



### **General**

The RQ Series of water temperature control units are quality run-tested in our ISO 9001:2008 certified facility. The units are in a painted sheet metal cabinet with four swivel casters for easy movement 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 hp to 3 hp standard flow pumps
- Bronze impellers from 3 hp high-flow 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
- Extended power cord to allow pump seal access without the need to disconnect pump motor wiring

### **Pump/Heater Casting**

- Leak-proof, cast iron, twin tube unitized pump volute/heater and mixing tube assembly eliminates 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

### **Cabinet**

- Tools-free access with lift-off cover
- Powder coat paint finished sheet metal construction for a durable, long-lasting high quality appearance
- Four swivel casters for easy location and movement
- Single-piece cover with solid top to keep leaks and spills off of the pump motor and heater

### **Control Panel**

- 24 VDC control circuit
- RTD temperature sensors
- Alarm horn with front panel alarm reset and silence button
- 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

### **Warranty**

- 3 year parts warranty
- 3 year labor warranty
- 5 year microprocessor parts warranty
- Lifetime pump/heater casting warranty
- Lifetime pump seal warranty (standard units)
- Lifetime \$175 microprocessor exchange policy after initial 5 year parts warranty

### Standard Microprocessor Controller

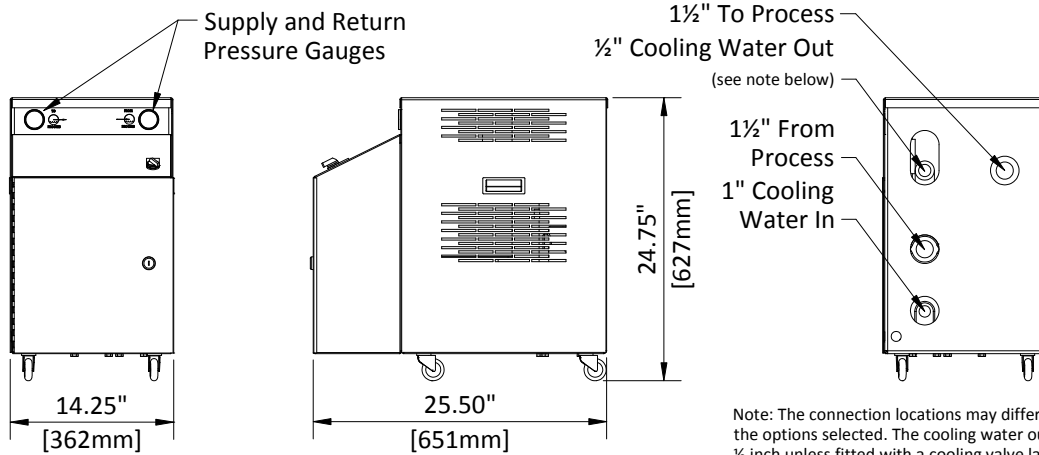


- Digital display of set point temperature
- Digital display of process supply and return temperatures
- 30 minute temperature deviation alarm delay during start-up prevents nuisance trips at start-up
- 1 minute automatic air purge cycle at start with safety cancellation above 120°F
- Seal-Saver program sequence cools the pump seals before stopping the pump to extend pump seal life
- Pump running hour display
- Control panel temperature display is easily adjusted between °F and °C temperature scales
- User adjustable high temperature warning
- User adjustable low temperature warning
- High temperature deviation alarm
- Low temperature deviation alarm
- Supply water temperature display
- Return water temperature display
- 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), set point temperature display, process temperature display (supply or return), run, and alarm

### Premium Microprocessor Controller



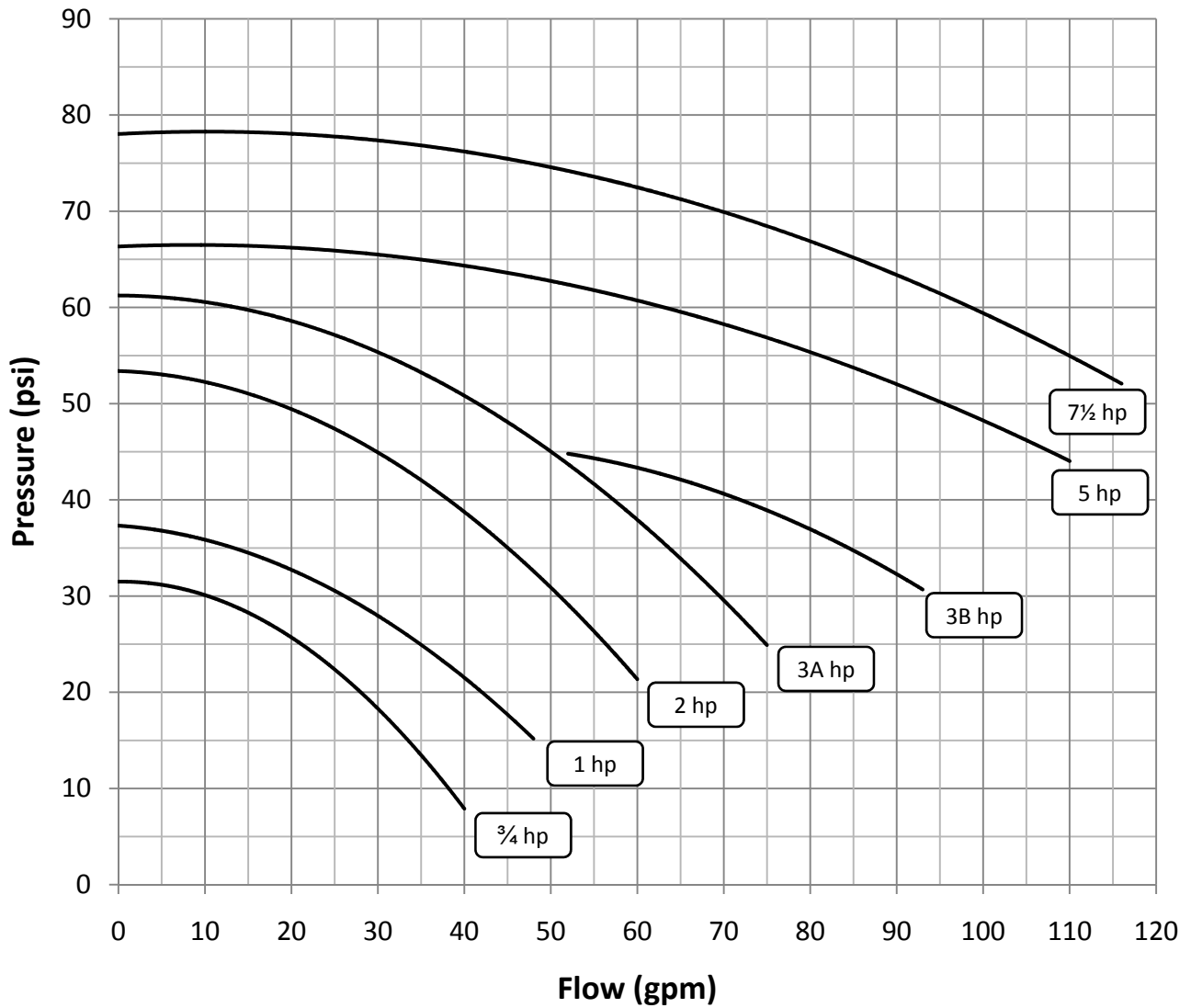
- 3-phase electrical power error protects against loss of phase, phase reversal, and phase imbalance
- Heat error alerts the operator when there is a heater contactor malfunction
- Digital display of set point temperature
- Digital display of process supply and return temperatures
- 30 minute temperature 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
- Pump running hour display
- Control panel temperature display is easily adjusted between °F and °C temperature scales
- User adjustable high temperature warning
- User adjustable low temperature warning
- High temperature deviation alarm
- Low temperature deviation alarm
- Supply water temperature display
- Return water temperature display
- Indicating lights for control power on, auto start signal applied, pump on, heat on, cool on, low coolant pressure in, temperature limit alarm, electrical phase error, heat error, seal saver sequence active, mold purge active (optional), crash cool active (optional), remote communications active (optional), remote heat/cool signal present, program mode, temperature display scale (°F or °C), set point temperature display, process temperature display (supply or return), run, and alarm



Note: The connection locations may differ depending on the options selected. The cooling water out connection is 1/2 inch unless fitted with a cooling valve larger than 1/2 inch in which case the cooling water out connection will be the same size as the cooling valve.

Model	Heater kW	Pump Performance			Unit FLA 460/3/60	Shipping Weight (lbs)
		hp	gpm	psi		
RQ0008	0	3/4	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	7 1/2	110	55	12	265
RQ0908	9	3/4	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	7 1/2	110	55	20	265
RQ1208	12	3/4	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	7 1/2	110	55	24	265
RQ1808	18	3/4	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	7 1/2	110	55	31	265
RQ2408	24	3/4	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	7 1/2	110	55	39	265

## RQ Series 60 Hz Pump Curves



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