

R7999A ControlLinks™ Fuel Air Controller



Uses the latest microprocessor-based technology to simultaneously control up to four actuators. When used with the ML7999 Universal Parallel Positioning Actuators, represents a value-added replacement of mechanical cam and linkage assembly controlling the relationship between fuel, airflow and flue gas recirculation (if used) on a power burner. The ControlLinks Fuel Air Control System consists of the R7999 Fuel Air Controller, Q7999 Wiring Subbase, ML7999 Universal Parallel Positioning Actuator and ZM7999 Configuration Software.

Description: Fuel Air Controller, consisting of a four-channel actuator drive Input/Output (I/O) and hardware interface for a variety of burner controllers.

Temperature Rating (Ambient): -40 F to +140 F; -40 C to +60 C.

Temperature Rating (Storage): -40 F to +150 F; -40 C to +65 C.

Humidity Range: 5 to 95% RH, noncondensing.

Electrical Ratings: (Input Power): 100 to 120 Vac (+10/-15%), 50/60 Hz (± 10%), 10VA maximum.

The R7999, with one communications port, provides communications capabilities similar to those found in the 7800 SERIES controls.

- Fast burner setup via PC or laptop.
- Fuel, air, FGR profile download capability.
- Two independent fuel profiles with or without FGR.
- 7 to 24 point profiles.
- Programmable behaviors of all actuators during Purge and Standby.
- Programmable behavior of nonselected fuel actuator.
- Independent lightoff and minimum modulation positions.
- Wide power voltage input range (100 to 120 Vac, 50/60 Hz).
- Auto/Manual input.
- Manual mode firing rate input.
- Pluggable controller to wiring subbase.
- Multipurpose communications port.
- Field-configurable device.
- Integrated boiler shock protection algorithms:
 - Water temperature low fire hold.
 - Stack temperature low fire hold.
 - FGR and low fire hold.
- Selectable FGR hold based on stack temperature.
- Programmable behavior of FGR actuator during purge.
- Maximum modulation limit capability.
- Remote reset input.
- Automated actuator endpoint seeking process.
- CSD-1 and NFPA acceptable.

Vibration: 0.0 to 0.5g continuous (V2 level).

Mounting: Mounts on Q7999 Wiring Subbase.

Approvals:

Underwriters Laboratories Inc (UL) : Listed, Report No. MH17367

Accessories:

32002515-001 Three-Pin Electrical Connector.

Product Number	Description
R7999A1005	Fuel Air Ratio Controller, 100 to 120 Vac, 50/60 Hz.

Q7999A ControlLinks™ Fuel Air Control Wiring Subbase



Provides terminals for field wiring for the R7999A ControlLinks Fuel Air Controller. Terminals on the R7999A,B Controller engage the Q7999 contacts to make electrical connections.

The Q7999A Subbase is panel-mounted.

- Quick-mount wiring subbase for R7999A,B Fuel Air Ratio Controllers.
- Allows wiring of control system before installation of controller.
- Panel-mounted.
- NEMA 1 enclosure.

Weight: 10 oz; 0.28 kg.

Enclosure: NEMA 1.

Approvals:

Underwriters Laboratories Inc: Listed, Report No. MH17367

Product Number	Description
Q7999A1006	Fuel Air Ratio Controller Wiring Subbase