



### General

The RQ Series of water temperature control units are quality run-tested in our ISO 9001:2008 certified facility. The units are in painted sheet metal cabinet with four swivel casters for easy portability and installation. The electrical control cabinet features an easy-to-use tilted front. The cabinet features quick and easy tools-free access to the mechanical components by simply removing the single-piece cover. In addition to being easy to remove, the cover has a solid surface to prevent water from getting into the pump motor.

### Pump

- Front facing supply and return water pressure gauges
- Cast iron centrifugal pump
- Stainless steel impellers from ¾ to small 3 hp pumps
- Bronze impellers from large 3 hp to 7½ hp pumps
- Silicon carbide pump seals designed for severe duty
- Pump seal flush line continuously removes contaminants
- Built-in sediment trap settles contaminants away from the pump seal

### Pump/Heater Casting

- Leak-proof, cast iron, twin tube unitized pump volute/heater and mixing tube assembly eliminated pipe fittings and flow restrictions
- Internal bypass line for protection of pump seals from overheating under low flow conditions
- Mechanical pressure relief valve to protect against over pressurization of heat tube assembly

### Heater(s)

- Long-life, 6-element Incoloy sheathed electric immersion heater(s) provides better corrosion resistance than copper or stainless steel heaters

### Control Panel

- 24 VDC control circuit
- RTD temperature sensors
- Tilted control panel top provides easy use of controls
- Interconnecting wiring run to terminal blocks for easy wiring tracing and troubleshooting
- Adjustable inlet water pressure safety switch allows operating under a wide range of set point and cooling water pressure combinations

### Standard Microprocessor Controller



- Digital display of set point, process supply, and process return temperatures
- 30 minute temperature deviation alarm delay during start-up prevents nuisance trips at start-up
- 1 minute automatic air purge cycle at start with safety cancellation above 120°F
- Seal-Saver program sequence cools the pump seals before stopping the pump to extend pump seal life
- Control panel temperature display easily adjustment between °F and °C temperature scales
- User adjustable high temperature warning

- User adjustable low temperature warning
- High temperature deviation alarm
- Low temperature deviation alarm
- Indicating lights for control power on, auto start signal applied, pump on, heat on, cool on, low coolant pressure in, temperature limit alarm, program mode, temperature display scale (°F or °C), process temperature display (supply or return), run, and alarm

**Advance Microprocessor Controller Option**

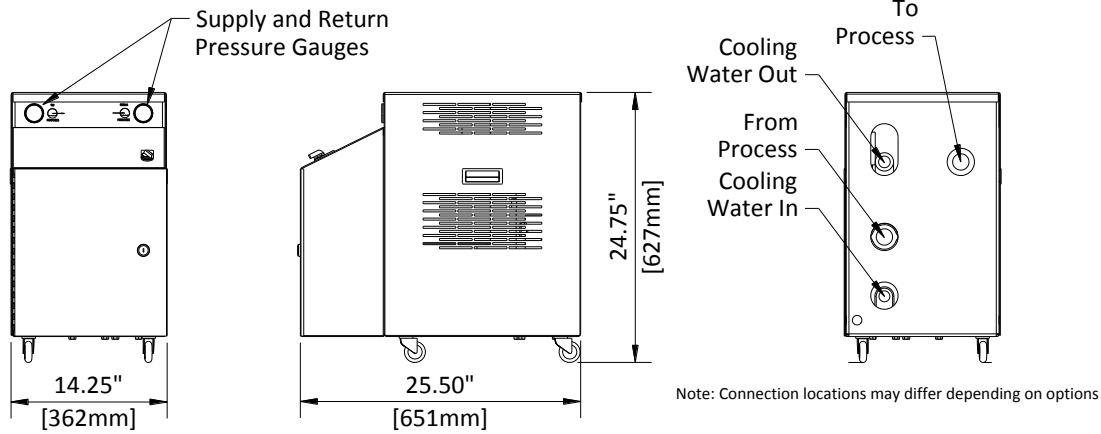


As an available upgrade, we offer an advanced controller, which in addition to the features of the standard controller is capable of providing the following.

- 3-phase power error
- Heater error
- Seal-Saver pump seal cool-down program
- Mold water purge
- Crash cool
- SPI or ModBus remote communications
- Remote heat/cool control inputs
- Remote 4-20mA set point input
- Remote 4-20mA supply temperature output
- Pump running hours display
- Process flow meter transducer input

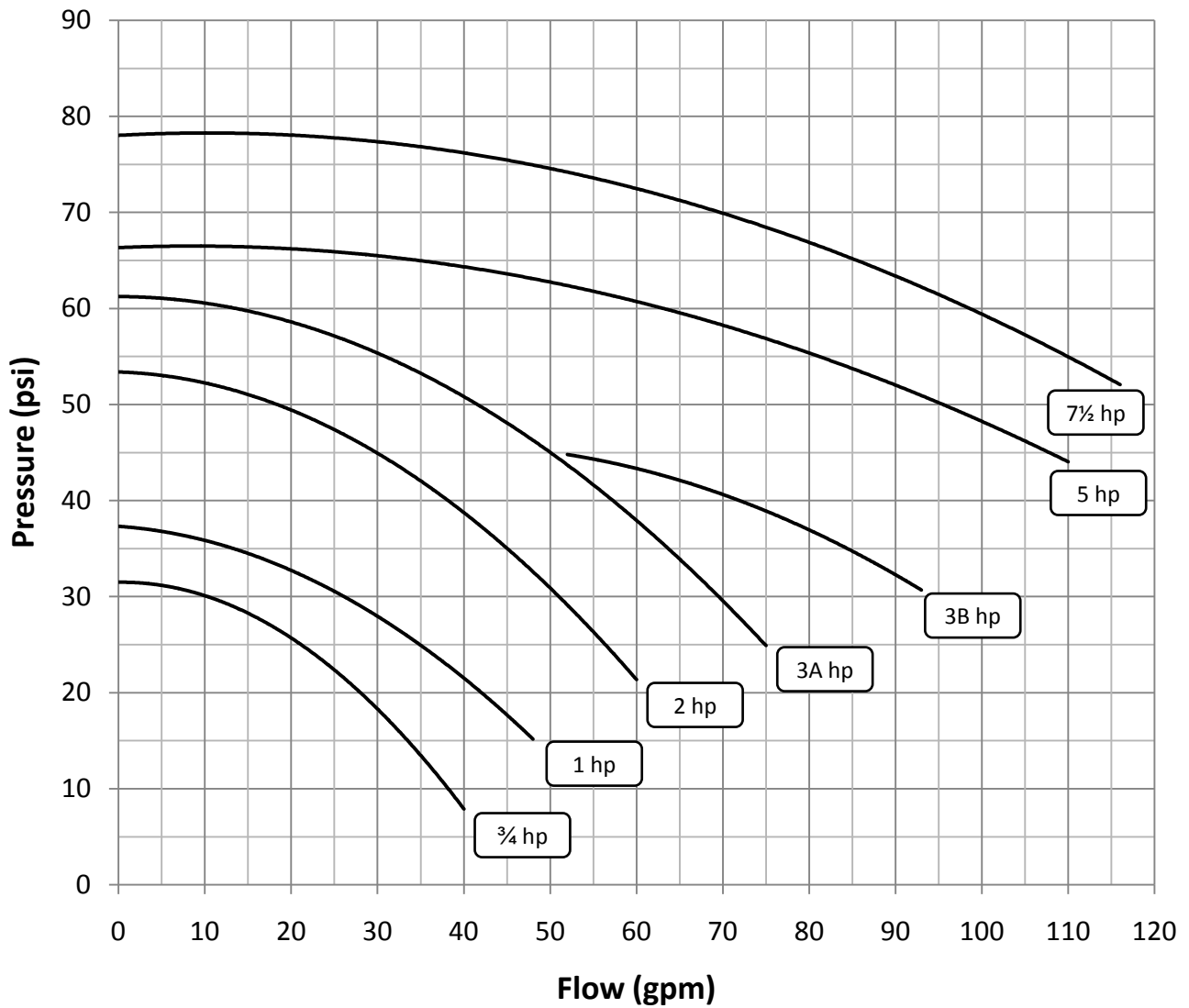
**Warranty**

- Lifetime pump/heater casting warranty
- Lifetime pump seal warranty (standard units)
- 5 year microprocessor parts warranty with \$175 lifetime exchange policy
- 2 year parts, 2 year labor warranty



| Model  | Heater<br>kW | Pump Performance |     |     | Unit FLA<br>460/3/60 | Shipping<br>Weight (lbs) |
|--------|--------------|------------------|-----|-----|----------------------|--------------------------|
|        |              | hp               | gpm | psi |                      |                          |
| RQ0008 | 0            | ¾                | 30  | 19  | 3                    | 230                      |
| RQ0010 | 0            | 1                | 35  | 25  | 3                    | 230                      |
| RQ0020 | 0            | 2                | 50  | 30  | 4                    | 235                      |
| RQ003A | 0            | 3                | 70  | 30  | 6                    | 240                      |
| RQ003B | 0            | 3                | 85  | 35  | 6                    | 240                      |
| RQ0050 | 0            | 5                | 95  | 50  | 9                    | 260                      |
| RQ0075 | 0            | 7½               | 110 | 55  | 12                   | 265                      |
| RQ0908 | 9            | ¾                | 30  | 19  | 13                   | 230                      |
| RQ0910 | 9            | 1                | 35  | 25  | 13                   | 230                      |
| RQ0920 | 9            | 2                | 50  | 30  | 14                   | 235                      |
| RQ093A | 9            | 3                | 70  | 30  | 15                   | 240                      |
| RQ093B | 9            | 3                | 85  | 35  | 15                   | 240                      |
| RQ0950 | 9            | 5                | 95  | 50  | 17                   | 260                      |
| RQ0975 | 9            | 7½               | 110 | 55  | 20                   | 265                      |
| RQ1208 | 12           | ¾                | 30  | 19  | 17                   | 230                      |
| RQ1210 | 12           | 1                | 35  | 25  | 17                   | 230                      |
| RQ1220 | 12           | 2                | 50  | 30  | 18                   | 235                      |
| RQ123A | 12           | 3                | 70  | 30  | 19                   | 240                      |
| RQ123B | 12           | 3                | 85  | 35  | 19                   | 240                      |
| RQ1250 | 12           | 5                | 95  | 50  | 21                   | 260                      |
| RQ1275 | 12           | 7½               | 110 | 55  | 24                   | 265                      |
| RQ1808 | 18           | ¾                | 30  | 19  | 24                   | 230                      |
| RQ1810 | 18           | 1                | 35  | 25  | 24                   | 230                      |
| RQ1820 | 18           | 2                | 50  | 30  | 25                   | 235                      |
| RQ183A | 18           | 3                | 70  | 30  | 26                   | 240                      |
| RQ183B | 18           | 3                | 85  | 35  | 26                   | 240                      |
| RQ1850 | 18           | 5                | 95  | 50  | 28                   | 260                      |
| RQ1875 | 18           | 7½               | 110 | 55  | 31                   | 265                      |
| RQ2408 | 24           | ¾                | 30  | 19  | 32                   | 230                      |
| RQ2410 | 24           | 1                | 35  | 25  | 32                   | 230                      |
| RQ2420 | 24           | 2                | 50  | 30  | 33                   | 235                      |
| RQ243A | 24           | 3                | 70  | 30  | 34                   | 240                      |
| RQ243B | 24           | 3                | 85  | 35  | 34                   | 240                      |
| RQ2450 | 24           | 5                | 95  | 50  | 36                   | 260                      |
| RQ2475 | 24           | 7½               | 110 | 55  | 39                   | 265                      |

## RQ Series 60 Hz Pump Curves



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