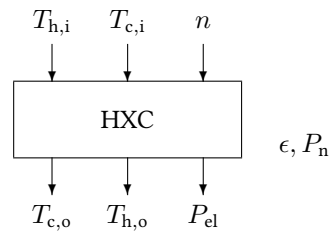


Block HXC

The HXC block simulates a heat exchanger with constant heat recovery efficiency.



Name	HXC
Function	st0005
Inputs	3
Outputs	3
Parameters	2
Strings	0
Group	S

Inputs

- 1 Temperature (hot) $T_{h,i}$ / °C
- 2 Temperature (cold) $T_{c,i}$ / °C
- 3 On-Off switch 0/1

Outputs

- 1 Temperature (cold) $T_{c,o}$ / °C
- 2 Temperature (hot) $T_{h,o}$ / °C
- 3 Electricity consumption P_{el} / W

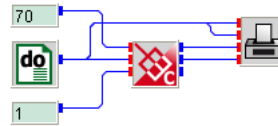
Parameters

- 1 Heat recovery efficiency ϵ
- 2 Nominal electricity consumption P_n / W

Strings

None

hxc.vseit



A heat exchanger with constant heat recovery efficiency of 80 % and a nominal electricity consumption of 50 W is simulated by a **HXC** block. The heat exchanger is switched on all the time and the hot side inlet temperature is set to 70 °C as defined by two **CONST** blocks.

A **DO** block varies the cold side inlet temperature between 0 and 50 °C in steps of 1 °C. The cold side inlet temperature and the resulting outlet temperatures are displayed by a **PLOT** block.

