Network Thermostats
BACstat II: DNT-T103/H103B

Description

The DNT-T103 is an intelligent room thermostat with a custom 3-value, 96 segment, LCD display. The DNT-T103 can communicate directly on a BACnet MS/TP network.

The DNT-T103 can display a wide-range of digital or analog values including setpoints, temperature, airflow, heating and cooling status, fan speed, valve and damper position, and more. When connected on a BACnet MS/TP network, the DNT-T103 functions as an independent BACnet thermostat. When connected to a Controller, on a LINKnet network, the DNT-T103 provides a programmable remote sensor and expanded I/O capabilities.

Application

The DNT-T103 is designed to be a low-cost solution for control of unitary equipment. It has built-in, configurable algorithms for VAV, VVT, fan coil/unit ventilator, heat pump, radiation and humidification applications.

The DNT-T103 may also be connected to a LINKnet network to provide programmable remote sensor and expanded I/O capabilities.

Features

—Native BACnet™ firmware

—BACnet MS/TP

—Configurable 3-value, 96 segment, LCD display (with optional backlighting)

—4 Configurable push buttons

—Controller firmware can be flash loaded over the network

—Network termination is jumper selectable on each device

—Derived Network Addressing (DNA) for simple integration into a standard network architecture

—Field selectable applications

—Service port

Specifications

BACnet Device Profile
BACnet Application Specific Controller (B-ASC)

LCD
3-value and various icons (96 total segments) with optional backlighting

Push Buttons
4 stylized momentary push buttons

Temperature Sensor
Thermistor Input - 10kΩ at 77°F (25°C)

Accuracy +/-0.36°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)

Humidity Sensor
Accuracy of +/- 3%RH from 20% -80% RH (linearized accuracy of +/- 3% to +/- 5% from 0-20% and 80-100% RH)

Display Resolution of 0.1%

Stability of < 0.5% RH/yr (typical)

Inputs
1 Universal input - 10 bit (supporting 0-5v, 0-10v, 10kΩ)

Outputs
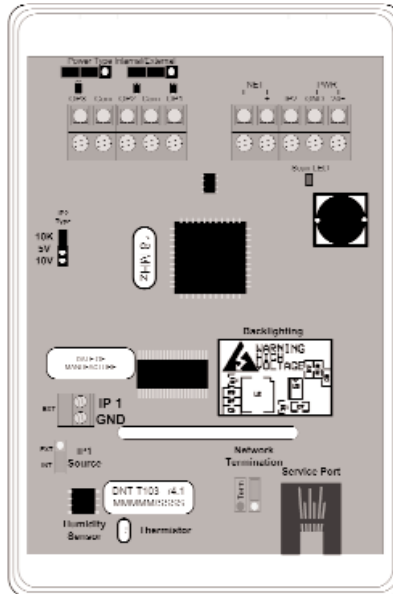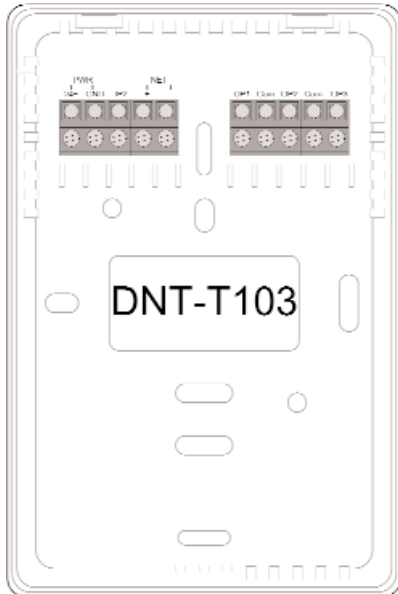3 Binary triac outputs (supporting binary, PWM or tri-state)

Technology
32-bit processor with internal A/D, Flash and RAM

Do it right. Delta CONTROLS ™

Network Thermostats
BACstat II: DNT-T103/H103B Board Layout Diagram

Accessories
DZNR-768—Delta Network Repeater for BACnet MS/TP

CON-768BT—Delta Network Converter

Ordering
Order the DNT-T103/H103 with the desired options, according to the following product numbers:

DNT-T103—Internal Thermistor Input, Additional I/O (1 IP and 3 OP)

DNT-T103BX—Backlighting, External Thermistor Terminator

DNT-T103-UL864—Same as previous, but with UL 864 Listing

DNT-H103B—Internal Thermistor Input, Internal Humidity Input, Additional I/O (1 IP and 3 OP),

Backlighting, External Thermistor Terminator

An appended button icon code must be included to specify the desired icons embossed on the buttons. If a button icon code is not specified, the product is shipped with the default button icons.

Default—Bottom 2 buttons are ▼ & ▲ (Setpoint Adjust), top 2 buttons are OFF and ON

INT—Bottom 2 buttons are ▼ & ▲ (Setpoint Adjust), top 2 buttons are O and I (International)

Do it right. Delta CONTROLS