

## McQuay Chiller Systems Offer MicroTech II™ Unit Controllers with the Protocol Selectability™ Feature

MicroTech II unit controllers on McQuay chillers and condensing units provide powerful DDC technology with our Protocol Selectability feature for easy integration into your building automation system (BAS) of choice.

- You select BACnet®, LONMARK® or Modbus® communications to communicate control and monitoring information to your BAS, without the need for costly gateways. Unit controllers are LONMARK certified with an optional LONWORKS® communication module.



- Factory integrated and tested controller with unit options to promote quick, reliable start-up, minimizing costly field commissioning.
- Detailed equipment control and status information is available to your BAS regardless of protocol (see back).
- Flexible BAS network communication options for the life of your McQuay equipment.

### Communication Module Protocol Options

- BACnet MS/TP
- BACnet / IP
- BACnet Ethernet
- LonTalk® (FTT-10A)
- Modbus RTU

Communications modules may be factory or field installed.

### MicroTech II Unit Controller Benefits

- Easy integration into your BAS of choice using the Protocol Selectability feature.
- Precise  $\pm 0.2^\circ\text{F}$  chilled water control for consistent, stable operation in chilled water systems.
- Control of up to four stages of cooling tower fans and modulation of tower fan or bypass valve provides optimum integrated control of the tower based on system conditions (water-cooled units only).
- Alarms, along with unit operating conditions at the time of the alarm, are saved in memory for troubleshooting assistance.
- Proactive pre-alarm notification of atypical operating conditions allows the chiller to stay online and provide maximum possible cooling.
- Automatic control of chilled water and condenser water pumps, simplified pump integration for lead/lag and automatic engagement of backup pump (centrifugal chillers only).
- Easy to read, 10-inch color touch-screen operator workstation allows users to observe chiller operation at a glance and change setpoints (centrifugal chillers only).
- Plottable historic trend data of water temperatures, refrigerant pressures and motor load data provide valuable information for energy conservation (centrifugal chillers only).

### Comprehensive Data Available

The data available from your McQuay chiller with MicroTech II unit controllers provides a clear picture of operating conditions and can notify your building automation system of alarm conditions, regardless of the protocol you select (see back page). Up to 100 alarms per chiller describe specific sensor failures, temperature or pressure problems, or if the chiller capacity has been inhibited and why (refer to the applicable Protocol Information documentation on [www.mcquay.com](http://www.mcquay.com)).



Open standard protocol network such as BACnet, LonTalk or Modbus

### Building Automation System Of Your Choice!



# Easy Integration Into Your Building Automation System Of Choice

TYPICAL DATA POINTS <sup>1</sup>	MCQUAY CHILLER MODEL				
(W = Write, R = Read)	WSC/WDC/WPV HSC/HDC/TSC	AGZ	ACZ	AGS <sup>5</sup>	WGZ
Active Setpoint	R	R		R	R
Actual Capacity	R	R	R	R	R
Capacity Limit Output	R	R <sup>4</sup>	R <sup>4</sup>	R	R
Capacity Limit Setpoint	W	W <sup>4</sup>	W <sup>4</sup>	W	W
Chiller Enable	W	W	W	W	W
Chiller Limited	R	R <sup>4</sup>	R <sup>4</sup>	R	R
Chiller Local/Remote	R	R	R	R	R
Chiller Mode Output	R	R		R	R
Chiller Mode Setpoint	W	W		W	W
Chiller On/Off	R	R	R	R	R
Chiller Status	R	R	R	R	R
Compressor Discharge Temp	R			R	
Compressor Percent RLA	R				
Compressor Run Hours	R	R	R	R	R
Compressor Select	W	W	W	W	W
Compressor Starts	R	R	R	R	
Compressor Suction Line Temp	R	R		R	R
Cond EWT	R				R
Cond Flow Switch Status	R				R
Cond LWT	R				
Cond Pump Run Hours	R				
Cond Refrigerant Pressure	R <sup>2</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>
Cond Sat. Refrigerant Temp	R <sup>2</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>
Cond Water Pump Status	R				R
Cool Setpoint	W	W		W	W
Current Alarm	R	R	R	R	R
Default Values	W	W	W	W	W
Evap EWT	R			R	
Evap Flow Switch Status	R	R	R	R	R
Evap LWT for Unit	R	R		R	R
Evap LWT for Compressor	R			R	
Evap Pump Run Hours	R				
Evap Refrigerant Pressure	R <sup>2</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>
Evap Sat. Refrigerant Temp	R <sup>2</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>	R <sup>3</sup>
Evap Water Pump Status	R	R		R	R
Heat Recovery EWT	R				
Heat Recovery LWT	R				
Heat Setpoint	W				
Ice Setpoint	W	W		W	W
Liquid Line Refrigerant Pressure				R	
Liquid Line Refrigerant Temp	R			R	
Maximum Send Time	W	W	W	W	W
Minimum Send Time	W	W	W	W	W
Network Clear Alarm	W	W		W	W
Oil Feed Pressure	R				
Oil Feed Temp	R				
Oil Sump Pressure	R				
Oil Sump Temp	R				
Outdoor Air Temp		R	R	R	
Pump Select	W				
Run Enabled	R	R	R	R	R

Notes: 1 Data points available are dependent upon options selected  
 2 Per compressor  
 3 Per circuit  
 4 Dual circuit models only  
 5 AGS Chiller 230 - 475 tons

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