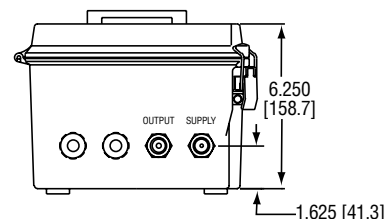
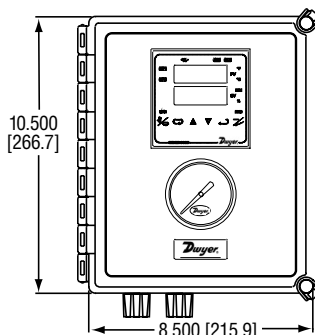




## Model EP1000 Electro-pneumatic Controller

### Specifications – Installation and Operating Instructions



#### DESCRIPTION

The Model EP1000 Electro-pneumatic Controller combines the highest quality instrumentation in one compact NEMA 4X enclosure for easy, low cost installation. Simply provide a supply pressure and voltage with a standard thermocouple, RTD, DC voltage or DC current input to this unit and a traditional pneumatic process quickly converts to a state-of-the-art electronic operation. The versatile microprocessor based controller incorporates a high level of standard features. Typical function setup items appear in the control menu only when the function is selected, so you don't have to wade through unnecessary items. Standard features include Self-Tune®, Fuzzy Logic, fully adjustable PID and Auto/Manual control with bumpless transfer.

#### INSTALLATION

Mounting: Loosen four (4) mounting screw on back of enclosure and rotate mounting feet to vertical position. Mount enclosure to a flat surface in a vertical position.

#### PNEUMATIC CONNECTIONS

**CAUTION:** Use of a supply gas other than air can create a hazardous environment because a small amount of the gas continuously vents to the atmosphere.

Connect a clean dry air supply from 20 to 100 psig to the port marked "supply". Connect the control element to the "output" port. Output is 0 to 20 psig. Both ports are 1/4" NPT. It is important that the line does not leak. This will affect control operation.

#### ELECTRICAL CONNECTIONS

Two (2), 1/2" conduit holes are provided for AC power and input signal connections. Run power and signal leads in separate conduit. Connect AC power and input signal to terminals shown on page 5 of controller instruction manual 949-1195. Route wire carefully and allow proper slack in wires to allow door to open. Wires can be secured with wire ties.

#### PHYSICAL DATA

**Front Panel Selectable Inputs:** Thermocouple, RTD, DC voltage or DC current.

#### Input Impedance:

Thermocouple: 3 Megaohms min.  
Voltage: 5000 ohms  
Current: 10 ohms  
RTD Current: 200 µA max.

**Output:** 3-15 psig (.21-1.1 kg/cm<sup>2</sup>)

**Supply Voltage:** 100 to 240 VAC nominal, ±10%, 50 to 400 Hz., single phase: 132 to 240 VDC, ±10%.

**Supply Pressure:** 20 psig (1.4 kg/cm<sup>2</sup>) minimum. 100 psig (7.0 kg/cm<sup>2</sup>) maximum.

**Maximum Air Consumption:** 0.1 scfm (.05 l/s) @ 100 psig.

**Output Capacity:** 4.0 scfm (1.9 l/s).

**Pressure Connections:** 1/4" NPT (supply and output).

**Accuracy:** ±1% of span.

**Linearity:** ±0.75% of span.

**Hysteresis:** ±0.5% of span.

**Repeatability:** ±0.5% of span.

**Temperature Range:** 14 to 130°F (-10 to 55°C).

**Enclosure:** NEMA 4X.

**Weight:** 8 lbs 2 oz (3.69 kg).

#### SETTING PROGRAM

The EP1000 has been factory set for a 100 ohm platinum RTD (DIN 0.00385) input and a range of 0 to 250°F. This can be easily changed to any other input by following the "Programming" Instructions in the controller manual. See page 3 to get started. This also describes using all of the additional features.