

**NEW
AIR-COOLED DESIGN
NO WATER REQUIRED!**

TEMPERATURE CONTROLLERS

REGAL Series Air-Cooled Oil Unit



RK-1230HCA

Air-Cooled Unit Benefits :

- Lower cost to install ... no water plumbing required.
- Longer heat exchanger life ... no thermal shock typical of water-cooled units
- Less pump maintenance ... air-cooled design eliminates scaling in cavity of typical models using water-cooled seal.
- Less heat exchanger maintenance ... air-cooled design eliminates scaling in heat exchanger typical of models using water-cooled heat exchangers.

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. **New 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: 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 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.

STANDARD FEATURES

- | | |
|---|---|
| <p>TANKS:</p> <ul style="list-style-type: none"> • 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 | <p>CABINTRY/FRAME:</p> <ul style="list-style-type: none"> • Stainless steel cabinetry • Hinged electrical cover • Portable, on casters • Galvanized steel base |
| <p>PUMP:</p> <ul style="list-style-type: none"> • Low pressure centrifugal pump • Cast iron casing • Bronze pump impeller • Air-cooled pump seal • Stainless steel motor shaft | <p>LIMIT DEVICES:</p> <ul style="list-style-type: none"> • Motor overload relay • High temperature limit • Fused control circuit |
| <p>HEATER:</p> <ul style="list-style-type: none"> • Flanged bolt-in mount • Vertical orientation • Steel heater sheath • Mercury heater contactor | <p>ELECTRICAL:</p> <ul style="list-style-type: none"> • Process pump motor starter • Fused transformer • 10' power cord installed • 110 volt alarm output • 5 kA RMS SSCR |
| <p>NEW</p> | <p>PRESSURE GAUGE:</p> <ul style="list-style-type: none"> • To process |
| | <p>CONTROL INSTRUMENT:</p> <ul style="list-style-type: none"> • Advantage LE |
| | <p>WARRANTY:</p> <ul style="list-style-type: none"> • 1 year parts and labor • See #ADV-205 for details |

OPTIONS

- | | |
|---|---|
| <p>INSTRUMENTATION:</p> <ul style="list-style-type: none"> • HE control instrument • Remote display (HE) • SPI communications cable - 20' (LE & HE) | <p>ELECTRICAL:</p> <ul style="list-style-type: none"> • Nema 12 construction • Special electrics |
| <p>SYSTEM ALARMS:</p> <ul style="list-style-type: none"> • Audible alarm • Visual/audible alarm beacon | <p>CABINTRY:</p> <ul style="list-style-type: none"> • Special Paint |

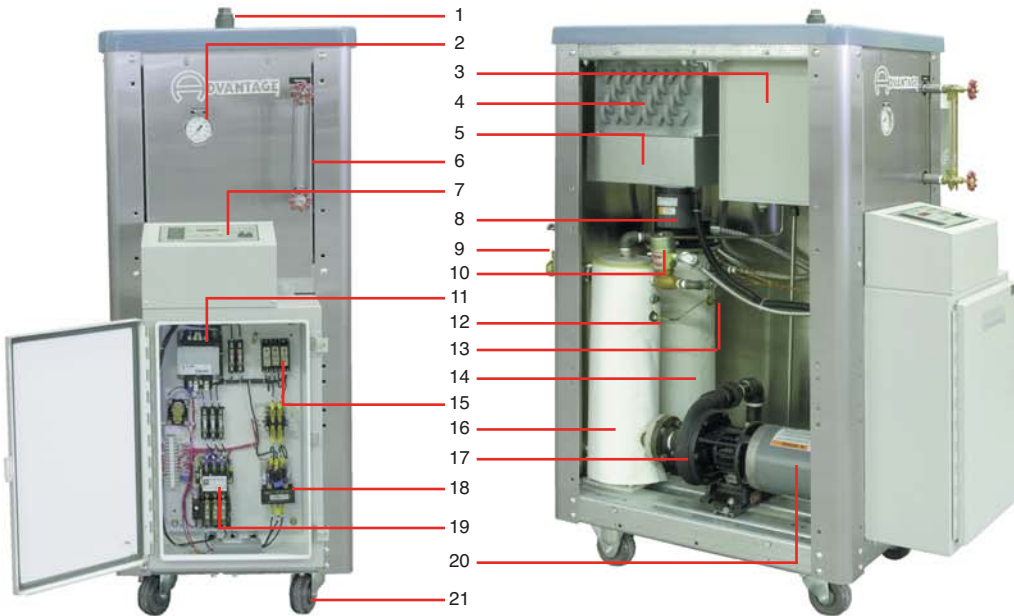


SPECIFICATIONS

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

SPECIFICATIONS RK-HEATER ¹		1230H/HCA	1245H/HCA	1250H/HCA	1645H/HCA	1650H/HCA	1660H/HCA	2460H/HCA
HEATER ¹	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/60hz ²	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.



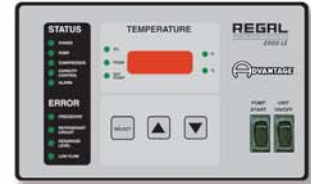
Description

- 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

Description

- 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

CUSTOM DESIGNS... if one of our standard models does not fit your application, then we can design a custom unit that will.



since 1977

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

ADVANTAGE ENGINEERING, INC. 525 East Stop 18 Road Greenwood, IN 46142 phone: 317-887-0729 fax: 317-881-1277

web site: <http://www.AdvantageEngineering.com> email: sales@AdvantageEngineering.com ©2011 ADVANTAGE ENGINEERING, INC. Form #ADV-544 11/03 updated 7/5/2011

SINCE PRODUCT INNOVATION AND IMPROVEMENT IS OUR CONSTANT GOAL, ALL FEATURES AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY.