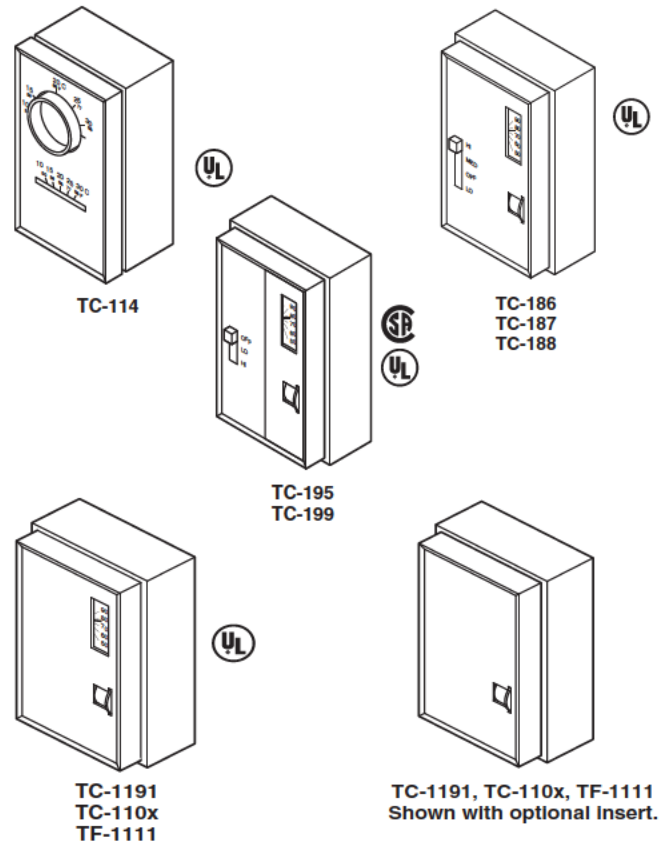


Two-Position Electric Duplex Room Thermostats

These thermostats provide on-off control of heating/cooling systems.

Features:

- Separate units for °C and °F.
- All units except TC-114.
 - Parallel heat and/or cooling anticipation capability.
 - Dial stop pins to limit range.
 - Lock cover screw/sets available.
 - Agency approval.
 - Switch bases AT-602 and AT-603 available for custom applications.
- TC-18x and TC-19x.
 - Fan switch option standard.



Model Chart

Model No.	Application	Setpoint Dial Range	Differential F Degrees (C Degrees)	Electrical Switch Refer to Electrical Ratings Table	Connections	Cover	Dimensions In. (mm) H x W x D	Agency Listing
TC-114	On/off control of unit heaters or motors.	50 to 90°F (10 to 32°C) Dual marked	Heat, 2 (1.1) Cool, 4 (1.7°)	SPDT snap action	Screw terminals	Beige plastic with metal brushed bronze insert	4-3/4 x 2-3/4 x 2-3/4 (121 x 70 x 70)	UL
TC-186 ^a TC-187 ^a TC-188 ^a TC-187-116 ^a TC-188-116 ^a	Sequenced on-off control of line voltage fan coil or zone valves on heating and cooling systems.	55 to 85 °F 13 to 29°C	Heat, 2 Neutral, 2 Cool, 2 Heat, (1.1) Neutral, (1.1) Cool, (1.1)	SPDT zero energy band (neutral center)	Coded screw terminals and color-coded 6 in. leads		Beige metal with metal brushed bronze insert	
TC-195 ^a TC-199 ^a	On-off control of line voltage fan coil or zone valves on heating and cooling systems.	55 to 85 °F (13 to 29°C)	1.5 (0.8) Heat, 2 (1.1) Cool, 2 (1.1) Neutral, 2 (1.1)	SPDT snap action SPDT zero energy band (neutral center)				

^a Models offer fan speed control.

TC-1xx Series, TC-11xx Series, TF-1111 Series

Model Chart (Continued)

Model No.	Application	Setpoint Dial Range	Differential F Degrees (C Degrees)	Electrical Switch Refer to Electrical Ratings Table	Connections	Cover	Dimensions In. (mm) H x W x D	Agency Listing
TC-1101	Low or line voltage on-off control of fan coils, fans, motor starters, contactors, two-position electric actuators.	55 to 85°F	2 (1.1)	SPDT snap action	Color-coded 6 in. leads	Beige plastic as standard	4-3/8 x 2-7/8 x 1-5/8 (111 x 73 x 41)	UL
TC-1101-116		13 to 29°C	1 C° (1.8 F°)					—
TC-1101-500 ^a		55 to 85°F	2 (1.1)					—
TC-1102		45 to 75°F	2 (1.1)					UL
TC-1102-116		7 to 23°C	1 C° (1.8 F°)					—
TC-1102-500 ^a		45 to 75°F	2 (1.1)					—
TC-1102-602 ^b		75 to 105°F						—
TC-1103			24 to 40°C					1 C° (1.8 F°)
TC-1103-116		75 to 105°F	2 (1.1)					—
TC-1103-500 ^a		Low or line voltage on-off control of heat/cool systems such as 3 or 4 pipe unitary.	55 to 85°F					Heat, 2 (1.1) Cool, 2 (1.1) Neutral, 2 (1.1)
TC-1191	13 to 29°C							
TC-1191-116	55 to 85°F							
TC-1191-500 ^a								
TC-1191-602 ^b								
TF-1111	55 to 85°F	4 (2.2)	SPDT floating off 0.160 FLA @ 24 Vac				—	
TF-1111-116	13 to 29°C	(2)						

^a Heat anticipation model.

^b 10 F degree night depression model.

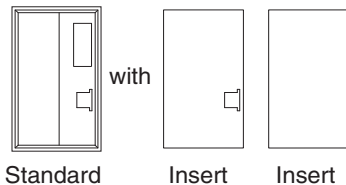
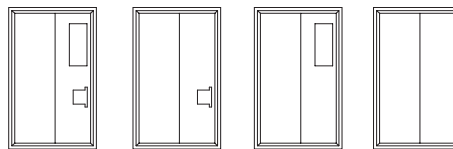


Figure 1 Standard Covers.



F TC-1xxx-399 -400 -403†† -404††
 C TC-1xxx-398 -410 -413†† -414††

††5/64" Allen screw used to secure cover.

**Figure 2 Options (for quantities of 24 or more each number)
 Add dash number (-xxx) suffix to base [part number of desired option].
 For metal covers, specify TC2-11xx. No cover option for TC-1xx.**

TC-1xx Series, TC-11xx Series, TF-1111 Series

Specifications

Anticipators	Thermostats mounted on concrete walls or surfaces that change temperature slowly, have reduced response to changes in air temperature. Response is further delayed by guards that restrict air flow to the thermostat. Anticipators are required (parallel for cooling, series or parallel for heating) for any of these conditions and in spaces intended for continuous occupancy; i.e., hotel guest rooms and offices.
Anticipation	
TC-18x Series	Cooling is fixed.
TF-1111 Series	Heating and cooling; factory-installed resistors are sized for 0.16 FLA @ 24 Vac maximum.
Fan switch	
TC-18x Series	Marking: Low-Off ^a -Med-High.
TC-19x Series	Marking: Off-Lo-Hi ^a . Construction: Integral two-pole three-position.
Sensing element	Bimetal.
Mounting	Flush or 2 x 4 wall box.
Locations	NEMA Type 1.
General Instructions	TC-18x: Refer to F-20044. TC-19x: Refer to F-15688. TC-110x: Refer to F-18785. TC-119x: Refer to F-18781. TF-1111-xxx: Refer to F-21666.

^a Off position de-energizes thermostat and fan.

Electrical Ratings.

Model No.	Fan Switch			Thermostat Contacts						
	Volts (AC)	Full Load Amps	Locked Amps	Volts (AC)	Full Load Amps	Locked Rotor Amps	Pilot Duty (VA)	Non-Inductive Amps		
TC-114	—	—	—	120/240	9.8/8	58.8/48	—	22		
TC-186	24	6	36	24	4.4	26	40	—		
TC-187	120			240			120		18	125
TC-187-116							240			
TC-187-770										
TC-188	240	3	18	240	3	18	125			
TC-188-116										
TC-188-770										
TC-195	120/240	6/3	36/18	120/240	3/1.5	18/9	48	120V 3 A 240V 1.5 A		
TC-195-770					1.0/0.5	6/3		48	120V 1 A 240V .5 A	
TC-199										
TC-199-770										
TC-1101	—	—	—	24/120/240	Heat, 4.4/4.4/2.2 Cool, 3.0/3.0/1.5	Heat 26.4/26.4/13.2 Cool, 18/18/9	40/210/210	—		
TC-1101-116										
TC-1101-500										
TC-1101-700										
TC-1102										
TC-1102-116										
TC-1102-500										
TC-1102-602										
TC-1102-770										
TC-1103										
TC-1103-116										
TC-1103-500										
TC-1103-770										

Electrical Ratings (Continued).

Model No.	Fan Switch			Thermostat Contacts				
	Volts (AC)	Full Load Amps	Locked Amps	Volts (AC)	Full Load Amps	Locked Rotor Amps	Pilot Duty (VA)	Non-Inductive Amps
TC-1191	—	—	—	24/120/240	Heat, 4.4/4.4/2.2 Cool, 3.0/3.0/1.5	Heat 26.4/26.4/13.2 Cool, 18/18/9	40/210/210	—
TC-1191-116								
TC-1191-500								
TC-1191-602								
TC-1191-770								
TF-1111	—	—	—	24	0.16 at 24 Vac	—	—	—
TF-1111-116								
TF-1111-770								

Accessories

Model No.	Description
AT-61 Series	Brushed bronze cover plates.
AT-101	Lock cover kit.
AT-104	Dial stop pins (pins included with each unit).
AT-504	Plaster hole cover kit (small).
AT-505	Surface mounting base.
AT-546	Auxiliary mounting plate.
AT-602	Selector switch sub-base DP4T.
AT-603	Selector switch sub-base one DP4T, one DPDT.
AT-1103	Wire guard.
AT-1104	Cast aluminum guard.
AT-1105	Plastic guard, 3-7/8 H x 3-1/2 W x 2-1/2 D in..
AT-1155	Plastic guard, 6-1/4 H x 5-1/2 W x 3-1/4 D in..
AT-1165	Plastic guard 8 H x 5-1/2 W x 3-1/2 D in.
TOOL-11	Calibration wrench.
TOOL-13	Contact burnishing tool.

Typical Applications

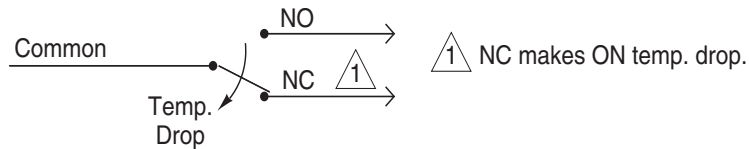


Figure 1 TC-114 Switch Action and Lead Identification.

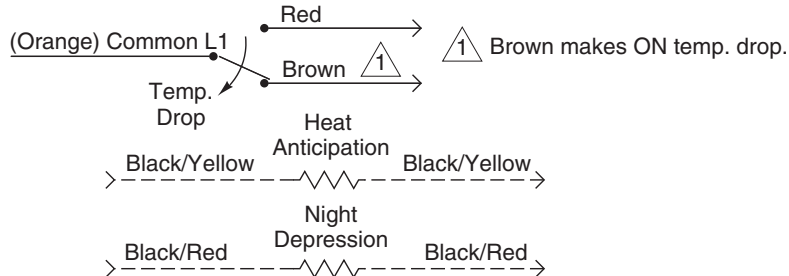


Figure 2 TC-110x Series Switch Action and Lead Identification.

TC-1xx Series, TC-11xx Series, TF-1111 Series

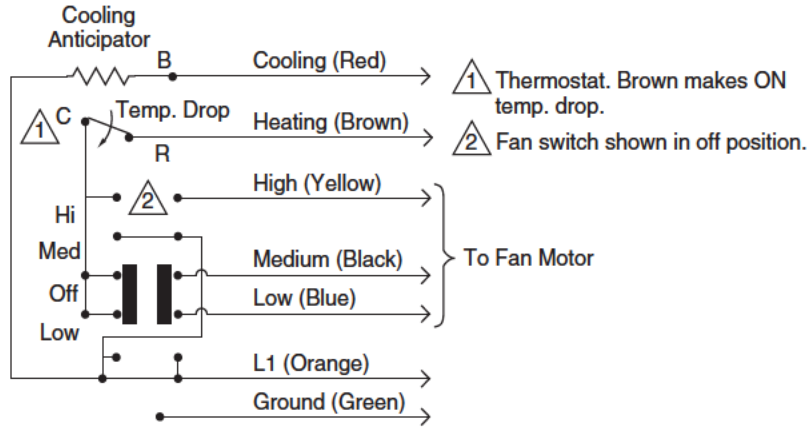


Figure 3 TC-18x Series Switch Action and Terminal Identification.

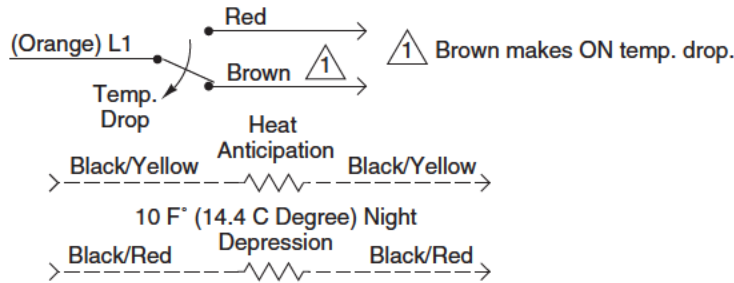


Figure 4 TC-1191 Switch Action and Lead Identification.

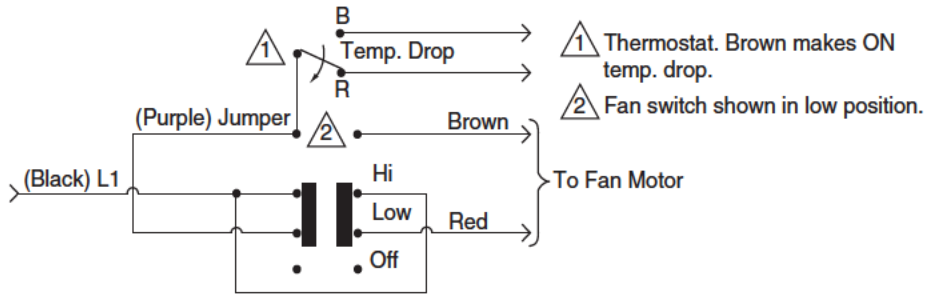


Figure 5 TC-19x Series Switch Action and Terminal/Lead Identification.

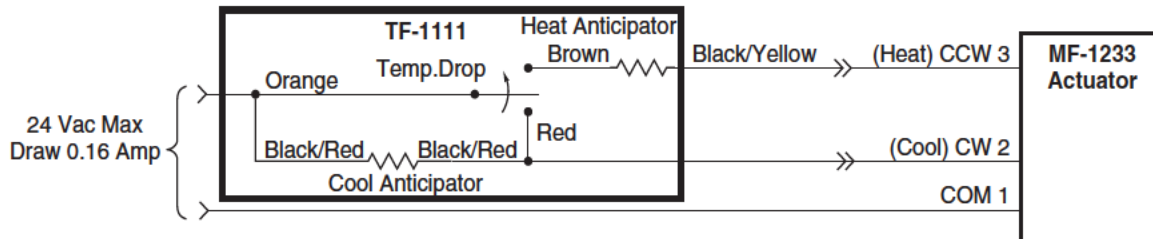


Figure 6 TF-1111 Switch Action and Typical Wiring.