

FEATURES

- Terminals and air connections oriented for convenient panel installation
- Manual/Auto toggle switch reports override status to controller, Adjustable Pressure Output Pot active in Manual Mode
- Field selectable analog input ranges
- Analog Feedback on branch pressure
- Closed loop control
- EPC bleeds at the rate of 41 scim
EPC2 is controlled exhaust
EPC2FS is controlled exhaust, but fails safe to 0 psig branch pressure
- Pluggable Terminal Block
- Not Position Sensitive
- 50/60 Hz Compatible
- Supplied with Filter-in-barb
- Black Anodized aluminum manifold



DRC Kit for
DIN Rail Mounting

APPLICATIONS

- 3 Way Mixing Valve Control
- Chiller Loading
- Pilot Positioner Control
- Pneumatic Valve and Damper Actuator Control
- Fan Vane Control
- DDC Control
- Compressor Staging

PRODUCT DESCRIPTION

The EPC* is an electric to pneumatic transducer which converts an analog electrical input signal to a proportional pneumatic output. The EPC* will automatically modulate its control valve(s) to regulate the branch line pressure to the selected set point as determined by the input signal.

The EPC* offers four selectable input ranges of 0 to 5, 0 to 10, 0 to 15 VDC and 0-20 mA that produce a 0 to 15 psig modulating output.

A 0-5 VDC feedback signal indicating the resultant branch line pressure, is also provided. This signal varies linearly with branch pressure (0 volts = 0 psig, 5 volts = 15 psig).

EPC* is designed with electrical terminals on one end and pneumatic connections on the other, allowing for maximum convenience in wiring and tubing installation when panel mounted.

The EPC is a constant bleed interface with branch exhaust response time determined by the bleed orifice size and pressure differentials.

If power fails to the EPC, it will continue to bleed through the bleed orifice until branch pressure is zero psig.

The EPC2 incorporates two valves (controlled exhaust) and does not bleed air at set point. Its branch exhaust flow and response time are not limited by an internal restrictor and are similar to its load rate.

If power fails to the EPC2, branch line pressure remains constant if the branch line does not leak air.

FAIL SAFE: The **EPC2FS** is a two valve model (controlled exhaust). Its N.O. branch exhaust valve allows exhaust of branch air on power failure.

ORDERING INFORMATION

Specify: **EPC**

		G - with 0-30 psi gauge												
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All factory calibrated products are NIST traceable. Certificates of Compliance must be ordered with product.

SPECIFICATIONS

Electrical Requirements

Power Supply: Voltage	24 VDC +10%/-5%.
	24 VAC +/-10%, 50 or 60 Hz.
Power Supply: Current	160 mA maximum, 200 mA maximum on FS (fail-safe) model.
Input: Range and Impedance	Four selectable ranges:
	0 to 5 VDC / infinite ohms.
	0 to 10 VDC / 200,000 ohms.
	0 to 15 VDC / 150,000 ohms.
	0 to 20 mA / 250 ohms.
Feedback: Output Signal Range	0 to 5 vdc = 0 to 15 psig.

Mechanical Requirements

Air Supply

Supply Pressure	Maximum 25 psig, minimum 18 psig.
Air Consumption	See chart under "Ordering Information" above.

Output

Pressure Range	0 to 15 psig (0-103 kPa).
Accuracy	EPC -1.5% full scale (less accurate below 3 psi). EPC2 -1% full scale (less accurate below 3 psi). EPC2FS -1.5% full scale (less accurate below 3 psi).
Manual/Auto Override	When switched to MAN, output can be varied from potentiometer. When switched to AUTO, output is controlled from input signal.
Manual/Auto Override Feedback	Dry Contacts (24 VAC or 24 VDC, 1 amp maximum). N.O. in AUTO operation (optional: N.O. in MAN operation)

Pneumatic Capacity

Air Flow:	Supply valves @ 20 psig (138 kPa) main/15 (103 kPa) out, 750 scim. Branch line requires 2 cubic inches minimum.
Filtering:	Furnished with integral-in-barb 80-100 micron filter (Part # PN004)

Connections

Wire Size	Up to one 14 gauge wire per terminal.
Terminal Type	Pluggable Blocks with 5mm pin spacing (optional fixed terminal strip with 45° captive screw, moving clamp design in nickel plated copper alloy)
Pneumatic Fitting Type	Brass barbed fittings for Main and Branch tubing mounted in black anodized machined aluminum manifold (blue manifold for FS model). Supplied with plugged 1/8"-27 FNPT gauge port. Gauge installed at additional cost.

Pneumatic Tubing Size/Type	1/4: O.D. nominal (1/8" I.D.) polyethylene.
Dimensions	3.750" L x 2.675" W x 1.750" H (3" with gauge) mounted in snap track

Environmental Requirements

Operating Temperature	32 to 120 deg. F
Storage Temperature Range	-20 to 150 deg F
Operating Humidity Range	5 to 95% non-condensing

Specifications may change without notice to improve product performance or functionality.