

Digital Display Thermostats for 3-Speed Fan Coil Units

for a wide variety of two and four pipe hydronic fan coil applications.

The Engineered Comfort T1070 Series Thermostat represent great value for a wide variety of two and four pipe hydronic fan coil applications. These thermostat controllers are available in both programmable and non-programmable models and are designed for standalone use in commercial buildings such as hotels and schools as well as residential condominium and apartment projects.



MODELS:

- T1070** Non-programmable 2 or 4-pipe
Normally Closed - Chilled and Hot water valves
- T1075** Programmable 2 or 4-pipe
Normally Closed - Chilled and Hot water valves
- T1075N** Programmable 4-pipe Cold Climate
Normally Closed Chilled water and
Normally Open Hot water valve

FEATURES:

- 7-day programmable models with self-prompting programming
- Auto 2-pipe changeover with thermistor sensor
- 24 Vac low voltage
- Electric heat ready (1-stage)
- 3-speed fan control (ECM or PSC)
- 2 position spring return on-off water valve control
- Dry contact equipped for remote on-off occupied/unoccupied control
- Keypad lockout option
- Large easy to read permanently illuminated digital display (°F or °C)
- Dual set point with adjustable deadband
- Red / Green LED shows heating / cooling mode
- All programming and set points stored in non-volatile memory and are never lost in power failure
- Clock chip back up allows time to stay current for up to 48 hours during power loss for programmable models
- Configurable display can show both heating and cooling set points and room temperature simultaneously
- Includes exact fit locking cover
- Optional wall plate for 2" x 4" (51 x 102) or 4" x 4" (102 x 102) electrical box installation

AVAILABLE SEQUENCES OF OPERATION

TWO-PIPE:

- Cool only – Thermostat is configured for cooling only operation. Cool and Off modes can be selected.
- Heat only – Thermostat is configured for heating only operation. Heat and Off modes can be selected.
- Heat/Cool with Auto Changeover – Thermostat is configured for operation with a changeover sensor, both modes are available for operation. Thermostat will measure water temperature and automatically lock out the incorrect mode. Heat or Cool modes may not be available, depending on water temperature.
- Heat/Cool with Auto Changeover and Auxiliary Electric Heat - The Mode button selects the operating mode of the thermostat. If Off is selected, the thermostat will not enter Heating or Cooling mode. In heating mode, the thermostat will either enable the electric heat (if chilled water is in the coil), or open the coil valve (if hot water is in the coil) to maintain set point. In cooling mode, the thermostat will open the valve (if chilled water is in the coil). If Auto is selected, the thermostat will enter Heating or Cooling mode as needed to maintain set point.

FOUR-PIPE & TWO-PIPE COOL WITH (TOTAL) ELECTRIC HEAT:

The Mode button selects the operating mode of the thermostat. If Off is selected, the thermostat will not enter Heating or Cooling mode. If Heat is selected, the thermostat will only enter Heating mode (if the room temperature is below the heating set point). If Cool is selected, the thermostat will only enter Cooling mode (if the room temperature is above the cooling set point). If Auto is selected, the thermostat will enter Heating or Cooling mode as needed to maintain set point.

FAN OPERATION:

When Fan is in Auto mode, it will run continuously (unless thermostat mode is set to off or in unoccupied mode and heating or cooling are not active). The thermostat will increase or decrease the fan speed based on load conditions. Fan operation may also be set to always run at Low, Medium, or High speeds.

TECHNICAL SPECIFICATIONS:

Power requirements: 20–30 Vac. 50/60 Hz. 3 VA@24V nominal

Temperature adjustment range: 35–99 °F (2–36 °C)

Accuracy: 35–65 °F, +/- 3 °F. 66–79 °F, +/- 2 °F
90–99 °F, +/- 3 °F. 100–104 °F, +/- 5 °F

Deadband: Adjustable 1 to 6 °F first stage,
fixed 1 °F for med/hi fan speeds

Output rating (fan or valve): 20–30 Vac. 0.4A max. 0.01A min.
3A in rush

Digital inputs: H₂O voltage free contacts, closed to signal chilled water supply
CK1 voltage free contacts, closed to alter set points

Local temp. sensor: Solid state. 10mV/°F

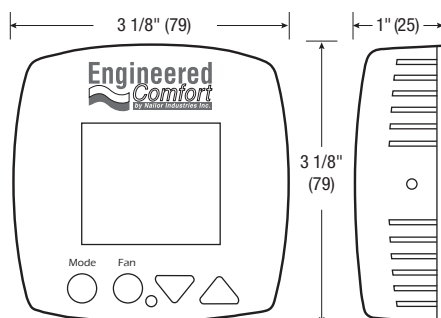
Remote temp. sensor: Digital communication. 5 ft. cable
Accurate to 1 °F

Wire size: 16 AWG (100 ft. max.) to 24 AWG (36 ft. max.)

Ambient conditions: Operating 35–104 °F (2–40 °C)
5–95% RH non-condensing
86 °F max. dew point

Compliance: UL/CUL listed (file E162563), NEC Class 2

Shipping weight: 0.5 lb (0.25 kg)



For more information, please visit
www.engineered-comfort.com