **101 802** | **ekey mounting frame FS IN GL WHI LED,** glass white with alarm LEDs |
| | • Dimensions WxHxD:<br>  53.5x127x24 mm<br><br>• Material: Stainless steel, glass<br>• Minimum mounting height: 155 cm |

## Accessory - Mounting frame with bell module

| Part no. | Description |
|----------|-------------|
| 101 803 | **ekey mounting frame FS IN BeM GL WHI,** glass white |
| 101 804 | **ekey mounting frame FS IN BeM GL AN,** glass anthracite |
| 101 807 | **ekey mounting frame FS IN BeM GL WHI LED,** glass white with alarm LEDs |
| 101 808 | **ekey mounting frame FS IN BeM GL AN LED,** glass anthracite with alarm LEDs |

| | |
|---|---|
| • Dimensions W x H x D: 53.5 x 171 x 24 mm | • Material: Stainless steel, glass<br>• 2 buttons to trigger a bell electronically |

## Accessory - Wall mounting set

| Part no. | Description | |
|----------|-------------|---|
| 101 302 | **ekey wall mounting set FS IN ST,** stainless steel | |
| 101 301 | **ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs | |
| | Housing: WxHxD: 60x122x36 mm | Faceplate WxHxD: 96x142x2 mm |
| 101 147 | **ekey weather shield FS IN ST,** stainless steel incl. wall mounting set | |
| | Housing WxHxD: 60x122x36 mm | Faceplate WxHxD: 126x142x65 mm |
| 101 300 | **ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet | |
| | Housing WxHxD: 42x87x25 mm | |

## Code pad keypad integra

| Part no. | Description |
|----------|-------------|
| 101 809 | **ekey home KP IN 2.0,** incl. 8 m connection cable |

| | |
|---|---|
| • Keypad: capacitive touchpad<br>• Dimensions WxHxD: 51.7x97.1x21.4 mm<br>• Power consumption: approx. 1 W<br>• Supply voltage: 8-24 VDC<br>• Temperature range: -25°C to +70°C<br>• IP code: IP54 | • Display: 3 multicolor LEDs<br>• Up to 99 different 4- to 8-digit codes can be programmed simultaneously, tamper-proof, data is retained in the event of a power failure, optical and acoustic signals, modern backlighting (configurable)<br>• Design element not contained within scope of delivery |

## Accessory - Design element

| Part no. | Description |
|----------|-------------|
| 101 677 | **ekey design element KP IN GL SG,** glass stainless steel gray |
| 101 678 | **ekey design element KP IN GL WHI,** glass white |
| 101 679 | **ekey design element KP IN GL AN,** glass anthracite |

## Accessory - Mounting frame

| Part no. | Description |
|---|---|
| 101 714 | **ekey mounting frame KP GL AN,** glass anthracite |
| 101 715 | **ekey mounting frame KP GL WHI,** glass white |
| 101 799 | **ekey mounting frame KP GL AN LED,** glass anthracite with alarm LEDs |
| 101 800 | **ekey mounting frame KP GL WHI LED,** glass white with alarm LEDs |
| | • Dimensions WxHxD: 53.5x127x24 mm |
| | • Material: Stainless steel, glass |

## Accessory - Mounting frame with bell module

| Part no. | Description |
|---|---|
| 101 782 | **ekey mounting frame KP BeM GL AN,** glass anthracite |
| 101 783 | **ekey mounting frame KP BeM GL WHI,** glass white |
| 101 805 | **ekey mounting frame KP BeM GL WHI LED,** glass white with alarm LEDs |
| 101 806 | **ekey mounting frame KP BeM GL AN LED,** glass anthracite with alarm LEDs |
| | • Dimensions WxHxD: 53.5x171x24 mm |
| | • Material: Stainless steel, glass<br>• 2 buttons to trigger a bell electronically |

## Accessory - Wall mounting set

| Part no. | Description | |
|---|---|---|
| 101 302 | **ekey wall mounting set FS IN ST,** stainless steel | |
| 101 301 | **ekey wall mounting set FS IN ST LED,** stainless steel with alarm LEDs | |
| | Housing: WxHxD: 60x122x36 mm | Faceplate WxHxD: 96x142x2 mm |
| 101 147 | **ekey weather shield FS IN ST,** stainless steel incl. wall mounting set | |
| | Housing WxHxD: 60x122x36 mm | Faceplate WxHxD: 126x142x65 mm |
| 101 300 | **ekey flush mount back box FS IN,** for flush-mounting installation, 0.5 mm sheet | |
| | Housing WxHxD: 42x87x25 mm | |

Control panel

# Step 2: Select the ekey multi control panel.

Control panel

| Part no. | Description |
|----------|-------------|
| **101 163** | **ekey multi CP DRM 4,** 4 relays |

| | |
|---|---|
| • Dimensions WxHxD: 70x86x54 mm (4 HP)<br>• Power consumption: approx. 1 W<br>• Supply voltage: 8-24 VDC<br>• Temperature range: -20°C to 70°C<br>• IP code: IP20<br>• Relays: 4x potential-free<br>• Max. relay voltage, max. relay current:<br>• 42 VAC/DC; 2 A<br>• Inputs (door opener): 4x potential-free<br>• Display: LCD 106 x 56 pixels, 7 lines/21 characters + 2x4 status LEDs | • Operation: 4 buttons<br>• RS-485 termination: switchable<br>• Runtime buffer for built-in clock: 96 h<br>• Connect up to 4 scanners, enroll users, delete individual users, set relay times (0-99s), change security code, reset, adjust LED brightness, test mode, 3 time zones, access log recording, master key plan, names input, vacation and always-access mode, configurable inputs<br>• KNX compatible |

## Accessory (optional)

| Part no. | Description |
|----------|-------------|
| **100 433** | **ekey multi CV USB RS-485** |

| | |
|---|---|
| • ekey multi data backup on PC (finger templates, control panel configuration, log files, etc.)<br>• Configuration of the ekey Wiegand converter (101 582) | Scope of delivery:<br>USB converter, software, USB cable |

# Step 3: Select a suitable power supply.

> **! ATTENTION:** A suitable power supply is often included in the scope of delivery for mounting inside door stations. Check the voltage and current needed to control the consumers (door opener, motorized lock). The scope of delivery for motorized locks usually includes a power supply.

## Power supply

| Part no. | Description | |
|---|---|---|
| 100 204 | **ekey PS OM 230 VAC/12 VDC/2 A,** outlet-mounted power supply | |
| | • Dimensions øxH: 54x31 mm<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -5°C to 50°C |
| 100 205 | **ekey PS DRM 230 VAC/12 VDC/2 A,** DIN-rail mounted | |
| | • Dimensions WxHxD: 52.5x93x68.5 mm (3 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 12 VDC; 2 A<br>• Temperature range: -10°C to 45°C<br>• IP code: IP20 |
| 100 891 | **ekey PS DRM 230 VAC/24 VDC/2 A,** DIN-rail mounted* | |
| | • Dimensions WxHxD: 70x93x66.5 mm (4 HP)<br>• Supply voltage: 230 VAC | • Output voltage, output current: 24 VDC; 2 A<br>• Temperature range: -5°C to 50°C |

## UPS DRM

The uninterruptible power supply (UPS) comprises a switched-mode power supply and a battery. In the event of a power failure, it can be relied upon to supply power to the finger scanner, the control panel, and the motorized lock for several hours.

| Part no. | Description | |
|---|---|---|
| 101 559 | **ekey UPS DRM 230/12 VDC/4 Ah,** DIN-rail mounted | |
| | • Dimensions WxHxD:<br>  UPS: 140x93x66.5 mm (8 HP)<br>  Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 2 parts: UPS (switched-mode power supply) and battery<br>• Output voltage, output current: 12 VDC; 2 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours.Suitable for use in conjunction with a motorized lock. |
| 101 593 | **ekey UPS DRM 230/24 VDC/4 Ah,** DIN-rail mounted | |
| | • Dimensions WxHxD:<br>  UPS: 210x93x66.5 mm (12 HP)<br>  Battery: 157x93x66.5 mm (9 HP)<br>• Supply voltage: 100-240 VAC<br>• 3 parts: UPS (switched-mode power supply) and 2x battery<br>• Output voltage, output current: 24 VDC; 3 A | • Temperature range: -10°C to 40°C<br>• Function display: LED<br>• Advantage: Replaces power supply; ensures a reliable power supply to the system for several hours. Suitable for use in conjunction with a motorized lock. |

# Step 4: Select a suitable interface, if required.

## Connection to home automation systems

| Part no. | Description | |
|---|---|---|
| **100 460** | **ekey home CV LAN RS-485** | |
| | RS-485/LAN interface for connection to external systems (e.g. KNX) with UDP protocol | Scope of delivery: LAN converter, software |

**"multi" protocol**

| 1 | 0012 | GEORG | 1 | 8 | 1 | 80131004120001 | GAR | 1 | - |
|---|---|---|---|---|---|---|---|---|---|
| Packet type | User ID | User name | User status | Finger ID | Key | Finger scanner serial number | Finger scanner name | Action | Input ID |

| Part no. | Description | |
|---|---|---|
| **101 719** | **ekey home CV KNX RS-485** | |
| | The ekey KNX converter is used to trigger functions in home automation systems based on the KNX home automation bus.<br><br>• Makeup: DIN-rail mounted<br>• Dimensions WxHxD: 18x98x61 mm (1 HP)<br>• Supply voltage: 12–24 VDC<br>• Mounting type: DIN rail | • RS-485 cable length: 10 m<br>• Number of RS-485 interfaces: 1<br>• RS-485 protocol: ekey home<br>• 12 events (10 free, 1 unrecognized, 1 tampering)<br>• in addition to the relays of the control panel<br>• specific application for ETS (ETS 5)<br>• functions: switching, sending values, activating scenarios<br>• assigning an event to a finger |

## Connection to external systems

| Part no. | Description | |
|---|---|---|
| **101 582** | **ekey home CV WIEG RS-485** | |
| | The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol. The product can be configured with the CV USB RS-485 (100 433). | Scope of delivery: Wiegand converter, software |

# ekey lock radio cylinder

## Retrofitting solution for all ekey systems.

**! COMPATIBLE**
with ekey home
and ekey multi

## No more keys ...

The ekey lock radio cylinder makes it easy to retrofit existing doors with finger scanners. Say goodbye to heavy bunches of keys and lost keys. Finger scanners are the safe and secure alternative to keys, which can be easily lost, forgotten, or stolen.

## Benefits of ekey lock:

- for internal, external, and glass doors
- no cables inside the door
- easy mounting
- suitable for single-point and multi-point locks
- take it with you when you move house
- existing fittings are retained

## Short facts:

- radio range indoors up to 10 m
- encrypted communication (frequency 868 MHz)
- standby time approx. 6 years
- ergonomically optimized mechanical knob
- "Made in Germany" durable cylinder mechanism
- long battery life (approx. 75,000 cycles)
- batteries are easy to replace
- compatible with all ekey finger scanners and the ekey keypad

## What you need to get your system into operation:

| ekey lock radio modules | Cylinder incl. mech. outside knob | Finger scanner | Control panel | Power supply |
|---|---|---|---|---|
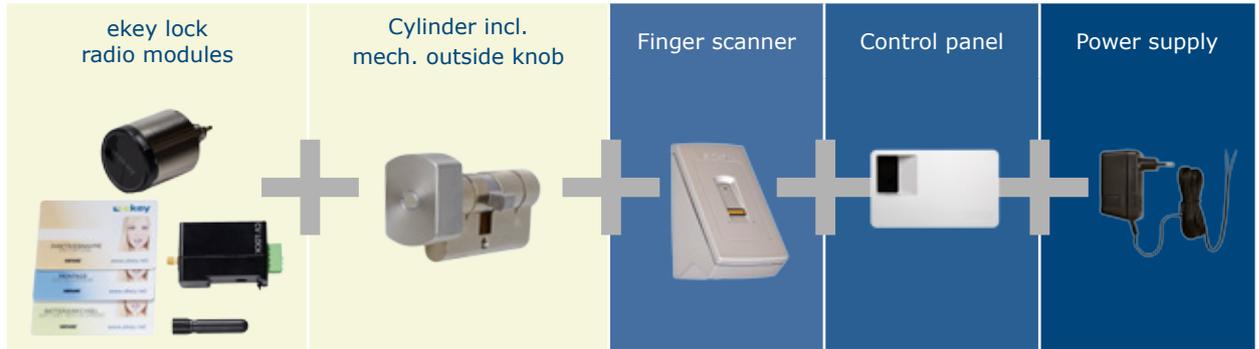
**Optional:**
• ekey lock wireless transponder for emergency opening

## Grundset

| Part no. | Description |
|---|---|
| 100 893 | **ekey lock radio modules 3.0** |

Scope of delivery:
• 1 module knob (MOK)
• 1 radio emitting module (REM)
• 1 short antenna (SANT)

• REM power supply
• 1 card set
• 2 batteries (CR2 type)
• 1 battery replacement clamp

**Cylinders in lengths from 30/30 to 70/70 in 5 mm increments** (see price list)

Scope of delivery:
1 mechanical knob (MEK) with permanently attached cylinder

**!** **Important:** Use a measuring gauge to determine the correct cylinder length. See price list for cylinder lengths.

### Accessory

| Part no. | Description |
|---|---|
| 150 017 | **ekey lock wireless transponder 3.0** |
| | Key for emergency opening; backup if there is no 2nd entrance (battery typ CR2032) |

### Electric strike

| 150 021 | **ekey lock electric strike** |
|---|---|
| | Scope of delivery: electric strike 10-24 V ACDC, flat shield 25x250x3 mm |

**Determine cylinder length**
Cut out the measuring gauge on page 73 and slide it into the opening where the lock cylinder should be.

# Retrofit solutions

from ekey finger scanner WM 1.0 to **OM E** or **WM 2.0**

### Retrofit solution for FS OM E

| Part no. | Description |
|---|---|
| on request | **ekey wall mounting set WM 1.0,** upgrade to FS OM E |

| | |
|---|---|
| With this upgrade kit, these accessories can be used after the lifetime of an ekey FS WM 1.0 has ended. The wall mounting set is reconstructed in a way that allows room for an ekey FS OM E. Cutting and milling work is not necessary for the reconstruction.<br>Everything can be screwed and glued. | Scope of delivery:<br>Front panel made of stainless steel, mounting bracket, screws for FS OM E |

**!** **Attention:** RFID function is not possible with ekey wall mounting set WM 1.0 (101 765)!
**!** **Attention:** Modification will be carried out at ekey's factory.

### Retrofit solution for FS WM 2.0

| Part no. | Description |
|---|---|
| 101 753 | **ekey mounting plate WM 2.0 ST** |

| | |
|---|---|
| The ekey stainless-steel mounting plate is used as a mounting aid for the ekey finger scanner wall-mounted 2.0 on top of electronic flush mount back boxes. It is also used as a mounting aid when upgrading the ekey finger scanner wall-mounted 1.0 to version 2.0. | Scope of delivery:<br>Mounting plate made of stainless steel, 2 screw anchors, 2 x 2 stainless-steel screws |

# Know who is coming home!

Integrating ekey finger scanners
into building control systems

# ekey makes your home more intelligent.

There is already a wide selection of different manufacturers making building control systems which are designed to make 21st century life as comfortable and safe as possible for you. However, by using the ekey fingerprint access control system, these systems can now detect **„WHO" triggers an action** and therefore make it possible to control, manage, or grant access to your building based on a particular person.

## By integrating ekey fingerprint access control solutions into your building control system, you get lots of new options:

- With ekey, the house knows **who is present** and who is not in the house.
- Depending on who is entering the house, it is possible to do much more with your fingerprint than simply opening the door – you can also **save a lot of energy** as the lighting, heating, and blinds are controlled intelligently.
- These options can be **configured on a user-specific basis** – so the TV and the stove remain off when it's just the children at home, for example.
- It is even possible to implement **time-dependent authorizations:** This means, for example, that the cleaner only has access to the house at certain times.

## When it comes to the user-defined options, the only limit is the user's imagination.

- For public buildings and companies, there is the option to **record who** has entered the building, as well as the **time and location** at which they have entered. This also makes it possible to use the system for **time-recording purposes.**
- What's more, **information about whether an authorized finger** has been swiped over the reader is available. If the person is not authorized, this information could be used to switch on the garden lighting and store a photo from the door camera in an archive, for example.
- Using a logic in the building control system, it is possible to trigger a **different command with each finger saved.**

# **Automate** your house **intelligently**, starting with an ekey fingerprint access control solution.

ekey
control panel

ekey
converter

building
control system

PARTNER

KNX
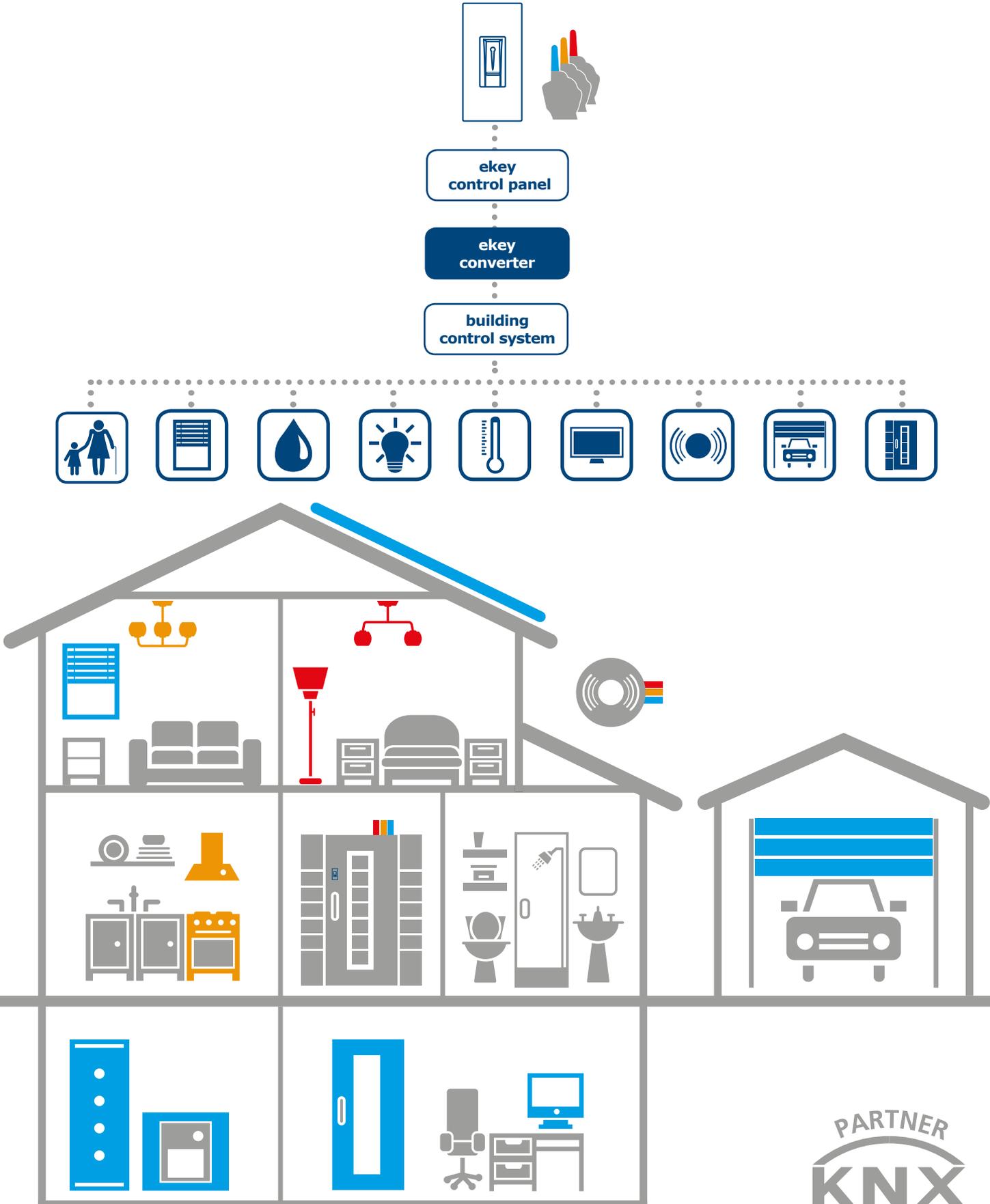
# The advantages of ekey finger scanners in conjunction with building control systems are at your fingertips.

### Unique identification
creates the ideal conditions for a home automation system that works as efficiently as possible so that **your house knows who is at home!**

### Highly innovative technology
• State-of-the-art access solutions are a fundamental feature of advanced building concepts
• Increase the value of the property

### Person-specific configurations, for example
• Children: Disable the stove, enable the camera in the house
• Light setting control, heating/air conditioning control, shading

### Access control
• Thanks to the protocol, you know who triggered an action when and where!
• It is also possible to use the system for time-recording purposes!
• Information about whether an authorized finger has been swiped over the reader
• Time-dependent authorizations, e.g., cleaner (Friday between 08.00 and 12.00)

### Different actions can be triggered with different fingers, for example
• Enabling/disabling the alarm system
• Checking in and out (in the building control system)
• Opening doors, gates, etc.
• Switching various controls

### Saving energy
• E.g. by controlling complete sections of a building
• By using predefined settings for lighting, blinds, heating, air conditioning, and ventilation
• Holiday function

### Accessibility
for young and old alike is often a key consideration for customers.
E.g. enabling the voice control using fingerprint identification

## ekey **interfaces** for connecting the equipment to third-party systems:

**ekey home CV LAN RS-485**
Part no. 100 460

The ekey LAN converter for connecting the equipment to third-party systems with a UDP protocol.

**ekey home CV WIEG RS-485**
Part no. 101 582

The ekey Wiegand converter converts the RS-485 protocol used by ekey into a 26-bit Wiegand protocol (adjustable).

**ekey home CV KNX RS-485**
Part no. 101 719

The certified ekey KNX converter converts access information directly into KNX events.

NEW

Aside from these converters (KNX, UDP, Wiegand), ekey also offers the option of coupling finger scanners directly with third-party systems using a software development kit.

# ekey provides **the right solution for every requirement!**

ekey gives you the option of integrating third-party systems, such as building control or alarm systems into ekey access control systems using ekey KNX, WIEGAND, or LAN (UDP) converters.

## The right access solution for my private space.

### ekey home
#### Single-point access solutions.

**Control up to 3 functions
with just one finger scanner\*.**

• can store up to 99 fingerprints
• can be used to control from 1 to 3 functions
  (e.g. door, gate and alarm system)
• easy to operate with central user
  administration directly via the control panel
• or by using the ekey home app (ekey finger
  scanner integra Bluetooth)
• optional: Card access (RFID) is possible
  -> can also store up to 99 cards
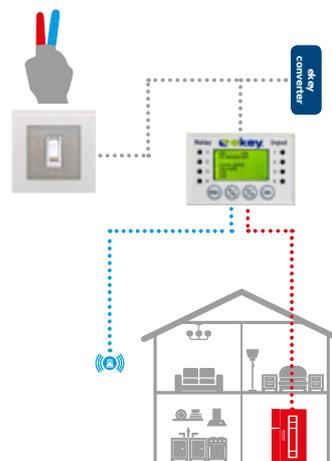


## The ideal access solution for home and work.

### ekey multi
#### Multi-point access solutions.

**4 finger scanners\* are managed by a
single control panel.**

• can store up to 99 fingerprints
• supports up to 4 finger scanners
• can be used to control up to 4 functions
• Individually programmable time slots
• access log recording for every finger scanner
• easy to operate with central user
  administration directly via the control panel
• User permissions can be assigned on a perso-
  nalized basis (based on location and time)
• Vacation or permanent program
• optional: Card access (RFID) is possible
  -> can also store up to 99 cards
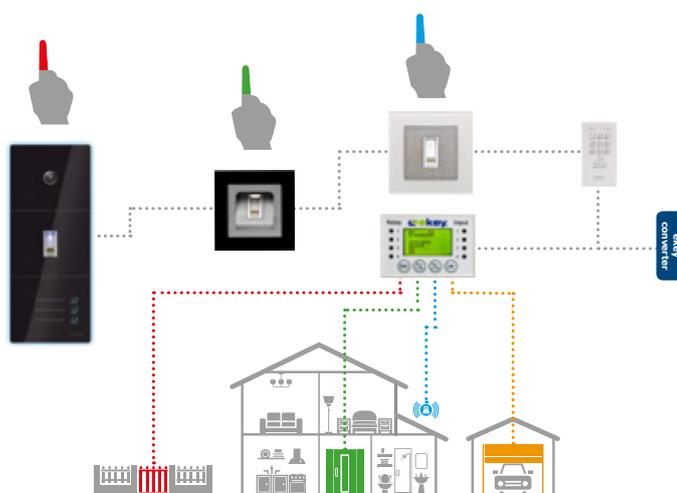


## The networkable access solution for companies and discerning households.

### ekey net
#### Network access solutions.
**The networkable access solution for
companies, associations, and discerning
households.**

• each finger scanner\* can store up to
  2,000 fingerprints
• supports up to 80 finger scanners
• can be used to control up to 4 functions
• programmable time slots
• access log recording for every finger scanner
• supports cross-site administration
• central administration via PC
• calendar function
• optional: Card access (RFID) is possible
  -> can also store up to 2000 cards



CP mini

CV LAN

ekey converter
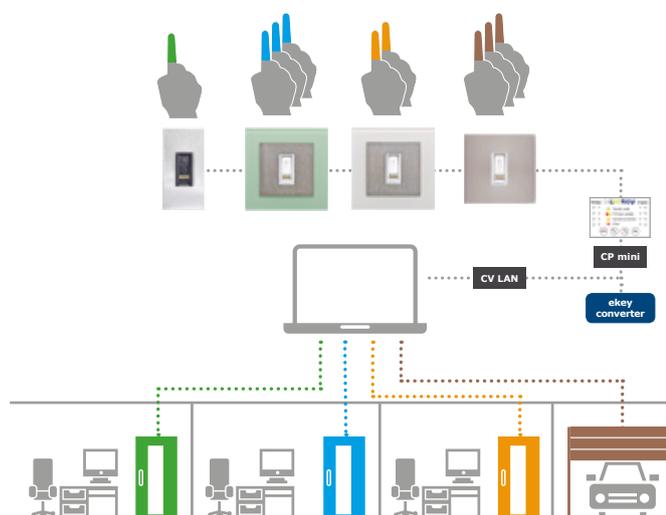
\*alternatively: Code pad (keypad) -> can store up to 99 or 2,000 codes

**BECKHOFF**
New Automation Technology

### Areas of application

- Private home
- Business enterprise
- Machine control
- Plant engineering
- Elevator control
- Shipbuilding
- and much more

# ekey finger scanner + BECKHOFF

Integration into BECKHOFF automation systems.

### Complete integration offers you considerable advantages:

- Maximum security
- Own access control system via Beckhoff
- Authorization systems for plants, buildings, and machines
- Use of existing Beckhoff infrastructure and switch actuators
- Personalized scene selection
- Convenient visualization and administration via touch displays

### How it works:

1. You need the **COMPONENTS** from **ekey** and **BECKHOFF.**
2. The finger scanner is controlled via a free Application Note from the TwinCAT Information System and the "Serial Communication" TwinCAT Supplement.

You can find further information at:
http://goo.gl/FwWh7M

# ekey finger scanners for BECKHOFF

| Part no. | Description | |
|---|---|---|
| **For wall mounting and easy retrofitting.** | | |
| **101 556** | **ekey FS WM 2.0 BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **WM 2.0**, steel-gray |
| **101 683** | **ekey FS WM 2.0 RFID BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **WM 2.0** with RFID card reader, steel-gray |
| **101 699** | **ekey FS WM 2.0 RFID + REL BECKHOFF*** | |
| | RS-485, 255 users, for BECKHOFF | FS **WM 2.0** with RFID card reader and integrated switching relay, steel-gray |
| **For mounting in doors or walls.** | | |
| **101 557** | **ekey FS IN 2.0 E BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **integra 2.0** with stainless-steel design element (ST) and 24 cm connection cable |
| **101 698** | **ekey FS IN 2.0 E RFID BECKHOFF*** | |
| | RS-485, 255 users, for BECKHOFF | FS **integra 2.0** with stainless-steel card reader design element (ST) and 24 cm connection cable |
| **For integration in door stations.** | | |
| **101 554** | **ekey FS OM I BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **OM I** for integration without design element (door station) |
| **101 682** | **ekey FS OM I RFID BECKHOFF*** | |
| | RS-485, 255 users, for BECKHOFF | FS **OM I** with RFID card reader for integration without design element (door station) |
| **For integration into switch frames.** | | |
| **101 555** | **ekey FS OM E BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **OM E** for switch ranges with bezel, pure white |
| **101 681** | **ekey FS OM E RFID BECKHOFF*** | |
| | RS-485, 255 users, for BECKHOFF | FS **OM E** with RFID card reader for switch ranges with bezel, pure white |
| **101 598** | **ekey FS OM E REL BECKHOFF** | |
| | RS-485, 255 users, for BECKHOFF | FS **OM E** with integrated switching relay for switch ranges with bezel, pure white |

*ekey RFID card (100 875) or ekey RFID FOB (100 662) on request!

# BECKHOFF components

| Part no. | Description | |
|---|---|---|
| **KL6041** | **Serial interface for K bus** | |
| | RS-485 | Up to 8 finger scanners per terminal |
| **EL6021** | **Serial interface for E bus** | |
| | RS-485, 115.2 kBaud | Up to 8 finger scanners per terminal |

Beckhoff Automation GmbH & Co. KG

# Tips and Tricks

## Congratulations on purchasing your ekey product!
Your finger is now also your key! Our tips and tricks will help you to make the best possible use of your ekey finger scanners.

### Installation position and mounting height

**Installation position:** Finding the right position for the finger scanner will make the finger swipe technique much easier to master and will improve finger recognition. The finger scanner works just as well whether you are right-handed or left-handed!

It is important to have enough moving space when standing in front of the finger scanner. Straining to reach the scanner will produce poor results.

**Mounting height:** The scanner can only be used ergonomically if it is mounted at the right height.
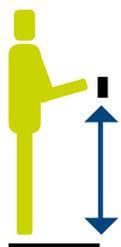
| Type | Minimum mounting height (lower edge) |
|---|---|
| **WM** (Wall-Mounted) | 135 cm |
| **OM** (Outlet-Mounted) | 100/155 cm |
| **IN** (integra) | 155 cm |
| **AR** (arte) | 155 cm |

### Mounting the control panel

The control panel switches the relay and must, therefore, only be mounted in the protected internal area (tamper protection). It should, however, be easily accessible for programming purposes.

### Sensor and finger surface

The sensor is the narrow strip across the bottom part of the finger swipe area. You must swipe the front phalanx fully over the sensor in order to achieve optimal results. The sensor must not be subjected to any mechanical stress other than operation with a finger and clearing with a soft cloth.

Do not scratch the sensor with your fingernail. Never clean the sensor with the rough side of a sponge or with any aggressive cleaning agents. Damaged sensors must be replaced.

Recommended finger surface
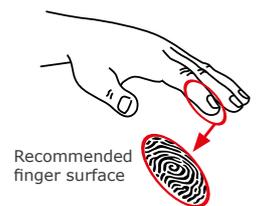
### Finger scan

From experience, the best fingers to use are as follows:
**1. Middle finger, 2. Index finger, 3. Ring finger.**
The thumb and the little finger should not be used. Each person will have fingers that are more or less suitable for scanning. It is a good idea to use the hand you write with (right-handed/left-handed), as you will have more feeling in this hand. You should choose a clean finger without any cuts or grazes. If your finger has very few lines due to abrasion or for genetic reasons, it will not be detected by the sensor. Clearly visible lines will make it easier to recognize.

Children should use their index finger or whichever finger they instinctively choose to use. Use the fingers that are most comfortable for you and those that are recognized the quickest.

A good finger swipe technique is crucial for optimal detection. The best method is to stretch out ALL of your fingers and place the finger to be scanned on the finger swipe area so that only the first phalanx is in contact with it. The joint of the first phalanx should be directly over the sensor.

Place the other fingers to the left and right of the scanner. Do not roll your finger onto the fingertip while swiping. Apply moderate pressure and swipe your finger evenly over the sensor at a medium speed: not too fast and not too slow. The incorrect amount of pressure will produce poor results.

The amount of pressure required will vary according to your skin type. Soft skin will require less pressure, dry skin will require more. Test a few different methods to see how you can achieve the best possible scan results for you. To begin with, the finger swipe technique takes a bit of practice. You will soon learn the best way to operate the scanner.
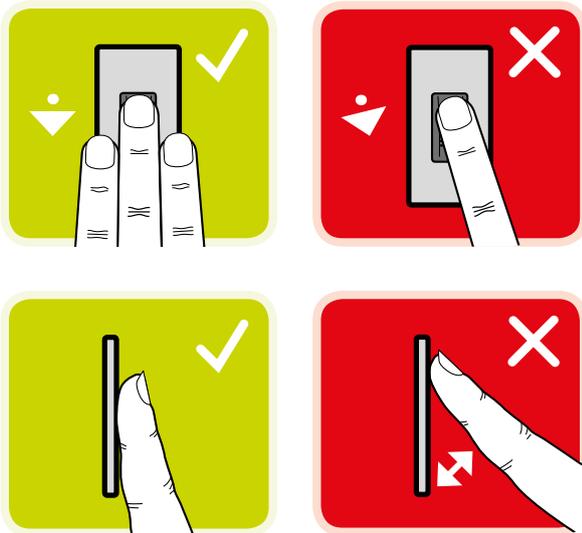
To enable convenient operation with either hand, and as a backup in case of injury, you should enroll one finger from each hand.

For fingers that are not so easy to scan – for example, those of small children, elderly people or manual workers – the same finger should be enrolled in several storage spaces.

It is generally better to enroll one finger several times rather than several fingers once. This increases the likelihood of detection and means that the system works better in the limit range of operation (dry fingers, skin cream or sweat after sport) or when operated under unfavorable conditions.

**Intelligent software:**
The ekey software is learning all the time – it can detect the growth of children's fingers as well as minor injuries and changes to users' habits.

**Children's fingers:** Children's fingers generally work from around school age. The specified mounting height must be observed in order to ensure correct operation.
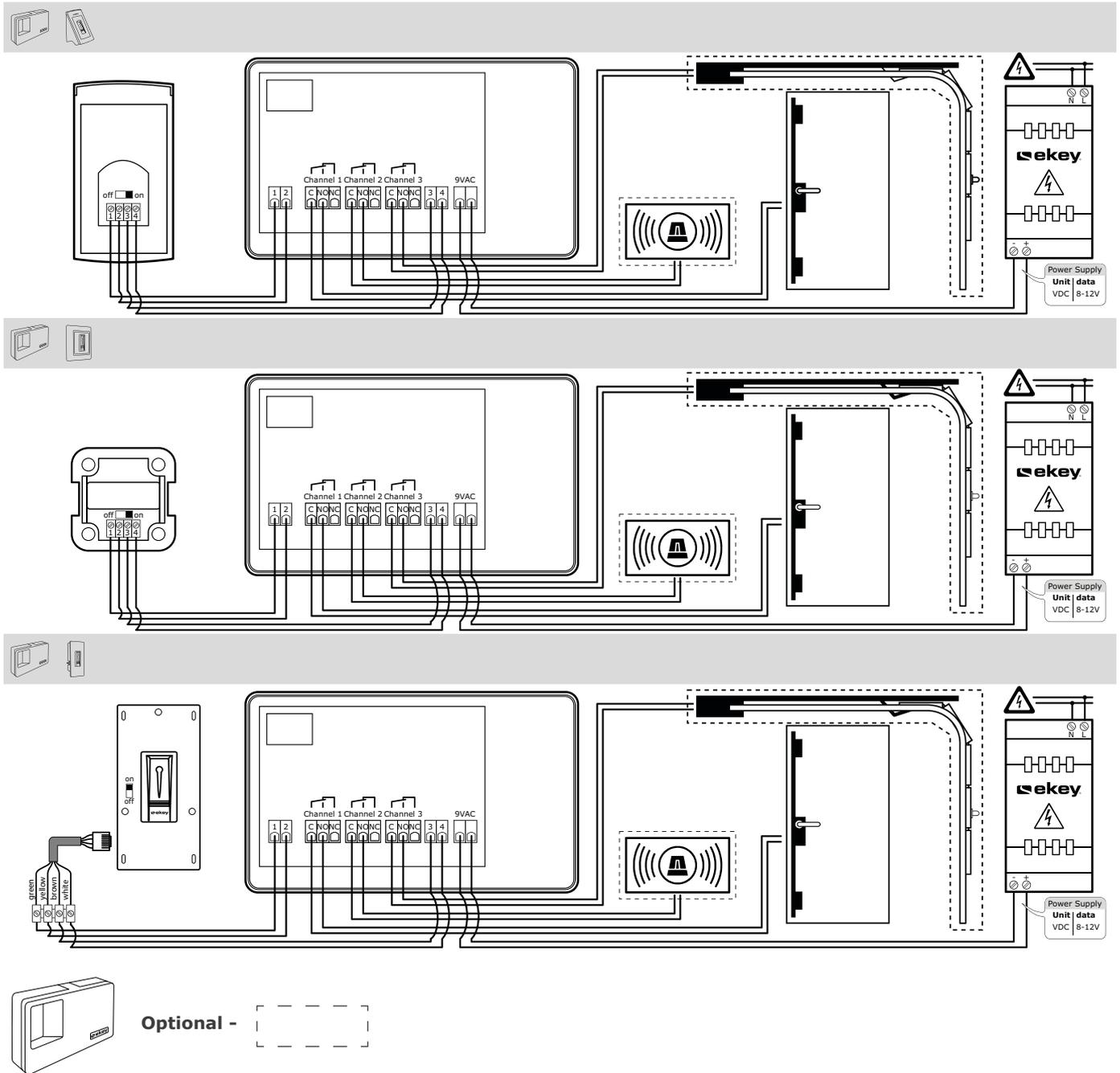
## Support

Enrolling fingers and using the scanner is usually a straightforward process. However, if this information does not help you, please contact us:

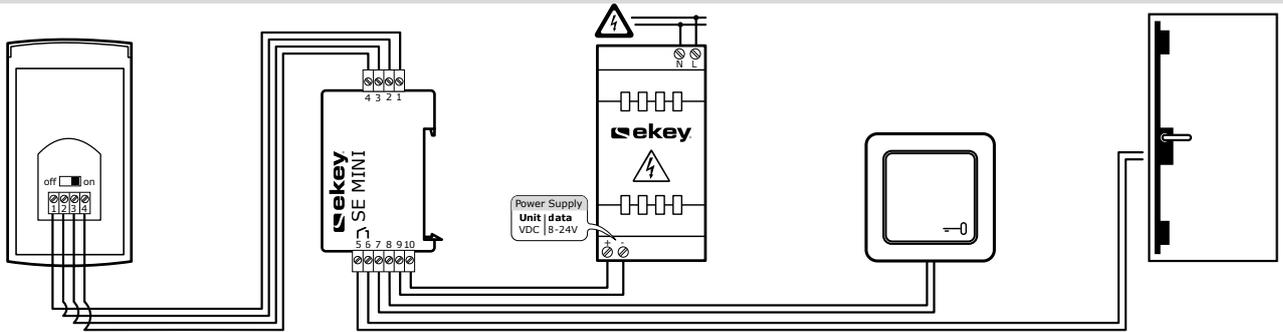**Austria & International:** +43 732 890 500 - 0

# Wiring diagram ekey home **CP WM**
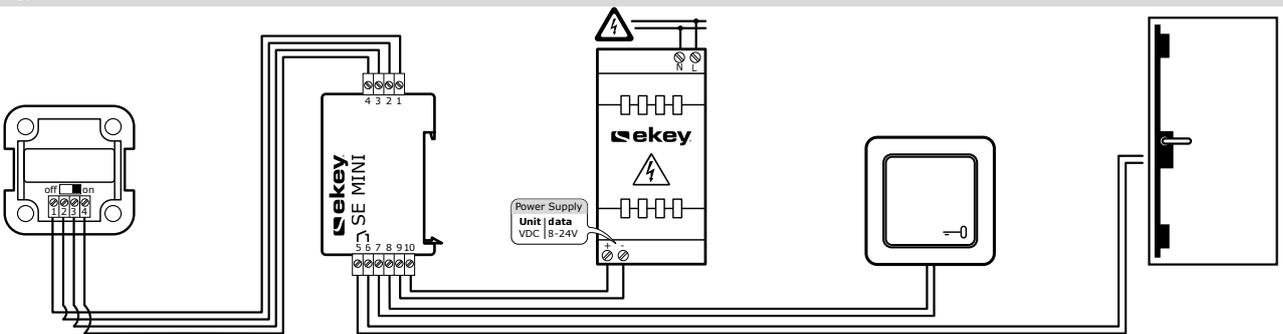


**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description | Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|-----|-------------|
| 1 | RS-485 (Clamp 1) | CH2 | Relay 2 (common) | | Relay 3 NC (normally closed) |
| 2 | RS-485 (Clamp 2) | | Relay 2 NO (normally open) | 3 | Power supply FS |
| CH1 | Relay 1 C (common) | | Relay 2 NC (normally closed) | 4 | Power supply FS |
| | Relay 2 NO (normally open) | CH3 | Relay 3 C (common) | 9 VAC | + VCC (8-12 VDC) |
| | Relay 1 NC (normally closed) | | Relay 3 NO (normally open) | 9 VAC | - VCC (8-12 VDC) |

# Wiring diagram ekey home **CP mini 1**


ekey home CP mini 1: 1 relay, 1 input


ekey home CP mini 1: 1 relay, 1 input


ekey home CP mini 1: 1 relay, 1 input

**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1 | RS-485 (Clamp 1) | 6 | Relay NO (normally open) |
| 2 | RS-485 (Clamp 2) | 7 | Input common |
| 3 | Power supply FS | 8 | Input |
| 4 | Power supply FS | 9 | - VCC |
| 5 | Relay C (common) | 10 | + VCC (8-24 VDC) |

ekey home CP mini 2: 2 relays

ekey home CP mini 2: 2 relays
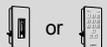
or ekey home CP mini 2: 2 relays
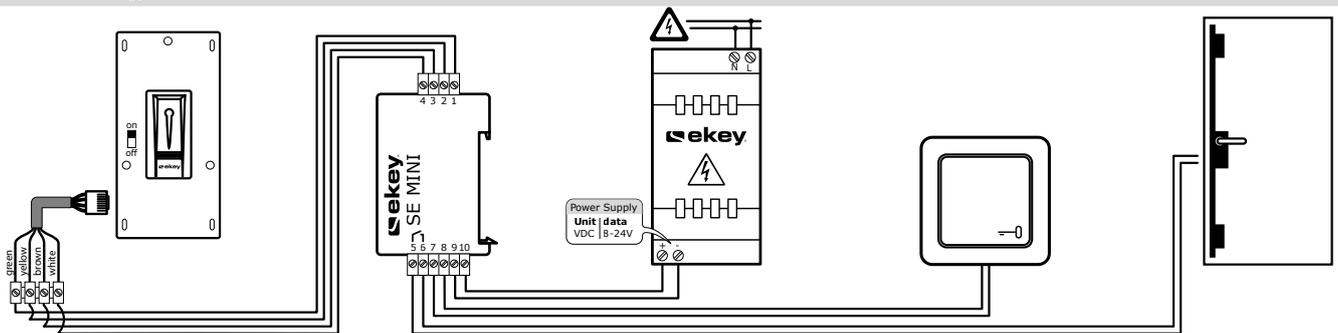
**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm
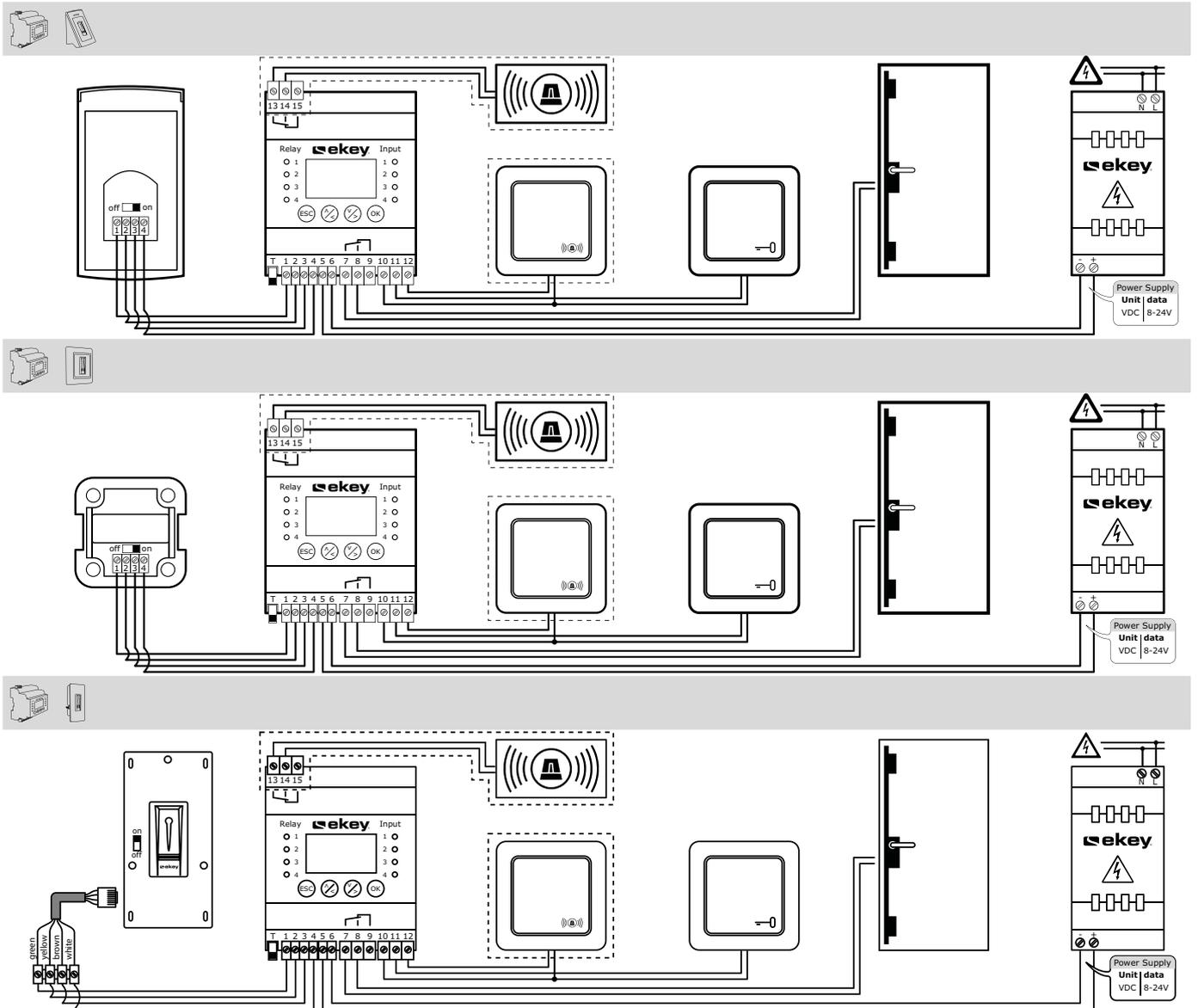
| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1 | RS-485 (Clamp 1) | 6 | Relay NO (normally open) |
| 2 | RS-485 (Clamp 2) | 7 | Input common |
| 3 | Power supply FS | 8 | Input |
| 4 | Power supply FS | 9 | - VCC |
| 5 | Relay C (common) | 10 | + VCC (8-24 VDC) |

# Wiring diagram ekey home **CP DRM**



**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description | Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|-----|-------------|
| 1 | RS-485 (Clamp 1) | 6 | - VCC (8-24 VDC) | 11 | Input 1 - potential-free! |
| 2 | RS-485 (Clamp 2) | 7 | Relay 1 C (common) | 12 | Input 2 - potential-free! |
| 3 | Power supply FS | 8 | Relay NO (normally open) | 13 | Relay 2 C (common) |
| 4 | Power supply FS | 9 | Relay 1 NC (normally closed) | 14 | Relay 2 NO (normally open) |
| 5 | + VCC (8-24 VDC) | 10 | INPUT 1/2 common | 15 | Relay 2 NC (normally closed) |

# Wiring diagram ekey multi **CP**
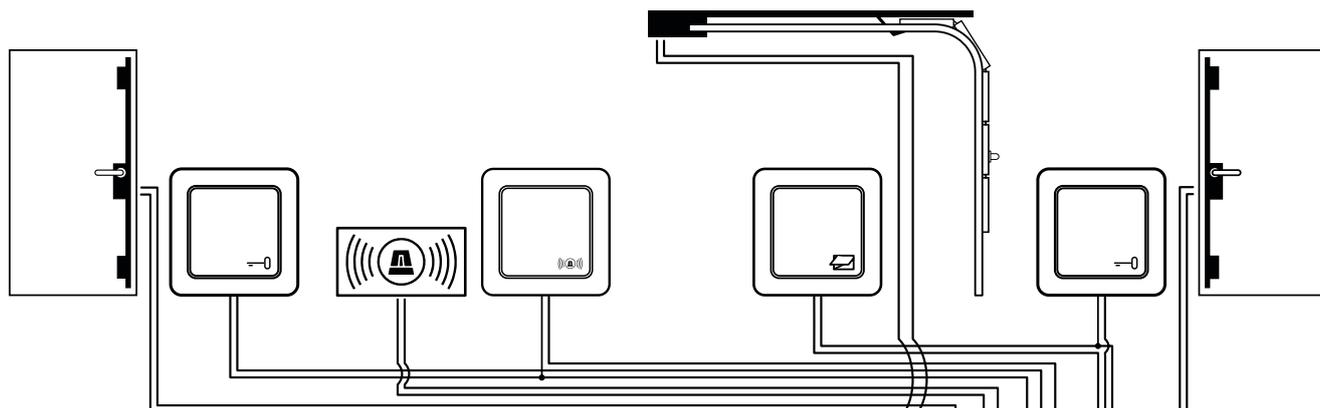


Switch the termination of the **first** and the **last** device in the RS485 bus line to **"ON"**
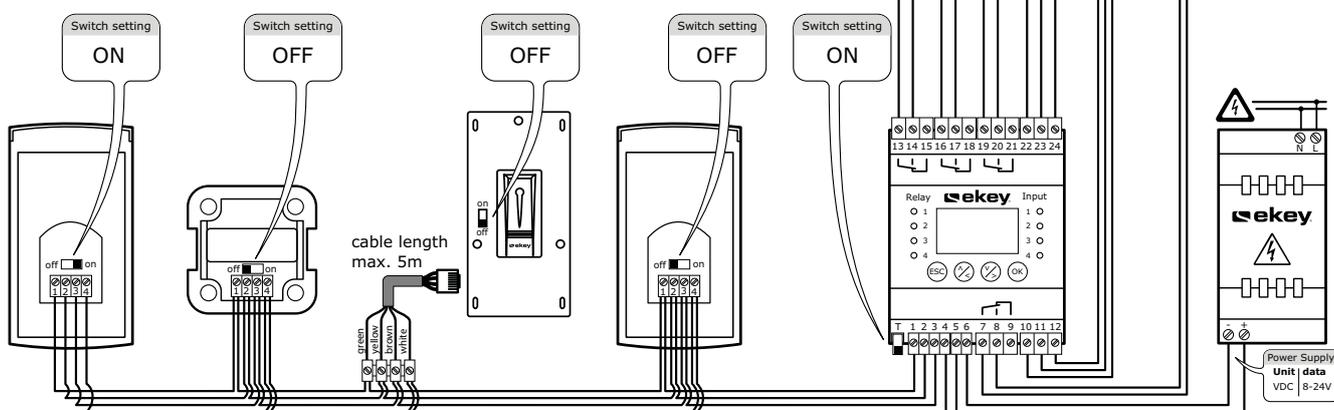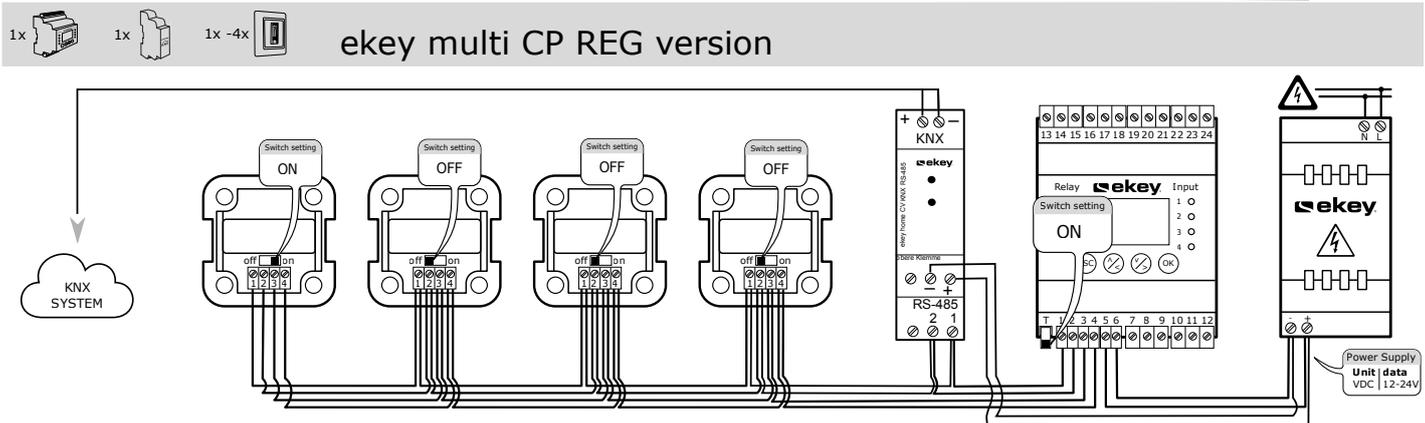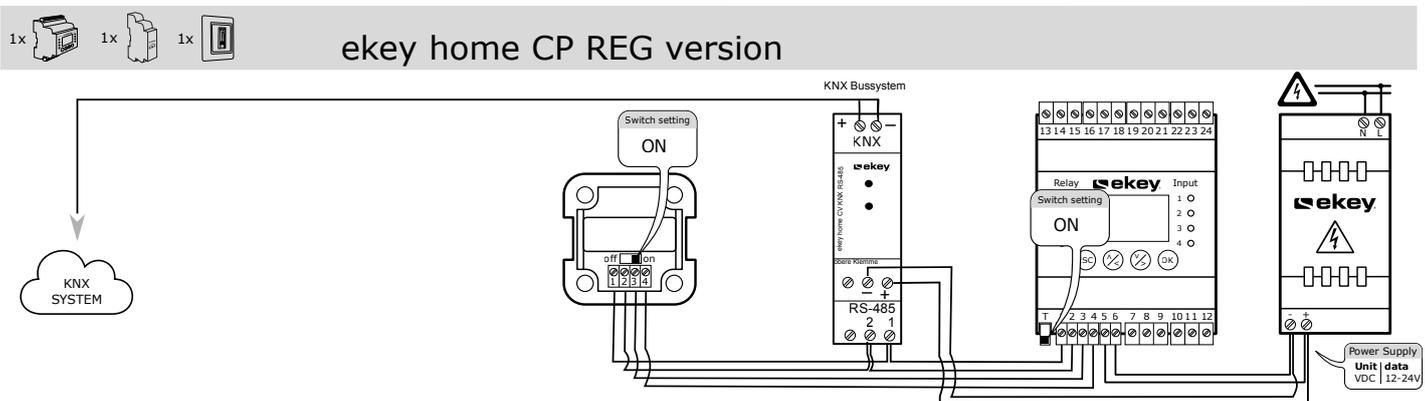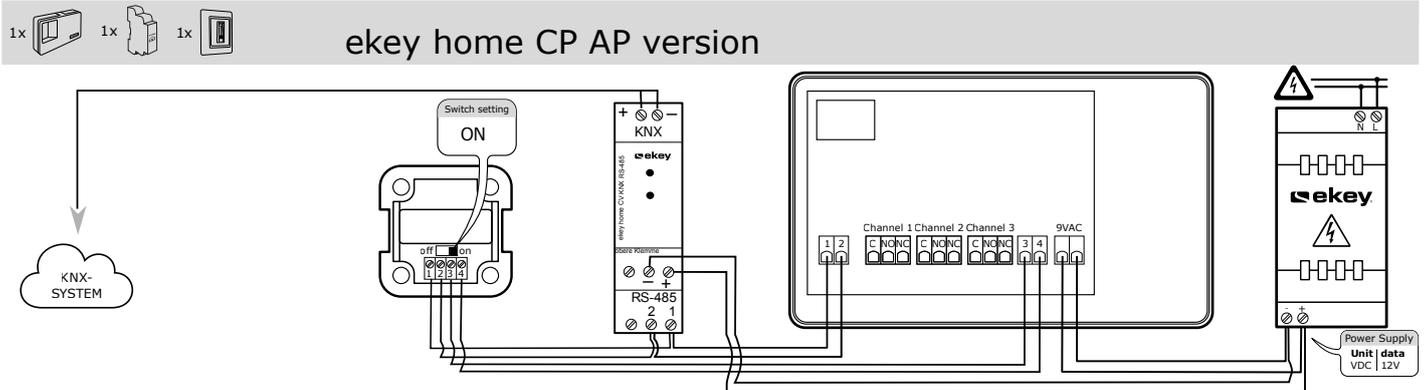


**Optional -**

**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description | Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|-----|-------------|
| 1 | RS-485 (Clamp 1) | 9 | Relay 1 NC (normally closed) | 17 | Relay 3 NO (normally open) |
| 2 | RS-485 (Clamp 2) | 10 | Input 1/2 common | 18 | Relay 3 NC (normally closed) |
| 3 | Power supply FS | 11 | Input 1 - potential-free! | 19 | Relay 4 C (common) |
| 4 | Power supply FS | 12 | Input 2 - potential-free! | 20 | Relay 4 NO (normally open) |
| 5 | + VCC (8-24 VDC) | 13 | Relay 2 C (common) | 21 | Relay 4 NC (normally closed) |
| 6 | - VCC (8-24 VDC) | 14 | Relay 2 NO (normally open) | 22 | Input 3/4 common |
| 7 | Relay 1 C (common) | 15 | Relay 2 NC (normally closed) | 23 | Input 3 - potential-free! |
| 8 | Relay NO (normally open) | 16 | Relay 3 C (common) | 24 | Input 4 - potential-free! |

# ekey **CV KNX** wiring diagram

## ekey home CP AP version



## ekey home CP REG version



## ekey multi CP REG version



**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description |
|-----|-------------|
| 1 | RS-485 (Clamp 1) |
| 2 | RS-485 (Clamp 2) |
| + | Power supply + VDC |
| - | Power supply - (GND) |
| KNX + | KNX + |
| KNX - | KNX - |

## ekey home version
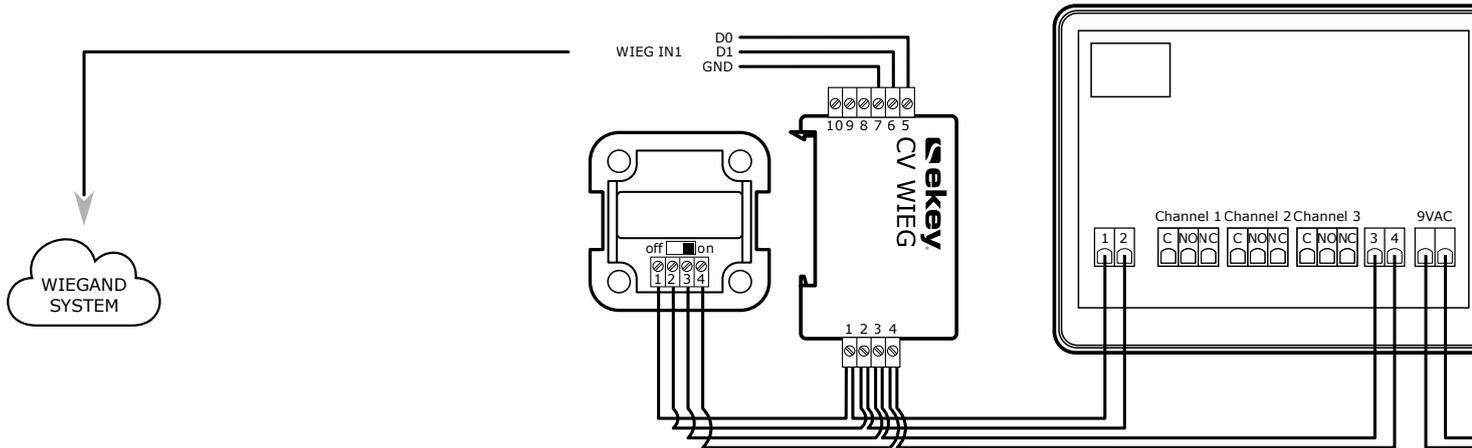
1x  1x  1x

WIEG IN1
D0
D1
GND

10 9 8 7 6 5

CV WIEG

ekey

off  on
1 2 3 4

1 2 3 4

WIEGAND
SYSTEM

Channel 1  Channel 2  Channel 3  9VAC

1 2   C NO NC   C NO NC   C NO NC   3 4

## ekey multi version 1

1x  1x  4x

WIEG IN1
D0
D1
GND

10 9 8 7 6 5

CV WIEG

ekey

off  on
1 2 3 4

off  on
1 2 3 4

off  on
1 2 3 4

off  on
1 2 3 4

1 2 3 4

WIEGAND
SYSTEM

13 14 15 16

Relay
1
2
3
4

ESC

T  1 2 3 4

## ekey multi version 2

1x  4x  4x

WIEG IN4
D0
D1
GND

WIEG IN3
D0
D1
GND

WIEG IN2
D0
D1
GND

10 9 8 7 6 5

10 9 8 7 6 5

10 9 8 7 6 5

CV WIEG

CV WIEG

CV WIEG

ekey

ekey

ekey

off  on
1 2 3 4

off  on
1 2 3 4

off  on
1 2 3 4

1 2 3 4

1 2 3 4

1 2 3 4
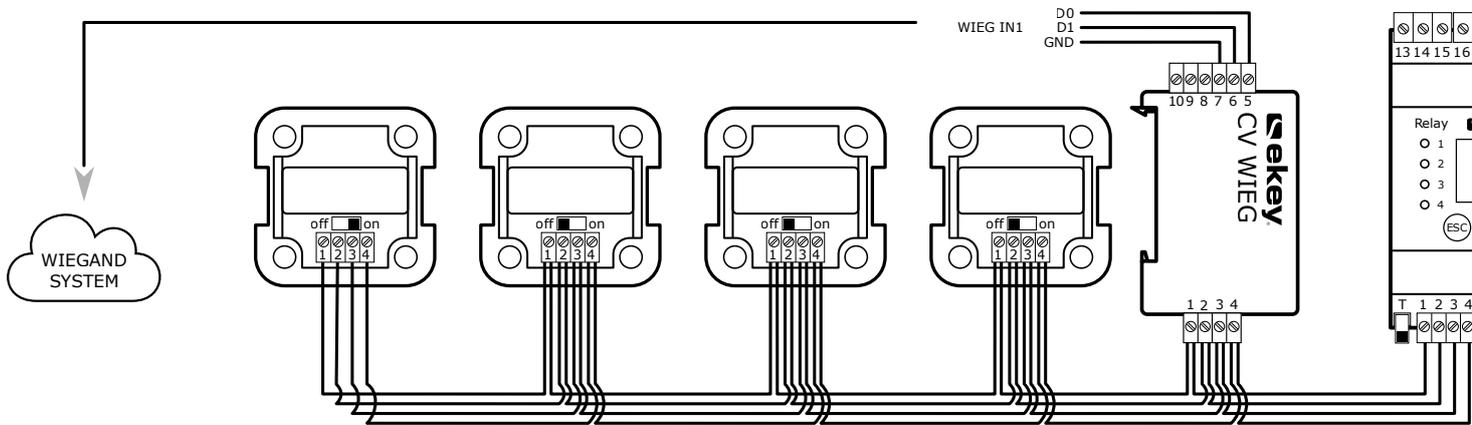
WIEGAND
SYSTEM
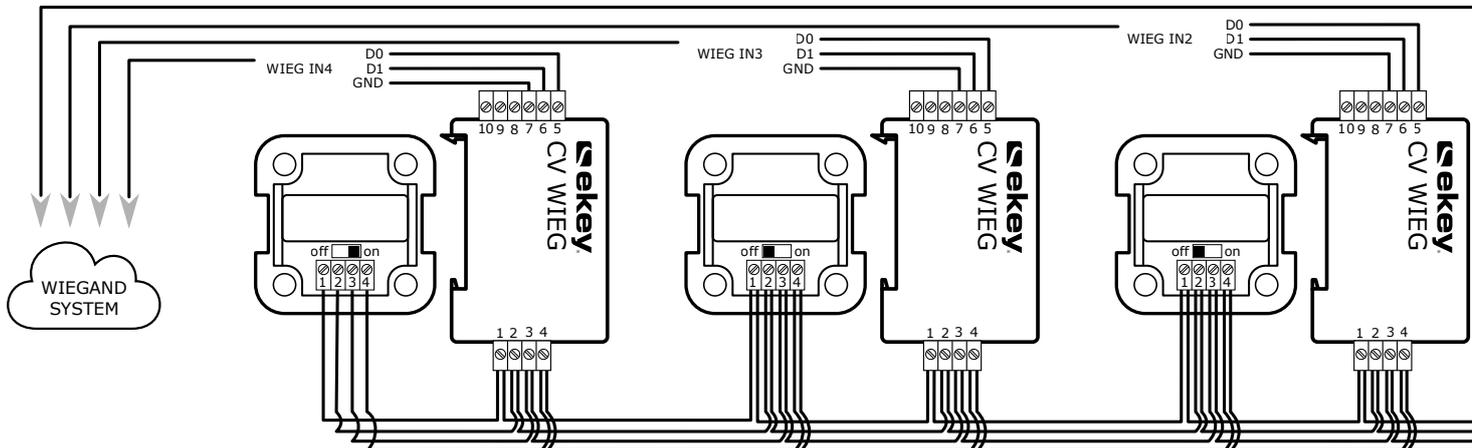
Power Supply
| Unit | data |
| VDC | 8-12V |
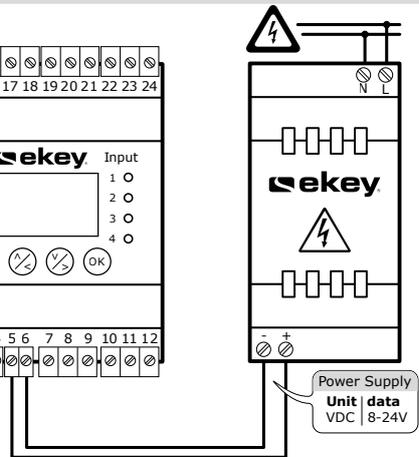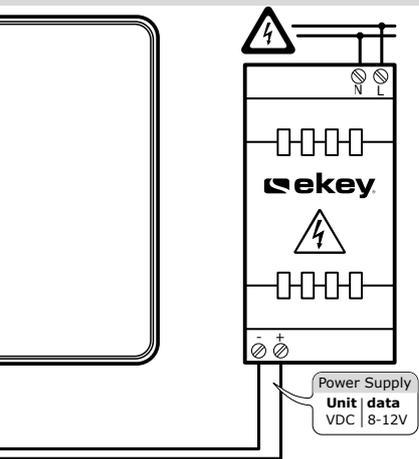
**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

| Pin | Description |
| --- | --- |
| 1 | RS-485 (Clamp 1) |
| 2 | RS-485 (Clamp 2) |
| 3 | Power supply |
| 4 | Power supply |
| 5 | WIEGAND D0 |
| 6 | WIEGAND D1 |
| 7 | WIEGAND GND |
| 8 | free |
| 9 | free |
| 10 | free |

Power Supply
| Unit | data |
| VDC | 8-24V |

Power Supply
| Unit | data |
| VDC | 8-24V |
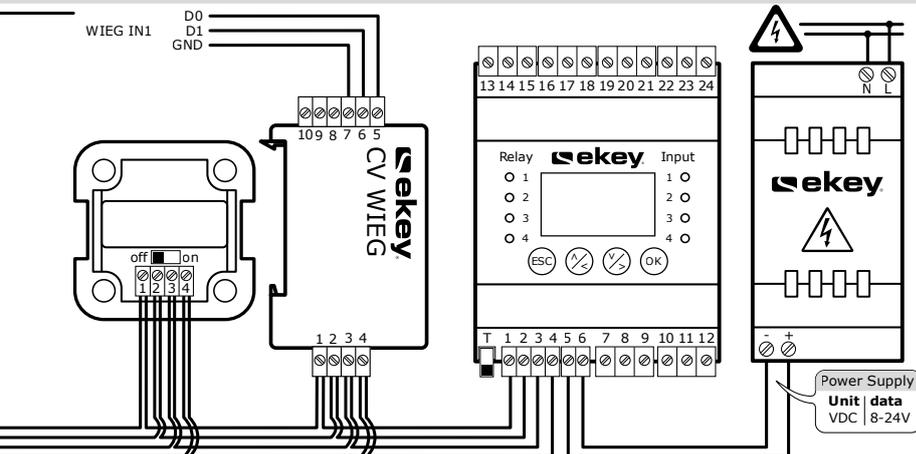
# ekey **CV LAN** wiring diagram

1x 1x 1x **ekey home version**
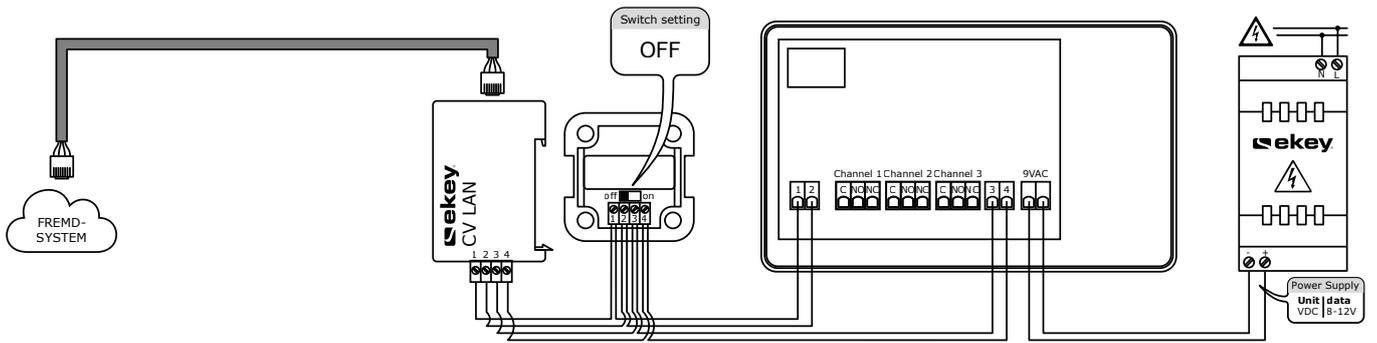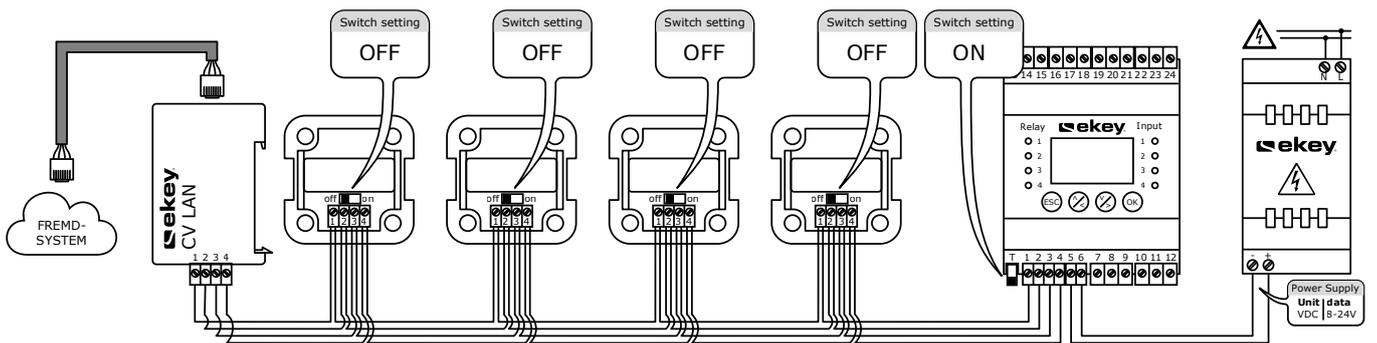


**Cable recommendation:** J-Y(ST)Y 4 x 2 x 0,8mm

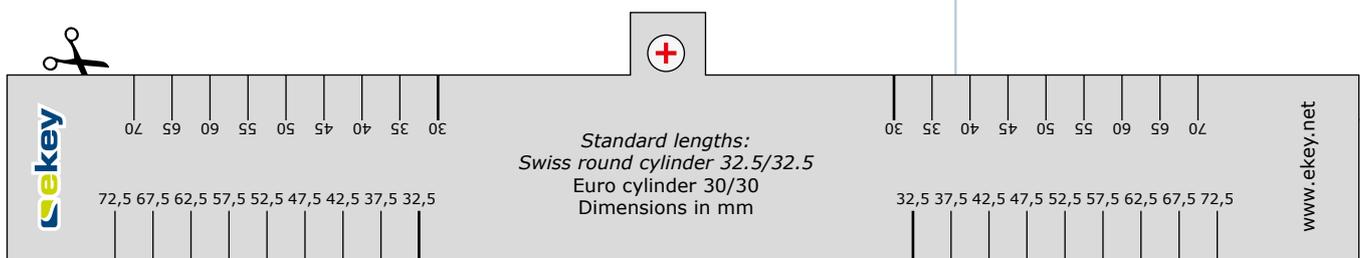| Pin | Description |
| --- | --- |
| 1 | RS-485 (Clamp 1) |
| 2 | RS-485 (Clamp 2) |
| 3 | Power supply FS |
| 4 | Power supply FS |
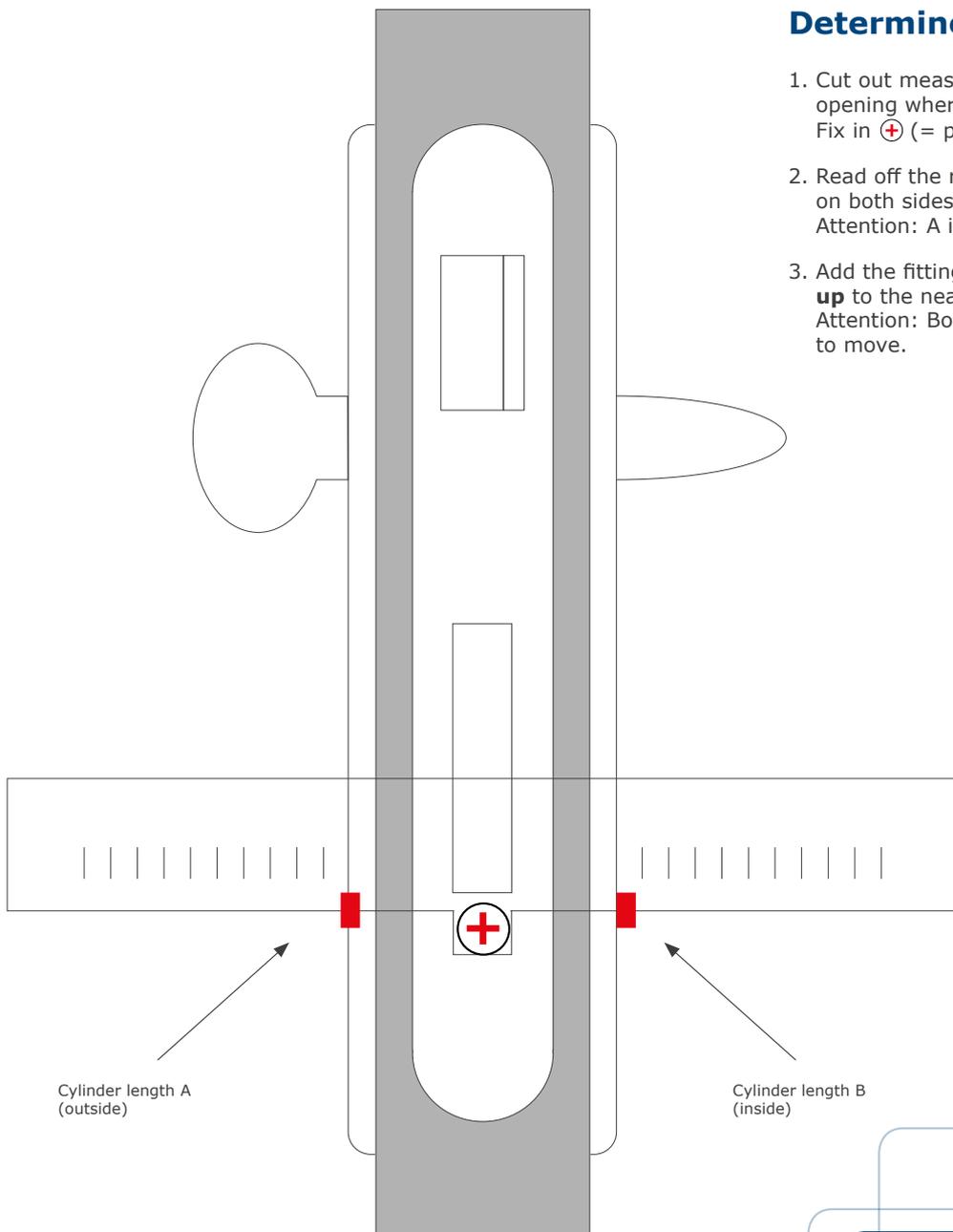
## Determine cylinder length:

1. Cut out measuring gauge and slide it into the opening where the lock cylinder should be. Fix in ⊕ (= position of fixing screw).

2. Read off the required length of the cylinder on both sides.
   Attention: A is the outside measurement!

3. Add the fittings to the calculation and **round up** to the nearest 5 mm.
   Attention: Both knobs must have a little room to move.

Cylinder length A
(outside)

Cylinder length B
(inside)

**ekey lock measuring gauge:**
Cut out the measuring gauge and read off the required cylinder length.

70 65 60 55 50 45 40 35 30

72,5 67,5 62,5 57,5 52,5 47,5 42,5 37,5 32,5

*Standard lengths:*
*Swiss round cylinder 32.5/32.5*
*Euro cylinder 30/30*
*Dimensions in mm*

30 35 40 45 50 55 60 65 70

32,5 37,5 42,5 47,5 52,5 57,5 62,5 67,5 72,5

www.ekey.net

ekey
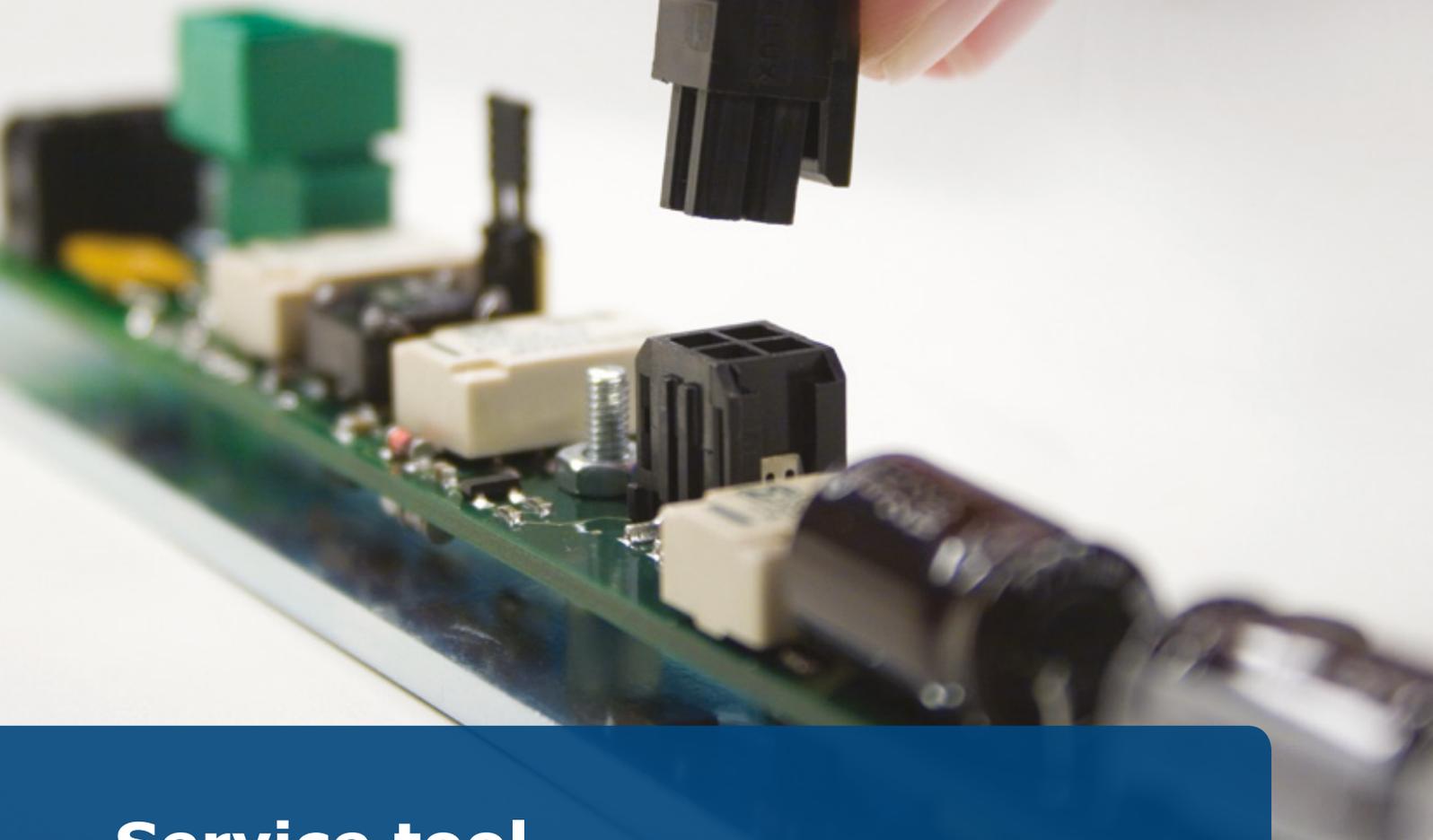
# Service tool

| Part no. | Description | |
|---|---|---|
| **101 255** | **ekey home/multi Servicekit** | |
| | For software updates of<br>• ekey home FS WM/OM/IN finger scanners<br>• ekey home CP IN/WM/DRM/mini and ekey<br>  multi CP DRM control panels (not ekey net) | Scope of delivery:<br>USB converter, software, USB cable, power<br>supply, matching cable harnesses |

| Part no. | Description |
|---|---|
| **101 680** | **ekey dismounting suction cup** |
| | For releasing the ekey finger scanner mounting frame and ekey keypad design elements. |

# ekey compatibility list

| Makes | Converter | Control panels | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | ekey home CP WM | | ekey home CP DRM | | ekey home CP mini* | | ekey multi CP DRM |
| | | 1 | 3 | 1 | 2 | 1 | 2 | 4 |
| **ekey home FS WM 2.0** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS WM 2.0 RFID** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS OM E/I** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS OM E/I RFID** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS IN 2.0** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS IN 2.0 RFID** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| **ekey home FS IN 2.0 BT** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🔴 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🔴 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 |
| **ekey home FS IN 2.0 BT RFID** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🔴 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🔴 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 |
| **ekey home KP IN** | | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |
| | LAN | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | WIEG | 🟢 | 🟢 | 🟢 | 🟢 | 🔴 | 🔴 | 🟢 |
| | KNX | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 | 🟢 |

*Only ekeyEvent1 can be triggered

**YOUR FINGER. YOUR KEY.**

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