

Temperature Control Units
Water & Oil
30° - 500°F

- **Portable Chillers**
Air & Water-Cooled
20° - 70°F
- **Central Chillers**
Air & Water-Cooled
Packages & Modules
20° - 70°F
- **Pump Tank Stations**
Chilled or Tower Water
200 - 3600 gallons
- **Cooling Tower Cells**
45 - 540 tons
- **Filters**
- **Heat Exchangers**

REGAL SERIES - Air-Cooled

ADVANTAGE Regal high temperature oil units are designed to supply up to 500°F of temperature stabilized heat transfer fluid to applications such as plastic molding, chemical processing and many others. **Air-cooled units need no water hook-ups.** Both *heating only* and *heating and cooling* models are available.

- **PROCESS TEMPERATURES:** 100°F to 500°F
- **AVAILABLE PUMP HP:** 1 to 3
- **AVAILABLE HEATER KW:** 12 to 24
- **COOLING OPTION:** Air-cooled via heat exchanger
- **CONTROL INSTRUMENT:** Microprocessor based
- **STANDARD DIMENSIONS:** 44" x 16" x 24" (HxWxD)

All models feature a high volume centrifugal pump with air-cooled pump seal. Models that include the optional cooling feature are equipped with a high temperature air-cooled heat exchanger to provide process cooling. When required, a valve opens introducing cooled fluid into the process while the fan exhausts the heat to the environment. The fan runs continuously providing a cool fluid reserve in the heat exchanger for rapid cooling on demand.

WARRANTIES

- **1 Year** covering the entire machine.
- **4 Years** control instrument



STANDARD FEATURES

TANKS:

- Large capacity expansion tank
- NPT process connections
- Process line shut-off valves
- Oil level sight glass
- Air operated mold purge circuit
- Fluid drain valve
- Fluid fill port

PRESSURE GAUGE:

- To process

CONTROL INSTRUMENT:

- Advantage LE

WARRANTY:

- 1 year parts and labor
- See #W-700 for details

PUMP:

- Low pressure centrifugal pump
- Cast iron casing
- Bronze pump impeller
- Air-cooled pump seal
- Stainless steel motor shaft

OPTIONS

INSTRUMENTATION:

- HE control instrument
- Remote display (HE)
- SPI communications cable - 20' (LE & HE)

HEATER:

- Flanged bolt-in mount
- Vertical orientation
- Steel heater sheath
- Mercury heater contactor

SYSTEM ALARMS:

- Audible alarm
- Visual/audible alarm beacon

CABINTRY/FRAME:

- Stainless steel cabinetry
- Hinged electrical cover
- Portable, on casters
- Galvanized steel base

ELECTRICAL:

- Nema 12 construction
- Special electrics

LIMIT DEVICES:

- Motor overload relay
- High temperature limit
- Fused control circuit

ELECTRICAL:

- Process pump motor starter
- Fused transformer
- 10' power cord installed
- 110 volt alarm output
- 5 kA RMS SSCR

APPLICATIONS

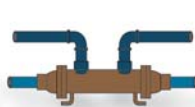
Regal Series temperature control units can be used on a variety of process applications that require 100°F to 500°F process temperatures.



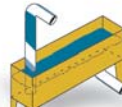
Molds & Dies



Nozzles, Barrels & Tools



Heat Exchangers



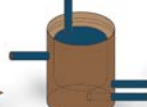
Troughs & Tanks



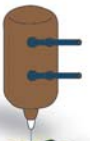
Rolls



Radiators and Air Coils



Jacketed Vessels and Mixers



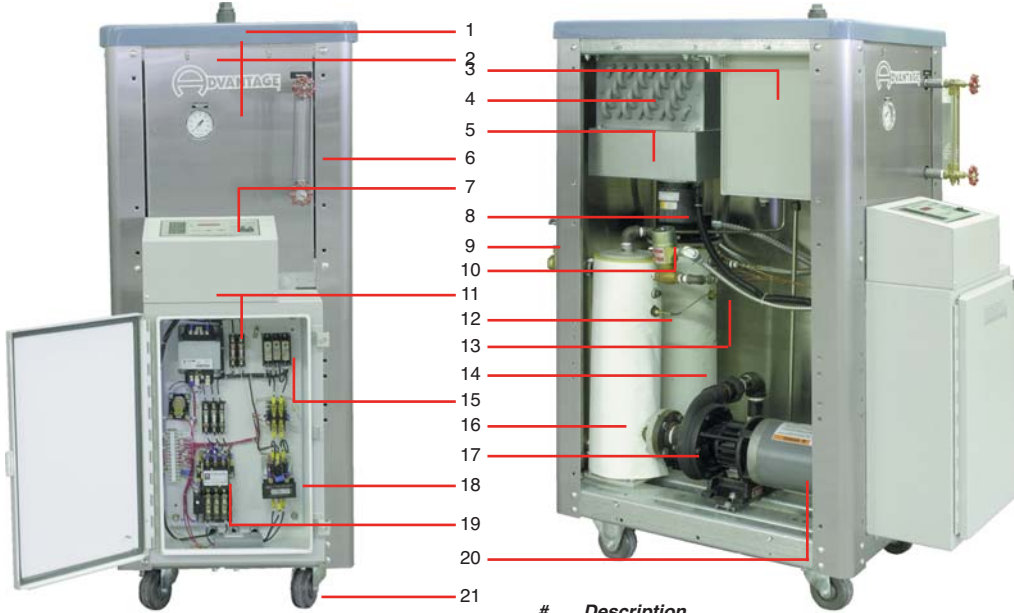
Lasers

SPECIFICATIONS

H = Heating Only HCA = Heating & Cooling Air-Cooled

SPECIFICATIONS RK-		1230H/HCA	1245H/HCA	1250H/HCA	1645H/HCA	1650H/HCA	1660H/HCA	2460H/HCA
HEATER¹	KW	12	12	12	16	16	16	24
PROCESS PUMP	HP	1	1½	2	1½	2	3	3
	GPM	30	45	50	45	50	60	60
	PSI	24	26	28	26	28	26	26
FULL LOAD AMPERAGE @ 3ø/60hz²	230 volt	34.8	36.4	38.0	47.0	49.0	51.0	71.0
	460 volt	17.9	18.7	19.5	23.5	24.5	25.5	35.5
	575 volt	14.3	14.9	15.6	18.8	19.6	20.4	28.4
DIMENSIONS	Height	60"	60"	60"	60"	60"	60"	60"
	Width	24"	24"	24"	24"	24"	24"	24"
	Depth	52"	52"	52"	52"	52"	52"	52"
CONNECTIONS	T/F ³	1"	1"	1"	1"	1"	1"	1"
WEIGHTS (lbs)	Shipping ⁴	600	625	630	700	725	730	850

1. Derate heater output by 25% for 208/3/60 operation. 2. Consult factory for 50hz operations. 3. T - to process; F - from process. 4. Approximate shipping weight.



- | # | Description |
|----|--|
| 1 | - Fluid fill port |
| 2 | - Fluid pressure gauge |
| 3 | - Expansion tank |
| 4 | - Heat exchanger |
| 5 | - Cooling fan and shroud |
| 6 | - Fluid level sight glass |
| 7 | - Control Instrument |
| 8 | - Fan motor |
| 9 | - Process connections |
| 10 | - Cooling valve |
| 11 | - Transformer (with fuse) |
| 12 | - From process sensor |
| 13 | - To process sensor |
| 14 | - Discharge cylinder |
| 15 | - Power entry terminal block |
| 16 | - Suction cylinder |
| 17 | - Centrifugal pump with air-cooled seal |
| 18 | - Mercury heater contactor |
| 19 | - Pump motor starter and over load |
| 20 | - Pump motor |
| 21 | - Caster |
| 22 | - Lift-off access panel |
| 23 | - To process connection and shut-off valve |
| 24 | - From process connection and shut-off valve |
| 25 | - Air connection and valve for mold purge |
| 26 | - Unit drain |

CONTROL INSTRUMENTS



Standard

'LE' INSTRUMENT - up to 500°F:

- Temperature display for *to process*, *from process* and *setpoint* temperatures
- Status lights for *power*, *pump heat*, *cool* and *alarm*
- Error lights for *pump overload*, and *high temperature*
- Pump start switch
- Unit on/off toggle switch
- Soft key operators



Upgrade!

'HE' INSTRUMENT - up to 500°F:

- Continuous *to process* temperature display
- Selectable *from process* temperature display
- Temperature display in °F or °C
- Continuous *setpoint* temperature display
- Setup display for *temperature*, *network* and *machine*
- Capacity display for *heat*, *cool*
- Ok-fault status display for *temperature deviation*, *probe*, *high temperature*, *pump overload* and *phase*
- Alarm display
- Communications display
- SPI communications
- Soft key operators

Model Designator for Regal Series Temperature Control Units

RK - 1230HCA

Regal Series

Heater KW

Pump GPM

Mode:

H : Heating Only

HC : Heating & Cooling

HCA : Air-Cooled



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TEMPERATURE CONTROLLERS • PORTABLE CHILLERS • CENTRAL CHILLERS • PUMP TANK STATIONS • TOWER SYSTEMS • FILTERS

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