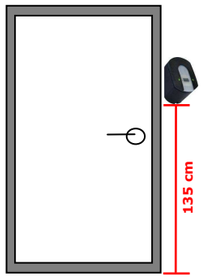
Wall-mounted (WM)

for ekey Finger Scanner (FS)



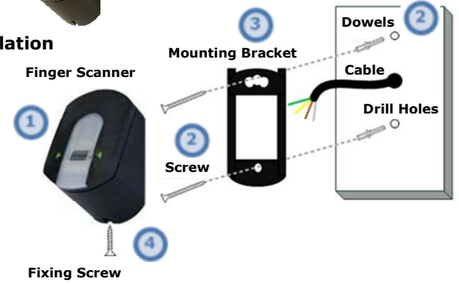
Installation Height

The recommended installation height is **135 cm** from ground level to the lower edge of the scanner (or higher)!

To safeguard proper operation by the user, resulting in an acceptable rate of recognition, pay attention to the specified installation height!

Make sure to have enough space on both sides of the finger scanner to allow proper operation with all fingers.

Installation



a) To mount the ekey FS WM (1), please use the supplied screws and plastic dowels. (2)
Mark the drill holes on the wall using the mounting bracket (3).

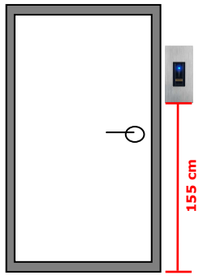
b) Drill two ***5 mm*** wide holes and place the dowels into them. Afterwards, fasten the mounting bracket using the corresponding screws.
To establish the electrical connection, please refer to the wiring plan.

c) Finally, clip the ekey FS WM into the mounting bracket and fix the scanner tightening the dedicated screw (4).

Technical Data

Description	Unit	Value
Power Supply	VAC	9-24
	VDC	9-24
Power Input	W	ca. 1
Temperature Range	°C	-40 up to +85
Memory Size	Fingerprints	home: 99 net: 40/200/2000
Security	FAR	1x 10^{-6}
	FRR	1,4x 10^{-2}
IP class	IP	43
Matching Speed	S	1-4
Life Span	Swipes	ca. 4 Mio
Dimensions	mm	B: **60,5** H: **99,8** T: **52,1**

integra (IN)



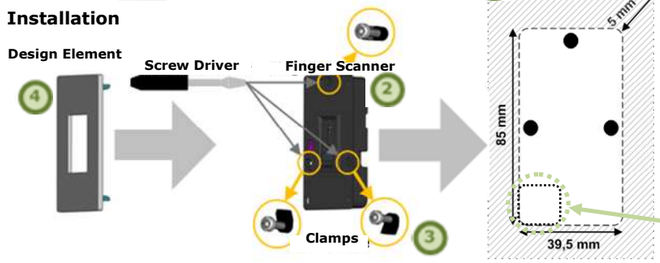
Installation Height

The recommended installation height is **155 cm** from ground level to the lower edge of the scanner (or higher)!

To safeguard proper operation by the user, resulting in an acceptable rate of recognition, pay attention to the specified installation height!

Make sure to have enough space on both sides of the finger scanner to allow proper operation with all fingers.

Installation



a) Cut out an area of W ***39,5 mm*** *H* ***85 mm*** *D* ***16 mm*** in the door panel or door frame (1).

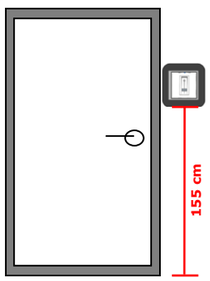
b) Use the supplied screws (*2x. 2,9 x 19 / 2x 2,9 x 38*) for mounting the finger scanner (2). **Attention!** Do not tighten screws too much; otherwise the housing might get damaged! By tightening the screws, the 3 clamps (3) will move outwards securing the finger scanner.

c) Finally, clip the design element (4) onto the finger scanner.
For the installation into a solid wall you will require a mounting bracket. Please contact your ekey installer for further details!

Technical Data

Description	Unit	Value
Power Supply	VAC	8-24
	VDC	8-24 (max. 30V)
Power Input	W	ca. 1
Temperature Range	°C	-25 up to +70
Memory Size	Fingerprints	home: 99 net: 40/200/2000
Security	FAR	1x 10^{-7}
	FRR	1,4 x 10^{-2}
IP class	IP	54 (front end)
Matching Speed	S	1-4
Life Span	Swipes	ca. 10 Mio.
Dimensions	mm	W: **43,6** H: **89** D: **17,3**

Outlet mounted (OM)



Installation Height

The recommended installation height is **155 cm** from ground level to the lower edge of the scanner (or higher)!

To safeguard proper operation by the user, resulting in an acceptable rate of recognition, pay attention to the specified installation height!

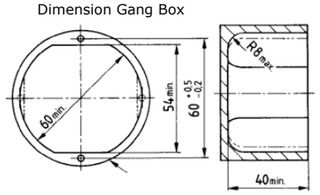
Alternatively, you can also install the finger scanner horizontally. The recommended installation height is **100 cm** then!

Horizontal installation

Make sure to have enough space on both sides of the finger scanner to allow proper operation with all fingers.

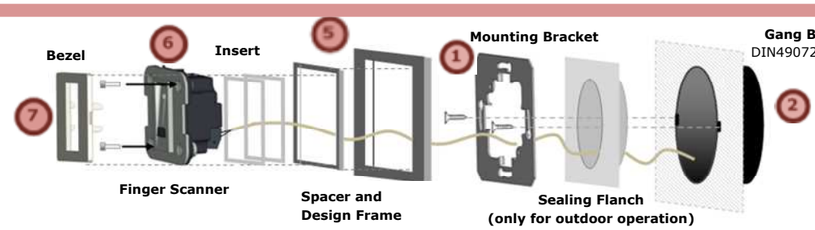
Installation

Dimension Gang Box



a) Use a gang box according to DIN49072. Pay attention to the specified installation height of either **155 cm** or **100 cm** from ground level.

The gang box has to stick to the minimum dimensions as outlined in the drawing above (DIN49072).

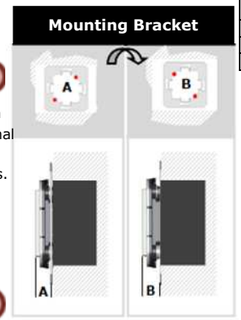


b) Before you start with the actual installation, hold on tight the finger scanner, inserts, spacer and design frame, and the mounting bracket to check how to position the mounting bracket to level the scanner with the design frame.

c) Tighten the mounting bracket (1) on the gang box (2) either in position **A** or position **B**.
A or **B** results from the installed position of the bracket (3). Position **A**: short distance | Position **B**: large distance (i.e. distance between bezel and mounting bracket) (4). For fine-tuning the final position, please use one or more inserts.
IP33/43 is realized via spacers and design frames from different the producer of electric switches. Using the frame supplied by ekey, you can reach IP44 (5).

d) Once you have decided on the final position, place the cable as shown in the drawing above and tighten the finger scanner (6) using 2 screws to the mounting bracket.

e) Finally, clip the bezel (7) onto the finger scanner.



Technical Data

Description	Unit	Value
Power Supply	VAC	8-24
	VDC	8-24
Power Input	W	ca. 1
Temperature Range	°C	-25 up to +70
Memory Size	Fingerprints	home: 99 net: 40/200/2000
Security	FAR	1x 10^{-7}
	FRR	1,4x 10^{-2}
IP class	IP	IP33/44 depending on frames
Matching Speed	S	1-4
Life Span	Swipes	ca.10 Mio
Dimensions	mm	B: **50,4** H: **50,4** T: **30,1**

You might not be able **to level** the finger scanner and the design frame with all frames from different producers.

In this case, the ekey FS OM will stick out on the front side.

801417

ekey
Europe´s # 1
for fingerprint access solutions

MOUNTING INSTRUCTION

ID25: Version: 2, 31.05.2011

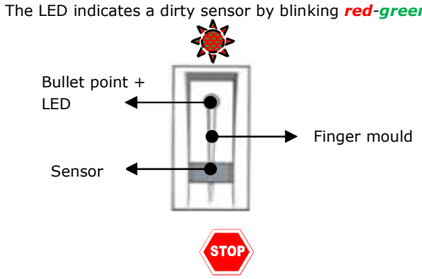
Cleaning & Maintenance

The sensor coating is highly durable against chemical substances and mechanical damages, e.g. dust.
The sensor surface is resistant against the following chemicals: ***detergents*** *(soap, Armor All (plastic cleaner/preservative), Formula 409, etc.),* ***Food & Beverages*** *(Cola, coffee, juice, etc.),* ***alcohol***, ***oil, grease, petrol***, ***brake fluid,*** *etc.,* ***hand lotion****.*

Generally speaking, the finger scanner does not require any maintenance.
The only exception is visible dirt on the sensor. If this is the case, please clean the sensor area.

Recommendation: Clean the finger scanner using a wet, soft and not scratching rag.

The LED indicates a dirty sensor by blinking ***red-green***

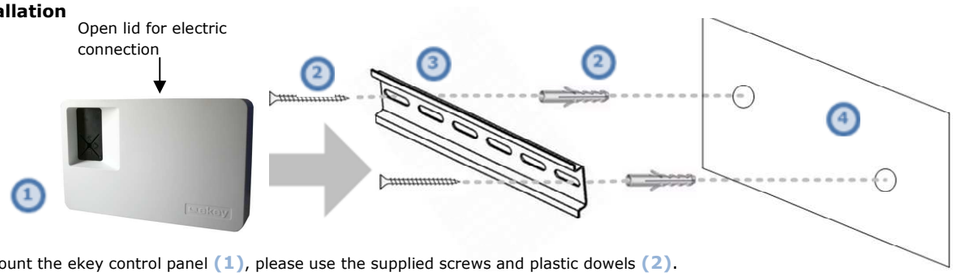


The sensor must not be touched using a **sharp** object as it could destroy the sensor!!

Wall-mounted (WM)

for ekey control panels (CP)

Installation



a) To mount the ekey control panel (1), please use the supplied screws and plastic dowels (2).
Mark the drill holes (4) on the wall using the DIN rail (3).

b) Drill two ***5 mm*** wide holes and place the dowels into them. Afterwards, fasten the DIN rail using the corresponding screws.

c) Finally, clip the ekey CP WM onto the rail.
Alternatively, your ekey CP WM can be installed on the DIN rail (35 mm) in your electrical cabinet.

Make sure to leave enough space above (for opening) and below (for electric wiring) the CP!

Technical Data

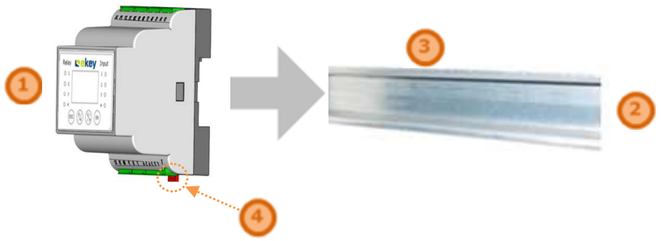
Description	Unit	Value
Power Supply	VAC	9-12
	VDC	9-12
Power Input	W	ca. 1
Relay	Amount	1/3
Relay Switching Capacity	A	230VAC/ 5A
mech. Relay Life Span	Operations	10 Mill.
elec. Relay Life Span *	Operations	200.000 at 250V/5A
Temperature Range	°C	-20 up to +70
IP Class	IP	20
Digital Inputs		-
Dimensions	mm	W: **180** H: **110** D: **39,2**

*The life span of the relay output decreases further when switching inductive or capacitive loads.

If you switch such loads, you have to take precautions on the relay output to avoid flying sparks.
There are **no** spark extinction elements built-in the ekey control panels!!

DIN rail mounted (DRM)

Installation



a) A DIN rail according to DIN EN 55022 or DIN EN 60715 TH35 with 35 mm is suited best to install the ekey CP DRM (multi) (1).(2) You can therefore install the ekey CP DRM (multi) in your electrical cabinet.

b) Attach the upper part of the control panel on the DIN rail (3).

c) Pull the latch (4) downward and place the lower part of the control panel on the DIN rail as well. Finally, release the latch to fasten the control panel.

Make sure to leave enough space below the CP (for electric wiring)!

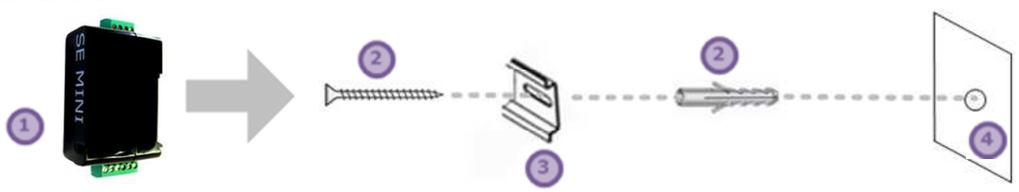
Technical Data

Description		Unit	Value
Power Supply		VAC	8-24
		VDC	8-24
Power Input		W	ca. 1W
Temperature Range		°C	-20 up to +70
Dimensions			4HP acc. DIN 43880
Interfaces			RS485
Relay	max. Switching Voltage [1]	VAC / VDC	42
	max. Switching Current [1]	AAC / ADC	2
	Mechanical Life Span	Operations	10 Mill.
	Electric Life Span [1] [2]	Operations	100 000
Input [3]	Low	kΩ	<1
	High	kΩ	>50
IP class		IP	20 (to be mounted in the electric cabinet)
Programming			4 Push Buttons
Display			1 LED for relays (green); 1 LED for inputs (red), LCD 106x56
max. wiring length of RS485 bus line (CLAMP 1,2) [4]		m	500
max. wiring length of supply line (CLAMP 3,4,5,6) when used in an industrial area		m	30
max. length of wires for relay and input (CLAMP 7-24) when used in an industrial area		m	30
Dimensions		mm	W: **70** (4HP) H: **86** D: **54**

1) Ohmic load exclusively
2) When switching inductive and capacitive loads, adequate safety measures should be taken in order to protect the relay contacts (sparks suppressor). The control panel does not have any built-in spark suppressors.
3) Define low and high, at which resistance between Input 12C and Input1, respectively Input2 are recognized as low or high.
4) When using the recommended cables

mini (mini)

Installation



a) To mount the ekey CP mini (1), please use the supplied screw and plastic dowel. (2)
Mark the drill hole (4) on the wall using the DIN rail (3).

b) Drill a ***5 mm*** wide hole and place the dowel into it.

c) Afterwards, fasten the DIN rail using the corresponding screw

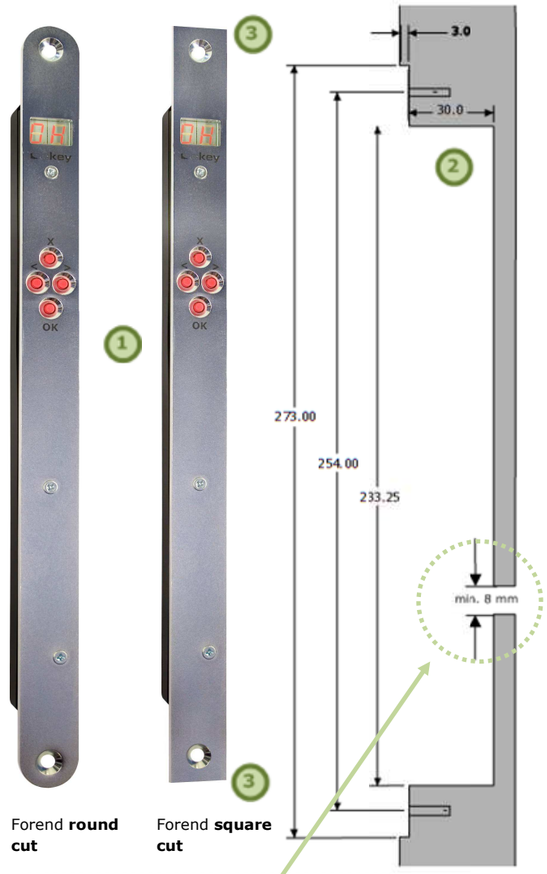
d) Finally, clip the ekey CP mini onto the rail.
Alternatively, your ekey CP mini can be installed on the DIN rail (35 mm) in your electrical cabinet.

Technical Data

Description	Unit	Value
Power Supply	VAC	8-24
	VDC	8-30
Power Input	W	ca.1
Relay	Amount	1
Relay Switching Capacity		42 VDC / 1 A
Temperature Range	°C	-20 up to +70
IP class	IP	20
Digital input (only dry contact configurable!)		1
Dimensions	mm	W: **25** H: **60** D: **42**

integra

ekey control panel for integration into door panels!



Forend **round cut**

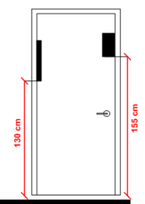
Forend **square cut**

Opening for cable feed
(the position of the opening can be higher or lower)

a) To mount the ekey CP IN (1) in the door, please work it according to template (2). Available milling width: **18, 20 or 24 mm**
Pay attention to the control panel's shape of the forend.
(square / round)

b) To fasten the control panel, please use the supplied screws.

c) Tighten the screws at the predefined holes at top and bottom of your ekey CP IN (3).



Technical Data

Description	Unit	Value
Power Supply	VAC	8-24
	VDC	8-24 (max. 30V)
Relay	Amount	1 / 2
Relay Switching Capacity	VAC (DC)	42 VDC (AC) / 2A
Peak AC	VAC (DC)	60
ON Resistor (max.)	Ω	0,12
Leakage Current	µA	1
Boot time	ms	1,5
Shut-off time	ms	0,5
Temperature Range	°C	-40 up to + 85
IP class	IP	40 (front end)
Digital inputs	Amount	1
Maximum voltage on X6 Pin 1 (only applicable for integra)	A	3
Dimensions	mm	W: **18/20/24**, H: **272**, D: **21**