

Energy wise

F O R Y O U R H O M E



Heat pumps – the natural choice

For environmentally friendly heating and cooling, a heat pump is the natural choice. Quiet and efficient, heat pumps use the heat found naturally in the air and ground. Plus, installing a heat pump may qualify you for rebates and reduced electric rates from Lake Country Power, making them an even greater value.

Value for your home or business

A heat pump is an ideal heating and cooling option for almost any building:

- Homes
- Schools
- Churches
- Businesses

Move heat efficiently

The concept for heat pumps was first formulated more than 150 years ago. Today, heat pump technology is the most advanced and energy-efficient heating and cooling technology available.

Heat pumps do not create heat-like combustion furnaces but simply transfer or “pump” heat from where it is (heat source) to where you want it to go (heat sink) using heat exchangers, compressors and refrigerant.

Since more heat energy is transferred than consumed in the process, the efficiencies of heat pumps range from 200-400 percent as

compared to 80-95 percent for combustion furnaces.

You can choose from two types of heat pumps

AIR-SOURCE HEAT PUMP

An air-source heat pump moves heat to and from the outdoor air. In summer, it operates like a conventional central air conditioner. In winter, it provides supplemental heat. (You will still need a conventional furnace or other heat source for the coldest days of the year.)

Air source heat pumps are energy-efficient and make your indoors more comfortable. Warm air from a heat pump is more moderate in temperature than air from conventional furnaces. As a result, the air rises more slowly, distributes heat more evenly and holds moisture better.

Installed, air source heat pumps cost slightly more than a standard central air conditioner. Lake Country Power provides tools to help you



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offset the additional cost in two to five years in the form of rebates and low, off peak electric rates.

GROUND-SOURCE HEAT PUMP

Here in Minnesota, temperature changes are a big part of our local climate. But just 10 feet underground, the temperature is about 50 degrees year-round. Ground-source heat pumps, also called geothermal heat pumps, take advantage of this consistent temperature.

A ground-source heat pump consists of a network of plastic pipe buried underground. Non-toxic antifreeze solution circulates through the pipes, then to the heat exchanger inside the GSHP. In summer, the liquid inside the tubing collects heat from the building and rejects that heat into the ground. In the winter, it collects heat from the ground and brings it indoors.

Discover the benefits of a ground-source heat pump:

- 300-400 percent energy-efficient – the most energy-efficient heating and cooling system available
- All working parts are located indoors
- Much quieter than conventional A/C
- Potential for free hot water all summer
- Hydronic floor heating option available – no need for a boiler
- Maintenance-free underground pipes are designed to last 50 years.

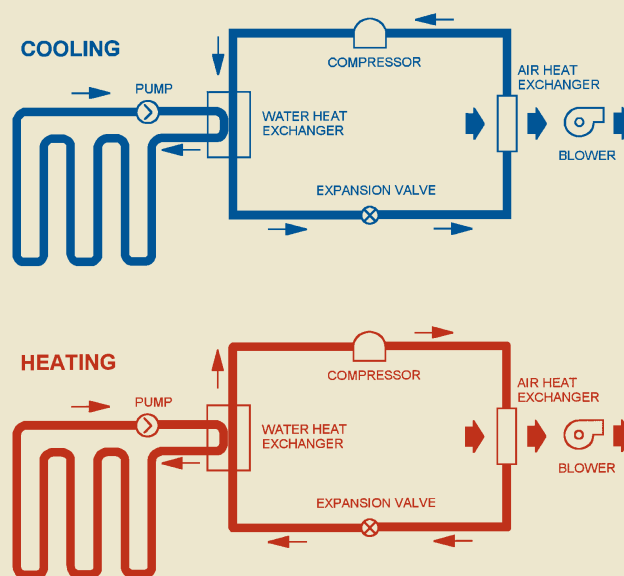
Help the environment, too

Lake Country Power is proud to offer you environmentally responsible options like heat pumps that help you save money and the environment.

Contact us

To save energy and money, call Lake Country Power at 800-421-9959.

GROUND SOURCE HEAT PUMPS



Ground source heat pumps use the earth's ability to store heat in the ground.

Get Your Federal Tax Credit

New for 2009, Federal Tax Credits are available for 30% of the cost of buying and installing a heat pump system. For complete details, go to



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