# **Datasheet - Kodiak Series Recirculating Chillers**



## **Recirculating Chillers with Cooling Capacities up to 11 kW**



Boyd's Kodiak® compressor-based recirculating chillers are the ideal solution when you need precise temperature control or cooling below ambient temperature. Kodiak® chillers offer outstanding performance and high reliability as well as quiet operation and ease-of-use.

• **Precise temperature control**: Our custom PID controller and advanced refrigeration control circuit ensure that the Kodiak maintains ±0.1°C (0.2°F) stability.

• Quiet operation: The components inside the Kodiak® have been performance-matched for quiet operation. In addition, vibration-isolation of the compressor (and pump in RC009-RC045) and foam padding on panels minimize vibration noise.

• **High reliability**: We are so confident that our Kodiak® chillers will provide years of trouble-free operation that we offer a 2-year warranty.

• Advanced ergonomic design: Our chillers look as good as the equipment they cool. Our industry-leading industrial design is as functional as it is attractive.

• CE certified and ITSNA tested to UL 6101 0A-1(RC009 - RC045) or MET tested to UL 1995 (RC115)



## **Performance Specifications**

Specification	RC009	RC022	RC045	RC115
Cooling capacity (@20°C process and ambient)	1050W	2400W	5900W	11000W
Temperature stability	+/-0.1°C			
Fluid connection		1/2" FNPT		3/4" FNPT
Reservoir capacity	4 liters / 1 gal	8 liters / 2 gal	23 liters / 6 gal	6.5 liters / 1.75 gal
Coolant temperature range		5 - 35°C / 41 - 95°F		4 - 35°C / 39 - 95°F
Ambient temperature range		10 - 35°C / 50 - 95°F		5 - 35°C / 41 - 95°F
Dimensions (W x D x H)	318x483x559 mm 12.5x19x22 in	376x623x673 mm 14.8x24.5x26.5 in	543x705x810 mm 21.4x27.8x31.9 in	813x1092x1143 mm 32x43x45 in
Dry weight	45 kg 100 lbs	75 kg 166 lbs	122 kg 270 lbs	235 kg 517 lbs
Electrical configurations with full load amperage:				
G03 (115V, 1Ph, 60Hz)	12.2A	NA	NA	NA
J03 (208/230V, 1Ph, 60Hz)	5.8A	10.0A	19.6A	NA
M01 (200-220V, 3Ph, 50Hz 208-230V, 3Ph, 60Hz)	NA	NA	NA	22.2A
Pump options				
BB: PDP <sup>*</sup> , Brass, 1.3 gpm / 4.9 lpm	•	٠		
BG: PDP <sup>·</sup> , Brass, 4.3 gpm / 16.3 lpm			٠	
DF: Centrifugal, 1.5 HP				٠
EB: Turbine, ½ HP			٠	

\*PDP = Positive Displacement Pump

#### **Additional Features:**

**RC009 / RC022 / RC045:** External Flow Valve (Manually adjustable globe or ball valve), 0.1°C Setpoint, Remote Start, 5 Micron Water Filter, Air Filter, and Microprocessor Temperature Controller with: RS-232 Interface, Digital Pressure Sensing, Low Level, Low/High Temp, Fault Shut Off (Toggle on/off), Relay Contacts (configurable as normally open or normally closed), Digital Temperature Display, Calibration Offset, Low Flow Shut Off, Auto-Restart, °C/°F Toggle, Audible Alarm, and Alarm Mute.

**RC115**: Air Filter, External Flow Valve (Manually adjustable ball valve), 5 Micron Water filter, and Microprocessor Temperature Controller with: 0.1°C Setpoint, Digital temperature and pressure display, low level, low/high temp, and refrigerant visual alarms, low coolant flow and low refrigerant pressure shut off, auto-restart, °C/°F toggle, 9 pin D connector with RS-232 communication.



## **Thermal Performance Graphs**

### RC009 at 60Hz



#### RC045at 60Hz

3 2 1 1 0 5 10 15 20 25 30 Temperature Setpoint (°C)

RC022 at 60Hz

RC022 Performance at 60 Hz

#### RC115 at 60Hz

35



Cooling Capacity (kW)

Disclaimer: Temperature represents output temperature of water assuming 20°C ambient air conditions. Performance subject to change due to variations such as fluid type or operating conditions.

## **System Pump Graphs**



Disclaimer: Includes pressure drop through Chiller. See pumps overview on www.boydcorp.com for guidance on selecting a pump. Pressure relief is factory set at 90 psi (6.2 bar). BG pump can be operated at flow rates as low as 0.5 gpm (1.9 lpm) for the RC022.

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