TAC-24 Low Voltage Digital Controller





The TAC-24 range of Digital Controllers are designed for room wall mounting with LCD and 0 / 2-10VDC output. It uses a very advanced microproccessor with processing power to meet almost all requirements.

- Setpoint 5~50 °C with adjustable HI-LO limits
- · Internal or external sensor
- P or PI function / Floating 3-wire
- Adjustable P-band and I-time / run time
- Adjustable Temperature off-set
- Key-card function for Energy Saving
- Set point / Room Temperature display options
- 0-10VDC / 2-10VDC selectable / 3-wire Floating

Function

All functions, settings are made using the menu system in the display.

SENSORS

The TAC-24 has a built-in NTC thermistor sensor. When an external remote sensor is connected, it automatically cuts out the internal sensor and revert to external sensing.

SET POINT

The temperature set point is set by pressing the + or - buttons and shown in the display, the setting range is $5 \,^{\circ} \text{C} \sim 50 \,^{\circ} \text{C}$ and High / Low limits can be preset in the menu mode if so desired. (see installation manual)

TEMPERATURE OFFSET

The room temperature display can be offset in the menu mode with + / - 8 °C in 0.5 °C steps. (see installation manual)

DISPLAY OPTIONS

User can choose to have both ROOM TEMPERATURE and SETPOINT TEMPERATURE on the LCD display and EITHER ROOM OR SETPOINT display only. (see installation manual)

OCCUPIED / UNOCCUPIED

To encourage Energy Saving, a potential-free contact is provided for connecting to either KEY-CARD or TIMER or presense sensor. When activated, the temperature setting will reset to a pre-determine temperature setting. (see installation manual)

All other functions and settings such as Heating / Cooling, P or PI, P-Band setting, I-Time setting, 0-10VDC or 2-10VDC signal output can be made via the menu mode. (see installation manual)

Models

<u>Model</u> <u>Functions</u>

TAC-24PI Wall mount Temperature Controller, 0/2-10VDC PI output.

TAC-24FL Wall mount Temperature Controller, 3-wire Floating output.

Available Option:- a) White, Green or Blue backlight LCD (Standard is white)

b) Above models are also available with Modbus, RS485 communication (option)

Thermostat Function Keys

Action Functional Push Buttons

Press (b) to toggle between POWER ON/OFF

Press + to INCREASE set point temperature in steps of 0.5 ℃
Press – to DECREASE set point temperature in steps of 0.5 ℃

Press M for 5 seconds to display room actual temperature or set point temperature momentarily.

(Note: For access into MENU MODE, please refer to installation manual)

Technical Data

Supply Voltage - 24VAC / DC (Modulating model), 24VAC (3-wire Floating model)

Power Consumption - 1.5VA

Ambient Temperature - $0 \sim 55 \,^{\circ}\text{C}$ Storage Temperature - $1.5 \times 10^{\circ}$ Ambient Humidity - Max 85%

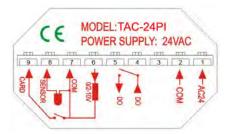
Protection Class - IP 30

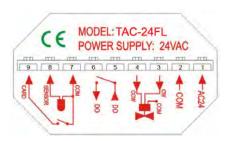
Housing - ABS to UL 94-5 fire retardant plastic Sensor type - Thermistor (NTC) 10k ohms at 25 ℃

Signal Outputs - 0 ~ 10VDC or 2 ~ 10VDC, 1mA (Modulating); 3-wire (Floating)

Outputs - On/Off contacts, switch controlled

Wiring Connection





Dimensions

