

**I/P, E/P ANALOG TO PNEUMATIC TRANSDUCER E-475** (3 wire current or voltage controls 3-15 PSI)**DESCRIPTION:**

The BEC E475 is an electric to pneumatic transducer which converts an analog electrical input signal to a proportional pneumatic output. The E475 offers four selectable input ranges that each produce a 0 to 15 psi output and provide a 0 to 5 vdc feedback signal indicating the controlled branch line pressure. This signal varies linearly with branch pressure: 0 vdc = 0 psig and 5 vdc = 15psig.

When the E475 receives an input signal which does not equate to the current branch line pressure, the E475 control valve(s) will modulate open or closed until the desired branch pressure is achieved. Regulating action of the E475 will automatically occur anytime the branch line pressure deviates from the selected setpoint.

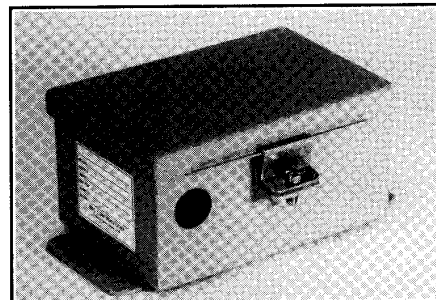
The E475E is a single valve version that has no restrictor and does not bleed or exhaust air. Its operation depends on the pneumatic circuit where it is installed, consuming between 14 and 73 scims.

The E475A, B, and C are constant bleed controllers with branch exhaust response times determined by the orifice size and pressure differentials.

The E475D incorporates two valves and is not a constant bleed controller. Its branch exhaust flow and response time is not limited by an internal restrictor and is similar to its load rate.

If power to the E475 is lost, the E475D and E will not exhaust any additional air from the branch line and the other models of the E475 will continue to bleed through the orifice until branch pressure is 0 psig.

The valve assemblies are designed to be disassembled for cleaning.

**FEATURES:**

- *FIELD SELECTABLE INPUT RANGES AND ORIFICES
- *CLOSED LOOP CONTROLLED DEVICE
- *GAUGE PORT
- *ANALOG FEEDBACK
- *SOLID STATE TRANSDUCER
- *BARBED OR 1/8" NPT FEMALE FITTINGS
- *NOT POSITION SENSITIVE
- *0 TO 5 PSI OUTPUT
- *SUPPLIED WITH FILTER
- *SNAP TRACK OR METAL WEATHER PROOF ENCLOSURE

APPLICATIONS

- *PNEUMATIC ACTUATORS
- *VALVE AND DAMPER ACTUATORS
- *FAN VANE CONTROL
- *PILOT POSITIONERS
- *DDC CONTROL
- *COMPRESSOR STAGING
- *3 WAY MIXING VALVE CONTROL
- *CHILLER LOADING

SPECIFICATIONS:

* CUSTOM CALIBRATION AND/OR MODIFICATION IS AVAILABLE

Supply Voltage	Regulated 24 VDC +/- 10% < .2 volts ripple	Output Control Pressure Signal	Standard: 0 to 15 psig
Power Consumption		Air Consumption (in scim)	
Nominal	75mA	E475A .007 orifice	41 +/- 5%
Maximum	150mA	E475B .010 orifice	73 +/- 5%
Supply pressure (max)	25 psig	E475C .005 orifice	14 +/- 5%
Operating Temperature		E475D (2 valve) 750 scim supply valve	No Consumption
Compensated Range	32 to 120 deg. F	E475E (1 valve, no orifice)	No Consumption
Maximum Range	-20 to 140 deg. F	Maximum Air Capacity (under optimum conditions)	
Operating Humidity	5 to 95% non-condensing	20 PSI in/15 out	Approx. 1500 scim
Input Impedance		Linearity (3 - 15 psi)	+/- .15 psi
Current	250 ohms	Dead Band (3 - 15 psi)	
Voltage	10,000 ohms	E475A, B, C, D, E	+/- .1 psi
Feedback Signal	0 to 5 vdc = 0-15 psig	E475D	+ .1 psi / - .5 psi
Input Signal		Pneumatic Circuit Air Consumption	
Selectable from: 0 to 5 vdc 0 to 10 vdc 0 to 15vdc 0 to 20 mA		(where 475 is installed, includes 475 air consumption)	80 scims Max
		Minimum Branch Line Capacity	4 cubic inches





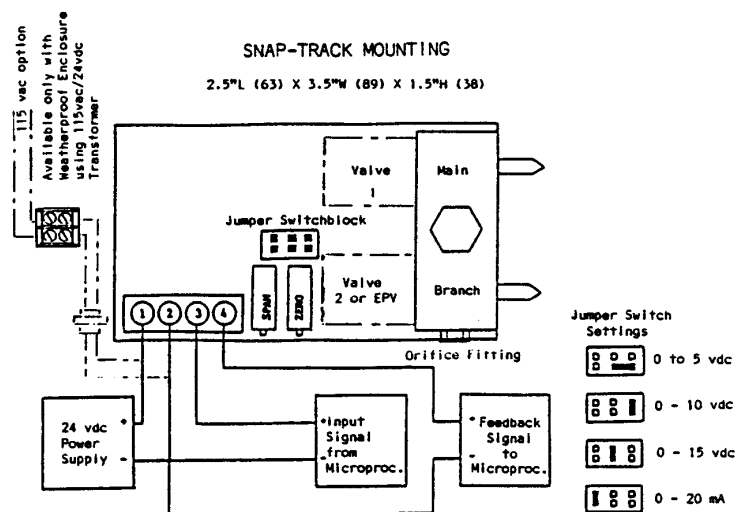
ENGINEERING PRODUCT SPECIFICATION RELEASE

E-11475

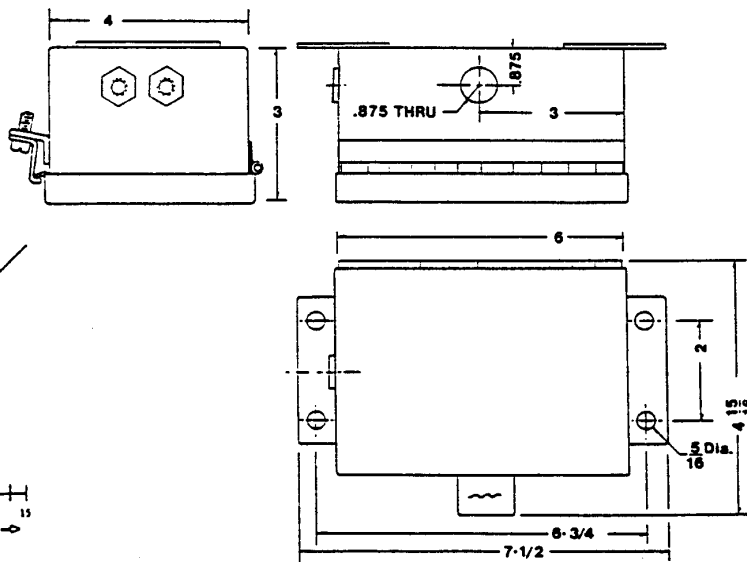
ORDERING INFORMATION

MODEL E-475	G	A	X	-	A	-	A
0-30 psi Gauge							
ORIFICE SIZE				ENCLOSURE		INPUT SIGNAL	
A - 1 valve - .007" Bleed Orifice				X - None (snap track)		A - 0-20mA (3 wire)	
B - 1 valve - .010" Bleed Orifice				W - Metal Weatherprof (Nema 4)		B - 0-5 vdc (3 wire)	
C - 1 valve - .005" Bleed Orifice						C - 0-10 vdc (3 wire)	
D - 2 valve - Bleed Orifice						D - 0-15 vdc (3 wire)	
E - 1 valve - Bleed Orifice						POWER	
						A - 24 ac/dc	
						B - 115 vac	

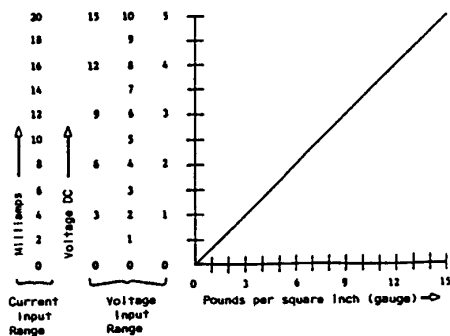
DIMENSIONS - WIRING



METAL WEATHERPROOF ENCLOSURE



INPUT vs. OUTPUT SIGNAL



BEC CONTROLS CORP.
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