

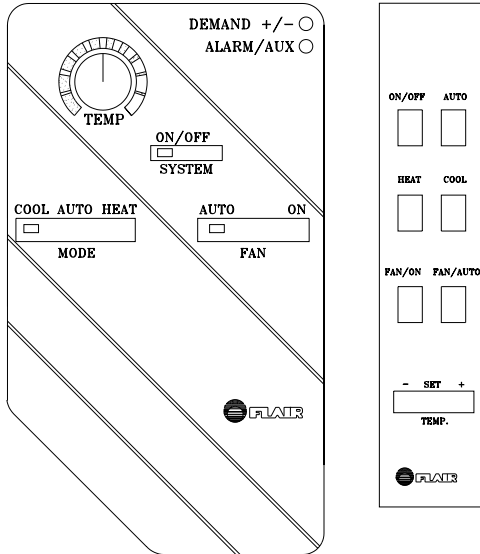
ELECTRONIC MODULATING THERMOSTAT *series TF81*

For modulating control of central (main) or zoned heating and cooling systems.

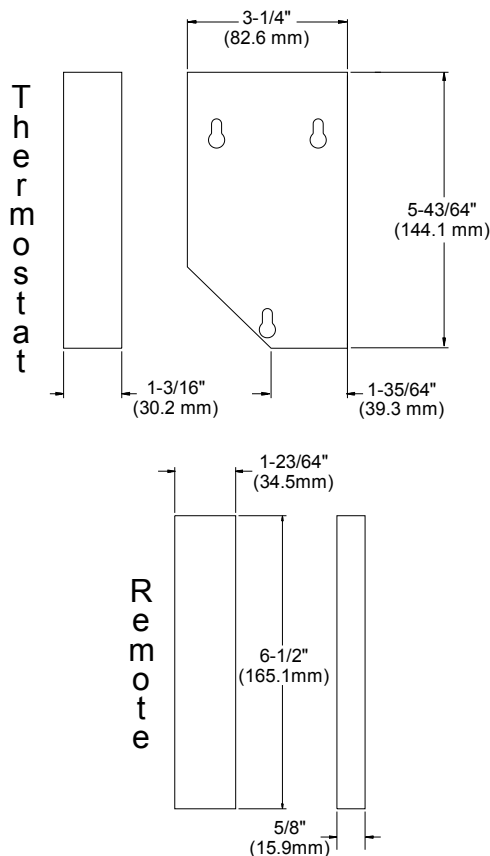
BENEFITS & SPECIAL FEATURES

Same benefits as the TE81 with the addition of the remote control:

- Adjustable dead band prevents overlapping between heating and cooling modes.
- Floating point control for closer tolerance.
- 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.
- Continuous (on) or intermittent (auto) fan control.
- Direct or reverse acting.
- System status indicators.
- No batteries required.
- Remote temperature sensor (optional).
- Return air temperature sensor (optional).
- Infra-red remote control internal receiver (standard).
- Infra-red remote control transmitter (optional).
- Infra-red remote control external receiver (optional).



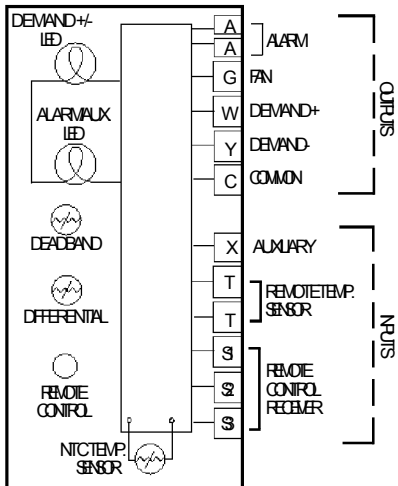
DIMENSIONS



SPECIFICATIONS

Operating Voltage:	24 vac (-15%, +10%, 50-60 Hz)
Temperature Range:	50° F - 90° F (10° C - 32° C)
Proportional Band:	2 - 10° F (1.1° - 5.5° C)
Bandwidth:	0-2° F (0-1.1° C)
Dead Band:	1° - 4° F (.6° - 2.2° C)
Sensor System:	Negative Temperature Coefficient (NTC)
Standard:	internal
Optional:	remote temperature sensor
Optional:	return air temperature sensor
Switches :	
Slide:	SYSTEM: ON/OFF
Slide:	HEAT/AUTO/COOL
Slide:	FAN: AUTO/ON
Rotating:	set TEMPerature
Switched Outputs:	Triac/relay
Indicator LED's:	ON (Green)
	ALARM (Flashing Red) / AUX (Steady Red)
Modulating circuit:	
	DEMAND + (Steady Blue)
	Set point Off
	DEMAND - (Flashing Blue)
Security:	Electronic temperature limiting and locking
Dimensions:	Thermostat: 5 ⁴³ / ₆₄ x 3 ¹ / ₄ x 1 ³ / ₁₆ Inches (144.1 x 82.6 x 30.2 mm)
	Remote: 6 ¹ / ₂ x 1 ²³ / ₆₄ x 5 ⁵ / ₈ Inches (165.1 x 34.5 x 15.9 mm)
Remote Control Transmitter (optional):	7-button infra-red
Battery:	(2) AAA
Range:	36' (10 meters)
Remote Control Receiver (optional):	infra-red
Range:	36' (10 meters)

MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS



Model Number: TF811120
 Description: Modulating
 1 stage heat, 1 stage cool
 with remote control

Switching Current at 24 VAC:
 Cooling: 1 Amp
 Heating: 1 Amp
 Fan: 1 Amp
 Alarm: 1 Amp
 Auxiliary: 1 Amp
 Weight: .4 lbs. (880 g)

ACCESSORIES

Remote Temperature Sensor	TX101001
Return Air Temperature Sensor	TX101011
Remote Control Transmitter (Compatible with internal and external remote control receivers.)	TX502001
Remote Control Receiver (external) (Up to 5 receivers may be daisy chained to thermostat and placed at remote locations—relays signal from remote control transmitter to thermostat.)	TX503001
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, Condominiums, Co-ops).
- Commercial (Stores, Restaurants, Offices).
- Industrial.
- Institutional (Hospitals, Hotels, Motels).

REFERENCES

For More Information On:	See:
Non-Remote version	TE81 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

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

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TF81P2