

Door status monitoring

With the electronic unit ekey net control panel MINI it is possible to monitor the door status, in connection with ekey net version 3.3 or above. The requirement for this is that the door is equipped with a potential-free contact, which reports the status of the respective door. The ekey net control panel MINI also has a potential-free relay contact with the function NO, and can therefore also be used as a control panel.

Functions

- Switching a motorised lock or a door opener with a potential-free relay contact (NO)
- Inputting a potential-free contact (e.g. door contact) into ekey net

Features

- The ekey net control panel MINI can be operated exclusively in connection with ekey net version 3.3 and above.

Requirements for the customer

- ekey net version 3.3 or above
- A potential-free door contact has to be installed in the door to enable door status monitoring.

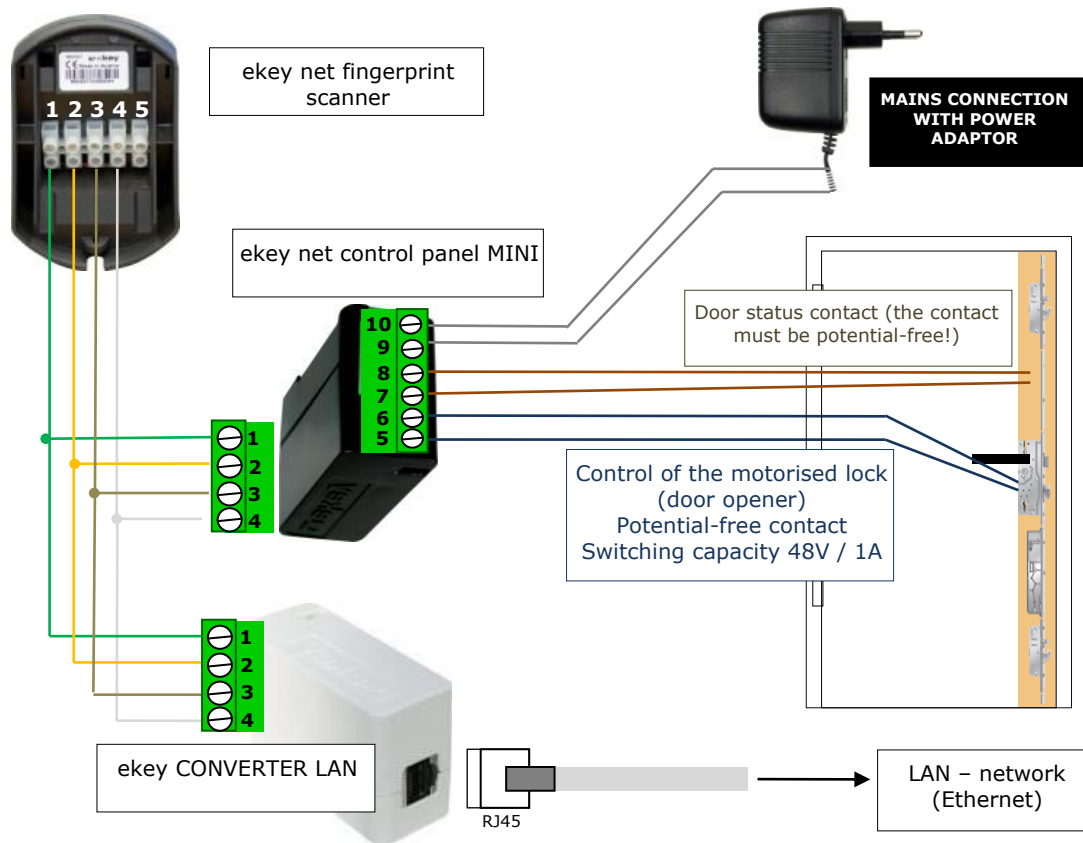
Scope of delivery, art. no.: 100666

- ekey net control panel Mini
- Assembly and installation instructions
- Mounting set

Illustration of the ekey control panel mini



Wiring the ekey net control panel MINI (schematic view)



When carrying out the wiring, please make sure you observe the guidelines in the assembly instructions and the ekey net specifications on the ekey net CD.

PIN allocation - ekey net control panel MINI

PIN no.:	ekey net control panel Mini
1	RS485B (terminal 1)
2	RS485A (terminal 2)
3	+VCC (terminal 3) switched
4	-VCC (terminal 4)

PIN no.:	ekey net control panel Mini
5	REL1C (relay contact 1)
6	REL1NO (relay contact 2)
7	IN1H (input H) = door contact
8	IN1L (input L) = door contact
9	-VCC (power supply e.g. 9V A/C)
10	+VCC (power supply e.g. 9V A/C)

Cable specifications:

Connection: fingerprint scanner – control panel
 ekey® recommends using the following cable for the electrical connection between the fingerprint scanner and the control panel:

4-pin twisted pair (UTP and STP) cable as per DIN ISO 8482.

e.g. LiYY 4 x 0.14 or LiYY 4 x 0.25

The respective voltage limits (maximum ratings) are also to be observed. The device with the lowest voltage range defines the maximum ratings of the power supply. It is, of course, also possible to power all components individually.

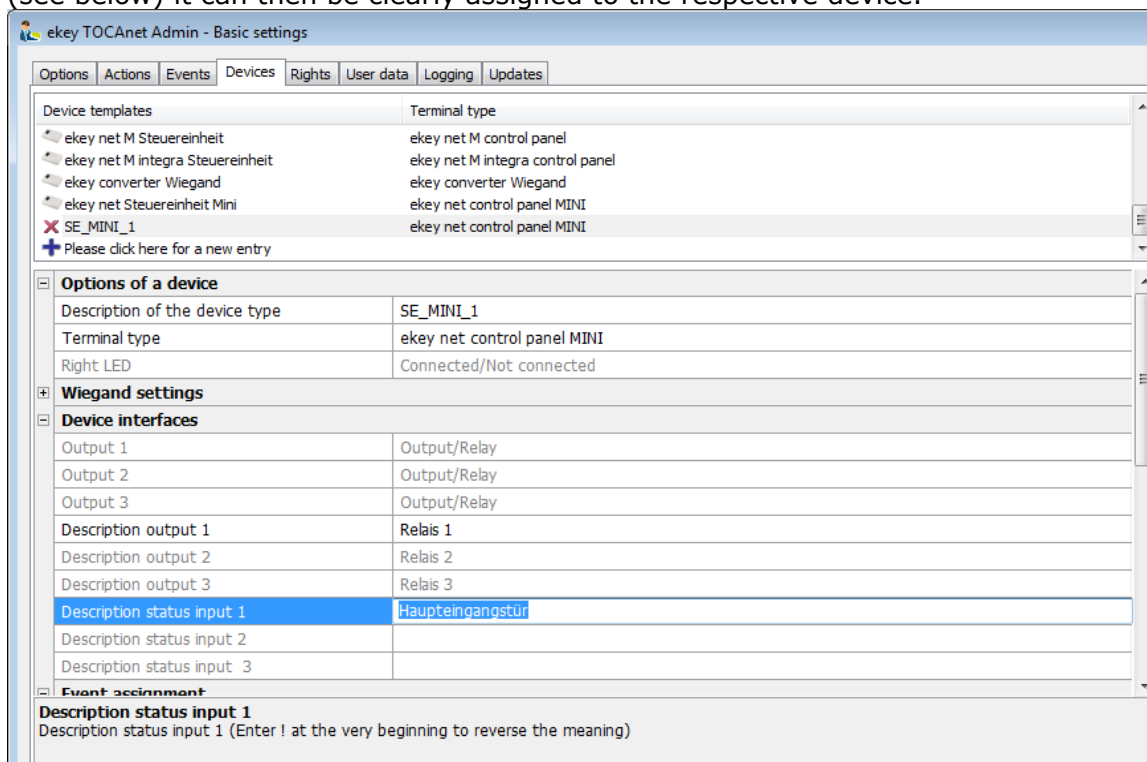
Door status monitoring

In order to now set up the function "Door status monitoring" in ekey net, proceed as follows:

Carry out the wiring as per the above section "Wiring the ekey net control panel Mini".

The configuration of the ekey net control panel MINI in the ekey net system is to be carried out in accordance with the Help section. It is also recommended to use the wizards.

Essentially, no special settings have to be made for the door status monitoring itself. In device settings, you should give the ekey net control panel MINI and the corresponding input 1 a suitable name (e.g. main entrance). As this name also appears in the log entry (see below) it can then be clearly assigned to the respective device.



Device templates		Terminal type
ekey net M Steuereinheit		ekey net M control panel
ekey net M integra Steuereinheit		ekey net M integra control panel
ekey converter Wiegand		ekey converter Wiegand
ekey net Steuereinheit Mini		ekey net control panel MINI
SE_MINI_1		ekey net control panel MINI
+ Please click here for a new entry		



Options of a device	
Description of the device type	SE_MINI_1
Terminal type	ekey net control panel MINI
Right LED	Connected/Not connected

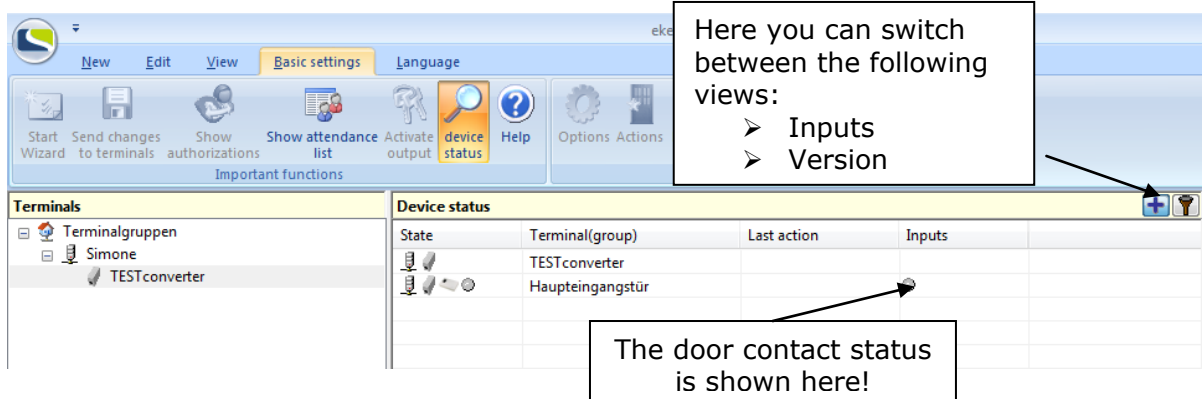
Wiegand settings	
Device interfaces	
Output 1	Output/Relay
Output 2	Output/Relay
Output 3	Output/Relay
Description output 1	Relais 1
Description output 2	Relais 2
Description output 3	Relais 3
Description status input 1	Haupteingangstür
Description status input 2	
Description status input 3	

Event assignment	
Description status input 1	Description status input 1 (Enter ! at the very beginning to reverse the meaning)

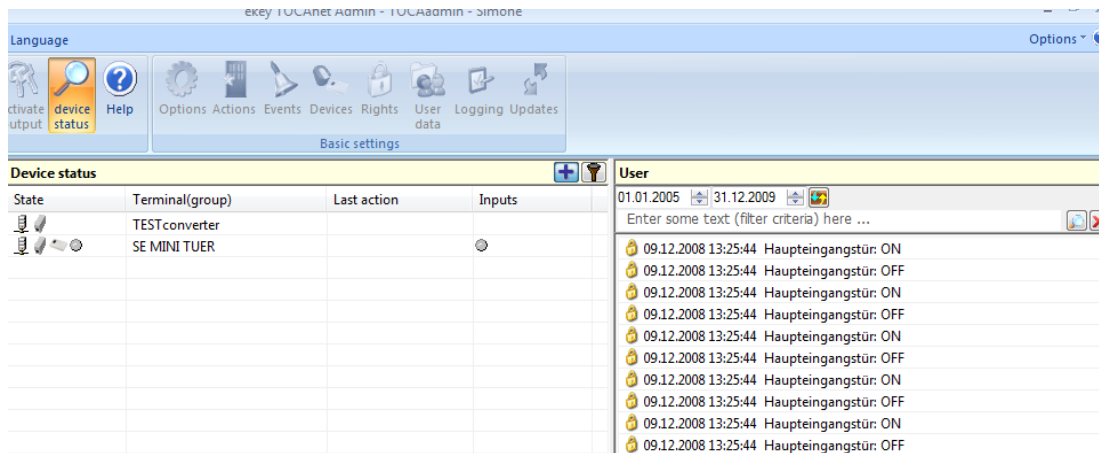
The monitoring of the door status is carried out in "Device status".

Here you can see the access status of the individual ekey net control panels MINI, under the heading "**Inputs**".

-  Door contact open
-  Door contact closed



With every change of door contact status (open -> closed or closed -> open), an entry is also made in the LOG file in addition to the display under device status. **WARNING !! Entries about door status changes are only made in the LOG file if the corresponding device is ONLINE. In OFFLINE-mode no recordings are made about door contact status changes !!**



Technical data (maximum ratings)

General data (MAXIMUM Ratings)

Technical data	Unit	Value
ekey net control panel MINI		
Power supply	V A/C	8-24
	V D/C	8-30
Power input	W	approx. 1
Relays	Number	1
Switching capacity of the relays		48V D/C / 1A
Temperature range	°C	-20 to +70
Protection class		IP20
Digital inputs (only potential-free contacts can be connected!)		1

The control panel has to be connected to the RS485 network with a 4-core cable which has a minimum diameter of 0.5mm (corresponds to 0.14mm² core diameter). For availability reasons ekey biometric systems recommends using a CAT5 cable. For distances of over 50m a power cable has to be selected with a larger core diameter for the live cores (connections 3 and 4). You can find the maximum cable lengths and the structure of the network in the ekey net specifications (ekey_net_Spezifikation.pdf).

1 relay (semi-conductor) is available for controlling external devices. The relay has a change-over contact. The maximum switching capacity is 48V D/C (A/C) / 1A. Each time a door is closed, without exception, a connection has to be created to a separate power supply.

The connection cable between the ekey net control panel, the ekey net fingerprint scanner and the ekey converter LAN are to be laid separately from the electrical installations of the building, as these signals create a low-voltage area which can be impaired by adjacent live cables.

**The connections do not have reverse polarity protection!
An incorrect electrical connection of the system can cause damage to the device!**

Subject to optical and technical amendments, as well as printing and typing errors