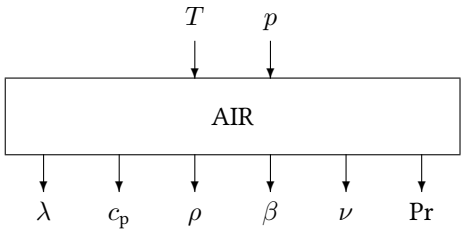
Block AIR

The AIR block handles properties of air as a function of temperature and pressure.

air



Name	AIR
Function	st0012
Inputs	2
Outputs	6
Parameters	0
Strings	0
Group	S

Inputs

1 Temperature T / °C
2 Pressure p / Pa

Outputs

1 Heat conductivity λ / $\mathrm{W\,m^{-1}\,K^{-1}}$
2 Specific heat capacity c_p / $\mathrm{J\,kg^{-1}\,K^{-1}}$
3 Density ρ / $\mathrm{kg\,m^{-3}}$
4 Heat expansion coefficient β / $\mathrm{K^{-1}}$
5 Viscosity ν / $\mathrm{m^2\,s^{-1}}$
6 Prandtl number Pr

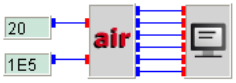
Parameters

None

Strings

None

air.vseit



Two CONST blocks provide a temperature of 20 °C and a pressure of 10^5 Pa. The AIR block calculates the properties which are displayed by a SCREEN block.

```
0.02512    1007.00000       1.18817       0.00341   0.15175E-04       0.72288
```