BACnet Field Control Device

BACnet VAV Controller

DSCV350B

[Description]

DSCV350B is a BACnet B-ASC 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 binary outputs are hot-switched triacs. Its analog input signal can be 4~20mA or 0~10VDC. DSCV350B has a user interface device port. This MSnet port can connect to a LCD control panel for user control and monitor the system. DSCV350B conforms international BACnet MS/TP communication protocol and fully compatible with any BACnet system. DSCV350B combines air pressure sensor and programmable function, provides a high precision VAV control



(Features)

- Conforms to ASHRAE and ISO16484-1 defined BACnet B-ASC standard communication protocol, compatible with BACnet system.
- With an MS / TP (Master-Slave / Token-Passing) port, uses Peer-to-Peer Master Slave/Token Passing communication mode.
- The MSnet port can work with control panels MST20V, MST20S, DSP20 or other MODBUS RTU Master or Slave device.
- The 12 bit universal input (UI) takes dry contact, pulse, 3K or 10K NTC thermostat, 4~20mA, or 0~10VDC input.
- Digital output (BO) is a 0.5A/24VAC Hot-Switched Triacs with a status LED.
- 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.
- Carry out calculations such as proportional, integral, differential, floating, logic, arithmetic and etc.
- 100 Binary Value (BV) and 100 Analog Value (AV) points, the analog value adopts high precision floating-point calculation.
- Standard floating point operation for analog point. Its large value range save additional work for ratio multiplication.
- Provide power failure backup function for all AI/BO/AO/BV/AV values keep in FRAM for at least 10 years.
- Priority control array by 16 for all BO, AO and BV.
- Can be edited online, download control logic program, and stored in flash memory, the program does not disappear because of long power outages.
- Support online real-time application debugging, greatly reducing editing time programmable logic.
- Mining slide design, space-saving, easy installation, plug-in terminal design adopted, with communication and device status lights for easy troubleshooting
- Technical staff in the field to adjust the air flow balance to compensate for variable air volume boxes installed or not the same type of error caused by.

[Specification]

Model	UI	во	AO	Description
DSCV350B	3	5	0	Can connect to MST20V, MST20S, or DSP20U control panel

Power Supply : 24VAC/VDC, 5VA.

Microprocessor : 32-bit high performance MCU, 10K RAM, 8K FRAM and 64K Flash memory.

Analog Input (UI) : 12-bit resolution, jumper selectable input signal type for 3K, 10K ohm NTC thermistor, 4~20mA or 0~10VDC.

Binary Output (BO) : 0.5A/24VAC hot-switched traics.

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

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

Supply

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.

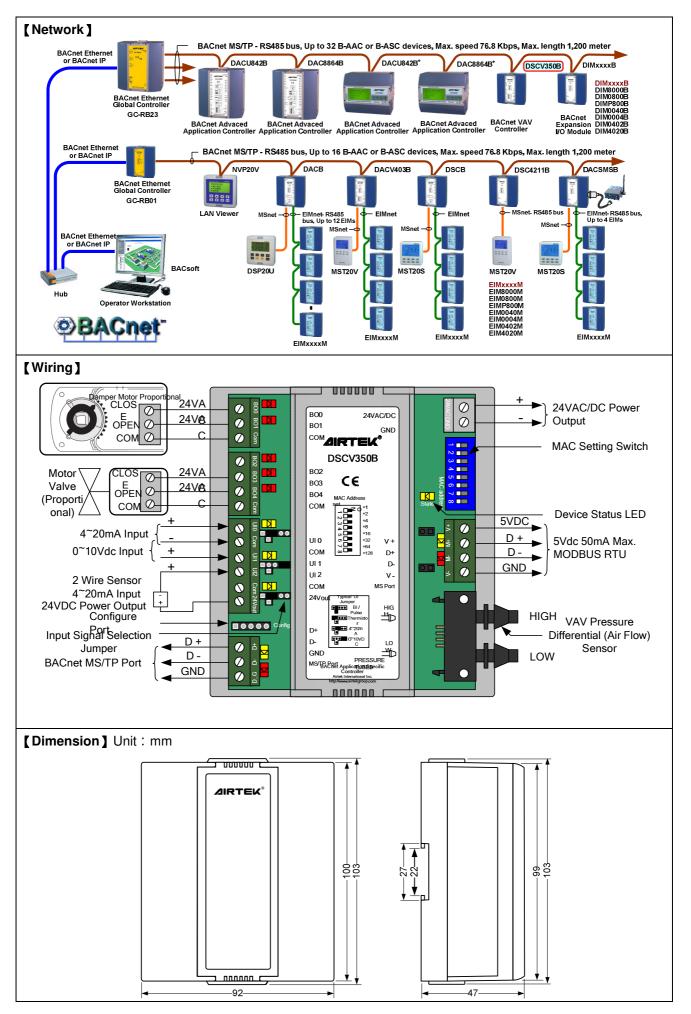
MSnet Port : One MSnet MODBUS RTU RS-485 port, communication speed 9,600/ 19,200/ 38,400bps,

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

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.