

Field Control Layer Device

BACnet Application Specific Controller+Touch panel

DSC8864B

【Description】

The DSC8864B is an advanced, programmable, standalone logic controller that complies with the BTL B-ASC protocol specifications. It is designed for monitor and control building electromechanical device, large AHU, clean room, fume hood, large-scale end device control. It uses 32-bit microprocessor core, communication speed up to 76,800 BPS, transmission distance up to 1,200 meters. DSC8864B has 8 (BI), 8 (AI), 6 (BO) and 4 (AO). In addition, it has an EIMnet port can connect up to 12 EIM series of expansion modules, allowing you to expand in response to the needs of various points. Another MSnet port can connect an external LCD control panel to make user operation and control easily at the job site. DSC8864B conforms to international BACnet MS/TP communication protocol, and fully compatible with any BACnet system. It is absolutely the best product for your building.



DSC8864B

DSC8864B-T

【Features】

- Produced in accordance with the BTL B-ASC protocol specifications.
- MS/TP (Master-Slave/Token-Passing) communication interface connect to the upper layer, global controller.
- EIMnet interface can connect up to 12 I/O expansion modules, maximum limit less than 100 points.
- Binary input (BI) has 5,000Vrms optical coupling isolates capabilities and status indicator design.
- Binary output (BO) has 5,000Vrms optical coupling isolates and status indicators.
- Analog Input (AI) has 12-bit resolution, can be jumper selectable to accept 3K Ω or 10K Ω NTC thermistor, 0~5VDC, 0~10VDC, 0~20mA or 4~20mA input signal.
- Analog Output (AO) has 12-bit resolution, can be software selected as 0~10VDC or 2~10VDC output signal.
- The user's control program can be downloaded, online edited and saved in flash memory of the controller.
- 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.
- Priority control array by 16 for all BO, AO and BV.
- Provide power failure backup functions for all AI/BO/AO/BV/AV values keep in FRAM for at least 10 years.

【Specification】

Model	BI Points	AI Points	BO Points	AO Points	EIM Q'TY	BV Points	AV Points	Touch Panel
DSC8864B	8	8	6	4	12	100	100	X
DSC8864B-T	8	8	6	4	12	100	100	V

Power Supply: 24VDC/AC, 20VA.

Microprocessor: 32-bit high performance MCU, 20K RAM, 8K FRAM, and 128K Flash memory.

Binary Input (BI): 12VDC detection voltage, 5,000Vrms interference-resistant optical coupled isolation, accepts dry contact or open collector input signals.

Analog Input (AI): 12-bit resolution, jumper selectable to accept 3K/10K Ω NTC, 0~10VDC, or 4~20mA signal.

Binary Output (BO): 7A/250VAC non-voltage SPST contact output.

Analog Output (AO): 12-bit resolution, 0~10VDC output signal with manual operate switch and signal turning knob.

Auxiliary Power: 24VDC/160mA power supply for external sensor power supply.

MS/TP Port: RS-485, 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: RS-485, communication speed 9,600/ 19,200/ 38,400 BPS selectable, can connect to a MST..., DSP..., or DST...panel, or a MODBUS master or slave device.

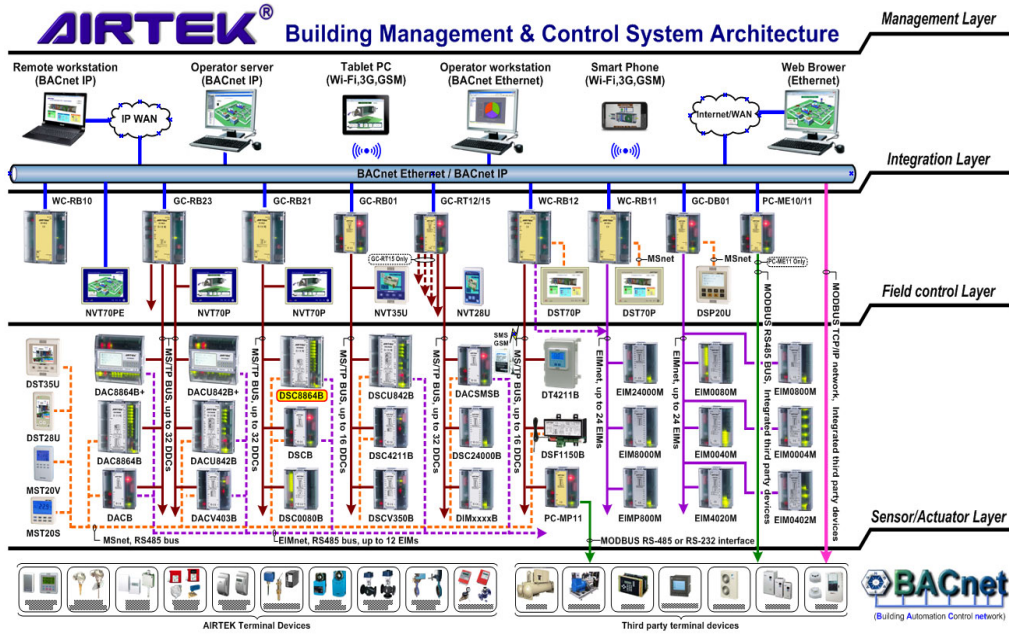
EIM Port: MODBUS RTU RS-485, communication speed 38,400 bps, connect to 12 EIMs.

Aluxiary Power: 24VDC, 200mA, for sensor use.

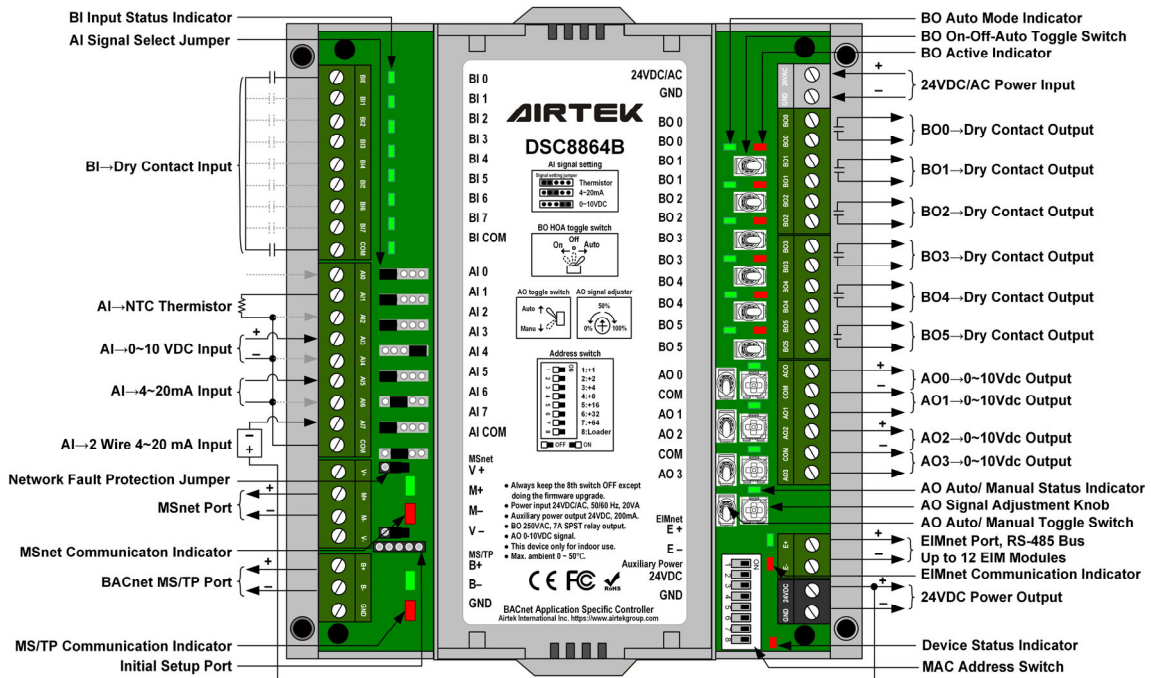
Environment: 0~50 $^{\circ}$ C, 5~95%RH, non-condensing

Certification: CE certified and compliant with the BTL B-ASC protocol specifications and RoHS

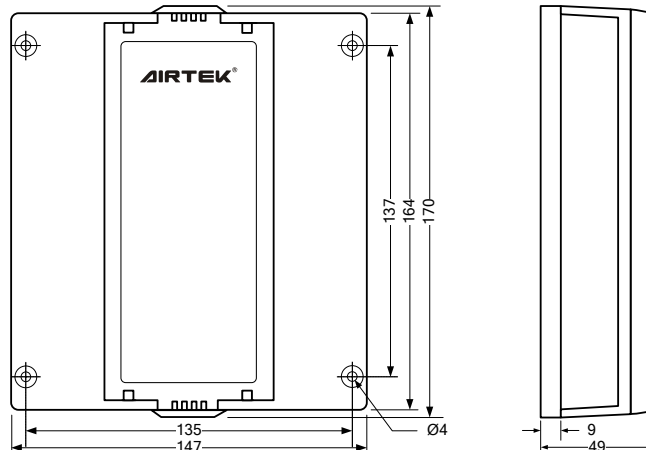
[Network Architecture]



[Wiring Diagram]



[Dimension] Unit : mm



Please refer to <https://www.airtekgroup.com/> for the most recent update information.