

DEMAND +/- O

ON/OFF

SET INSIDE TEMP OUTSIDE

COOL HEAT AUTO AUTO AM PM COOL FAN CLOCK

PROG

HEAT

CLOCK SELECT

DAY

SAT

SUN

MODE

ALARM/AUXO

ELECTRONIC PROGRAMMABLE MODULATING

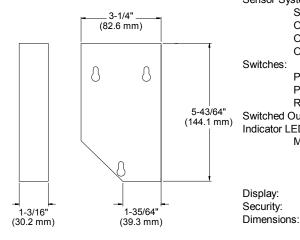
THERMOSTAT series TP81

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

BENEFITS & SPECIAL FEATURES

- Adjustable dead band prevents overlapping between heating and cooling modes.
- Floating point control for closer tolerance.
- 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.
- No sub-base required.
- 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.
- Temperature setback reduces energy costs.

DIMENSIONS



SPECIFICATIONS

Operating Voltage: 24 vac (-15%, +10%, 50-60 Hz) Temperature Range: 50°F - 90°F (10°C - 32°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

Push-button: MODE/CLOCK/SELECT/PROG/UP/DOWN

Push-button: SYSTEM: ON/OFF Rotating: set TEMPerature Switched Outputs: Triac/relay

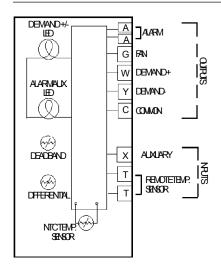
Indicator LED's: ALARM (Flashing Red) / AUX (Steady Red) Modulating circuit:

DEMAND + (Steady Blue)
Set point Off
DEMAND - (Flashing Blue)
Display: LCD, 4 character, .5" (1.27 cm) height.
Security: 4 digit user selectable code
Dimensions: 5⁴³/₆₄ x 3¹/₄ x 1³/₁₆ Inches (144.1 x 82.6 x 30.2 mm)

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.

Bulletin TP81P1

MODEL NUMBERS AND DESCRIPTIONS FOR VARIOUS APPLICATIONS



Model Number: TP811120

Description: 1 stage heat, 1 stage cool

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
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.
- Residential (Single or multi-family, Apartments, Condominiums, Co-ops).
- Commercial (Stores, Restaurants, Offices).
- Industrial.
- Institutional (Hospitals, Hotels, Motels).

REFERENCES

For More Information On: See:

Remote Model TQ81 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