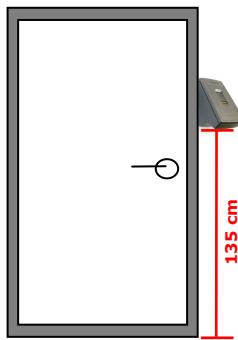


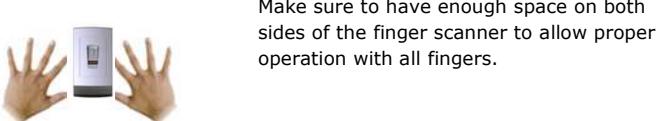
Wall-mounted (WM)



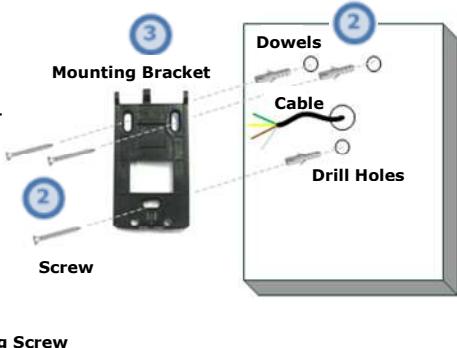
Installation Height

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!



Installation

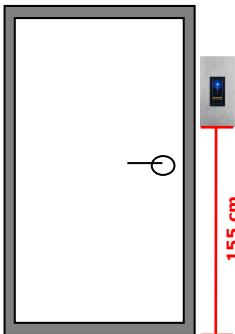


for ekey Finger Scanner (FS)

Technical Data

Description	Unit	Value
Power Supply	VAC	8-24
	VDC	8-24
Power Input	W	ca. 1
Temperature Range	°C	-25 up to +75
Memory Size	Fingerprints	home: 99 net: 40/200/2000
Security	FAR	1×10^{-5}
	FRR	$1,4 \times 10^{-2}$
IP class	IP	44
Matching Speed	S	1-4
Life Span	Swipes	ca. 10 Mio
Dimensions	mm	B: 45 H: 81,6 T: 60,3

integra (IN)



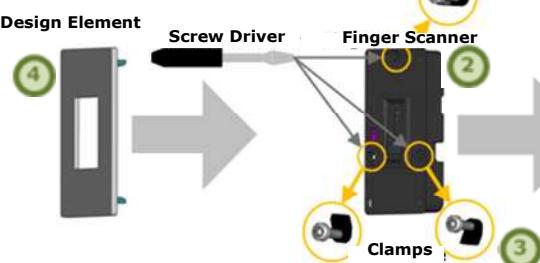
Installation Height

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

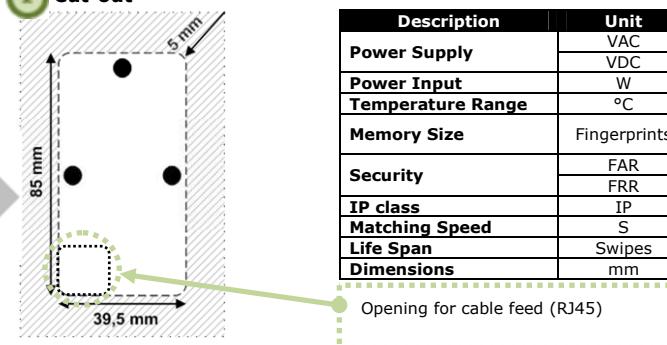
To safeguard proper operation by the user, resulting in an acceptable rate of recognition, pay attention to the specified installation height!



Installation



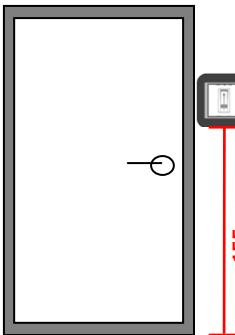
1 Cut-out



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	1×10^{-7}
	FRR	$1,4 \times 10^{-2}$
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!

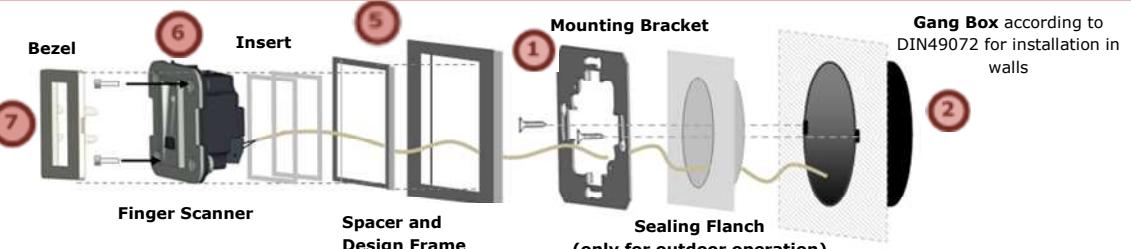
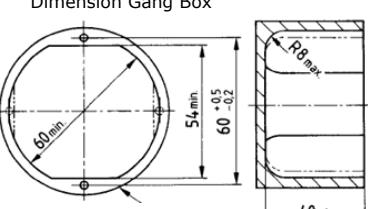
Alternatively, you can also install the finger scanner horizontally. The recommended installation height is **110 cm** then!



Horizontal installation



Installation



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	1×10^{-7}
	FRR	$1,4 \times 10^{-2}$
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.



Cleaning & Maintenance

The sensor coating is highly durable against chemical substances and mechanical damages, e.g. dust.

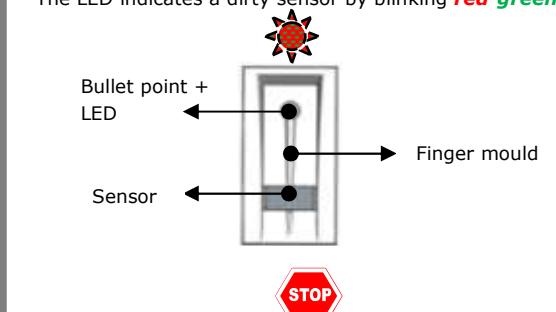
The sensor surface is resistant against the following chemicals: **detergents** (soap, Armor All (plastic cleaner/preservative), Formula 409, etc.), **Food & Beverages** (Cola, coffee, juice, etc.), **alcohol, oil, grease, petrol, brake fluid, etc.**, **hand lotion**.

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

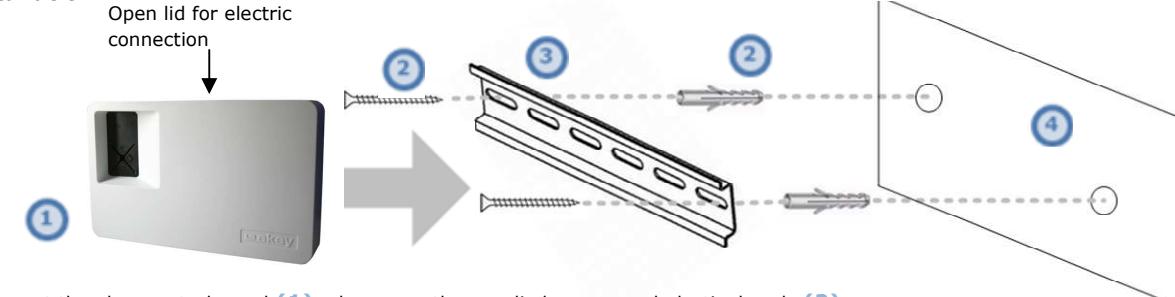


The sensor must not be touched using a sharp object as it could destroy the sensor!!

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

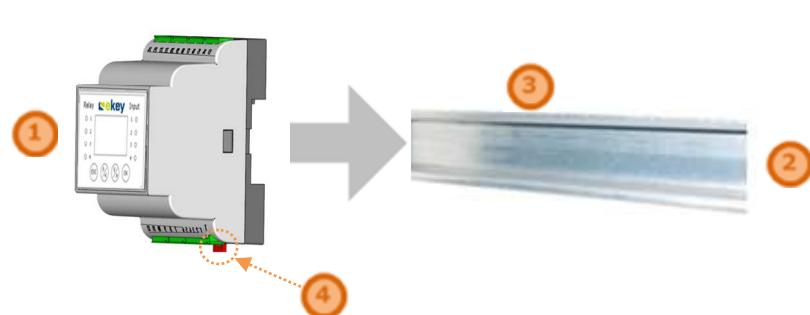


*The life span of the relay output decreases further when switching inductive or capacitive loads.

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

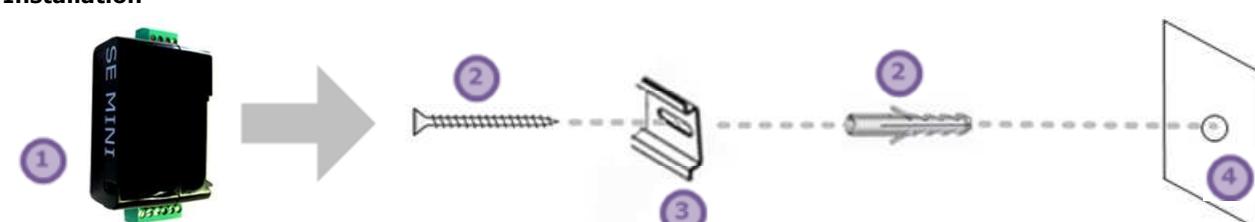
2) When switching inductive and capacitive loads, adequate safety measures should be taken in order to protect the relay contacts (sparks suppressor). The control panel does not have any built-in spark suppressors.

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

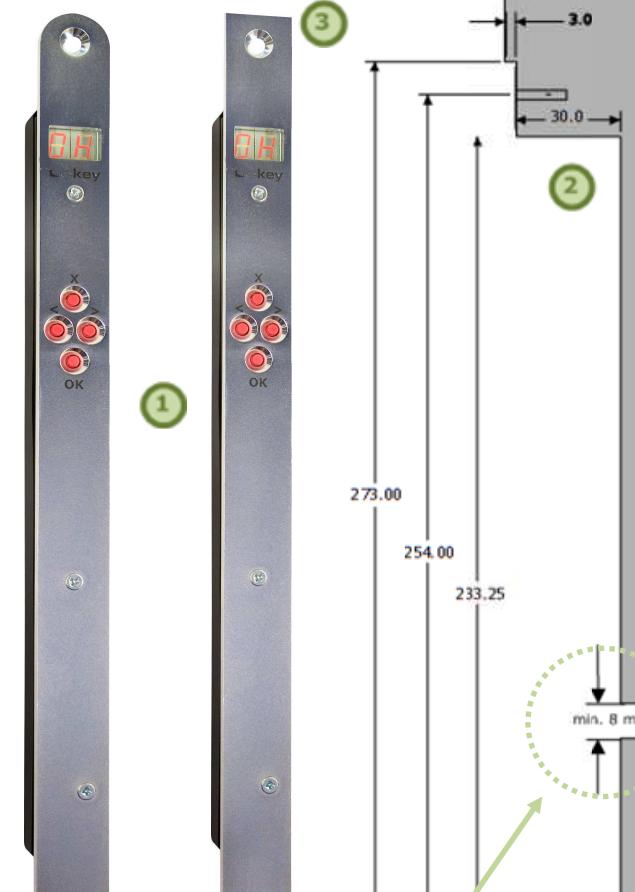
d) Finally, clip the ekey CP mini onto the rail.
Alternatively, your ekey CP mini can be installed on the DIN rail (35 mm) in your electrical cabinet.

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

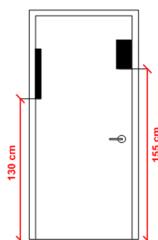
ekey control panel for integration into door panels!



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) / 2A	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