

Network Thermostats DNT-T305

Description

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



Application

The DNT-T305 is suitable for various room applications with small I/O requirements such as Fan Coil Units, Unit Ventilators and Heat Pumps.

Because of its programming capability, the DNT-T305 can be used to create or modify GCL+ programs and BACnet objects for specific applications.

Features

- Native BACnet firmware
- BACnet MS/TP communications
- Attractive wall-mount housing
- 4/8/16 button keypad
- Fully programmable in GCL+
- Programmable LCD with optional backlighting
- 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
- Service port

Specifications

BACnet Device Profile

BACnet Advanced Application Controller (B-AAC)

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 or options)

10 display icons representing different functions

Keypad

4, 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)

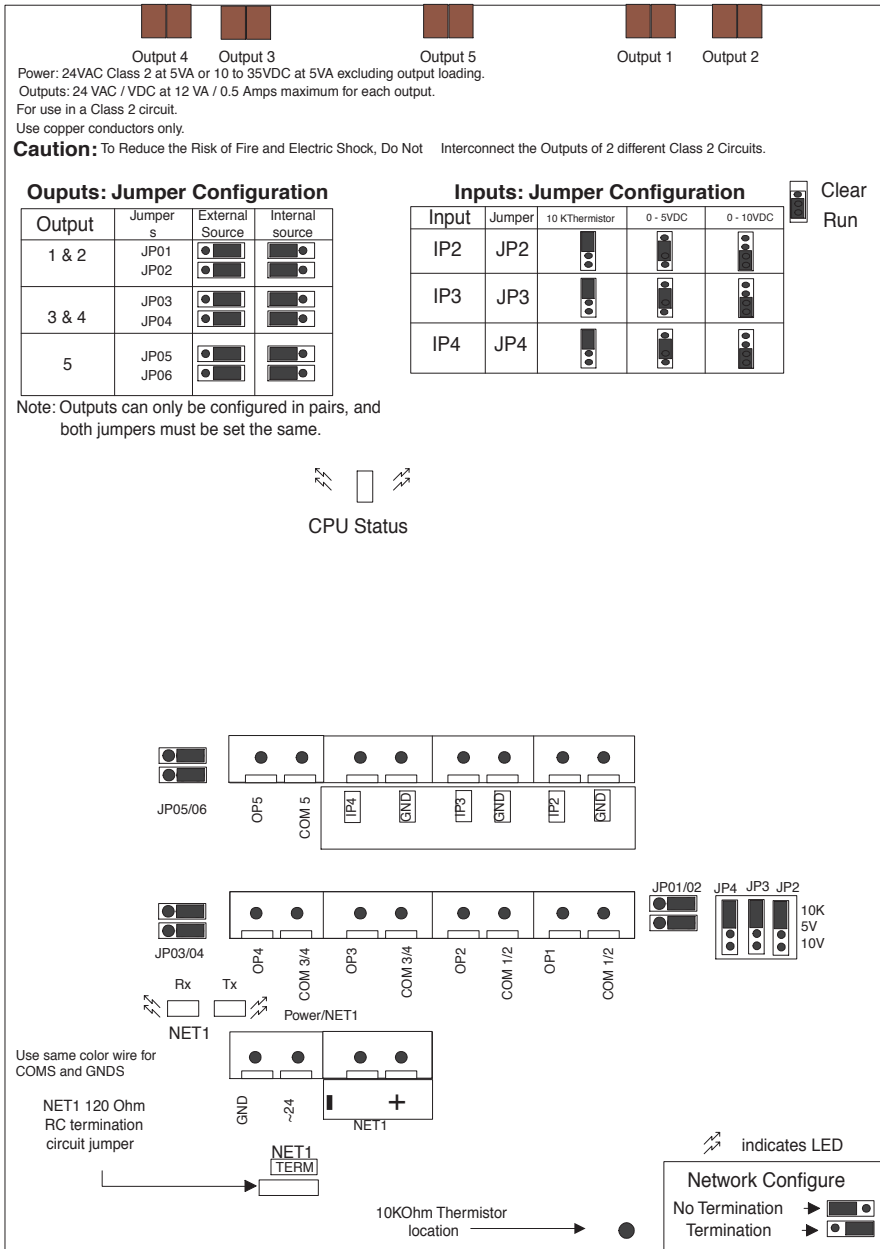
External Outputs

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

Jumper selection for internal or external power on binary outputs

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Network Thermostats DNT-T305: Board Layout Diagram



Specifications (Continued)

Technology

32-bit processor

512 KB (4 megabit) Flash memory

64 KB SRAM memory for database

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) (maximum of 99 devices per BACnet MS/TP segment)

SubLAN (NET2) None with this model

Connectors

AMP plug-in terminal connectors

Wiring

Class 2

Power

24 VAC

5VA, 65VA with BOs fully-loaded

Ambient

32° - 131°F (0° - 55°C)

10 - 90% RH (non-condensing)

Dimensions

5 3/4 x 4 1/4 x 1 1/4 in. (14.7 x 10.9 x 3.8 cm) with housing

0.50 lb. (240 g) with housing

Approvals/Standards

UL 916 Listed

CE

FCC

BTL Listed

Network Thermostats

DNT-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 DNT-T305 with the desired options according to the following product number:
DNT-T305-xxx

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.

