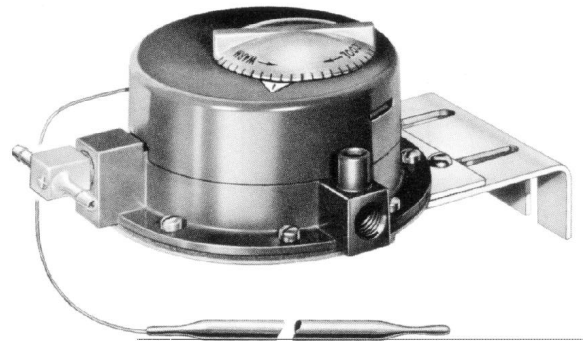# JOHNSON CONTROLS

T-3100 Thermostat
Single Temperature, Single Pressure

The Johnson T-3100 proportional action, pneumatic thermostat is designed to maintain space temperature in accordance with the return air temperature in a terminal air conditioning unit.

Direct or reverse acting models with liquid-filled bulb element are available with external set point adjustment.

The thermostat mechanism is protected by a snap-on cover. The external set point adjusting dial marked "Cool-Warm" and a pointer are located on top of the cover. The pointer has tabs that permit restricting the temperature adjustment range to as little as ±2.5F° (±1.4C°). It is factory set for a nominal adjustment of ±7.5F° (±4C°), from a set point of 75F° (24C).

Linear expansion and contraction of the liquid in the element permits uniform dial graduations and provides a high degree of accuracy over the entire range of operation.
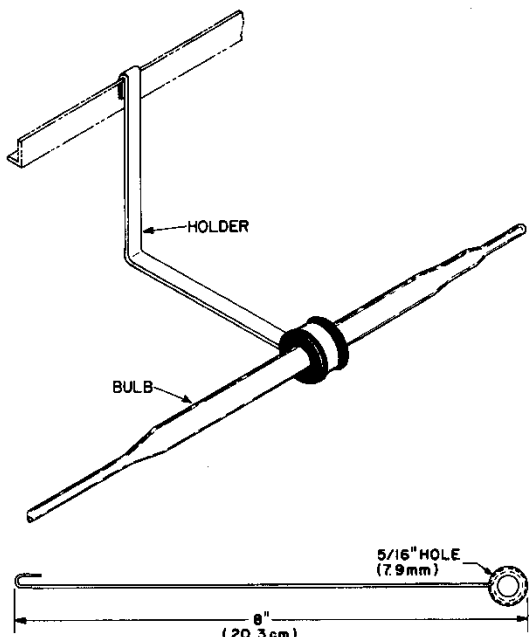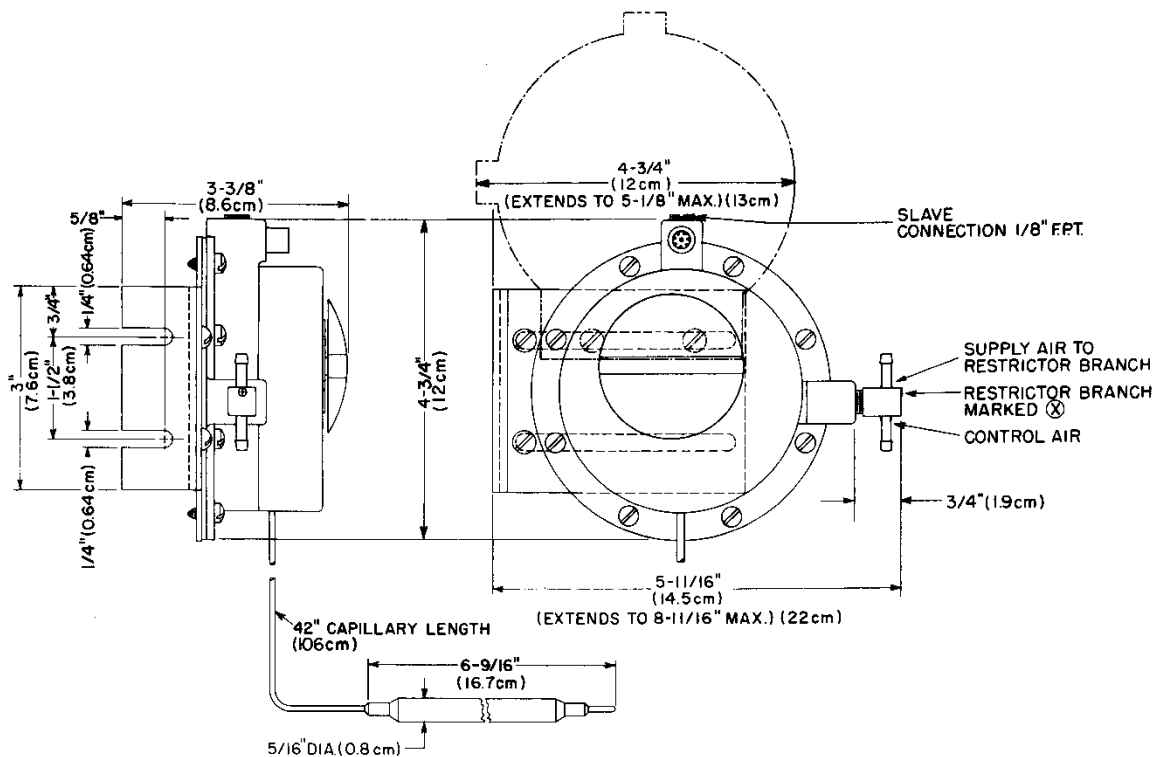
The T-3100 is attached to a metal bracket that permits a variety of mounting positions. It is recommended that the thermostat be placed so the dial is accessible.
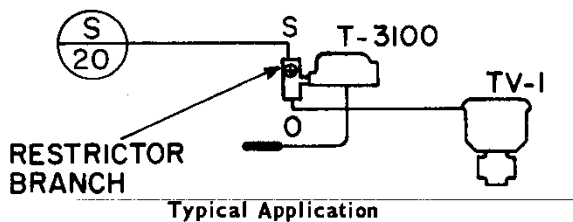
Specifications

PRODUCT		T-3100 NON-RELAY TYPE THERMOSTAT	
ACTION	PROPORTIONAL	DIRECT ACTING T-3100-2	
		REVERSE ACTING T-3100-3	
AIR CONNECTIONS	SUPPLY	RESTRICTOR BRANCH	BARBED RESTRICTOR TEE (R-3710-3107) FOR 1/4 IN. O.D. POLYETHYLENE TUBING
	OUTPUT	OPEN BRANCH	
	SLAVE	1/8 IN. F.P.T.	
MAXIMUM SUPPLY PRESSURE		25 psig (170 kPa)	
ELEMENT	TYPE	BULB WITH 42 IN. (106 cm) CAPILLARY	
	RANGE	60 TO 150F (15 TO 65C)	
SENSITIVITY		2.5 psi/F° (31 kPa/C°)	
DIAL	SPAN	20F° (11C°) MAXIMUM	
	RANGE	FACTORY SET AT ±7.5F° (±4C°) FROM A SET POINT OF 75F (24C)	
	MARKING	"COOL-WARM", GRADUATED IN ONE DEGREE "F" INCREMENTS	
AMBIENT TEMPERATURE LIMITS		−20 TO +150F (−29 TO 65C)	
MATERIAL	BODY	DIE CAST ALUMINUM	
	COVER	DIE CAST ZINC	
COVER FINISH		GREEN LACQUER	
ACCESSORY		T-275-100 BULB ELEMENT HOLDER	

Dimensions

4-3/4"
(12cm)
(EXTENDS TO 5-1/8" MAX.)(13cm)

3-3/8"
(8.6cm)

5/8"

1/4"(0.64cm)

3"
(7.6cm)

3/4"

1-1/2"
(3.8cm)

1/4"(0.64cm)

4-3/4"
(12cm)

SLAVE
CONNECTION 1/8" F.P.T.

SUPPLY AIR TO
RESTRICTOR BRANCH

RESTRICTOR BRANCH
MARKED ⊗

CONTROL AIR

3/4"(1.9cm)

5-11/16"
(14.5cm)
(EXTENDS TO 8-11/16" MAX.) (22cm)

42" CAPILLARY LENGTH
(106cm)

6-9/16"
(16.7cm)

5/16"DIA.(0.8 cm)

HOLDER

BULB

RESTRICTOR
BRANCH

S
20

S

T-3100

TV-1

O

Typical Application

5/16"HOLE
(7.9mm)

8"
(20.3cm)

T-275-100 Bulb Element Holder