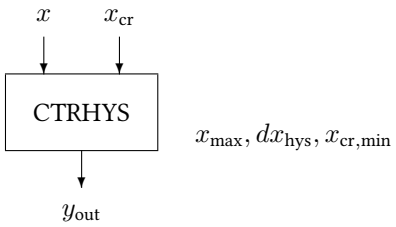
Block CTRHYS

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}

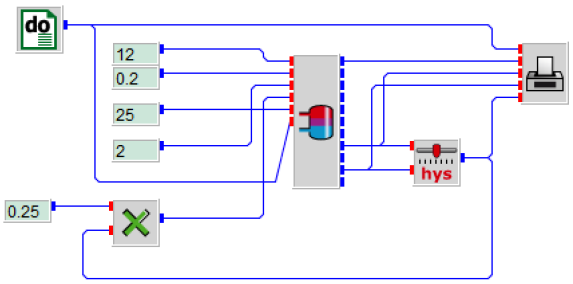
Parameters

1	Max. value to switch on x_{max}
2	Hysteresis to switch off dx_{hys}
3	Critical value min limit $x_{cr,min}$

Strings

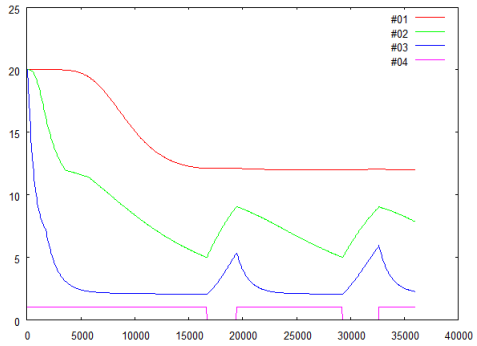
None

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.