WARMZONE
Premier Radiant Heating

INDUSTRIAL ELECTRONIC THERMOSTSAT



The Ranco ETC is a microprocessor-based family of temperature controls designed to provide on/off control for commercial heating, cooling, air conditioning and refrigeration applications. With its wide temperature range, one and two stage capability, selectable heating/cooling modes and multi-voltage input, the ETC is one of the most versatile temperature controls available.

DIGITAL DISPLAY

Unlike many electronic controls, the ETC is simple to install and set up. One finger is all you need to program it. The standard digital display and keypad allow the user to adjust the temperature settings with 1° resolution. Setpoint temperature, differential and mode of operation (heating or cooling) can all be selected using the keypad and display.

When not in the programming mode, the display gives a constant readout of the sensor temperature. Annunciators on the liquid crystal display also indicate when the relay is energized.

CHOICE OF ONE OR TWO STAGE MODELS

The ETC line includes both one and two stage models. On two stage controls, each stage can be set independently thus eliminating the bothersome task of calculating interstage temperatures. And two stage models can be set up with overlapping heating or cooling stages.

REMOTE TEMPERATURE SENSING

The ETC is capable of remote temperature sensing up to 400 feet away from the control when using standard 22 gauge sensor wire.

BUILT-IN SAFETY

Every ETC model is equipped with diagnostic programs that check for hardware, software or system problems and display different error codes to indicate where the trouble is.

The ETC also has a keypad lockout switch to prevent tampering with the control settings by unauthorized personnel. The switch, which is located inside the enclosure, can be used to disable the keypad function.

OPTIONAL ANALOG OUTPUT

ETC models are available with a 0 to 10 volt analog output that can be used for remote temperature indication or as input to a central monitoring system. This signal is a linear representation of the sensor temperature with 0 volt –30°F and 10 volts = 220°F.

SPECIFICATIONS

Temperature setpoint range	–30° to 220°F
Differential range	1°F to 30°F
Input power requirements	120 or 208/240 VAC (24 VAC optional)
Sensor	Thermistor, 2" long x 1/4" dia. with 8' cable
Control Ambient Temperatures	
Operating	–20°F to 140°F
Storage	–40°F to 176°F
Ambient humidity	0 to 95% RH, non-condensing
Enclosure	NEMA 1, plastic (NEMA 4X optional)
Dimensions	NEMA 1 models, 6.52" high x 2.7" wide x 2.48" deep NEMA 4X models, 7.84" high x 2.7" wide x 2.48" deep
0 to 10 V output impedance	1 K ohms
Agency Approvals	UL listed, file E94419, Guide XAPX CSA certified, file LR68340. class 4813 02
Switch action	SPDT

RELAY OUTPUT RATINGS - NO (NC):	ONE STAGE		TWO STAGE	
	120V	208/240V	120V	208/240V
Full load amps	16 (5.8) A	8 (2.9) A	9.8 (5.8) A	4.0 (2.9) A
Locked rotor amps	96 (34.8) A	48 (17.4) A	58.8 (34.8) A	29.4 (17.4) A
Resistive amps	15 (5.8) A	8 (2.9) A	9.8 (5.8) A	4.9 (2.9) A
Horsepower	1 (1/4) HP	1 (1/4) HP	1/2 (1/4) HP	1/2 (1/4) HP
Pilot duty	125VA at 120/208/240 VAC			

ORDERING DATA

UNI-LINE ORDER NO.	NUMBER OF STAGES	ENCLOSURE	INPUT VOLTAGE	0 TO 10 VOLT OUTPUT
ETC-111000	ONE	NEMA 1	120/208/240 VAC	NO
ETC-111100				YES
ETC-112000			24 VAC	NO
ETC-112100				YES
ETC-141000		NEMA 4	120/208/240 VAC	NO
ETC-211000	TWO	NEMA 1		
ETC-211100				YES
ETC-212000			24 VAC	NO
ETC-212100				YES
ETC-241000		NEMA 4	120/208/240 VAC	NO