

Compliance  
Controls

# Lean-Burn Natural Gas Engines Air/Fuel Ratio Controller

## Automatic Control for Lean-Burn Engines



### AFR-64L Air/Fuel Ratio Controller for Lean-Burn Natural Gas Engines

Need automated control for your lean-burn natural gas engine? Compliance Controls' AFR-64L air/fuel ratio controller provides state-of-the-art engine control in one simple, easy-to-use product.

#### Automatic Operation:

No operator intervention needed – the AFR-64L controller automatically tracks multiple factors, including engine load, tailpipe emissions and more, then precisely adjusts the mix to maximize fuel efficiency, minimize engine emissions, improve engine performance and reduce maintenance costs.

#### Emissions Compliance:

The AFR-64L controller optimizes the lean-burn air/fuel mix to maintain targeted emissions levels over varying engine loads, speeds, fuel quality and ambient conditions.

#### Cost Savings:

Pinpoint performance problems as soon as they occur. The AFR-64L controller's advanced troubleshooting and diagnostics cover 76 critical operating parameters, allowing the operator to cut the costs of maintenance, labor, downtime and replacement parts.

Take control over your engine needs – engine diagnostics, emissions control, fully automatic operation – the AFR-64L does it all for you.



Compliance Controls is a division of



# Automatic Control for Lean-Burn Engines.

Imagine having an expert monitoring your engine, optimizing the air/fuel mixture 24/7. That's what the AFR-64L controller will do for you.

## Main Features

- Easy to install and use
- Troubleshooting and diagnostic capabilities
- Improved engine and emissions control system performance
- Ongoing emissions compliance

## Benefits

- Emissions compliance maintained over varying engine speeds/loads and ambient temperatures
- Reduced fuel consumption, leading to better fuel economy
- Reduced lube oil nitration
- Improved engine performance minimizes air/fuel mix-related misfires and detonations
- Longer, more trouble-free equipment life
- Troubleshooting aids and diagnostics
- Records up to 8 historic faults at a time, eliminating guesswork
- Helps prevent costly equipment damage and failures
- Better-managed, lower maintenance costs
- Fully automatic – no operator is required in normal operation
- Minimal operator training
- Flexible network compatibility with high-speed data transfer
- Software, upgrades and documentation available on disk or online

## Technical Features:

- Fast, easy, low-cost installation
- Fits virtually any lean-burn, spark-ignited, carbureted natural-gas industrial engine
- Windows®-based platform compatible with most computers
- Software can be installed on laptop, PC, or network
- Comprehensive 76-fault diagnostics
- Data plotting for easy, accurate troubleshooting
- Separate alarm and shutdown dry contact relays
- Variable set-point for exhaust oxygen control delivers real-time response to varying engine loads and transients – perfect for generator-sets and other high-variance applications
- Open loop/feed forward control combined with closed loop exhaust gas oxygen sensor feedback and a super fast-acting fuel control valve
  - Allows for rapid response to engine load changes
  - Vital for generator sets and other applications with severe engine load variations
  - Helps maintain compliance even in the event of an oxygen sensor failure
- Drives up to two control banks for operation on "V" type engine configurations
- Fast-acting Full Authority Fuel Control Valve controls all fuel delivered to the engine
- Display - Viewable monitor (optional)
- RS-485/MODBUS® communications support for high-speed data transmission

To find out more about the AFR-64L Control System, contact your local Compliance Controls dealer or visit our website: [www.compliancecontrols.com](http://www.compliancecontrols.com)



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