

Control System

The CoolLogic Control System governs all top level events, timing and compressor staging, and allows operator interface for all levels of setting and retrieving data. The CoolLogic Control System provides leaving chilled and hot water liquid temperature control algorithms which maintain accurate temperature control for cooling, heating, heat recovery and simultaneous heating and cooling applications. A compressor run time equalization sequence is provided to ensure even distribution of compressor run time throughout the entire chiller bank. Chiller power consumption is minimized by indexing the most efficient stages of cooling, optimizing heat transfer surface.

Operator Interface

- Multi-line back-lit LCD display panel
- User friendly with conveniently grouped menuing system
- Provides access to critical information:
 - Set points Active temperatures Chiller scheduling • Servicing • Diagnostics • Alarm conditions • Pressures • Operation modes

Application Flexibility

- Cooling Water and Remote Air Cooled
- High Temperature
- Heat Recovery
- Reverse Cycle Heat Pump
- Simultaneous Heating and Cooling

Standard Alarm Status Indicators

- Up to 100 occurrences stored with date and time, available for recall through keypad
- High pressure cutout
- Low pressure cutout
- Compressor thermal protector fault
- Low suction temperature
- High discharge temperature
- Low leaving chilled water temperature
- High leaving condenser water temperature
- Communication error



- Loss of flow through the evaporator
- Loss of flow through the condenser
- Electrical voltage/phase failure

Building Automation System (BAS) Interface

BACnet • LonWorks • Modbus • N2

Master Control Panel Features

- NEMA Type 1 enclosure (24" x 24" x 8.5")
- Operator interface
- 120/24 Volt control power supply with surge protection
- 120 Volt convenience receptacle
- Power and fault indicator lights
- Three position selector switch
 - Local Off Remote
- Temperature sensor inputs for system evaporator and condenser water inlet and outlet
- Voltage/phase monitor inputs
- Simple two-conductor shielded cable daisy chain from master to modules
- Main system menus include:
 - Status Setup Service Alarm





Master Controller Specifications

- ARCNET communication co-processor for linking to modules
- 10/100 fast Ethernet port
- EIA-232 or EIA-485 communication port
- Real-time clock
- Incoming power and network connection protection
- BACnet conformance as defined in ANSI/AHSRAE Standard 135-2004
- 16 MB non-volatile RAM memory
- Up to 20 input/output points



Module Controller Specifications

- 16-bit microprocessor
- 1 MB flash memory
- 1 MB battery-backed RAM
- Up to 24 input/output points
- Built-in protocol support
- 10,000 hour lithium 3V coin cell battery for data retention during power outages
- Surge and transient protection circuitry for power and communications





Contact your local ClimaCool representative or visit our website at www.climacoolcorp.com to find out more about the *CoolLogic* Control System and other heating and cooling solutions that may fit your application needs.





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