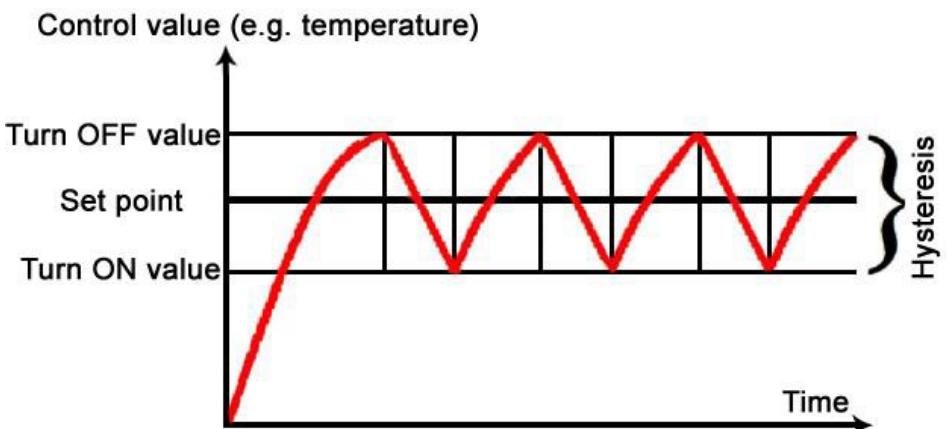


# Hysteresis function component

If you want to use a hysteresis function component, then you need to consider following.  
**Attention!!!** A temperature sensors is required (configured).  
**Functionality of the component :** You own e.g.: a PT-1000 sensor and you want to turn a device on and off at desired temperatures.



Go to „Controls“ in „Device configuration“. Create a new control function with the green plus

Go to “Special functions” and create a “Hysteresis”.

At name enter e.g.: „Temperature switch“.

At “Interface” select e.g.. „Internal Memory“.

At “Hysteresis points” press on the green plus.

At sensor/counter select e.g.: pt1000\_1 (temperature\_adc).

The second sensor/counter can stay turned off.

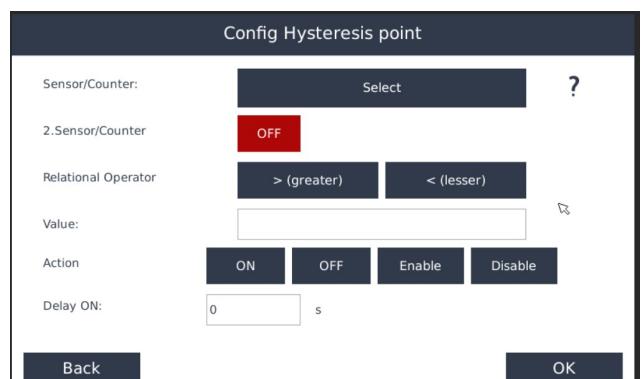
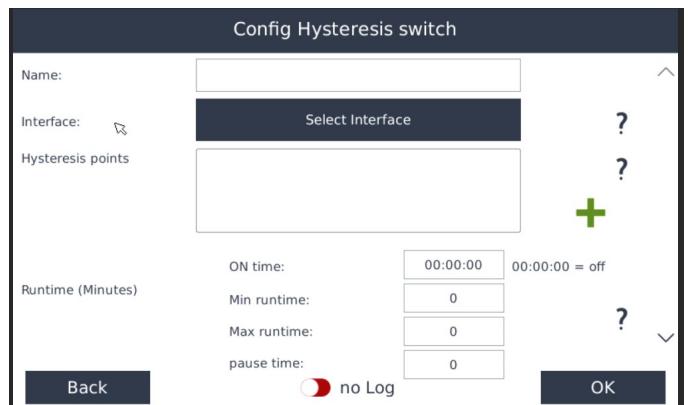
**At „2.Sensor/Counter“ you have got the possibility to integrate a second sensor value to the function component. This replacement value (Sensor1, Sensor 2) can be added up or subtracted.**

At „Relational Operator“ select „>(greater)“.

At „Value“ enter e.g.: 30.

At „Action“ select „ON“.

At „Delay ON“ select e.g.: „5“ seconds.



Confirm with „OK“.

**That means, that the PT1000 sensors turns on with a delay of 5 seconds, when the temperature reaches 30°C or above.**

**At a hysteresis, not only an ON condition is required, but also an OFF condition.**

Press on the green plus at „Hysteresis points“.

At sensor/counter select e.g.: pt1000\_1 (temperature\_adc).

The second sensor/counter can stay turned off.

At „Relational Operator“ select „<(lesser)“.

At „Value“ enter e.g.: 25.

At „Action“ select „OFF“.

At „Delay ON“ select e.g.: „5“ seconds.

Confirm with „OK“.

**That means, that the PT1000 sensors turns off with a delay of 5 seconds, when the temperature goes under 25°C.**

**At „Runtime (Minutes)“ you can set the „Turn ON time“, when the hysteresis component enables the output e.g.: 16:00:00. This value is set to OFF at midnight. At „Min Runtime“ a minimum runtime can be entered like e.g.: 10 Min.**

**At „Max Runtime“ a maximum runtime can be entered like e.g.: 10 Min.**

**At „Pause time“ you can select the time span between ON and OFF time e.g.: 20min.**

Confirm with „OK“ until you are in the „Device configuration“ and then go to „Save“.

**This function component goes to an „Internal Memory(DO\_Virtual)“. Therefore this function component can be linked. When using a physical output, at “Interface” this output has to be selected.**

Various interface extensions are available in our program. More info <http://www.eco-data.de>