TB & TM PLUS SERIES THERMOSTATS

Automated Logic

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Enhance occupant comfort and optimize energy efficiency in a wide range of HVAC applications with the Automated Logic TB and TM Plus thermostats. Available with BACnet (TBPL series) or MODBUS (TMPL series) communication protocols, the TB and TM Plus thermostats seamlessly integrate with your building management system (BMS) or provides standalone zone/room control. Leveraging the advanced capabilities of ALC's WebCTRL® platform, the TB and TM Plus deliver precise temperature control for any space.

KEY FEATURES

- Easy-to-use touchscreen display

- Temperature, humidity, and motion onboard sensors for optimal control

- BACnet or MODBUS communication protocol capable, depending on model

- Configurable inputs and outputs for versatile control

- Real-time clock maintains accurate time for up to 7 days during power outages

- Flexible power supply options (24VAC or 110-220V)*

*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

- Chilled Beams: Achieve precise temperature and humidity control for optimal comfort and energy savings in chilled beam systems

- Variable Frequency Drives (VFDs): Seamlessly integrate with VFDs to fine-tune motor speeds and optimize energy consumption

WebCTRL®

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 Plus Series (BACnet) Part #	Part #			
Options	24V, Temp., Humidity	24V, Temp., Humidity, Motion	110-220V, Temp. Only	-
Branded	TBPL-24-H-A	TBPL-24-HM-A	TBPL-H-A	-
Unbranded	TBPL-24-H	-	TBPL-H	-
Communication:	BACnet MS/TP (subordinate device) Baud rates up to 76.8 kbps, detected and set automatically by the thermostat			
TM Plus Series (MODBUS)	**Part #**			
Options	24V, Temp., Humidity	-	-	110-220V, Temp., Humidity, Motion
No Brand	TMPL-24-H	-	-	TMPL-HM
Communication:	Modbus RTU (server device) 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	Backlit, Resistive Touchscreen			
Sensing Element:				
Temperature	Range: 41-95° (5-35°C), Accuracy: ± 1°F (0.5°C)			
Humidity Range: 10-90% Accuracy: ± 3% Typical	X	X	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 contact, or 0-10 VDC AI, or 50 kOhm thermistor @ 77°F (25°C) A, B - Communication +/- (RS485) In1, 0 - NO or NC dry contact, 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, 15, 16 – DO 0.3A AO1, AO2 - 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:	Rectangular 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:	3.15" W x 5.04" H x 0.62" D (8cm W x 12.8cm H x 1.55cm D) w/ PIR 3.15" W x 4.65" H x 0.62" D (8cm W x 11.81cm H x 1.55cm D) w/o PIR NOTE: Depth of unit that inserts into gang-box is 0.95" (2.4cm)			
Weight:	9.7 oz (0.28 kg)			

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