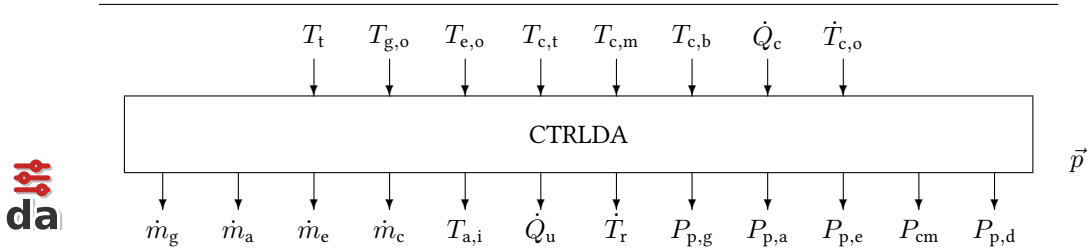
## Block CTRLDA

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

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