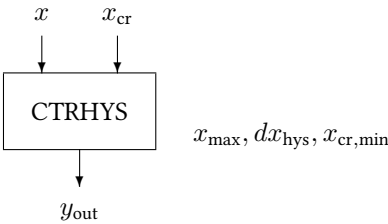


Block CTRHYS

The CTRHYS block simulates a differential controller that generates a control function and returns the values 0 or 1. A critical value can be controlled for safety reasons.



Name	CTRHYS
Function	st0036
Inputs	2
Outputs	1
Parameters	3
Strings	0
Group	S

Inputs

- 1

Value to be controled x
- 2

Critical value (lower limit) x_{cr}

Outputs

- 1

Output control function y_{out}

Parameters

- 1

Max. value to switch on x_{max}
- 2

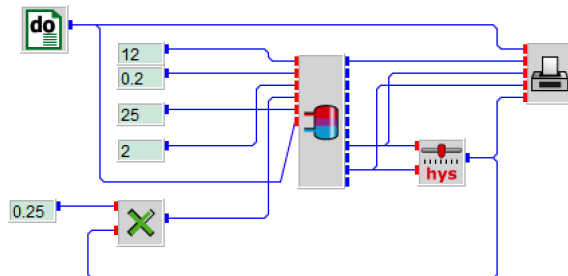
Hysteresis to switch off dx_{hys}
- 3

Critical value min limit $x_{cr,min}$

Strings

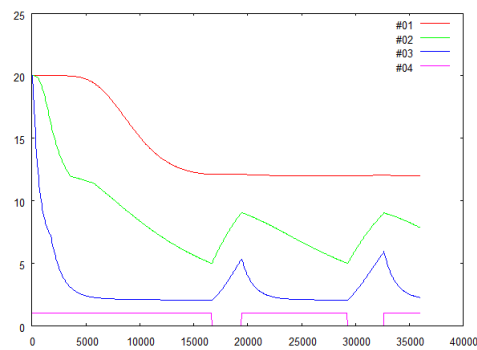
None

ctrhys.vseit



In this example a stratified storage tank is controlled by a **CTRHYS** block. The time is simulated by a **DO** block which runs for ten hours in steps of 60 seconds. The operation conditions are set constant.

A **PLOT** block displays tank temperatures in three different heights and the control signal as given by the **CTRHYS** block.



Please observe that the feedback loop is not algebraic because the **TANKST** block is a Delay block.