

GOV+

ELECTRONIC SPEED GOVERNOR FOR USE WITH PLC+ PANELS

- Provides speed governing function to PLC's or operates as stand-alone governor control.
- Integrated Ethernet port for communications to a PLC/PC or other communication device.
- Input from magnetic pickups or Hall-effect sensors.
- Specifically designed to interface with PLC+ panels and HMIs.
- User-selectable communication protocols: EtherNet/IP™ or Modbus/TCP
- On-board web page allows for configuration and monitoring.
- Amplified isolated output signal mimics input frequency.
- Actuator driver from configurable 4-20mA or 0-10V output with respect to speed.
- A discrete input is available for connection to an engine temperature monitoring switch to control warmup duration.
- Configurable startup logic: Ready, purging, starting, warmup, running.
- Three adjustable warmup ramps: configurable ramp speed. The desired speed can be adjusted remotely by a potentiometer or by 4-20mA (rpm/sec) and hold timers. Use one or all three.
- Configurable tuning parameters.
- Pluggable connectors with convenient push-in spring-cage connections.
- On board diagnostic LEDs.
- "Wink-Mode" for multiple PLC module identification.
- DIN-rail mounted.
- CSA and UL Certified for Class I, Division 2, Groups C and D.

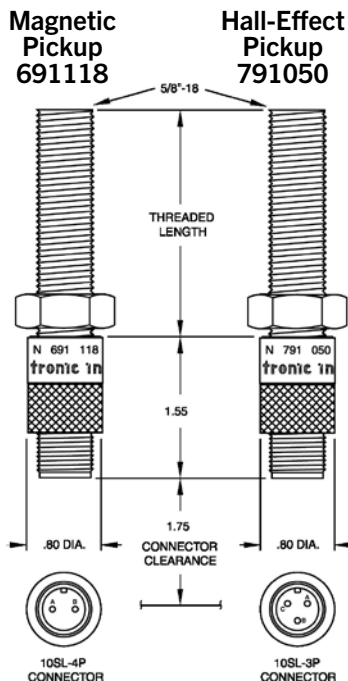
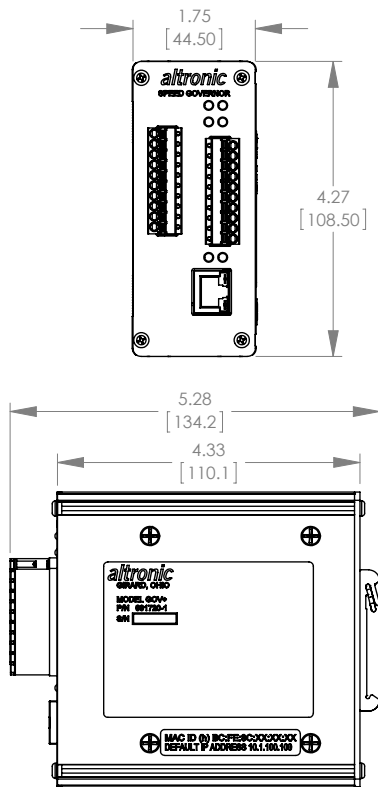
The PLC+ product line was developed by Altronic to allow easy integration of engine/compressor/generator function specific I/O through Ethernet to industry standard PLCs. The PLC+ Modules are designed to seamlessly deliver efficient, hazardous area approved, cost effective I/O functions that are not normally available by off-the-shelf PLC hardware.

The PLC+ modules were designed with Rockwell Automation Control Logix and Compact Logix in mind. EtherNet/IP, implemented in the PLC+ Monitors, along with Modbus/TCP, allow seamless communication over Ethernet to Rockwell Automation PLCs as well as a wide range of other industrial PLCs. The PLC+ Monitors are based upon taking a time tested Altronic designed device with specialty I/O functions such as Analog and digital I/O, vibration, detonation, speed, and others and marrying it to a communications board packaged in a rugged, cost effective, shock and dust-resistant package.

The GOV+ Electronic Speed Governor is a module in the PLC+ product line. It provides closed loop speed control of an engine by controlling an actuator. It can communicate to PLC's to monitor and control processes via Ethernet/IP or Modbus TCP. The speed input pulse can come from magnetic, Hall-effect, or other types of active pickups. A configurable 4-20mA or 0-10V analog output signal can be used to control an actuator position to control the speed. The GOV+ has the following startup logic: ready, purging, starting, warmup, and running. The GOV+ has three adjustable warmup ramps with configurable ramp speed in rpm/sec with hold timers. The GOV+ is designed for use as a component of a PLC+ Control Panel, or as a stand-alone product. PLC+ panels use one or more such devices for engine control and monitoring. The Ethernet port allows the monitored values to be communicated to a PC, PLC, or other communications device using either Modbus/TCP or EtherNet/IP protocol. These values can be displayed on an HMI display and compared to user adjustable setpoint levels for sequencing, and/or alarm and shutdown.



Module Dimensions



Specifications

Power Requirement.....	10-32VDC, 0.60 AMP max.
Ambient Temperature Range.....	-40°C to 80°C (-40°F to 176°F)
Enclosure.....	Extruded aluminum, NEMA Type 1
Mounting.....	Mounts to 35mm rails
Speed Input.....	Pulses from magnetic pickups, Hall-effect sensors
Input Frequency Range	1Hz to 100kHz
Range.....	0 to 3,000 RPM
Update Rate.....	30 milliseconds
I/O and Power Connections	Pluggable, push-in, spring-cage
Communication Protocols	Modbus/TCP and EtherNet/IP
Module Configuration.....	Built-in web pages or Modbus
Connector, Ethernet Port.....	Shielded RJ45 socket
Network Wiring Interface.....	Auto MDI/MDIX
Connections.....	Up to 5 connections
Data Rate	Auto-sensed, 10/100Mbps
Address.....	Auto IP, Boot P. Static
LED Indicators.....	Power, Status, Link, RX/TX, SW1, SW2
Analog Inputs	2 ea., 0-20mA or 0-5V
Discrete Inputs.....	2 ea., internal pull up to 3.3V
Voltage Output	0 to 10V, 0.5 amp max.
Current Loop Output.....	4-20mA forward or reverse acting
Output Switch	2 programmable, solid-state switches, rated 32VDC, 0.2 AMP continuous, optically isolated from power supply
Switch 1 Configuration	NC/NO, Failsafe/Shelf
Switch 2	N/O, Failsafe (closed for run)
Hazardous Area Classification.....	Class I, Div. 2, Groups C & D Certified for direct hook-up, Temp Code T4, max ambient temp 80°C

Ordering Information

Speed Governor..... Model GOV+

Magnetic pickups

1.75" threaded length	691118-1
2.50" threaded length.....	691118-2
3.00" threaded length.....	691118-3
4.50" threaded length.....	691118-4
6.00" threaded length.....	691118-6

Cable assemblies, magnetic pickups

Unshielded type	693104-x *
Shielded type, 180° connector	593048-x *
Shielded type, 90° connector	593054-x *

Hall-effect pickups

1.75" threaded length	791050-1
2.50" threaded length.....	791050-2
4.50" threaded length.....	791050-4
6.00" threaded length.....	791050-6

Cable assemblies, Hall-effect pickups

Unshielded type	593050
Shielded type, 180° connector	593052-x *
Shielded type, 90° connector	593057-x *

* See current price list, under MAGNETIC PICKUPS AND CABLES

ALTRONIC

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