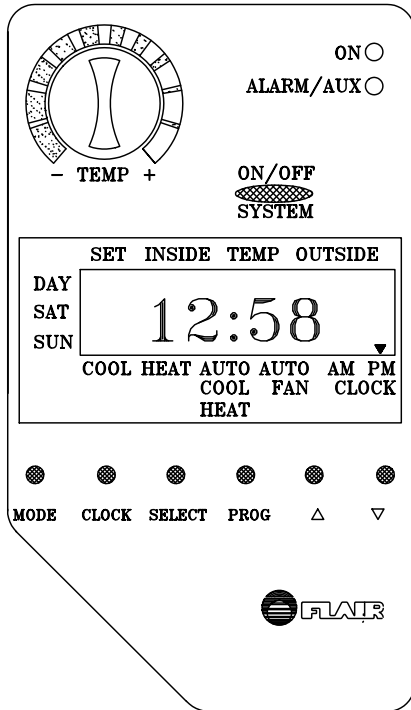**FLAIR**

ELECTRONIC PROGRAMMABLE PROPORTIONAL
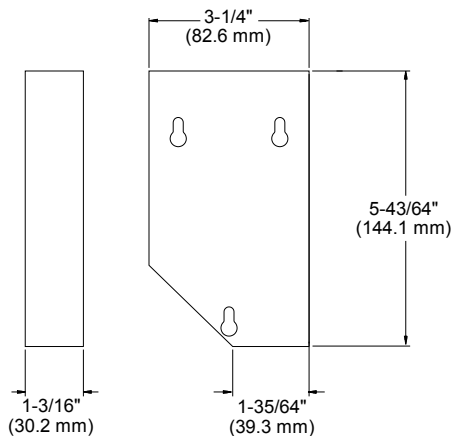# THERMOSTAT *series TP91*

For proportional valve control of heating and cooling 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.
- 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.
- Vacation mode—up to 365 days.
- 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.
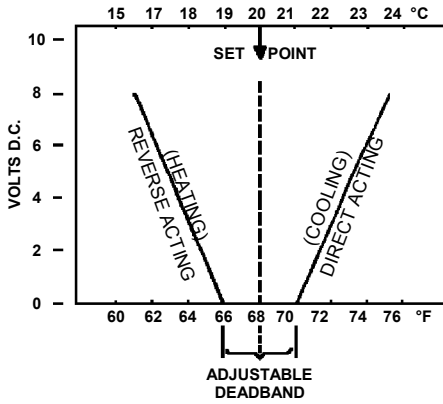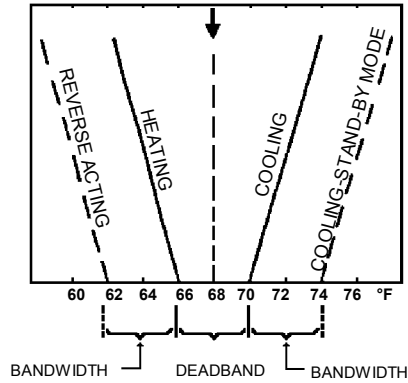
DIMENSIONS

3-1/4" (82.6 mm)

5-43/64" (144.1 mm)

1-3/16" (30.2 mm)

1-35/64" (39.3 mm)

SPECIFICATIONS

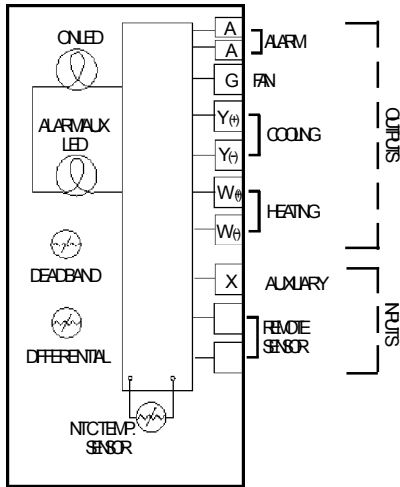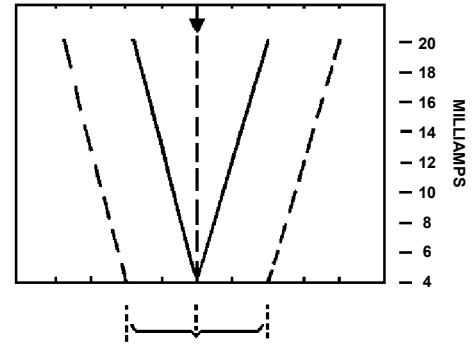|	
Operating Voltage:	24 vac (-15%, +10%, 50-60 Hz)
Output:	0-10 Vdc or 4-20 mA
Temperature Range:	50°F - 90°F (10°C - 32°C)
Temperature Differential:	
Heating:	approximately ±0.8°F (.4°C)
Cooling:	approximately ±0.8°F (.4°C)
Bandwidth:	0-2° F (0-1.1‾ C)
Dead Band:	4°F (2.2° C)
Sensor System:	Negative Temperature Coefficient (NTC)
Standard:	internal
Optional	remote temperature
Optional:	return air temperature
Optional:	outside air temperature
Switches:	
Push-button:	MODE/CLOCK/SELECT/PROG/UP/DOWN
Push-button:	SYSTEM: ON/OFF
Rotating:	set TEMPerature
Indicator LED's:	ON (Steady Green)
	ALARM (Flashing Red) / AUX (Steady Red)
Display:	LCD, 4 character, .5" (1.27 cm) height.
Security:	4 digit user selectable code
Dimensions:	$5^{43}/_{64}$ x $3^{1}/_{4}$ x $1^{3}/_{16}$ Inches (144.1 x 82.6 x 30.2 mm)

Zero Bandwidth Positive Deadband

Positive Bandwidth and Deadband

Positive Bandwidth Zero Deadband

Model Number: TP911120
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)
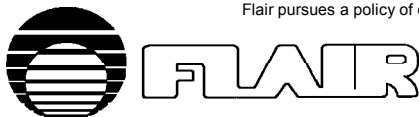
*Warmer/cooler scale is standard

ACCESSORIES

Remote Temperature Sensor	TX101001
Return Air Temperature Sensor	TX101011
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.
- Industrial
- Commercial. (Stores, Restaurants, Offices)
- Institutional. (Hospitals, Hotels, Motels)
- Residential. (Single or multi-family, Apartments, Co-ops, Condominiums)

REFERENCES

For More Information On:	See:
Remote Model	TQ91 data sheet
Wiring, jumper, potentiometer settings and applications	Instruction sheet
Other thermostats	This section
Zone Actuators	Star Actuator section
Zone Valves	Star Valve section
Wiring Panels	Control Panels section
Warranty & pricing	Pricing & Terms section

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

FLAIR INTERNATIONAL CORPORATION

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TP91P2