

C. A. Dunham Company

Administrative and General Offices

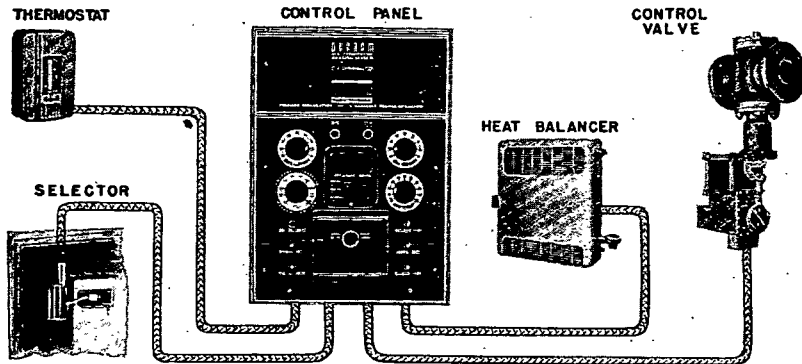
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THE DUNHAM DIFFERENTIAL VACUUM HEATING SYSTEM

Fully Automatic

"Dunham Heating Service," as close to you as your telephone in most principal cities, see classified telephone directory. Expert heating engineers are available to architects and engineers for counsel at every one of these offices.



The Control Panel is the centralized operating station at which all control adjustments and settings are made and from which remote readings of room temperatures, control valve openings and percentage of heat output as measured by the Heat Balancer may be obtained. The Temperature Control Equipment appraises the heat demand of the building utilizing the resistance thermometer principle of operation. The Resistance Thermometers comprise coils of metal conductors whose electrical resistance varies with variations in their temperature connected in a Wheatstone Bridge circuit. Such temperature sensitive elements have no moving parts. All moving parts are contained in the Panel and in the Control Valve.

The basic control of the Differential Temperature Control Equipment balances the heat supply (measured by the Heat Balancer) with the heat demand (measured by the Selector). Compensating or limiting features are provided by the room Resistance Thermometer units. Since this room thermometer is not depended upon to perform the function of the conventional room thermostat, it is not as limited in its application. It can be used to register room temperatures from any location regardless of the type of occupancy of the room.

DUNHAM THERMOSTATIC TRAPS

For Operating Pressures up to 15 lb psi gage

The 1/2 in. trap is available in AP, RH, LH, SW, and vertical patterns. The 3/4 in. in AP, SW only. The 1 in. in AP only.

Construction—Bodies, covers, nut and nipple are of brass, valves and seat are cast bronze. The trap is non-adjustable, permanent adjustment for correct operation is built into the element. The thermostatic elements for traps of the same size are interchangeable without adjustment. The disc is made from Monel Metal sheet. The cor-

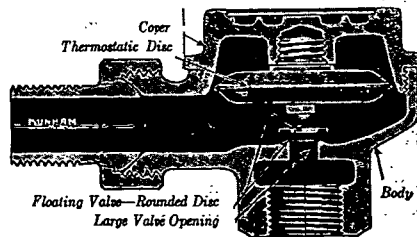


Fig. 3565

rugations are shaped to reduce hinge action at the rim of the disc and to distribute disc motion uniformly. The filling nozzle and the valve assembly are attached to their respective halves of the disc by threaded nuts making tight screwed joints which are further reinforced, locked and sealed by sweating with solder. The valve is flat and is attached to the disc by a ball swivel joint to insure its seating squarely and tightly. Valve opening is exceptionally large and the passage of water or dirt out of the trap is not obstructed by a guide as none is necessary with the Dunham design. Valve seat is raised slightly and rounded to minimize the depositing of incrustants.

DUNHAM THERMOSTATIC STEAM TRAPS—TYPE TH

For Working Pressures 25 Lb to 100 Lb

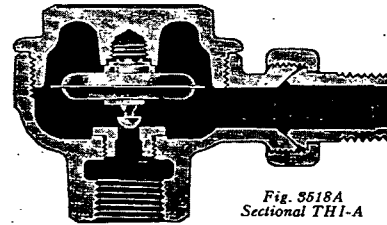


Fig. 3518A
Sectional TH1-A

Construction—Type TH traps are the thermostatic fluid expansion type.

The trap consists of two principle parts, a body with renewable valve seat and a cover containing the thermostatic element. Permanent adjustment for correct operation is built into the element. The covers may be removed from the trap body while hot without danger to the thermostatic element. The valve is swiveled to insure its seating tightly without causing localized stresses on the element. Body, cover, nut and nipple are of brass; valve and seat are

of special heat treated stainless steel; thermostatic element is formed from monel metal sheet. Capacity lbs condensate per hour Type TH1A 1200 to 2600; Types TH2A and TH3A 1800 to 4500.

DUNHAM RADIATOR VALVES

"ORIFLEX" PACKLESS RADIATOR VALVE

Type 175 Oriflex self-contained adjustable orifice valve combines the conveniences of both lever and wheel handle valves. The adjustable orifice within the valve controls the steam flow. Oriflex eliminates the time consuming operations of disconnecting and re-connecting the valve in order to balance a system. Merely remove the handle; insert the key on the adjustment stem thus made accessible, adjust the orifice (calibrated guide surrounds stem) to the exact setting needed for perfect balance. Instead of being limited to orifices calibrated in steps of five square feet, Oriflex provides for adjustments in increments of one square foot.

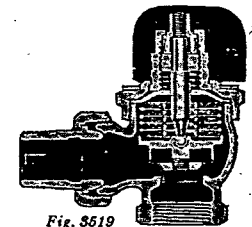


Fig. 3519

PACKLESS RADIATOR VALVE, SERIES 1140

Wheel Handle

Suitable for all types of low pressure steam heating systems. The bellows construction, the non-rising stem, low bonnet, heat-resistant composition handle requiring less than one turn to open the valve fully, recommend this valve for services in which long-wearing quality, absolute tightness and attractive design are desired.

Bodies and bonnets are brass castings, rough finish. The valves are furnished with heavily constructed brass union nuts and nipples. The expansion member is the built-up type of bellows, fabricated from tinned phosphor bronze giving maximum resiliency and wear. The expansion member not only prevents leakage of steam, air and water, but also prevents steam, water and dirt from clogging and corroding the spindle nut and screw.

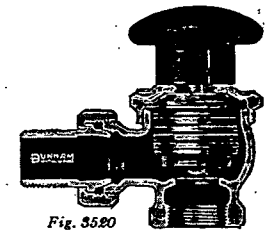


Fig. 3520