

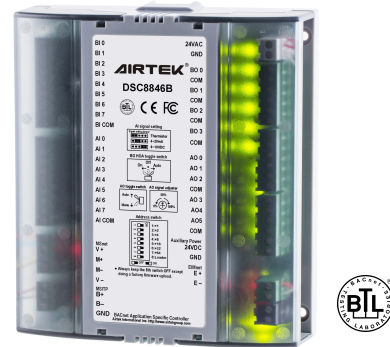
Field Control Layer Device

BACnet Application Specific Controller

DSC8846B

【Description】

DSC8846B is a standalone BTL listed BACnet B-ASC class programmable controller. It is designed for monitor and control of building mechanical Plant such as large AHU's, clean rooms, fume hoods, chillers, boilers etc. It uses 32-bit microprocessor, communication speeds up to 76,800 bps, transmission distance up to 1,200 meters. DSC8846B has 8 Binary Inputs(BI), 8 Analog Inputs(AI), 4 Binary Outputs (BO) and 6 Analog Outputs (AO). In addition, it has an EIMnet port can connect up to 12 EIM series of expansion modules, allowing an expansion in response to the needs of various applications. The MSnet port can connect to an external LCD control panel or Modbus devices using RTU protocol. The DSC8846B is a BTL listed device, and is fully compatible with any BACnet system.



【Features】

- BACnet Application Specific Controller (B-ASC) class listed device.
- An MS/TP (Master-Slave/Token-Passing) communication interface connect to the upper layer, global controller.
- An MSnet communication interface can connect an MST, DSP, DST control panel or a MODBUS RTU device.
- An EIMnet communication interface can connect up to 12 EIM I/O expansion modules, in response to the needs of various points
- RS-232 interface can be connected via an AD - Linker cable any Terminal program for change of configuration.
- Binary inputs (BI) with 1,000VDC optical coupling isolate capabilities and status indicators.
- Digital outputs (BO) optical coupling with 1,000 VDC isolation, status indicators, Triac. Each BO point has manually A-O-M toggle switch that can override the internal program, the toggle switch is internally monitored.
- Analog Input (AI) have 16-bit resolution, they can be jumper selected to accept 10KΩ NTC thermistor, 0~10VDC or 4~20mA input signal and binary input (dry contact).
- Analog Outputs (AO) have 16-bit resolution, 0~10VDC standard output signal. Each AO point has a manual A-M toggle switch with a adjustable pot that can override the internal program, the toggle switch is internally monitored.
- DDC control programs can be edited online, downloaded live and real-time debugging. Program algorithms such as enthalpy, dew point temperature, PID control, HVAC common computing functions, logarithms, trigonometric functions, roots and Advanced Math functions.
- All analog input (AI), digital output value (BO), analog output (AO), digital software point (BV), analog software point (AV) write to the FRAM. Gold capacitor hold the memory for up to 10 years.
- Onboard 100 Bv points (supports 16 Priority Array) and 100 Av points for calculation values, set points etc.

【Specification】

Model	BI	AI	BO	AO	EIM Q'TY	BV Points	AV Points
DSC8846B	8	8	4	6	12	100	100

Power Supply : 24VAC/Dc, 5VA.

Microprocessor : Dual 32-bit high performance MCU, 128K FRAM1M+128K+16K SRAM, 8M+1M+64K Flash memory.

Binary Input (BI) : 12VDC detection voltage, 1,000VDC optical coupling isolates, accepts dry contact or open collector signal.

Analog Input (AI) : 16-bit resolution, jumper selectable to accept 10KΩ NTC thermistor, 10VDC, or 4~20mA signal & Bi.

Binary Output (BO) : With 0.5A/24VAC/DC (Hot-switched triacs) outputs. With A-O-M switches, (internally monitored).

Analog Output (AO) : 16-bit resolution, 0~10VDC. With A-M switch and output signals with adjust pot (internally monitored).

MS/TP Port : 2-wire MS/TP RS-485 bus, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, max. length 1,200 meters, having 2500Vrms optical coupling isolate and TVS ARRAY surge protection.

MSnet Port : meters, or connect to MST, DSP or DST control panels.

EIMnet Port : RS-485 bus, communication speed 38,400 bps, max. length 1,200 meters, up to 12 EIMs.

Environment : 0~50°C, 20~90%RH, non-condensing

Certification : CE (EMC Directive 2004/108/EC), FCC(Part 15,Subpart B,Class A), UL916, BTL(BACnet Testing Laboratory Listed BACnet Application Specific Controller (B-ASC)).

【Network Architecture】

AIRTEK® Building Management & Control System Architecture

