Field Control Layer Device

BACnet Advance Application Controller

DAC8846B

[Description]

DAC8846B is a BTL listed standalone BACnet B-AAC class programmable controller. 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, With a programmable control functions, and supports time schedule, Calendar, alarm (Event enrollment) etc. DAC8846B has 8 Binary Inputs(BI), 8 Analog Inputs(AI), 4 Binary Outputs(BO) and 6 Analog Outputs (AO). In addition it has an ElMnet port can connect up to 12 ElM 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. DAC8846B is a BTL listed device, and fully compatible with any BACnet system. It is absolutely the best product for your building.



[Features]

- Made in accordance with the BACnet communication protocol established by the American Heating, Refrigeration and Air-Conditioning Association (ASHRAE), and passed the BTL B-AAC level certification.
- With Peer to Peer peer-to-peer data transmission and sharing functions and the ability to read and write external controller objects, it can read single or multiple data (DS-RP-A/DS-RPM-A) and change the value setting (DS-WP-A).
- Built-in 32-bit microprocessor 128K FRAM, 1M+128K+16K SRAM and 8M+1M+64K Flash memory.
- Built-in MS/TP master and servant token communication interface, with 2,500Vrms anti-interference potential isolation design.
- Built-in RS-232 communication interface, through the AD-Linker connection line and hyper terminal machine program, the initial value of the
 equipment can be set or parameter modification.
- Digital input point (BI), with 5.000Vrms anti-interference optical coupling isolation capability and status indicator design.
- Analog input point (Al), with 16-bit resolution, can accept 3K or 10KΩ NTC thermistor, 4~20mA or 0~10VDC and other signals.
- Digital output point (BO), with 24VAC, 0.5A, hot-switched triacs (Hot-switched triacs), with 7,500Vpeak anti-interference optical coupling
 isolation device, status indicator light and HOA (manual/stop/automatic) switch And with the switching state feedback monitoring function.
- Analog output point (AO), with 16-bit resolution, 0~10VDC output signal, with HA (manual/automatic) switch and with switching state feedback
 monitoring function and manual signal output adjustment knob to facilitate on-site test run Adjustment and maintenance work is carried out.
- With online program editing, debugging, online program download and online firmware update functions.
- It has common function calculation functions such as enthalpy value, dew point temperature, PID control, and advanced mathematical function calculation functions such as logarithm, trigonometric function, and root sign.
- With BACnet standard objects such as Calendar, Schedule, Notification Class, Event enrollment, etc.; Timetable and alarm event registration support external object access functions.
- It has 150 digital software points (BV) and 150 analog software points (AV), which can be used as calculation values, set points, timers or warning points, etc.
- All analog input cumulative value (AI), digital output value (BO), analog output value (AO), digital software point (BV), analog software point (AV) all have power-off memory function, which can be automatically when power is off Data can be stored in FRAM for more than 10 years.
- All BO, AO and BV points support 16-bit priority control function.

[Specification]

| Ī | Model | BI | Al | во | AO | EIM Q'TY | Calendars | Schedules | Notification | Event | BV Points | AV Points |
|---|----------|----|----|----|----|----------|-----------|-----------|--------------|-------|-----------|-----------|
| Ī | DAC8846B | 8 | 8 | 4 | 6 | 12 | 2 | 12 | 4 | 20 | 150 | 150 |

Power Supply : 24VAC, 35VA.

Comparison of the Compari

Binary Output (BO): With 0.5A/24VAC (Hot-switched triacs) output. With manual on / off / auto switch, can monitor the status.

Analog Output (AO): 16-bit resolution, 0~10VDC. With manual / automatic switch and output signals adjust knob.

MS/TP Port : MS/TP MODBUS RS-485, communication speed 9,600/ 19,200/ 38,400/ 76,800 bps, auto select, max. length

1,200 meters, having 2500Vrms optical coupling isolator and TVS ARRAY surge protection.

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

connect to comtrol panel.

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

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

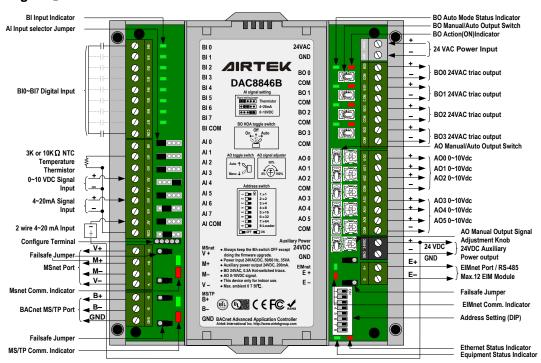
Real Time Clock : A build-in gold capacitor can back up real time clock after power failure.

Environment : 0~50°C, 20~90%RH, non-condensing. **Certification** : BTL(B-AAC), UL916, CE, FCC, and RoHS



[Network Architecture] Management Layer **Building Management & Control System Architecture** Operator workstation (BACnet Ethernet) 200 (((***))) (((***))) Integration Layer Field control Layer DST35U 1 DST28L Sensor/Actuator Layer h 7-17 00

[Wiring Diagram]



[Dimension] Unit: mm

