

Terminal Room / Zone Controllers

TRCs and TZCs are a family of wall-mounted controllers designed to provide cost effective control of terminal and unitary HVAC equipment. The TRC/TZC product line includes devices tailored specifically for control of a broad set of equipment such as fan coil units, heat pumps, variable air volume (VAV) terminal units, and packaged HVAC and AHU units.

BENEFITS

A Complete Stand-Alone Controller

Each TRC/TZC is a complete stand-alone controller with its own microprocessor and non-volatile memory. This allows it to execute independent local control of equipment even when connection to a high-level controller is not available. This networking capability allows the TRC/TZC to be a fully integrated part of a comprehensive energy management and building automation system.

TRC/TZCs are designed for ease of installation, wiring and service. They incorporate removable terminal blocks and explicit terminal identification. They also incorporate automatic baud rate detection and status LED's for the BACnet MS/TP network to ease the installation process.

TRC/TZCs use the latest micro-controller technology and surface mount electronic devices to achieve powerful functionality in a small, attractive package.

FEATURES

- Precise stand-alone control for HVAC units and other unitary control equipment applications
- A Wide variety of models with pre-programmed sequences and options to fit most any unitary application
- Incorporates integrated flash memory technology to maintain information in the event of a power loss
- Large, backlit display for local information & configuration
- Attractive design fits well within any environment



PRODUCT MODELS

The TRC/TZC product line includes multiple models built on a common hardware platform. Each model is tailored to a specific application and designed to effectively control its associated HVAC equipment.

- **Model 76XX** – The TRC 76XX series is specifically designed to control packaged and split staged heating/cooling equipment and heat pumps. Additionally, the TRC 76XX series is pre-programmed to suit the most used applications, and contains all required I/O hardware for the target applications. Single stage, 2 stage and heat pump versions are available for a wide range of applications.
- **Model 73XX** – The TRC 73XX series is specifically designed to control multi-speed fan coil units with 2 position, analog or floating temperature control valves. This model also incorporates a selection of pre-programmed sequences that accommodate most applications directly. Avoidable sequence options and on-board inputs and outputs eliminate the need for auxiliary relays and peripheral devices in most applications. Versions with integrated relative humidity sensors are also available.
- **Model 72XX** – The TRC 72XX series is specifically designed to control 0-10 VDC, staged and floating point heating and cooling terminal systems. The TRC 72XX series is pre-programmed to suit the most used applications and requires little configuration to accomplish remarkable temperature control regardless of the application. Common applications include cooling only VVT zone with re-heat, fin-tube radiators, cabinet heaters, radiant panel heaters and electric re-heat zones. Optional changeover sensing eliminates multi-vendor peripheral sourcing and further simplifies installation.

COMMUNICATIONS

Terminal Room/Zone Controllers provide an RS-485 communication bus connection which allows multiple Terminal Room/Zone Controllers to be networked together. The network uses BACnet protocol and operates at 9.6k, 19.2k or 38.4k baud. Auto-baud detection is used by the TRC/TZC to ease system configuration. The network address of each device is configured through a local password protected intuitive user interface.

SPECIFICATIONS

ELECTRICAL

Supply Requirements 24 VAC +/- 20%, 50/60 Hz

Power Consumption 2 VA

ENVIRONMENT

Temperature & Humidity 32° - 122° F (0° - 50° C)
10 - 95 % RH non-condensing

Storage Conditions -22 to 122° F (-30 to 50° C)
10 - 95 % RH non-condensing

Control Accuracy +/- 0.9° F (+/- .0° C) at 70° F (21° C) typical calibrated

COMMUNICATIONS

Network BACnet MS/TP RS-485 with auto-baud rates of 9.6k, 19.2k, and 38.4k

Terminations Removable screw terminals : 18 gauge max (22 gauge recommended)

GENERAL

Dimensions 4.94 x 3.38 x 1.13 in. (12.5 x 8.6 x 2.9 cm)

Weight .75 lbs (.34 kg)

AGENCY COMPLIANCE

24 VAC, +/- 20%, 50/60 Hz FCC: Class A computing device, Subpart) of Part 15 UL : UL873 z

File E234137 with CN's XAPX (US) and XAPX7 (Canada) CE Approved

BTL Listed as a BACnet Application Specific Controller (B-ASC)



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