BACnet Field Control Device

BACnet Application Specific Controller

DSC4211B

【Description】

DSC4211B is a standalone BACnet B-ASC class programmable controller. It is designed for monitoring and control of building mechanical devices, small AHU's, clean rooms, fume hoods, small-scale end device control. It uses 32-bit microprocessor core, transmission rate up to 76,800 bps, transmission distance up to 1,200 meters. DSC4211B has 4 Binary Inputs (BI), 2 Analog Inputs (AI), 1 Binary Output(BO) and 1 Analog Output(AO). In addition, it has a MSnet port that can connect to an external LCD control panel or a Modbus device. DSC4211B conforms to international BACnet MS/TP communication protocol and fully compatible with any BACnet system.

【Features】

- Conforms to ASHRAE and ISO16484-1 defined BACnet B-ASC standard communication protocol, compatible with BACnet system.
- An MS/TP (Master-Slave/Token-Passing) communication interface connect to upper layer global controller.
- An MSnet communication interface can connect to a MST20V, MST20S, DSP20U control panel or a MODBUS RTU device.
- Binary Input (BI) has 5,000Vrms optical coupling isolator and status indicator design.
- Binary Output (BO) has 5,000Vrms optical coupling isolator, status indicators.
- Analog Input (AI) has 12-bit resolution, jumper selectable to accept dry contact,10KΩ NTC thermistor, 0~5VDC, 0~10VDC, 0~20mA, 4~20mA or Bi signals.
- Analog Output (AO) has 12-bit resolution, 0~10VDC or 2~10VDC signal.
- DDC control program can be downloaded live, edited and saved in flash memory of the controller.
- Supports many calculations such as proportional, integral, differential, floating, logic, arithmetic and etc.
- 100 Binary Value (BV) and 100 Analog Value (AV) points.
- Supports 16 x Priority Array control for all BO, AO and BV.
- The analog value adopts high precision floating-point calculation.
- Gold Capacitor provides power failure backup for up to 10 Years. Data for all AI/BO/AO/BV/AV are stored in FRAM.
- Slide track design for space-saving and easy installation.

【Specification】

Model	BI Points	AI Points	BO Points	AO Points	BV Points	AV Points
DSC4211B	4	2	1	1	100	100

Power Supply : 24VAC/VDC, 5VA.

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

Binary Input (BI) : 12VDC detection voltage, 5,000Vrms isolation optical coupling, accept dry contact or open collector signal.

Analog Input (AI) : 12-bit resolution, selectable to accept dry contact, 10KΩ NTC thermistor, 0(2)~10VDC or 0(4)~20mA.

Binary Output (BO) : 5A/250VAC non-voltage SPST contact outputs, with 5,000Vrms optical coupling isolator.

Analog Output (AO) : 12-bit resolution, 0~10VDC or 2~10VDC output signal.

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

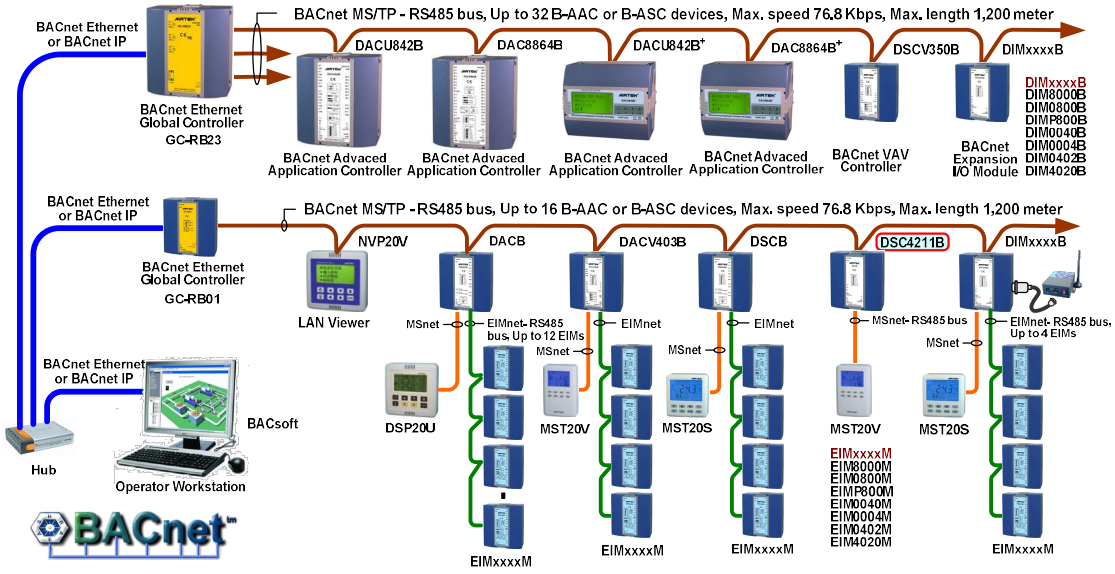
MS/TP Port : 2-wire MS/TP RS-485 bus, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, max. length 1,200 meters, with 2500Vrms optical coupling isolator and TVS ARRAY surge protection.

MSnet Port : 2-wire MODBUS RTU RS-485 bus (Master/Slave), communication speed 9,600 bps, or connect to a MST20V, MST20S, DSP20U control panel, a maximum cable run length 100 meters.

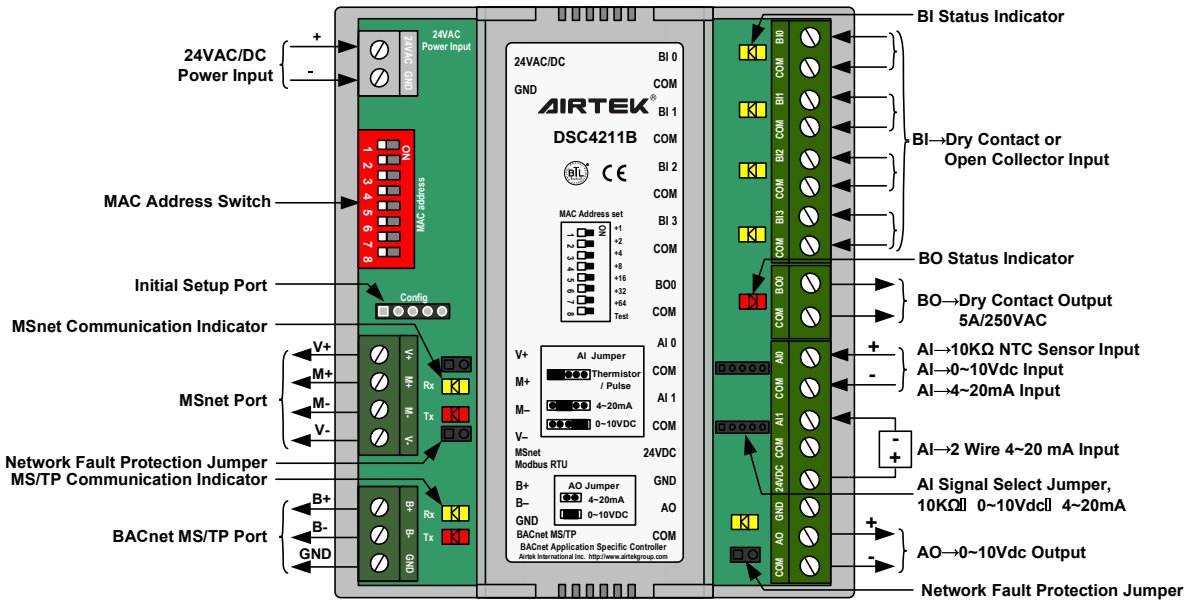
Envirenment : 0~70℃, 0~95%RH, non-condensing

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

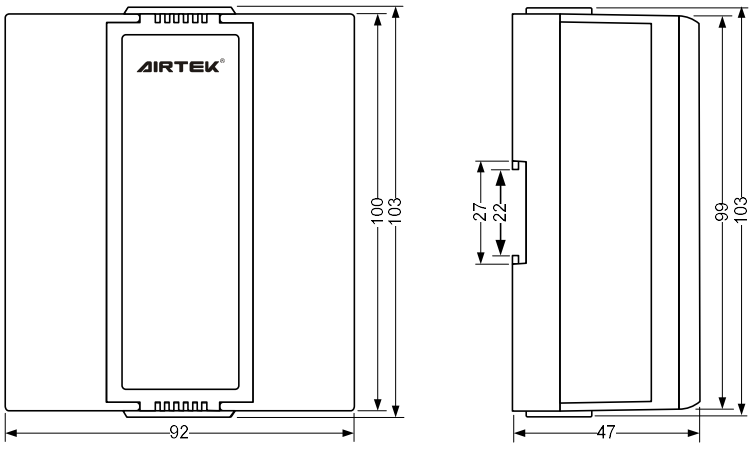
【Network】



【Wiring】



【Dimension】 Unit : mm



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