# **BACnet Field Control Device**

#### **BACnet VAV Controller**

# DACV403B

#### [ Description ]

DACV403B is a BACnet B-AAC class programmable VAV controller. It has an air pressure sensor to control a single duct VAV box. We can control dual duct VAV box by using EIM module on the EIMnet port. It has a 32 bit microprocessor, communication speed up to 76,800bps. Its universal input point takes binary or analog input signals. Its analog input signal can be 4~20mA or 0~10VDC. Its EIM port can connect 4 EIM modules. Total number of I/O points can be selected by using different combination of EIM. DACV430B has an user interface device port. This MSnet port can connect to a LCD control panel for user control and monitor the system. DACV403B conforms international **BACnet** communication protocol and fully compatible with any BACnet system.



### (Features)

- Conforms to ASHRAE and ISO16484-1 defined BACnet AAC standard communication protocol, compatible with BACnet system.
- Uses Peer-to-Peer MS/TP communication system.
- The MSnet port can work with control panels MST20V, MST20S, DSP20 or other MODBUS RTU Master or Slave device.
- The EIM port can connect up to 4 EIM I/O expansion modules.
- High precision air pressure differential sensor, sense on either direction, measure at low air flow rate, fully IC packed to prevent dust pollution.
- Calibrate function in BACsoft for advantage of adjustment at site when air flow is stable.
- User's control program can be downloaded, edited and saved in flash memory of the controller.
- Real-time debug function, save programming time.
- Carry out calculations such as proportional, integral, differential, floating, logic, arithmetic and etc.
- 150 BV and 150 AV points.
- Real-time clock, 2 Calendars, 12 Schedules, 4 Notification Class, 20 Event Enrollments standard BACnet object. Schedules and event enrollments support external object access function.
- Standard floating point operation for analog point. Its large value range save additional work for ratio multiplication.
- The analog value adopts high precision floating-point calculation.
- Provide power failure backup function for all AI/BO/BV/AV values keep in FRAM for at least 10 years.
- Priority control array by 16 for all BO and BV points.
- Slide track design for space-saving and easy installation.

## [Specification]

Model	UI	во	AO	EIM	Note
DACV403B	4	0	3	4	Schedule, Alarm, R/W other devices available

Power Supply : 24VAC/VDC, 5VA (Minimum load)

Microprocessor : 32-bit high performance MCU, 64K RAM, 32K FRAM and 384K Flash memory.

Analog Input (UI) : 12-bit resolution, jumper selectable input signal type for 3K, 10K ohm NTC thermistor, 4~20mA or

0~10VDC.

Analog Output (AO) : 12-bit resolution, jumper selectable output signal type for 4~20mA or 0~10VDC.

Pressure Sensor : ±500Pa pressure differential sensor. Accuracy is ±3% of measure value.

**Auxiliary Power** 

Supply : Provide 24VDC/60mA power output for sensor application.

MS/TP Port : One MS/TP RS-485 port, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select,

2500Vrms electrical isolated protection and TVS ARRAY surge protection...

MSnet Port : One MSnet MODBUS RTU RS-485 port, communication speed 9,600/ 19,200/ 38,400bps,

adjustable. It works with master or slave device or control panel MST20V or DSP20U.

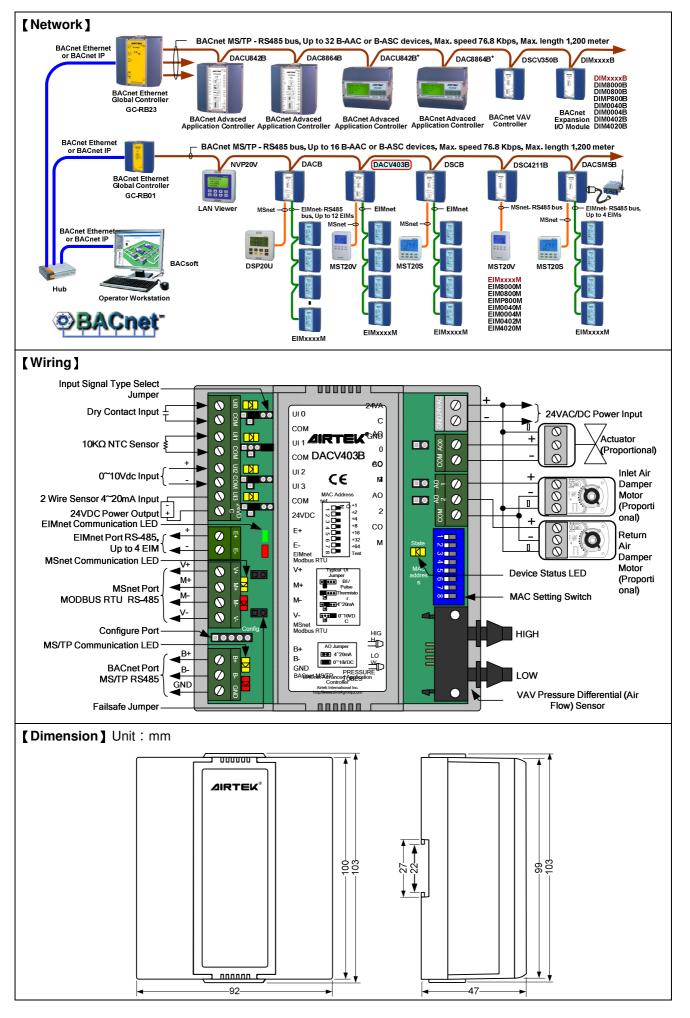
EIM Port : One Airtek RS-485 port, communication speed 38,400bps, works with 4 EIM I/O expansion

modules.

Environment :  $0 \sim 70^{\circ}$ C,  $0 \sim 95\%$ RH, non-condensing

Certification : EMC Directive 89/336/EEC (European CE Mark).





Please refer to http://www.airtek.com.au for the most recent updated information.