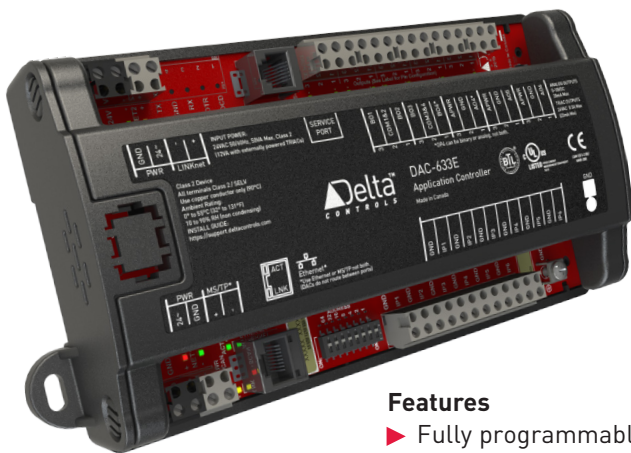


▶ Application Controllers

DAC-633 / DAC-633E

Description

The DAC-633 is a fully programmable, Native BACnet® Advanced Application Controller that communicates on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet (DAC-633E), or on an RS-485 LAN using the BACnet MS/TP protocol (DAC-633). It is designed for a wide-range of applications that have small local I/O requirements. It also supports BACstat® and other Delta LINKnet devices.



Application

The DAC-633 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-633 can be tailored to specific applications by creating and modifying BACnet objects and GCL+ programs.

Features

- ▶ Fully programmable
- ▶ Super Capacitor for real-time clock and SRAM backup (requires no maintenance) on DAC-633E
- ▶ Supports 6 BACstat network sensors on LINKnet for room sensing and control or 2 Delta Field Modules on LINKnet for I/O expansion
- ▶ Actuator power terminal (24 VAC) for each analog output (powered internally or from an auxiliary transformer)
- ▶ Firmware upgrade and database load/save over the network
- ▶ Optional field upgrade to Modbus® RTU with hardware key
- ▶ 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), jumper configurable for:
0-5 VDC
0-10 VDC
10 kΩ Thermistor
Dry Contact (using 10 kΩ Thermistor jumper setting)
4-20 mA

Outputs

3 Binary TRIAC Outputs
24 VAC @ 0.5 A max per output
Leakage Current 100 μA, min current 25 mA
Jumper configured for internal or external power

2 Analog Outputs
0-10 VDC @ 20 mA max per output
Software configurable as binary or analog

1 Universal Output
Configurable as either 0-10 V or 24 VDC FET

Device Addressing

Set via DIP switch and jumpers, or software setup

Connectors

Removable screw-type terminal connectors

Wiring Class

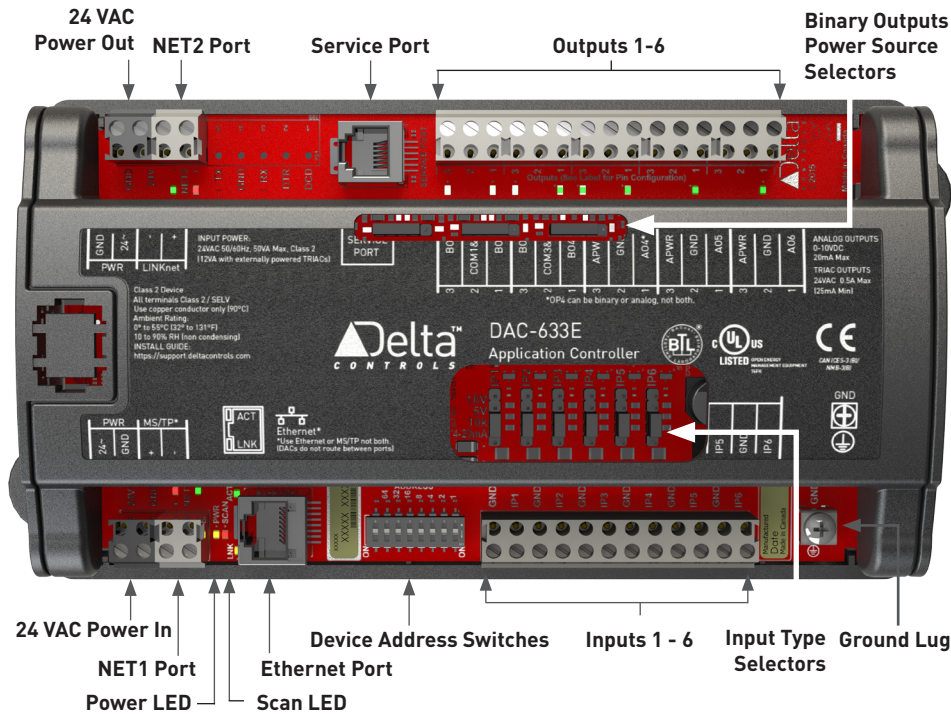
Class 2 / SELV

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-633E: Board Layout Diagram



Specifications (Continued)

Power

24 VAC 50/60 Hz @ 50 VA with fully-loaded binary outputs

Power (UL 864)

24 VAC 50/60 Hz @ 12 VA, 50 VA with fully-loaded binary outputs

Technology

(non-Ethernet version)

- 16-bit processor
- 1 MB Flash memory
- 128 KB SRAM memory for database

(Ethernet version)

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

Communications Ports

Main LAN

- Ethernet (10-BaseT)
 - BACnet IP, BACnet over Ethernet
- or
- RS-485 NET1
 - BACnet MS/TP up to 76800 bps, max 99 devices per port

SubLAN

- RS-485 NET2
- Delta LINKnet up to 76800 bps, max 12 devices on LINKnet with no more than 2 DFM devices
- Optional Modbus up to 38400 bps, max 5 devices

Ambient

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

Dimensions

8½ x 4¼ x 1½/16 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
UL 916 Listed
BTL Listed
UL 864 Listed for UL 864 product numbers

Subject to change without notice.

Ordering

Order the DAC-633 with the desired options according to the following product numbers:

DAC-633	Delta application controller 6 universal inputs, 3 analog outputs, 3 binary TRIAC outputs
DAC-633E	6 universal inputs, 3 analog outputs, 3 binary TRIAC outputs, Ethernet
DAC-633-UL864-340	6 universal inputs, 3 analog outputs, 3 binary TRIAC outputs, 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
DFF099-CDT	Additional 50 credit blocks for the Modbus flash key
DFF099-KEY	Modbus flash upgrade key with 50 credits pre-loaded

* UL 864 versions available