



The Climate Saver Heat Pump



The Climate Saver was designed and developed to be the most innovative, efficient, and green HVAC system available today.

We have taken technologies that the industry has relied on for decades to provide reliable and high-quality comfort, adapted them to the 21st century, and combined them with renewable energy innovations that allow you to keep your family comfortable while lowering your bills and minimizing your impact on the planet.

QUALITIES OF A CLIMATE SAVER

Home heating and cooling technology has until very recently lagged other industries when it comes to innovation. The team at Climate Saver Solutions has tirelessly focused on rethinking HVAC technology to meet the demands and needs of the market as well as the planet. Our system has several characteristics and features that make it unique among the competition.



GREEN

At a time when we can directly feel the impacts of climate change and are relying on an aging electric grid, our design team set out to develop a system that could utilize the power of the planet by harnessing renewable energy. The Climate Saver heat pump looks unlike any other heat pump available today because of our patented Solar Thermal Collector. This Collector is able to capture and concentrate ambient light to heat the refrigerant that flows through the system so that the compressor which traditionally does this job only operates at a fraction of what all other heat pumps require. This translates directly into higher efficiency levels, financial savings and a minimized carbon footprint.

EFFICIENCY

Heat pump efficiency levels are measured using two standard metrics across the industry: SEER (Seasonal Energy Efficiency Rating) for cooling mode and HSPF (Heating Seasonal Performance Factor) for heating mode. Currently the national minimum ratings required for heat pumps are SEER of 13 and HSPF of 8.2, with the highest rated models achieving ratings of up to 24 SEER and 13 HSPF. The Climate Saver heat pump has set a new benchmark in the industry by achieving *effective SEER and HSPF ratings of up to 40 and 16.4 respectively. How is this possible? While all other heat pumps draw all of their power from the electric grid (which costs you money) we attain a significant amount of our energy from renewable resources. The solar thermal collector is the revolutionary technology that sets the Climate Saver apart and creates a new standard for efficiency levels.

UNPRECEDENTED FUNCTIONALITY

All heat pumps are three times more efficient at heating a home than a traditional furnace, so why doesn't everyone have one? Heat pumps pull heat from the air which is easy to do when it is relatively mild out, however, as the temperature drops it becomes harder and harder to find, and as heat pump efficiencies plummet at lower temperatures, a secondary system (furnace or boiler) kicks in to take over the home heating responsibility. This limitation is now over! Maybe what makes the Climate Saver heat pump stand out the most against the competition is its ability to operate at peak efficiency down to well below zero degrees. This means that even in frigid northern areas of the country homeowners can rely on the Climate Saver heat pump to provide all of their home heating needs, without that secondary system ever kicking in. Heating your home without burning fossil fuels translates into drastically reduced utility bills and carbon footprint.

ADAPTABILITY

The Climate Saver Heat Pump utilizes advanced variable speed inverter technology allowing for automatic adjustments to real-time internal and external conditions. This adaptability provides more accurate and efficient temperature control by maintaining consistent speeds, avoiding temperature swings and using less energy.



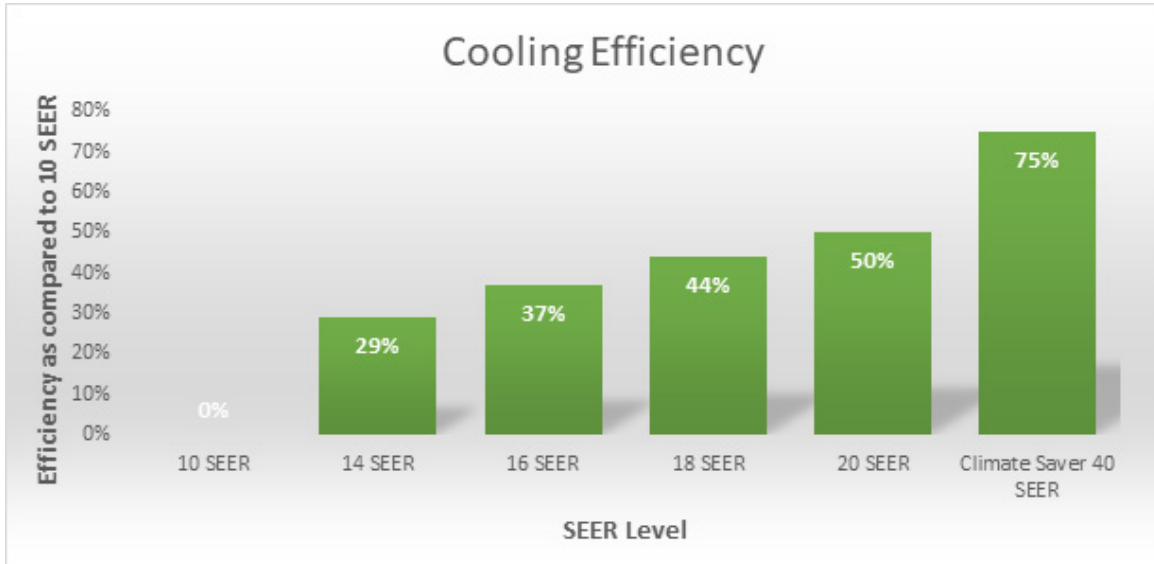
QUIET OPERATION

Noisy HVAC systems can be a nuisance to both you and your neighbors. That is why the Climate Saver was built to be the quietest heat pump on the market. The fan that blows air out of the top of the condenser is the source of the noise from all HVAC systems. The unique configuration of the Climate Saver with the Solar Thermal Collector positioned above the condenser forces air out the sides of the unit, muffling the sound. Testing has shown the Climate Saver to be one of the quietest HVAC systems ever developed with sound levels as low as 40 decibels.

UNPRECEDENTED EFFICIENCY

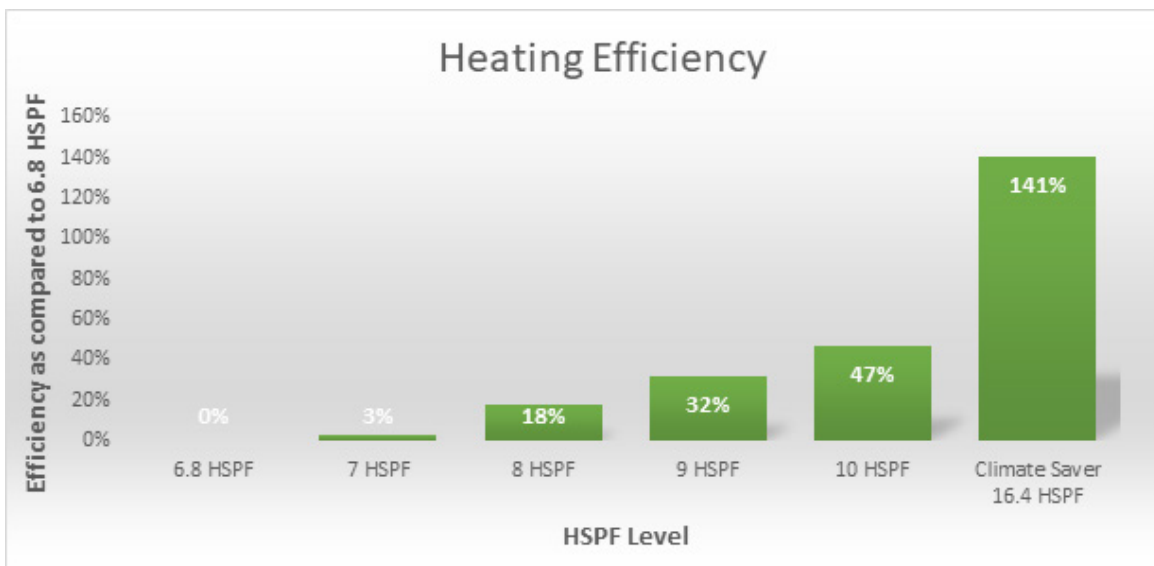
COOLING SEASON

As the SEER (Seasonal Energy Efficiency Rating) goes up your electric bill for cooling your home goes down. With an effective SEER* of up to 40, the Climate Saver will lower your spending significantly when compared to any other unit on the market.



HEATING SEASON

The HSPF (Heating Season Performance Factor) rating indicates the heating efficiency of the system. As HSPF goes up the cost for heating your home goes down. With an effective HSPF* of 16.4, the Climate Saver will lower your costs for home heating when compared to any other unit on the market.



Percentages are based on the 2005 minimum requirements of 10SEER/6.8HSPF. Your specific savings may vary depending on the efficiency of your current unit, system settings and usage, local climate, equipment maintenance and installation.

*The effective SEER/HSPF ratings are achieved by converting the ICC-SRCC OG100 efficiency ratings of the Solar Thermal Collector into a SEER/HSPF and combining it with the SEER/HSPF rating of the traditional heat pump portion of the Climate Saver Heat Pump.

HEAT PUMPS VS. FURNACE

Heat pumps can be a great alternative to a furnace in that they don't burn any fossil fuels (great for the environment and your utility bills) heating your home. They simply use electricity to move warm air into your house from the outdoors. Traditional heat pumps can transfer 300% more energy than they consume, while high efficiency furnaces can only transfer 95%-98%. The drawback of traditional heat pumps is that as the temperature drops into the thirties and below it is harder to heat a home efficiently and secondary heating coils are used which are extremely inefficient. A dual fuel system, which is common in more northern regions of the country, has a furnace that takes over responsibilities from the heat pump when the temperatures drop. The Climate Saver Heat Pump is revolutionary in that it achieves higher levels of efficiency than traditional heat pumps and can sustain nearly peak levels at sub-zero temperatures, eliminating the need for a backup furnace.



COP = useful heat produced/energy input

**High performance
means more
savings and less
environmental
impact**



Sophisticated System Monitoring Paired with Dynamic Control Ensuring Your Home Heating And Cooling Needs Are Always Met



Climate Saver Solutions is proud to offer a dynamic yet simple to use smart thermostat enabling you to control your system, however, and from wherever, you want.

Climate Saver is compatible with all 2-stage heat pump thermostats

Product Features

- Set your temperature remotely from your smart phone
- Wi-Fi connectivity through the App
- Able to control indoor fan speed for better dehumidification control
- Three-year limited warranty
- Seven-day programmable settings



Smart Home Heating And Cooling

The innovative IoT Gateway System leaves the maintenance of your heating and cooling system to the pros. With real-time data management, the IoT Gateway notifies your contractor of any problems, often before you ever discover an issue. The smart system also provides recommendations for energy savings, reducing your carbon footprint.

Technical Information

Series	CS			
	24K	36K	48K	60K
AHRI Reference NO.	202337969	202110525	202337970	202110527
ICC-SRCC OG100 Ref NO.	10002093			
Capacity				
Cooling Capacity(BTU/h)	23400	34200	45000	54000
Heating Capacity(BTU/h)	24000	36000	47000	54000
Load	25%-110%			
SEER (Effective)	20.0 (40.0)*	18.0 (40.0)*	17.0 (40.0)*	17.0 (40.0)*
HSPF (Effective)	10.0 (16)*	10.0 (16)*	9.5 (16)*	9.5 (16)*
Component				
Compressor	Variable			
Fan Motor	Multi-speed			
Outdoor metering device	Electronic expansion valve			
Indoor metering device	Non-bleed R410A TXV			
High Pressure Sensor	•	•	•	•
Low Pressure Sensor	•	•	•	•
Compressor Noise Cancelling Jacket	•	•	•	•
Refrigerant Accumulator	•	•	•	•
Field Setting				
Dehumidification Mode	•	•	•	•
High Capacity Mode	•	•	•	•
Silent Mode	•	•	•	•

CONDENSING SECTION MODEL SIZES			
Models	Height(H)	Width(W)	Depth(D)
2436	59-15/16	29-1/8	29-1/8
4860	68-3/16	29-1/8	29-1/8

Standard Features:

- Up to 40 SEER/16 HSPF (Effective)
- Fully modulating inverter drive
- Capacity load from 25%-110%
- Sound levels as low as 40dB
- Compress equipped with noise cancelling jacket
- Compatible with most 24V thermostats
- Low temperature field setting
- Dehumidification mode specifically designed for high humidity areas
- Refrigerant Auto charge feature
- Intelligent control
- Backup Operation up to 2 failed sensors



AIR HANDLER SECTION MODEL SIZES				
Models	Series	Height(H)	Width(W)	Depth(D)
24/36	E series	46-1/2"[1180]	21"[533]	21"[533]
48/60		56"[1422]	24-1/2"[622]	21"[533]

Standard Features:

- Multi-speed ECM blower motor
- Factory installed TXV
- Multi-position Installation
- Multiple electrical entry locations
- Field installed heater kits 5, 10,15,20KW
- Two front panels (upper and lower) for easy serving
- Slide rail design for motor and coil for easy installation and maintenance
- Horizontal and vertical drain pan pre-installed
- Plastic primary drain pan
- Cooperating with Ecoer thermostat, E series can automatically switch to low speed to get even better dehumidification control



* The unique nature of the Climate Saver heat pump requires efficiency testing by two separate certification bodies. AHRI tests the heat pump efficiency without the thermal cell component, while ICC/SRCC tests the thermal cell component independently. The scientific relationship of heat to pressure enables us to convert the ICC/SRCC results into an effective SEER/EER/HSPF which is combined with the AHRI certified SEER/EER/HSPF to generate the overall effective results we have achieved in testing.