

System Controllers

DSC-1146E

Description

The DSC-1146E is a fully programmable, Native BACnet® Building Controller that communicates on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet, or on an RS-485 LAN using the BACnet MS/TP protocol. The DSC-1146E is designed for a wide-range of applications that have medium local I/O requirements. It also supports BACstat® and other Delta LINKnet devices.



Application

The DSC-1146E is suitable for controlling various packaged units and equipment with medium I/O requirements such as small air handling units, boilers and chillers.

The fully programmable DSC-1146E can be tailored to specific applications by creating and modifying BACnet objects and GCL+ programs.

Features

- ▶ Fully programmable in GCL+
- ▶ Super capacitor for real-time clock and SRAM backup which requires no maintenance
- ▶ Supports 12 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 (can be 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 output, power, CPU and SCAN status

Specifications

BACnet Device Profile

BACnet Building Controller (B-BC)

Inputs

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

Outputs

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

4 Analog Outputs (0-10 VDC)

Device Addressing

Set via DIP switches and jumper, or software setup

Connectors

Removable screw-type terminal connectors

Wiring Class

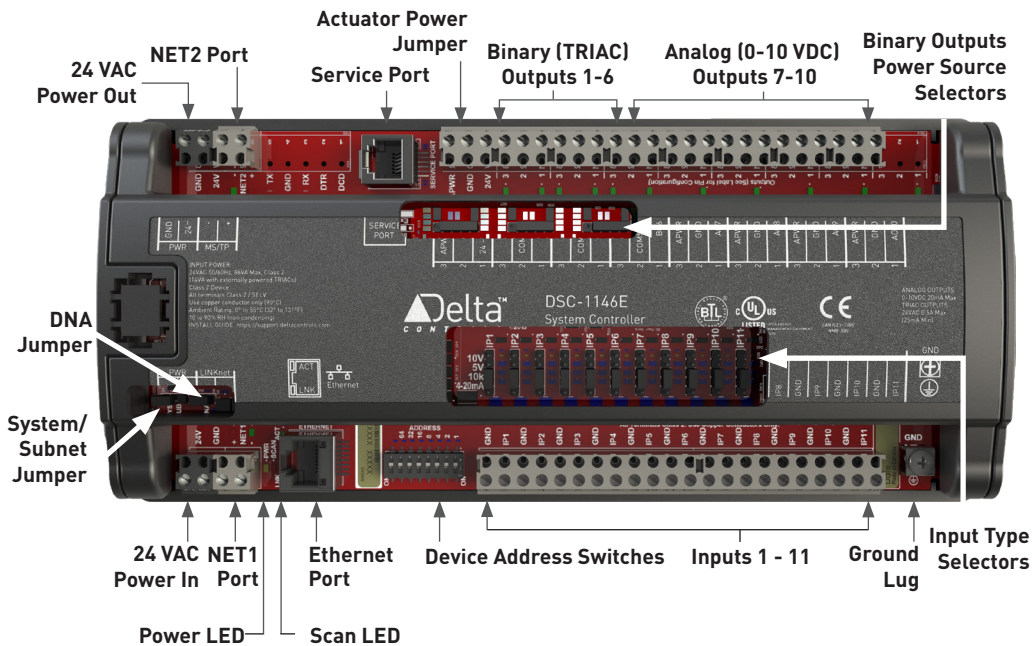
Class 2 / SELV

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).
Modbus is a registered trademark of Schneider Automation.

Updated May 2019

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DSC-1146E: Board Layout Diagram



Specifications (Continued)

Power

24 VAC @ 14 VA, 86 VA with fully-loaded Binary Outputs

Technology

16-bit processor
2 MB (16-megabit) flash memory
319 KB SRAM memory for database
Real-time clock
Super capacitor for 72-hr backup of real-time clock and SRAM

Communications Ports

Ethernet (10-BaseT)
BACnet IP, BACnet over Ethernet

2 RS-485 NET1, NET2 supporting:
BACnet MS/TP up to 76800 bps, max 99 devices per port

Delta LINKnet up to 76800 bps, max 12 devices on LINKnet with no more than 2 DFM devices (1 port only)

Optional Modbus up to 68400 bps, max 5 devices (1 port only)

Ambient

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

Dimensions

26.2 x 10.7 x 4.9 cm
(10⁵/₁₆ x 4¹/₄ x 1¹⁵/₁₆ in.) with housing

Weight

435 g (0.959 lbs) with housing

Compliance

CE
FCC
EAC

Listings

C-UL Listed
UL 916 Listed
BTL Listed



Subject to change without notice.

Ordering

Order the DSC-1146E with the desired options according to the following product numbers:

DSC-1146E	Delta System Controller 11 inputs, 4 analog outputs, 6 binary outputs
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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