Block UBPEMFC





Name	UBPEMFC
Function	ubpemfc
Inputs	4
Outputs	6
Parameters	11
Strings	0
Group	S

Inputs

1 Current [A]
2 Time
3 Ambient Temperature / Temperature Setpoint [Celsius]
4 Heating Power [W]

Outputs

1 Stack Voltage [V]
2 Stack Power [W]
3 Hydrogen Consumption Rate [kg/timestep]
4 Air Consumption Rate [kg/timestep]
5 Cell Temperature [°C]
6 Heat Generation [W]

Parameters

1 Cell Area [cm^2]
2 Number of Cells
3 Hydrogen Pressure [atm]
4 Air Pressure [atm]
5 Ohmic Resistance
6 Exchange Current Density
7 Limitting Current Density

8	Time Step
9	Heat Capacity [J/K]
10	Heat Transfer Coefficient
11	Heat Transfer Exponent
12	Thermal Model

Strings

None