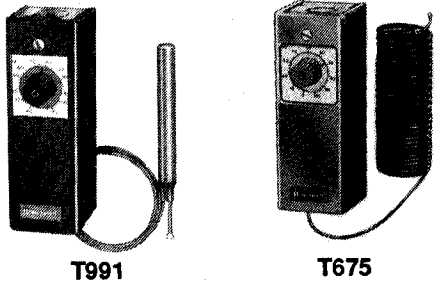


Honeywell

T991A PROPORTIONAL TEMPERATURE CONTROLLERS



T991A PROPORTIONAL TEMPERATURE CONTROLLERS PROVIDE MODULATING CONTROL OF WATER OR AIR TEMPERATURES IN DUCTS, TANKS, AND SIMILAR APPLICATIONS. STANDARD MODELS HAVE A SENSING BULB AND CAPILLARY; FAST-RESPONSE MODELS HAVE A COILED SENSING ELEMENT THAT OPERATES AT LEAST FOUR TIMES FASTER THAN STANDARD CONTROLLERS, DEPENDING UPON OPERATING CONDITIONS.

□ T991A

- All models compensate for effects of ambient temperature on the case and tubing.
- Controls temperature of air or liquids.
- Sensing element capillary tubing allows remote mounting of sensing element.
- Set point may be read and adjusted through cover.
- Throttling dial inside case adjusts proportioning range.

SPECIFICATIONS

MODELS: T991A Temperature Controller—standard or fast response.
ELECTRICAL RATING: 24 to 30 Vac.
POTENTIOMETER RESISTANCE: 135 ohms (280 ohms available as option on model with 55 to 175 F range).
TEMPERATURE RANGES AND LIMITS:

Range	Maximum Ambient Temperature for Controller	Maximum Operating Temperature for Bulb
0 to 100 F	125 F	125 F
55 to 175 F ^a		200 F
80 to 180 F		200 F
160 to 260 F		280 F
-15 to 35 C	52 C	52 C
15 to 75 C ^a		93 C
30 to 80 C		93 C
75 to 120 C		138 C

^a Available in 20 ft x 7/64 O.D. averaging element (copper)—senses temperature along length of element.

PROPORTIONING RANGE: Adjustable from approximately 3 to 30 F [1.7 to 17 C]; set point is always the center point of proportioning range.

BULB PRESSURE RATING: 50 psi maximum for direct immersion.
CAPILLARY LENGTH AND MATERIAL (5/64 in. O.D.):

Copper: 5, 10, 20, or 24 ft.
Stainless steel: 20 ft.

MOUNTING MEANS: Three holes in back of case for furnished screws.

DIMENSIONS: See Fig. 1.

FINISH: Gray.

ACCESSORIES:

1. Separable immersion wells, to be screwed into tank or boiler: 112622AA—1/2 inch NPT, or 112630AA—3/4 in. NPT.
2. Pressure fitting 7617ABY—1/2 in. NPT, rated at 50 psi water or 15 psi air pressure.
3. Duct Bulb Holder 131524A.
Duct Coil Holder 131524A.
4. T-Strap 105900 for strapping bulb to a pipe.
5. Bracket assembly 7640HY (a standoff bracket for mounting T991A to insulated duct).

6. Assembly 7640HX for mounting T991A with averaging element when access into duct is not available.
 7. Calibration wrench 801534.
 8. Weatherproof enclosure Q615A.
- OPTIONAL SPECIFICATIONS:
1. 280 ohm potentiometer on 55 to 175 F model.
 2. Averaging element available on 55 to 175 F model or 15 to 75 C model.

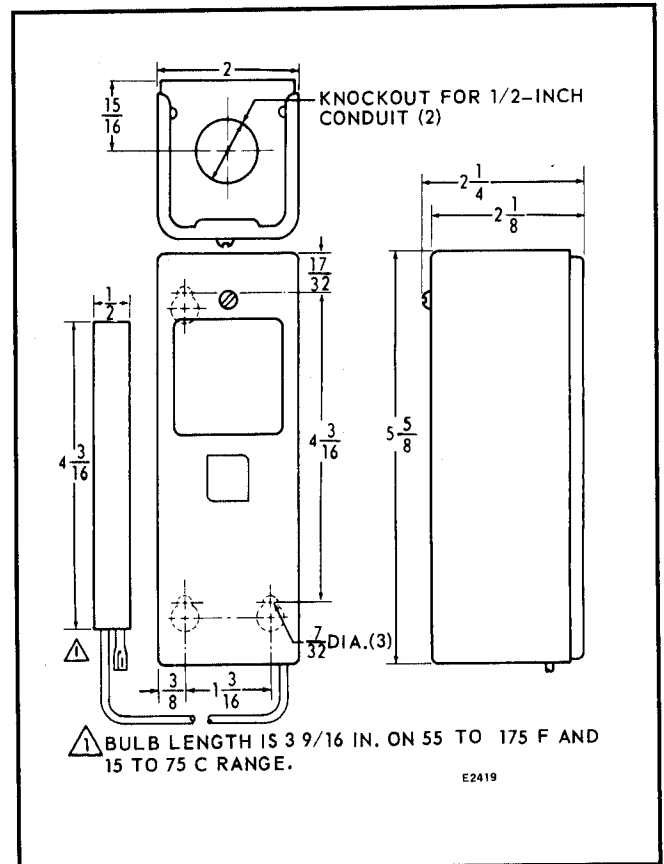


Fig. 1—APPROXIMATE DIMENSIONS IN INCHES.

MOUNTING MEANS:

CASE—Screws through three mounting holes in back of case.

OUTDOOR BULB—Guard with supporting clip and wood plug for wall seal (furnished).

INDOOR BULB (order accessories separately)—

1. Warm air: 107324A Bulb Holder.
2. Hot water: Boiler fittings:

	1/2 NPT	3/4 NPT
Insertion Well	121371P	121371Q
Comp. Fitting	7617ABY ^a	104484B ^a

^a Has a water pressure rating of 50 psi and an air pressure rating of 15 psi when used with the T475A.

MAXIMUM INDOOR BULB TEMPERATURE: The application should not permit the indoor bulb to be reset to a temperature higher than 270 F [132 C].

CAPILLARY TUBE LENGTHS:

Outdoor Bulb—30 ft [9 m].

Indoor Bulb—10 ft [3 m].

LISTING BODIES: T475A controls are listed by Underwriters Laboratories Inc.

FINISH: Gray enamel.

CONTROL CASE DIMENSIONS: Refer to Fig. 1.