

BACnet Field Control Device

Digital I/O Expansion Module



DIM..M

【Description】

DIM....B is a standalone BACnet B-ASC class controller. It is designed for monitoring and control of building electromechanical devices such as AHU's, clean rooms, fume hood's, end device control. It uses 32-bit core microprocessor, transmission rates selectable up to 76,800 bps and transmission distance up to 1,200 meters. The binary and pulse inputs are optical isolated to 5,000Vrms (noise protection), Binary inputs accept dry contact or open collector signal, Pulse inputs accept up to 100HZ per sec. The binary outputs are a 5A/250VAC/SPST relay dry contact. The physical points of DIM modules are read/write capable from any Bacnet device on a MSTP Lan. DIM expansion modules are a low cost option for remote control making the arrangement of control points flexible and cost effective. DIM....B conforms to international BACnet MS/TP communication protocol and is fully compatible with any BACnet system.



DIM8000B



DIMP800B



DIM0040B



DIM4020B

【Features】

- Conforms to ASHRAE and ISO16484-1 defined BACnet MS/TP standard communication protocol, compatible with BACnet system.
- A n MS/TP (Master-Slave/Token-Passing) communication interface, with Peer to Peer function.
- Binary Input (BI) and Pulse Input (PI) have 5,000Vrms optical isolation capability and status indicator design.
- Binary Output (BO) have 1,000Vdc optical isolation, status indicators and manual on/off/auto selection switch.
- 8 MAC Address DIP switches for address 0~127.
- Can remotely located for reduction of cable runs.
- Slide track design for space-saving and easy installation.
- Plug-in terminal blocks and LED Indicators of communication and status are convenient for system debugging.

【Specification】

Model	BI Points	BO Points	PI Points	BV Points	Max. number of DIM module on each MS/TP network			
					GC-RB01	GC-RT12	GC-RB21/23	WC-RB12
DIM8000B	8	0	0	8	16	32	32	32
DIMP800B	0	0	8	8				
DIM0040B	0	4	0	4				
DIM4020B	4	2	0	6				

Power Supply : 24VAC/DC, 2 VA.

Microprocessor : 32 bit high speed processor (MCU).

Binary Input (BI) : Accept dry contact or open collector signal, having 5,000Vrms optical coupling isolator.

Pulse Input (PI) : Hi speed pulse rate to 100hz per sec open collector or dry contact , having 5,000Vrms optical coupling isolator.

Binary Output (BO) : 5A/250VAC SPST dry contact output, with 1,000Vrms optical isolation and override switch.

MS/TP Port : MS/TP RS-485 bus, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, 2500Vrms electrical isolation protection and TVS ARRAY surge protection.

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

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

【Wiring】

- DIM..B require 24VAC/DC power supply. Do not share the same power supply with the other equipment.
- DIM..B network communications uses RS-485 transmission, please use wire 2Core, AWG18 ~22 shielded twisted configuration.
- Do run communication cable with or near power cables or other power carrying conductors to avoid interference.
- RS-485 network must comply with Daisy chain (one in one out rule) to configuration, do not use T shape or star shape configuration.
- RS485 network should be terminated with 120Ω termination resistors at both end, the total length should not exceed 1,200 meters.
- The inputs of DIM modules should use AWG 22 overall shielded cable.
- **Warning!** The on board Auto/OFF/Manual switch will override the remote communication commands of BO points.
- The binary output of DIM modules are a dry contact rated at 5A/250VAC capacity, do not control the electric device exceed this capacity.

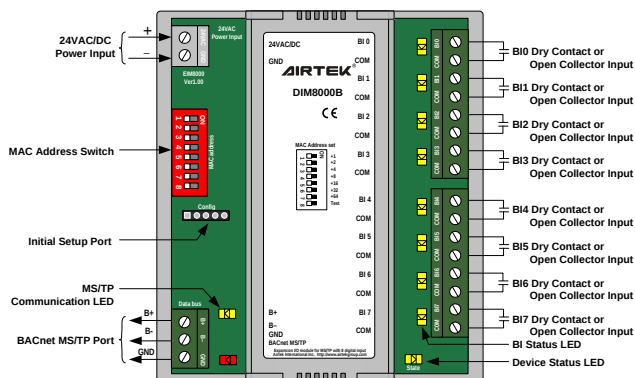


FIG. 1 DIM8000B

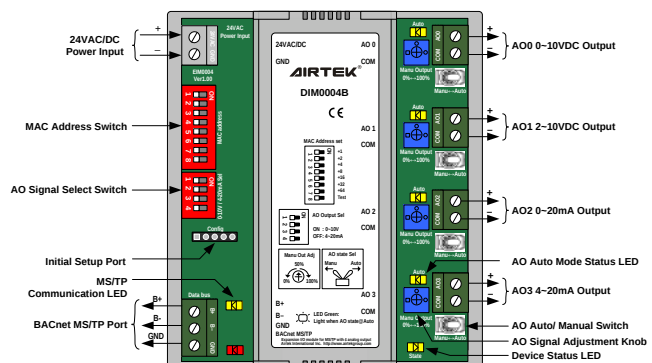


FIG. 2 DIM0040B

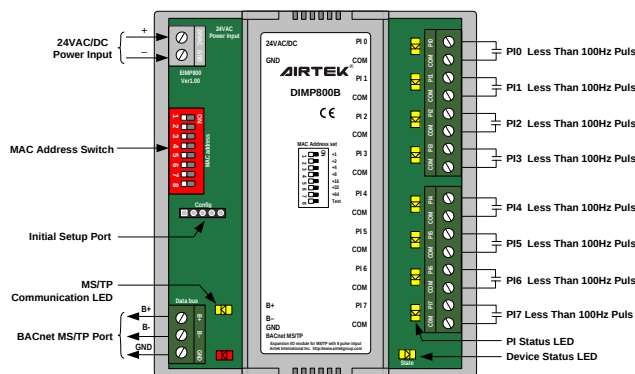


FIG. 3 DIMP800B

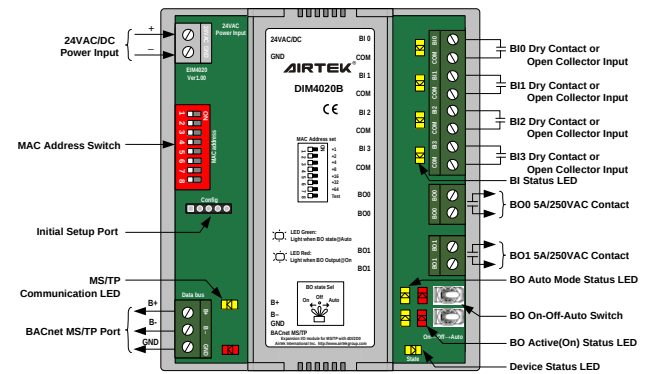
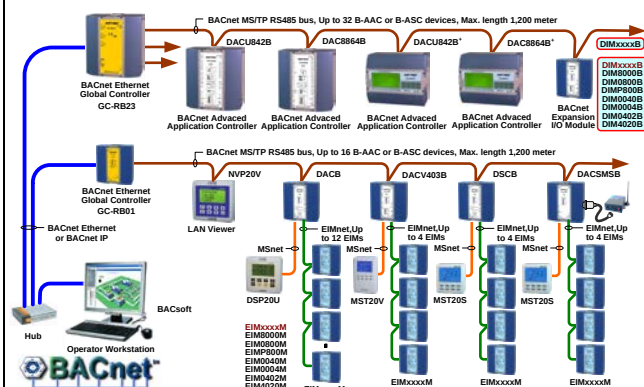


FIG. 4 DIM4020B

【Network】



【Dimensions】 unit : mm

