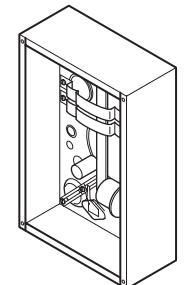


Dual Setpoint, Single Output Room Thermostats

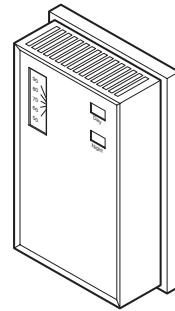
For proportional control of pneumatic-actuated valves and damper actuators to maintain room air temperatures in heating, ventilating, and air conditioning systems.

Features:

- Attractive appearance.
- Branch-line to sensing-element pneumatic feedback for linear, stable operation.
- Available with °F or °C setpoint scales and thermometers.
- Covers supplied with exposed setpoint and thermometer.
- Cover inserts included for:
 - Exposed setpoint only.
 - Blank cover.
- Aspirated versions of certain models available.



TK-17xx-600
Aspirated Thermostat



TK-17xx

Model Chart		15 psig Supply Pressure			20 psig Supply Pressure ^a		
°F	°C ^b	Dial Range ^c	Control Action ^d	Cover Legend	Dial Range ^c	Control Action ^d	Cover Legend
TK-1717 ^e	TK-1717-116	55 to 85°F (13 to 29°C)	Direct	Heat ^f	55 to 85°F (13 to 29°C)	Direct	Cool
TK-1727 ^e	TK-1727-116		Reverse			Reverse	
TK-1731 ^e	TK-1731-116		Reverse			Direct	
TK-1741 ^e	TK-1741-116		Direct			Reverse	
TK-1711 ^e TK-1751 ^g	TK-1711-116 TK-1751-116 ^g		Direct	Day	Direct	Night	
TK-1721 ^e TK-1761 ^g	TK-1721-116 TK-1761 ^g		Reverse		Reverse		

^a 22 psi required if setpoints are more than 20°F apart.

^b Celsius models not available for wholesale.

^c Control dial is marked in °F on one side and °C on the other side. Units have built-in stops that can limit high and/or low setting of each dial.

^d Direct Acting (D.A.) — Increase output pressure on temperature rise.

Reverse Acting (R.A.) — Decrease output pressure on temperature rise.

^e These models available in aspirated versions, add -600 to model number.

^f Use AT-67 series cover plate to reverse heat/cool legends.

^g Units include a manual override lever for overriding 22 psig (152 kPa) operation and placing control into 15 psig (103 kPa) control mode when unit is supplied with 22 psig (152 kPa). Lever automatically resets when supply pressure is reduced to 15 psig (103 kPa).

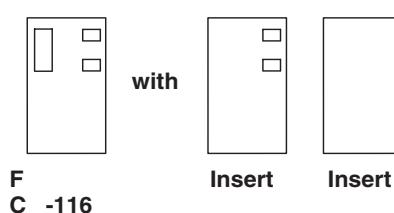


Figure 1 Standard Covers.

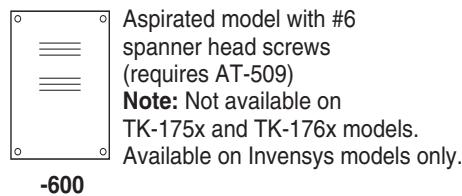
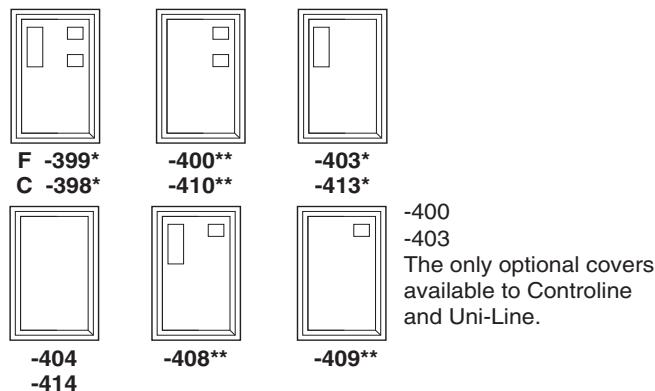


Figure 2 Aspirated Thermostat Cover.



* Units have external thermometers.
 ** Units have internal setpoint adjustment:
 setpoint can be seen externally.
 Knob(s) are provided to modify the
 unit to external adjustment.

Figure 3 Optional Covers. (For quantities of 24 or more of same part number).

Add “dash number” (-xxx) suffix to base part number for desired option. For metal covers, specify TK2-17xx-xx.

Specifications

Thermostat	Proportional two pipe type. Two pressure Heating/Cooling or Day/Night thermostats switch between two bimetal sensors.
Sensing element	Two bimets.
Control dial range	Two independent with stops. Refer to Model Chart.
Throttling range	Independently adjustable for each setpoint dial 2 to 10°F/10 psi change in branch line pressure, factory set at 4°F/10 psi.
Output air signal	0.5 psig (3.4 kPa) to supply air -0.5 psig (-3.4 kPa).
Action	Refer to Model Chart.
Ambient limits	
Shipping	-40 to 150°F (-40 to 65°C). 0 to 98% R.H., non-condensing.
Operating	20 to 115°F (-7 to 46°C). 10 to 98% R.H., non-condensing.
Supply air pressure	Clean, oil free, dry air required (reference EN-123).
Requires	15 and 22 psig (103 and 152 kPa) dual pressure. Refer to Model Chart.
Maximum	30 psig (207 kPa).

TK-17xx Series

Specifications (Continued)

Air connections

Main (black)	5/32 in. dia. spring reinforced plastic tube.
Branch (white)	5/32 in. dia. spring reinforced plastic tube.

Air consumption for sizing air compressor

TK-17xx	13.8 scim (3.8 mL/s).
TK-17xx-600 (Aspirated models)	41.5 scim (11.3 mL/s).

Air capacity for sizing air mains

TK-17xx	80 scim (21.8 mL/s).
TK-17xx-600 (Aspirated models)	120 scim (32.7 mL/s).

Cover Beige plastic with brushed bronze metal inserts as standard except aspirated models. Aspirated models have brushed stainless steel covers.

Mounting Upright position on wall.

Dimensions

TK-17xx	4-3/8 H x 2-3/4 W x 1-5/8 D in. (111 x 70 x 43 mm).
TK-17xx-600 (Aspirated models)	Wall box: 5 H x 3-1/2 W x 2-1/2 D in. (127 x 89 x 64 mm). Cover: 5-1/2 H x 4 W in. (140 x 102 mm).

Accessories

Model No.	Description
AT-65 Series	Cover inserts.
AT-67	Brushed bronze cover plates (cooling/heating).
AT-504	Plaster hole cover.
AT-505	Surface mounting base.
AT-506	Pneumatic wall box fitting.
AT-509	Wall box required for aspirated thermostats.
AT-536	Pneumatic wall thermostat conversion kit.
AT-546	Auxiliary mounting base.
AT-533-101	Adapter 1/4 in. plastic to 5/32 in. plastic.
AT-533-127	Adapter 3/16 in. copper or 1/4 in. copper with 1/4 in. solder coupling (not included) to 5/32 in. plastic.
AT-533-129	5/32" x 5/32" barbed brass connector.
TOOL-015	Spanner head driver for #6 spanner head screws.
TOOL-080-1	Calibration tool.
TOOL-095-1	Pneumatic calibration tool kit.

Typical Applications



Figure 4 Typical Application.