

# GEMINI MOTOR- OPERATED POTENTIOMETER

**SOLID STATE**  
Part No. 12M03-148

## SPECIFICATIONS

**SUPPLY:** 120V AC $\pm$ 10% 50/60 Hz, Single Phase  
**AMBIENT TEMPERATURE:** 0 $^{\circ}$ -40 $^{\circ}$ C (50 $^{\circ}$ C in Cabinet)  
**INPUTS:** 120V AC from pushbuttons, relay contacts, programmable controllers\* or similar devices for functions of "UP," "DOWN" and "RESET."  
 \*NOTE: Triac outputs from a PLC must have less than 0.1 mA leakage unless a burden resistor is used.

**SIZE:** (in optional chassis) 3-1/4" H x 5-1/4" W x 6" D

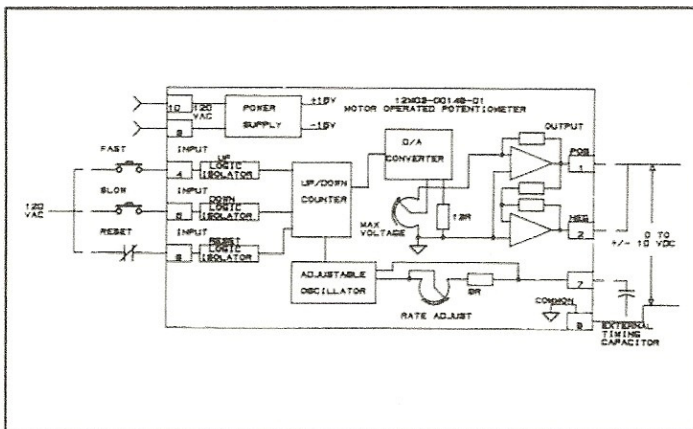
## GENERAL DESCRIPTION

STAND ALONE REFERENCE SUPPLY to replace Mechanical Motor Operated Potentiometer Assemblies.

PROVIDES A 0 to  $\pm$  10 VOLT OUTPUT controlled by pushbuttons.

## OPTIONS

- Use With Reflex 12M03-101 Or 12M03-133 Relay Assemblies Where Limit Switches Are Required



## STANDARD FEATURES

- Adjustable Ramp From 2 to 20 Seconds. Range Extendible with External Capacitor
- Automatic Reset to Zero on Power Up
- Output is Adjustable From 0 to Maximum. Compatible with drives using  $\pm$ 10VDC or less.
- Detailed Technical Manual.
- Positive Front Access Connection
- Easily Removed, Repaired, or Modified
- Three Year Warranty
- Compatible with Equipment from other Manufacturers

## TYPICAL APPLICATIONS

- Remote Control from Pushbuttons for Corrugators, Printing Presses and Similar Equipment
- Other Applications Requiring Remote Control of Power, Speed, Torque, Position, Tension, Draw, Trim, and other Process Variables

# SOLID STATE MOTOR-OPERATED POTENTIOMETER

## TECHNICAL DESCRIPTION

The GEMINI REFLEX SOLID STATE MOP is a digital-based equivalent of a mechanical motor-operated potentiometer. It provides an adjustable DC output voltage, increasing or decreasing at an adjustable rate in response to external signal devices such as pushbuttons, relay contacts, a programmable controller, or similar devices from several locations.

In operation, optically-isolated 120V AC signals actuate a Solid State Oscillator which provides pulses to an Up/Down Counter. The digital output of the counter is converted to an analog output voltage adjustable from zero to ten volts DC. The frequency of the Oscillator is

adjustable for different rates of change on the output.

The counter is an 8-bit device providing a resolution of one part in 256. Accuracy is 1% of maximum output.

Non-adjustable limits for zero and maximum are built in electronically. Option relay boards are available if electrical contacts for "Limit Switches" are required.

Field-proven circuit design insures a high-level of accuracy, noise immunity and reliability. The mounting arrangement provides a reliable connection, but allows easy removal without disturbing permanent wiring.

## GEMINI REFLEX ELECTRONIC CONTROL COMPONENTS

- Universal Eddy Current Drive
- M-G Set or Regulator Replacement
- Firing Circuits and Regulators to replace electronic boards in obsolete single and three phase DC motor drives
- DC Shunt Motor Field Crossover Control
- Wound Rotor Motor Secondary Control
- Power Supplies for Plating, Heating and Annealing
- Winders
- Custom Multi-Motor Drive Systems
- Special and Hard-to-Find Controls



**GEMINI CONTROLS LLC**  
**W61 N14280 TAUNTON AVE.**  
**PO BOX 380**  
**CEDARBURG, WI 53012**  
**www.geminicontrols.com**

**PHONE: (262)-377-8585**  
**FAX: (262)-377-4920**  
**email: sales@geminicontrols.com**