Block BASE

The BASE block calculates the dynamic conductance value for unsteady heat transport via basement around an building. Calculation is based on EN ISO 13370.



BASE

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Inputs

None

Outputs

1 Dynamic conductance via basement floor [W/K]
2 Dynamic conductance via basement wall [W/K]
3 Static conductance [W/K]
4 Phase shift because of basement [mth.]

Parameters

1 Switch base-mode (0: no cellar without ins. band 1: no cellar with ins. band 2: heated cellar 3: unheated cellar)
2 Switch ins. band modus (only for BP(1)=1) (0: horizontal 1: vertical)
3 Net volume cellar [m^3]
4 Area of basement floor [m^2]
5 External perimeter of basement floor [m]
6 Height of cellar wall [m]
7 Thickness of cellar wall [m]
8 Height cellar wall above ground [m]

9	Width of insulation band [m]
10	Thickness of ins. band [m]
11	Thermal resistance of wall under ground [(m^2*K)/W]
12	Thermal resistance of ground plate [(m^2*K)/W]
13	U-value cellar ceiling [W/(m^2*K)]
14	Thermal resistance of insulation band (Dämmstreifen) [(m^2*K)/W]
15	U-value wall above ground [W/(m^2*K)
16	Ventilation rate in cellar [1/h]
17	Thermal conductivity of soil [W/(mK)]

Strings

None