

Microprocessor Burner Controls

RM7890; EC7890 On-Off Primary Controls



Microprocessor-based integrated primary burner control for automatically fired gas, oil or combination fuel single burner

Application: On-Off Primary Control

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%)

Weight: 1 lb 13 oz (0.8 kg)

applications. Provides level of safety, functional capability and features beyond conventional controls.

- Functions include automatic burner sequencing, flame supervision, system status indication, system or self diagnostics and troubleshooting
- Subbase and amplifier are required for operation
- Options include Modbus™ interface, keyboard display module, remote display module
- Five LEDs provide sequence information
- Interchangeable plug-in flame amplifiers
- Optional local or remote annunciation of operation and fault information
- Nonvolatile memory retains history files and sequencing status after power loss
- Selectable relight or lockout on loss of flame
- 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

Approvals

Gastec/European: See table

Canadian Standards Association: See table

Factory Mutual: See table

Swiss RE (formerly IRI): Acceptable

Underwriters Laboratories, Inc: See table

Required Components: Q7800A,B Universal Wiring Subbases. R7847, R7849, R7851, R7852, R7861, or R7886 Flame Signal Amplifier.



Product Number	Voltage	Pilot Type	Flame Establishing Period	Comments	Gastec/European	Canadian Standards Association	Factory Mutual	Underwriters Laboratories, Inc
EC7890A1011/U	220 to 240 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	—	—	Report No. 1D0A1.AF	—
EC7890A1029/U	220 to 240 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	—	GASTEC: CE-63AP3070/1, Approved to EN298	Report No. 1D0A1.AF	—
EC7890B1010/U	220 to 240 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	Includes Shutter Drive Capability	—	Report No. 1D0A1.AF	—
EC7890B1028/U	220 to 240 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	Includes Shutter Drive Capability	—	Report No. 1V9AO.AF	—
RM7890A1015/U	120 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	—	—	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890A1031/U	120 Vac (+10, -15%)	Intermittent	Intermittent	30 sec fixed	—	—	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890A1064/U	120 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	—	GASTEC: CE-63AP3070/1, Approved to EN298	Report No. 1D0A1.AF	—
RM7890B1014/U	120 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	Includes Shutter Drive Capability	—	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890B1030/U	120 Vac (+10, -15%)	Intermittent	Intermittent	Fixed 4 sec or 10 sec PFEP	Includes Shutter Drive Capability, Alarm sounds when Reset pushed	—	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890B1055/U	120 Vac (+10, -15%)	Intermittent	Intermittent	4 sec or 10 sec	Includes Shutter Drive Capability	Gastec EN268 Report 1156791	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890C1005/U	120 Vac (+10, -15%)	Standing Pilot	Intermittent	—	Standing Pilot Applications	—	Certified, File No. LR95329-3	Report No. OX4A5.AF
RM7890D1004/U	120 Vac (+10, -15%)	Intermittent	Intermittent	15 sec or 30 sec	Higher Flame Sensor Voltage for Infra Red Heater Applications	—	Certified, File No. LR95329-3	Report No. OX4A5.AF