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

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.

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 (±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)

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

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