

# Wiring ekey home



Europe's #1 for fingerprint access solutions

ID 14/44: 801331: Version 3 dated 13.3.2012



801331

## ELECTRICAL SAFETY



All ekey home devices are to be operated by safety extra-low voltage and powered by adapters from protection class 2 according to VDE 0140-1. Such power adapters are typically marked with below shown symbol according to IEC 60417:

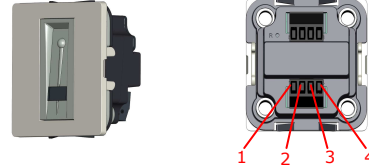
**The creation of electrical connections and the connections to the mains can only be carried out by specialists!**

**The devices do NOT have reverse polarity protection! An incorrect electrical connection of the devices can cause them serious damage.**

**The cable between the ekey home CP (control panel) and the ekey home FS (finger scanner) must be installed separately from the house electrical installation (230V respectively 380V mains voltage).**

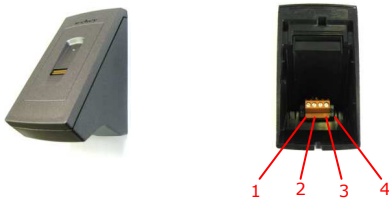
Device / Product	Clamp Nr.	Signal description	Recommended cable color
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### ekey home FS OM



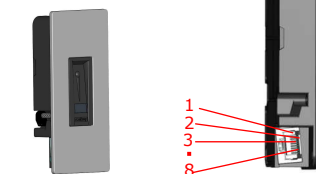
			J-Y(ST)Y
1	RS485 (Clamp 1)		green
2	RS485 (Clamp 2)		white
3	Power supply (Clamp 3)	8-24VDC or	red
4	Power supply (Clamp 4)	8-24VAC	blue

### ekey home FS WM 2.0



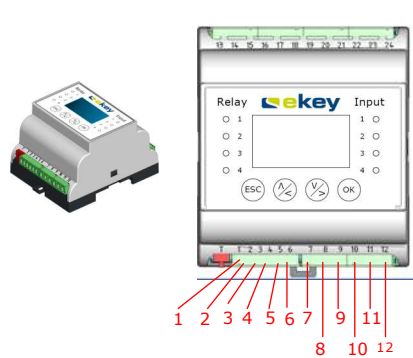
			J-Y(ST)Y
1	RS485 (Clamp 1)		green
2	RS485 (Clamp 2)		white
3	Power supply (Clamp 3)	8-24V DC or	red
4	Power supply (Clamp 4)	8-24V AC	blue

### ekey home FS IN



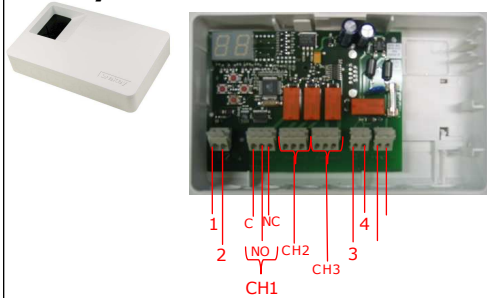
			LiYY (Type A)
4	RS485 (Clamp 1)		green
5	RS485 (Clamp 2)		yellow
7	Power supply (Clamp 3)	8-24VDC or	brown
8	Power supply (Clamp 4)	8-24VAC	white

### ekey home CP DRM



			J-Y(ST)Y
1	RS485 (Clamp 1)		green
2	RS485 (Clamp 2)		white
3	Power supply FS (Clamp 3)		red
4	Power supply FS (Clamp 4)		blue
5	+VCC	8-24VDC or	
6	-VCC	8-24VAC	
7	Relay 1 C (common)		
8	Relay 1 NO (normally open)		
9	Relay 1 NC (normally close)		
10	Input1		
11	Input1		
12	NC (not connected)		

### ekey home CP WM



			J-Y(ST)Y
1	RS485 (Clamp 1)		green
2	RS485 (Clamp 2)		white
CH1	C	Relay 1 Common	
	NO	Relay 1 Normally open	
	NC	Relay 1 Normally close	
CH2 <sup>1)</sup>	C	Relay 2 Common	
	NO	Relay 2 Normally open	
	NC	Relay 2 Normally close	
CH3 <sup>1)</sup>	C	Relay 3 Common	
	NO	Relay 3 Normally open	
	NC	Relay 3 Normally close	
3	Power supply FS (Clamp 3)		red
4	Power supply FS (Clamp 4)		blue
9VAC	A	+Vcc	9-12VDC or
	B	-Vcc	9-12VAC

<sup>1)</sup> Only for ekey home CP WM 3

## Cable recommendation:

J-Y(ST)Y 4 x 2 x 0.8mm :

**Cable assignment :**  
 2x RS485 bus (green/white) + 2x RS485 spare (yellow/white)  
 2x power supply (red/blue) + 2x spare (brown/white) to increase cable cross section for cable length > 50m



The cable between the ekey home CP (control panel) and the ekey home FS (finger scanner) must be installed separately from the house electrical installation (230V respectively 380V mains voltage). The cable carries signals in the low voltage range, which may be disrupted by contiguous conducting cables with mains voltage.

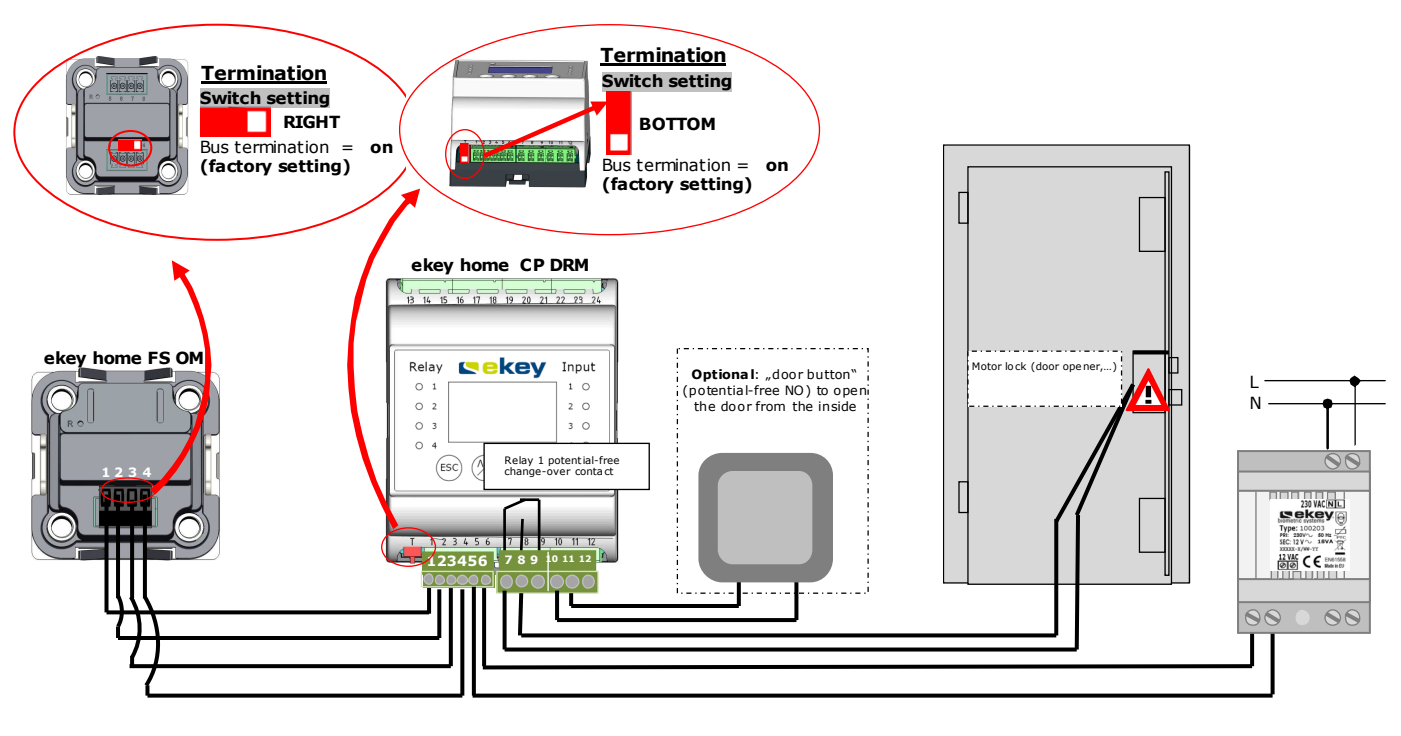
## Example 1

"OM" version

ekey home FS OM



+ ekey home CP DRM

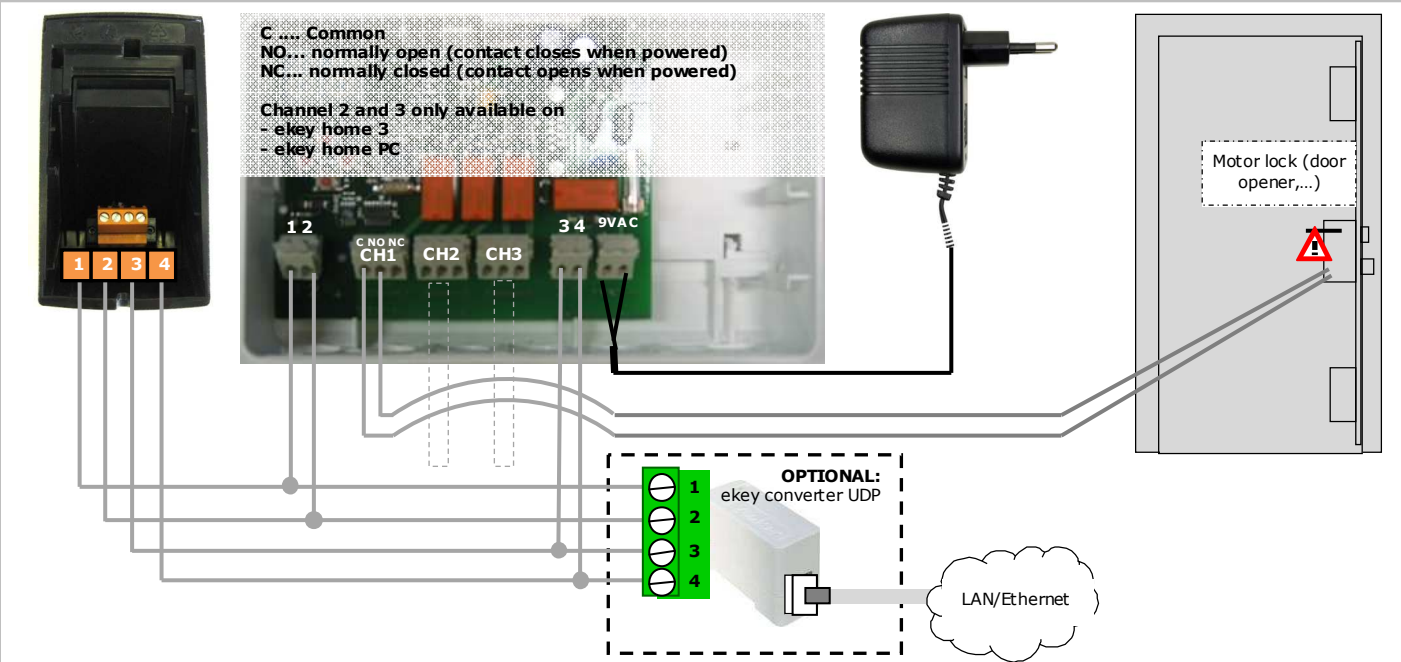


## Example 2

"WM" version ekey home FS WM 2.0



ekey home CP WM

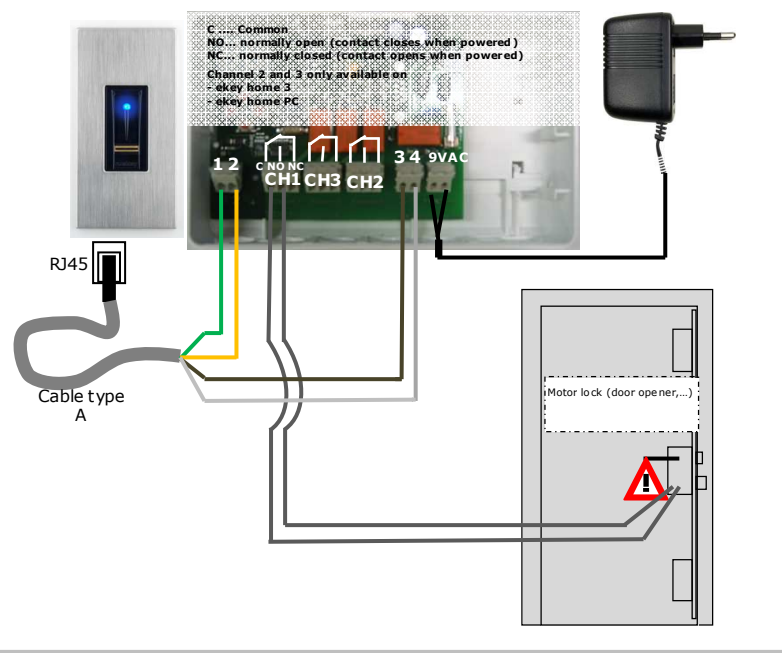


**The connection to the motor lock/door opener should only be seen here as a schematic illustration. The wiring varies according to the motor lock type!!**

**Check the motor lock/door opener technical connection instructions and further specific data!**

## Example 3

"IN WM" version ekey home FS IN + ekey home CP WM



## Example 4

"IN DRM" version ekey home FS IN + ekey home CP DRM

