

Block RECEIV

The RECEIV block...



DUMMY

Name	RECEIV
Function	pp0003
Inputs	5
Outputs	3
Parameters	9
Strings	0
Group	S

Inputs

- 1 Concentrated radiation / W m^{-2}
- 2 Fluid inlet temperature / $^{\circ}\text{C}$
- 3 Fluid mass / kg s^{-1}
- 4 Ambient temperature / $^{\circ}\text{C}$
- 5 Time / s

Outputs

- 1 Fluid outlet temperature / $^{\circ}\text{C}$
- 2 Fluid mass flow / kg s^{-1}
- 3 Chassis temperature / $^{\circ}\text{C}$

Parameters

- 1 Area of receiver / m^2
- 2 Fluid heat capacity / $\text{kJ kg}^{-1} \text{K}^{-1}$
- 3 Convection loss coefficient / $\text{W m}^{-2} \text{K}^{-1}$
- 4 Emissivity of receiver
- 5 Transmission of cover
- 6 Absorption of receiver
- 7 Number of iterations

- 8 Product of chassis / J K^{-1}
- 9 Heat transport coefficient / $\text{W K}^{-1} \text{s}^{-1}$

Strings

None
