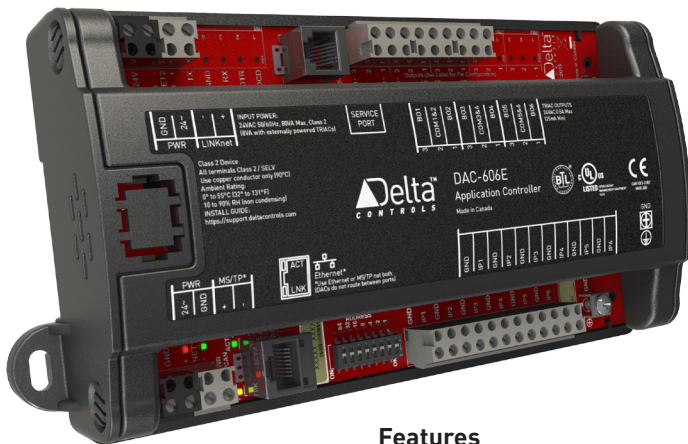# Application Controllers

DAC-606 / DAC-606E

Description
The DAC-606 is a fully programmable, Native BACnet® Advanced Application Controller that either communicates on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet (DAC-606E) or an RS-485 LAN using the BACnet MS/TP protocol (DAC-606). It is designed for a wide-range of applications that have small local I/O requirements. It also supports BACstat® network sensors and other Delta LINKnet devices.

Application
The DAC-606 is suitable for controlling various packaged units and equipment with small I/O requirements such as fan coil units, unit ventilators, heat pumps, and small boilers or chillers.

The fully programmable DAC-606 can be tailored to specific applications by creating and modifying BACnet objects and GCL+ programs.

Features
▶ Native BACnet firmware

▶ Fully programmable in GCL+

▶ Maintenance free super capacitor for real-time clock and SRAM backup on DAC-606E

▶ Supports 6 BACstat network sensors on LINKnet for room sensing and control or 2 Delta Field Modules on LINKnet for I/O expansion

▶ Firmware upgrade and database load/save over the network

▶ Supports Modbus® capability via flash loading in the field

▶ Service port

▶ Screw or DIN rail mountable

▶ LED indicator for each output, power, CPU and SCAN status

Specifications

BACnet Device Profile
BACnet Advanced Application Controller (B-AAC)

Inputs
6 Universal Inputs (10-bit), supporting:
    0-5 VDC
    0-10 VDC
    10 kΩ Thermistor
    Dry Contact (using 10 kΩ Thermistor jumper setting)
    4-20 mA

Outputs
6 Binary TRIAC Outputs (jumper configured for internal or external power)

Device Addressing
Software addressed

Connectors
Removable screw-type terminal connectors
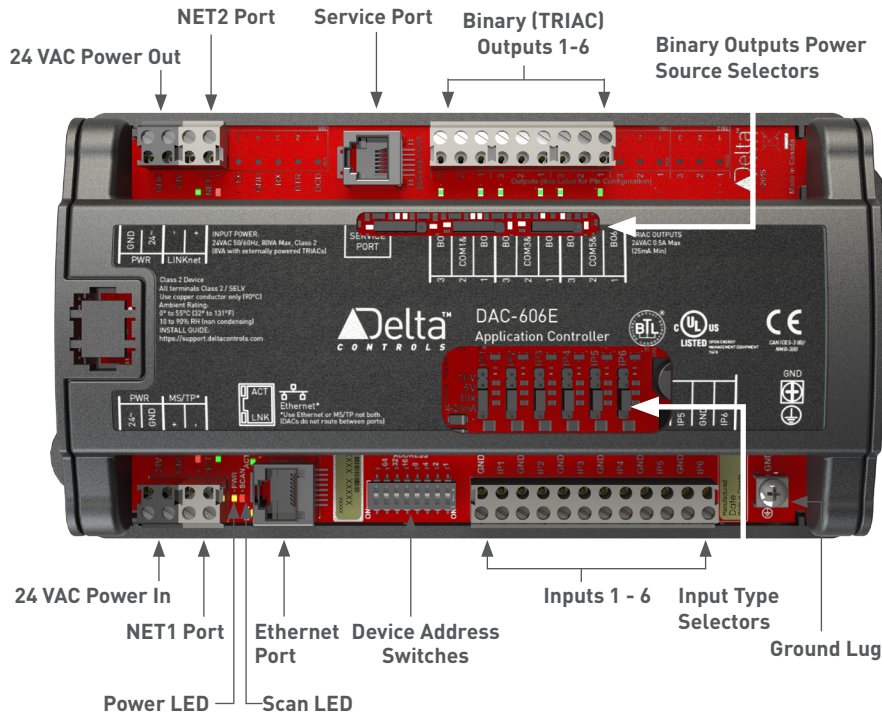
Wiring Class
Class 2 /SELV

BACstat is a registered trademark of Delta Controls Inc. BACnet is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Updated February 2016

Application Controllers

DAC-606E: Board Layout Diagram

24 VAC Power Out   **NET2 Port**   **Service Port**   **Binary (TRIAC) Outputs 1-6**   **Binary Outputs Power Source Selectors**

24 VAC Power In   **NET1 Port**   **Ethernet Port**   **Device Address Switches**   **Inputs 1 - 6**   **Input Type Selectors**   **Ground Lug**

Power LED   **Scan LED**

Specifications (Continued)

Power
24 VAC 50/60 Hz @ 8 VA, 80 VA with fully-loaded TRIAC Outputs

Technology
(non-Ethernet version)
16-bit processor
1 MB Flash memory
127 KB SRAM memory for database

(Ethernet version)
16-bit processor
2 MB Flash memory
319 KB SRAM memory for database
Super Capacitor for 72-hour backup of real-time clock and SRAM

Communications Ports
Twisted-Pair Ethernet
(10-BaseT) @ 10 MB, BACnet IP, BACnet over Ethernet

Main LAN (NET1)
BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps (default), max of 99 devices per BACnet MS/TP network

SubLAN (NET2)
Delta LINKnet @ 76800 bps, max 6 devices on LINKnet, with no more than 2 DFM devices

Ambient
32° to 131°F (0° to 55°C)
10 to 90% RH (non-condensing)

Dimensions
8½ x 4¼ x 1¹⁵/₁₆ in. (21.8 x 10.7 x 4.9 cm) with housing

Weight
0.80 lb. (360 g) with housing

Compliance
CE
FCC

Listings
C-UL Listed
BTL Listed
UL 916 Listed
UL 864 Listed for UL 864 product numbers

Ordering
Order the DAC-606 with the desired options according to the following product numbers:

DAC-606	Delta Application Controller 6 inputs, 6 BOs
DAC-606E	6 inputs, 6 BO's, Ethernet
DAC-606-UL864-340	6 inputs, 6BO's, UL 864 Listed

Accessories

DZNR-768	Delta Network Repeater for BACnet MS/TP*
TRM-768	Delta Network Terminator for BACnet MS/TP*
CON-768BT	Bluetooth wireless service tool

* UL 864 versions available

Subject to change without notice.