

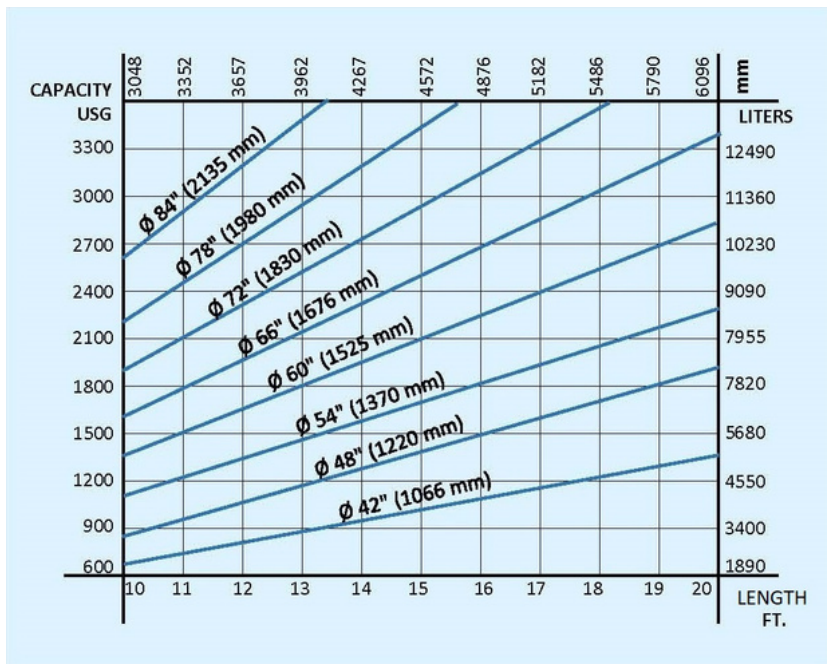
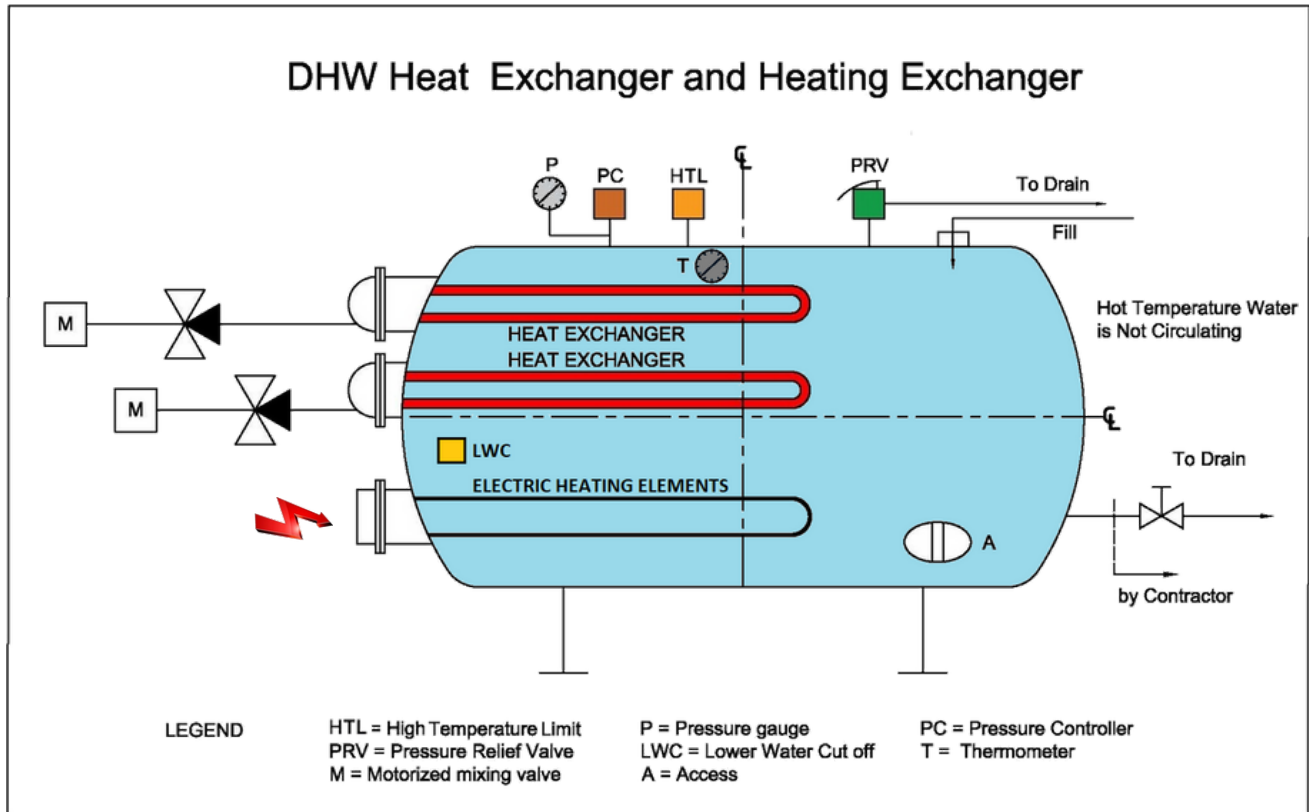
Electric with HT Thermal Storage for **Heating Water and DHW Heater** In one package

Applications

- | Apartment Buildings
- | Condominium Buildings
- | Educational Buildings
- | Food Services
- | Hotels
- | Retirement Homes
- | Office Buildings
- | Mining Operations
- | Thermal Pump System



DHW Heat Exchanger and Heating Exchanger



ADVANTAGES

- One unit multipurpose in the boiler room.
- Storage capacity based on actual requirements.
- Use of electric valves under demand charge.
- Independent control of water heating, DHW, and glycol mixture.
- Cost savings in electricity consumed.
- Initial cost savings of installed power.
- Operational savings.
- Savings maintenance cost.
- Accurate control of temperature by 3-way valves.
- Protection against high temperature and loss of flow.
- Compatible with building BAS system.
- Easy programming changes.

Note: When selecting dimension for storage vessel, determine first storage capacity and select the length of vessel to suit the available space. The resulting diameter is found at the intersection of capacity and length lines. For any other capacity not listed and/or other information please contact us. Maximum standard vessel available: 120" (3048 mm) dia. x 30' (9144 mm) long.

Technical Specifications

SYSTEM COMPONENTS

Thermal storage vessel of high-temperature water (non circulating)

Designed according to ASME Section VIII Div. 1 for 100 PSIG with 1/16 in. Corrosion allowance and 400F. Operating at 52.3 PSIG and 300F maximum. 4 in (100mm) fiberglass insulation with 18GA metal cover epoxy painted provided with 16"x18" manhole, flanges for heating elements and heat exchangers, drain connection and screwed connections for all controls. Safety valve to suit.

Flanged Heating Elements.

Have Incoloy blades at 75w/in² (11.6W/cm²) dissipation; 50w/in² (7.75W/cm²) for propylene glycol.

Blades to be individually replaceable with standard tools. KW and Voltage to suit selection.

Vessel recirculating pump

While heat exchangers and electric elements are positioned to produce a natural circulation of the water in the storage vessel, possible stratification in large vessels can be avoided by adding an iron body circulating pump, mounted and piped to vessel complete with isolating valves. The pump motor is prewired to the control panel and has its own fused circuit and manual started. Capacity to suit vessel.

Domestic Hot Water System - DHW

Heat Exchanger has copper tubes, brass tube sheet and bronze head. Designed for incoming water at 40F heated to 120F when immersed in tank water at 260F. ASME Registration for 125PSI.

External piping attached to the Heat Exchanger includes unions, shock absorber, check valves, stop valves, PRV., Outlet Temperature Controller, High Limit TC, 3 only Thermometers, pressure gauge, drain connection and a 3-way Modulating Valve.

Cold Water supply, Hot Water supply and Recirculating Water are connected to the assembly above. The manufacturer assembles all the components, makes the electrical connections and tests the operation. The mechanical contractor subsequently insulates the assembly with 2 inch formed insulations and arrows for direction of flow according to drawings provided.

Heating Water System

Heat Exchanger has copper tubes, steel tube sheet and cast-iron head. Designed for return water at 180F and supply water at 200F with tank water at 270F. Supply and return water temperatures will depend on the application, ASME Registration for 125PSI.

External piping attached to the Heat Exchanger includes unions, shock absorber, check valves, stop valves, PRV., Outlet Temperature Controller, High Limit TC, 3 only Thermometers, pressure gauge, drain connection and a 3-way Modulating Valve.

Cold Water supply, Hot Water supply and Return Water are connected to the assembly above. The manufacturer assembles all the components, makes the electrical connections and tests the operation. The mechanical contractor subsequently insulates the assembly with 2 inch formed insulations and arrows for direction of flow according to drawings provided.

Unit with
2 exchangers



Glycol Mixtures Heating Systems

Heat Exchanger has steel tubes, steel tube sheet and cast-iron head. Designed for supply mixture at 140F and return at 120F with tank water at 210F Supply and return temperatures may vary with the application.

External piping attached to the Heat Exchanger includes unions, shock absorber, check valves, stop valves, PRV., Outlet Temperature Controller, High Limit TC, 3 only Thermometers, pressure gauge, drain connection and a 3-way Modulating Valve.

Cold Water supply, Hot Water supply and Recirculating Water are connected to the assembly above. The manufacturer assembles all the components, makes the electrical connections and tests the operation. The mechanical contractor subsequently insulates the assembly with 2 inch formed insulations and arrows for direction of flow according to drawings provided.

Power and Control Panel. EEMAC 12 Panel, ventilated

Power Section includes distribution to electrical elements circuits via contactors and fuses according to power availability and vessel water temperature. Availability can be based on hourly schedule or on supervision of building demand making use of the valleys below the subscribed demand line.

Control Section reacts to temperature in the vessel, controls the 3-way valves in the heating and domestic hot water loops including all the protections against high temperature and pressure.

Control Section also connects with BAS providing status, performance and availability of the three systems and allows BAS to make changes as applicable.

Food Services - Restaurants and Cafeterias

If the whole building is dedicated to food service or processing it would fall in the DHW category. In the case of a cafeteria in a school or office building, the food service would have its own DHW system while the building would have a regular water heating system.

Application for "Acmetherm" Selection

ACMETHERM Hot Water Heaters are designed and manufactured to specific requirements. Our Company offers free engineering assistance in selecting the best solution and most economical design. Please copy or scan this page, fill in the data of your application and e-mail it at info@acmeprod.com, or fax to us at (514) 342-3131, or contact our representative in your area.

Submitted by: _____	Date: _____
Company: _____	Phone: _____
Name of Project: _____	Location: _____
Type of Project: _____	E-mail: _____

(apartment, hotel, etc.)

DOMESTIC HOT WATER

Main demand : _____	Flow in GPM: _____
Kitchen Equipment: _____	Laundry Equipment: _____
Special Facilities: _____	
Incoming Water: Temperature: _____ °F.	Pressure: _____ PSI.
Supply Water: Temperature: _____ °F.	Pressure: _____ PSI.
Desired Operation Schedule: _____	

(Particular times when heating can be switched off or partial electric power is available.)

Other details: _____

HEATING AND PROCESS WATER

Type of System: _____	Flow in GPM: _____	
Temperature In: _____ °F.	Temperature Out: _____ °F.	Pressure at Inlet: _____ PSI.
Maximum Available Pressure Drop: _____		
Continuous or Intermittent Operation: _____		
Desired Operating Schedule: _____		
Other Details: _____		

GLYCOL HEATING

Type of System: _____	Flow in GPM: _____	
Temperature In: _____ °F.	Temperature Out: _____ °F.	Pressure at Inlet: _____ PSI.
Maximum Available Pressure Drop: _____		
Continuous or Intermittent Operation: _____		
Desired Operating Schedule: _____		
Other Details: _____		



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