

Unit Conversion Table - HVAC Parameters

<i>Parameter</i>	<i>Technical</i>	<i>X=</i>	<i>English Unit</i>	<i>X=</i>	<i>SI Unit</i>
Optimum enthalpy	Kcal/Kg	1.8	Btu/lb	2.326	kJ/kg
Thermal Conductivity	kcal/m h °C	8.064	Btu in/ft ² h °F	0.1442	W/m ² K
	kcal/m h °C	0.672	Btu in/ft ² h °F	1.731	W/m ² K
Specific heat	kcal/kg °C	1.0	Btu/lb °F	2.326	kJ/kgK
Heat Transfer	kcal/m h °C	0.2048	Btu in/ft ² h °F	5.678	W/m ² K
Humidity ratio	g/Kg	6.933	gr/lb	0.143	g/kg
Flow	l/s	15.85	gal/min	63.09	cm ³ /s
	m ³ /S	3.531x10 ³	CFS (Cu Ft /S)	28.317	ls
	m ³ /S	35.315	CFS (Cu Ft /S)	1.7	(m ³ /min) CMH
	m ³ /min	35.315	CFM (Cu Ft /min)	1.7	CMH (m ³ /h)
Pressure	mm Hg at	0.03937	in. Hg at 32°F	3.386	kPa
	0°C KG/cm ²	14.22	Psi	6.895	kPa
	Bar	14.504	Psi	0.6897	N/cm ²
	mm H ₂ O	0.04	in.wg	254	Pa
	TR	0.525	in.wg	254	Pa
	TR	917	psi	6895	Pa
Energy	Kcal	3.968	Btu	1.055	kJ
	Kgm	7.233	Ft lb	1.356	J
	kWh	3412	Btu	1.055x10 ⁻³	MJ
Weight	g	0.03527	oz	0.02835	kg
	kg	2.205	lb	0.4536	kg
	ton (long-2240 ib)	1.12	ton USA (200 lb)	0.9072	metric ton, t
Power	kcal/h	3.968	Btu/h	0.02835	W
	cal/s	14.286	Btu/h	3.927X10 ⁻⁴	Km
	KM - metric	0.9861	KM	0.7457	kW
	Mcal/h	0.3307	Ton* (cooling)	3.517	kW
	TR	1.03	MBH	0.293	kW
Area	cm ²	0.155	in ²	645.2	mm ²
	m ²	10.76	ft ²	929	cm ²
Length	mm	0.03937	in	2.54	cm
	cm	0.03281	ft	0.3048	m
Volume of liquid	cm ³	0.06102	in ³	0.01639	l
	l	0.03531	ft ³	0.02832	m ³
	m ³	1.308	yd ³	764.6	l
	gallon USA	3.785	l	1000	ml,cm ³
	gallon USA	8	US pint	16	US oz
Velocity	m/s	3.281	ft/s	0.3048	m/s
	m/s	196.9	ft/min=fpm	0.00508	m/s