

EP250 SERIES

FOR MECHANICALLY GOVERNED ENGINES

DESCRIPTION

The EP250 Series is a very flexible platform for mechanically governed diesel engine control, monitoring, and protection, featuring 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. FFD monitors battery charge, low oil pressure, high temperature, over-speed and up to three additional contact closure inputs. The expandable microprocessor-based solid-state design uses high-power semiconductors instead of outdated electromechanical relays to ensure reliable and reliable high-current switching.

The EP250 Series features LOFA's new modular Function Enhancement Packs (FEP). The plug-and-play FEP modules allow various feature upgrades to be easily added to the standard platform. FEPs include:

- **Diagnostic Program Gauge (DPG)**
- **Auto-Start with Real-time Clock**
- **Data Logging**
- **Closed Loop Speed Control**
- **Precision Actuator Control**
- **Custom OEM Solutions**

The Diagnostic Program Gauge (DPG) features a backlit LCD display with three push buttons all in a compact 2" gauge. The LCD is clearly readable in both bright sunlight as well as total darkness. The DPG provides a complete user interface for other Function Enhancement Packs and allows each system to be field programmed to suit the customer's unique requirements. After programming, the DPG can be removed in cost-sensitive applications.

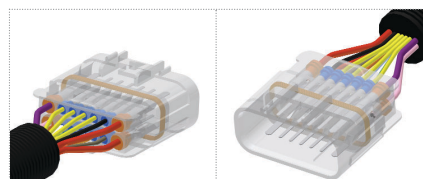
Some of the EP250 Series programmable features include:

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

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.



Pictured Above: EP250 G7



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



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
- VDO Cockpit International gauges-world-class instruments set the industry standard for quality and reliability
- Simple plug-and-play installation customized to the specific application allows rapid equipment completion
- Heavy-duty powder-coated Aluflex™ aluminum enclosure with integrated isolation mounting designed to withstand the most extreme industrial applications
- Optional lockable vandal-protection door which can be easily installed in the field
- 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 pick-up
- 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

SPECIFICATIONS

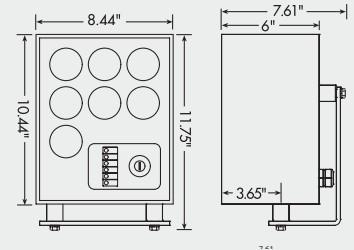
- Standby Current: 50 mA @ 12 VDC, 80 mA @ 24 VDC
- Operating Temperature: -40° to 185° F (-40° to 85° C)
- Key Switch: 75 A for 1 second (5% duty cycle)/18 A continuous @ 12V; 25,000 mechanical cycles
- Reverse polarity protection
- 2-year limited warranty
- Optional 24V model available

Solid State Inputs/Outputs

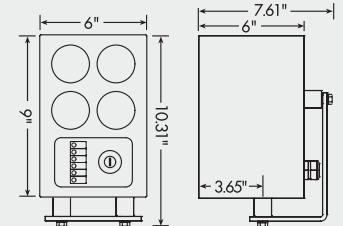
- Tachometer Frequency Input (alternator, proximity switch or magnetic pickup)
- Temperature Gauge Input
- Oil Pressure Gauge Input

DIMENSIONS

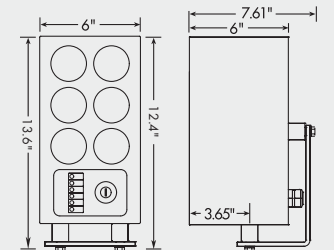
EP250 G7
Seven Gauge Openings



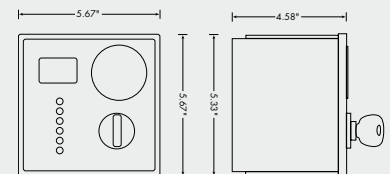
EP250 G4
Four Gauge Openings



EP250 G6
Six Gauge Openings



EP250 G1
One Gauge Opening



- 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)