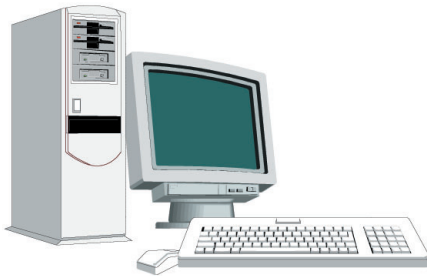


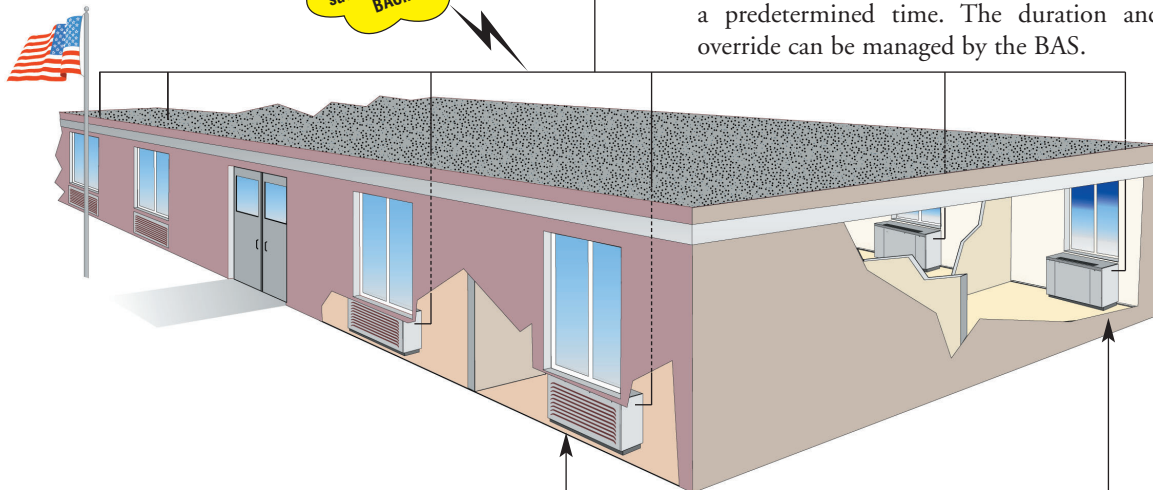
AAF®-HermanNelson® Unit Ventilators Offer MicroTech II™ Unit Controllers With Our Protocol Selectability™ Feature

MicroTech II™ unit controllers with Protocol Selectability™ allow easy integration into your building automation system (BAS) of choice via open, standard protocols such as LonTalk® and BACnet®. Optional communications modules on the AAF-HermanNelson unit ventilator can transmit control and monitoring information without additional gateways to the building automation system that best meets your building's requirements.

Building Automation System of Your Choice!



Open standard protocol network such as LonTalk or BACnet



AAF®-HermanNelson® classroom unit ventilators with MicroTech II controls

MicroTech II Unit Controller Benefits

- Easy, low-cost integration into most BAS!
- You select either BACnet or LonTalk communications to communicate control and monitoring information to your BAS, without the need for costly gateways. Unit controllers are LONMARK® certified with the optional LONWORKS® communication module.



LONMARK®3.3

- Factory integrated and tested controller, sensors, actuator and unit options promote quick, reliable start-up and minimize costly field commissioning.
- Flexible BAS network communication options for the life of your AAF-HermanNelson equipment via the Protocol Selectability option.

Integrated AAF-HermanNelson Unit Ventilator Options

- **Advanced Dehumidification and Economizer Control**
Optional unit-mounted humidity or enthalpy sensors can provide superior economizer operation or use a direct input from your BAS for custom dehumidification strategies.
- **Demand Control Ventilation (DCV)** – Optional CO₂ sensor can be programmed to optimize outdoor air intake to meet fresh air requirements at lower operating costs. CO₂ levels can be monitored and logged from a central BAS.
- **Centralized Temperature and Humidity Sensing** – Allows you to optimize temperature and humidity control by selecting sensors located away from sunlight and using this common reading for all units through the BAS.
- **Tenant Override Monitoring and Control** – For after-hours operation, the user can return units to the occupied mode for a predetermined time. The duration and logging of the override can be managed by the BAS.

Easy Integration Into Your Building Automation System Of Choice

Communication Module Protocol Options

- LonTalk (FTT-10A)
- BACnet MS/TP
- Others

Communication modules may be factory or field installed.

Comprehensive Data Available Regardless of Your Protocol Choice

The data available from your AAF-HermanNelson unit ventilators with MicroTech II unit controllers provides a clear picture of just what's happening in each classroom and notifies your building automation system of alarm conditions regardless of the protocol you select.

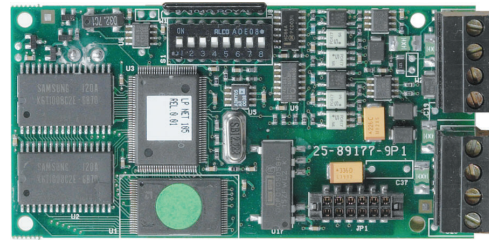
Typical Data Points* (R = Read, W = Write)

Read/Write Attributes:

- Application Mode (R/W)
- Auxiliary Heat Enable (R/W)
- Compressor Enable (R/W)
- Economizer Enable (R/W)
- Emergency Override (R/W)
- Energy Hold Off (R/W)
- Heat/Cool Mode (R/W)
- Occupancy Override (R/W)
- Outdoor Air Humidity (R)
- Reset Alarm (R/W)
- Reset Filter Alarm (R/W)
- Setpoint Offset (R/W)
- Source (Water In) Temperature (R/W)
- Space CO₂ (R/W)
- Space Humidity (R/W)
- Space Temperature (R/W)

Read Only Attributes:

- Binary Input 1 Status (R)
- Binary Output 1 Status (R)
- Binary Output 2 Status (R)
- Binary Output 3 Status (R)
- Compressor Run Time (R)
- Chiller Water Valve Position (R)
- Discharge Air Temperature (R)
- Discharge Air Temperature Setpoint (R)
- Effective Setpoint (R)
- Effective Space Temperature (R)
- Fan Speed (R)
- F & BP Damper Position (R)
- Local Setpoint (R)
- Outdoor Air Damper Position (R)
- Space Fan Runtime (R)
- Unit Ventilator Controller State (R)
- Water-out Temperature (R)
- WH or CW/HW Valve Position (R)



Typical 2"x4" Communication Module

Read/Write Setpoint Attributes:

- Econ. IA/OA Enthalpy Diff. Setpoint (R/W)
- Econ. IA/OA Temp. Diff. Setpoint (R/W)
- Econ. Outdoor Air Enthalpy Setpoint (R/W)
- OAD Min. Position High-Speed Setpoint (R/W)
- OAD Min. Position Low-Speed Setpoint (R/W)
- OAD Min. Position Med.-Speed Setpoint (R/W)
- Occupied Cooling Setpoint (R/W)
- Occupied Heating Setpoint (R/W)
- Space CO₂ Setpoint (R/W)
- Space Humidity Setpoint (R/W)
- Standby Cooling Setpoint (R/W)
- Unoccupied Cooling Setpoint (R/W)
- Unoccupied Heating Setpoint (R/W)
- UV Software Application Version (R/W)

Typical Alarms*

- Indoor Air Temperature Sensor Failure
- DX Pressure Fault
- Compressor Envelope Fault
- Discharge Air DX Cooling Low Limit
- Condensate Overflow Indication
- Indoor Air Coil DX Temperature Sensor Failure
- Outdoor Air Temperature Sensor Failure
- Discharge Air Temperature Sensor Failure
- Outdoor Air Coil DX Temperature Sensor Failure (or)
Water Coil DX Temperature Sensor Failure
- Water-out Temperature Sensor Failure (or)
Water-in Temperature Sensor Failure
- Space Humidity Sensor Failure
- Outdoor Humidity Sensor Failure
- Space CO₂ Sensor Failure
- Source Temperature (Water-in) Inadequate Indication
- Change Filter Indication

*Not all data points or alarms listed will be available in all unit ventilator configurations. Humidity and CO₂ points require the use of optional sensors.



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