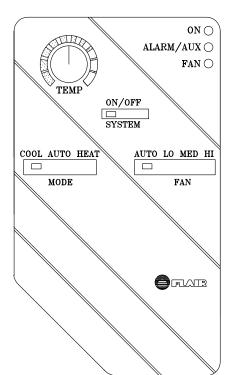


## **ELECTRONIC PROPORTIONAL**

# THERMOSTAT series TE93

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



### **BENEFITS & SPECIAL FEATURES**

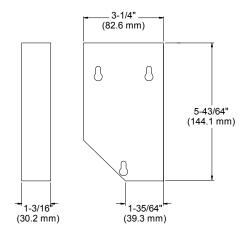
- Proportional output provides fast and accurate positioning for zone actuators and valves.
- Proportional integral control eliminates overshoot and droop.
- Adjustable dead band prevents overlapping between heating and cooling modes.
- Manual on/off override.
- Electronic temperature limiting and locking.
- Low and high limit temperature alarms can activate a dry contact to switch an external control.
- Automatic heating/cooling changeover.
- Three speed automatic fan control with manual override.
- Direct or reverse acting outputs.
- System status indicators.

Bandwidth:

Color:

- Adjustable differential band.
- Warmer/cooler scale standard.
- Fahrenheit and Celsius scales included.

# DIMENSIONS



# **SPECIFICATIONS**

Cooling: 0-2° C approximately ±0.8° F (.4° C)
Fan (in auto mode):

Low: < 2° F (1.1° C)

Low: < 2° F (1.1° C)

Med: 2 - 4° F (1.1°-2.2° C)

High: > 4° F (2.2° C)

0-10° C0-2° F (0-1.1° C)

Dead Band:

Sensor System:

Standard:

Optional:

Adjustable 0 - 4° F (2.2° C) to set point

Negative Temperature Coefficient (NTC)

internal

remote temperature sensor

Optional: remote temperature sensor Optional: return air temperature sensor Switches :

 Slide:
 SYSTEM: ON/OFF

 Slide:
 MODE: COOL/AUTO/HEAT

 Slide:
 FAN: AUTO/LOW/MED/HIGH

 Rotating:
 set TEMPerature

 Indicator LED's:
 ON (Green)

FAN: Low: (Slow Flashing Yellow)
Med: (Flashing Yellow)
High: (Fast Flashing Yellow)

Security: Electronic temperature limiting and locking Dimensions:  $5^{43}_{64} \times 3^{1}_{4} \times 1^{3}_{16}$  Inches (144.1 x 82.6 x 30.2 mm) Material: abs plastic

FLAIR INTERNATIONAL CORPORATION • 600 Old Willets Path • Hauppauge, New York 11788 • TEL: (516) 234-3600 • FAX: (516) 234-3610
© 1995 FLAIR INTERNATIONAL CORPORATION

FLAIR is a registered trademarks of Flair International Corporation.

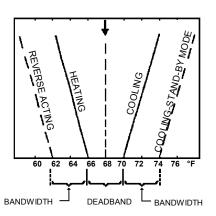
matte white

# MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS

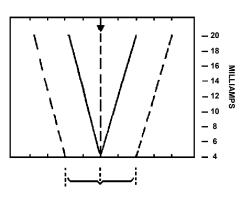
# Zero Bandwidth Positive Deadband

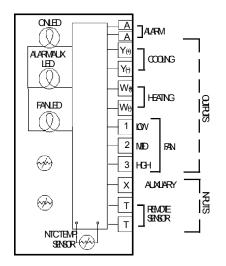
# 10 - SET VPOINT 8 - SET VPOINT 2 - 60 62 64 66 68 70 72 74 76 °F ADJUSTABLE DEADBAND

# Positive Bandwidth and Deadband



# Positive Bandwidth Zero Deadband





Model Number: TE931120

Description: 1 stage heat, 1 stage cool

Switching Current at 24 VAC:

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

## **ACCESSORIES**

Remote Temperature Sensor TX101001
Return Air Temperature Sensor TX101011

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 TF93 data sheet

Wiring, jumper, potentiometer settings

and applications

Other thermostats This section

Zone Actuators Star Actuator section

Zone Valves Star Valve section

Wiring Panels Control Panels section

Warranty & Pricing Pricing & Terms

section

Instruction sheet

