



Terranova[®] Model 809

Diaphragm Gauge Control/Display

1/8 DIN Vacuum Gauge Controller
Covers gauges with full scale of 100 mTorr to 1000 Torr



Diaphragm Manometers are widely used because of their ability to measure absolute pressure with gas-species independent readings and for their immunity to contamination/corrosion.

The Terranova Model 809 Diaphragm Gauge Controller displays vacuum pressure as measured from capacitance and piezo diaphragm gauges. The 809 supplies ± 15 volts to operate un-heated diaphragm gauges and precisely measures the 0 to 10 volt signal from the Diaphragm Gauge to determine pressure. The 809 is housed in a 1/8 DIN enclosure and is simple to operate.

The 809 offers a low cost, single gauge control/display for ease of operation in many applications.

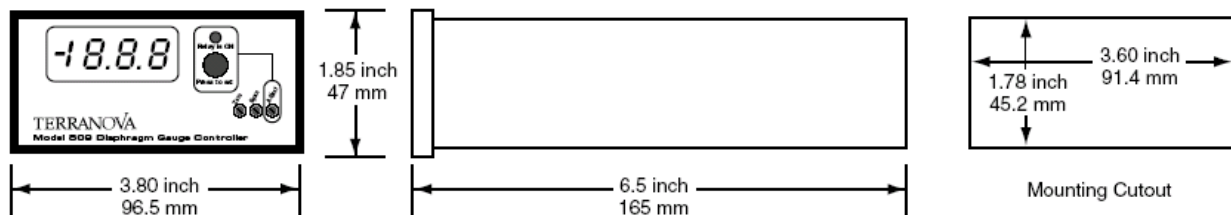
The process control set point relay has an isolated output and is rated at 240 VAC at 2 amps to allow direct control of small motors and actuators.

The 809 uses an advanced power supply design, which operates on any input from 100 VAC to 240 VAC. Major features include:

- low cost
- simple operation
- gas-species independent readings
- small 1/8 DIN size
- calibrated linear analog output
- interfaces to many diaphragm gauges
- one process control set point
- universal power input

Specifications

Useful Measuring Range	3 decades; for diaphragm gauges with full scale of 100 mTorr to 1000 torr; decimal point selection is entered on the front panel by the user
Display Range	1 mTorr to 1000 torr; pressures higher than 1000 torr displays HI
Accuracy of Gauge Interface	The 809 incorporates a high-resolution input circuit which allows the use of the diaphragm manometer over 3 decades.
Input to the 809 Controller	0 to 10 volts for full scale of the gauge
Units of Display	Torr
Vacuum Gauge	one diaphragm manometer
Operating Temperature Range	36°F to 122°F (+2°C to +50°C)
Pressure Display	3+ digit 7-segment bright red LED, 10 mm high
Display Indicators	bright red individual LED for miscellaneous indicators; 7-segment LED for digits
Adjustments	Zero, span, set-point value, decimal point position
Process Control Set Point	One relay, 2 amp @ 30 VAC Resistive 1 amp @ 120 VAC Resistive 0.5 amp @ 240 VAC Resistive
Nonvolatile Memory	for all user specified parameters
Analog Output	0 – 10 volts DC
Power Requirement	100-240 VAC, 47-63 Hz
Weight	1 lb. / 0.5 kg
Mounting	brackets are provided for panel mounting



Terranova 809 Dimensions and Mounting Cut-Out