

# Microprocessor Burner Controls

## RM7840 Programmers with VPS



**Microprocessor-based integrated burner control for automatically fired gas, oil, coal or combination fuel single burner applications. Provides safety, functional capability and features beyond conventional controls. With Valve Proving Feature. S7800A1142**

**Application:** Programming Control w/VPS

**Dimensions, Approximate:** 5 in. wide x 5 in. high x 5 1/4 in. deep with Q7800A Subbase x 6 3/32 in. deep with Q7800B Subbase (127 mm wide x 127 mm high x 133 mm deep with Q7800A Subbase x 155 mm deep with Q7800B Subbase)

**Ambient Temperature Range:** -40 F to +140 F (-40 C to +60 C)

**Vibration:** 0.5 G environment

**Frequency:** 50 Hz; 60 Hz (±10%)

**Pilot Type:** interrupted

**Early Spark Termination:** Yes, 5 sec

**Preignition:** Yes

**PrePurge:** Determined by ST7800A Purge Timer Card

**PostPurge:** programmed with S7800A1142 display

**AirFlow Check:** User selectable

**Second Stage Pilot Valve:** selectable

**Keyboard Display required to program VPS and change postpurge required to program VPS and change postpurge.**

- Functions include automatic burner sequencing, flame supervision, system status indication, system or self-diagnostics and trouble shooting
- Access for external electrical voltage checks
- Application flexibility and communication interface capability through Modbus™
- Five LEDs provide sequence information
- Power LED blinks fault code on Lockout
- Five function Run/Test Switch
- Interchangeable plug-in flame amplifiers
- Local or remote annunciation of operation and fault information using the S7800 Keyboard Display (optional)
- Nonvolatile memory retains history files and lockout status after loss of power
- Compatible with existing Honeywell flame detectors
- S7800A1142 Keyboard required to setup Valve Proving Feature and change post purge time
- SIL3 Capable in a properly designed Safety Instrumental System when using amplifiers R7847B,C; R7849B; R7851B,C; R7852B; R7861A and R7886 with their appropriate flame detectors

**Weight:** 1 lb 10 oz (0.7 kg)

**Approvals**

**Federal Communications Commission:** FCC Part 15, Class A, Emissions

**Factory Mutual:** See table

**Underwriters Laboratories, Inc:** See table

**Required Components:** Q7800A,B Universal Wiring Subbases. R7847, R7849, R7851, R7852, R7861, or R7886 Flame Signal Amplifier. ST7800A Plug-in Purge Timer Card.



Product Number	Voltage	Flame Establishing Period		Interlocks	Comments	Factory Mutual	Underwriters Laboratories, Inc
		Main	Pilot				
EC7840L1014/U	220 to 240 Vac (+10, -15%)	10 sec or 15 sec	4 sec or 10 sec	Lockout	Requires S7800A1142 Display, LHL-LF&HF Proven	—	—
RM7840G1022/U	120 Vac (+10, -15%)	10 sec, or 15 sec, or 30 sec, or Intermittent	4 sec or 10 sec	Running	Requires S7800A1142 Display, LHL-LF Proven	Report No. 1V9AO.AF	Component Recognized, File No. MP268; Guide No. MCCZ
RM7840L1075/U	120 Vac (+10, -15%)	10 sec or 15 sec	4 sec or 10 sec	Lockout	Requires S7800A1142 Display, LHL-LF&HF Proven	Report No. 1V9AO.AF	Component Recognized, File No. MP268; Guide No. MCCZ