

General Information

The PhD “S” models are an effective solution for efficient pool heating and dehumidification when first cost is an important consideration. Using proven “energy recovery” technology, the PhD will save on energy use and reduce energy costs as well.

The PhD pool heating/dehumidification system is a packaged unit with integrated functions to heat pool water and dehumidify the pool’s surrounding air. The PhD recovers the heat lost by pool evaporation and recycles that heat to heat the pool water. At the same time, the heated, moisture laden air is cooled and dehumidified and returned to the pool area to maintain a stable, comfortable indoor environment. This reduces the need for fresh air ventilation and helps control costs associated with conditioning the air introduced from the outside. When used with a Remote Air Cooled Condenser or Water Cooled Condenser, the unit can function as a regular air conditioner.

General Specifications

- Max. Water Heating Capacity:
W/80°F water 84,000 BTUH
- Air Reheating Capacity:
W/80°F water 44,000 BTUH
- Total Cooling Capacity 68,000 BTUH
- Moisture Removal Capacity*: 26 lbs/hr
- Air Volume
 @0.35 in. ESP 2700 CFM
- Pool Water Flow: 16.0 GPM
 Pressure Drop 8.4 PSI
- Water Inlet Max. Temp. 104°F
- Water Inlet Min. Temp. 60° F
- Water Inlet Max. Pressure 85 PSI
- Air Returning Min. Temp. 65° F

Standard Features

- Painted Aluminum Cabinet
- Blygold Coated Air Coils for Corrosion Resistance
- Scroll Compressor
- Cupronickel Condenser Coil
- Coated Blower for Corrosion Protection
- Stainless Steel Drain Pan
- Refrigerant: R-22

Options

- Economizer Module
- Remote Air Cooled Condenser Reay
- Water Cooled Condenser (Built-In)
- Supplemental External Static Pressure (ESP) - (over 0.35 in. W.G. ESP)

Optional Accessories

- Remote Air Cooled Condenser
- Thermostat and Humidistat

*at EAT (Entering Air Temperature) 82°F and 60 % RH

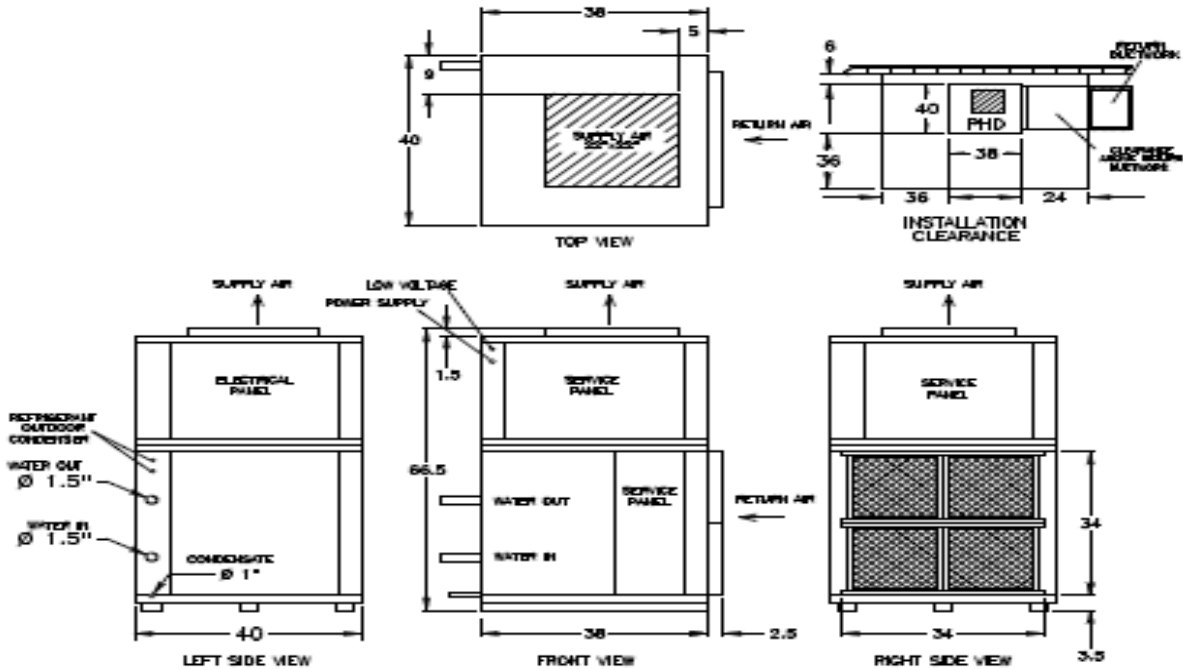
Electrical Characteristics

Model	Compressor					Blower					MCA	MFS
	Volts	Hz	Ph	RLA	LRA	Volts	Hz	Ph	HP	FLA		
PhD-90 SC	208/230	60	3	20.7	156	208/230	60	3	1-1/2	4.8	29	45
PhD-90 SD	460	60	3	10.0	75	460	60	3	1-1/2	2.4	14	20

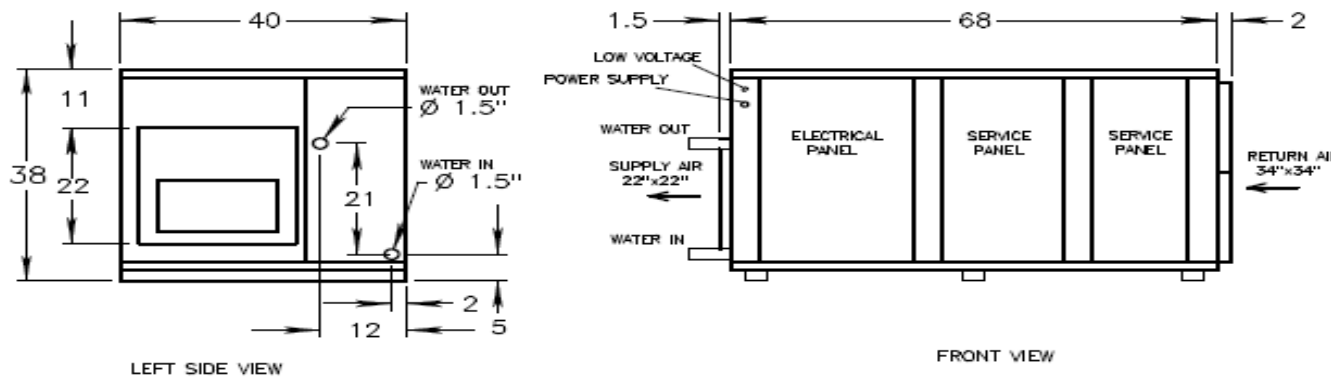
MCA = Minimum Circuit Ampacity MFS = Maximum Fuse

(Dimensional Data on Reverse)

PhD-90 S Dimensional Data - Vertical Configuration



PhD-90 S Dimensional Data - Horizontal Configuration



Ship Weight: 845 Lbs.

As part of the Applied Energy Systems, Inc. continuous improvement program, specifications subject to change without notice.