

TZT-701

Multi-function Thermostat with Built-In Zone Control

Making Life Comfortable

General Description

When every item one possesses demonstrates a desire to achieve a level of sophistication and class previously unsurpassed, why then should the most important comfort control item be any less inspiring?

Temperzone is pleased to present you with the TZT-701 Wall Thermostat. Designed to be attractive yet unobtrusive. Simple to use while still having advanced control capability.

Extensive research was undertaken prior to the production of the TZT-701 Thermostat. Key criteria in its design are its clean lines, thin profile and an impressive "EL" backlit Liquid Crystal Display. Simple operation and logical button placement were also deeply researched to ensure the TZT-701 operation and control is as intuitive and impressive as its clean modern styling.

The TZT-701 has real control power with the ultimate in functional flexibility. A combination of hardware switches and software options ensures this thermostat is capable of controlling almost any air conditioner. Single or 3 speed fan equipment, single or multi-stage equipment (heat pump or heat / cool equipment type), digital multi-stage outputs or modulating 0~10V control as well. Two zones of active temperature management is also built in as standard.

Optional temperature sensors can be installed to measure the outside air temperature - a useful feature should you wish to see what you need to wear for the day. The Zone 2 temperature sensor when installed is used to ensure the second zone temperature is maintained exactly as required. The Fan Coil temperature sensor will ensure warm start heating and residual heat/cool fan run on - a useful energy saving function in this energy conscious world. The coil sensor also maintains safe operating temperatures during the cooling cycle.

The few features listed here plus the many additional capabilities that this thermostat offer makes the TZT-701 thermostat perfect for residential, apartment or commercial applications:

Great looks, control flexibility, highly reliability, at a price sure to impress



Features

- 7 day 4 or 2 event programming or non programmable mode (with night set back)
- Auto Season Changeover between Heat & Cool
- Built in Active 2 Zone Control (with zone temperature display)
- Single & 3 Speed Fan Control with Auto Fan Speed (set by system installer)
- Single or Two Stage equipment control
- Relays all voltage free input - rated at 240V 10 amps. Mixed voltage permitted
- Powered from 24V AC or Line Voltage
- Equipment Fault / Occupancy inputs (2) with status display on the LCD
- Built in economy function using outside air for free heating & cooling
- Flow verification Interlock

Condensed Specifications

Relays (Maximum ratings - all supplied Voltage Free)

Fan Low/Med/High	Max 10A 240V
Heat 1/2	Max 10A 240V
Cool 1 /2	Max 10A 240V
Damper 1 /2	Max 5A 240V Changeover
Fault Status	Max 1A 240V Changeover
Temp Sensors	10K NTC
Input Voltage	24VAC / 240VAC(fused) selectable

Size

Wall Controller	115 x 100 x 24 mm
Control PCB	190 x 140 x 61 mm

Accuracy

+/- 0.3°C @ 21°C

Resolution

0.1°C/1.0°F

Control Range

0~38°C

Outside Air temp display range

-8 ~ 60°C

Back light

Blue EL

Optimised Time to Start Temp Differential method

Display Size 74 x 55mm

Coms Protocol

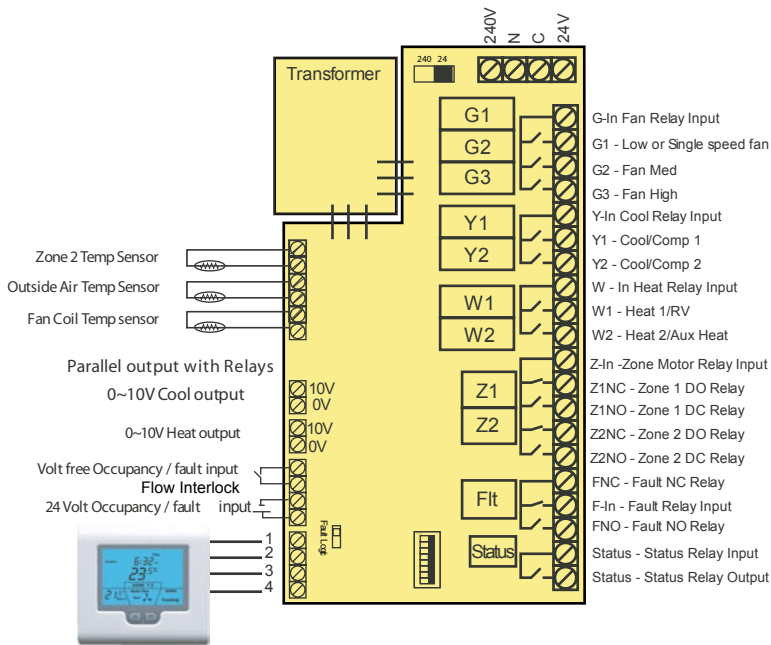
Native RS485 150M max. run 4 core

Warm Start

Fan coil >33°C

Economy function

2.5c dampers only >5 suspend comp call



No matter what type of air conditioning system you have, or what type of application you are trying to manage, the TZT-701 with its impressive list of features, will ensure a successful outcome.

The TZT-701 is as equally capable of controlling a commercial air conditioning system in a large office as it is managing the comfort in a two bedroom apartment with Gas heating.

The TZT-701 has the added ability to be set to either Manual or Programmable mode of operation. Two independent zones of temperature management are available; also the free energy of the outside air can be used to heat or cool the climate-controlled area by utilising the in-built "Economy" function. No matter what air conditioning problem you are faced with, the TZT-701 is more than capable of providing the solution.

Take time to study the condensed wiring layout provided above and you will begin to see the capability of this impressive Air Conditioning control system. All relays are voltage free so its simple to mix voltages when required. Need to control 24V heating contactors and 240Volt fans? - No Problem! Features include: parallel modulating 0~10 volt outputs with 2 stages of heating and cooling using high current relays, single or 3 speeds of fan control, fault inputs, flow interlock and outputs as well as a status relay that energises whenever the TZT-701 is using energy - perfect for monitoring energy usage. The TZT-701 is the answer to all of your Heating and cooling applications.

TZT-701 is available as a kit for retro fitting on **temperzone** models ISD/OSA 330-960RKT and OPA 225-960RKT (ie 24V single & two stage systems); standard on all digital models.

Due to continuous product improvement - specifications subject to change without notice

Installer Adjustable Parameters

Hardware Adjustments (DIP Switch)

- Single / 3 Speed Fan Indoor Fan
- Heat Pump (OB terminals) / Heat Cool Equipment Control
- Single / Multi-stage Equipment Control.
- Reversing Valve Mode (O/B) / Fan Mode E/G
- 4 Min compressor protection delay On/Off
- Manual / Programmable Thermostat function
- Zone Control Enable / Disable - Economy function enable
- 4 / 2 Daily events (Set Back / Start Stop programming)

Software Adjustments

- Pin Number Select 00~99
- Keyboard lock On / Off (2 levels)
- Room and Set Temp Display / Set Temp display only
- Room (and zone 2) Temperature Sensor Calibration
- Analogue Output span adjustment (1 ~ 10°C)
- Deg C / F Display
- Manual mode countdown timer period (0~8 hours)
- High Temperature Limit (0~38°C) Cooling OFF set point
- Low Temperature Limit (0~38°C) Heating OFF set point
- Stage differential temperature (0.5 ~4°C)
- Lock out high fan speed when only 1 zone called.
- Optimised Equipment Start Enable / Disable
- Fan Control Mode - Smart Fan / Smart Fan with Heat
- Zone programing function On / Off
- Mode Selection (Heat Only - Cool Only - Auto mode)
- Temperature Set Range 0~38°C
- Set / Program Heating or Cooling value to OFF
- AM/PM or 24 Hour Clock
- Occupancy Heat Value
- Occupancy Cool Value
- Occupancy Fan Mode



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Available from