



# E-MAX ANALOG ISOLATOR

ANALOG OPTICAL ISOLATION DEVICE



- High Reliability
- High Accuracy and Linearity
- Simple Installation

The Analog Optical Isolator module is a single isolated current in / current out or voltage in / voltage out channel of physical separation and electrical isolation for establishing and maintaining the independence of Class 1E equipment from non-Class 1E instrumentation circuits. Input-to-Output isolation has a steady-state isolation capability of 2500 volts AC rms. This isolation will be maintained between

- a) input to output signals
- b) input to output power
- c) output signal to input power

The devices are housed in non-combustible glass-filled polycarbonate cases with connecting terminals sloped at 45° angles to facilitate stacking of units. Input and Output terminals are easy access #10-32 studs.

All units are subjected to a burn-in test for a minimum of 100 hours at a temperature of approximately 140°F under load.

## ORDERING INFORMATION

| Part Number | Isolator Type | Voltage Range  | Input | Load Resistance | Linearity & Accuracy of Scale % |
|-------------|---------------|----------------|-------|-----------------|---------------------------------|
| 175D126-1   | Voltage       | 0 -1 Vdc       | 100 K | 100 K           | .50                             |
| 175D126-2   | Voltage       | 0-5 Vdc        | 100 K | 100 K           | .50                             |
| 175D126-3   | Voltage       | 0-10 Vdc       | 100 K | 100 K           | .50                             |
| 175D126-4   | Voltage       | 0-1 / 0-10 Vdc | 100 K | 100 K           | .50                             |

Power for Input/Output: 120 Vac rms  $\pm 15\%$  60 Hz 1.7 W Maximum

| Part Number | Type Current Range | Input / Output | Input Resistance | Load Resistor | Accuracy (Full Scale Span $\pm\%$ ) |
|-------------|--------------------|----------------|------------------|---------------|-------------------------------------|
| 175D127-1   | Current            | -0.5 - +0.5    | 1 K              | 1 K           | .75                                 |
| 175D127-2   | Current            | 0 - 1          | 1 K              | 1 K           | .75                                 |
| 175D127-3   | Current            | 0 - 5          | 1 K              | 1 K           | .50                                 |
| 175D127-4   | Current            | 4 - 20         | 1 K              | 1 K           | .50                                 |
| 175D127-5   | Current            | 0 - 50         | 100 K            | 100 K         | .50                                 |
| 175D127-6   | Current            | -1 - +1        | 1 K              | 1 K           | .75                                 |
| 175D127-8   | Current            | 4 - 20         | 100 K            | 1 K           | .50                                 |

Power for Input/Output: 120 Vac rms  $\pm 15\%$ , 60 Hz Input - 1.7 W Max. Output- 4.25 W Max.

**WEIGHT** 2.4 LBS

**TERMINAL CONNECTION** 10-32 STUDS TO ACCOMMODATE RING OR SPADE LUGS OF #12 AWG WIRE

**INPUT SIGNAL TOLERANCE**  $\pm 10\%$

ENVIRONMENTAL CHARACTERISTICS:

**OPERATING TEMPERATURE** 30° To 140° CENTIGRADE

**STORAGE** -20° To 65° CENTIGRADE

**RELATIVE HUMIDITY** 0 TO 95% R.H. NON-CONDENSING

**SURGE WITHSTAND CAPABILITY:** ANSI C37.90.1 1999

**QUALITY CERTIFICATION:** ISO 9001:2000

## DIMENSIONS

ALL DIMENSIONS IN INCHES

