

## Component Specifications

### Actuator and Governor Control

#### Operation

Governing Mode	: Isochronous to 5% droop
Steady State Stability	: $\pm 1/4\%$
Operating Input Frequency Range	: 1K to 5K Hz
Idle Frequency Range	: 200 to 2200 Hz
Response Time of Actuator	: 15 milliseconds

#### Power

Operating Voltage	: 12 Volts D.C. $\pm 3$ Volts or 24 Volts D.C. $\pm 6$ Volts Continuous
Ground Polarity	: Negative ground (case isolated)
Power Consumption (Maximum)	: 94 Watts (12 or 24 Volts D.C.)
Nominal Operating Current	: 1.3 amps at 24 volts
Nominal Operating Current	: 2.6 amps at 12 volts
Maximum Operating Current	: 3.9 amps at 24 volts
Maximum Operating Current	: 7.8 amps at 12 volts

#### Environmental

Ambient Operating Temp.	: -40° to 185°F [-40° to 85°C]
Maximum Temp. Drift	: $\pm 1$ @ - 40° to 185°F [- 40° to 85°C]
Relative Humidity	: 0 to 100% non Condensing

#### Physical-Remote Control

Dimensions	: 5.75 in. x 4.44 in. x 2.15 in. (146mm x 113mm x 55mm)
Weight	: 2 lbs. [.9 kg]
Mounting	: Any position, typically in enclosure
Case Material	: Die cast aluminum

#### Panel Mounted Control

Dimensions	: 5.5 in. x 4.1 in. x 1.3 in. (140mm x 104mm x 33mm)
Weight	: 1 lb. [.45 kg]
Mounting	: 16 pin plug-in receptacle

#### Protection Features

High voltage protection (15 VDC for 12 volts or 32 VDC for 24 volts continuous)  
Reverse of supply polarity  
Surge protection (80 VDC, 10 msec transient)

Vibration Protection: (Remote Control) Entire printed circuit board sealed with Silicone filled Epoxy.  
(Panel Mounted Control) Circuit board sealed with Silicone Epoxy.

#### Magnetic Pickup Specifications

Thread Size	: 5/8 - 18 UNF-2A
Tap Drill Size	: 37/64 inch
Proximity to Gear Teeth	: .028 in. min. - .042 in. max. (Approximately 1/2 to 3/4 turn)
Temperature Range	: - 67° to 220°F [- 55° to 105°C]
Output at Cranking Speed	: 1.5 volts AC minimum
Maximum Output	: 30 volts AC
Coil Resistance	: 300 ohms maximum

**Remote Potentiometer Specifications**

Resistance	: 5K Ohms $\pm$ 5%
Linearity	: .25%
Travel	: 360° x 10
Power Rating	: 2 Watts @ 160°F [70°C]
Insulation Rating	: 1000 M Ohms @ 500 VDC
Dielectric Strength	: 100 V RMS
Operating Temperature Range	: +220°F to - 67°F [+ 105°C to - 55°C]

**Wiper Resistor — For the Remote Mounted Control Fine Speed Adjustment Potentiometer**

120K Ohms, 1/4 Watt

100 PPM Temperature Coefficient or Less Metal Film

**Resistance Test of Actuator Coil**

When the actuator leads are disconnected, the coil resistance must be 6.8 to 7.6 ohms for the 24 volt model or 2.0 to 2.3 ohms for the 12 volt model.

**Table 1: Normally Open Electric Fuel Control Governor Parts**

Part No.	Description
3052504	Actuator Low Flow-24V-For use on NT-855 and KTA-19 (KTA-1150) engines
3052505	Actuator High Flow-24V-For use on VTA-28 (VTA-1710), KTA-38 (KT(A)-2300) and KTA-50 (KTA-3067) engines
3052506	Actuator Ultra High Flow-24V-For use on KTTA-38 (KTTA-2300) and KTTA-50 (KTTA-3067) engines
3052507	Actuator Low Flow-12V-For use on NT-855 and KTA-19 (KTA-1150) engines
3052508	Actuator High Flow-12V-For use on VTA-28 (VTA-1710), KTA-38 (KT(A)-2300) and KTA-50 (KTA-3067)
3052509	Actuator Ultra High Flow-12V-For use on KTTA-38 (KTTA-2300) and KTTA-50 (KTTA-3067) engines
3037359	Control-12 or 24V (For Remote Mounting, Enclosed)
3032733	Control-12 or 24V (Plug-In type, for mounting in Cummins Engine Instrument Panel or Generator Control Panel Enclosure)

**Table 2: Normally Closed Electric Fuel Control Governor Parts**

Part No.	Description
3044189	Actuator, 24V, Normally Closed, Low Flow, for use on NT-855 and KTA-19 engines
3044190	Actuator, 24V, Normally Closed, High Flow, for use on VTA-28, KT(A)38, and KTA-50
3044191	Actuator, 24V, Normally Closed, Ultra-Hi Flow, for use on KTTA-38 and KTTA-50
3044192	Actuator, 12V, Normally Closed, Low Flow, for use on NT-855 and KTA-19 engines
3044193	Actuator, 12V, Normally Closed, High Flow, for use on VTA-28, KT(A)-38, and KTA-50
3044194	Actuator, 12V, Normally Closed, Ultra-Hi Flow, for use on KTTA-38 and KTTA-50
3044195	Control-12 or 24V, Plug-In-Type, for mounting in Cummins Engine Panel or Generator Control Panel Enclosure
3044196	Control-12 or 24V, Remote Mounting, Enclosed

**Table 3: Parts Common for Both Systems**

Part No.	Description
3034572	Magnetic Pickup (For SAE #1 or #0 Flywheel Hsg. with engine wiring)
3034573	Magnetic Pickup (For SAE #00 Flywheel Hsg. with engine wiring)
3015105	Remote Speed Potentiometer (See Remote Control)
104215	Idle-Run Toggle Switch
213272	Magnetic Pickup (For SAE #1 or #0 Flywheel Hsg. without engine wiring)
3003916	Magnetic Pickup (For SAE #00 Flywheel Hsg. without engine wiring)
213273	Wiring Harness for 213272 and 3003916 magnetic pickups