

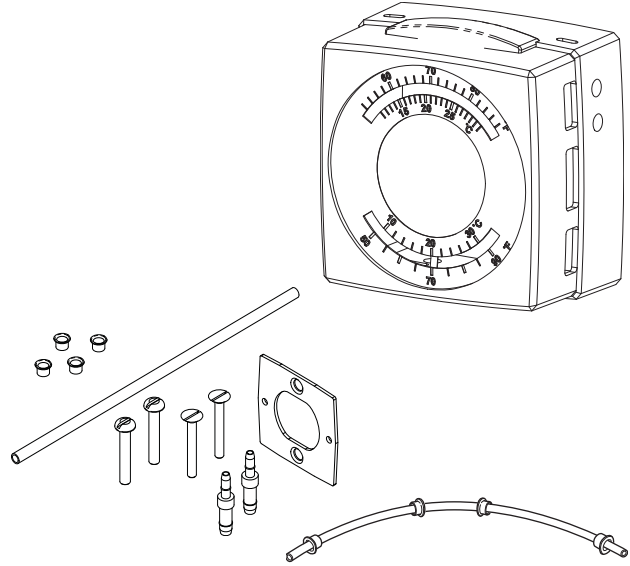
2211 through 2218 Series

Room Thermostats

These pneumatic room thermostats are designed for proportional temperature control of pneumatic valves and damper actuators to maintain room air temperatures in heating, ventilating, and air conditioning systems.

Features:

- Small size, approximately 2 x 2 in. (51 x 51 mm).
- Factory calibrated. Stainless steel ball-in-seat provides pneumatic feedback for linear, stable operation.
- Easy-to-use throttling range adjustment and recalibration.
- Adjustable bimetal shows actual throttling range in both °F and °C. Adjustable 2 to 12°F (1 to 6.7°C).
- Setpoint (in both °F and °C) shown on thermostat body with cover removed.
- Leakproof, O-ring sealed, spring-loaded self-closing branch gauge tap.
- 2214 and 2216:
 - Separate factory-calibrated night bimetal and setpoint dial, with fixed 4 F° (2 C°) night throttling range for accurate "night" operation.
 - Snap-acting (not gradual) changeover from "day" to "night" operation and vice versa.
- 2216:
 - Third port (R) output with manual reset lever allows full restoration of day operation (typically, of unit ventilator), with either manual or automatic reset to day-night schedule.
- 2218:
 - Snap-acting (not gradual) changeover from direct-action to reverse-action and vice versa.



2211 through 2218 Series

Model Chart				
Model No.	Replaces Model No.	Dial Range °F (°C)	Air Consumption	Description (Refer to Following Pages for More Detail)
2211-012	T12-301	55 to 85 (13 to 29)	0.017 scfm at 20 psig (0.48 L/m at 138 kPa)	Single temperature, one-pipe, D.A.
2211-013	T13-301			Single temperature, one-pipe, R.A.
2212-118	T18-301	55 to 85 (13 to 29)	15.6 scim at 20 psig (4.2 mL/s at 138 kPa)	Single temperature, two-pipe, D.A., throttling range adjustable 2° to 12°.
2212-119	T19-301			Single temperature, two-pipe, R.A., throttling range adjustable 2° to 12°.
2212-618	—			Single temperature, two-pipe, R.A., throttling range adjustable 2° to 12° (includes 20-023).
2212-619	—			
2214-121	T23-301	Day 55 to 85 (13 to 29)	29.4 scim at 16 psig (8.0 mL/s at 110 kPa)	Day-Night Thermostat, two-pipe, D.A. 16 psig (110 kPa) day, 25 psig (172 kPa) night.
		Night 50 to 80 (10 to 27)	43.2 scim at 25 psig (11.8 mL/s at 172 kPa)	
2214-122	T24-301	Day 55 to 85 (13 to 29)	29.4 scim at 16 psig (8.0 mL/s at 110 kPa)	Day-Night Thermostat, two-pipe, R.A. 16 psig (110 kPa) day, 25 psig (172 kPa) night.
		Night 50 to 80 (10 to 27)	43.2 scim at 25 psig (11.8 mL/s at 172 Kpa)	
2216-126	T27-301	Day 55 to 85 (13 to 29)	29.4 scim at 16 psig (8.0 mL/s at 110 kPa)	Day-Night Thermostat, three-pipe, with manual reset lever D.A. 16 psig (110 kPa) day, D.A. 25 psig (172 kPa) night.
		Night 50 to 80 (10 to 27)	43.2 scim at 25 psig (11.8 mL/s at 172 Kpa)	
2218-132	T32-301	55 to 85 (13 to 29)	31.1 scim at 16 psig (8.5 mL/s at 110 kPa)	Summer-Winter, throttling range adjustable 2° to 12°. 16 psig (110 kPa) Main — R.A., Summer. 25 psig (172 kPa) Main — D.A., Winter. (Can be used with 8 psig summer main if recalibrated in the field.)
			43.2 scim at 25 psig (11.8 mL/s at 172 Kpa)	
2218-134	T32-321		22.5 scim at 13 psig (6.1 mL/s at 90 kPa)	Summer-Winter Thermostat for use with Honeywell 13 to 18 psig Systems. 13 psig (89 kPa) Main — R.A., Summer. 18 psig (124 kPa) Main — D.A., Winter.
			34.5 scim at 18 psig (9.4 mL/s at 124 kPa)	
2218-133	T33-301		29.4 scim at 15 psig (8 mL/s at 103 kPa)	Summer-Winter Thermostat for use with Johnson main air systems. 25 psig (172 kPa) Main — R.A., Summer. 16 psig (110 kPa) Main — D.A., Winter.
			34.5 scim at 20 psig (9.4 mL/s at 138 Kpa)	

Note: Includes 1/4" by 3/16" barbed couplings, 20-693 tubing kit, 22-024 standard mounting kit, 20-928 gray plastic cover with F/C listing.

2211 through 2218 Series

Specifications	
Action	Proportional; refer to Model Chart.
Setpoint range	55 to 85°F (13 to 29°C).
Throttling range	2 to 12°F/12 psi (1.1 to 6.7°C/83 kPa) adjustable, factory set 3°F (1.7 °C) [night, 3 to 5°F/12 psi (1.7 to 2.7°C/83 kPa), non-adjustable].
Construction	
Components	Die cast aluminum, stainless steel, and glass-filled nylon.
Diaphragms	Fabric-reinforced neoprene.
Air filter	Internal.
Supply air pressure	Clean, dry, oil free air required (Refer to EN-123).
Nominal	Refer to Model Chart and Typical Applications.
Maximum	30 psig (207 kPa).
Connections	For spring-reinforced 3/16 in. O.D. plastic tubing and required fittings.
Air consumption	Refer to Model Chart and Typical Applications.
Calibration point	9 psig (62 kPa) branch line pressure when ambient temperature equals setpoint (except 2218-3x1 Series and 2218-133, 12 psig branch line pressure).
Setpoint adjustment	Serrated thumbwheel, external or concealed.
Mounting	Upright position on wall.
Dimensions	2-1/32 H x 2-1/32 W x 1-3/8 D in. (52 x 52 x 35 mm).

Accessories		
Part Number	Replaces Model	Description
Accessories		
20-660	6-441	Cover screw (included with thermostat).
20-707	10-53	Metal thermostat guard.
20-715	10-62	Clear thermostat guard.
21-876	10-76	Opaque thermostat guard.
21-928	—	Gray plastic cover, blank dial.
21-933	—	Gray plastic cover, °F/°C dial (included with thermostat).
21-933-1	—	Gray plastic cover, Day/Night dial.
Calibration		
20-881	N2-4	Calibration wrench.
22-138	MCS-GA	Branch tap gauge adaptor.
900-002	—	Thermostat calibration kit.
Installation		
10-82-SS	—	Outlet box mounting plate, stainless steel.
20-850	10-82	Outlet box mounting plate, black.
20-642	6-371	Mounting ring.
21-473	10-73	Snap-in drywall mounting bracket.
22-021	—	Universal drywall mounting kit.
22-022	N5-95	Competitor replacement mounting kit.
22-024	—	Standard mounting kit (included with thermostat).
22-693	—	Tubing kit (included with thermostat).
Only for 2212-118, 2212-119, 2211-012, 2211-013, 2214-121		
20-712	10-59	Dial stop kit.
Only for 2212-61x		
21-930	—	White cover.
22-023	—	Thermostat conversion kit, white.

For additional information, refer to Accessories on page 124.

Typical Applications

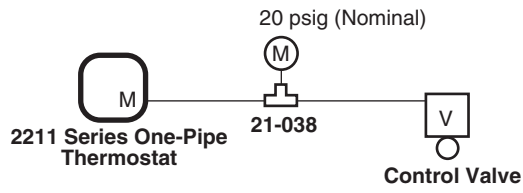


Figure 1 2211 Typical Application.

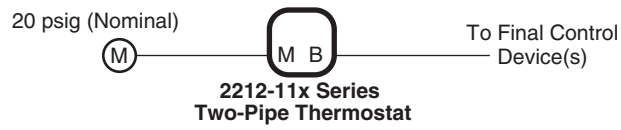


Figure 2 2212-11x Typical Application.

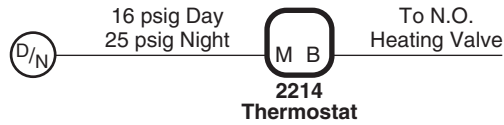


Figure 3 2214 Typical Application.

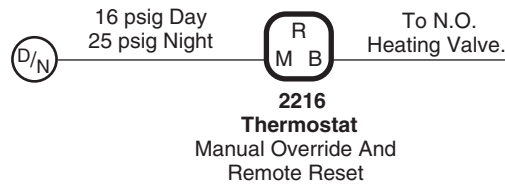


Figure 4 2216 Typical Two Pipe Application.

2211 through 2218 Series

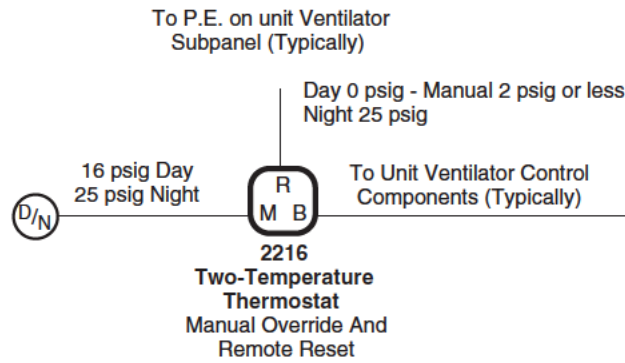


Figure 5 2216 Typical Three Pipe Application.

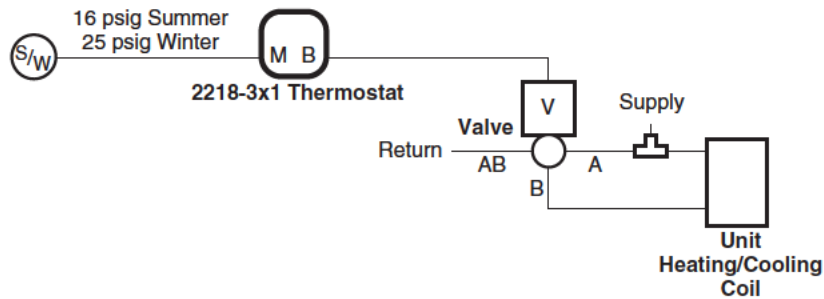


Figure 6 2218-3x1 Typical Application.

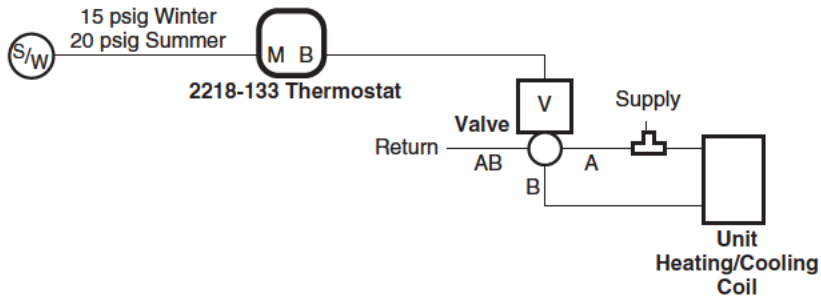


Figure 7 2218-133 Typical Application.