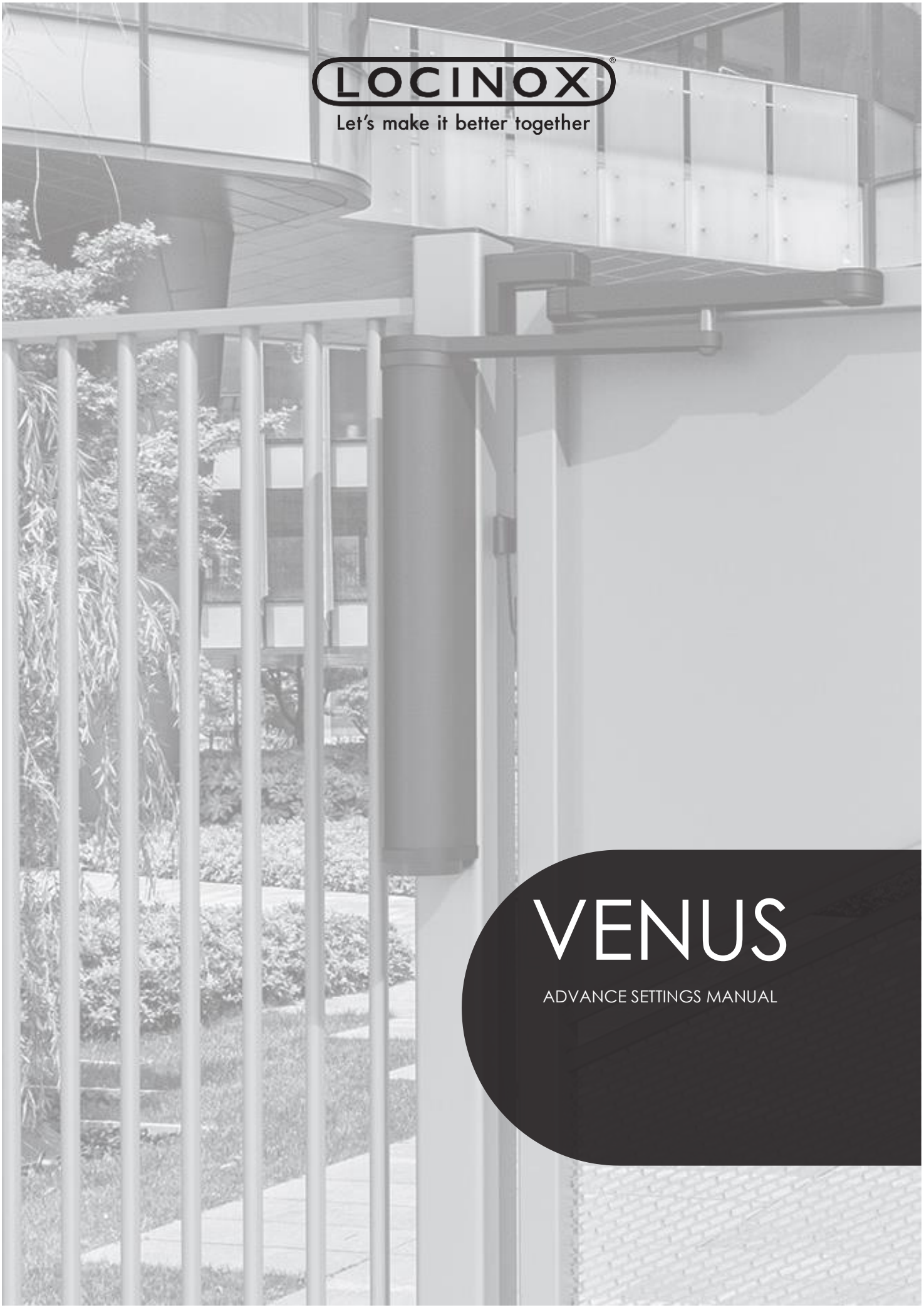

LOCINOX®

Let's make it better together

# VENUS

ADVANCE SETTINGS MANUAL

## FCC statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### CAUTION:

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjuntion with any other antenna or transmitter.

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## TECHNICAL SUPPORT

If you require any additional information or assistance during the installation, please contact your dealer, who will be able to provide the latest information. Alternatively, you can visit the Locinox website for more technical information or e-mail us on info@locinox.com. Please keep the serial number at hand of your product for future support.

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# Venus – advanced settings manual





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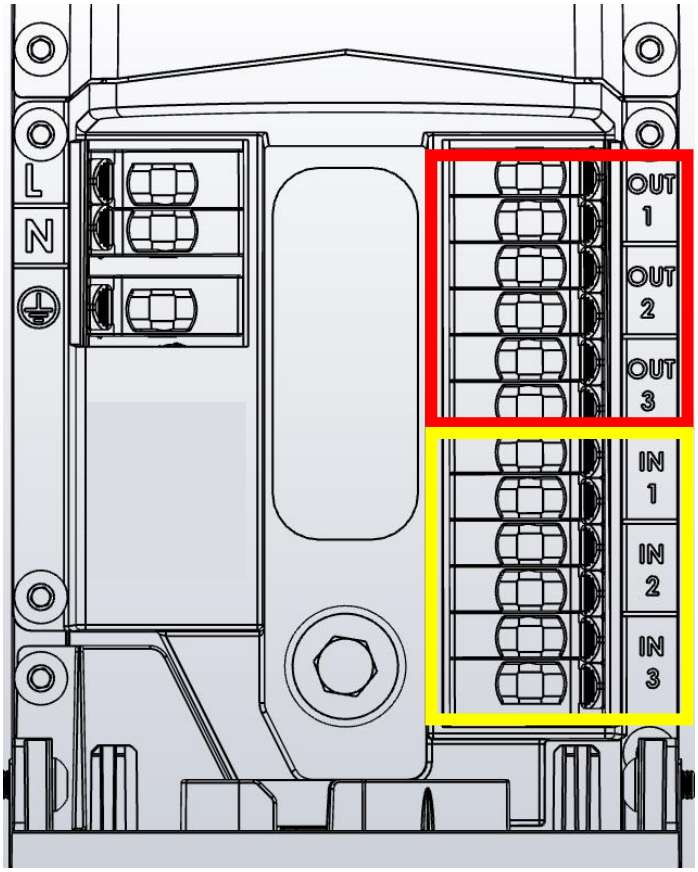
# Advance settings menu

The settings described in this document can be changed during the first installation of the Venus device or after reconnecting to the device via the application. When setting up for the first time, the device will allow us to go to the settings after performing the first calibration. If you want to change the settings of Venus, which is already installed on the gateway, simply connect to the device through the app and skip the gateway configuration to directly go to advanced settings.

## Output signal

Output signal (marked by red) is a signal from Venus to power and control external devices (e.g. electric strikes, maglocks, Slimstone-2, etc.). Output signal is **24V DC** type, max. current 2A, total output power 48W. The total of the 3 output connectors should stay below 2A, otherwise Venus will switch off output terminals. Those terminals have colors: red (+24V), black (0V).




## Input signal

Input signal (marked by yellow) is a signal that control Venus from outside (e.g. push button, Slimstone-2, intercom, etc.). Venus input terminals are a **dry contact**. This mean, the control signals can't have any voltage. If control signal has voltage value, it is **mandatory** to use a relay between the control device and Venus. In the advanced settings menu (app), there is a possibility to change the input as NO or NC signal type. Those terminals has color green.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# Venus manual or automatic mode

## Manual mode

This mode should be selected if the lock or keep is mechanical and the Venus is unable to control the lock or keep. The user must manually open the gate and make an opening movement, after a few degrees, this will be detected and Venus automatically opens the gate up to the desired opening angle. This function is called “Push&Go” , which is enabled by default, but it could be switched off through the advanced settings menu in the app. This mode automatically closes the gate after a set pause time (5 seconds by default).

**Important information:**
When calibrating the motor, retract the daybolt to don’t have mechanical blockade during calibration.


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## Automatic mode

This mode should be selected if the lock or keep is electrical and the Venus can control it. Please remember that Venus support only 24V DC output power signal. The user doesn't need to manually open the gate. Venus takes full control for opening and closing cycle. Controlling the gate can be done by:

- Push button,
- Programable keypad (Slimstone-2, Slimstone-X),
- Intercom,
- Or other access control devices.

In case that the user would like to open the gate manually this automatic mode also has "Push&Go" function enabled by default. This mode automatically closes the gate after a set pause time (5 seconds by default).

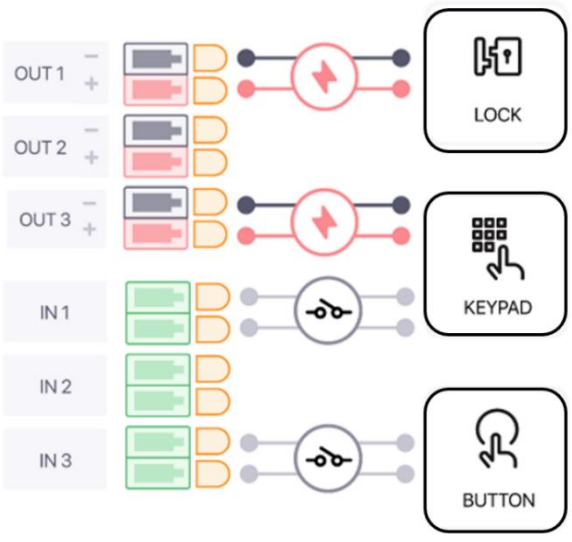
Important information:
When calibrating the motor, Venus will detect automatically which type of electric lock or keep is connected to the device (Fail-Open or Fail-Close). More explanation of the names you can find **here**.

Default connection settings for automation mode:

- **Output 1**: Lock
- **Output 2**: Unused
- **Output 3**: 24V AUX (powering the access control device)

- **Input 1**: Control device, NO contact for a control device (e.g. Keypad), open and close command active
- **Input 2**: Unused
- **Input 3**: Control device, NO contact for a control device (e.g. Push button), open and close command active

- "Push&Go" function is active





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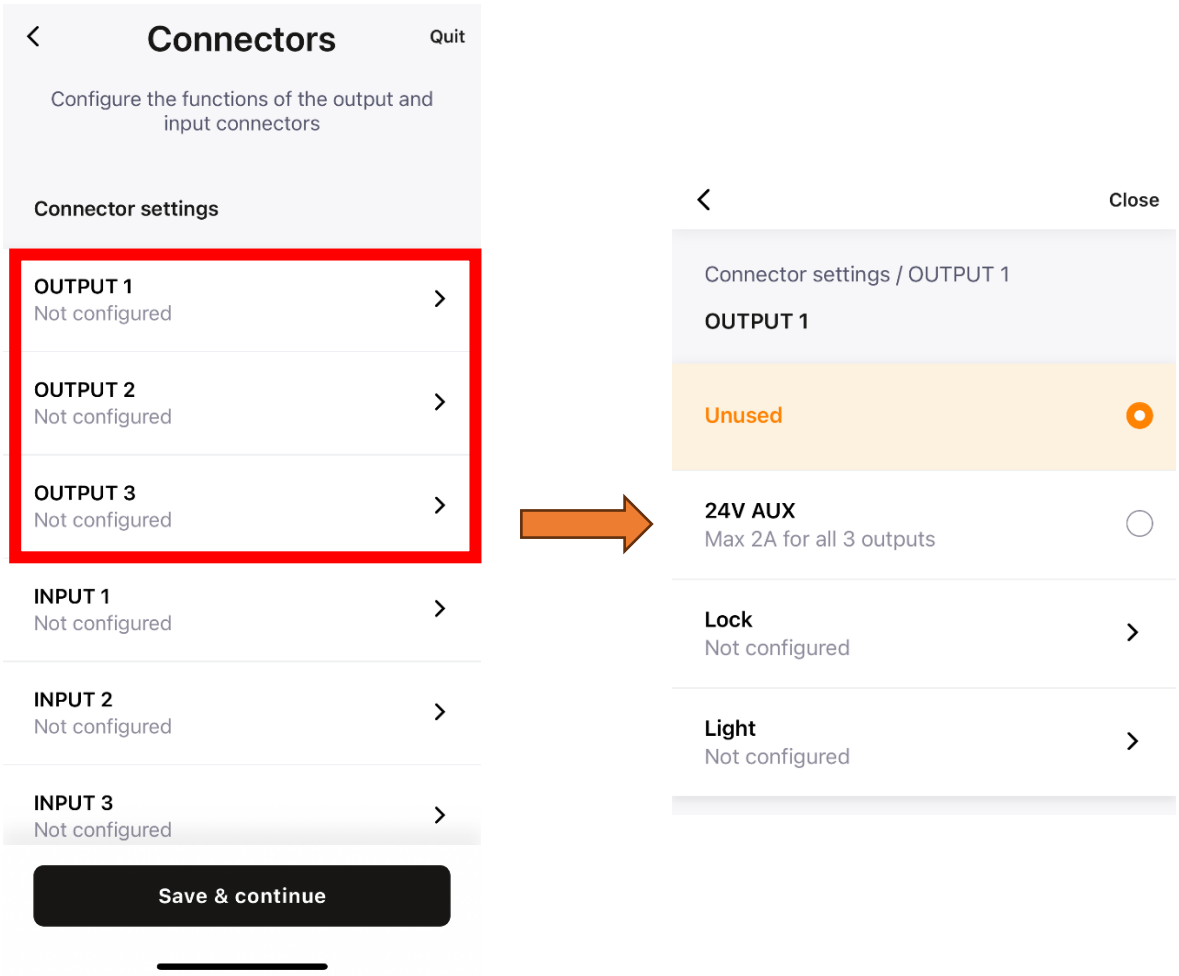
# Output connectors – 24V DC




The Venus can provide controlled power through the output connectors to external devices (e.g. electric strikes, maglocks, Slimstone-2, etc.). The output signal is **24V DC** type, max. current 2A, that's mean the total output power that Venus can give is **48W**. If we overload the Venus outputs, the device automatically will shut down all terminals to prevent short circuit. Then the device goes into error mode:

- Integrated warning light will blink 5Hz with full brightness.
- The Venus automatically retries re-enabling the outputs every few seconds. The outputs remain disabled as long as the overload or short circuit is present.

## Unused

This option does not sign any configuration or feature on the terminal. This option is set as the default for all outputs if the Manual operating mode is selected. The Automation mode has pre-defined options, these are explained: here.

## 24V AUX

Provides constant power **24V DC** to an external. Total output power on all terminals is 48W. This setting can be used to power external lights or an access control device. Make sure that these devices can function with 24V DC.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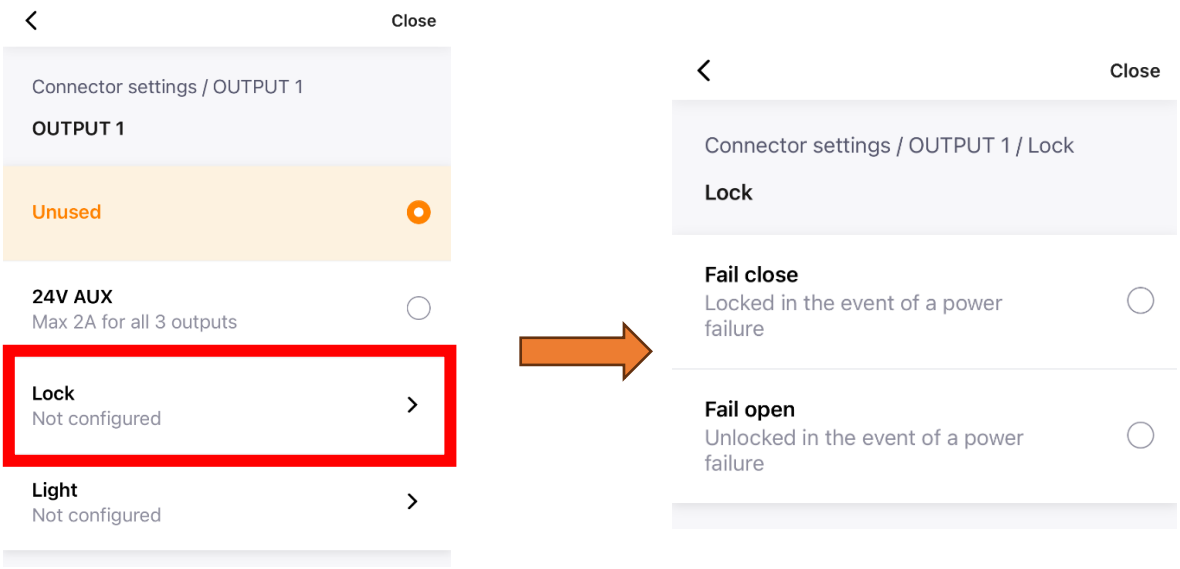
## Lock

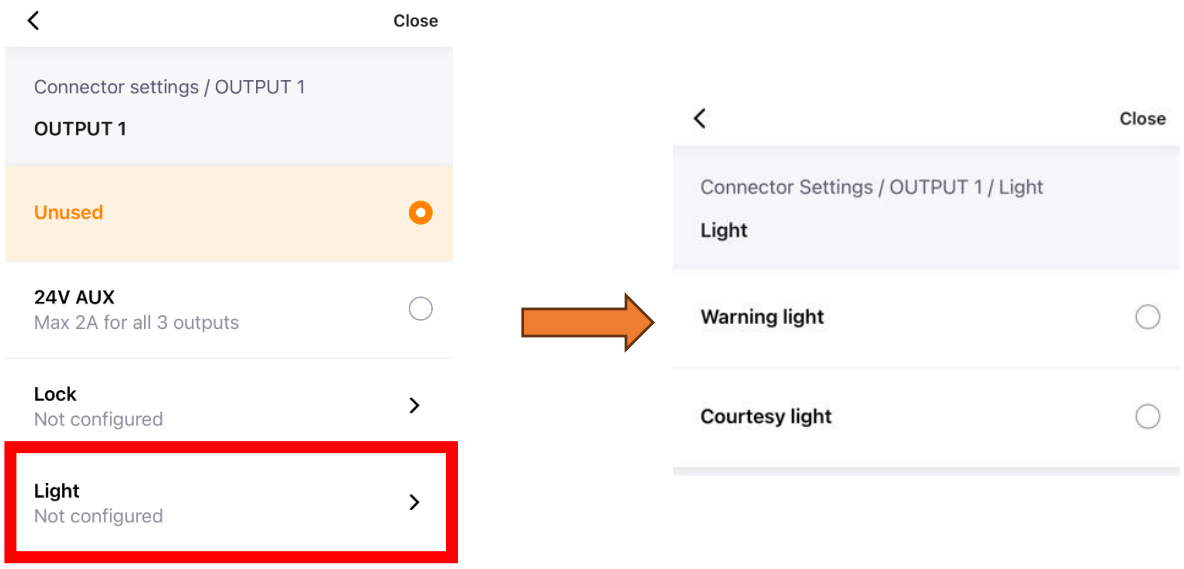



**Important:**
*This option is automatically set up during first configuration of the gate, because Venus automatically detects the type of electric lock or keep.*

The Lock option allows selecting the correct type of the lock. This option can be changed after the first installation if the installer would like to change the lock type or add a new lock that can be controled by Venus. There are two types:

- **Fail close**: in case of power failure this device is locked (Emissa version).
- **Fail open**: in case of power failure this device is unlocked (Ruptura version and Maglocks).

## Light




*Warning light*

Connect an external 24V DC lamp and enable it while the gate is in motion. The 24V DC output signal is flashing at 2Hz, this is the same frequency as the integrated warning lamp.

*Courtesy light*

Connect an external 24V DC lamp and enable it while the gate starts to open. The lamp remains ON after the gate is closed for a certain period. This time can be set in the light settings on the second page of the advanced settings.

*Light -> Activation time Courtesy light*



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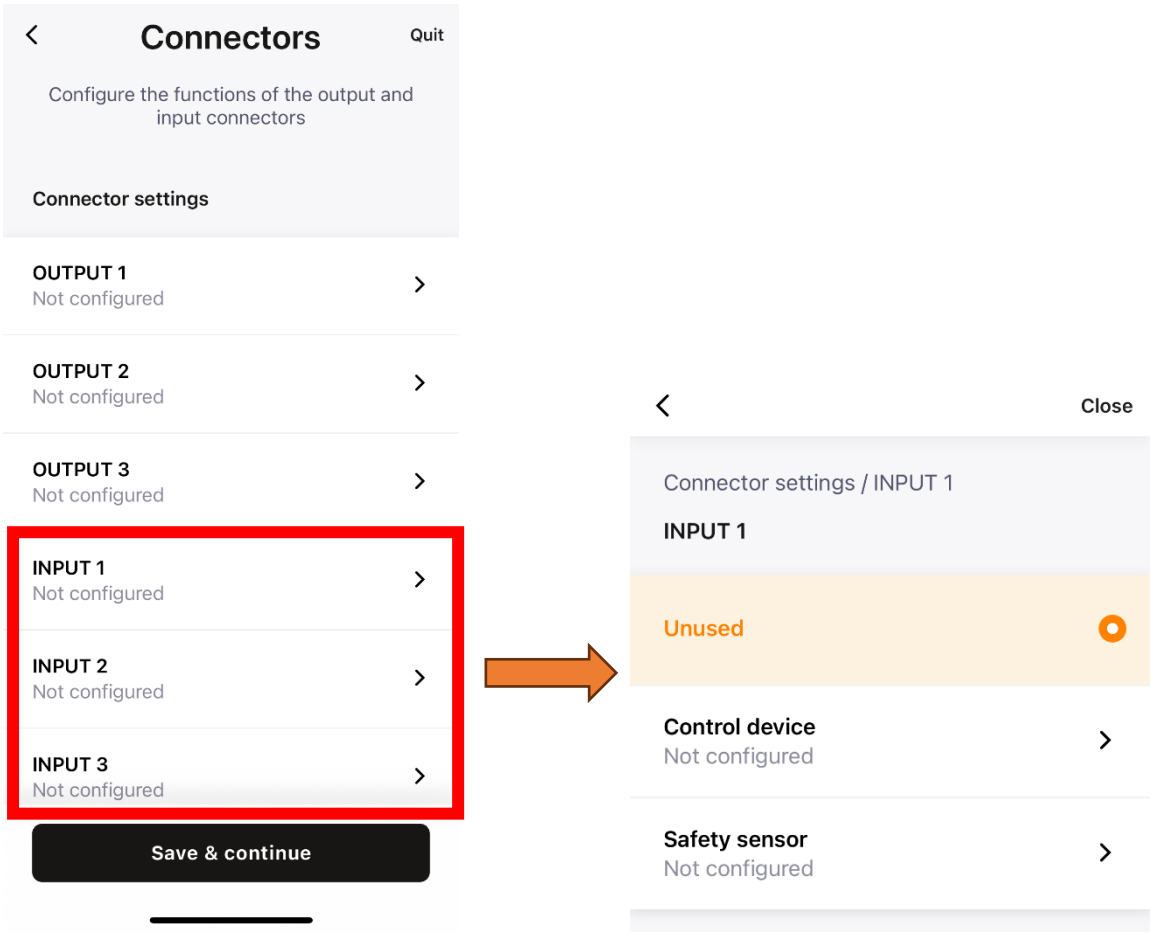
# Input connectors – dry contact




Input signal is a signal that control Venus from outside (e.g. push button, Slimstone-2, intercom, photocells, etc.). Input Venus terminals are a **dry contact**. This mean, the control signals can't have any voltage. If control signal has voltage value, it is mandatory to use a **relay** between the control device and Venus.

## Unused

This option does not assign any function to the input terminal. This option is set as the default for all inputs when Manual mode is selected. Automatic mode has pre-defined options that are explained: here.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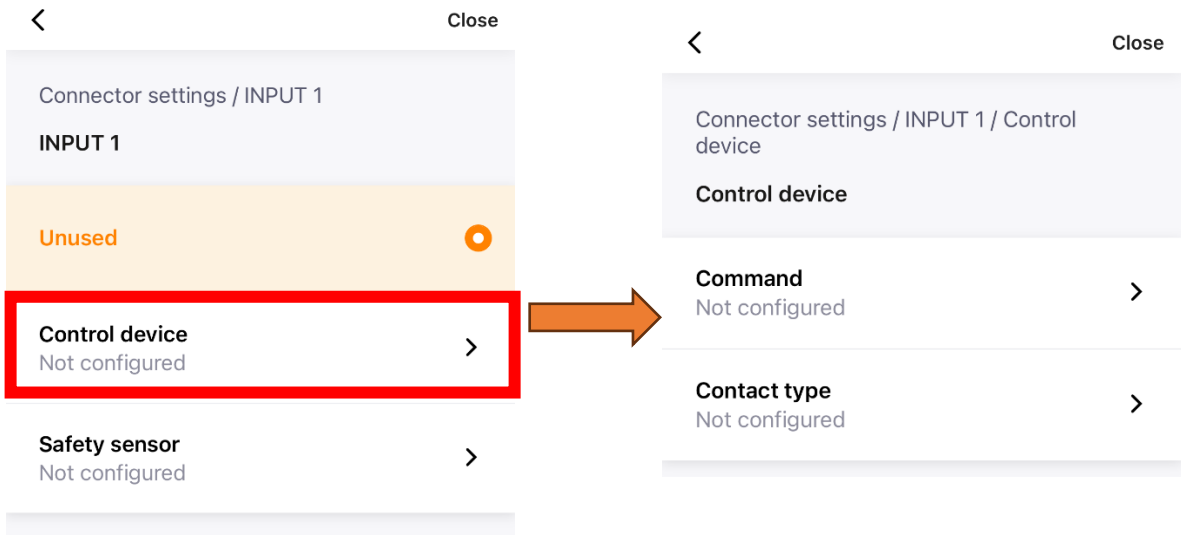
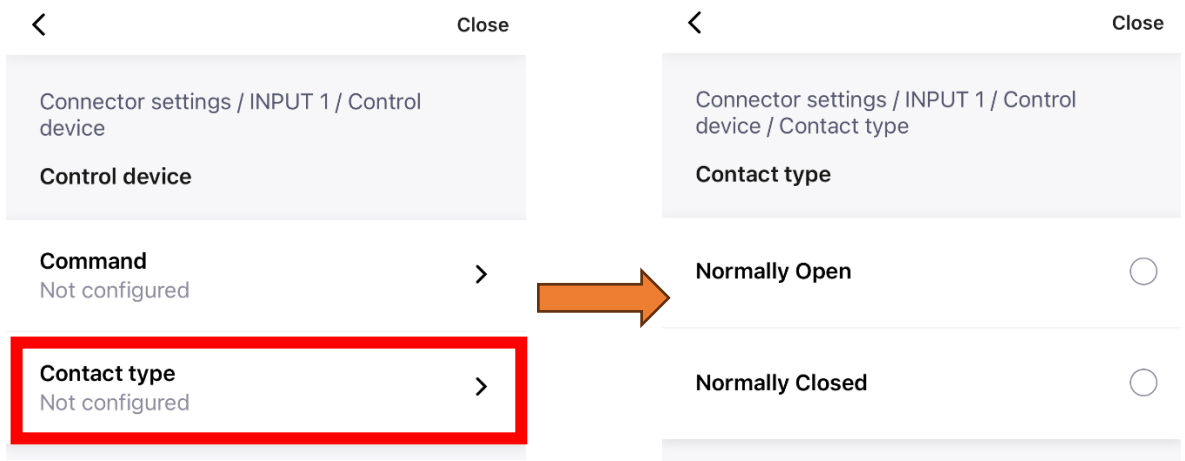
## Control device




Configuring the control device option allows the Venus device to be controlled by a control signal from another device or control element. Control device option setting has two configurable options:

- **Command** option allows to properly configure Venus operation in various modes, which are described further in the document.
- **Contact type** option allows to select the control signal type: Normally Open or Normally Closed.





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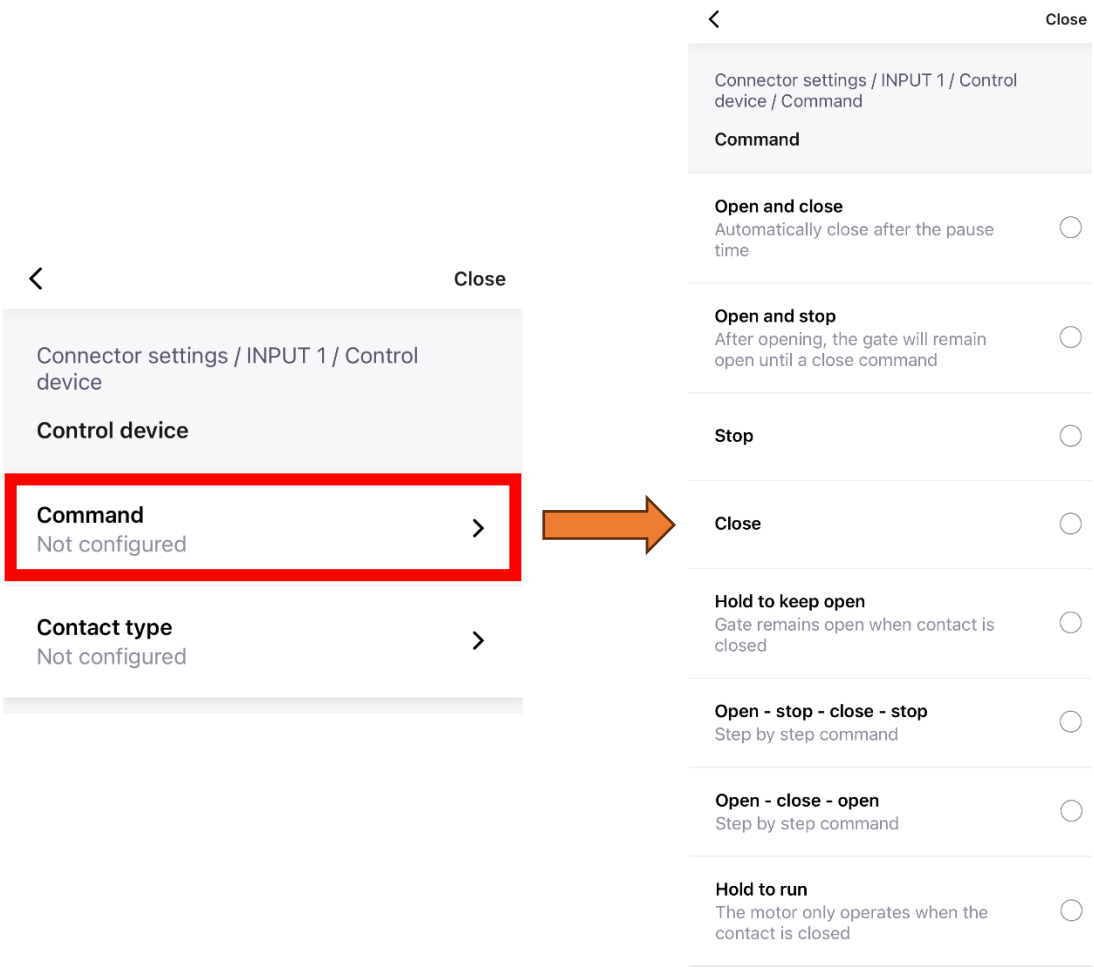



*Open and close*
A full opening cycle (opening and closing the gate) is activated with set pause time (default 5 seconds). The pause time can be configured on the second page of the advanced settings in the application.

*Open and stop*
Opens the gate to the preconfigured opening angle and the gate remains open until the user closes the gate manually (Push&Go). Alternatively, the user can trigger a “Close” command through another input.

*Stop*
Stops the gate and disables the pause time. The gate remains stopped until the user closes or opens the gate manually (Push&Go). Alternatively, the user can trigger a “Open” or “Close” command through another input.

*Close*
Closes the gate. If the gate is in closed position, the motor will also try to close the gate until a hard stop is detected.

*Hold to keep open*

Opens the gate only when the signal is active. If the signal is removed while the gate is opening, then Venus will close the gate. When the open position is reached, Venus will stay open as long as there is an active signal on the input. When the signal is removed, Venus will wait for the duration of the configured pause time (default is 5 seconds) and then closes the gate. If customer manually closes the gate while this function is active, the gate will move to the open position again after the pause time.

*Open – stop – close – stop*

Make full open and close cycle with set pause time. When the input signal is triggered a second time, during the opening movement, the gate stops. A third trigger on the input, will reverse the movement, etc. open -> stop -> close -> stop.

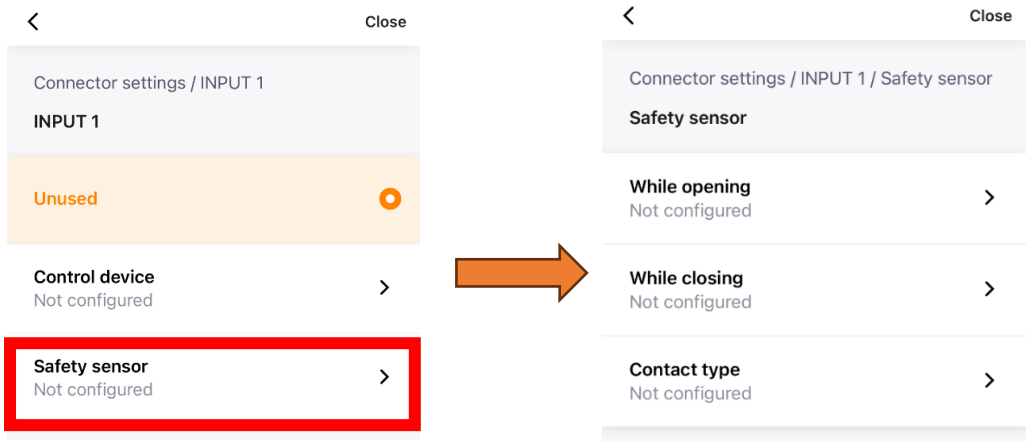
*Open – close – open*

Make full open and close cycle with set pause time. When the input signal is triggered again, the gate reverses, etc.

*Hold to run*

Open the gate only while the signal is active. After reaching the open position, Venus will wait for the set pause time (default is 5 seconds) and close the gate (even if the control signal is active). If the contact is interrupted while the gate is moving, the gate stops. If you trigger the input again, it will reverse.

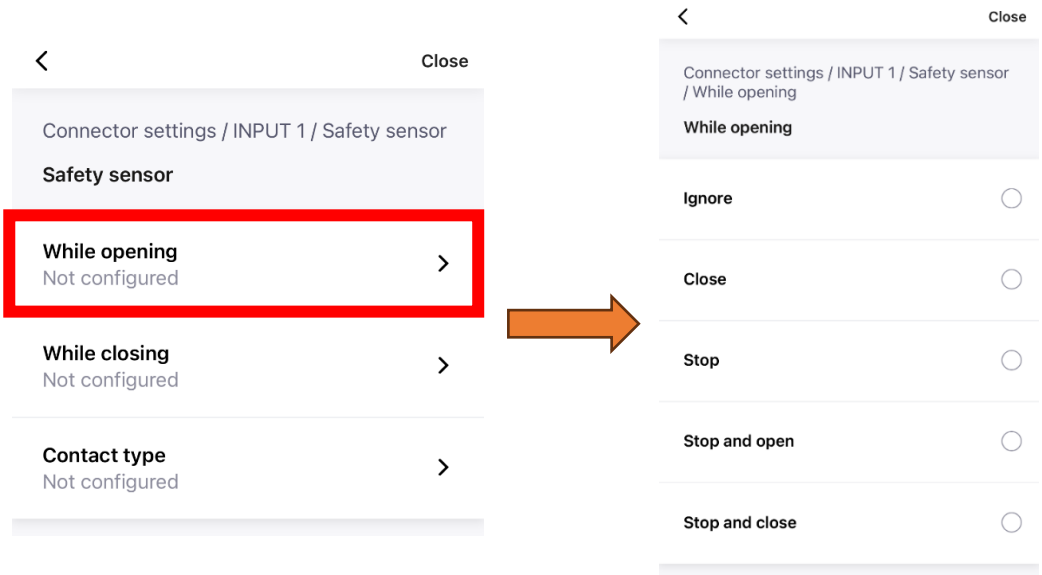
## Safety sensor




The configuration of the safety sensor option allows to control the operation of the Venus, through the use of external sensors (e.g. photocells, light curtain). The Safety sensor setting has three configurable options.

**While opening**

Controls the Venus operation during the opening of the gate. If the option is set to anything except ignore, a triggered safety sensor will also prevent the gate from starting an opening motion.



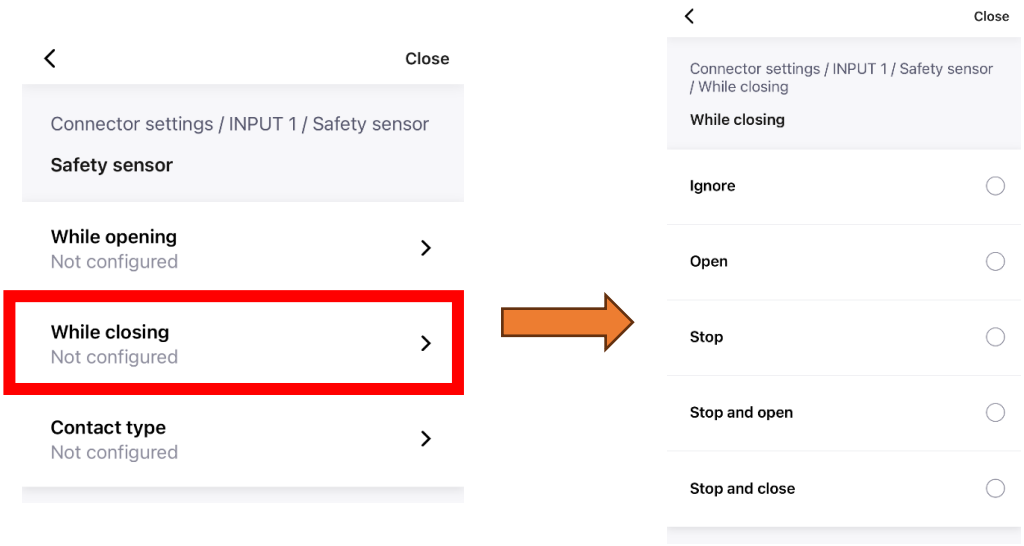

Choosing this configuration we can set up different motor behaviors during the opening the gate:

- **Ignore**: no change, ignores the sensor signal.
- **Close**: if the sensor is triggered during the opening movement, it interrupts the opening of the gate and closes it.
- **Stop**: if the sensor is triggered during the opening movement, it interrupts the opening of the gate and stops it.
- **Stop and open**: if the sensor is triggered during the opening movement, the gate stops. It opens once the signal is back in the default state (depends on the chosen type NO/NC).

- **Stop and close**: if the sensor is triggered during the opening movement, the gate stops. It closes once the signal is back in the default state (depends on the chosen type NO/NC).

**While closing**

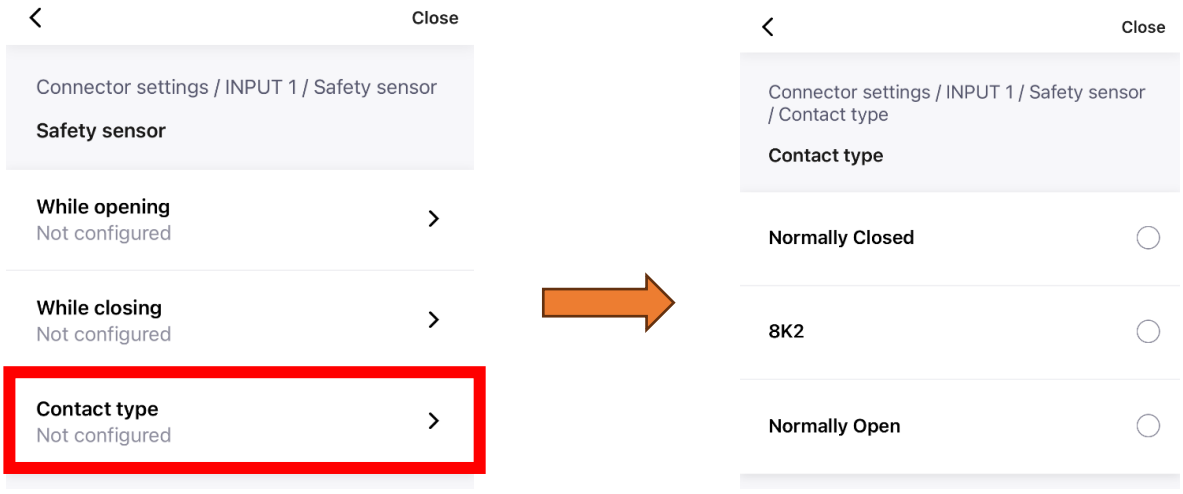
Controls the Venus operation during the closing of the gate. If the option is set to anything except ignore, a triggered safety sensor will also prevent the gate from starting a closing motion.




Choosing this configuration we can set up different functionality of Venus during closing the gate:

- **Ignore**: no change, ignores the sensor signal.
- **Open**: if the sensor is triggered during the closing movement, it interrupts the closing of the gate and opens it.
- **Stop**: if the sensor is triggered during the closing movement, it interrupts the closing of the gate and stops it.
- **Stop and open**: if the sensor is triggered during the closing movement, the gate stops. It opens once the signal is back in the default state (depends on the chosen type NO/NC).
- **Stop and close**: if the sensor is triggered during the closing movement, the gate stops. It closes once the signal is back in the default state (depends on the chosen type NO/NC).

**Contact type** option allows to select the appropriate type of control signal: Normally Open, Normally Closed and 8K2 safety sensor.





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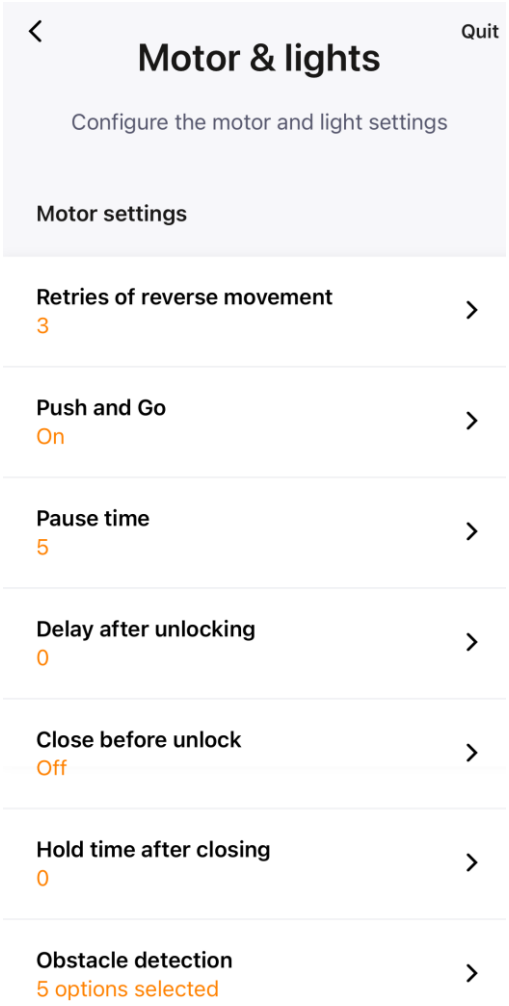
# Motor settings

After configuring and saving the parameters for the I/O of Venus, the application moves to the second page, which allows to configure the operation of the **electric motor** and the **lights parameters**.

The Venus electric motor can be configured with the following functions:

- Retries of reverse movement,
- Push and Go function,
- Pause time,
- Delay after unlocking,
- Close before unlock,
- Hold time after closing,
- Obstacle detection.





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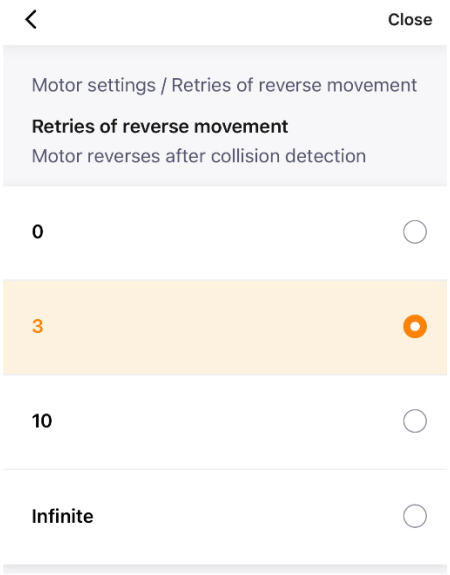
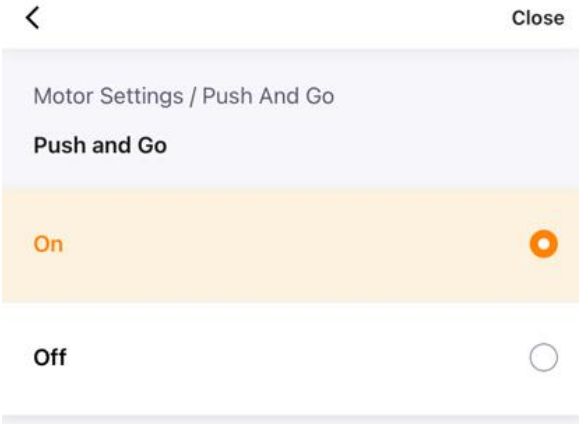
## Number of Retries after Collision




The number of attempts to close the gate, in case of a collision during closing. In the event of a collision, the gate returns to the open position, and after the pause time, the Venus attempts to close the gate again. If the collision count is exceeded, the gate fully opens and remains open until it is closed manually. The application allows you to set a quantity of: 0, 3, 10 and infinite. The default value is 3 attempts. This function does not work in case of a collision during opening, in that case, Venus will automatically return to the closed position and wait for a new opening command.

## Push/Pull & GO




Enable or disable the Push&Go function. This function automatically starts the gate by manually pushing or pulling the gate for a few degrees. This function is recommended in Manual mode when using a mechanical keep. Default setting is ON.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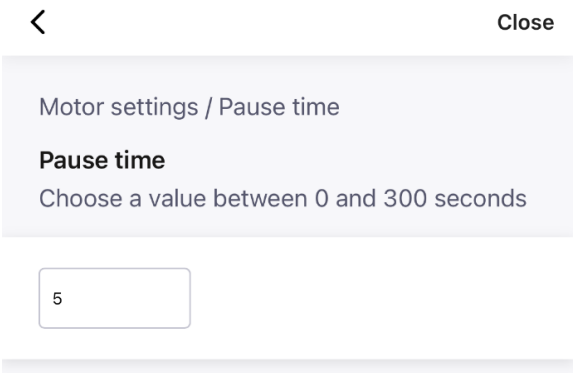
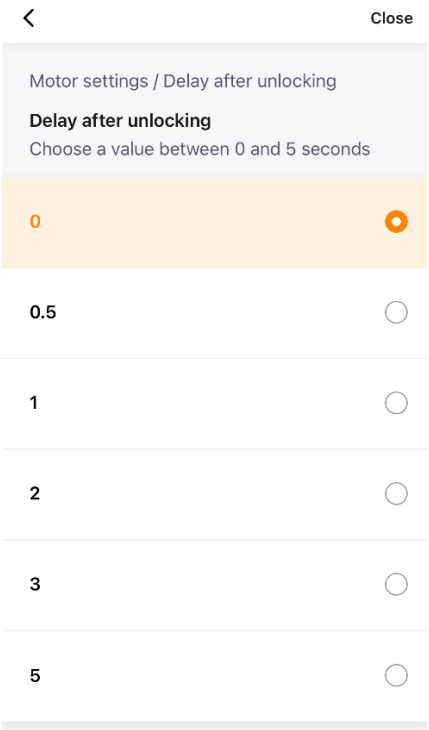
## Pause time



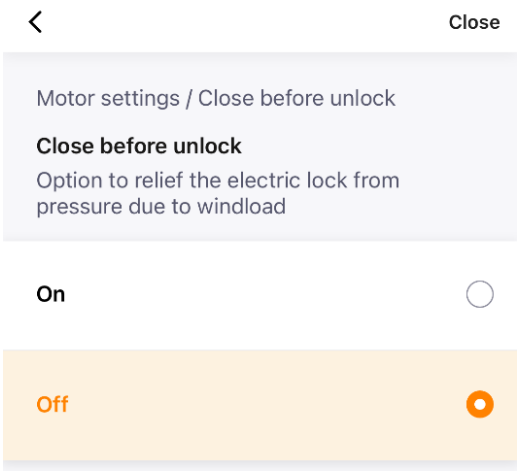

Set the pause time for automatically closing the gate after Venus reaches its fully open position. The possible range of pause time is between 0 and 300 seconds (5 minutes). After this time, Venus will automatically close the gate. The default value is 5 seconds.

## Delay after unlocking



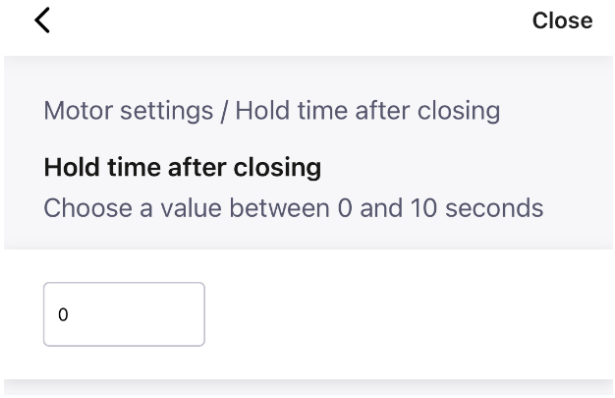

Set the delay time between the opening command and the actual opening of the gate. The options are: 0, 0.5, 1, 2, 3 or 5 seconds. This optimum value is automatically set by Venus during the calibration step (option 5 seconds not included). This function could be used with maglocks to compensate for the demagnetizing time.

## Close before unlock



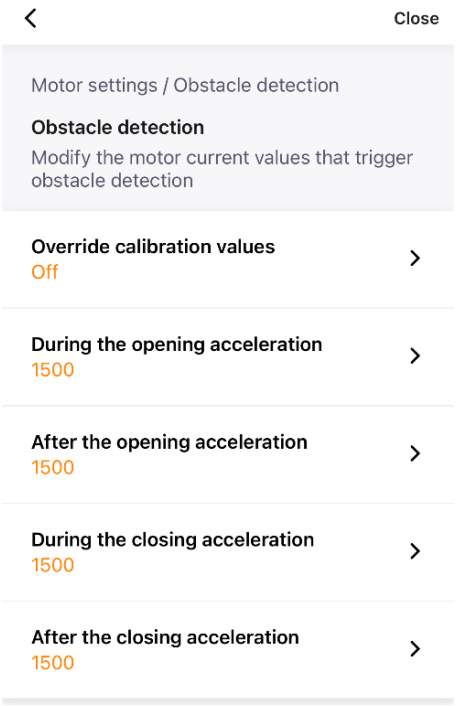

Push the gate against the keep in closed position for 0.5 second to release wind pressure from the lock before opening. After that time, Venus will automatically open the gate. The default is disabled. This function should be used in combination with Electradrop. The push in the closing direction starts with the pre-flash.

## Hold time after closing




Set the duration of the holding force after the gate is closed. Choose between 0 and 10 seconds. This function should be used in combination with Electradrop to keep the gate in closed position, even under wind load, while the bolts drops in the ground stop.

## Obstacle detection




**Important!**

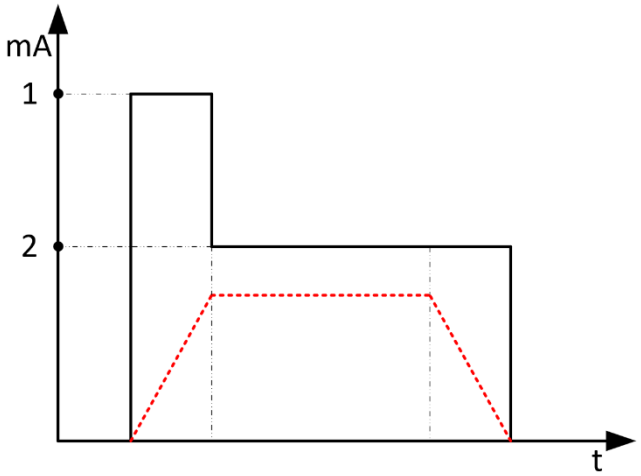
*This option is advisable for qualified people who have the skills and knowledge of the correct configuration of the electric motor. Locinox assumes no responsibility for the Venus device not being installed and configured correctly. Be sure to comply with the relevant standards at the installation site and adapt the requirements to local laws. In compliance with Machine Directive 2006/42/EC, a risk analysis must be performed and automated gate identified in accordance with CE Marking directive 93/68/EEC before the system is commissioned.*

During the calibration step, the optimal motor current limits are automatically determined throughout the full opening and closing motion.

It is possible however to overrule these automatic limits and set them manually. A separate obstacle detection current limit can be set for the phase:

1. First phase during the gate acceleration
2. Second phase after the gate acceleration

The red dotted line indicates the speed of the Venus electric motor. When reaching phase 1, the motor does not accelerate and maintains a constant speed of movement. When reaching the final position, the motor automatically reduces its speed.





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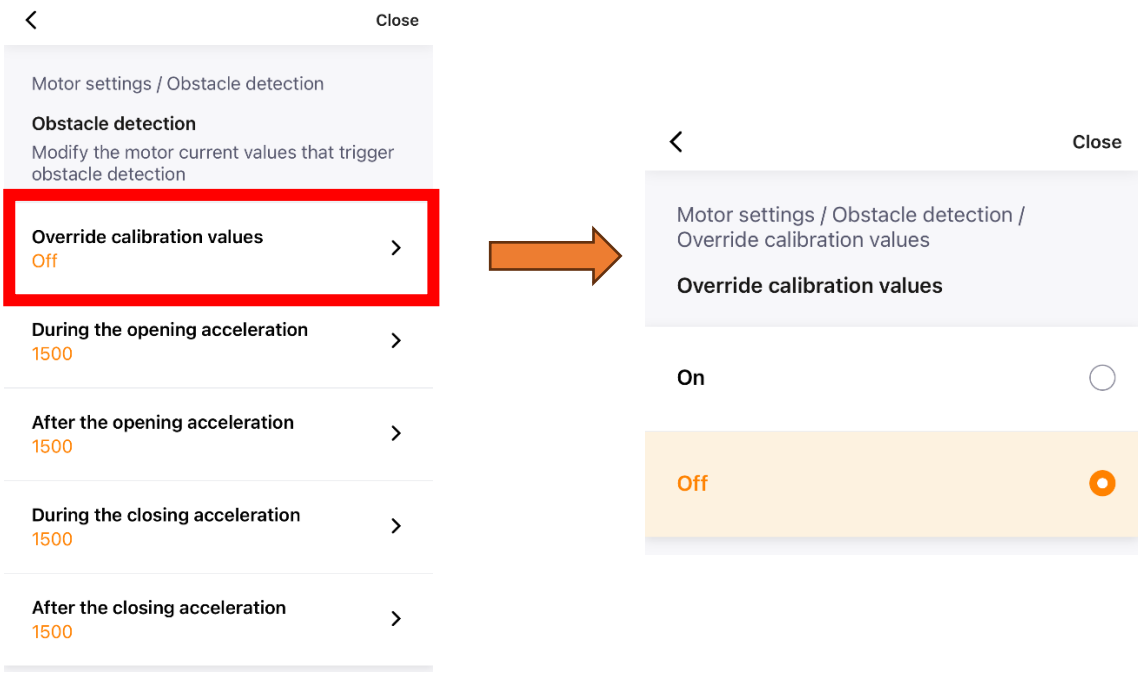
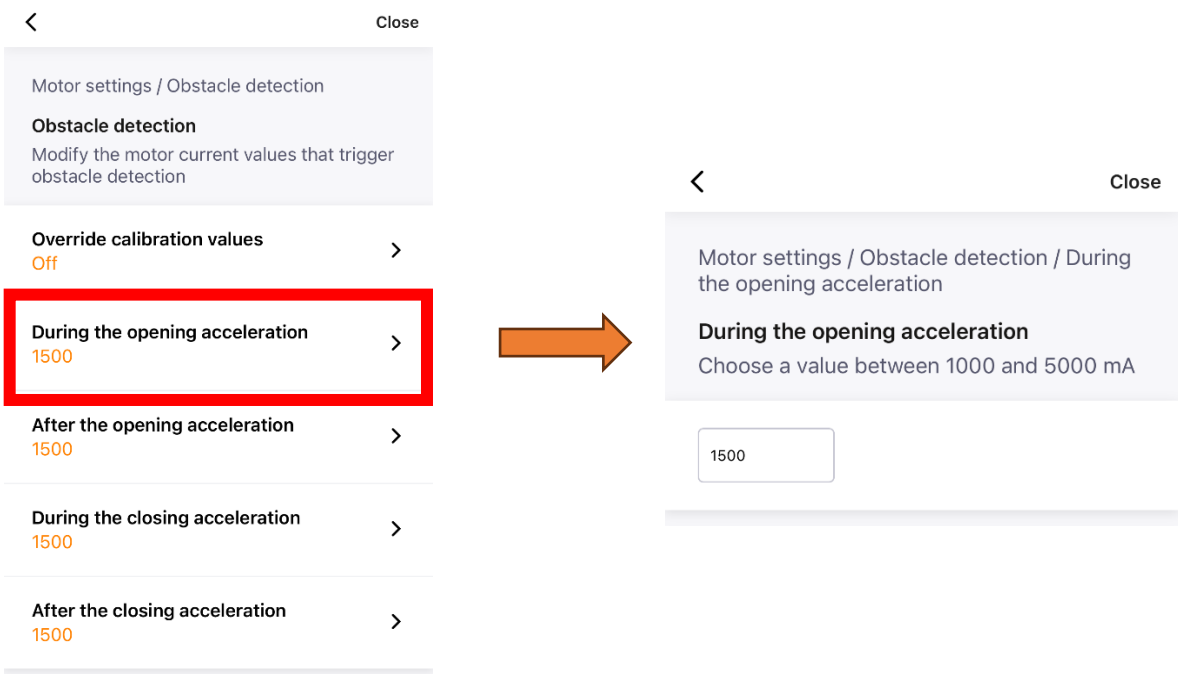
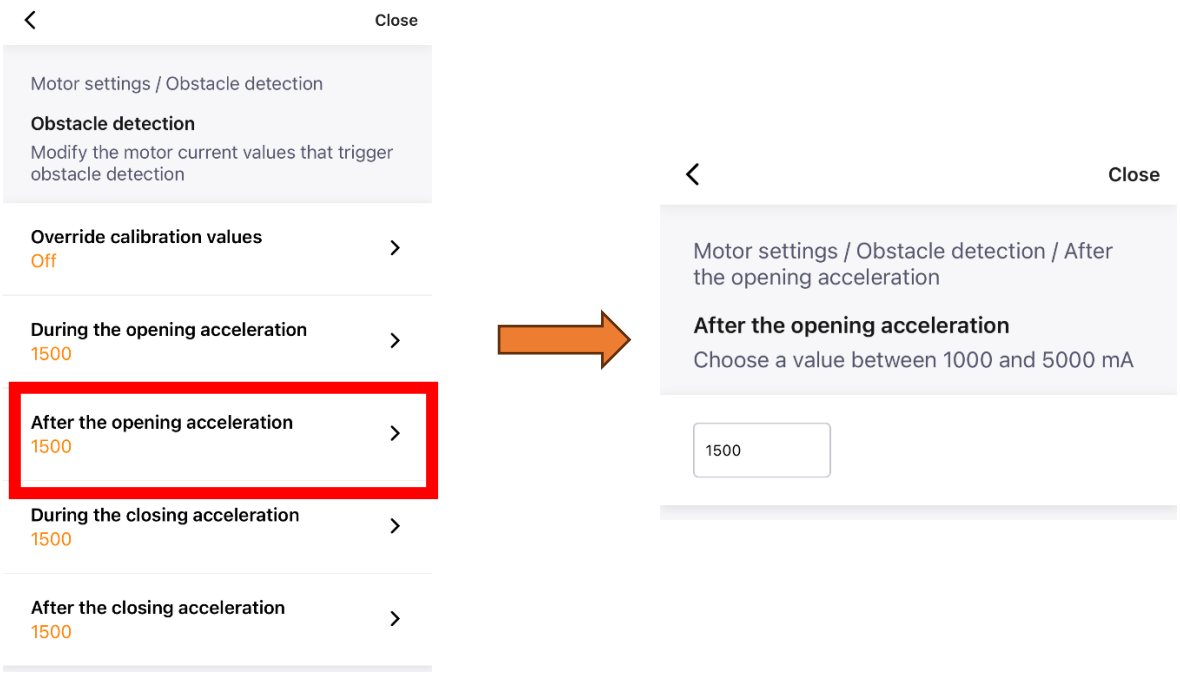



The “Override calibration values” option should be enabled to override the automatically determined overcurrent values.



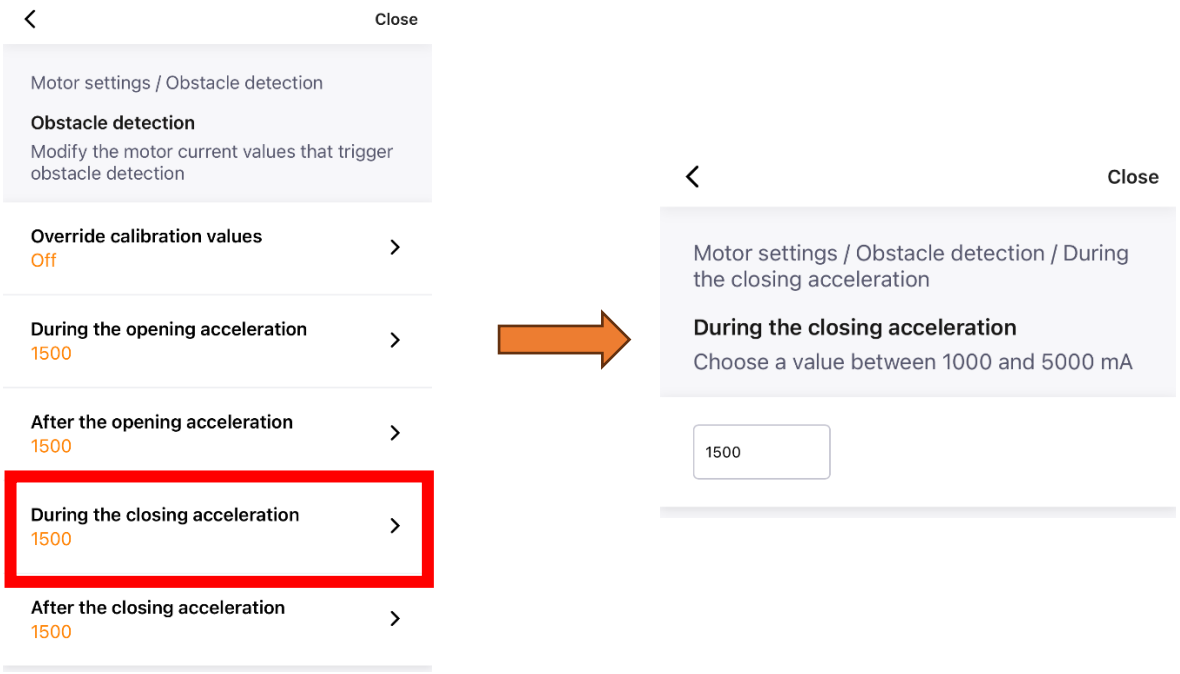

**During the opening acceleration**

Set the overcurrent value (mA) during the first phase of the opening movement of the gate, before the acceleration. Choose a value between 1000mA (minimum motor force) and 5000mA (maximum motor force).



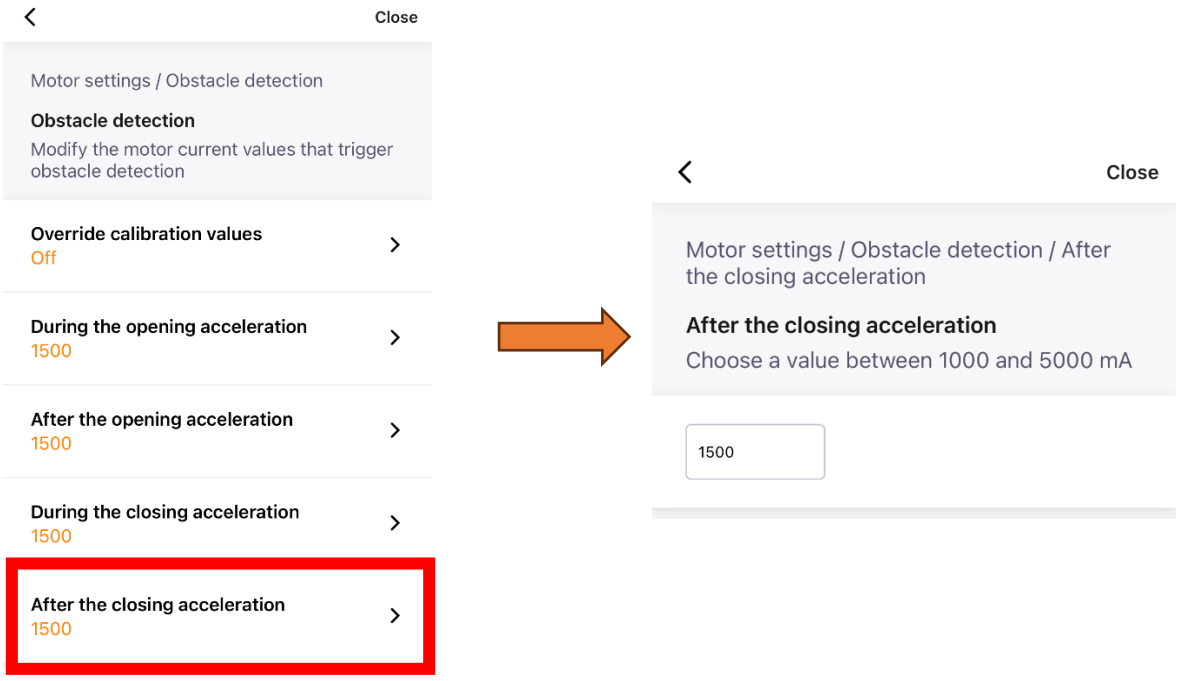

**After the opening acceleration**

Set the overcurrent value (mA) during the second phase of the opening movement of the gate, after the acceleration. Choose a value between 1000mA (minimum motor force) and 5000mA (maximum motor force).




**During the closing acceleration**

Set the overcurrent value (mA) during the first phase of the closing movement of the gate, before the acceleration. Choose a value between 1000mA (minimum motor force) and 5000mA (maximum motor force).




**After the closing acceleration**

Set the overcurrent value (mA) during the second phase of the closing movement of the gate, after the acceleration. Choose a value between 1000mA (minimum motor force) and 5000mA (maximum motor force).



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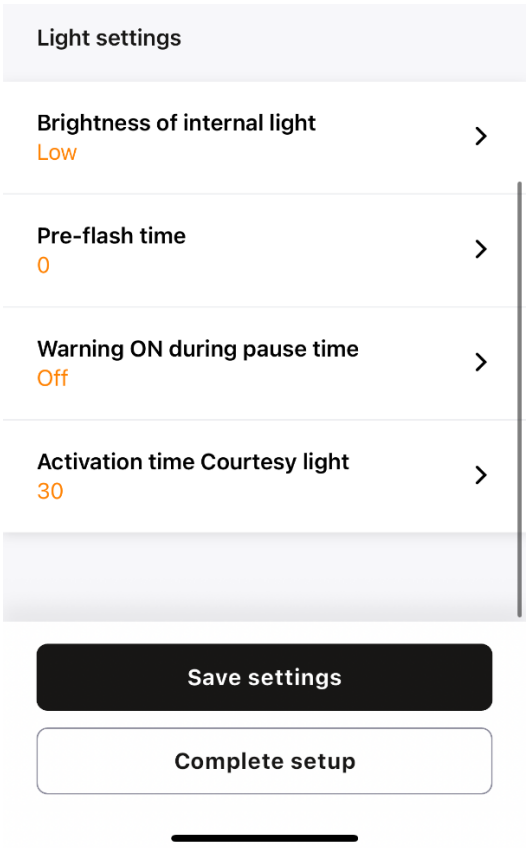
# Light settings

After configuring and saving the parameters for the I/O of Venus, the application moves to the second page, which allows to configure the operation of the **electric motor** and the **lights parameters**.

Following configuration settings are available for the lights:

- Brightness of internal light,
- Pre-flash time (both internal and external light),
- Warning ON during pause time (both internal and external light)
- Activation time Courtesy light (external)





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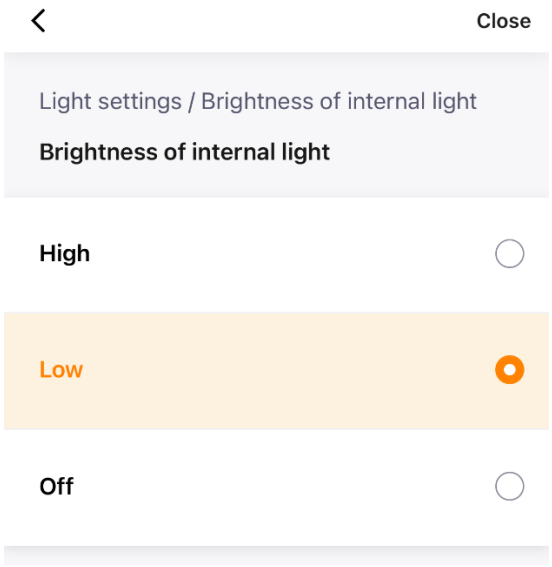
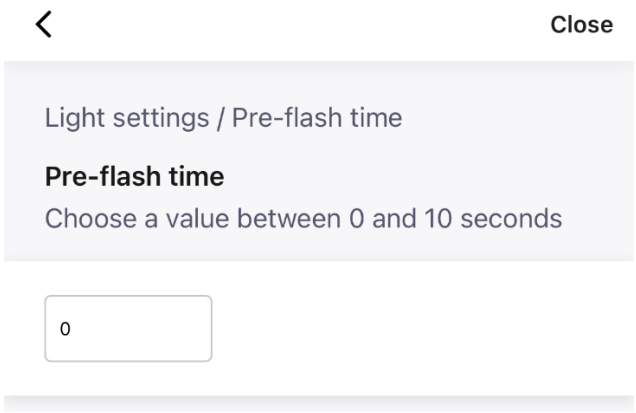
## Brightness of internal light




Set the brightness of the integrated flash light located at the bottom of Venus, with following options:

- **High**: activate the integrated warning light in Venus when opening or closing the gate and sets the maximum brightness of it.
- **Low**: activate the integrated warning light in Venus when opening or closing the gate and sets the minimum brightness of it.
- **Off**: complete deactivation of the integrated warning light when Venus opens or closes the gate.

## Pre-flash time




Set the pre-flash time of the internal and optional external warning light. This parameter applies to the opening and closing of the gate. Choose a value between 0 and 10 seconds. The lock is not released during the pre-flash period. The gate only starts the movement after the pre-flash time has finished. This function should be set to at least 3 seconds if the Venus is combined with Electradrop, to allow for the bolt to lift.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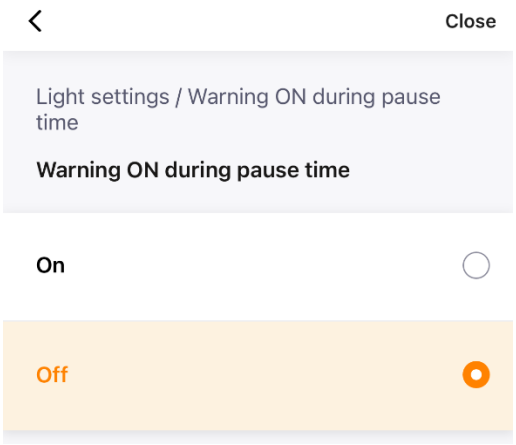
## Warning ON during pause time

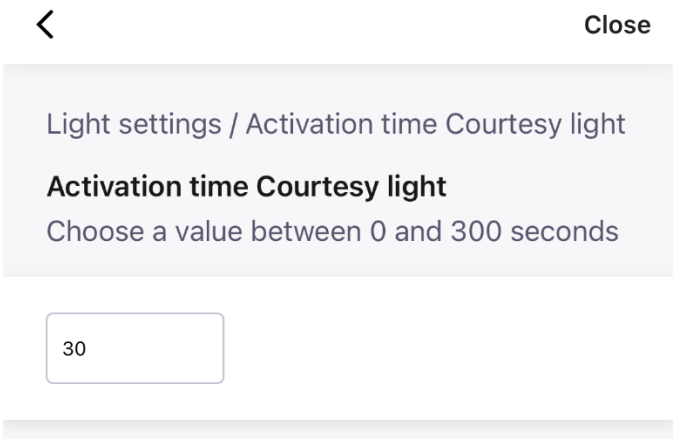



The warning light can continue flashing during pause time; the time between opening and automatic closing of the gate. This function can be:

- ON: the warning light flashes when the gate is in the open position during pause time
- OFF: the warning light does not flash when the gate is in the open position during pause time

This setting is disabled by default.

## Activation time Courtesy light




Set the auto-off timer of the external light starting after each movement. Choose a value between 0 and 300 seconds (5 minutes). The default value is 30 seconds. This applies to the output terminal that is configured as Courtesy light.

*Output -> Light -> Courtesy light*