

McQuay Commercial Rooftop Units Feature MicroTech II® Controllers with Open Choices™

Each McQuay Maverick II™ 30 to 50-ton commercial rooftop unit is equipped with a complete MicroTech II controller system. These unit controllers are factory configured for stand-alone operation or can be integrate to a building automation system (BAS) with a field-installed communication module with our Open Choices feature.

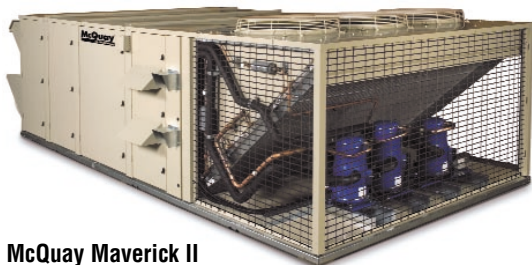
Open Choices Benefits

- Easy, low cost integration into most building automation systems without costly gateway panels.
- You can select either BACnet® or LONWORKS® communication options. Units are LONMARK® 3.4 certified with the appropriate communications module for LONWORKS networks.
- Comprehensive unit control and status information is available to your BAS regardless of communication protocol.
- Communication options offer long-term choices for equipment adds or replacements, and service support. That's the benefit of our Open Choices feature.

Control Functions Provided

Available in both stand-alone operation or when coordinated by a BAS:

- Auto/manual operation selection
- Cooling and heating lockout control
- Night/unoccupied setback
- Internal time clock
- 7-day plus one holiday scheduling
- Timed tenant override for off-hour flexibility
- Remote setpoint adjustment options



McQuay Maverick II rooftop unit



Control Configurations

MicroTech II controls offer two basic control configurations that can be customized to meet the requirements of the most demanding systems.

- **Variable Air Volume with Discharge Temperature Control (VAV-DTC)**—provides discharge air temperature control along with duct static pressure control.
- **Constant Air Volume with Zone Temperature Control (CV-ZTC)**—provides the precise, flexible zone temperature control available with DDC controls.

Advanced Control Strategies

Duct Static Pressure Control. Available on all VAV-DTC units to provide precise control of the supply fan variable frequency drive to increase efficiency and reduce energy costs.

Economizer Control. On units equipped with an economizer, this control strategy allows use of outdoor air to cool the building space, saving energy that would have been used by mechanical cooling.

Minimum Ventilation Air Volume Control. For Maverick II units used in VAV systems, the MicroTech II controller consistently maintains the minimum outdoor air requirements of ASHRAE Standard 62 to optimize indoor air quality in the building space.

Open standard protocol network such as BACnet or LonTalk



Building automation system of your choice!

McQuay[®]
Air Conditioning



Easy Integration into Your Building Automation System of Choice

Comprehensive Data Available – Regardless of Protocol Choice

The MicroTech II unit controller provides Maverick II unit status information and notifies your BAS of alarm conditions, regardless of the available communication protocol.

• LonTalk DAC (FTT-10A)

Designed in accordance with LONMARK Discharge Air Controller (DAC) Functional Profile

• LonTalk SCC (FTT-10A)

Designed in accordance with LONMARK Supply Comfort Controller (SCC) Functional Profile

• BACnet MS/TP

• BACnet/IP

Typical Data Points—

Inputs

- Occupancy Scheduler Input
- Building Static Pressure Setpoint
- Occupied Cooling Setpoint
- Unoccupied Cooling Setpoint
- Occupied Heating Setpoint
- Unoccupied Heating Setpoint
- Max Discharge Air Heating Setpoint
- Discharge Air Heating Setpoint
- Outdoor Air Damper Minimum Position Input
- Economizer Enable
- Application Mode
- Occupancy Mode
- Emergency Override
- Duct Static Pressure Setpoint
- Space Temperature Input
- Outdoor Air Temperature Input
- Discharge Air Cooling Setpoint
- Building Static Pressure Input
- Space IAQ Input
- Receive Heartbeat

Primary Heat Enable

Primary Cool Enable

Clear All Alarms

Clear One Alarm

Outputs

- Unit Status
- Cooling Capacity
- Primary Heating Capacity
- Cooling Status
- Heating Status
- Economizer Status
- Outdoor Air Damper Position
- Occupancy
- Discharge Air Temperature
- Return Air Temperature
- Space Temperature
- Outdoor Air Temperature
- Local Space Temperature
- Local OA Temperature
- Duct Static Pressure

Supply Air Fan Capacity

Building Static Pressure

Exhaust Fan Capacity

Effective Setpoint Output

Effective Discharge Air Temperature Setpoint

Space CO₂

Exhaust Fan Status

Current Alarm

Alarms

- Dirty Filter
- High/Low Circuit Pressure
- Return Air Sensor Fail
- Space Sensor Fail
- Outdoor Air Sensor Fail
- Airflow
- Low Supply Air Temp
- High Supply Air Temp
- High Return Air Temp
- Duct High Limit
- Discharge Sensor Fail

*A global leader in
system solutions for
air conditioning, heating,
ventilating and refrigeration.*



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