Block Q5P

The Q5P block implements by a five-parameter model typically used for heating- and cooling demand calculations of buildings.



Q5P

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Inputs

1 Ambient temperature T_a / °C

Outputs

1 Heating or cooling demand Q or / kWh
2 Heating (+1), or base load (0), or cooling (−1) indicator

Parameters

1 Base load Q_b / kWh
2 Heating change-point temperature T_h / °C
3 Heating slope α_h / kWh K^{-1} (usually negative)
4 Cooling change-point temperature T_c / °C
5 Cooling slope α_c / kWh K^{-1} (usually positive)

Strings

None