

Energy Efficiency Systems Energy Savings Calculator

Model (pick from list):	<input type="text" value="3709"/>	Nearest city (pick from list):	<input type="text" value="Chicago, Illinois"/>
Model name:	<input type="text" value="3709"/>	Heating hours per year:	<input type="text" value="6536"/> hrs
Main motor bhp:	<input type="text" value="53.6"/>	Fuel type:	<input type="text" value="Natural Gas"/>
Compressor capacity (cfm):	<input type="text" value="222"/>	Cost:	<input type="text"/> \$/THERM
Main Motor Efficiency:	<input type="text" value="93"/>	EES option cost:	<input type="text"/>
Fan motor hp:	<input type="text" value="1.5"/>	Installation cost:	<input type="text"/>
Fan motor efficiency:	<input type="text" value="85"/>		
Total operating hour per year:	<input type="text"/> hrs.		
Average load %:	<input type="text" value="100%"/>		

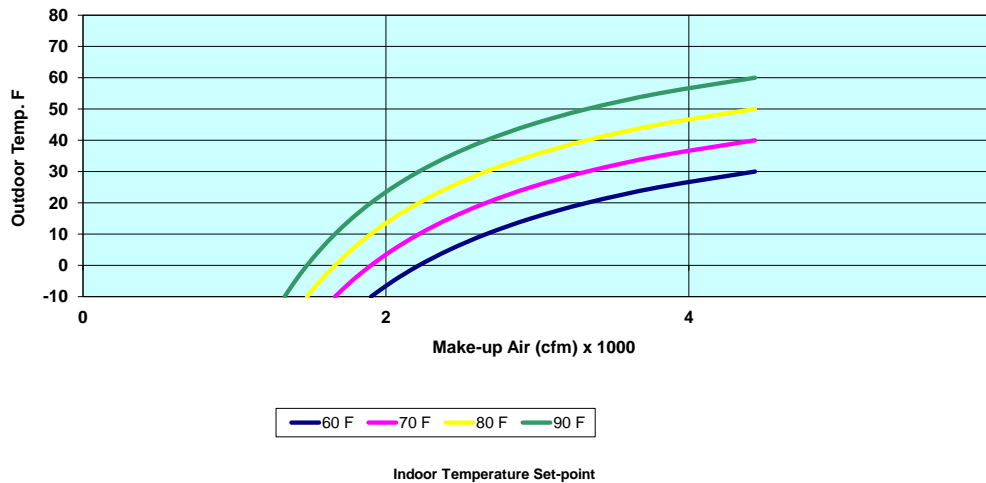
Potential Energy Savings

Compressor heat rejection:	<input type="text" value="2,274"/>	BTU/min
Main motor heat rejection:	<input type="text" value="171"/>	BTU/min
Fan motor heat rejection:	<input type="text" value="11"/>	BTU/min
Heat carried in compressed air:	<input type="text" value="60"/>	BTU/min
Total heat rejection:	<input type="text" value="2,396"/>	BTU/min
Heat available for recovery:	<input type="text" value="2,157"/>	BTU/min
BTUs saved per year:	<input type="text" value="0"/>	BTU/yr (x1,000,000)
Energy savings per year:	<input type="text" value="\$0"/>	per yr
Simple payback:	<input type="text" value="--"/>	yrs

Clear form before starting
new calculation



CFM Make-up Air vs. Outdoor Temperature



NOTES

- Assumes that yearly operating hours are spread evenly throughout the year
- Assumes 90% of rejected heat can be recovered
- Calculations based upon modified Degree-Day method 65F base (ASHRAE Handbook)
- Savings assume a 75% heating system efficiency
- Actual BTUs and dollar savings may vary based upon variations in heat rejected, system efficiencies, etc.
- Assumes a 15 deg F approach temp
- Assumes Inlet Modulation part load control and 25,000 CFM cooling air flow for "Other" models