

600 SERIES

AALADIN WATER HEATERS

Aaladin[®]

CLEANING SYSTEMS



YOU CAN DO MAGIC



600 Series Water Heaters

Standard Features

- High Efficiency Schedule 80 Coil
- Fuel Efficient Combustion Chamber
- Hi-Limit Temp Control
- Waterproof Ignition Transformer (Oil Fired Models)
- Cad Cell Flame Sensor (Models 655 & 665)
- Electronic Ignition (Models 650 & 660)
- Stainless Steel (Models 650, 655, 660 & 665)
- Heavy Duty Tubular Steel Frame (Stationary Models)
- Heavy Duty Legs (Stationary Models)
- Pneumatic Tires (Portable Models)
- Powder Coat Painted
- 50' Wire Braid High Pressure Hose (Model 610)
- High Pressure Flow Switch (Model 610)
- Adjustable Temperature Control (Model 610)

Options:

- Cad Cell Flame Sensor (Models 610, 615, 625 & 635)
- Electronic Ignition (Models 620, 630 & 640)
- Spark Igniter (Models 620, 630 & 640)
- High Pressure Flow Switch
- Adjustable Temperature Control
- Water Separating Fuel Filter (Oil Fired Models)
- Draft Diverters (Gas Fired Models)

| OIL FIRED MODELS | 610 | 615 | 625 | 635 | 655 | 665 |
|-------------------|---------|---------|---------|---------|---------|-----------|
| MAXIMUM BTU INPUT | 350,000 | 480,000 | 350,000 | 480,000 | 577,000 | 1,200,000 |
| ELECTRICAL | 115V | 115V | 115V | 115V | 115V | 115V |
| <i>DIMENSIONS</i> | | | | | | |
| LENGTH | 40" | 43" | 24" | 24" | 30" | 36" |
| WIDTH | 28" | 28" | 24" | 24" | 30" | 36" |
| HEIGHT | 36" | 36" | 48" | 48" | 64" | 84" |
| WEIGHT: | 235 | 285 | 250 | 300 | 450 | 1140 |

| GAS FIRED MODELS | 620 | 630 | 640 | 650 | 660 |
|-------------------|---------|---------|---------|---------|-----------|
| MAXIMUM BTU INPUT | 350,000 | 440,000 | 480,000 | 680,000 | 1,200,000 |
| ELECTRICAL | 115V | 115V | 115V | 115V | 115V |
| <i>DIMENSIONS</i> | | | | | |
| LENGTH | 26" | 24" | 24" | 30" | 36" |
| WIDTH | 24" | 24" | 24" | 30" | 36" |
| HEIGHT | 48" | 48" | 51" | 64" | 84" |
| WEIGHT: | 250 | 325 | 350 | 450 | 980 |

GUIDE TO WATER HEATER SIZING

There are many variables that enter into the proper sizing of a water heater. If you don't know the answer to any of the following questions, please contact your AaLadin representative for assistance. After each question, there is an explanation of how to use the information to size your water heater needs.

- 1. Burner Fuel Type:**
Determine the type of fuel that will be supplied to the burner on the unit. Models can be gas fired using either Liquid Propane (LP) or Natural Gas, while other models can be oil fired using diesel fuel, fuel oil, or kerosene.
- 2. Portable or Stationary:**
If the unit will be moved around, pick a portable model. The stationary units must be installed in a fixed position.
- 3. Incoming Water Pressure:**
The water coming into the water heater can be either standard water pressure or pressurized with a pump. Standard water pressure needs to be a minimum of 40 psi and you will use the chart for 40 psi minimum water heaters. If the unit is connected to a pump with a minimum of 300 psi, you will use the chart for incoming flows 300 psi minimum.
- 4. Heat Rise:**
This is the number that indicates how much heat will have to be added to the incoming water to reach the desired output water temperature. An example would be if you desired 150 degree water and your incoming ground water temperature was 50 degrees, you would need a 100 degree heat rise to reach this temperature.
- 5. Output Gallons Per Minute:**
This is the Output Flow that is desired. This number will be used to determine which of the water heaters will heat the water to the proper temperature and to give you the desired flow.

OUTPUT FLOW RANGES FOR SPECIFIC HEAT RISES

| BURNER FUEL | | MODEL# | 40 PSI MINIMUM INCOMING PRESSURE DEGREES OF HEAT RISE | | | 300 PSI MINIMUM INCOMING PRESSURE DEGREES OF HEAT RISE | | |
|-------------|------------|--------|--|------------|-------------|---|------------|-------------|
| | | | 50 | 100 | 150 | 50 | 100 | 150 |
| GAS | STATIONARY | 620 | 2.0 – 9.0 | 2.0 – 4.5 | 2.0 – 3.0 | 2.0 – 9.0 | 2.0 – 4.5 | 2.0 – 3.0 |
| | | 630 | - | 4.5 – 6.0 | 3.0 – 4.0 | - | 4.5 – 6.0 | 3.0 – 4.0 |
| | | 640 | - | - | 4.0 – 4.5 | - | 6.0 – 6.5 | 4.0 – 4.5 |
| | | 650 | - | - | 4.5 – 5.0 | - | 6.5 – 8.5 | 4.5 – 6.0 |
| | | 660 | - | - | 5.0 – 6.0 | - | 8.5 – 13.0 | 6.0 – 12.0 |
| | | | | | | | | |
| OIL | STATIONARY | 625 | 2.0 – 10.0 | 2.0 – 5.2 | 2.0 – 3.5 | 2.0 – 10.0 | 2.0 – 5.2 | 2.0 – 3.5 |
| | | 635 | - | 5.2 – 6.75 | 3.5 – 4.75 | - | 5.2 – 7.2 | 3.5 – 4.75 |
| | | 655 | - | - | 4.75 – 5.0 | - | 7.2 – 8.5 | 4.75 – 6.0 |
| | | 665 | - | - | 5.0 – 6.25 | - | 8.5 – 13.0 | 6.0 – 12.0 |
| | | | | | | | | |
| PORTABLE | | 610 | 2.0 – 8.5 | 2.0 – 4.25 | 2.0 – 2.75 | 2.0 – 8.5 | 2.0 – 4.25 | 2.0 – 2.75 |
| | | 615 | - | 4.25 – 7.0 | 2.75 – 4.75 | 8.5 – 10.0 | 4.25 – 7.0 | 2.75 – 4.75 |
| | | | | | | | | |

HOW TO DETERMINE WHAT OPTIONS YOU WILL NEED

- 1. Temperature Control or High Limit:** All Water Heaters come standard with High Limit switches set at 200 Degrees. If any other Maximum Temperature is desired, you will need to order Temperature Control on the unit.
- 2. High Pressure Flow Switch:** If the Water Heater is going to be connected to a Pump and has a shut off mechanism, it will be necessary to order a flow switch that will be used to shut off the burner when the flow of water through the unit is stopped.
- 3. Electronic Ignition or Spark Igniter:** Each gas fired Water Heater comes standard with a standing pilot. A spark igniter will light this pilot by pushing onto a sparkler that shoots a spark out to ignite the pilot. An electronic ignition will automatically shoot sparks to ignite the pilot whenever it is not lit and the unit is requiring heat.