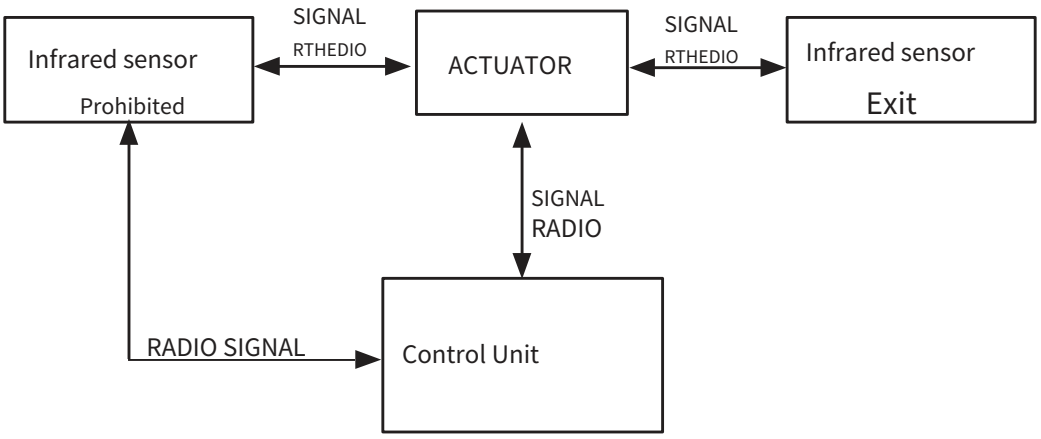
OCO1

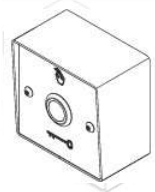
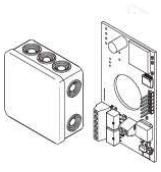
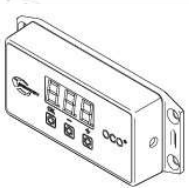
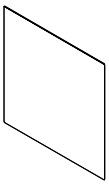
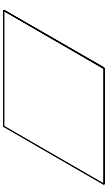
I. SYSTEM DIAGRAM



II.TECHNICAL SPECIFICATIONS

General specifications		
	Operating voltage	12-24V DC
	Switching current (relay)	30V DC - 2A
Energy consumption		
	By element	max. 150mA
	2x infrared sensors + 1x actuator	max. 450mA
	Control unit	Power supply 12V DC | 2A
System		
	Communication	Radio (868MHz)
	Open field range	50m

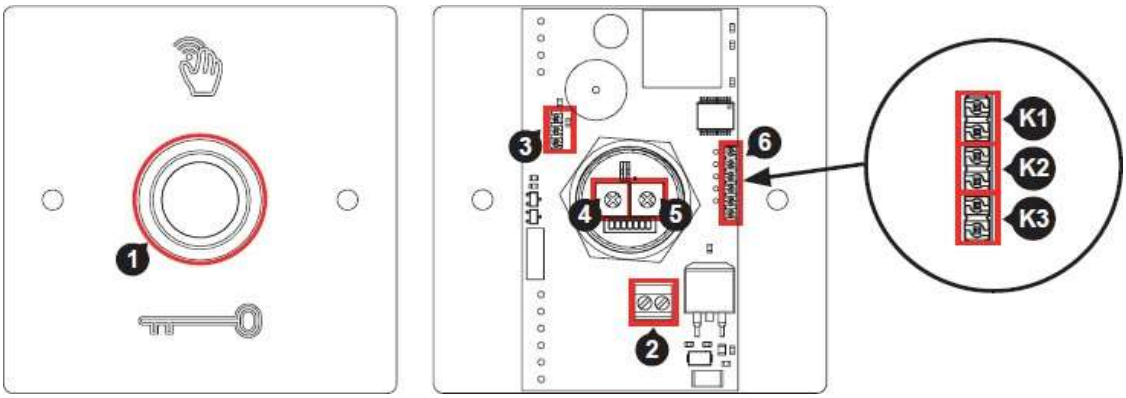
III. DEVICE COMPONENTS

Access system elements (Entrance / Exit)					
					
Sensor infrared	Actuator	Control unit	Power supply	Interior panel	Exterior panel
2	1	1	1	1	1

IV. DESCRIPTION

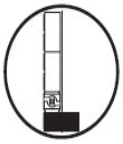
1) Infrared sensor

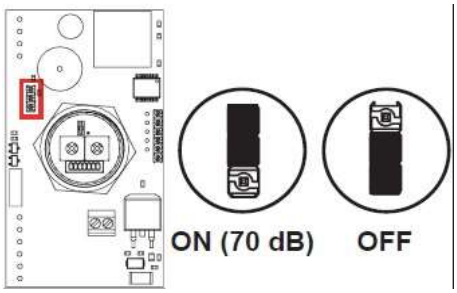
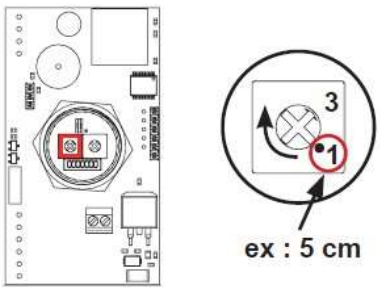
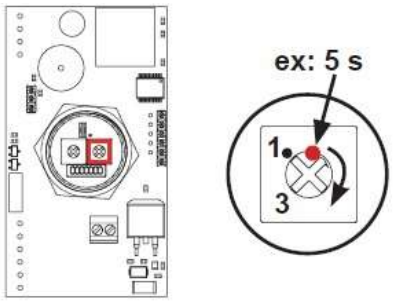
Infrared sensors communicate with the actuator and control unit.



1	1 bicolor LED (red and green)	5	Timer setting
2	Electrical terminal block 12/24V DC	K1	Setting to define the sensor as input or output
3	Buzzer settings	K2	Group configuration
4	Sensitivity distance setting	K3	System association mode

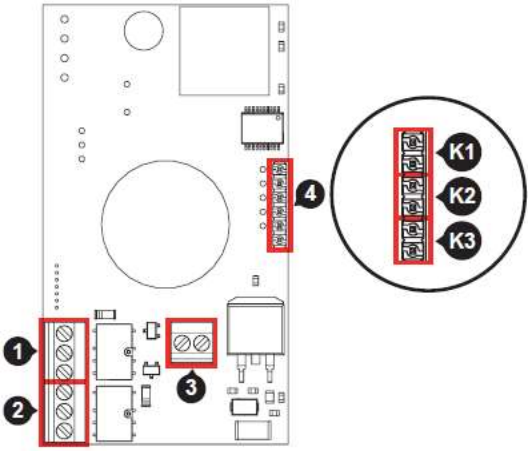
Jumper Configuration

K1	K2	K3
 Set as sensor infrared of Prohibited	 Jumper in factory position	 Normal mode of usage (by default)
 Set as sensor infrared output	Do not change the jumper in this system (OCO1).	 System association mode

Buzzer Configuration	Sensitivity distance setting	Timer setting
		
	For best use, it is recommended to set the sensitivity distance to 5 cm (factory settings).	It is recommended to configure the timer 5 secs.

2) Actuator

The actuator should be installed near the locking system or lock control box. This allows access to be opened and communication with the control unit.



1	Relay 1 (C/NO/NC)
2	Relay 2 (C/NO/NC)
3	Electrical terminal block 12-24V DC
K1	Relay operation configuration
K2	Group configuration (if OCO1 AC2)
K3	System association mode

Naming and positioning of jumpers

K1

Infrared input sensor activates relay 1

Infrared sensor output activates relay 2

Infrared sensors activate relay 1 (relay 2 is deactivated)

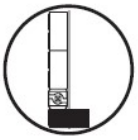
K2

Default jumper

Do not change the jumper in this system (OCO1).

K3

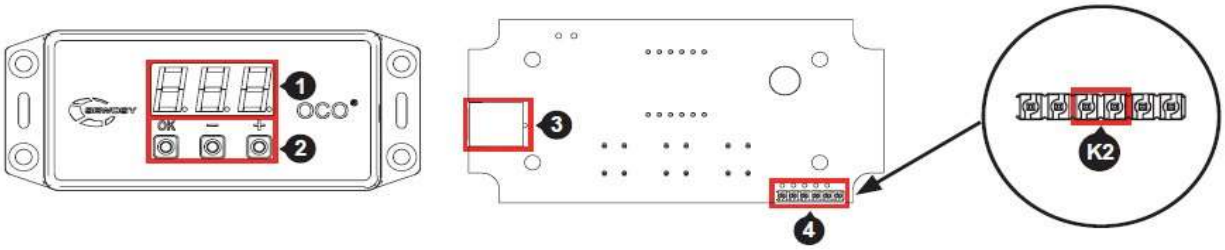
Normal usage mode (default)



System association mode

3) Control Unit (counter)

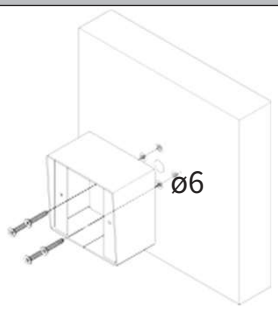
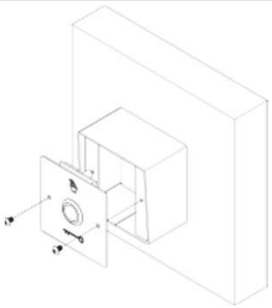
The control unit indicates the number of people in the facility. The control communicates with infrared sensors. Installing the control on a metal surface is not recommended as this reduces the radio range.



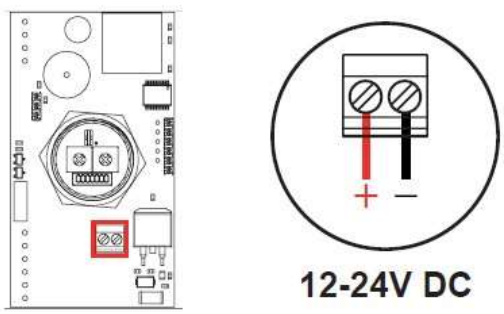
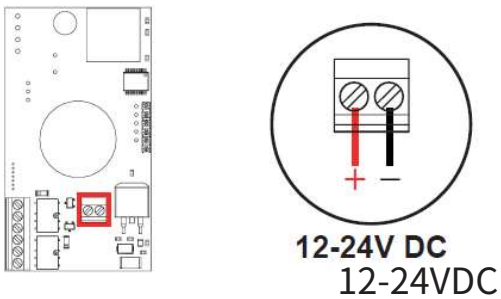
1	Digital display	3	12V DC power supply male connector
2	Control buttons	K2	Group configuration

Naming and positioning of jumpers
K2
Default jumper position, do not change!

V.INSTALLATION

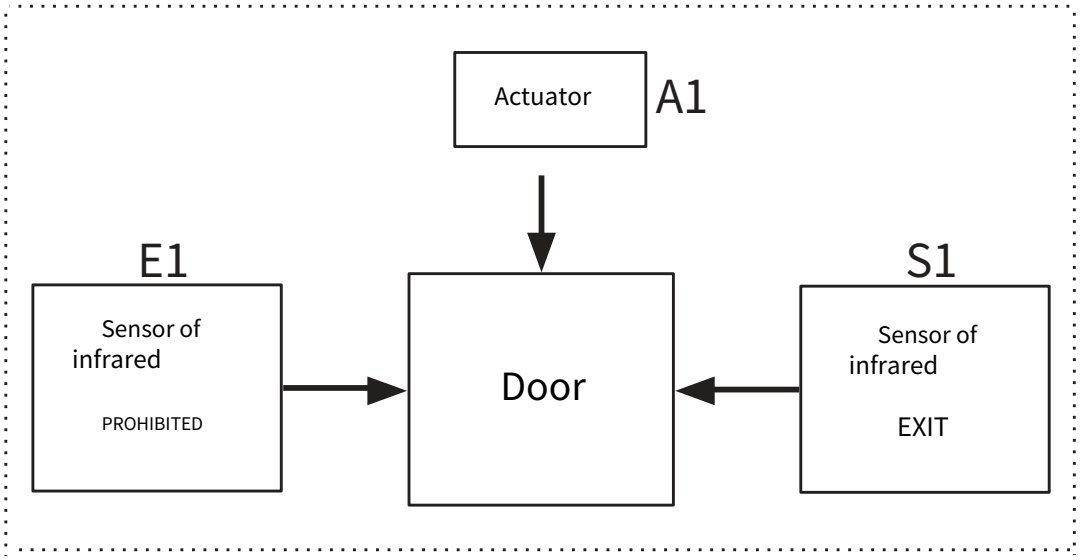
1	2
DIN 7982 - ST4.2 x 25 	 M4 x 6 anti-theft screw
Wall sockets are not provided.	Apply silicone sealant around the infrared sensor box and the wall to ensure water resistance.

VI. CONNECTION

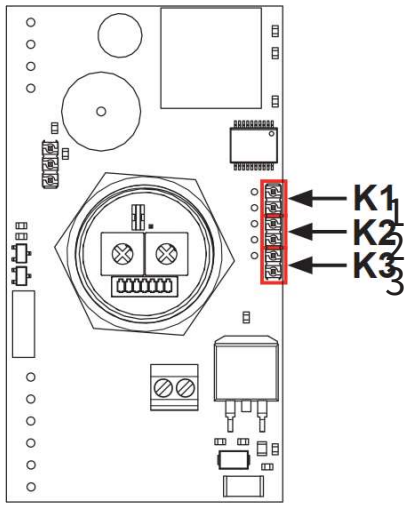
Infrared sensor connection	Connector connection
	

VII.SYSTEM CONFIGURATION EXAMPLES

1)System with common input and output



Infrared sensor configuration



K1 Configuration of input and output infrared sensors

Jumper K1 on the input infrared sensor

Jumper K1 on infrared sensor output

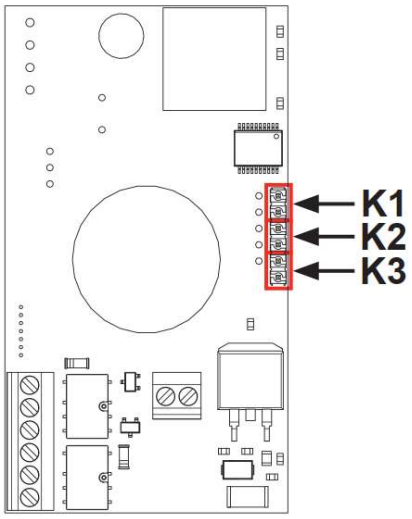
K2 Group configuration

Do not change the jumper

K3 System membership

See pages 21 and 22

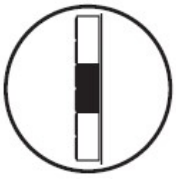
CCoonnffiigguration ddooacatcutaudaodror



K1 Relay operation configuration

As it is the same port for input and output, only one relay can be used

K2 Group configuration

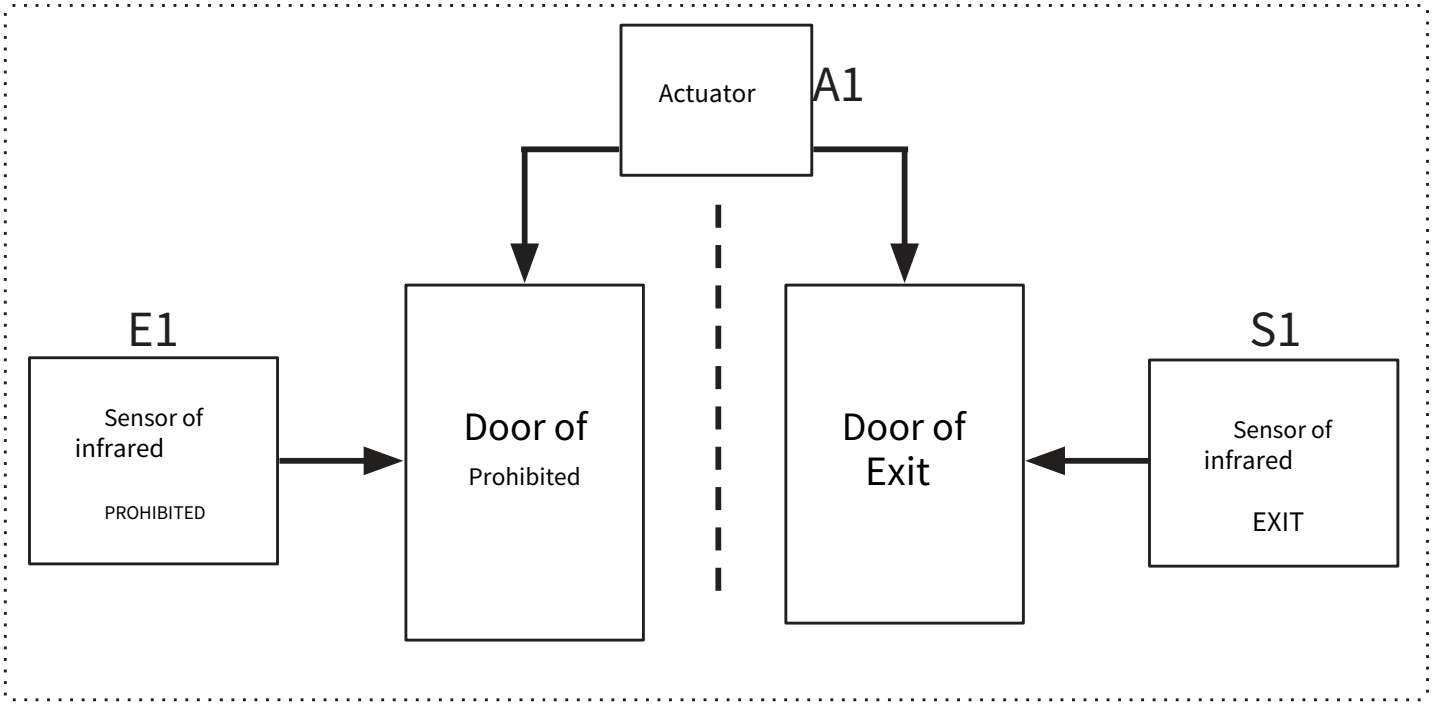


Do not change the jumper

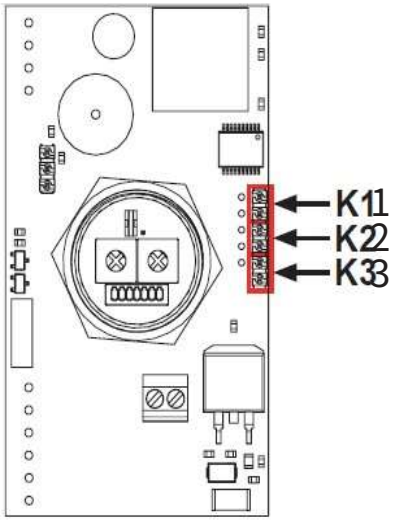
K3 System membership

See pages 21 and 22

3) Automatic door with independent entry and exit

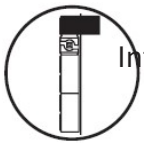


Infrared sensor configuration



K1 Input and output infrared sensor configuration

Infrared input sensor



Infrared output sensor

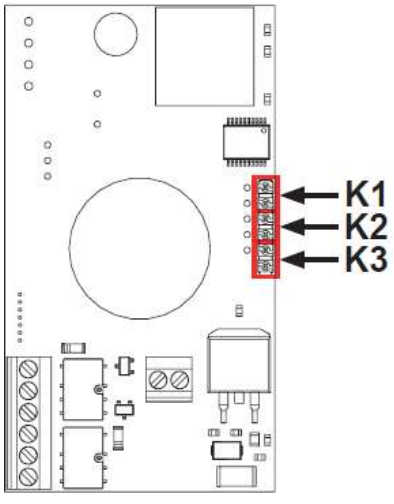
K2 Group configuration

Do not touch the jumper.

K3 System membership

See the schedule on pages 21 and 22.

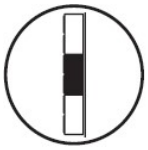
Actuator configuration



K1 Input and output infrared sensor configuration

Different ports for output and input, so the input infrared sensor activates relay 1 and the output infrared sensor activates relay 2.

K2 Group configuration



Do not touch the jumper.

K3 System membership

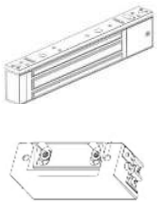
See the schedule on pages 21 and 22.

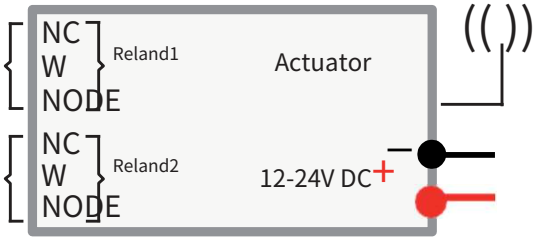
VIII. CONNECTION DIAGRAM

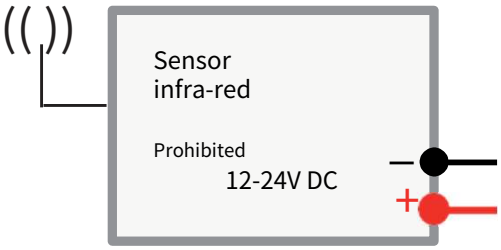
1) Example of connecting a system with an electronic lock

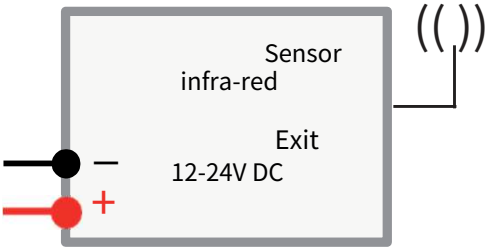
C/NC:Fail safe lock (NO)

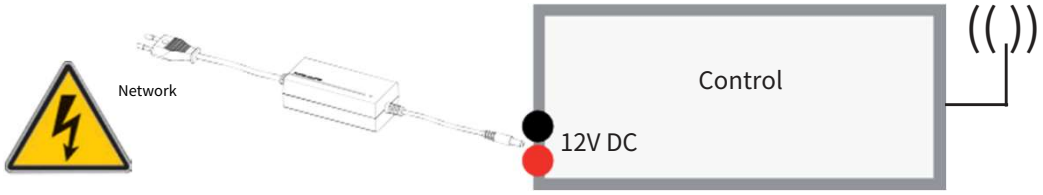
C/NO:Fail Secure (NC) lock

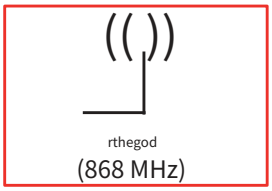












⚠Warning

- Use the correct input voltage as specified (12-24V DC).

- Incorrect input voltage may damage the product. This error is not covered by the product warranty.

VII. PROGRAMMING – Associating devices to a single system

The association process involves communicating a common identification key to all system components. By default, all components are programmed with the same key, ensuring the system is operational upon installation. However, it will be imperative to change this key if another identical system is installed nearby to avoid any interaction between the systems.

From now on, theinfrared sensorsand theactuatorswill be calledperipherals,and thecontrol unitwill be calledUC

Short nominations of peripherals :

E1 =Infrared door entry sensor #1 S1 =Infrared exit sensor for door #1 A1 =Actuator control electronic board no. 1

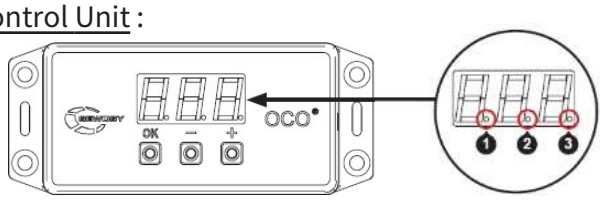
Jumper naming (infrared sensor) :

K1 =Infrared input sensor (thejumper is in its place) /Infrared output sensor (thejumper has been removed). K2 =Group 1 (thejumper is in its place) /Group 2 (thejumper has been removed).
K3 =User mode (thejumper is in its place) /Association mode (thejumper has been removed).

Appointment of jumpers (actuator) :

K1 =Activation of relay 1 «entry sensor» and relay 2 «exit sensor» (thejumper is in its place).
Activation of relay 1 «entry and exit sensor» (thejumper has been removed).In this case, relay 2 is inactive.
K2 =Group 1 (thejumper is in its place) /Group 2 (the jumper has been removed).
K3 =User mode (thejumper is in its place) /Association mode (the jumper has been removed).

Control Unit :



1	Decimal point of the leftmost digit in the display
2	Decimal point of the middle digit in the display
3	Decimal point of the rightmost digit in the display

Association of peripherals to the control unit :

WARNING! Do not connect the control unit until point 3.

1) Position theK1and theK2 (of the infrared sensor and the actuator) according to the configuration required by theperipherals.

2) Connect theperipherals.

3) Turn on the UC, keeping the button pressedOKuntil the display ofHOLLOWshow the indicator. TheUCwill show[_]if an association key already exists (system is factory associated) or---if you don't have any key.

4) Press+and−simultaneously to generate a new key.

5) The control shows---then to confirm that you are entering association mode.

PLEASE NOTE:The association of allperipheralshappens one at a time, without turning off the control after each association process.

6) Remove the jumperK3nodeperipheralthat you wish to associate to begin the association request.Note: The name of the peripheral will be shown on the UC display, for example for input sensor E1 | Output sensor S1 | Actuator A1.

7) After the display identifies the type of peripheral, press the buttonOKto accept the association. Once the peripheral has validated, the display will change from showingE1_to showE1 .In case of not showingE1but yesE1-put the jumper back in and after 5 seconds try again

8) Whenever a peripheral is added, replace the jumper.K3to exit this association modeperipherals.

Note: The symbol after the device name indicates the progress of the pairing process.E1_ identified | E1¯successfully associated | E1- try again.

Repeat steps 6, 7 and 8 of this procedure for all installed peripherals.

9) When all peripherals are associated, press the+ buttonto exit association mode and save the association identification key. The control unit will reboot.
If necessary, press the - button to exit association mode at any time without changing the previous identification key.

Definition of the maximum quota (maximum number of people that can be inside the establishment at the same time) :

To schedule the maximum number of people:

1) Press the button+when turning on and hold this button until the display shows the correct decimal point.

2) Adjust the required value with the buttons+and-

3) Press the buttonOKto end programming and save the value. The control unit will restart.

Manual counter configuration :

To adjust the counter value:

1) Press the buttonOKand hold this button until the display shows the left decimal point.

2) Adjust the value with the buttons+and-.

To reset the counter to zero, press the buttons at the same time+and-.

3) Press the buttonOKto finish programming.

How to force the counter :

It is possible to force the counter to the quota value, to close the input until the next output. Therefore, keep

pressed the buttonsOKand+until the display shows the quota value.