

# ENGINE INTEGRATED CONTROL SYSTEM

## *EICS*®



INTEGRATED IGNITION, AIR / FUEL CONTROL  
AND SPEED GOVERNING



**FW MURPHY**®  
PRODUCTION CONTROLS



# ENGINE INTEGRATED CONTROL SYSTEM

Optimizing your engine’s performance and maintaining emission compliance is easier than ever with FW Murphy’s Engine Integrated Control System (EICS®). EICS combines many products into a complete integration package precalibrated specifically for your engine. EICS combines key components such as IntelliSpark® ignition control, AFR air/fuel control, speed governing, interface and diagnostics, sensors, harnessing, 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.

## COLOR DISPLAY >

- User display and interface
- Mid-sized modular CAN display with full-color graphics and resolution
- Displays operation, status and diagnostics



## ECM (Engine Control Module) >

- Full spark / fuel control module
  - Advanced model-based control to optimize performance
  - Customized software to meet customer requirements
- |                  |                |
|------------------|----------------|
| - Ignition       | - Reporting    |
| - Air/Fuel Ratio | - Local/Remote |
| - Diagnostic     | - Efficiency   |
| - Regulation     | - Diagnostics  |



## THROTTLE BODY >

- Electronic speed governing control
- Suction or discharge pressure based speed control options
- Offers best-in-class governing



## SMART COILS >

- Capacitive discharge ignition with Smart Coil™ technology
- High quality construction for durability
- Designed to fit wide range of applications



# PRECONFIGURED TO YOUR EXACT ENGINE

EICS has been preconfigured 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 range, maintaining efficiency with load following technology for even the toughest gas lift applications. In addition, 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 JJJJ, without the need for pretesting to get dialed in.

## < D-EPR (Direct-acting Pressure Regulator)

- Direct-acting Electronic Pressure Regulator precisely controls the flow of the fuel gas to the mixer. The D-EPR maintains performance and emissions control, optimum combustion, fuel economy and transient response
- Single-stage microprocessor based electromechanical fuel pressure regulator incorporates a high speed actuator
- Hard anodized body for corrosive fuel environments
- Operates on low pressure fuel supply



## < MIXER

- Air / fuel management mixer
- Fast response fuel metering
- Specifically designed for naturally aspirated and turbocharged engines
- Minimal part-to-part variation
- Hard anodized body and stainless steel fuel valve for corrosive fuel environments



## < CATALYST

- Sealed stainless steel metallic substrate catalytic converter assembly with ANSI flanges and multiple pre/post converter sensor ports
- Optimized precious metals loading for low emissions requirements and wide range of fuels
- Packaged complete with pre/post UEGO sensors and RTDs



## < WIRE HARNESS

- Prefabricated custom wire harness solutions designed for specific engines
- Wire harness solutions include labeled wiring and connectors to simplify and eliminate connectivity errors



OPTIMIZE ENGINE PERFORMANCE AND MAINTAIN EMISSION COMPLIANCE EASIER THAN EVER





# EICS SOFTWARE CONTROL KEYS



## < SUCTION/DISCHARGE CONTROL KEY

- Allows for automatic speed control of the engine based on changes in suction or discharge pressure

## < EMISSIONS CONTROL KEY

- Enables operation of the emissions control feature of the EICS

EICS is your solution to be compliant. With the ever-increasing standards of local, state and federal regulations, it's imperative to have a system you can trust. EICS reduces your testing costs and eliminates your worries. By increasing performance, EICS saves time and money by skipping tuning and testing.

With the EICS Emissions package, eliminate the need for manual field adjustments. Our Emissions package transforms compliance from a constant hassle to an automated task. Simply enter your parameters and let the system do the rest. Be secure in knowing your engine is running at its peak performance and in complete compliance.

**MANUFACTURING, SALES & ENGINEERING**  
2151 RANDON DYER ROAD  
ROSENBERG, TX 77471

**SALES, SERVICES & SUPPORT**  
4646 S HARVARD AVE  
TULSA, OK 74135

**DOMESTIC SALES & SUPPORT**  
FW MURPHY PRODUCTS  
PHONE: 918 957 1000  
EMAIL: [INFO@FWMURPHY.COM](mailto:INFO@FWMURPHY.COM)  
[WWW.FWMURPHY.COM](http://WWW.FWMURPHY.COM)

**FW MURPHY CONTROL SYSTEMS & SERVICES**  
PHONE: 281 633 4500  
EMAIL: [CSS-SOLUTIONS@DOVERPRECISION.COM](mailto:CSS-SOLUTIONS@DOVERPRECISION.COM)

**INTERNATIONAL SALES & SUPPORT**  
LATIN AMERICA & CARIBBEAN  
PHONE: +1 918 770 8775  
EMAIL: [INTERNATIONAL@FWMURPHY.COM](mailto:INTERNATIONAL@FWMURPHY.COM)



FM 668933 (Rosenberg, TX - USA)

