

ekey home CP DRM 1

ekey home CP DRM 2

Product description

The *ekey home 1 CP DRM* and *ekey home 2 CP DRM* are control panels (actuators) featuring 1 or 2 potential-free relay(s) respectively and 1 or 2 digital input(s) respectively to control a door lock or a door opener. The *ekey home 1 CP DRM* and *ekey home 2 CP DRM* can only be operated in combination with finger scanners of the *ekey home* product range by ekey biometric systems. The control panels should 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
- 1 relay *ekey home CP DRM 1*
2 relays *ekey home CP DRM 2*
change-over contact, potential-free
- 1 digital input *ekey home CP DRM 1*
2 digital inputs *ekey home CP DRM 2*
(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
- Protection class IP20

Item number

Description	Relays	Dig. input	Item #:
ekey home CP DRM 1	1	1	101162
ekey home CP DRM 2	2	2	101312

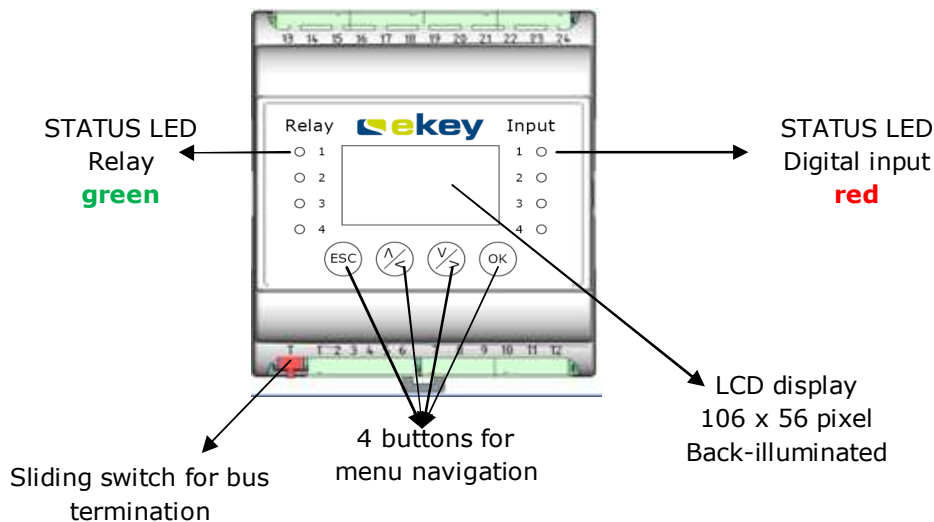
Standards

The *ekey home CP DRM 1* and *ekey home CP DRM 2* are compliant with the 2004/108/EG (CE) and 2002/95/EC (RoHS) guidelines

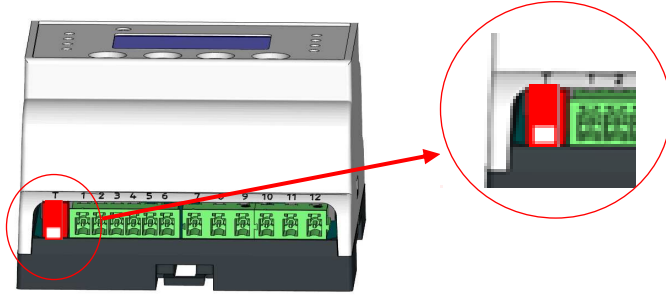
Applied standards	harmonized
EN 61000-6-2:2005	
EN 61000-6-3:2007	



Controls and visual indications



Bus termination



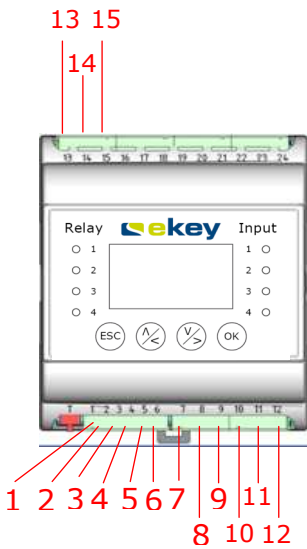
Switch setting

BOTTOM Bus termination = **ON**
(factory setting)

TOP Bus termination = **OFF**

Pin assignment

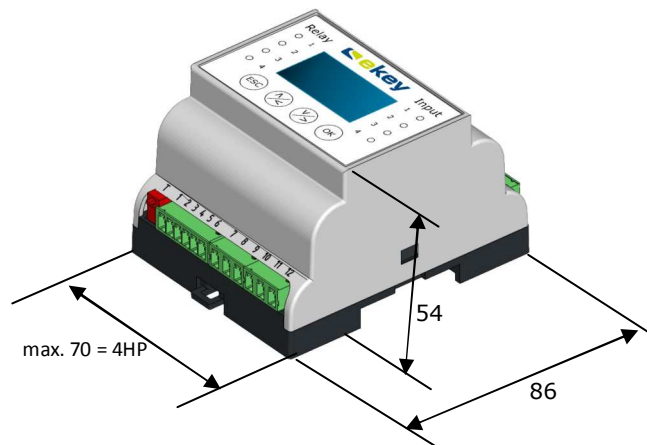
The electric connection of the ekey home CP DRM 1/2 is done via screw terminals. The push terminals are supplied with the product.



Clamp #:	Signal description ekey home		Recommended cable color (ekey standard)
	1 CP DRM	2 CP DRM	
1	RS485 (Clamp 1)	RS485 (Clamp 1)	Green
2	RS485 (Clamp 2)	RS485 (Clamp 2)	Yellow
3	Power supply (Clamp 3)	Power supply (Clamp 3)	Brown
4	Power supply (Clamp 4)	Power supply (Clamp 4)	white
5	+VCC	+VCC	-
6	-VCC	-VCC	-
7	Relay 1 C (common)	Relay 1 C (common)	-
8	Relay 1 NO (normally open)	Relay 1 NO (normally open)	-
9	Relay 1 NC (normally close)	Relay 1 NC (normally close)	-
10	Input 1	Input 1/2 common	-
11	Input 1	Input 1	-
12	NC (free)	Input 2	-
13	NC (free)	Relay 2 C (common)	-
14	NC (free)	Relay 2 NO (normally open)	-
15	NC (free)	Relay 2 NC (normally close)	-

Dimensions

Dimensions in mm



Cable recommendation

Please use the following cables:

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


Technical data

Absolute maximum threshold value

Operating the devices beyond these values will destroy them!






Description		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




Description	Unit	ekey home		
		1 CP DRM	2 CP DRM	
Supply (use protection class II => SELV )	VAC	8-24		
	VDC	8-24		
Power input	W	<1W		
Temperature range	°C	-20° up to +70		
Dimensions		4HP (DIN 43880)		
Interface		RS485		
Number of relays	quantity	1	2	
Relay data	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	
Number of inputs (for door push-button)	Quantity	1		
Electr. data input ³⁾	Low	kΩ	<1	
	High	kΩ	>50	
Protection class	IP	20 (to be mounted indoors in the electric control cabinet)		
Operation		4 buttons		
Indicators and display	LEDs for outputs (green)	1	2	
	LEDs for inputs (red),	1	2	
	LCD	Resolution 106x56, backlight		
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 home CP DRM ½ features mechanical change-over contacts and does not feature such suppressors.
- 3) Define low and high, at which resistance between input12C and input1, respectively input 2, will low respectively high, be defined. Same for input 34C and input 3, respectively input 4.
- 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 WM white	Anthracite	100481
	White	100482
ekey home FS IN		100504
FSB home FS	Handle 30	100645
	Handle 35	100647
	Oval right	100650
	Oval left	100653
Feller home FS		Contact Feller in Switzerland.

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