

TB & TM SERIES THERMOSTATS



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The Automated Logic TB and TM Series Thermostats available in BACnet (TB series) or MODBUS (TM series) communication protocols come with a variety of options and features for a wide range of HVAC applications. The TB and TM Series thermostats offer either zone/room/building control or building management system (BMS) level control. Utilizing ALC's powerful WebCTRL® building automation system's platform, the user can be sure that each space has precision temperature control.

KEY FEATURES

- Built-in temperature, humidity, and/or motion sensing for optimal control
- Intuitive push-button interface with a clear LCD display
- BACnet or MODBUS communication protocol capable (depending on model) for flexible system integration
- Configurable inputs and outputs to support a variety of HVAC applications
- Real-time clock maintains accurate time for up to 7 days during power outages
- Choice of 24VAC or 110-220V power supply for installation flexibility*

*depending on thermostat model

APPLICATIONS

- Fan (FCUs): Enhance occupant comfort by providing individual control over fan speed and temperature
- Rooftop Units (RTUs): Optimize RTU operation for energy efficiency through precise temperature and airflow control
- Heat Pumps: Maximize heat pump performance and efficiency with integrated control of heating and cooling modes
- Variable Frequency Drives (VFDs): Seamlessly integrate with VFDs to fine-tune motor speeds and optimize energy consumption



The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS



TB Series (BACnet)	Part #		
Options	24 V, Temp. Only	24 V, Temp, Humidity, Motion	110 - 220V, Temp. Only
Branded	TB-24-A	TB-24-HM-A	TB-AC
Unbranded	TB-24	TB-24-HM	TB
Communication:	BACnet MS/TP (subordinate device) Baud rates up to 76.8 kbps, detected and set automatically by the thermostat		
TM Series (MODBUS)	Part #		
Options	24 V, Temp. Only	-	110 - 220V, Temp. Only
Unbranded	TM-24	-	TM
Communication:	Modbus RTU (server) Baud rates up to 76.8 kbps, detected and set automatically by the thermostat		
Power:	24 VAC ± 15% 4VA no load, 76 VA Full Load		110-220 VAC
Display	LCD		
Sensing Element:			
Temperature	Range: 41-95° (5-35°C), Accuracy: ± 1°F (0.5°C)		
Humidity Range: 10-90% Accuracy: ± 3% Typical	-	X	X
Motion Sensor Type: PIR, quad, omnidirectional Distance: 16.4 ft. (5 m) Detection Range: 90 x 30 (HxV) Movement Speed: 2.62 – 3.94 ft/s (0.8 – 1.2 m/s) Detection Object: 15.75 x 9.84 in. (400 x 250 mm)	-	X	X
Inputs	T1, 0 - Normally Open (NO) or Normally Closed (NC) dry contract, or 0-10 Vdc AI, or 50 kOhm thermistor @ 77°F (25°C) A, B - Communication +/- (RS485) In1, 0 - NO or NC dry contract, or 0-10 Vdc AI, or 50 kOhm thermistor @ 77°F (25°C) C, R - Power 24 VAC		
Outputs	11, 12, 13 – DO, 3A 14 – DO 0.3A 15, 16 - DO 0.3A or AO 0-10 Vdc, 5 mA max., not isolated		
Environmental Operating Range:	50° to 122°F (10° to 50°C), 10 - 90% RH, non-condensing		
Housing:	Square form factor, fire-retardant ABS plastic, UL94V-0		
Mounting:	Installs to a standard wall box with mounting hardware included (consult technical instructions)		
Compliance:	FCC CFR47, chapter 1, subchapter A, part 15, class B ICC, ICES-003, class B CE Mark LVD, 2014/35/EU RoHS 2011/65/EU C-Tick Mark, AS/NZS 61000-6-3 CA Prop. 65		
Dimensions:	3.62" W x 3.19" H x 0.91" D (9.2cm W x 8.1cm H x 2.3cm D)		
Weight:	4.8 oz (0.14 kg)		