Tank Thermostat

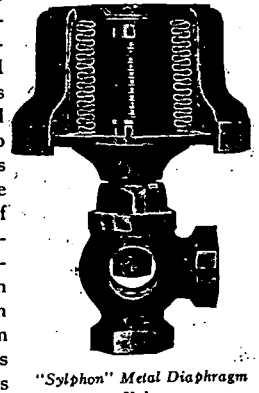
Designed for insertion through 1-in. tapped hole in tank and controlling, in the case of hot water tanks, a diaphragm valve on the supply pipe to the steam coils in the tank. It can be used to control the temperature of any liquid, either hot or cold. It is especially adaptable for controlling the temperature of water in hot water heating plants by its control of the boiler draft doors.

Humidostats and Humidifiers

The humidostat automatically controls the supply of moisture delivered to the air by a humidifier and maintains a constant percentage of relative humidity. It operates a diaphragm valve on the steam coils in the pan humidifier. The pan is provided with float box to maintain constant water level and is located in the ventilating air duct leading throughout the building. Steam jet and water spray types of humidifiers are also furnished.

"Sylphon" Metal Diaphragm Valves

This valve having an indestructible 1-piece metal diaphragm, is permanent and requires no repairs. Its value for the control of steam is obvious and particularly so in connection with steam coils, radiators in wall boxes where excessive heat would destroy rubber diaphragms.



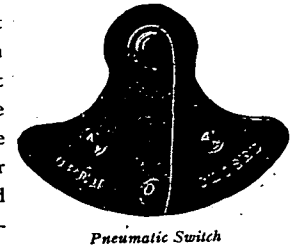
"Sylphon" Metal Diaphragm Valve

Humidity Control

The supplying of moisture to the heated air in buildings and the automatic control of the percentage of moisture in this air are recognized by authorities to be as important as maintaining proper temperatures.

Pneumatic Switch Control

Remote valve and damper control plays, by means of our pneumatic switches, a very important part in the economical operation of the modern heating plant especially in schools. It saves the janitor's time for other duties, and makes it possible to accomplish results in the operation of the heating plant which can not be obtained in any other way. It makes it easy to operate the fresh air, return air and vent dampers, with the corresponding assurance that these dampers will be economically operated as intended by the heating engineer.



Pneumatic Switch

The following types of pneumatic switches for different purposes and different conditions are made:

Lever Handle Switch,

Push Button Switch,

Indicating Switch, to open and close dampers partially as desired.

Electro Pneumatic Switch, to open and close dampers automatically—with the starting and stopping of fan motors.

How to Specify

Furnish and install a complete system of automatic temperature regulation and humidity control, furnishing all necessary thermostats, valves, dampers, humidifiers, special devices, air compressors, piping and fittings, and labor of installing system, except setting valves and dampers in position—all in accordance with the following schedule and detailed specification:

SCHEDULE—State the rooms to be controlled and number of thermostats in each; the manner in which the tempered air, if there is any, is to be controlled; the manner in which the drafts of the boiler are to be controlled; and specify the manner of the control of any fresh air, vent or return air dampers, stating the location and number of switches.

THERMOSTATS—Where the greatest economy of fuel and the most flexible handling of the heating system is desired specify the Johnson Dual or Two-Temperature thermostat and that it shall operate at all times at one set pressure not less than 15 lbs. per square inch. If dual thermostats are not desired specify Johnson Metal Diaphragm Model Thermostat, size, 4½ x 2 x 1 in.; and state whether it is to have residence or school cover, indicating device, positive shut-off, and whether it is to be positive or intermediate motion. Specify the number and kind of inserted thermostats.

VALVES—Specify Johnson Metal Diaphragm Valve having the "Sylphon" Metal Bellows for its diaphragm. State whether valves are to be plain or nickel-plated with or without unions; add: Valves to be placed in position by heating contractor.

AIR COMPRESSORS—Specify kind of air compressor (steam, hydraulic, electric or power driven), requiring that the air compressor shall be of sufficient size to operate the system, with a factor of safety not less than 3, and requiring that it be provided with all necessary governing devices, fittings, gage, etc.

HUMIDOSTATS—Specify Johnson Humidostat and Humidifier, stating the kind of humidifier, whether perforated steam or copper evaporating pan.

DAMPERS—Specify that dampers shall be made by the heat regulating contractor, but installed by the galvanized iron contractor, and that dampers shall consist of wrought iron frames, sheet steel blades, strongly cleated, with brass bearings.

GUARANTEE—Require that system be complete in every respect, and that all necessary material and special fittings shall be furnished whether specifically mentioned or not. Require that entire system be guaranteed free from all original defects in material and workmanship, and that any parts proving defective or wearing out within 2 years from date of completion shall be replaced free of charge. Require that thermostats shall operate the valves or dampers to which they are attached, at a variation of not to exceed 1 deg. above or below any given point.

Contracting

This company contracts to furnish and install in complete working order the Johnson System of Temperature Control, including thermostats, valves, piping, etc., and gives annual inspection and prompt service to all plants constantly.