

G-7185 Step Controller

The Johnson G-7185 Pneumatic Step Controller is designed to regulate electric heating elements in accordance with the demands of a direct acting, single or dual temperature pneumatic thermostat. The G-7185 is available with six or nine pressure electric switches adjusted for sequence operation within a nominal operating range of pilot pressure. Each switch is rated at 20 amperes 480 volts A.C. (non-inductive); 360 V.A., 120-480 volts A.C. pilot duty. The G-7185 is U.L. component recognized.

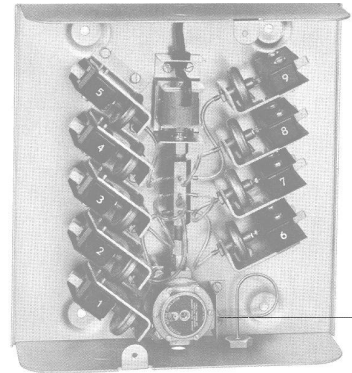
The solenoid operated exhaust valve and a reverse acting 2:1 cumulator are integral parts of the G-7185 and act as fail safe devices. If a power failure occurs in the fan circuit, the solenoid valve exhausts the control air from the switches returning them to their normally open position.

For unit ventilator applications, 120 volts A.C. six or nine point models are available with a line cord and plug and 1/8 in. brass barbed fittings for supply and pilot pressure connections.

Operation

The reverse acting cumulator varies its output pressure inversely to the pilot air pressure changes from the thermostat, at a 2:1 ratio. With full pilot pressure from the direct acting thermostat to the cumulator, the output pressure will be 0 psig and all of the pressure electric switches will be de-energized.

As the temperature at the thermostat decreases, the



output pressure of the cumulator increases. When the cumulator output reaches 6.5 psig, the switches begin to close. The nine switch model closes in steps of 0.8 psi and the six switch model in steps of 1.2 psi until all the switches are closed and all heating elements are energized.

Mounting

The G-7185 is furnished in a heavy gage metal cabinet designed for unit ventilator end compartment mounting or wall mounting in any position. Conduit knockouts are provided in the top and bottom of the cabinet.

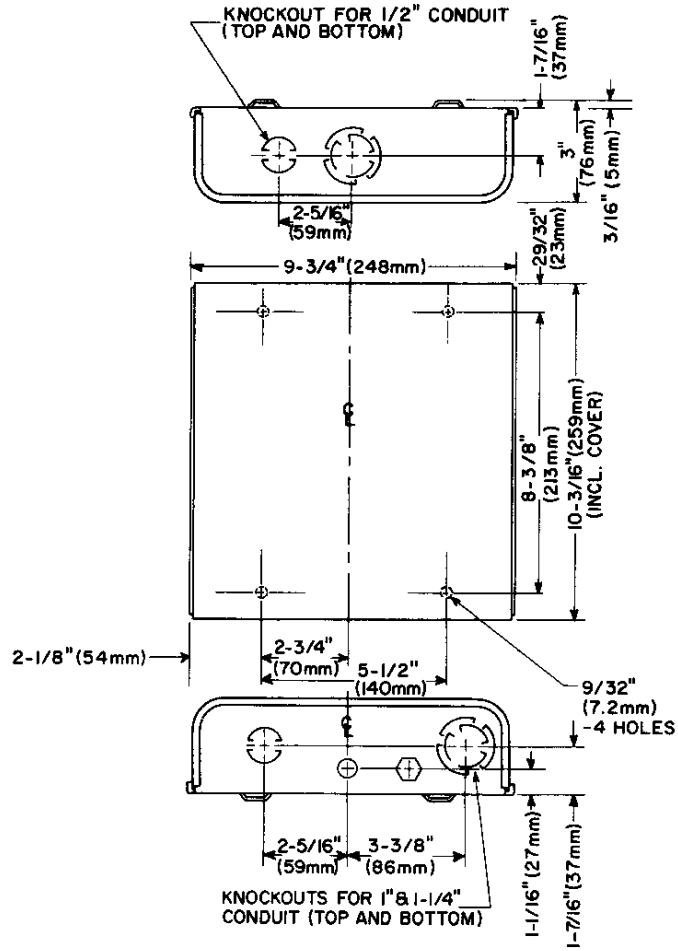
Specifications

PRODUCT		G-7185, SIX OR NINE POINTS
MODELS	G-7185-1	6 SWITCH UNITS, 120 VOLT SOLENOID
	G-7185-2	6 SWITCH UNITS, 208 VOLT SOLENOID
	G-7185-5	9 SWITCH UNITS, 120 VOLT SOLENOID
	*G-7185-106	6 SWITCH UNITS, 120 VOLT SOLENOID
	*G-7185-107	9 SWITCH UNITS, 120 VOLT SOLENOID
NOMINAL OPERATING RANGE		6.7 TO 10.7 psig PILOT PRESSURE
MAXIMUM AMBIENT TEMPERATURE		140F (60C)
SWITCHES		N.O. SPST SNAP ACTING
ELECTRICAL RATING PER SWITCH		20 AMPS (NON-INDUCTIVE), 480 VOLT A.C. PILOT DUTY 360 VA @ 120-480 V.A.C.
CURRENT FAILURE DEVICE		SOLENOID EXHAUST VALVE; 120 OR 208 VOLT A.C.
MAXIMUM SUPPLY PRESSURE		20 psig (140 kPa)

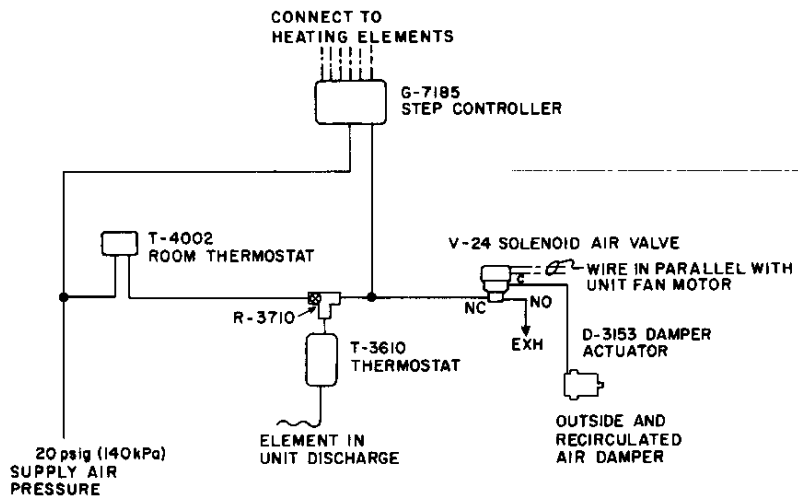
*These models have line voltage cords for Unit Ventilator Applications.

Performance Specifications are nominal and are subject to accepted manufacturing tolerances and application variables.

Dimensions



Typical Application



Typical Control System using
G-7185 Pneumatic Step Controller

**JOHNSON
CONTROLS**

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