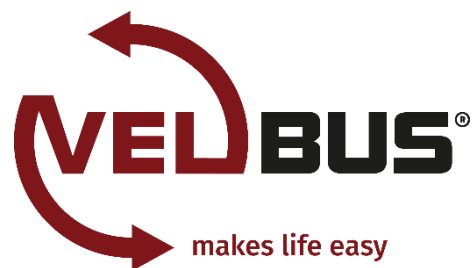
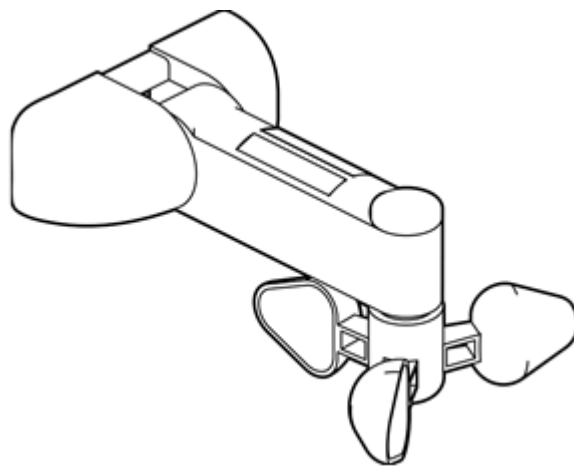


# Velbus weather station

**VMBMETEO**

**Manual**



# 1. Possibilities

VMBMETEO		08	VMBMETEO	1626	0
<input checked="" type="radio"/> Frost alarm	CH1	Released	} 8 output channels (alarms)		
<input checked="" type="radio"/> Heat alarm	CH2	Released			
<input checked="" type="radio"/> Rain alarm	CH3	Released			
<input checked="" type="radio"/> Dawn alarm	CH4	Pressed			
<input checked="" type="radio"/> Dusk alarm	CH5	Released			
<input checked="" type="radio"/> Sun alarm	CH6	Released			
<input checked="" type="radio"/> Wind alarm	CH7	Released			
<input checked="" type="radio"/> Storm alarm	CH8	Released			
<input type="radio"/> Outdoor temp.	CH10	21,3 °C	} 4 measured values		
<input type="radio"/> Rainfall	CH11	0,0 mm/h			
<input type="radio"/> Illuminance	CH12	251 lx			
<input type="radio"/> Wind speed	CH13	0,0 km/h			

The VMBMETEO weather station measures **four values**:

- **outdoor temperature** (between -30°C and 60°C)
- **quantity of rain fall** (0 to 100 mm/h)
- **illuminance** (3 to 65000 lux)
- **wind speed** (0 to 100 km/h)

It has **8 output channels** (CH1-8), each of which can contain a **random combination** of the above values. By default, they're preconfigured to trigger some of the most used alarms:

1. **Frost alarm:** closes at 0°C or less, and reopens at 0,5°C or more (measured during at least 2 minutes)
2. **Heat alarm:** closes at 25°C or more, and reopens at 24,5°C or less (measured during at least 2 minutes)
3. **Rain alarm:** closes at 1mm/h rain or more, and reopens at less than 0,5mm/h (measured during at least 15 minutes)
4. **Dawn alarm:** closes at 10 lux of light or more (measured during at least 2 minutes), and reopens at 5 lux or less (measured during at least 2 minutes)
5. **Dusk alarm:** closes at 5 lux of light or less (measured during at least 2 minutes), and reopens at 10 lux or more (measured during at least 2 minutes)
6. **Sun alarm:** closes at 50 000 lux of light or more (measured during at least 2 minutes), and reopens at 40 000 lux or less (measured during at least 5 minutes)
7. **Wind alarm:** closes at a wind speed of 30 km/h or more, and reopens at 25 km/h or less (measured during at least 15 minutes)
8. **Storm alarm:** closes at a wind speed of 62 km/h or more, and reopens at 55 km/h or less (measured during at least 15 minutes)

These alarms can be fully customized as desired by the user, as any combination of the four measured values. Each alarm (output channel) can exist of different conditions (rules). In total, a maximum of 24 conditions can be used, divided over the 8 output channels.

For each condition, the following can be chosen:

- which **value** (temperature, wind, rain or light) is used. The same value can be used more than once in the same alarm (e.g. close channel at 5 lux of light or less, or 25 lux or more)
- alarm at **higher then** or **lower then**
- the **activation level** (the threshold for activation)
- the **activation time** (how long the activation level has to be exceeded before activation)
- the **deactivation level** (the threshold for deactivation)
- the **deactivation time** (how long the deactivation level has to be exceeded before deactivation)

The different conditions can be combined either with AND, or with OR. (AND = alarm when all conditions are met, OR = alarm when at least one condition is met.)

## 2. Configuration with Velbuslink



For a general explanation about installing and configuring Velbus, please consult the installation manual on [www.velbus.eu](http://www.velbus.eu).



Always use the latest version of Velbuslink (free download at [www.velbus.eu](http://www.velbus.eu) > Support > Downloads).

The screenshot shows the VelbusLink 9.80.0.9 software interface. The main window displays a 'Project Navigation' tree on the left with 'VMBMETEO' selected and circled in red. A red arrow points from this selection to the '08. VMBMETEO - Configuration Settings' dialog box. The dialog box has tabs for 'Status', 'Alarm Thresholds', 'Programs', and 'Settings'. The 'Status' tab is active, showing the following data:

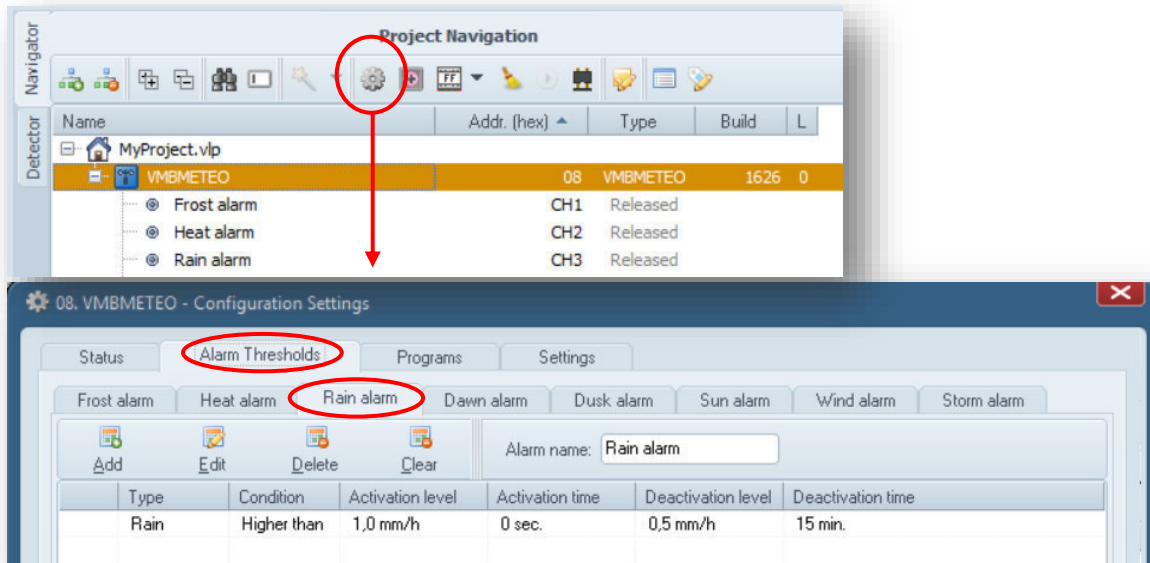
Outdoor temp.	23,9 °C	Minimum: 19,0 °C	Maximum: 23,9 °C	Reset min/max
Wind speed	0,0 km/h			
Illuminance	264 lx			
Rainfall	0,0 mm/h			

At the bottom right of the dialog box, it states 'All values are approximate' and has a 'Close' button. A red text box with a gear icon says 'click right > configure or press' with an arrow pointing to the gear icon in the 'Project Navigation' tree.

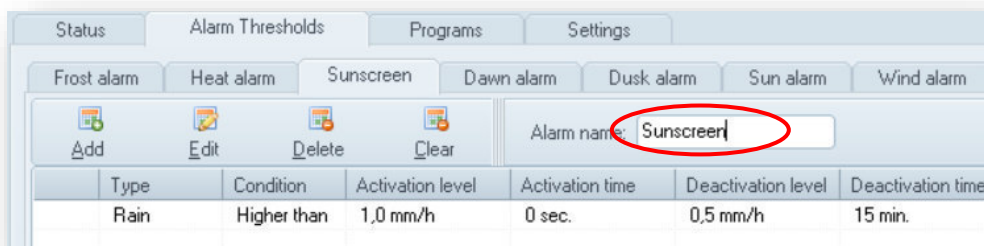
## 2.1.Example of an alarm configuration

E.g.: configure alarm channel that closes when it rains, or when the wind speed is too high, or when there's too little light (to control a sunscreen).

We start with one of the preconfigured alarms, e.g. the rain alarm (CH3). Select the VMBMETEO module and click "Configure" . In the configuration screen, open the tab "Alarm thresholds", and select the "Rain alarm".



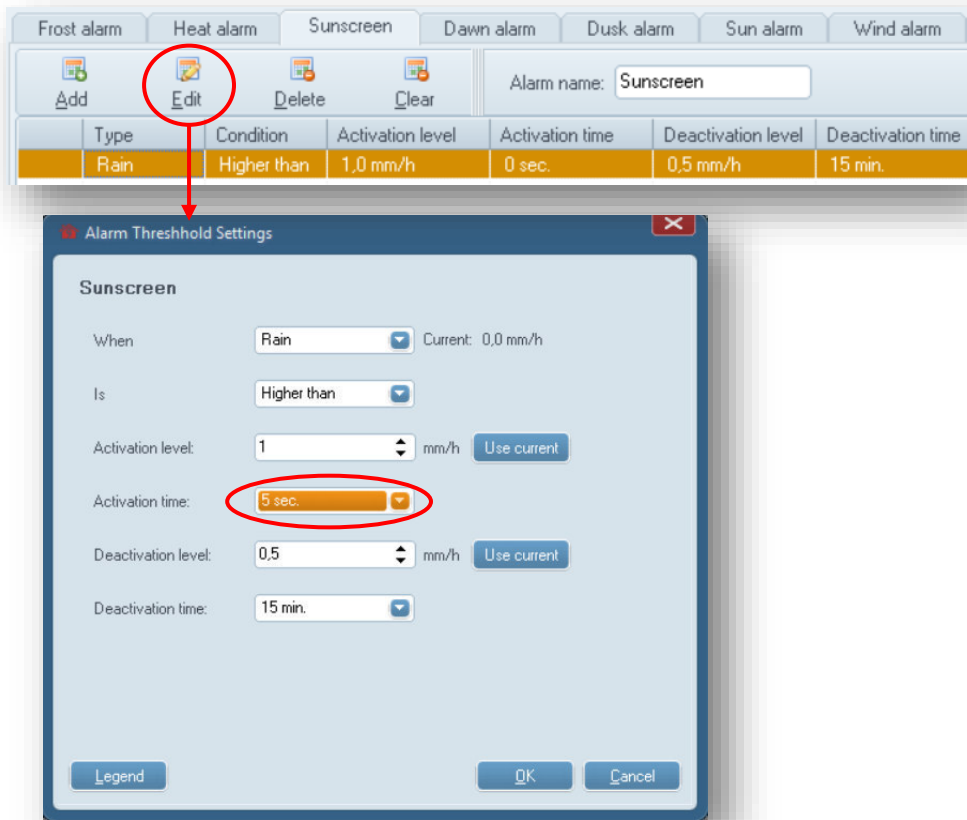
First, we change the name in the text box "Alarm name" (in this example, we choose "Sunscreen").



We can keep the condition for rain. However, we can customize the parameters as desired. For example, we can change the activation time.

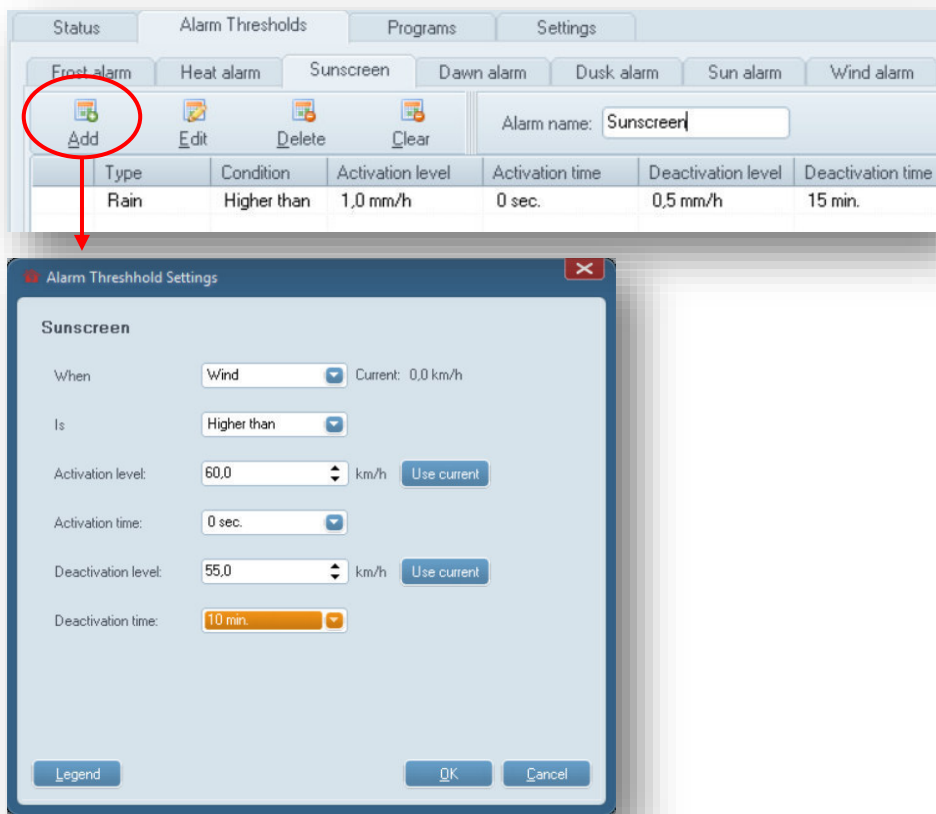
Select the condition "Rain" (click somewhere on the rule), and click "Edit".

In the window "Alarm threshold settings" we can customize all parameters. For example, we set the activation time to 5 seconds (see below).



Click "OK".

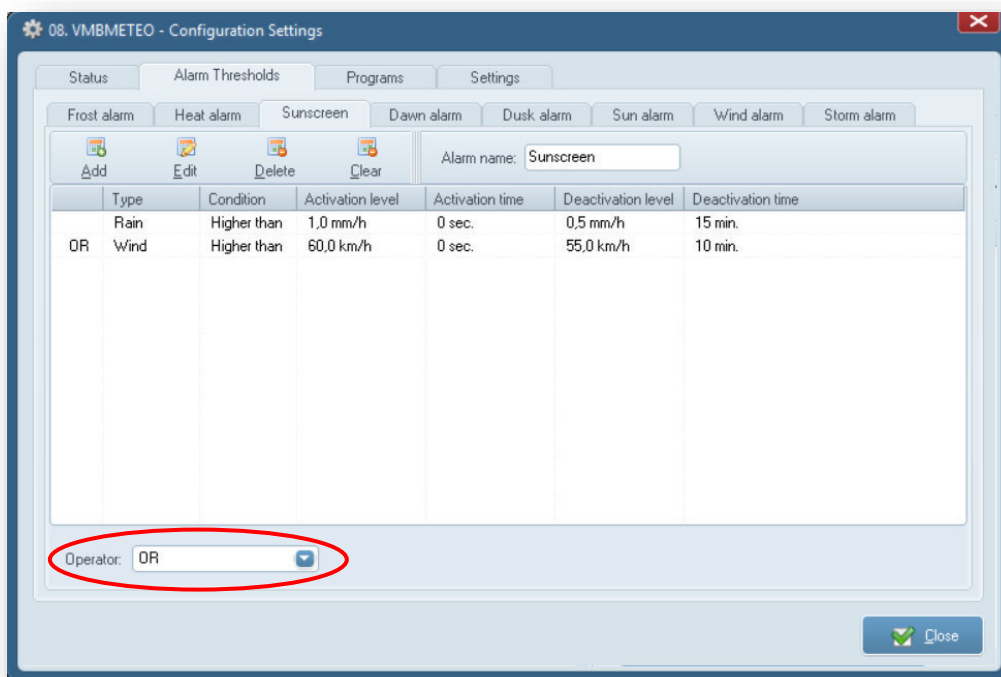
Now we can add the other two conditions. We start with the condition for wind. Click in the window "Configuration settings" on "Add". Configure in the "Alarm threshold settings" the following parameters (see image below).



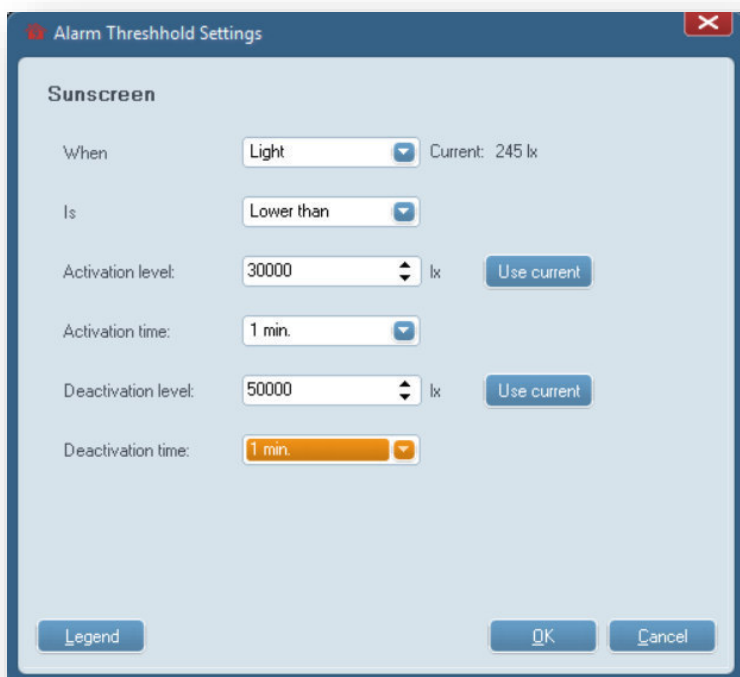
*Hint: to get an overview of commonly used values, click on “Legend” in the lower left corner in the window “Alarm threshold settings”. Click “Done” to close the legend.*

Click “OK” in the window “Alarm threshold settings”.

In the configuration settings, make sure that in the lower left corner, the operator is correctly set (OR or AND).



Finally we add, in the same way as we added the wind-condition (via the “Add” button), the condition for light intensity.



The three conditions are now set. The output channel “Sunscreen” (CH3) will close when one of the conditions is met. It will only open when none of the conditions are met. This output channel can now be used as condition for actions to control the sunscreen. (For a general explanation about programming Velbus, see the [Velbus Installation guide, Part 2: Programming](http://www.velbus.eu)).

Status Alarm Thresholds Programs Settings

Frost alarm Heat alarm Sunscreen Dawn alarm Dusk alarm Sun alarm Wind alarm Storm alarm

Add Edit Delete Clear

Alarm name:

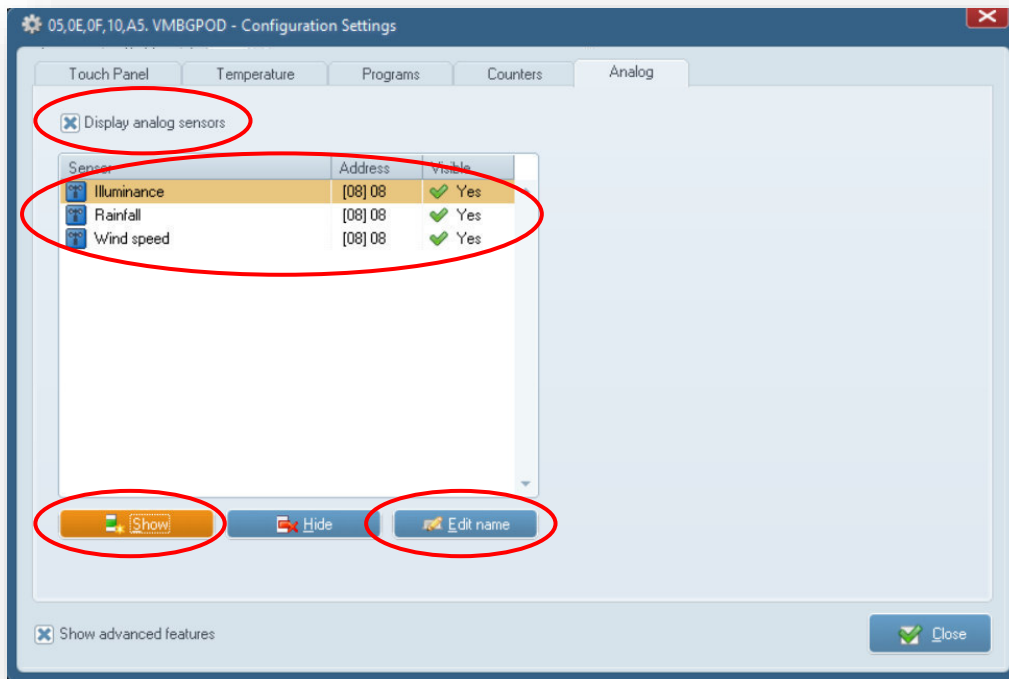
	Type	Condition	Activation level	Activation time	Deactivation level	Deactivation time
	Rain	Higher than	1,0 mm/h	5 sec.	0,5 mm/h	15 min.
OR	Wind	Higher than	60,0 km/h	0 sec.	55,0 km/h	10 min.
OR	Light	Lower than	30000 lx	1 min.	50000 lx	1 min.



## 2.2. Show measured values on a VMBGPOD glass touch panel with oled display

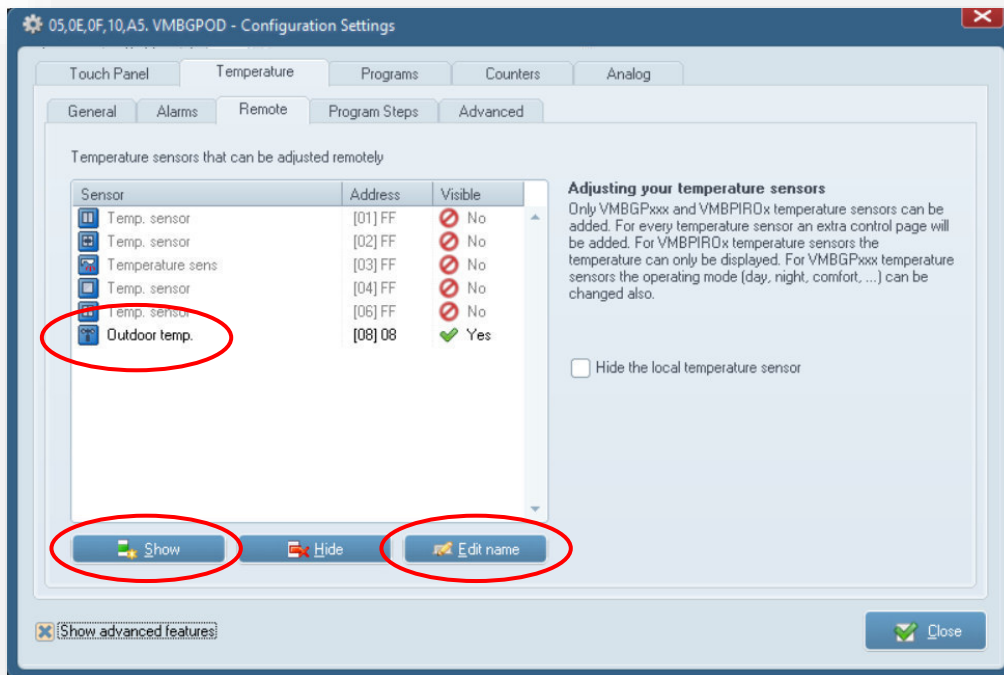
### Rain quantity, wind speed and light intensity

To show the rain quantity, the wind speed and/or the light intensity on a VMBGPOD glass touch panel with oled display, select in the “configuration settings” **of the VMBGPOD** the tab “Analog”. Check “Display analog sensors”. Then select the values you want to be displayed and click “Show”. Per selected value a page is added to the. The displayed name can be customized by clicking “Edit name”.

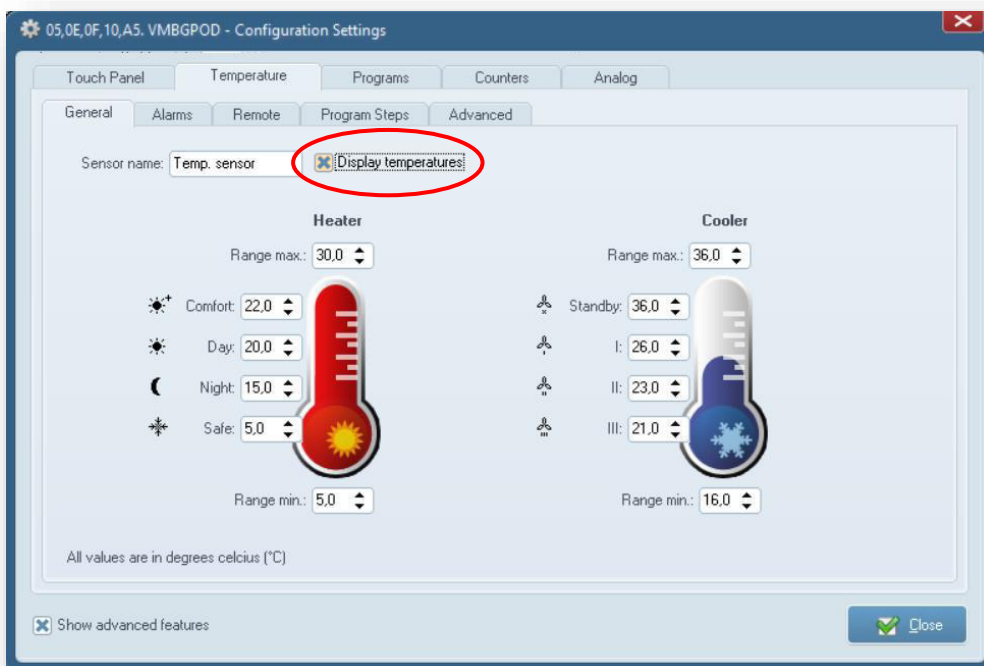


### Outdoor temperature

To display the outdoor temperature measured by the VMBMETEO on a VMBGPOD glass touch panel with oled display, go in the “configuration settings” **of the VMBGPOD** to the tab “Temperature” > “Remote”. Select the temperature sensor of the VMBMETEO and click “Show”. Click “Edit name” to customize the displayed name.



Check “Hide the local temperature sensor” if you don’t want the temperature sensor of the panel itself to be shown. Make sure that in the tab “Temperature” > “General” the option “Display temperatures” is checked.



## 2.3. Overview of the settings

### Status

**Wind speed**  
Currently measured wind speed. Click on the name to change it.

**Outdoor temperature**  
Currently measured outside temperature. Click on the name to change it. Click "Reset min/max" to reset the minimum and maximum value (to the currently measured value).

**Illuminance**  
Currently measured illuminance. Click on the name to change it.

**Rainfall**  
Currently measured quantity of rain. Click on the name to change it.

08. VMBMETEO - Configuration Settings

Status Alarm Thresholds Programs Settings

Outdoor temp. 28,9 °C  
Minimum: 19,0 °C  
Maximum: 29,0 °C  
Reset min/max

Wind speed 0,0 km/h

Illuminance 213 lx

Rainfall 0,0 mm/h

All values are approximate

Close

## Alarm thresholds



Configuration of the output channels (alarms) CH1-CH8.

**Delete**  
Delete selected condition(s)

**Clear**  
Delete all conditions

Change the name of the alarm (output channel)

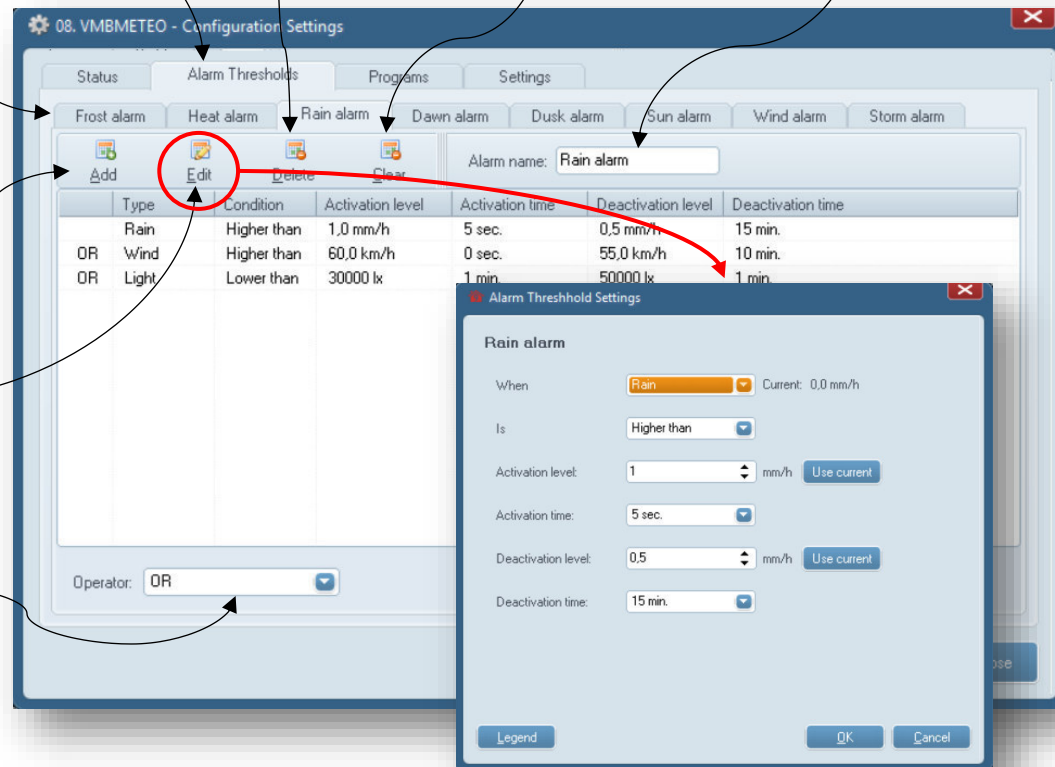
**Tabs with alarms**  
Select the desired alarm here. At factory defaults 8 alarms are preconfigured with generally applicable conditions. These can be completely customized as desired by the user.

**Add**  
Add a new condition. Maximum 24 conditions can be used, divided over the 8 alarms.

**Edit**  
Edit selected condition(s) (opens the window "Alarm threshold settings")

**Operator: AND or OR**

- When "AND" is selected, all conditions must be met to close the output channel
- When "OR", the output channel is closed when 1 or more conditions are met.



**Configure alarm condition**  
See next page

**Configure alarm threshold**



Settings for the selected condition (see previous page)

Choose temperature, rain, light or wind

“Higher than” = condition is met when the measured value is higher than the activation level (see further)  
 “Lower than” = condition is met when the measured value is lower than the activation level (see further)

**Activation level / Activation time**  
 When the activation level is exceeded (up- or downwards, see above) during at least the activation time, the channel will close  
**Deactivation level / Deactivation time**  
 When the channel is closed, it will only open when the deactivation level is exceeded (in opposite sense than the activation level) during at least the deactivation time.  
*e.g. “Temperature higher than activation level 25°C, activation time 1 minute, deactivation level 24°C and deactivation time 10 seconds” means: when it’s continuously warmer than 25°C during at least 1 minute, the channel will close. Once it’s closed, it will only reopen when it’s continuously colder than 24°C during at least 10 seconds.*

**Legend**  
 Opens an info window with commonly used values for rain quantity, illuminance and wind speed.

Currently measured value

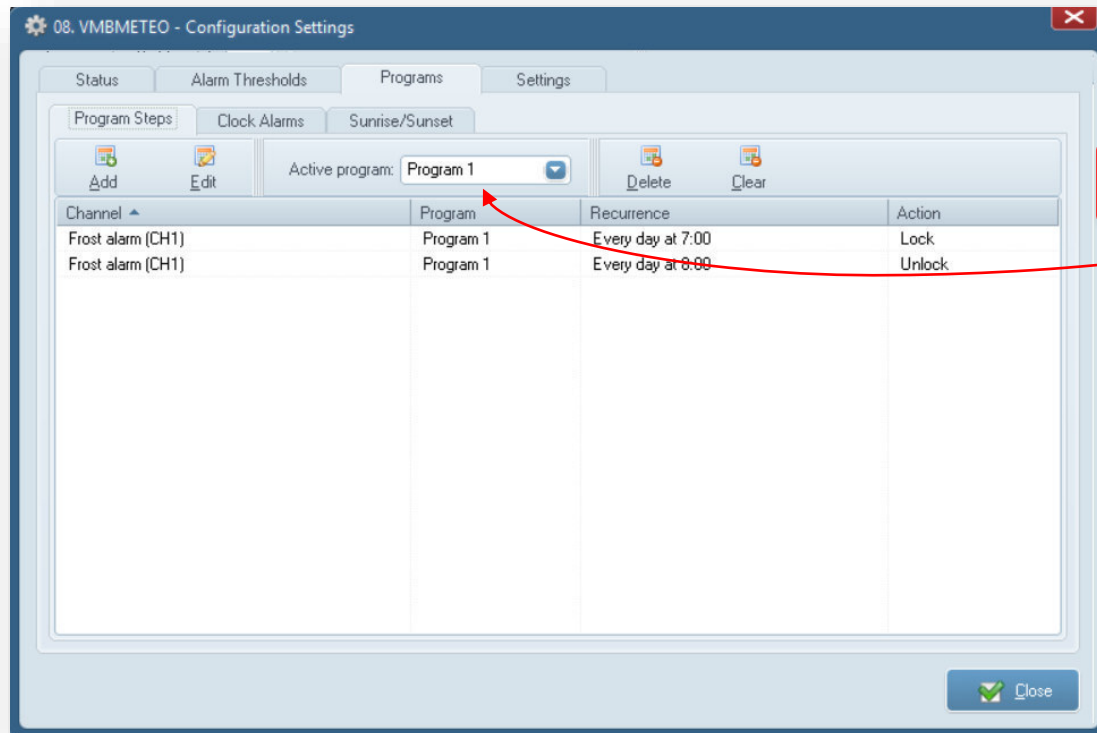
**Use current**  
 Use currently measured value in text box “Activation level” or “Deactivation level”

## Timers



**For a detailed explanation regarding program steps in Velbus, see the Velbus installation manual.**

**Timers**  
 In this tab, program steps can be added to lock or unlock output channels at specific times. These settings are analogous to these for other input channels, please consult the “Velbus installation guide, part 2: Programming”.  
*E.g.: Frost alarm is locked every day at 07:00 and unlocked at 08:00. Between 07:00 and 08:00, linked actions will be blocked.*



Do not forget to set the active program!

Calibration of the temperature sensor. The filled in value (-8°C to + 7,5°C) will be added to the measured value.

**Auto-send**

Configure how often the measured value (rain, wind, temperature and illuminance) must be put on the bus.

**Sending these values is only important for Home Center. When the installation does not contain Home Center (VMBHIS), select "never".**

