

# Microprocessor Burner Controls

## RM7897 Automatic Primary Control with Programmable Post-Purge



Microprocessor-based integrated full-function primary burner control for automatically fired gas, oil, or combination fuel single burner applications. Programmable Post-Purge. Requires S7800A1142 Display to program post-purge feature.

- Functions include automatic burner sequencing, flame supervision, system status indication, system or self-diagnostics and troubleshooting.
- Subbase, amplifier and purge card are required for operation.
- Options include PC interface, keyboard display module, DATA CONTROLBUS™ MODULE, remote display module, first-out expanded annunciator, and COMBUSTION SYSTEM MANAGER™ software.
- Five LEDs provide sequence information. Power LED blinks fault code on Safety Shutdown.
- Interchangeable plug-in flame amplifiers.
- Local or remote annunciation of operation and fault information.
- Nonvolatile memory retains history files and sequencing status after power loss.
- Optional remote reset capability.
- Optional report generation.
- Selectable recycle or lockout on loss of airflow or flame.
- Shutter drive output.
- Airflow switch check.
- Delayed main valve.
- Programmable post-purge using S7800A1142 Keyboard Display (not provided).

**Application:** On-Off Primary Control with Pre- and Programmable Post-purge

**Flame Establishing Period - Pilot:** 4 sec or 10 sec

**Interlocks:** Selectable

**Preignition:** Yes

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

**PostPurge:** programmed with S7800A1142 display

**Required Components:** Q7800A, B Universal Wiring Subbases. R7847, R7848, R7849, R7851, R7852, R7861, or R7886 Flame Signal Amplifier. ST7800A Plug-in Purge Timer Card.

**Frequency:** 50 Hz; 60 Hz ( $\pm 10\%$ )

**Vibration:** 0.5 G environment

**Shipping and Storage Temperature Range:** -40°F to +140°F (-40°C to +60°C)

**Approximate, Dimensions:** 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)

**Weight lb. (kg):** 1 lb 15 oz (0.9 kg)

**Approvals, Underwriters Laboratories Inc.:** Component Recognized, File No. MP268; Guide No. MCCZ.

**Approvals, CSA:** Certified, File No. LR95329-3.

**Approvals, Control Safety Devices:** Acceptable: CSD-1

**Approvals, FCC:** FCC Part 15, Class B, Emissions.

**Approvals, Swiss RE:** Acceptable

**Approvals, Factory Mutual:** Report No. OX4A5.AF.



Commercial/Industrial  
Combustion Controls

Material Number	Voltage	Pilot Type	Delayed Main Valve	Comments	Used With
RM7897A1002/U	120 Vac (+10, -15%)	selectable		Includes blinking LED fault annunciation feature	7800 Series Amplifiers
RM7897C1000/U	120 Vac (+10, -15%)	selectable	Yes	Includes blinking LED fault annunciation feature	7800 Series Amplifiers