

AFR-9R

Rich-Burn Air/Fuel Ratio Control System

The AFR-9R is the right choice when searching for the simplest to use load following air/fuel ratio control system. The system is designed to maximize the efficiency of a three-way catalyst by maintaining the proper air/fuel ratio over varying engine loads, speeds, fuel quality, ambient temperatures and barometric pressure. This is done without operator intervention after the initial program setup.

The AFR-9R features nine set point targets based on a combination of three RPM settings and three manifold pressure settings and includes three valve default position settings. As your engine's load and/or speed change, the AFR-9R anticipates (feed-forward control) and corrects the air/fuel ratio to optimize catalyst performance.

The system includes the Murphy PV-450 full-color graphical user interface for control functions, monitoring, programming and diagnostic displays. The eight-button display includes comprehensive built-in help files for added operator convenience.

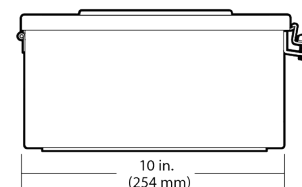
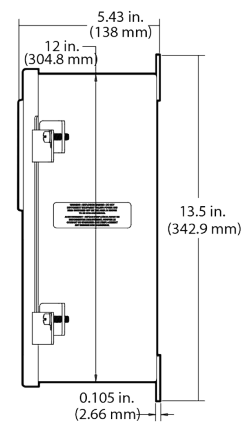
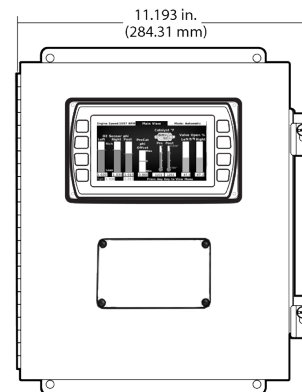
The Murphy AFR-9R air/fuel ratio controller represents cutting-edge technology in many areas: hardware, microprocessor power, control system software, operator interface options, adaptability to variable engine conditions and control requirements, software upgrade capability, in addition to comprehensive on-board diagnostics system (OBD).

Technical Features

- Set point and operation done entirely through the full-color graphic display, enclosure or remote mounted
- Designed for wide range of horsepower, gas fueled, carbureted rich-burn industrial engines
- Microprocessor-based controller with nine air/fuel set points
- Available with either the non-intrusive fuel enrichment strategy or the in-line fuel authority control strategy
- High-speed full-authority butterfly fuel control valves for quick response time. (available)
- Proportional solenoid fuel control valves for auxiliary fuel control (available)
- Map sensor to measure variances in manifold air pressure



Dimensions



Technical Features (continued)

- Post catalyst, oxygen sensor input for real-time adaptation to changing catalyst performance (post catalyst sensor is optional)
- Pre and Post catalyst differential temperature displayed when using an (optional) ungrounded Type K thermocouple
- Separate alarm and shut-down dry-contact relays for flexibility in setup and operation
- Heated exhaust gas oxygen sensors for optimum Air/ Fuel Ratio control
- 12 / 24 VDC Nominal
- Magnetic pickup or CD ignition input for engine speed operating reference
- Upgradeable to accept additional end devices
- IP 66 enclosure, 10 in. W x 13 in. H x 5 in. D.

How To Order

Options listed below applies to all Air/Fuel Controllers. All configurations may not be available. Call your sales representative or Enovation Controls for more information. Sample order AFR-PD-R-9R-2-1-FA50 below.

