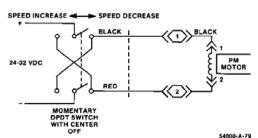


## **PM Speed Adjusting Motor**

for PSG Governor

## **Application**

A PM Speed Setting Motor (Permanent Magnet type) provides a means of remote speed adjustment for the PSG governor. Alternator frequencies can be matched, or when operating in droop mode, load distribution may be changed from a remote location.



**Typical Motor Wiring Schematic** 

## Description

The permanent magnet motor is mounted on top of the PSG governor. It is coupled to the governor's speed-setting

mechanism through a friction clutch. If the operator runs the speed adjustment to its limit the clutch is set to slip, protecting the motor.

The Permanent Magnet Motor replaces the series-wound electric speed-setting motor. The design provides a more positive means of remotely adjusting the PSG speed reference.

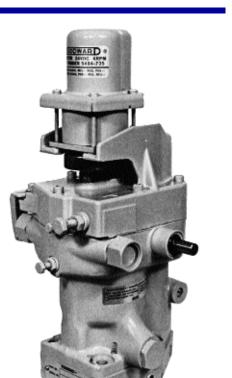
The motor features electro-graphitic brushes and long-life commutator material. The die cast cover is chromate coated to prevent corrosion. Oilite bearings are used in the installation.

Wiring installation is rated for 200 °C minimum protection. Fast-connect terminals are available, or the motor may be specified with two lead wires.

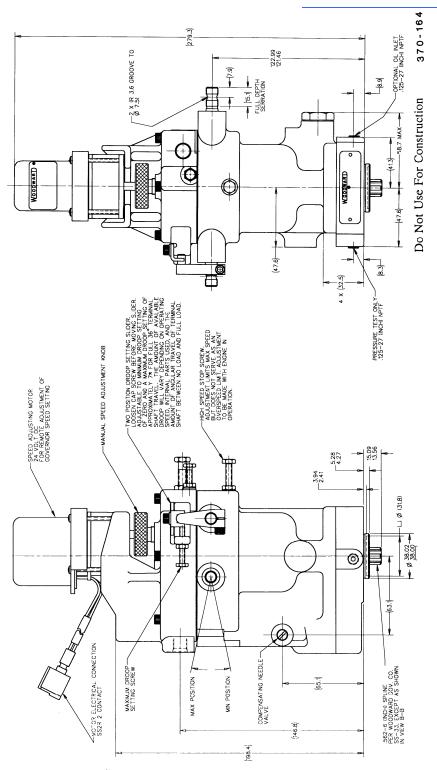
The Permanent Magnet Motor operates on dc power. Units are available for nominal 12, 24, 36, and 48 Vdc operation. The speed of the motor is affected by variations in the nominal voltage rating. Woodward makes a converter for operations with 115–230 Vac power sources. A device is also available to adjust the speed of the motor.

At rest the Permanent Magnet Motor acts as a brake to resist speed changes due to vibration.

A protective boot insulates the terminals and seals the upper end of the motor. The PM Speed Adjusting Motor has passed vibration tests at 5 and 10 Gs, from 10 to 500 Hz.



- Vibration resistant
- 2, 24, 36, 48 Vdc motors available
- Vibration resistant internal brake
- Economical
- Positive control
- May be added to existing governors



PSG Governor with PM Speed Setting Motor (Do not use for construction)



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