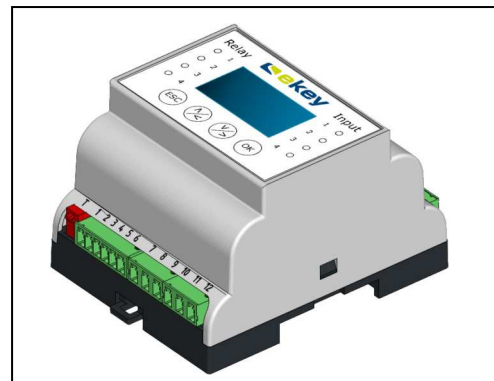


ekey multi CP DRM 4

ID 60/20: Version 1 dated 7.12.2010

Product description

The *ekey multi CP DRM 4* is a control panel (actuator) with 4 potential-free relays and 4 digital inputs to control door locks, door openers, garage doors, etc. The *ekey multi CP DRM 4* can be operated with 4 finger scanners of the new 2.0 generation of the ekey biometric systems *ekey home* product range. The finger scanners and the *ekey multi CP DRM 4* thus make it possible to set up an RS485-based networked access system. Temporal and localized access rights may be set. The *ekey multi CP DRM 4* is meant to be mounted on a 35mm DIN rail within the electric control cabinet.



Features

- DIN rail mounted device 4HP
- Mounting on 35 mm DIN rail compliant with DIN EN 55022, respectively DIN EN 60715 TH35
- AC/DC supply
- Power supply for finger scanners of the *ekey home product range* with watchdog feature
- 4 relays, change-over contact, potential-free
- 4 digital inputs (controlled over the potential-free contact) for door push-button on the internal side of the door.
- Operates only in combination with an *ekey home FS* (see „compatible finger scanners“)
- The bus termination can be deactivated directly on the device
- LCD display and 4 buttons for menu navigation
- The relay and digital input status are indicated by the LEDs
- 3 programmable weekday-dependent time zones
- Customizable access rights via virtual keys and master key plan
- Protection class IP20

Item number

Description	Relays	Dig. inputs	Item #
ekey multi CP DRM 4	4	4	101163

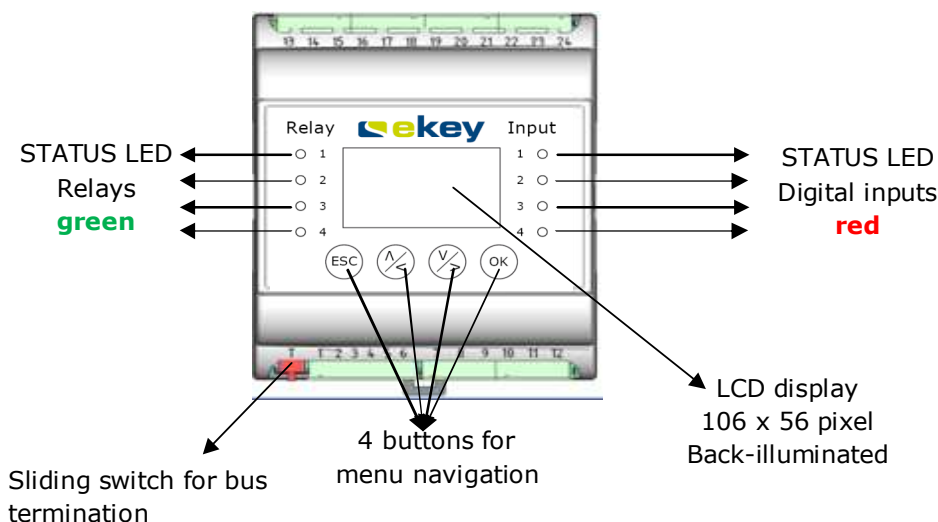
Standards

The *ekey multi CP DRM 4* are compliant with the 2004/108/EG (CE) and 2002/95/EC (RoHs) guidelines.

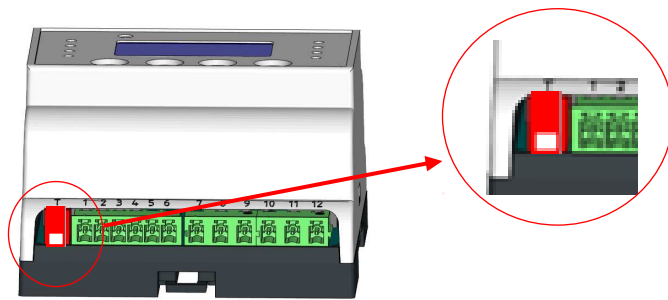
Applied standards	harmonized
EN 61000-6-2:2005	
EN 61000-6-3:2007	



Controls and visual indications



Bus termination

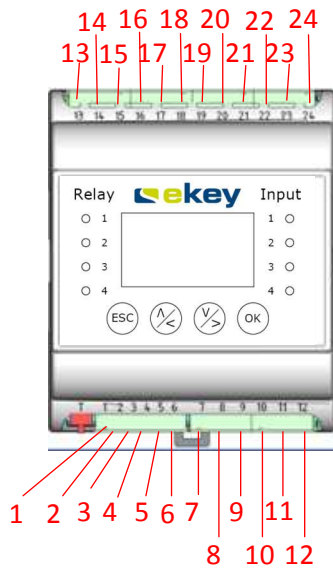


Switch setting

- BOTTOM** Bus termination = **ON**
(factory setting)
- TOP** Bus termination = **OFF**

Pin assignment

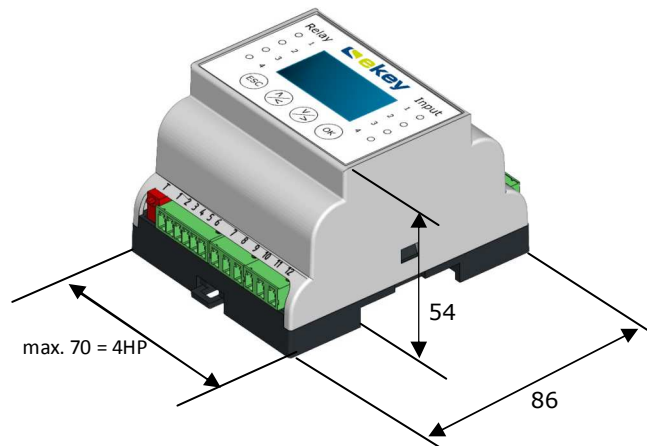
The electric connection of the *ekey multi CP DRM 4* is done via screw terminals. The push terminals are supplied with the product.



Clamp #	Signal description	Recommended cable color J-Y(ST)Y
1	RS485 (Clamp 1)	green
2	RS485 (Clamp 2)	white
3	FS supply (Clamp 3)	red
4	FS supply (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	Input12 C	
11	Input 1	
12	Input 2	
13	Relay 2 C (common)	
14	Relay 2 NO (normally open)	
15	Relay 2 NC (normally close)	
16	Relay 3 C (common)	
17	Relay 3 NO (normally open)	
18	Relay 3 NC (normally close)	
19	Relay 4 C (common)	
20	Relay 4 NO (normally open)	
21	Relay 4 NC (normally close)	
22	Input34 C	
23	Input 3	
24	Input 4	

Dimensions

Dimensions in mm



Cable recommendation

Please use the following cables:

J-Y(ST)Y 4 x 2 x 0,8

Cable assignment :

2x RS485 bus (green/white) + 2x RS485 spare (yellow/white) in the case of a star-shaped wiring (bidirectional!)
 2x power supply (red/blue) + 2x spare (brown/white) to increase cable cross section for cable length > 50m

Technical data

Absolute maximum threshold value

Operating the device beyond these values will destroy it!

Technical Data		Unit	Values
Supply	AC	V	0-24
	DC	V	±30
Temperature range	Storage	°C	-20 up to +70
	Operation	°C	-20 up to +70






Electric characteristics

Technical Data		Unit	Values
Supply		VAC	8-24
		VDC	8-24
Power input (Standby: no active relay; display off)		W	~ 1W
Temperature range		°C	-20° up to +70
Dimensions			4HP (DIN 43880)
Interface			RS485
Number of relays	Quantity	Quantity	4
	Max. switching voltage ¹⁾	VAC/VDC	42
	Max. switching current ¹⁾	AAC / ADC	2
	Mechanical life time cycle	Number of switchings	10 ⁷
	Electric life time cycle ²⁾	Number of switchings	10 ⁵
Digital inputs	Quantity	Quantity	4
	Max. resistance active input ³⁾	kΩ	<1
	Min. resistance inactive input ³⁾	kΩ	>50
Protection class	IP		20 (to be mounted indoors in the electric control cabinet)
Operation			4 buttons
Indicators and display			4 LEDs for outputs (green) 4 LEDs for inputs (red), LCD 106x56
Time	Adjustable		Adjustable via menu navigation
	Accuracy, deviation at 25°C	s/month	± 60
	Accuracy, deviation at 70°C	s/month	± 265
	Running time during power shortage	h	96
Max. cable length for communication (CLAMP 1,2) ⁴⁾		m	500



Max. length of the power supply cable (CLAMP 3,4,5,6) when operated in an industrial area	m	30
Max. length of the connection cables for relay contact and digital input (CLAMP 7-12) when operated in an industrial area	m	30
Dimensions HxWxD	mm	86 x 70 (4HP) x 56

- 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 *ekey multi CP DRM 4* features mechanical change-over contacts and does not feature such suppressors.
- 3) At which electric resistance active or inactive will be identified.
- 4) When using the recommended cables.

Accessories

Item description	Color	Picture	Item number
ekey PS power supply 12VDC / 2A DRM 4HP	White		100201
ekey PS power supply 12VAC / 1.5A DRM 4HP	White		100203
ekey PS power supply 12VDC / 1.5A OM	Black		100204
ekey PS power supply 12VDC / 1A OM	Black		100202
Ekey PS power supply 24VDC / 2A DRM 4HP	White		100891

Compatible finger scanners

Item description	Picture	Item number
ekey home FS OM (<i>not available in Switzerland</i>)		101148
ekey home FS IN 2.0		101247

Subject to optical and technical modifications, any liability for misprints excluded.