

System Controllers

DSC-T305

Description

The DSC-T305 is a fully programmable, Native BACnet™ Building Controller that communicates on an RS-485 LAN using the BACnet MS/TP protocol. The DSM-T305's attractive housing includes an LCD display with a wide-angle view and an intuitive keypad.



Application

The DSC-T305 features an LCD with keypad that can be used as a stand-alone interface for a building network to set equipment schedules, adjust setpoints, and adjust network time.

This controller's I/O configuration is suitable for various applications such as packaged Roof-top Units, Fan Coil Units, Unit Ventilators and Heat Pumps. Because of its programming capability, the DSC-T305 can be used to create or modify GCL+ programs and BACnet objects for specific applications.

The SubLAN may be configured to support Delta BACstats and other Delta LINKnet I/O devices.

Features

- Native BACnet firmware
- BACnet MS/TP communications
- 4/8/16 button keypad
- Fully programmable in GCL+
- Programmable LCD with backlight
- Application database can be loaded over the network
- Controller firmware can be flash loaded over the network
- Derived Network Addressing (DNA) for simple integration into a standard network architecture
- Subnetwork can be configured for BACnet MS/TP or expansion I/O
- Real-time clock with battery backup
- Battery backup
- RS-232 Serial Port
- Service port

Specifications

BACnet Device Profile

BACnet Building Controller (B-BC)

LCD

Large font 4-digit alpha numeric display (for time, object value or units)

Small font 4-digit alpha numeric display (for time or units display)

12-digit alpha numeric display (for object names, menu commands and options)

10 display icons representing different functions

Backlighting

Keypad

4 or 8 or 16 buttons (suitable for different applications)

Security door

Temperature Sensor

Thermistor input - 10kΩ at 77°F (25°C)

Accuracy +/-0.4°F from 32-158°F (+/- 0.2°C from 0-70°C)

Display resolution of 0.1°

Stability 0.24°F over 5 years (0.13°C)

External Inputs

3 Universal inputs - 10 bit (supporting 0-5v, 0-10v, 10kΩ)

External Outputs

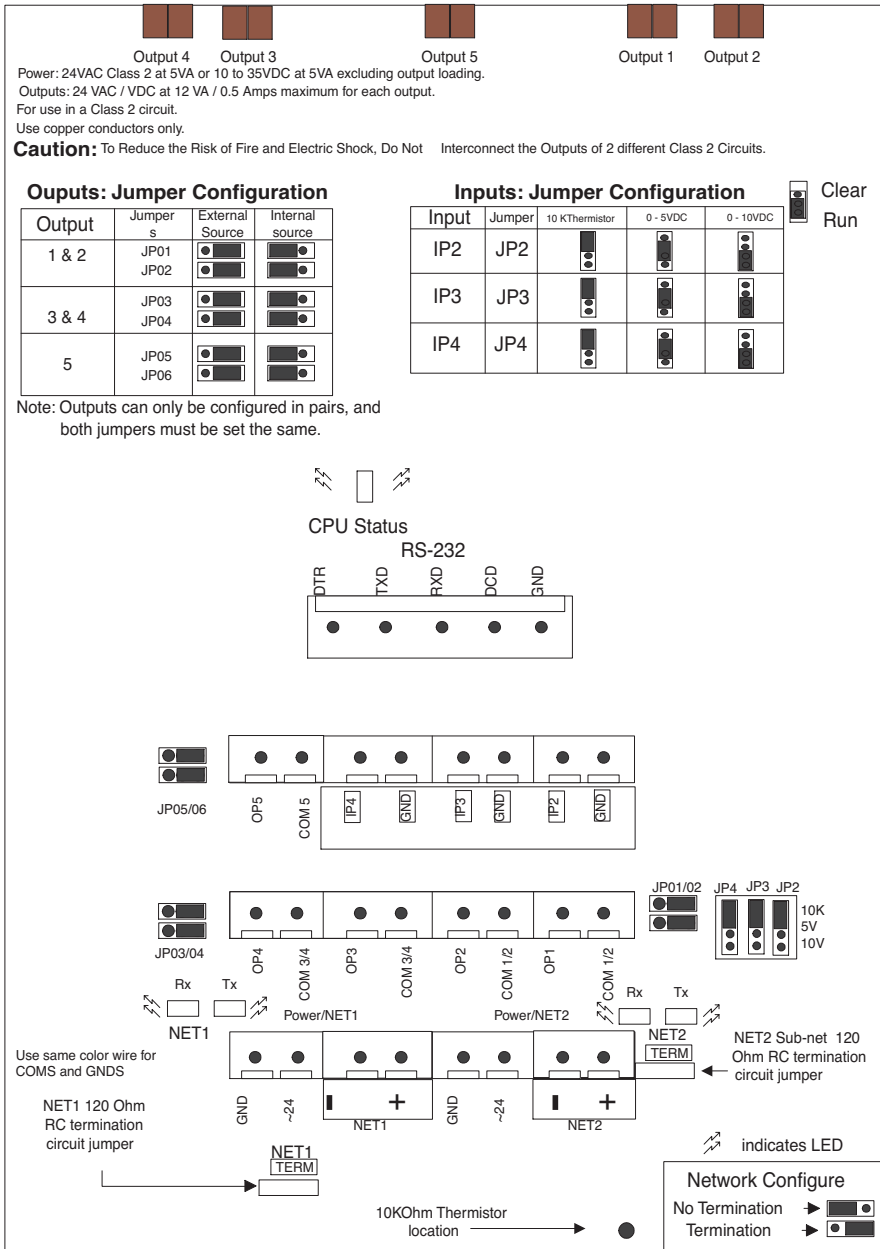
5 Binary FET outputs (AC or DC switching or PWM)

Jumper selection for internal or external power on binary outputs

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DSC-T305: Board Layout Diagram



Specifications (Continued)

Technology

32 bit processor
 1MB (8 megabit) Flash memory

319 KB SRAM for database

Real-time clock with Lithium battery and SRAM backup

CPU status LED

Device Addressing

Set via keypad configuration setup or software setup

Communications Ports

Main LAN (NET1)
 BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps (default)

SubLAN (NET2)
 BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps, Delta LINKnet @ 76800 bps (maximum 12 devices on LINKnet, with no more than 4 DFM/DNT devices)

Serial RS-232 BACnet PTP
 (RS-232 9600, 19200 or 38400)

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DSC-T305: Ordering Options

Accessories

RPT-768—Delta Network Repeater for BACnet MS/TP

TRM-768—Delta Network Terminator for BACnet MS/TP

DTT970—Delta Termination Tool
(Handle Assembly and Crimp Die)

DTK971-2 RC Term Kit (2-Pin, 18 Gauge, Qty-10)

DTK971-4 RC Term Kit (4-Pin, 18 Gauge, Qty-10)

DTK973-2 RC Term Kit (2-Pin, 24 Gauge, Qty-10)

DTK972-5 RC Term Kit (5-Pin, 22 Gauge, Qty-10)

Ordering

Order the DSC-T305 with the desired options according to the following product numbers:

DSC-T305-xxx—Controller, No Backlighting

DSC-T305B-xxx—Controller with Backlighting

xxx- Append the keypad code to specify the desired buttons

An appended keypad and door code must be included to specify the desired model as follows:

Keypad Code & Description

G1A: General - 4 Buttons

G1B: General - 16 Buttons

G2A: General w/Fan Speed - 8 Buttons

G2B: General w/Fan Speed - 16 Buttons

G3A: General w/Time & Date - 8 Buttons

H2A: Hotel w/Fan Speed - 8 Buttons

K1A: Keypad Applications - 16 Buttons

See the following page for a pictorial representation of the keypad buttons.

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● Indicates row of buttons is exposed through door.

