

EP250 G1

FOR MECHANICALLY GOVERNED ENGINES

DESCRIPTION

The EP250G1 is the most compact member of the EP250 Series and functions as a complete control system. The unique face-mountable, aluminum enclosure houses the EP250 controller and a high-current key switch as well as options for a 2" diameter gauge and a rectangular hourmeter.

This flexible platform for diesel engine control, monitoring and protection features LOFA's powerful First-Fault Diagnostics (FFD). After pinpointing the initial failure, FFD stores it in memory and alerts the end user via a single bright LED. First-Fault Diagnostics monitors battery charge, low oil pressure, high temperature, over-speed and up to three additional contact closure inputs. The expandable, solid-state microprocessor-based design uses high power semiconductors instead of outdated electromechanical relays to ensure reliable, high-current switching.

The drop-in face-mountable enclosure is an ideal way for machine designers to place LOFA technology directly in the equipment dash. The G1 enclosure platform (5.7" square X 4.2" deep) allows modular expansion via a plug-and-play gauge cluster. The gauge cluster supports up to four 2" gauges in an additional drop-in enclosure to simplify system design.

Like all members of the EP250 Series, the EP250G1 features LOFA's new modular Function Enhancement Packs. The plug and play FEP modules allow various feature upgrades to be easily added to the standard platform. FEPs include:

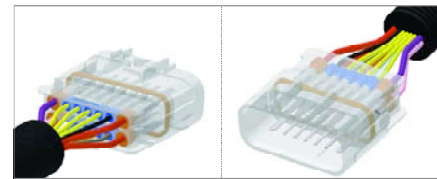
- Data Logging
- Closed Loop Speed Control
- Precision Actuator Control
- Custom OEM Solutions

Some of the EP250 Series programmable features include:

- Automatic preheat duration
- Afterglow duration
- Failure indication with shutdown or indication only
- Over-speed shutdown
- Normally open or normally closed shutdown switches



Pictured Above: EP250 G1



Pictured Above: Delphi GT Weather-proof Connector, Std. 12" Harness
Other electrical connections available upon request.

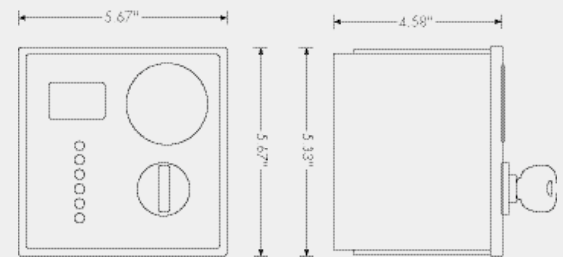
The standard system includes a 12" wiring harness terminating into a sealed weatherproof plug. This durable connection performs well in harsh environments and provides efficient installation of custom plug and play engine harnesses as well as standard harness extensions.



FEATURES AND BENEFITS

- Engine monitoring, protection and diagnostics via First-Fault Diagnostics (FFD) for battery charge, low oil pressure, high temperature, over-speed condition, and up to three additional contact closure inputs
- Ultra-bright First-Fault Diagnostics LED display - highly visible in direct sunlight
- Simple plug and play installation customized to the specific application allows rapid equipment completion
- Face-mountable, heavy-duty anodized aluminum enclosure designed to withstand the most extreme industrial applications
- Automatic shutdown override eliminates pushing a button during engine starting, allowing for simplified engine cranking
- Heavy-duty IP 64 water-resistant key switch with a mechanical start-locking device to prevent unwanted engagement of the starter motor after the engine is running
- Optional flip-down key switch cover available for wash-down when booted key is removed
- Frequency input compatible with either alternator frequency terminal, proximity switch or magnetic pickup
- Programmable automatic preheat with afterglow controls the engine's cold starting aid when the key is turned to the run position
- Optional preheat control based on ambient temperature
- Alarm output for external buzzer or beacon light provides additional shutdown indication

DIMENSIONS



SPECIFICATIONS

- Standby Current: 50 mA @ 12 VDC, 80 mA @ 24 VDC
- Operating Temperature: -40° to 185° F (-40° to 85° C)
- Key Switch: 75 A for 1 second (5% duty cycle)/18 A continuous @ 12V; 25,000 mechanical cycles
- Reverse polarity protection
- 2-year limited warranty
- Optional 24V model available

Solid State Inputs/Outputs

- Tachometer Frequency Input (alternator, proximity switch or magnetic pickup)
- Temperature Gauge Input
- Oil Pressure Gauge Input
- Temperature Switch Input
- Oil Pressure Switch Input
- Three (3) Additional Switch Inputs
- Fuel Shutdown Solenoid Output (70 A for 1 second/5% duty cycle, 15 A continuous)
- Starter Solenoid Output
- Alarm Output (2 A continuous)
- Switched Battery Output (fused, 15 A continuous)
- Preheat Indication/Control (ground or battery active, input or 2 A continuous output)
- Battery Charge Indication/Alternator Excitation (3 A continuous output)