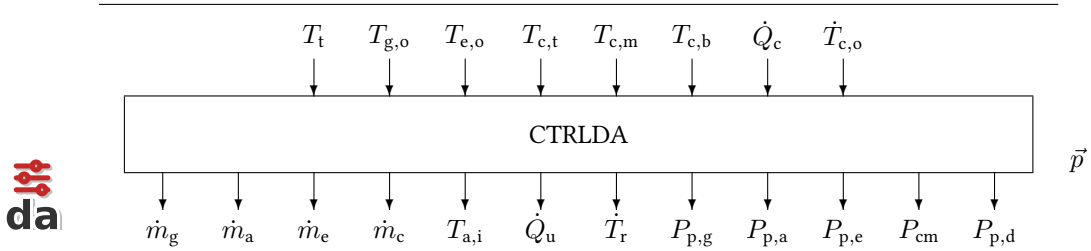
Block CTRLDA

The CTRLDA block simulates a real controler of a solar driven double effect absorption cooling machine.



Name	CTRLDA
Function	st0040
Inputs	8
Outputs	12
Parameters	14
Strings	0
Group	S

Inputs

1	Hot water storage temperature at top node / °C
2	Generator outlet temperature / °C
3	Evparator outlet temperature / °C
4	Cold water temperature at top node / °C
5	Cold water temperature at middle node / °C
6	Cold water temperature at bottom node / °C
7	Cooling load / kW
8	Outlet temperature cooling tower / °C

Outputs

1	Controlled generator mass flow / kg s^{-1}
2	Controlled absorber mass flow / kg s^{-1}
3	Controlled evaporator mass flow / kg s^{-1}
4	Controlled mass flow cold distribution taken from cold storage / kg s^{-1}
5	Contolled absorber inlet temperature / °C
6	Not delivered cooling power / kW
7	Return temperature from load / °C
8	Electricity consumption generator pump / kW

9	Electricity consumption absorber pump / kW
10	Electricity consumption evaporator pump / kW
11	Electricity consumption ACM / kW
12	Electricity consumption cold distribution pump / kW

Parameters

1	Generator mass flow / $kg\,s^{-1}$
2	Absorber mass flow / $kg\,s^{-1}$
3	Evaporator mass flow / $kg\,s^{-1}$
4	Minimum generator inlet temperature / °C
5	Generator minimum start up temperature / °C
6	Absorber inlet set temperature / °C
7	Cold distribution, supply temperature / °C
8	Cold distribution, return temperature / °C
9	Lower limit evaporator outlet temperature / °C
10	Electricity consumption generator pump / kW
11	Electricity consumption absorber pump / kW
12	Electricity consumption evaporator pump / kW
13	Electricity consumption ACM / kW
14	Electricity consumption cold distribution pump / kW

Strings

None
