

EICS®

Engine Integrated Control System

Optimizing your engine's performance and maintaining emission compliance is easier than ever with the Murphy Engine Integrated Control System (EICS). It is a complete integration package pre-calibrated specifically for your engine model.

EICS combines key components - ignition system (powered by Murphy's IntelliSpark® Ignition technology), air/fuel control, speed governing, interface and diagnostics, sensors, harnesses, catalyst and engine control unit (ECU) - in one package, saving you money and man-hours associated with the installation and setup of separate engine components.

The EICS has been pre-configured for your convenience, ensuring your engine will run at optimum performance without the need for manual field adjustments. Its D-EPR valve accommodates wide variations in fuel composition and speed/load ranges, maintaining efficiency with load following technology for even the toughest gas lift applications.

In addition, the EICS eliminates the need for pretest site visits by maintaining emissions - saving you time and money. With EICS you can be certain your site will pass required testing, like Quad J testing, without the need for pretesting to get dialed in.

Features

- An OEM approach to an after-market application
- Two packages available: performance/efficiency package, optional emissions package (includes catalyst)
- One unit, three integrated functions - CD Ignition, air/fuel control and electronic governing speed control
- Pre-calibrated and dyno tested for specific engine models
- Advanced electronic air-fuel ratio control
- Lightning fast response to engine speed/load variations and fuel quality changes
- Murphy's IntelliSpark Ignition Coils for expanded engine diagnostics and dynamic spark adjustment
- Graphical color user interface
- Data sharing via MODBUS RS485
- Data logging



Benefits

- Integrated system = simplified installation compared to separate components
- The integrated approach makes more advanced diagnostics possible
- No more setup of generic boxes - EICS is engine specific
- No more dialing in - it's pre-calibrated
- Optimization of your engine's performance
- Maintains emissions compliance between testing - no tweaking necessary
- Eliminates magneto failures and premature spark plug changes
- Reduces engine failure diagnostic time
- Reduces costs associated with the engine's operation



How To Order

Step 1 - Pick the EICS Package based on your engine model

An EICS Package is Available for Engine Models

Arrow VRG330 and VRG330CF

Caterpillar G3300 Series

Caterpillar G3406

Cummins G5.9

Cummins G8.3

Cummins Engine KTA19GC

Kits are available with magneto conversion for older engines.

Kits are also available with shielded ignition components.

Step 2 - Determine display variant

Every EICS Engine Kit Requires One Display - Choose One Variant Below

P/N 48700017 - In Panel Mount Display Kit, Display + EICS Pigtail + RS485 Pigtail

P/N 48700021 - Remote Mount Display Panel with Switches, in Enclosure

Step 3 - Add optional hardware if desired

Add Optional Emissions Package:

Emissions kits are available for each engine. To order, contact your Murphy sales representative.

To Add Optional Suction/Discharge Pressure Based Speed Control:

Order the key below and add a standard Murphy PXT 4-20ma Pressure Sensor to complete

P/N 48700031 - Suction Control/Discharge Control Software Key (requires Murphy PXT sensor)

Step 4 - Generator controls

The EICS works with generator controls. To check compatibility contact your Murphy sales representative.

Contact your Murphy sales representative:

- To purchase products and systems
- To view a full list of supported engine models
- To let us know which engine models you would like to see mapped next

Contact your Murphy sales representative at www.fwmurphy.com/EICS-engines.

Diagram of System Overview

