

TEC1100 Series
Thermostat



TEC1100 Series Thermostat

Description

TEC1100 is a series of non-programmable thermostats, each with a Liquid Crystal Display (LCD) and a keypad for easy menu selection. TEC1100 thermostats connect to the Metasys® N2 bus, which provides the programmability for the most efficient space control. The user can easily adjust heating or cooling setpoints, view the room or outside air temperatures, select continuous fan operation, and specify mode of operation (Day/Night).

The TEC1100 series includes three models: Single-stage (TEC1101), Heat Pump (TEC1102), and Multistage (TEC1103). It can be used with furnace, heat pump, packaged air conditioning unit, and rooftop unit applications. Fuzzy logic algorithms have been incorporated to provide precise setpoint control.

Features

- Metasys N2 bus communication for use with a proven communication network; N2 Bus is widely accepted by Heating, Ventilating, and Air Conditioning (HVAC) control suppliers
- easy-to-read liquid crystal display (LCD) for realtime control of the environment
- pushbutton selection for easy adjustment of the thermostat's many options
- low profile design that fits with any décor; enhanced with a unique cover design
- temperature alarm that occurs at the workstation if the space temperature is not satisfied
- °C or °F selection by pressing the up/down arrow buttons without affecting the Metasys display

- easy sensor calibration by pressing the Fan button for 10 seconds and using the up/down arrows to adjust
- 1-hr override to Day (Occupied) mode for temporary occupancy

Applications

The TEC1100 series is based on the established T500 product. The three TEC1100 models are similar to the T500 models: HCN, HPN, MSN. These models support most common HVAC applications. The TEC1100 provides the advantage of Metasys N2 Network communication, so the user can view operation or make adjustments at the thermostat or from a remote workstation. Additionally, a subtle cover design change provides a distinctive appearance, which is unique to Johnson Controls. The cover is lockable to minimize access to setpoint buttons.

To Order

Specify the code number from the following selection chart.

Selection Chart

Code Number	Description
TEC1101-1	Thermostat W/N2, 1 Heat/1 Cool, similar to T500HCN
TEC1102-1	Thermostat W/N2, Heat Pump, similar to T500HPN
TEC1103-1	Thermostat W/N2, 2 Heat/ 2 Cool, similar to T500MSN

Accessories

Code Number	Description
TEC10DOOR-NONPR	Replacement Door (10/Box)
SEN-500-1	Remote indoor air temperature communication module with sensor
SEN-500-2	Outdoor air temperature communication module with outdoor air sensor
SEN-500-3	Outdoor air temperature communication module with duct-mount sensor

TEC1100 Series Thermostat (Continued)

Specifications

TEC1100 Series Thermostat.	
Product	TEC1101-1 Thermostat with N2 Bus, 1 Heat/1 Cool, Non-programmable TEC1102-1 Thermostat with N2 Bus, Heat Pump, Non-programmable TEC1103-1 Thermostat with N2 Bus, 2 Heat/2 Cool, Non-programmable
Power Requirements	20-30 VAC, 50/60 Hz, Class 2, 24 VAC nominal, 2.4 VA not including relay loads
Relay Contact Rating	Maximum Inductive: 1 ampere with surges to 3 amperes, 24 VAC Class 2 Maximum Resistive: 1 ampere, 24 VDC Minimum: 10 mA for a 24 VAC circuit; 10 mA for a 24 VDC circuit
Binary Value (LED 1, LED 2, CLK1)	20-30 VAC or 22-30 VDC, switches at 2 VDC
Recommended Wire Size	1.5 mm ² (18 AWG) at 30 m (100 feet); 0.6 mm ² (24 AWG) at 6 m (20 feet)
Thermostat Measurement Range	0 to 48°C (28 to 124°F)
Outdoor Air Temperature Indication Range	-48 to 48°C (-50 to 124°F)
Control Range	Heating: 5 to 30°C in 1° steps, 38 to 88°F in 1° steps Cooling: 16 to 40°C in 1° steps, 60 to 108°F in 1° steps
Display Resolution	1°C (1°F)
Minimum Deadband	1°C or 2°F (Between heating and cooling)
°C / °F Conversion	20°C = 68°F (each Celsius degree above or below 20°C is 2°F)
N2 Communications	Isolated bidirectional, RS-485, 9600 baud
Ambient Operating Conditions	0 to 55°C (32 to 131°F); 5 to 90% RH non-condensing
Ambient Storage Temperatures	-34 to 55°C (-30 to 131°F)
Dimensions (H x W x D)	114.3 x 101.6 x 22.2 mm (4 1/2 x 4 x 7/8 in.)
Shipping Weight	0.171 kg (0.37 lb)
UL and cUL Listing	UL 873 Multiple Class 2 Device, UL94HB Plastic Enclosure
CE Compliance	CISPR 22, Residential Class B, CE Directive (89/336/EEC, EN50081/1, EN50082/2) Industrial and Residential
FCC Compliance	This equipment has been tested and found to comply with the limits for a Class A digital device and verified to Class B pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense. Operation is subject to the following two conditions: (1) This device may not cause harmful interface. (2) This device must accept any interface received, including interference that may cause undesired operation. Cet appareil numérique de la classe A respecte toutes les exigences du Reglement sur le materiel brouilleur de Canada.