

Block UBPEMFC



DUMMY

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
