



General

The RA, RAD, RB and RBD series of water temperature control units are quality run-tested in our ISO 9001:2000 certified facility. The units are built in painted sheet metal cabinet with casters for easy portability and installation. The electrical control cabinet features an easy-to-use tilt front. The cabinet has removable sides and top for easy access.

Pump(s)

- Cast iron centrifugal pump
- Stainless steel impellers (3/4 to 2 HP units), all others are bronze
- Silicon carbide pump seal
- Pump seal flush line with continuous seal contaminant removal/flushing

Pump/Heater Casting(s)

- Leak-proof twin tube cast pump assembly with reduced fittings
- Internal bypass line for protection under low flow conditions

Heater(s)

- 6 element incoloy sheathed electric immersion heater(s)

Control Panel

- Tilted control panel for easy use
- Easy access flip down control panel door
- Interconnecting wiring run to terminal block for easy wiring tracing and troubleshooting
- Adjustable inlet water pressure safety switch

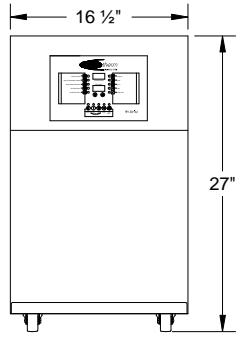
Microprocessor Controller

- PID control program with full PID heat and cool
- Control panel adjustment between °F and °C temperatures
- Auto-tune control program sequence
- 30 minute temperature deviation alarm delay during start-up
- 1 minute automatic air purge cycle with safety cancellation above 120°F
- High temperature safety set for 260°F
- Self-adjusting high and low temperature deviation alarm set points
- Easy reset of control panel alarms from front panel
- Low voltage fail-safe sensor interlocked with control circuit
- Dual LED digital display of actual and set point temperatures
- 7 snap action micro switches with LED indication
- Seal Saver automatic cool down program
- Diagnostic Alarm Lights: Low pressure, high temperature, pump motor overload, over set point, under set point
- Operational Lights: Pump on, heater on, cool valve open, air purge sequence activated, probe fault, power on, unit start, unit stop, mold purge activated (optional), alarm silence (optional)

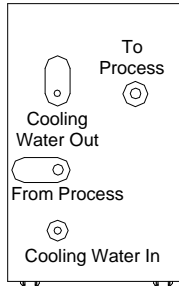
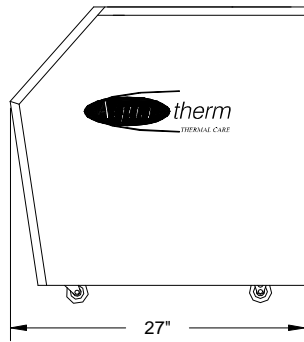
Warranty

- 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

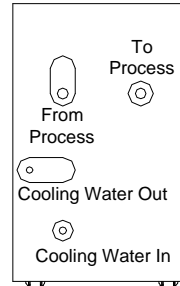
RA, RAD, RB, RBD Aquatherm Temperature Control Units



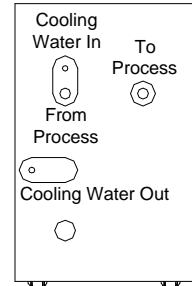
RA & RB Series
Single-Zone Units



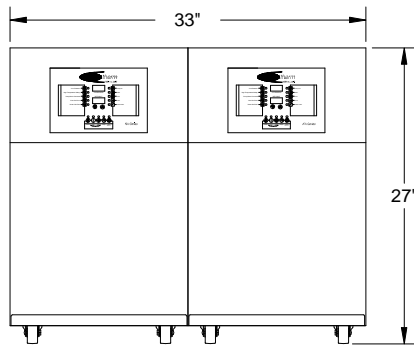
0 kW, 9 kW & 12 kW
RA & RB Series
Single-Zone Units



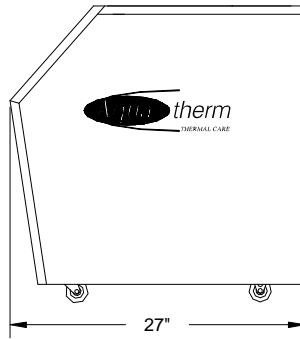
18 & 24 kW
RA Series
Single-Zone Units



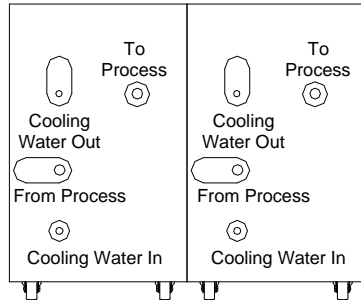
RB & RA Series
Single-Zone Units
With Heat Exchanger



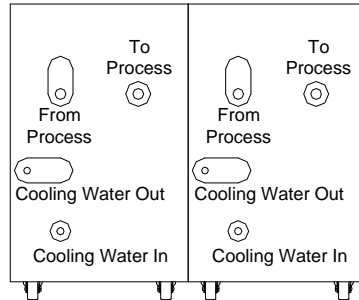
RAD & RBD Series
Dual-Zone Units



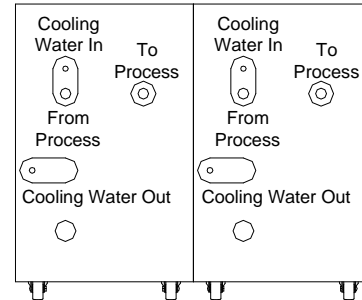
Connection Sizes (same for all units)
 1½" To Process
 1½" From Process
 1" Cooling Water In
 ½" Cooling Water Out



0 kW, 9 kW & 12 kW
RAD & RBD Series
Dual-Zone Units



18 kW & 12 kW
RAD Series
Dual-Zone Units

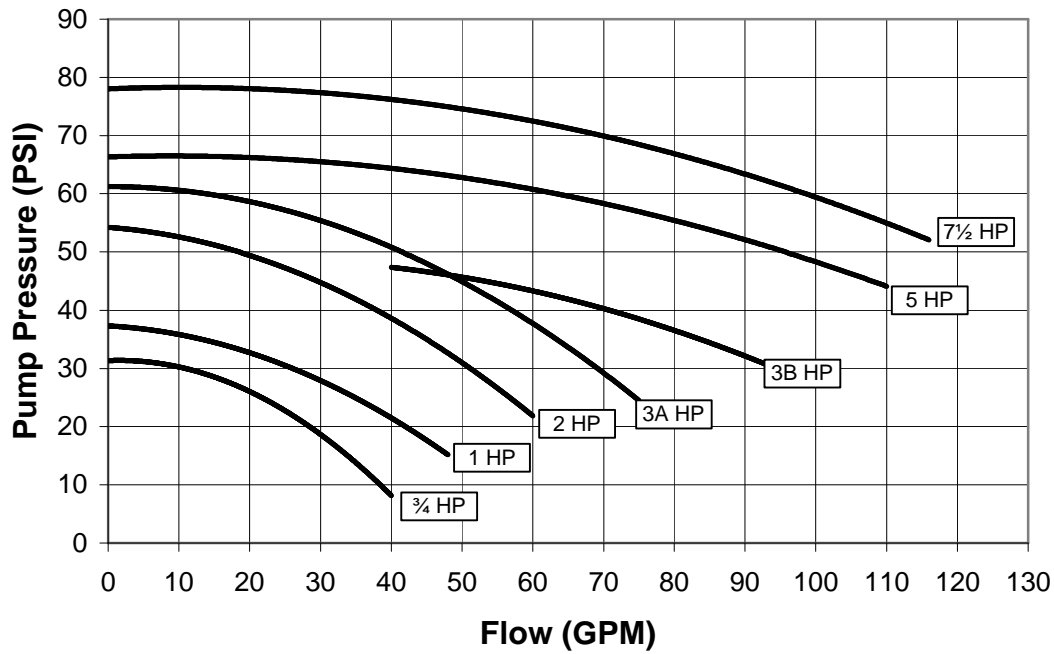


RAD & RBD Series
Dual-Zone Units
With Heat Exchangers

RA, RAD, RB, RBD General Specifications

| Single-Zone Units | | | | | | | Dual-Zone Units | | | | | | |
|-------------------|-----------------------|------------------|-----|-----|-------------------|-------------------------|-----------------|--------------------------------|---------------------------|-----|-----|-------------------|-------------------------|
| Model | Heating Capacity (kW) | Pump Performance | | | Unit FLA 460/3/60 | Unit Ship Weight (Lbs.) | Model | Heating Capacity Per Zone (kW) | Pump Performance Per Zone | | | Unit FLA 460/3/60 | Unit Ship Weight (Lbs.) |
| | | HP | GPM | PSI | | | | | HP | GPM | PSI | | |
| RB08 | 0 | ¾ | 30 | 19 | 3 | 230 | RBD08 | 0 | ¾ | 30 | 19 | 6 | 460 |
| RB10 | 0 | 1 | 35 | 25 | 3 | 230 | RBD10 | 0 | 1 | 35 | 25 | 6 | 460 |
| RB20 | 0 | 2 | 50 | 30 | 4 | 235 | RBD20 | 0 | 2 | 50 | 30 | 8 | 470 |
| RB3A | 0 | 3 | 70 | 30 | 6 | 240 | RBD3A | 0 | 3 | 70 | 30 | 12 | 480 |
| RB3B | 0 | 3 | 85 | 35 | 6 | 240 | RBD3B | 0 | 3 | 85 | 35 | 12 | 480 |
| RB50 | 0 | 5 | 95 | 50 | 9 | 260 | RBD50 | 0 | 5 | 95 | 50 | 18 | 520 |
| RB75 | 0 | 7½ | 110 | 55 | 12 | 265 | RBD75 | 0 | 7½ | 110 | 55 | 24 | 530 |
| RA0908 | 9 | ¾ | 30 | 19 | 13 | 230 | RAD0908 | 9 | ¾ | 30 | 19 | 26 | 460 |
| RA0910 | 9 | 1 | 35 | 25 | 13 | 230 | RAD0910 | 9 | 1 | 35 | 25 | 26 | 460 |
| RA0920 | 9 | 2 | 50 | 30 | 14 | 235 | RAD0920 | 9 | 2 | 50 | 30 | 28 | 470 |
| RA093A | 9 | 3 | 70 | 30 | 15 | 240 | RAD093A | 9 | 3 | 70 | 30 | 30 | 480 |
| RA093B | 9 | 3 | 85 | 35 | 15 | 240 | RAD093B | 9 | 3 | 85 | 35 | 30 | 480 |
| RA0950 | 9 | 5 | 95 | 50 | 17 | 260 | RAD0950 | 9 | 5 | 95 | 50 | 34 | 520 |
| RA0975 | 9 | 7½ | 110 | 55 | 20 | 265 | RAD0975 | 9 | 7½ | 110 | 55 | 40 | 530 |
| RA1208 | 12 | ¾ | 30 | 19 | 17 | 230 | RAD1208 | 12 | ¾ | 30 | 19 | 34 | 460 |
| RA1210 | 12 | 1 | 35 | 25 | 17 | 230 | RAD1210 | 12 | 1 | 35 | 25 | 34 | 460 |
| RA1220 | 12 | 2 | 50 | 30 | 18 | 235 | RAD1220 | 12 | 2 | 50 | 30 | 36 | 470 |
| RA123A | 12 | 3 | 70 | 30 | 19 | 240 | RAD123A | 12 | 3 | 70 | 30 | 38 | 480 |
| RA123B | 12 | 3 | 85 | 35 | 19 | 240 | RAD123B | 12 | 3 | 85 | 35 | 38 | 480 |
| RA1250 | 12 | 5 | 95 | 50 | 21 | 260 | RAD1250 | 12 | 5 | 95 | 50 | 42 | 520 |
| RA1275 | 12 | 7½ | 110 | 55 | 24 | 265 | RAD1275 | 12 | 7½ | 110 | 55 | 48 | 530 |
| RA1808 | 18 | ¾ | 30 | 19 | 24 | 230 | RAD1808 | 18 | ¾ | 30 | 19 | 48 | 460 |
| RA1810 | 18 | 1 | 35 | 25 | 24 | 230 | RAD1810 | 18 | 1 | 35 | 25 | 48 | 460 |
| RA1820 | 18 | 2 | 50 | 30 | 25 | 235 | RAD1820 | 18 | 2 | 50 | 30 | 50 | 470 |
| RA183A | 18 | 3 | 70 | 30 | 26 | 240 | RAD183A | 18 | 3 | 70 | 30 | 52 | 480 |
| RA183B | 18 | 3 | 85 | 35 | 26 | 240 | RAD183B | 18 | 3 | 85 | 35 | 52 | 480 |
| RA1850 | 18 | 5 | 95 | 50 | 28 | 260 | RAD1850 | 18 | 5 | 95 | 50 | 56 | 520 |
| RA1875 | 18 | 7½ | 110 | 55 | 31 | 265 | RAD1875 | 18 | 7½ | 110 | 55 | 62 | 530 |
| RA2408 | 24 | ¾ | 30 | 19 | 32 | 230 | RAD2408 | 24 | ¾ | 30 | 19 | 64 | 460 |
| RA2410 | 24 | 1 | 35 | 25 | 32 | 230 | RAD2410 | 24 | 1 | 35 | 25 | 64 | 460 |
| RA2420 | 24 | 2 | 50 | 30 | 33 | 235 | RAD2420 | 24 | 2 | 50 | 30 | 66 | 470 |
| RA243A | 24 | 3 | 70 | 30 | 34 | 240 | RAD243A | 24 | 3 | 70 | 30 | 68 | 480 |
| RA243B | 24 | 3 | 85 | 35 | 34 | 240 | RAD243B | 24 | 3 | 85 | 35 | 68 | 480 |
| RA2450 | 24 | 5 | 95 | 50 | 36 | 260 | RAD2450 | 24 | 5 | 95 | 50 | 72 | 520 |
| RA2475 | 24 | 7½ | 110 | 55 | 39 | 265 | RAD2475 | 24 | 7½ | 110 | 55 | 78 | 530 |

**RA, RAD, RB, RBD Series
60 Hertz Pump Curves**



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