

TEMP

DAY

SAT

SUN

MODE

ONO

FANO

CLOCK

FIXI

ALARM/AUX (

ON/OFF

SYSTEM

FAN

SET INSIDE TEMP OUTSIDE

COOL HEAT AUTO AUTO AM PM

PROG

COOL

HEAT

CLOCK SELECT

ELECTRONIC PROGRAMMABLE PROPORTIONAL

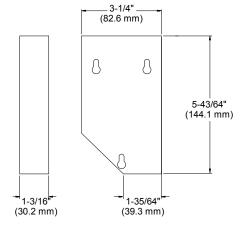
THERMOSTAT series TP93

For proportional valve control of heating and cooling fan coil systems.

BENEFITS & SPECIAL FEATURES

- Proportional output provides fast and accurate positioning for zone actuators and valves.
- Proportional integral control eliminates overshoot and droop.
- Adjustable dead band prevents overlapping between heating and cooling modes.
- Three speed automatic fan control with manual override.
- Direct or reverse acting outputs.
- Adjustable differential band.
- 4 daily programs for M-F, Sat. and Sun.
- Digital 12/24 hour real time clock.
- Ten year lithium battery for back up during power outages.
- Easy programming—Easy setting.
- Large, easy to read, LCD display.
- Temperature display—set point, inside and outside air—in F° or C°.
- System status indicators.
- Learned response feature adjusts for changing climate.
- Manual on/off override.
- Temporary override with automatic resumption of program.
- Electronic program and temperature limiting and and locking.
- Low and high limit temperature alarms can activate a dry contact to switch an external control.
- Auto-changeover (heating/cooling).
- Continuous (on) or intermittent (auto) fan.

DIMENSIONS



SPECIFICATIONS

Operating Voltage: 24 vac (-15%, +10%, 50-60 Hz) Output: 0-10 VDC or 4-20mA Temperature Range: 50° F - 90° F (10° C - 32° C) Temperature Differential: 0-2° C approximately ±0.8° F (.4° C) Heating: 0-2° C approximately ±0.8° F (.4° C) Cooling: Fan (in auto mode):

Low: < 2° F (1.1° C) 2 - 4° F (1.1°-2.2° C) Med: High: > 4° F (2.2° C) Bandwidth: 0-10° C0-2° F (0-1.1° C) Dead Band: Adjustable 0 - 4° F (2.2° C) to set point

Sensor System: Negative Temperature Coefficient (NTC) Standard: internal Optional: remote temperature sensor Optional: return air temperature sensor Optional: outside air temperature sensor

Switches: Push-button: MODE/CLOCK/SELECT/PROG/UP/DOWN Push-button: SYSTEM: ON/OFF

Rotating: set TEMPerature Indicator LED's: ON (Green) ALARM (Flashing Red) AUX (Steady Red) FAN:

Low: (Slow Flashing Yellow) Med: (Flashing Yellow) (Fast Flashing Yellow) High: 4 digit user selectable code

543/64 x 31/4 x 13/16 Inches (144.1 x 82.6 x 30.2 mm)

Security:

Dimensions:

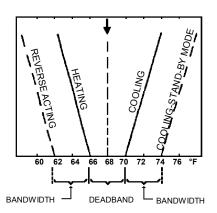
MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS

Zero Bandwidth Positive Deadband

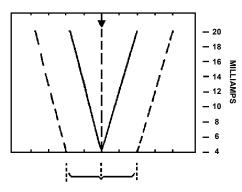
17 18 19 20 21 22 23 24 °C

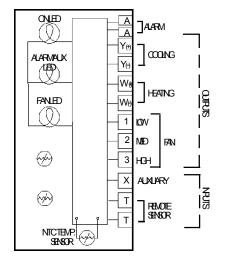
10 -**POINT** SET 8 -VOLTS D.C. 6 4 O 62 **ADJUSTABLE** DEADBAND

Positive Bandwidth and Deadband



Positive Bandwidth Zero Deadband





Model Number: TP931120

Description: 1 stage heat, 1 stage cool

Switching Current at 24 VAC:

Cooling: 1 Amp Heating: 1 Amp 1 Amp Fan: .4 lbs. (880 g) Weight:

ACCESSORIES

Remote Temperature Sensor TX101001 TX101011 Return Air Temperature Sensor Outside Air Temperature Sensor TX101021

Backplates may be used to cover large holes in walls or mount to utility boxes:

horizontal TX201001 vertical TX202001 square TX203001

Transformers:

40 VA TR140100 20 VA TR120100

Relay Transformers:

20 VA (2) SPST 120 VAC relay TR440200 20 VA (1) SPST 120 VAC relay TR440300

APPLICATIONS

- Central (main) heating or cooling.
- Zone heating or cooling.
- Residential. (Single or multi-family, Apartments, Co-ops, Condominiums)
- Commercial. (Stores, Restaurants, Offices)
- Industrial
- Institutional. (Hospitals, Hotels, Motels)

REFERENCES

For More Information On: See:

Remote version TQ93 data sheet

Wiring, jumper, potentiometer settings

and applications

Other thermostats This section

Zone Actuators

Star Actuator section

Zone Valves

Star Valve section Control Panels section

Wiring Panels Warranty & Pricing

Pricing & Terms

Instruction sheet

section

Flair pursues a policy of constant improvement. For this reason, all specifications are subject to change without notice.

