

Wiring ekey multi CP DRM 4



Europe's #1 for fingerprint access solutions

ID 18/45: 801330: Version 2 dated 13.3.2012



801330

Electrical safety



All ekey home/multi 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 - ekey standard
------------------	-----------	--------------------	---

ekey home FS OM

Clamp Nr.	Signal description	Recommended cable color - ekey standard
1	RS485 (Clamp 1)	green
2	RS485 (Clamp 2)	white
3	Power supply (Clamp 3)	red
4	Power supply (Clamp 4)	blue

J-Y(ST)Y

ekey home FS IN

Clamp Nr.	Signal description	Recommended cable color - ekey standard
4	RS485 (Clamp 1)	green
5	RS485 (Clamp 2)	yellow
7	Power supply (Clamp 3)	brown
8	Power supply (Clamp 4)	white

L1YY (Type A)

ekey home FS WM 2.0

Clamp Nr.	Signal description	Recommended cable color - ekey standard
1	RS485 (Clamp 1)	green
2	RS485 (Clamp 2)	white
3	Power supply (Clamp 3)	red
4	Power supply (Clamp 4)	blue

J-Y(ST)Y

ekey multi CP DRM 4

Clamp Nr.	Signal description	Recommended cable color - ekey standard
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	
6	-VCC	
7	Relay 1 C (common)	
8	Relay 1 NO (normally open)	
9	Relay 1 NC (normally close)	
10	Input12C	
11	Input1	
12	Input2	
13	Relais 2 C (common)	
14	Relais 2 NO (normally open)	
15	Relais 2 NC (normally close)	
16	Relais 3 C (common)	
17	Relais 3 NO (normally open)	
18	Relais 3 NC (normally close)	
19	Relais 4 C (common)	
20	Relais 4 NO (normally open)	
21	Relais 4 NC (normally close)	
22	Input34 C	
23	Input 3	
24	Input 4	

J-Y(ST)Y

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

Cable assignment :
2x RS485 bus (green/white) + 2x RS485 spare (yellow/white) for star shaped topology wiring back and forth.
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 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!!

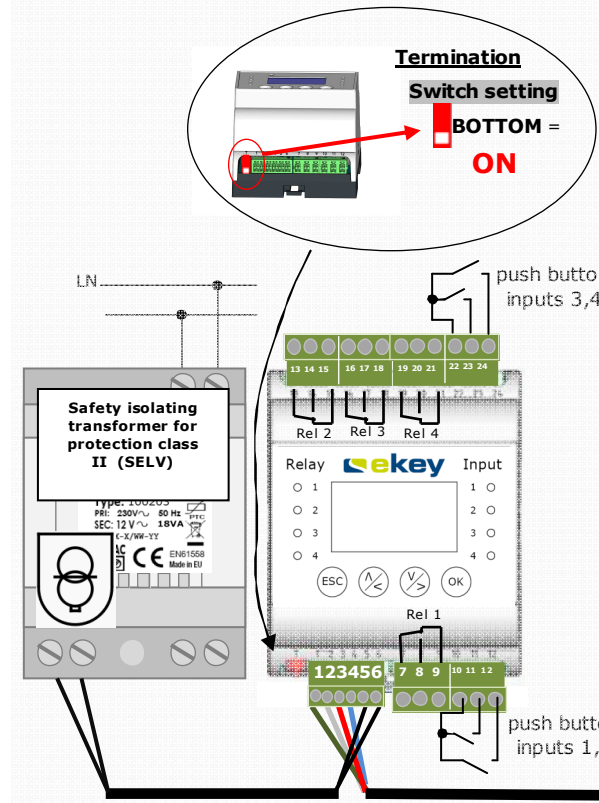
Check the motor lock/door opener technical connection instructions and further specific data!!!

ekey multi wiring



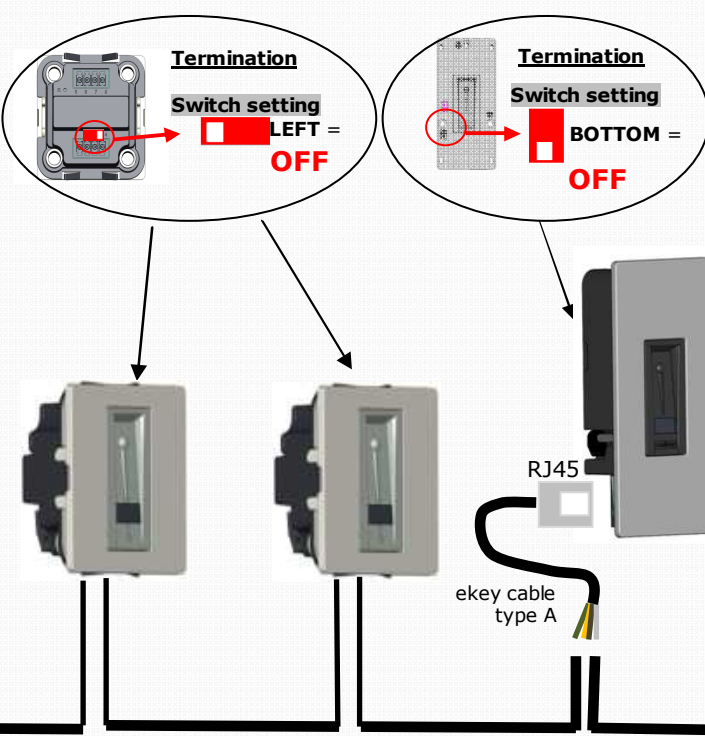
Switch the termination of the first and the last device in the RS485 bus line to „ON“

First device in the bus line

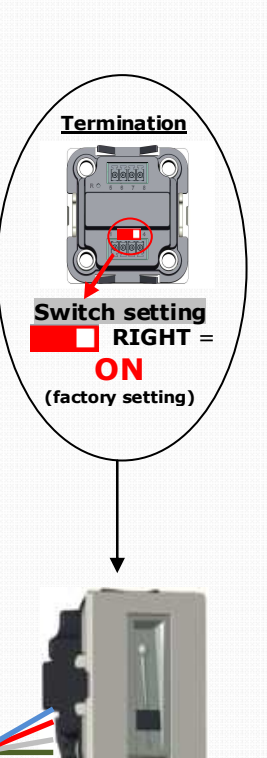


Devices in the middle of the bus

Depending on your configuration, up to 3 devices can be connected here!



Last device in the bus line



RS 485: serial wiring (line topology) max. 500m **NO STAR TOPOLOGY!**

Detailed drawing example (with 3 finger scanners on 3 doors)

