WATER HEATERS / BOILERS

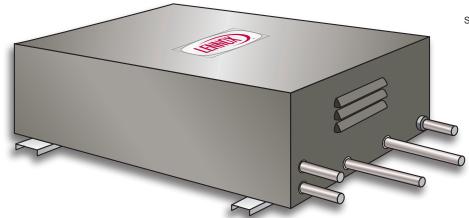
HW2

LENNOX

Reclaim Heat Water Heater Module - 50 HZ

PRODUCT SPECIFICATIONS

Bulletin No. 490028 December 2010 Supersedes September 1994



5.5 to 7.5 L/hr per kW Of Cooling Capacity Per Hour At 60°C Hot Water From 24°C Entering Water

FEATURES

GENERAL

Water heater module is an in-line heat exchanger that connects between the compressor and outdoor coil.

Module utilizes a portion of the heat generated during the normal cooling cycle of an air conditioner or heat pump to heat water for domestic use.

The simultaneous process of water being heated by the refrigerant and the refrigerant being cooled by the low temperature water results in the dual benefit of useable hot water and high air conditioning efficiency.

Reduces operating costs while providing free hot water.

Reduces operating pressures and condensing temperatures minimizing the energy demand on the outdoor unit.

Module contains a water circulating pump, refrigerant discharge thermostat, high temperature limit, freezestat, water regulating valve, insulated heat exchanger and wiring junction box.

All interconnecting piping and wiring of the module components are factory completed.

Installer has only to locate the module and make field piping and electrical connections to complete the job.

PERFORMANCE

5.5 to 7.5 L/hr per kW (5 to 7 U.S. gal/hr per ton) of cooling capacity of 60°C (140°F) hot water at 24°C (75°F) entering water.

Shipping Weight - 12 kg (26 lbs.)

SYSTEM OPERATION

Circulating pump is actuated by the refrigerant discharge thermostat upon sensing the presence of hot discharge gas from the outdoor unit.

Hot discharge gas circulates through the double-wall heat exchanger giving up its heat to the cold water.

Water regulating valve - Adjustable - 49 to 71°C (120 to 160°F) monitors the leaving temperature and restricts water flow below the temperature setting.

As the inlet water (storage) reaches approximately 66°C (150°F), the high temperature limit will turn off the circulating pump thereby limiting the storage tank water temperature.

Freezestat provides freeze protection by activating the water pump anytime the water temperature reaches approximately 7°C (45°F).

See Typical Piping schematic illustration on next page.

APPLICATION

Applicable to remote or packaged air conditioning or heat pump systems with nominal cooling capacities of 5.2 to 17.5 kW (1.5 to 5 tons).

System must be equipped with an expansion valve.

Must be installed in the horizontal position within 10 feet of the outdoor unit.

For maximum efficiency, a minimum storage capacity of 303 L (80 U.S. gallons) is recommended.

HEAT EXCHANGER

Coiled tube-in-tube, double-wall copper.

Encased in polyurethane insulation.

Drain valve provided for draining heat exchanger.

FEATURES

WATER CIRCULATING PUMP

Stainless steel, 21 W (1/35 hp).

Water cooled and lubricated

Thermal overload protected

220/240V - 50 hz -1 phase, 0.33 A, 21W (1/35 hp) output.

CABINET

Heavy gauge galvanized steel with a weather resistant paint finish of outdoor enamel.

Removable cover allows complete access to interior.

Electrical inlet provided in side of cabinet.

Channel raises cabinet off mounting surface.

Wiring Junction Box

Located for easy access.

Equipped with terminal block for power connection.

Line Connection

Water and refrigerant lines 12.7 mm (1/2 in.) outside diameter, sweat connections.

Lines are stubbed outside of cabinet for easy field connection.

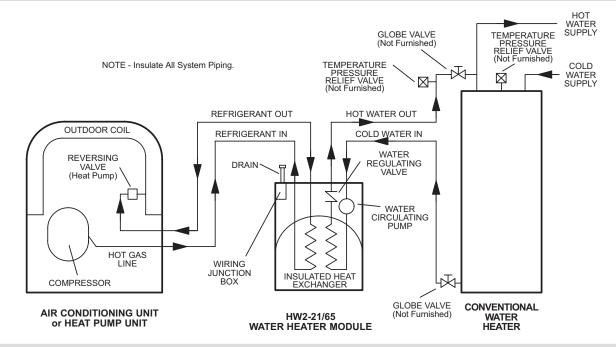
OPTIONS

Thermostat Kit (57C33)

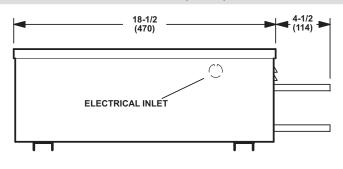
Required for heat pump applications.

Thermostat field installs in module and prevents operation below 4°C (40°F) outdoor air temperature.

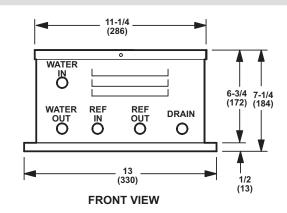
TYPICAL PIPING



DIMENSIONS - INCHES (MM)



SIDE VIEW



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