



HVAC Formulas: Chiller Coefficient of Performance

The following equation calculates the ratio of energy used to the energy output of a chiller.

INPUT VARIABLES	
T1	Chilled water return temperature in degrees F
T2	Chilled water supply temperature in degrees F
GPM	Volume of water passing through the chiller
KW	Kilowatts

OUTPUT VARIABLES	
COP	Energy output of the chiller

EQUATION	
COP	$(T1 - T2) * GPM * 0.0417 / (0.28433 * KW)$

