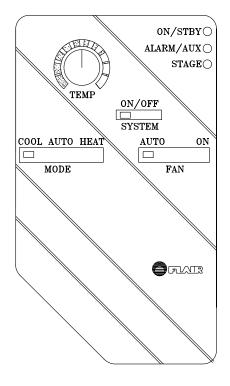


#### **ELECTRONIC**

### THERMOSTAT series TE21

For central (main) or zoned control of heating and cooling systems. Available in single- and multi-stage versions with automatic changeover.



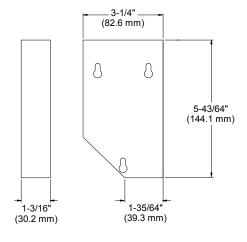
### **BENEFITS & SPECIAL FEATURES**

- 4 minute time delay for compressor protection (may be bypassed).
- No batteries required.
- Remote temperature sensor (optional).
- Return air temperature sensor (optional).
- Automatic heating/cooling changeover.
- 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.
- Continuous (on) or intermittent (auto) fan control.
- System status indicators.
- Warmer/cooler scale (standard).
- Fahrenheit and Celsius scales included.
- Available in up to 3 stages of heating and 2 stages of cooling control.

### **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).

# **DIMENSIONS**



## **SPECIFICATIONS**

Operating Voltage: 24 vac (-15%, +10%, 50-60 Hz)
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)
Between stages: 2° F (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
Compressor Protection: switched 4 minute time delay

 Switches:
 Slide:
 SYSTEM: ON/OFF

 Slide:
 FAN: AUTO/ON

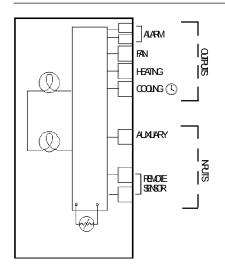
 Slide:
 MODE: COOL/AUTO/HEAT

 Rotating:
 Set: TEMPerature

Indicator LED's: ON (Steady Green) / STBY (Flashing Green)
ALARM (Flashing Red) / AUX (Steady Red)

Staging (orange): Stage One (Off); Stage Two (On); Stage Three (Flashing) 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)

## MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS

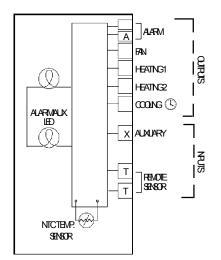


Model Number: TE211120

Description: 1 stage heat, 1 stage cool

Switching Current at 24 VAC:

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

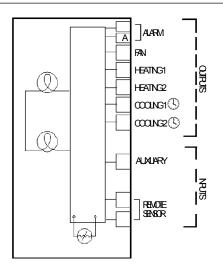


TE212120 Model Number:

2 stage heat, 1 stage cool Description:

Switching Current at 24 VAC:

Cooling: 1 Amp Heating 1: 1 Amp Heating 2: 1 Amp Fan: 1 Amp Alarm: 1 Amp Auxiliary: 1 Amp .4 lbs. (880 g) Weight:

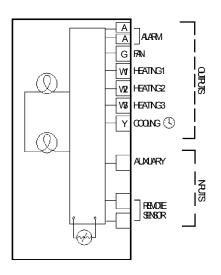


TE212220 Model Number:

Description: 2 stage heat, 2 stage cool

Switching Current at 24 VAC:

1 Amp Cooling 1: Cooling 2: 1 Amp Heating 1: 1 Amp Heating 2: 1 Amp Fan: 1 Amp Alarm: 1 Amp Auxiliary: 1 Amp Weight: .4 lbs. (880 g)

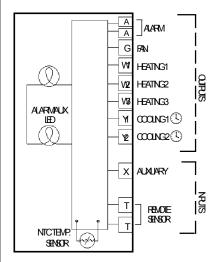


Model Number: TE213120

Description: 3 stage heat, 1 stage cool

Switching Current at 24 VAC:

Cooling 1: 1 Amp Heating 1: 1 Amp 1 Amp Heating 2: Heating 3: 1 Amp Fan: 1 Amp Alarm: 1 Amp Auxiliary 1 Amp .4 lbs. (880 g) Weight:



Model Number: TE213220

Description: 3 stage heat, 2 stage cool

Switching Current at 24 VAC:

Weight:

Cooling 1: Cooling 2: 1 Amp 1 Amp Heating 1: 1 Amp Heating 2: Heating 3: 1 Amp 1 Amp Fan: Alarm 1 Amp Auxiliary: 1 Amp

**ACCESSORIES** 

Remote Temperature Sensor TX101001 Return Air Temperature Sensor TX101011 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

(1) Indicates this output is protected by 4 minute time delay

### REFERENCES

For More Information On:	See:
Remote Model	TF21 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 sect.
Warranty & pricing	Pricing & Terms section
Backplates	Accessories sheet

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



.4 lbs. (880 g)