



Product Data

Trane[®] Thermostats

Programmable Data Sheet



SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.



Trademarks

All trademarks referenced in this document are the trademarks of their respective owners.

Revision History

Removed non-programmable thermostat information in the document.

Overview

Trane offers a line of programmable commercial thermostats for conventional (rooftop) air conditioners and heat pumps. Features and benefits include:

- **Intuitive Liquid Crystal Display** — are easy to use and read for all users and languages.
- **Soft-touch Buttons or Touch Screen** — both are easy and responsive for setup.
- **Configurable** — permits usage in conventional (RTU) systems or heat pumps with and without auxiliary heat.
- **Dehumidification** — only with touch screen model.

Part Numbers

Model	X Code	Clarksville	Global Parts
Thermostat, Programmable, 3-Heat/2-Cool	X13511537010	BAYSTAT150A	THT02774
Thermostat, Programmable, Touch Screen, 3-Heat/2-Cool/Dehumidification	X13511538010	BAYSTAT152A	THT02775

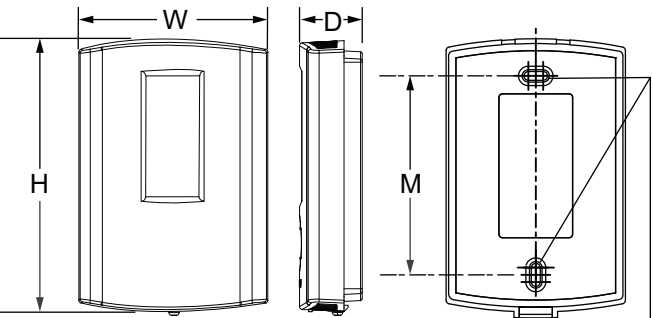
Specifications

Specification	Range, Value, or Comment
Sensor Operating Temperature	From 32°F to 122°F (0°C to 50°C)
Storage Temperature	From -40°F to 185°F (-40°C to 85°C)
Storage/Operating Humidity Range	5% to 95% Relative Humidity (RH), Non-condensing
Thermistor Accuracy	0.2°C at 25°C, 1%
Setpoint Functional Range	50°F to 89.6°F (10°C to 32°C)
Housing Material	Polycarbonate/ABS blend, UV Protected, UL 94-5VA Flammability Rating, suitable for application in a plenum
Mounting	Fits a standard 2 in. by 4 in. junction box (vertical mount only). Mounting holes are spaced 3.2 in. (83 mm) apart on vertical center line. Includes mounting screws for junction box and wall anchors for sheetrock walls. Overall dimensions: 2.9 in (74 mm) by 4.7 in. (119 mm)
Resolution	0.125°F over a range of 60 to 80°F (15.6 to 26.7°C); 0.25°F when outside this range
Accuracy	0.5°F over a range of 55 to 85°F (12.8 to 29.4°C)
Power Consumption	<1 VA

Category	Specification/Description
Input Power:	24 Vac, 50 Hz or 60 Hz (18 Vac to 32 Vac)
Wire Size:	18 to 22 AWG
Output Terminal Ratings:	1A resistive load @ 30 Vac
Temperature Display Ranges:	• Programmable Push Button: +15 to +122 °F (-9.5 to +50 °C) • Programmable Touch Screen -45°F to 199°F (-42.8°C to 92.8°C)

Category	Specification/Description
Temperature Setpoint Ranges:	- Heat Setpoint: 40°F to 90°F (4.5°C to 32°C) - Cool Setpoint: 50°F to 99°F (10°C to 37°C)
Display Type:	LCD
System Modes:	- Heat - Cool - Auto - Off - Emergency Heat
Fan Modes:	- On - Auto
Only Non-Touch Screen:	
Remote Temperature Sensor:	The thermostat includes terminals for a remote temperature sensor. They can be used for display, H/C control, or heat pump compressor lockout. The remote sensor must be 10K type 2. Recommended sensors include: Zone Temperature Sensor BAYSENS077A (X1351152801, SEN01488) or Duct Temperature Sensor BAYSTAT170A (41901133, SEN01287).
Scheduling Options:	5/2 day; 5/1/1 day; 1 day; 7 day. Two (Day/Night) or four (Morning/Day/Evening/Night) configurable periods per day.
Temporary Override:	Users can temporarily change the temperature setpoints, fan mode, and/or occupancy setting from the programmed schedule.
Lockout:	System, fan, and/or schedule settings can be locked out individually on the programmable push button model. The touch screen locks out all functions at the same time except for Clean Screen and Filter Change functions.
Only Touch Screen:	
Remote Humidity Sensor:	Touch screen thermostat has an internal humidity sensor and is capable of including a remote humidity sensor. The remote humidity sensor must be a 4 to 20 mA, 24 Vdc type. <i>Recommended humidity sensors: Wall Mount BASYSENS036A (X1379044401, SEN01177) and Duct Mount 4190 7020 (X1379044501).</i>
Humidity Display Range:	0% to 99% (1% steps)
Humidity Setpoint Range:	30% to 80% (1% steps)

Dimensions

Dimension	Programmable	Programmable Touch-Screen	
H	4.7 in. (119 mm)	3.3 in. (85 mm)	 Two (2) slots for standard #8-32 (M4), 2"x4" junction box mounting screws.
W	3.3 in. (83 mm)	5.9 in. (150 mm)	
D	1.1 in. (28 mm)	1.3 in. (33 mm)	
M	3.3 in. (85 mm)	3.3 in. (85 mm)	

Wire Terminals

Label	Description	Programmable	
		3Heat/2Cool	Touch Screen
(O/B)W	(Changeover Valve) ^(a) Heat Relay	✓	✓
(Aux/E)W2	(Auxiliary or Emergency Heat Relay) ^(a) Second Stage Heat		
(W1)W2	(Emergency Heat Relay) ^(a) Second Stage Relay	✓	✓
A	Economizer Relay	✓	✓
C	Common	✓	✓
Dh	Dehumidify Relay		✓
G	Fan Relay	✓	✓
Hp	External Humidity Sensor Power		✓
Hs	External Humidity Sensor Input		✓
(L)	(Emergency Heat Indicator Relay) ^(a)		
R	24 Vac Heating	✓	✓
Rc	24 Vac Cooling	✓	✓
S1	External Temperature Sensor	✓	✓
S2	External Temperature Sensor	✓	✓
Y	Stage 1 Compressor Control Relay	✓	✓
Y2	Stage 2 Compressor Control Relay	✓	✓

(a) Text in parentheses applies to **only** heat pump systems.

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