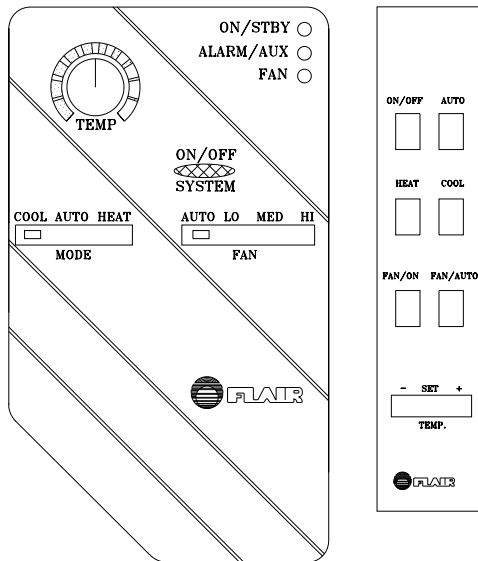


# ELECTRONIC THERMOSTAT *series TF23*

For control of fan coils and Packaged Terminal Air Conditioners (PTACs). For heating and cooling with an automatic changeover.

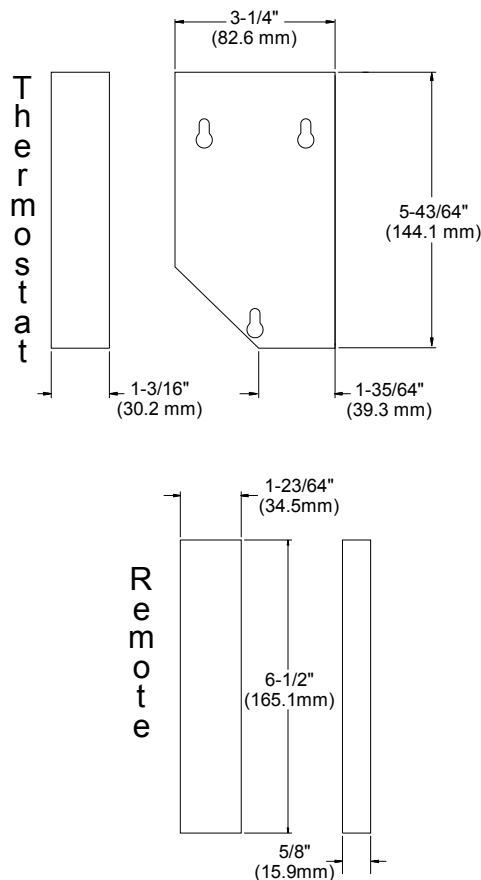


## BENEFITS & SPECIAL FEATURES

**Same benefits as the TE23 with the addition of remote control:**

- 4 minute time delay for compressor protection (may be bypassed).
- Remote temperature sensor (optional).
- Return air temperature sensor (optional).
- Electronic temperature limiting and locking.
- Low and high limit temperature alarms can activate a dry contact to switch an external control.
- Three speed automatic fan selection control with manual override.
- Continuous (on) or intermittent (auto) fan control.
- System status indicators.
- Models to accommodate 24/100/120/208/230/277 vac.
- Infra-red remote control internal receiver (standard).
- Infra-red remote control transmitter (optional).
- Infra-red remote control external receiver (optional).

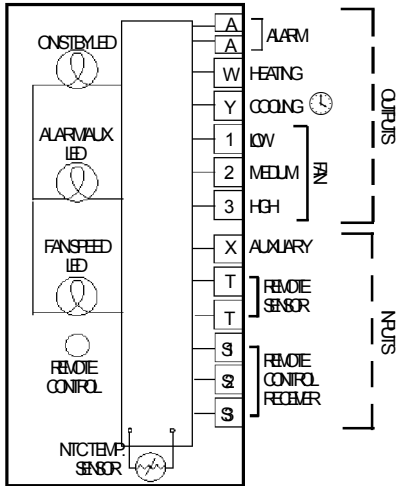
## DIMENSIONS



## SPECIFICATIONS

Operating Voltage:	24/100/120/208/230/277 vac (-15%, +10%, 50-60 Hz)	
Switching Current at rated voltage:		
Cooling:	minimum 10 Amps	
Heating:	minimum 10 Amps	
Fan:	minimum 10 Amps	
Alarm:	minimum 1 Amp	
Auxiliary:	minimum 1 Amp	
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)	
Fan:		
Low:	< 2° F (1.1° C)	
Med:	2 - 4° F (1.1°-2.2° C)	
High:	> 4° F (2.2° C)	
Dead Band:	4° F (2.2° C)	
Sensor System:	Negative Temperature Coefficient (NTC)	
Standard:	internal	
Optional:	remote temperature	
Optional:	return air temperature	
Compressor Protection:	switched 4 minute time delay	
Switches:		
Push-button:	SYSTEM: ON/OFF	
Slide:	MODE: HEAT/AUTO/COOL	
Slide:	FAN: AUTO/LOW/MED/HIGH	
Rotating:	Set TEMPERature	
Indicator LED's:	ON (Steady Green) / STBY (Flashing Green)	
	ALARM (Flashing Red) / AUX (Steady Red)	
	(Slow Flashing Yellow)	
	(Flashing Yellow)	
	(Fast Flashing Yellow)	
Security:	Electronic temperature limiting and locking	
Dimensions:	Thermostat:	5 <sup>43</sup> / <sub>64</sub> x 3 <sup>1</sup> / <sub>4</sub> x 1 <sup>3</sup> / <sub>16</sub> Inches (144.1 x 82.6 x 30.2 mm)
	Remote:	6 <sup>1</sup> / <sub>2</sub> x 1 <sup>23</sup> / <sub>64</sub> x 5 <sup>5</sup> / <sub>8</sub> 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: TF231120; 24 VAC  
 TF231130; 100 VAC  
 TF231140; 120 VAC  
 TF231150; 208 VAC  
 TF231170; 230 VAC  
 TF231190; 277 VAC

Description: 1 stage heat/cool with remote control

Weight: .4 lbs. (880 g)

Indicates this output is protected by a switched 4 minute time delay.

## 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

## APPLICATIONS

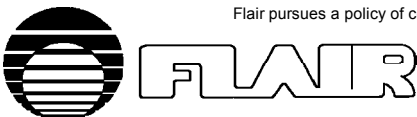
- Zone heating or cooling.
- Commercial (Stores, Restaurants, Offices).
- Industrial.
- Institutional (Hospitals, Hotels, Motels).

## REFERENCES

For More Information On:	See:
Non-Remote Version	TE23 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.



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TF23P2