



Mollier-h-x-Diagram for air humid - Pressure 0.950 bar (537.000 m / 10.000 °C / 80.000 % rH)

### 1) Cooling of air - Partition of fins (2.5 - 3.5 mm)

Capacity	kW	10.076
Mean temp.diff.	K	8.957
Coefficient	kW/K	1.125
Coolant In	°C	5.000
Coolant Out	°C	7.000

		Air In	Air Out
Temperature	°C	21.000	10.300
Rel. Humidity	%	60.000	91.077
Abs. Humidity	g/kg	9.906	7.562
Density humid	kg/m³	1.118	1.162
Enthalpy humid	kJ/kg	46.287	29.416
Volume flow humid	m³/h	1941.737	1864.169
Mass flow dry	kg/h	2150.000	2150.000
Condensed water	kg/h		5.040
Surface temperature	°C		6.378

### 2) Heating

Capacity	kW	4.998
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		Air In	Air Out
Temperature	°C	10.300	18.500
Rel. Humidity	%	91.077	53.664
Abs. Humidity	g/kg	7.562	7.562
Density humid	kg/m³	1.162	1.129
Enthalpy humid	kJ/kg	29.416	37.784
Volume flow humid	m³/h	1864.169	1918.096
Mass flow dry	kg/h	2150.000	2150.000

### 3) Heat load with air

Sensible heat	kW	1.500
Latent heat	kW	0.000
Heat Load	kW	1.500

		Air In	Air Out
Temperature	°C	18.500	20.961
Rel. Humidity	%	53.664	46.083
Abs. Humidity	g/kg	7.562	7.562
Density humid	kg/m³	1.129	1.120
Enthalpy humid	kJ/kg	37.784	40.295
Volume flow humid	m³/h	1918.096	1934.279
Mass flow dry	kg/h	2150.000	2150.000