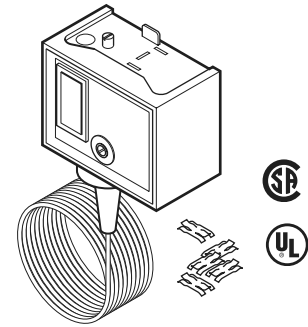


Low Temperature Thermostats

The TC-5231, TC-5232, and TC-5241 low temperature thermostats are used to control temperature in air conditioning or refrigeration systems.

Features:

- 20 ft. (6.1 m) element senses temperature over a large area. Control responds to coldest one-foot section of the sensor.
- Adjustable setpoint with 5 F degrees (3 C degrees) fixed differential.
- SPST, SPDT and DPST versions.
- Capillary mounting clips provided.



Model Chart																
Model No.	Setpoint Range	Device Type	Electrical Switch	Voltage Vac	Full Load Amps	Locked Rotor Amps	Pilot Duty (VA)	Non-Inductive Amps								
TC-5231	35 to 60°F (1.7 to 1.5°C)	Low temp auto reset	SPDT ^a	24 ^b	—	—	100	16								
				120	17	102	720	24								
				208												
				240 ^c												
TC-5232			277	—	—	—	—	—	—	7.2						
											DPST ^d	24 ^b	—	—	100	16
												120	24	144	125	24
												208				
240 ^c																
TC-5241	277	—	—	—	—	—	—	7.2								
									SPDT ^a	24 ^b	—	—	100	16		
										120	17	102	720	24		
										208						
240 ^c																
TC-5242	15 to 55°F (-9.4 to 12.8°C)	Low temp manual reset ^e	1-SPST Main N.C. 1-SPST Aux N.O.	120	16	96	125	—								
				208	9.2	55.2										
				240 ^c	8	48										
				277	—	—	125	7.2								
				120	6	36										
				208	3.4	20.4										
				240 ^c	3	18										
277	—	—	125	6												

^a Do not exceed pilot duty rating on one side of switch.
^b Less than 0.5 Amp is not recommended.
^c Full load and locked rotor ratings are suitable for hermetic compressors only.
^d Limit two separate circuit loads with common return to <5885 VA. Only one load may be a motor load.
^e Reset cannot be accomplished until the sensed temperature is at least 5°F above setpoint.

TC-5231 Series, TC-5232, TC-5241 Series

DC Ratings for TX-5232 Only.

Volts	FLA ^a	LRA ^a	NIA ^a	PD VA ^a
120	4.6	46	3	57.5
240	2.3	23	0.5	57.5
600	—	—	—	57.5

- ^a FLA — Full Load Amps.
 LRA — Locked Rotor Amps.
 NIA — Non-Inductive Amps.
 PDVA — Pilot Duty VA.

Specifications

Setpoint dial range	Dual marked 35 to 60°F (1.7 to 15.5°C). TC-5242: 15 to 55°F (-9.4 to 12.8°C).
Sensing element	Vapor pressure type, copper construction.
Response	To lowest temperature sensed by any one-foot section of its element. Altitude causes the control to operate approximately 1°F colder per 1000 ft. of elevation.
Differential	5 F degrees (3 C degrees) fixed.
Electrical switch	Refer to Model Chart.
Ratings	Refer to Model Chart.
Connections	Coded screw terminals.
Mounting	In any position on any surface not subject to excessive vibration.
Housing	Molded gray PVC plastic cover with a zinc-plated steel main enclosure with a 1/2 in. conduit opening. TC-5242: painted steel housing.
Environment	
Ambient temperature limits	Shipping: -40 to 150°F (-40 to 66°C). Operating: Must be 5°F (3°C) above setpoint to a maximum of 150°F (66°C) at case. Thermal sensing element: 300°F (149°C).
Humidity	Enclosure: 5 to 95% RH, non-condensing. Thermal sensing element: 0 to 100% RH.
Locations	NEMA Type 1.
Dimensions	
Case	2-45/64 H x 3-1/2 max. W x 2 max. D in. (69 x 89 x 51 mm). TC-5242: 3-1/4 H x 4 L x 2 D in. (83 x 101 x 51 mm)
Element	3/32 in. O.D. x 20 ft. length (2.4 mm x 6.1 m). TC-5242 1/8 in. O.D. x 20 ft. length. (3.2 mm x 6.1 m).
Agency Listings	
UL 873	Underwriters Laboratories Inc. listed (File # E9429 Category Temperature-indicating and Regulating Equipment).
CSA	Certified for use in Canada by Underwriters Laboratories. Canadian standards C22.2 No. 24-93.
General Instructions	Refer to F-25911.

Typical Applications

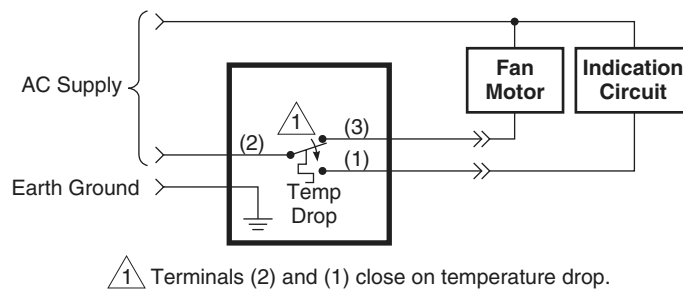


Figure 1 TC-5231 or TC-5241 Switch Action and Terminal Identification.

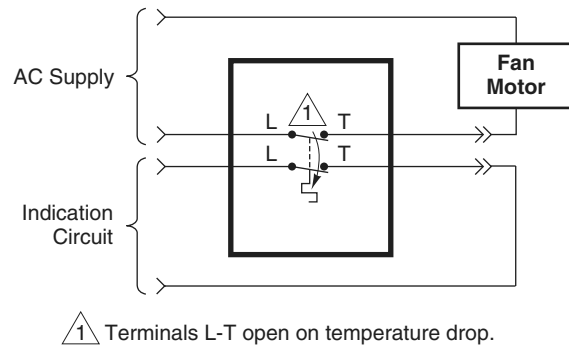


Figure 2 TC-5232 Switch Action and Terminal Identification.

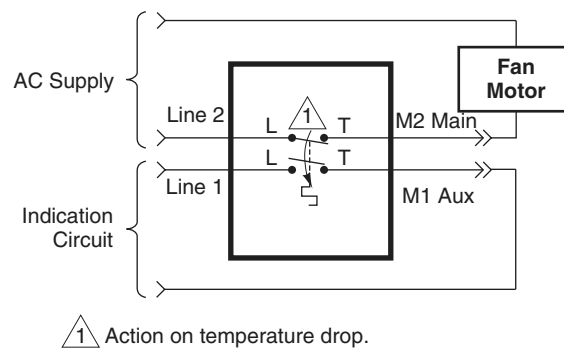


Figure 3 TC-5242 Switch Action and Terminal Identification Manual Reset.