

# Refrigerated OIL COOLERS WATER COOLERS



## COMPLETE PACKAGE

## PROGRAMMABLE TEMPERATURE CONTROL

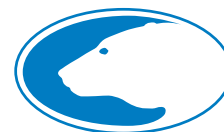
## DIRECT OIL OR WATER COOLING

### Standard Features

- Programmable Digital Temperature Controller/Indicator
- Low and High Pressure Cutout
- Compressor Overload Protection
- Crankcase Heater
- Filter Dryer and Site Glass
- Freeze Stat (water system only)
- Washable Condenser Intake Filter
- 16 ga Steel Cabinet
- Time Delay Start
- 50/60 Hz Operation
- Up to 12 Tons Cooling Capacity
- Contractor Wired, Electrical Disconnect
- Liquid Injection Compressor Cooling
- Low Flow Shut Off Switch

### Options

- Low Ambient Control (required for outdoor use)
- Ambient Tracking Control
- Suction and Discharge Gauges
- Hot Gas Bypass
- Recirculation Pumps Mounted and Wired (cabinet size will increase on some models)



**CHILLER MFG.™**  
Liquid Cooling

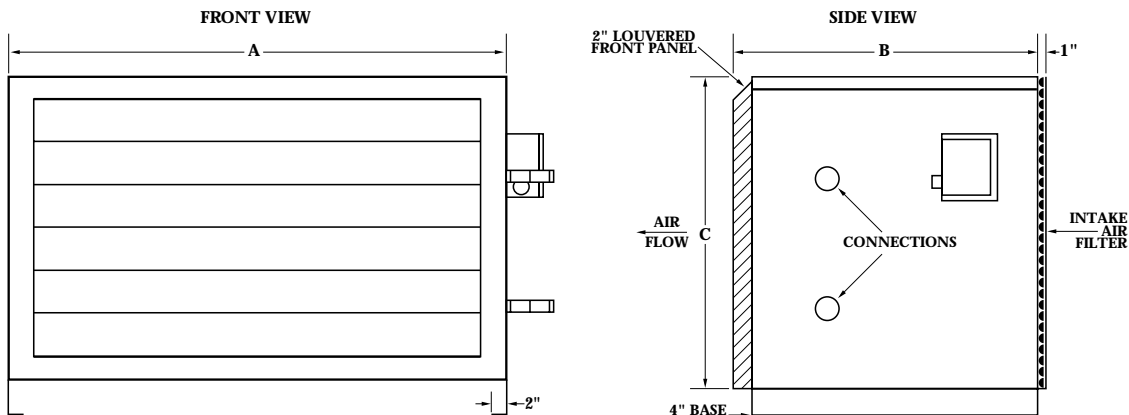
1.800.334.COOL

## Performance Specifications

Model	BTU/Hr.	Oil Cooling Service Flow (GPM)	Water Cooling Service Flow (GPM)	<ol style="list-style-type: none"> <li>Unit uses R 22 refrigerant. (R 134A Available)</li> <li>Derate cooler performance 17% when operating at 50 Hz.</li> <li>Digital indicator monitors fluid "out" temperature.</li> <li>Oil flow rates and capacities are based on the use of Mobil DTE-24, Sunvis 832, or equal.</li> <li>BTU capacities are based on a 10°F Fluid Delta T, at 95°F ambient.</li> <li>Maximum entering fluid temperature 130°F. For higher temperatures consult factory. Minimum fluid temperature 85°F for Oil, 45°F for Water.</li> <li>Maximum ambient temperature 120°F.</li> <li>Oil pressure drop through cooler 10-12 psi at rated flow.</li> <li>Water pressure drop through cooler 5-6 psi at rated flow.</li> </ol>
RC-0.75	9,000	2-3	1-2	
RC-1	12,000	3-5	2-3	
RC-1.5	18,000	5-7	3-4	
RC-2	26,000	7-10	4-6	
RC-3	37,000	10-15	6-8	
RC-4	48,000	15-18	8-9	
RC-5	60,000	18-23	9-13	
RC-7.5	90,000	25-34	13-18	
RC-10	122,000	35-50	18-27	
RC-12	144,000	45-57	27-29	

## Electrical Data (Full Load Amps)

Model	60 Hz			50 Hz	
	208/230/1Ø	208/230/3Ø	460/3Ø	200/220/1Ø	380/415/3Ø
RC-0.75	10	7	4	10	6
RC-1	9			9	
RC-1.5	17	11	4.5	17	9.9
RC-2	25	17	5.3	25	15.3
RC-3	30	22	9	30	19.8
RC-4	37	23	12	37	21.7
RC-5	53	31	15	53	27.9
RC-7.5	—	43	22	—	38.7
RC-10	—	63	27	—	56.7
RC-12	—	70	36	—	63



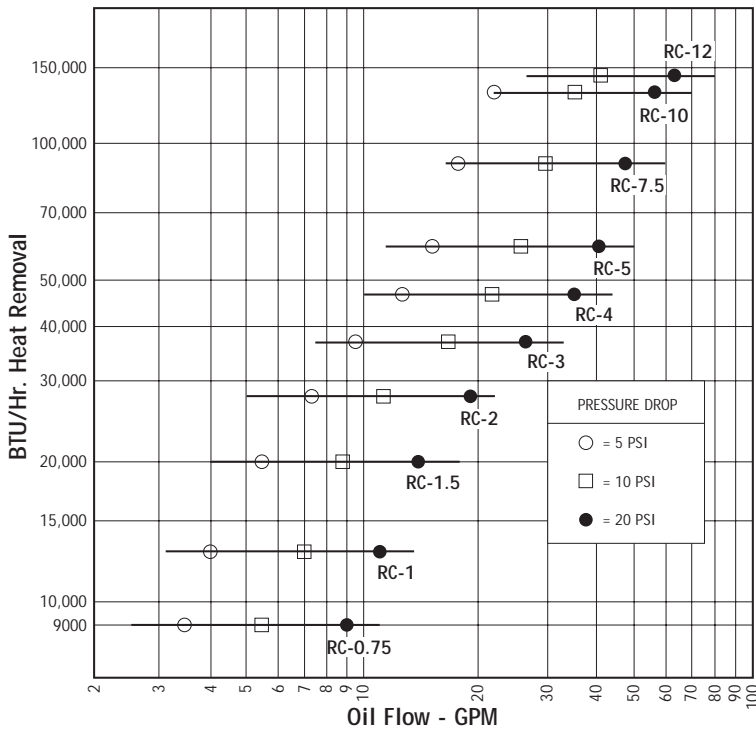
## Dimensions & Weights

Model	A	B	C	Connections	Approx. Weights (lbs.)	
					Net	Shipping
RC-0.75	28.5	25.25	15	.75 MPT	267	406
RC-1					287	417
RC-1.5					290	420
RC-2					325	455
RC-3	39.5	31.75	23	1.0 MPT	425	555
RC-4	47.5	25	435		565	
RC-5			460		590	
RC-7.5	59.5	35.75	27	1.5 MPT	575	805
RC-10			31		625	855
RC-12			35		650	900

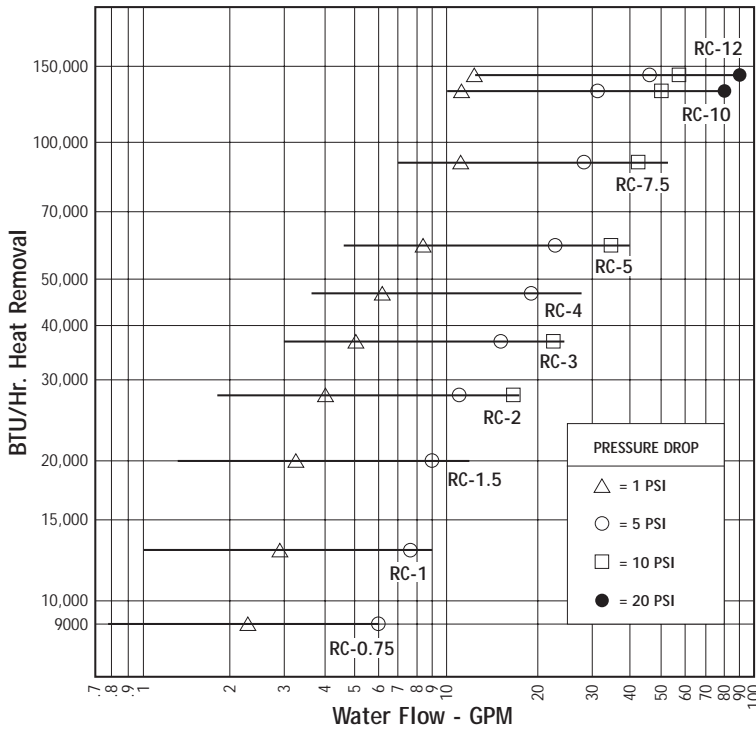
We reserve the right to make reasonable design changes without notice. Dimensions are in inches. MPT (male pipe thread)

# Performance Curves

## Oil Cooling



## Water Cooling



## Ratings

- Maximum Ambient Temperature: 110°F
- Maximum Pressure: 300 PSI
- Maximum Fluid Entering: 130°F
- Minimum Fluid Temperature: 55°F Water, 85°F Oil

# Sizing Data

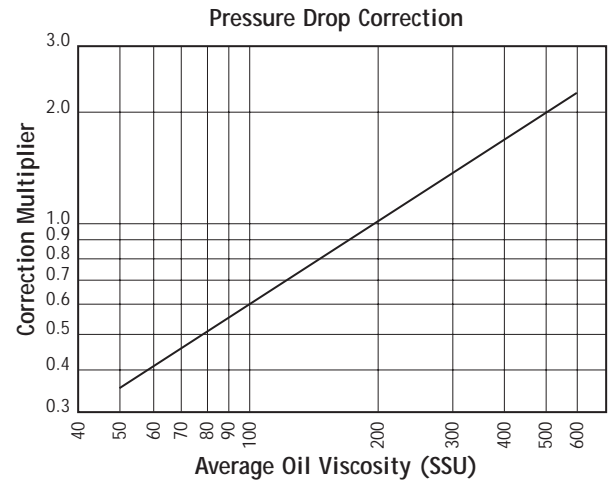
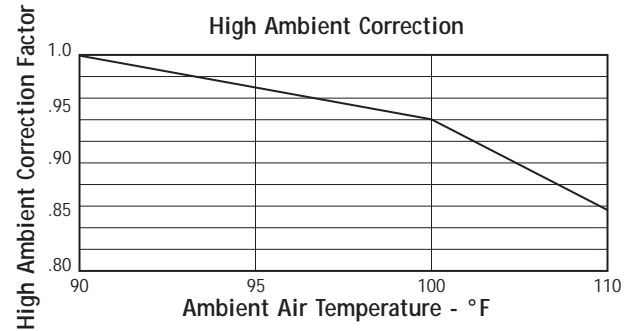
BTU capacities are based on 90°F ambient. For higher ambients, use correction factor below. Oil service pressure drops are based on 200 SSU average oil viscosity. Use correction factor below as required.

### To Determine BTU/Hr. Heat Removal:

$$\frac{\text{BTU/Hr. Heat Load}}{\text{High Ambient Correction Factor}} = \text{BTU/Hr. Heat Removal/Curve}$$

### To Determine Actual Oil Pressure Drop:

$$\text{Pressure Drop shown on curve} \times \text{Drop correction multiplier} = \text{Actual Pressure Drop}$$



## Specifications

All units equipped with: Programmable Temperature Controller that automatically regulates the leaving fluid temperature, R-22 refrigerant, and electrical disconnect. Fluid recirculation pumps are optional. Consult factory for specifications. De-rate performance 17% for 50 Hz operation. Be sure to provide ample fresh air to the chiller, and always electrically interlock the chiller to oil/water pump for safety.

## How To Order

**Note:** Both positions must be filled.

RC	—	<input type="text"/>	—	<input type="text"/>
		Model Selection		Operating Voltage/Frequency
				208/230/1Ø 60Hz
				208/230/3Ø 60Hz
				460/3Ø 60Hz
				200/220/1Ø 50Hz
				380/415/3Ø 50Hz

**Note:** 3 Phase is not available for the RC-0.75



**CHILLER MFG.™**  
Liquid Cooling



**1-800-334-COOL**

[www.chillermfg.com](http://www.chillermfg.com)

133 Harrison Avenue • P.O. Box 97 • Jeffersonville, Indiana 47130

Printed in U.S.A. 11/98