

Taking on the open
systems challenge



BAC-7000 Series BACnet Advanced Application Controllers, VAV

Native BACnet 4-input/4-output con-
trollers with built-in airflow sensors
and actuators for VAV applications



BAC-7001/7051/7003/7053 AAC

Native BACnet VAV Controllers (and Actuators)

These native BACnet advanced application controllers (AAC) are designed for variable air volume terminal units. An integrated actuator, integrated air flow sensor, NetSensor® connection, and supplied programs make these controller-actuators ideal for stand-alone or networked VAV applications. BAC-7003/7053s are designed for (series or parallel) VAV fan induction unit applications.

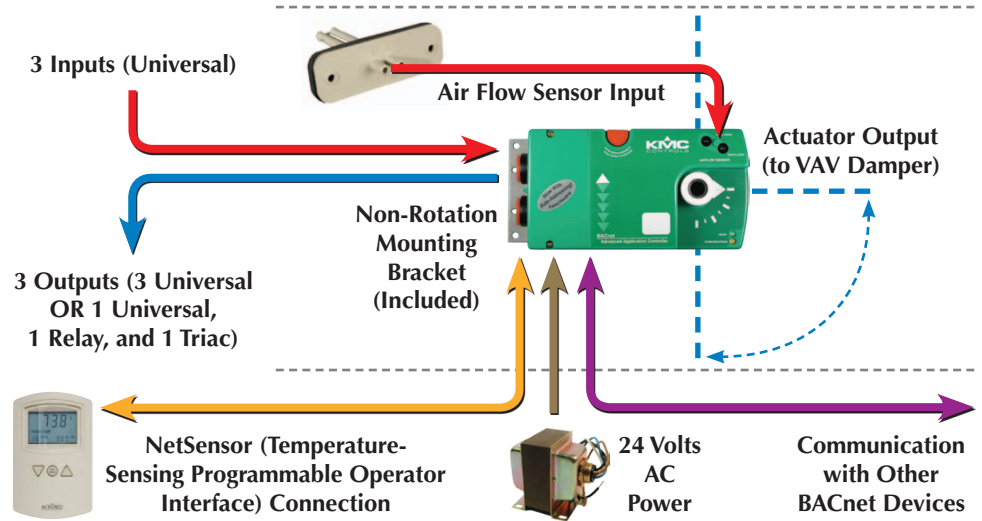
These BTL-listed BACnet MS/TP compliant devices incorporate standard single-duct VAV program sequences, yet are fully field programmable. Built-in programs include:



- Heating/cooling changeover
- VAV with time-proportional or staged reheat
- Fan control (BAC-7003/7053 only)
- Balancer override (permits balancing using the NetSensor with no computer required)

Along with these programs and integrated actuator, an on-board airflow sensor enables use of a single or multipoint differential pressure measuring station or pitot tube. The controllers also offer an additional three inputs and three outputs for flexibility.

Together with our powerful BACnet operator workstation software and other native BACnet devices, the BAC-7000 series takes on the challenges of open systems automation.



SPECIFICATIONS

Inputs, Outputs, and Communications

Three universal (0–5 VDC) inputs, each of which is programmable as an analog, binary, or accumulator object

Fourth input dedicated to the airflow sensor

Three short-protected universal outputs (only one on BAC-7003/7053), each of which is programmable as an analog (0–10 VDC) or binary (0/12 VDC) object

One triac and one relay output on BAC-7003/7053

Fourth output dedicated to actuator motor

Compatible with KMD-1160/1180 series NetSensors (connection through a modular jack)

Actuator and Other Features

Shaft sizing: 1/2-inch (3/8-inch adaptor available)

Torque: 50 (min.) to 70 (max.) in-lbs. (5.7 to 7.9 N·m)

Angular rotation: 0 to 95° (adjustable end stops at 45°, 60°, and 90°)

Motor timing: BAC-7001/7003, 18°/minute at 60 Hz (15°/minute at 50 Hz); BAC-7051/7053, 60°/minute at 60 Hz (50°/minute at 50 Hz)

Auto addressing automatically assigns MAC address and device instance

Auto restart on power failure

(See data sheets for more information)



building your comfort zone®