

High-Efficiency Water Source Heat Pumps

Trane high-efficiency water source heat pumps are engineered to deliver superior efficiency and optimum performance over many years of operation. They are often applied in preference to normal-efficiency units when there are programs sponsored by local utilities, or when low energy consumption is a critical design parameter.

With cooling EER's as high as 15.2 at ARI 320 rating conditions and heating COP's as high as 4.8, this horizontal heat pumps design uses low water pressure drop and thermostatic expansion valves to maintain optimum superheat over a wider range of control. Low water pressure drop also contributes to system efficiency by reducing pump's loads.

High-efficiency heat pumps are offered in six sizes over three standard casing footprints. All casings are mounted on heavy duty base rails for easy installation. Removable side panels provide access to all internal components. To promote better indoor air quality, the main drain pan is also fully removable for easy cleaning.

Quiet operation is assured by the units thermal acoustical insulation and internally isolated fan motors and compressors. External isolation at the base rail is also provided.

Superior to conventional electromechanical controls, the heat pump's microelectronic controller includes such features as random start, antishort-cycle timing, and inputs for enabling/disabling the unit, load shedding and diagnostics. Refrigerant pressure switches (low and high), a "freezestat" and the controller's self-diagnostic routine protect the unit from unusual operating conditions. An alarm output is energized whenever any of these conditions is detected.

***Features & **Benefits**

*Integrated Comfort™ System Compatibility (DDC Option)

**Linking DDC controls to Tracer® building management system permits monitoring, diagnostic and control capabilities from one convenient location. Simplifies after-hours scheduling and tracks equipment run times to trigger regular maintenance.

*Trane-built Climatuff™ Compressors

**Installed in 8 million+ applications. Built-in protection includes internal overloads and high-pressure relief. Design-tested in Trane's System Extreme Environmental Test (SEET) facility to simulate five years of operation in a 16-week period.

*Easy Retrofit

**Field-reversible discharge and conventional thermostat interface allow these high-efficiency heat pumps to replace a building's existing units.

*Earth-coupled Technology

**Eliminates system's "heat adder" and "heat rejector". Allows equipment to operate at lower discharge pressures and use less kw. Is environmentally sound and may qualify for electric utility incentives to offset installed costs.

*Designed for Higher Efficiency

**Cooling EER's to 15.2, heating COP's to 4.8 to reduce operating costs.