

# ekey home converter Wiegand RS485

## Product description

The ekey home converter Wiegand RS485 is an accessory item for the product groups ekey home and ekey multi. The ekey home converter Wiegand RS485 serves for the data technology connection of ekey home and ekey multi to a Wiegand system. The Wiegand converter transforms the internal ekey RS485 protocol into a Wiegand protocol. Data transfer from the ekey system to the foreign Wiegand system occurs uni-directionally and never in the other direction. The housing of the device is constructed for mounting on 35mm DIN rails. The factory-set 26 bit-Wiegand protocol of the ekey home converter Wiegand RS485 may be adjusted for MS Windows operating systems by means of the PC software ekey FWupdate.



## Features

- Operating within ekey home or ekey multi systems
- Sending access information (Wiegand ID) to a foreign system with Wiegand protocol
- Factory setting 26 bit Wiegand protocol
- Wiegand protocol adjustable for MS Windows operating system with PC software ekey FWupdate
- Baudrate 115200 Bd of the converter on RS485 side
- DIN-rail mounted device
- Mounting on DIN-rail 35mm according to DIN EN 55022 resp. DIN EN 60715 TH35
- AC /DC supply
- Protection class IP20

## Description and item number

Description	Item #
ekey home CV Wiegand RS485	101582




## Standards

The product ekey home converter Wiegand RS485 is compliant with the 2004/08/EG (CE) and 2011/65/EU (RoHS) guidelines.

Applied standards	harmonized
EN61000-6-3:2007	
EN61000-6-2:2005	

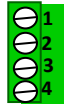
## Optical signalling

The ekey home converter Wiegand RS485 has a status LED, signalling the various operating states of the converter.

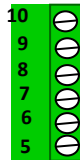
Signalling	Information	Description
	green flashing	Normal operation
	green	Data sending
	red flashing	Factory setting/ no proper connection

## PIN assignment

PIN No.	Signal description
1	RS485
2	RS485
3	-VCC
4	+VCC

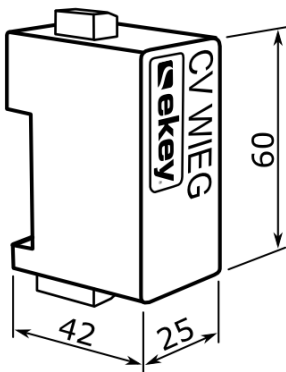


PIN No.	Signal description
5	WIEGAND D0
6	WIEGAND D1
7	WIEGAND GND
8	-----
9	-----
10	-----



## Dimensions

in mm



## Wire specification

ekey recommends using the following cable types for wiring the system:

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

### Wire assignment 4 x 2-pin

- 1 wire pair for RS485 Bus (green/white) + 1 back-up wire pair (yellow/white) in case of star-shaped basic wiring = by routing the wire back and forth a serial wiring can be obtained.
- Wire pair (red/blue) for voltage supply + 1 back-up wire pair (brown/white) to increase cross-section for cable lengths above 50m

## Technical data – ekey home converter WIEGAND RS485

### Absolute maximum limit values

Operating beyond these limits will destroy the device!

Technical data		Unit	Value
Power supply	AC	V	24
	DC	V	30
Temperature range	storage	°C	-25 to +70
	operating	°C	-25 to +70

### Electrical features

Technical data		Unit	Value
Supply	AC	V	8-24
	DC	V	8-30
Power input <sup>1</sup>		W	ca. 1
Temperature range	storage	°C	-25 to +70
	operating	°C	-25 to +70
Baudrate on RS485 side		Bd	115200
operating		1	reset button (located in a recess)
signalling		1	status LED
protection class		IP	20
max. wire length RS485 Bus <sup>2</sup>		m	500
max. length of supply line when used in industrial environmental conditions		m	30
Dimensions WxHxD		mm	60x24x42

1) Power input varies  $\pm 10\%$  within the entire supply voltage range

2) In case of using the recommended wires

Subject to optical and technical amendments, as well as printing and typing error!