

# **RYMASKON<sup>®</sup> 400-Modbus**

## **Configurator Manual**

User Manual for Configuration  
of Room Control Units

**RYMASKON<sup>®</sup> 411-Modbus**  
**RYMASKON<sup>®</sup> 412-Modbus**

**RYMASKON<sup>®</sup> 421-Modbus**  
**RYMASKON<sup>®</sup> 421-Modbus**

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# 1 General Information

## 1.1 Short Description

The program can be used to search for **RYMASKON® 400-Modbus** devices connected to the bus. Found devices can then be configured, including time and data setting as well as updating the device firmware.

The integrated Configuration Editor allows the user to manage any number of configurations.

## 1.2 System Requirements for RYMASKON® 400-Modbus-Configurator

Windows® 7 Professional 32/64-bit or higher.

# 2 Main Program

The Main Program of **RYMASKON® 400-Modbus-Configurator** features three window areas, as shown below:

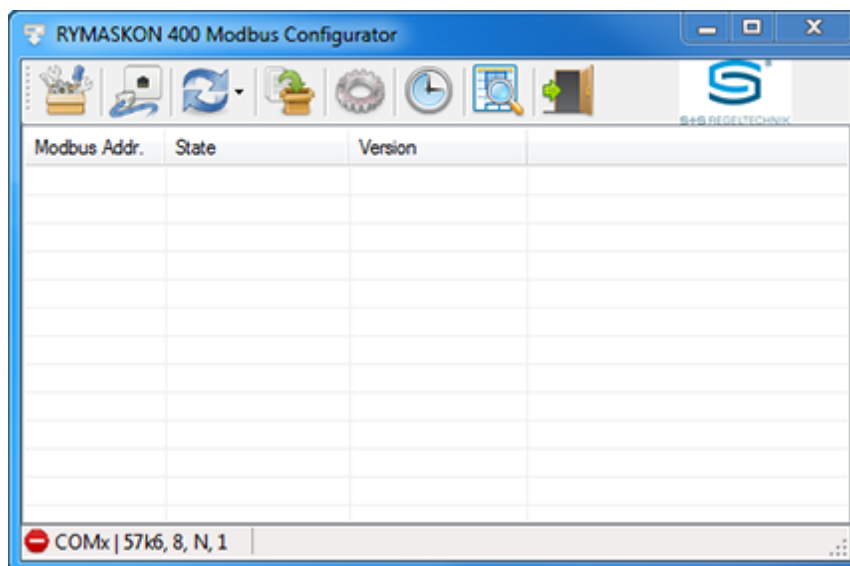


Fig. 1: Main Program window of RYMASKON® 400-Modbus-Configurator software

## 2.1 Status Bar of Main Program

A status bar can be found at the bottom of the window:



Fig. 2: Status bar of Main Program

The status bar shows the current COM parameters. The icon indicates whether or not there is a connection to the COM port. In addition, further information as well as error messages or other notes can be displayed in the remaining section of the status bar.

## 2.2 List of Found Devices

The central area of the Main Program window is reserved for a list of all **RYMASKON® 400-Modbus** devices found on the bus.

| Modbus Addr. | Bootloader Version | Application Version |  |
|--------------|--------------------|---------------------|--|
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
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|              |                    |                     |  |
|              |                    |                     |  |
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|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |
|              |                    |                     |  |

Fig. 3: List of found devices

Listed devices can then be configured, and firmware updates can be uploaded.

## 2.3 Toolbar of Main Program

The toolbar of the Main Program offers eight function buttons identified by the following icons:



Fig. 4: Toolbar of Main Program

### 2.3.1 Configuration of COM Parameters

The first button is used for configuring the COM parameters.



Fig. 5: COM parameters configuration button

Pressing this button opens the COM parameters configuration dialog:

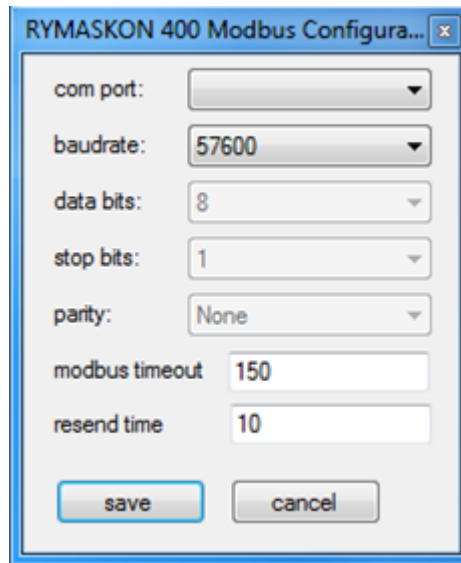


Fig. 6: COM parameters configuration dialog

### 2.3.2 Enabling or Termination of Bus Connection

The second button is used for establishing (or terminating) the connection to the configured COM port.



Fig. 7: COM port connection button

Upon successful connection, the icon in the status bar changes to green. In addition, the status bar will show the configuration data of the selected COM port:

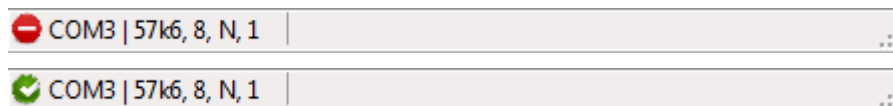


Fig. 8: Status bar examples with information on configured COM port

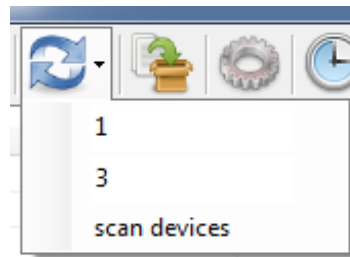
### 2.3.3 Scan for RYMASKON® 400-Modbus Devices

By means of the third button, the bus can be searched for **RYMASKON® 400-Modbus** devices.



**Fig. 9: Button for search of RYMASKON® 400-Modbus devices**

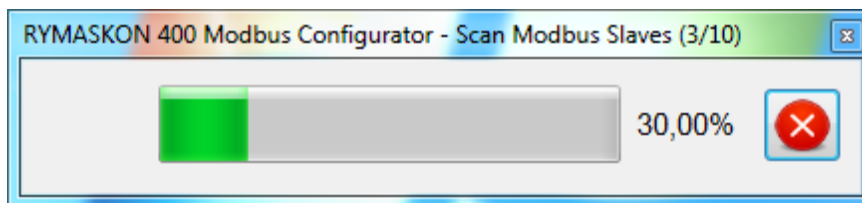
Pressing this button will open the following dialog window:



**Fig. 10: Dialog window for search of RYMASKON® 400-Modbus devices**

The first field of this window requires the starting address from which the bus should be scanned. The second field must contain the end address up to which the bus should be scanned.

Selecting "scan devices" will start the search and open another window showing a scan progress bar:



**Fig. 11: Progress bar of device scan**

### 2.3.4 Update of RYMASKON® 400-Modbus Firmware

The fourth button on the toolbar can be used for updating the **RYMASKON® 400-Modbus** firmware.



**Fig. 12: Firmware update button**

Before an update can be started, one or more devices must be selected from the list of found devices. If multiple devices are selected, the same firmware version will be updated to all of them, consecutively.

| Modbus Addr. | Bootloader Version | Application Version |
|--------------|--------------------|---------------------|
| 1            | 1                  | NO APP              |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |

Fig. 13: Device selection dialog window

Then, pressing the update button will open the standard file selection dialog:

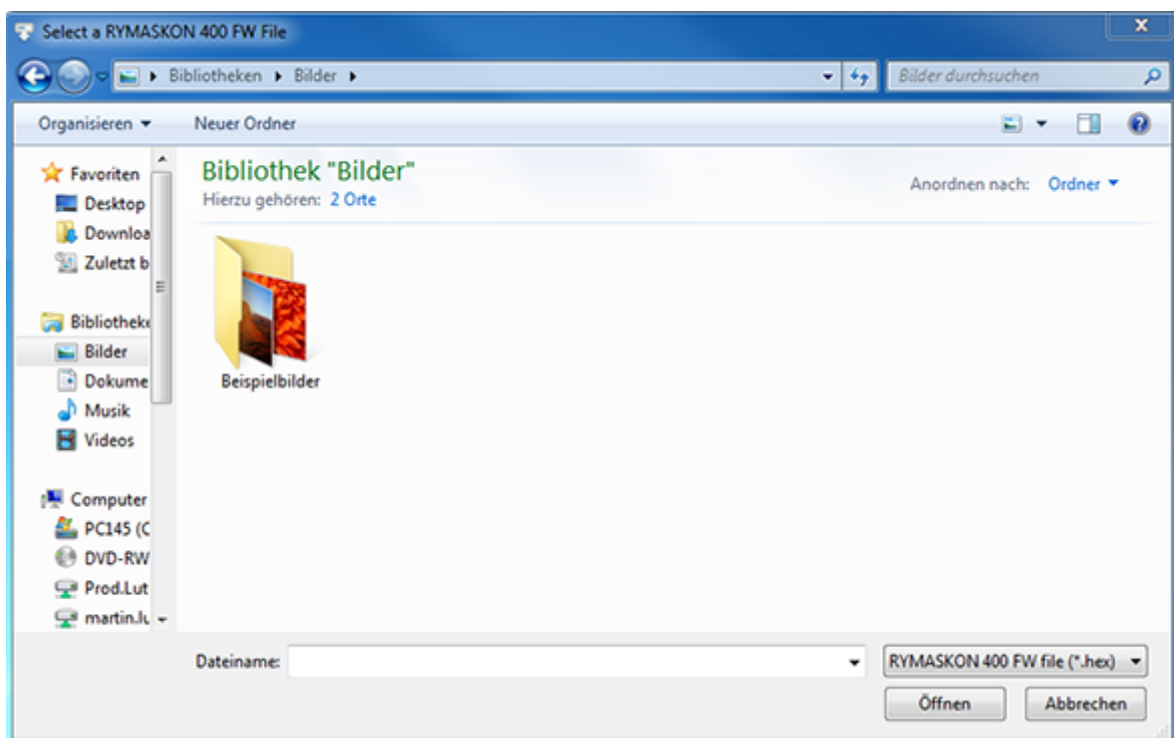


Fig. 14: Standard file selection dialog

In this window, the user must select a desired firmware file. After pressing the “Open” button, the selected firmware file will be checked for validity.

If there are no unresolved issues, the following window will be displayed:



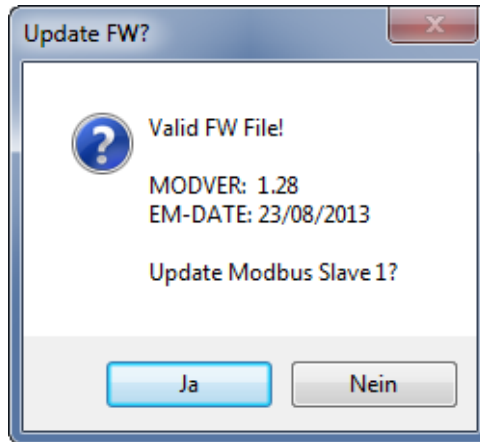


Fig. 15: Display of firmware details

The window shows all details of the selected firmware. Pressing “Yes” will start the update process, and a progress bar will be displayed:

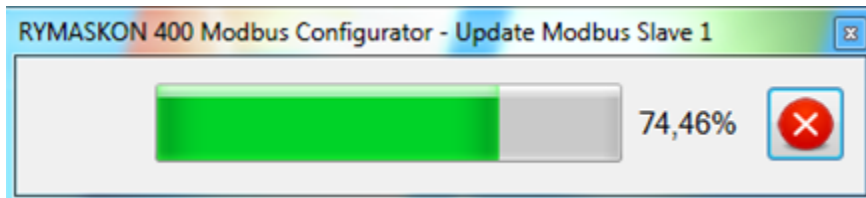


Fig. 16: Update progress

A completed update will be confirmed by the following message:

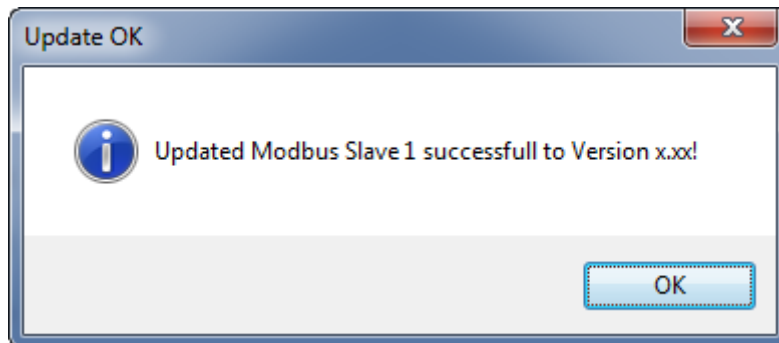


Fig. 17: Notification of successful update

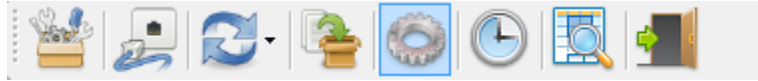
If more than one device had been selected for the update, the message will list the result for each device as “OK” or “Fail”.



**After a firmware update, the updated device(s) must be reconfigured. If there is no configuration available yet, it must be retrieved from a device prior to starting the update, see chapter 3.4.**

### 2.3.5 Opening the Configuration Editor

Pressing the fifth button (gears) will open the Configuration Editor.



**Fig. 18: Button for opening the Configuration Editor**

For detailed information on Configuration Editor, please refer to section 3 in this manual.

### 2.3.6 Sending of Current Time and Date

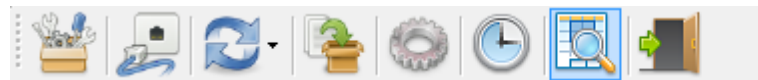
By pressing the button with the clock icon, the current date and time can be sent to the selected devices.



**Fig. 19: Button for sending time and date**

### 2.3.7 Opening the Modbus Monitor

The magnifying glass button can be used for opening a simple Modbus Monitor that allows the user to read and write Modbus fields.



**Fig. 20: Button for opening the Modbus Monitor**

### 2.3.8 Closing the Program

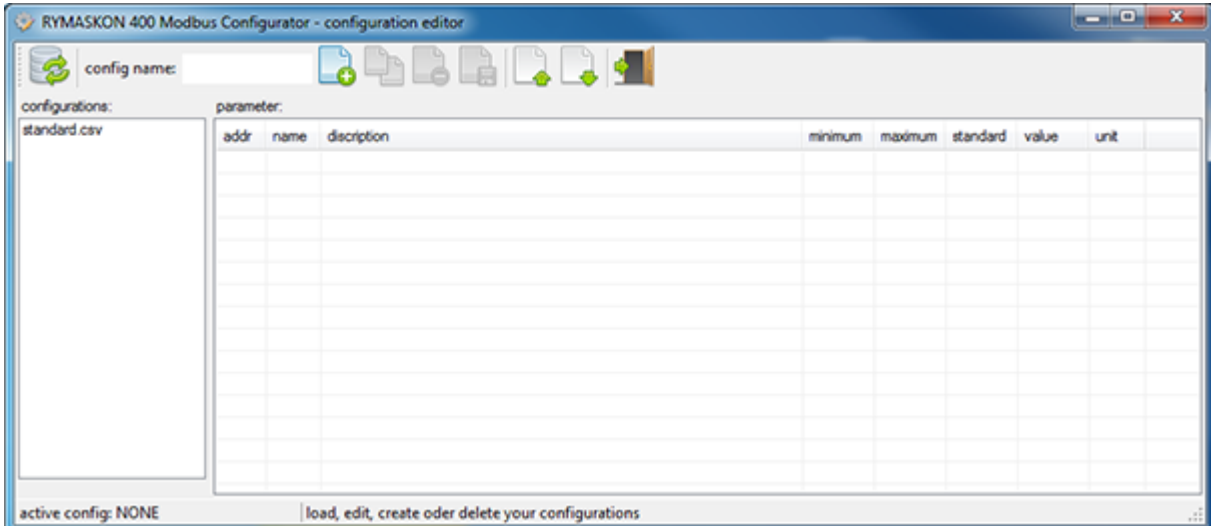
Pressing the door button at right will close the program.



**Fig. 21: Button for closing the Modbus Configurator software**

### 3 Configuration Editor

As described in section 0, the Configuration Editor is opened by pressing the button with the gears icon on the Main Program toolbar. With this Editor, the user can create, view, edit, retrieve and copy individual configurations and eventually upload them to existing **RYMASKON® 400-Modbus** devices on the bus.



**Fig. 22: Program window of Configuration Editor**

For uploading a configuration to one or multiple devices, these must first be selected in the Main Program:

| Modbus Addr. | Bootloader Version | Application Version |
|--------------|--------------------|---------------------|
| 1            | 1                  | NO APP              |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |
|              |                    |                     |

**Fig. 23: Device selection dialog window**

The Configuration Editor program window is divided in four areas, as described in the following:

### 3.1 Status Bar of Configuration Editor

On a status bar of its own, the Configuration Editor shows the currently active configuration at left and further important information at centre.

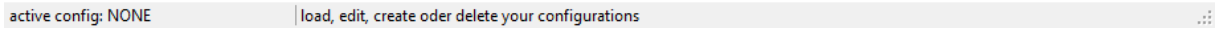


Fig. 24: Status bar of Configuration Editor

### 3.2 Configurations Overview

In the window area at left, the Editor displays an overview of all configurations found in the <config> folder.

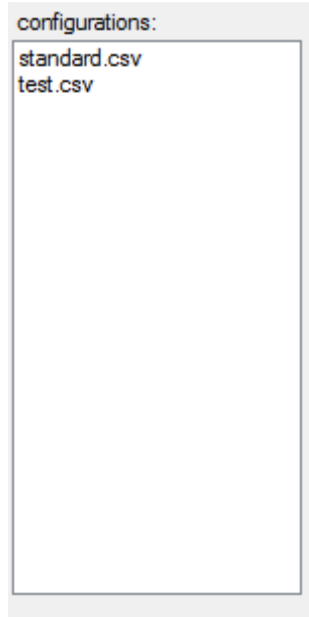


Fig. 25: Configurations overview

A desired configuration can be opened by double-clicking its name. The parameters saved in the selected configuration will then be displayed in the larger window area:

| addr | name | discription | minimum | maximum | standard | value | unit |
|------|------|-------------|---------|---------|----------|-------|------|
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |
|      |      |             |         |         |          |       |      |

Fig. 26: Parameters area

### 3.3 Parameters List

Example of a list of parameters shown in Configuration Editor:

| addr | name | discription   | minimum | maximum | standard | value | unit |
|------|------|---|---------|---------|----------|-------|------|
| 16   | P1   | Hauptregelung:0= Extern (AS)1= Intern                                       | 0       | 1       | 0        | 0     |      |
| 17   | P2   | Ausgang 1/2 stromlos0= Zu 1= Auf  | 0       | 1       | 0        | 0     |      |
| 18   | P3   | Nur RC05:Ventilfunktion0= 2-Punkt1= PWM                                     | 0       | 1       | 0        | 0     |      |
| 19   | P4   | Sollwertaenderung mit Tasten1+4 (0=nein, 1=ja, 2=praesenz)1+2 (=3)4+5 (...) | 0       | 4       | 1        | 1     |      |
| 20   | P5   | Sollwertaenderung mit Tasten2+5 (0=nein, 1=ja, 2=praesenz)1+2 (=3)4+5 (...) | 0       | 4       | 0        | 0     |      |
| 21   | P6   | Sollwertaenderung mit Tasten3+6 (0=nein, 1=ja, 2=praesent)                  | 0       | 2       | 0        | 0     |      |
| 22   | P7   | Nur RC05:2-PunktregelungEinschaltswelle Ausgang 0                           | 0,0     | 100,0   | 33,0     | 33,0  | %    |
| 23   | P8   | Nur RC05:2-PunktregelungAusschaltswelle Ausgang 0                           | 0,0     | 100,0   | 10,0     | 10,0  | %    |
| 24   | P9   | Nur RC05:2-PunktregelungEinschaltswelle Ausgang 1                           | 0,0     | 100,0   | 33,0     | 33,0  | %    |
| 25   | P10  | Nur RC05:2-PunktregelungAusschaltswelle Ausgang 1                           | 0,0     | 100,0   | 10,0     | 10,0  | %    |
| 26   | P11  | Nur RC05:Ventil-Laufzeit:Zeit bis der maximal Hub erreicht ist              | 0       | 18000   | 100      | 100   | s    |
| 27   | P12  | Nur RC05:Ventil-Aufwaermzeit:Vorlaufzeit, wenn Ventilaugang laenger als ... | 0       | 18000   | 80       | 80    | s    |
| 28   | P13  | Nur RC05:Ventil-Abkuehlzeit:Zeit, bis die Totzeit aktiv wird                | 0       | 18000   | 360      | 360   | s    |
| 29   | P14  | Betriebsart DIE10= Schalter1= Taster2= Fensterkontakt (interne Regelung)    | 0       | 2       | 0        | 0     |      |
| 30   | P15  | Betriebsart DIE20= Schalter1= Taster2= Taupunktwaechter (interne Rege...    | 0       | 2       | 0        | 0     |      |

Fig. 27: Display of configuration-specific parameters

By double-clicking on a parameter, a dialog window opens in which the parameter can be edited:

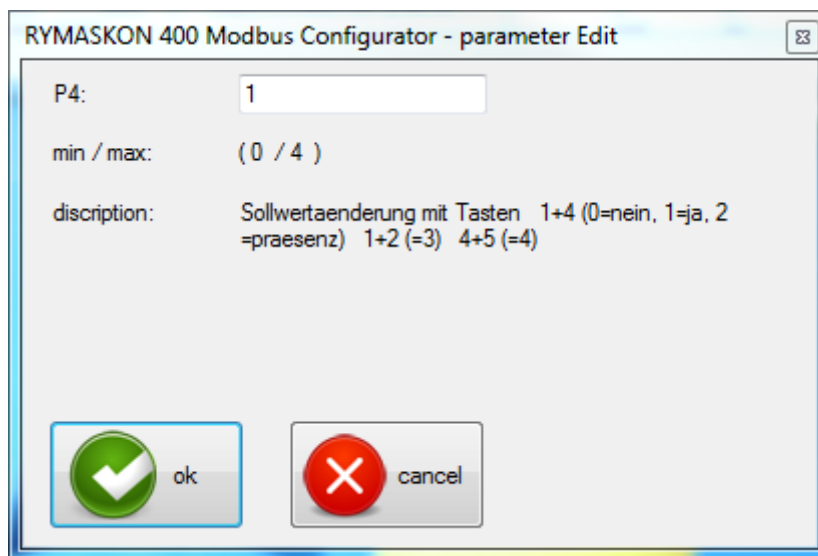


Fig. 28: Parameter editing dialog

Below the actual value, this dialog again also shows the minimum and maximum values as well as a short description of the selected parameter.

The minimum and maximum values will be checked by the program. If the entered value should not comply, the entry field will turn red, and the OK button will be disabled.

### 3.4 Toolbar of Configuration Editor

The fourth area of the Editor window is its toolbar, which includes eight buttons and one input field.



Fig. 29: Toolbar of Configuration Editor

By pressing the first button at left, the user can update the configurations overview.



Fig. 30: Button for updating the configurations overview

The input field is required for entering a name for any configuration to be added or copied.



Fig. 31: Text field for entering a configuration name

The second button (+) is used for creating a new configuration:



Fig. 32: Button for creating a new configuration

A currently opened configuration can be copied using the third button on the toolbar.



Fig. 33: Button for copying a loaded configuration

The fourth button (-) is used to delete the currently opened configuration.

When this button is pressed, the user will be prompted to confirm the deletion. When doing so, the configuration will be **irrevocably** deleted!



Fig. 34: Button for deleting a configuration

The fifth button (disk icon) can be used to save any changes made to an opened configuration.



Fig. 35: Button for saving changes

The sixth button (up arrow) on the toolbar serves for retrieving a configuration from a device. Please note that this requires prior selection of that device in the Main Program.



Fig. 36: Button for retrieval of a configuration from a device

Pressing the seventh button (down arrow) will upload the selected configuration to the selected device(s).



**Fig. 37: Button for sending the configuration to the device(s)**

The Configuration Editor can be closed by pressing the door button at right on the toolbar. If there are any changes that have not yet been saved, the user will be prompted to do so.



**Fig. 38: Button for closing the Configuration Editor**