

AIR-SOURCE HEAT PUMP

ELECTRIC HEATING AND COOLING SOLUTION

Valent offers air-source heat pumps in capacities ranging from 3 to 30 tons.

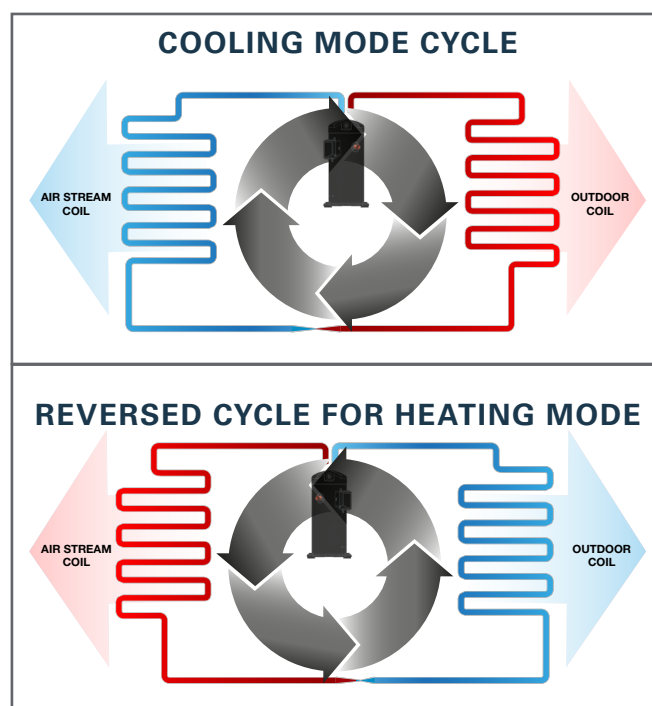
This heating and cooling technology is typically used when natural gas heating is unavailable or prohibited by local code. In colder climates, an air-source heat pump may be paired with a secondary heat source such as gas or an electric heater.

ONE SYSTEM TO HEAT AND COOL

- An air-source heat pump is designed to transfer energy between the ambient air and supply air stream, providing both cooling and heating for the space it serves.
- In cooling mode, the air stream coil absorbs heat energy from the supply air and rejects this heat to the outdoor air. While the air stream coil provides cool air, the outdoor coil rejects heat to the ambient air.
- In heating mode, a reversing valve allows the air stream coil to heat the supply air where the outdoor coil absorbs heat from the ambient air and the air stream coil rejects this heat to the supply air.
- Utilizing the refrigeration system for the first stage of heating can be more efficient than electric heat, per kW consumed.

BROAD RANGE OF APPLICATIONS

- Air-source heat pumps can be used in all climates
- Available in 100% outdoor air or mixed air applications
- Valent does not lock out air-source heat pump heating operation until 0°F which maximizes compressor run time and reduces the need for supplemental heat



Air-source heat pumps use a reversing valve to reverse the flow of refrigerant and pull heat from the ambient outdoor air.

QUICK INFORMATION GUIDE

Valent Model	VX, VXE, or VXC 112 and 212	VR-200, VR-300, and VR-400
Cooling Capacity	3 to 30 tons	6.5 to 30 tons
Compressor	Inverter scroll	Inverter scroll
Airflow Configurations	100% outdoor air or mixed air	Mixed air
ASHP Heating Lockout	0°F	0°F
Condenser Fan	Lead EC or All EC	All EC
Supplemental Heat Options	Indirect gas, electric, or hot water	Indirect gas or electric
Coil Frost Protection	As needed, based on refrigeration suction temperature, outside air temperature, and/or outside humidity	

See the Valent VX IOM, VR IOM, and Controls IOM Sequence of Operation for more information.

LEARN MORE ABOUT VALENT

- www.valentair.com
- Download the [Product Datasheet](#) to see Valent's range of options.
- [Contact your Valent Representative](#).

