

# Controllers

## RA890F Protectorelay® Primary Control



**Primary control provides solid state, electronic flame safeguard protection for industrial and commercial single or dual fuel burners.**

- Uses rectification principle of electronic flame detection.
- Replaces RA890E in most applications; Mounts on same Q270A1024 Subbase.
- Recycles if flame signal lost while in Run. Failure to establish pilot results in a lockout. Safe-start check prevents start-up if flame-simulating failure occurs in flame detector circuit.
- Includes built-in protection against ignition crossover in flame rod systems.
- Includes spdt alarm contacts.
- Solid state circuitry.
- Mounts and removes easily through use of captive mounting screws.
- Mounting base is made of strong thermoplastic.

**Dimensions, Approximate:** 5 in. high, 5 in. wide, 4 3/4 in. deep (including subbase) (127 mm high, 127 mm wide, 121 mm deep (including subbase))

**Application:** Either a line or low voltage controller can be used

**Alarm Relay Switching:** SPDT

**Safety Switch Timing:** 15 seconds

**Temperature Ratings:** 50 Hz models -20 F to +105 F, 60 Hz models -20 F to +115 F (50 Hz Models -29 C to +41 C, 60 Hz Models -29 C to +46 C)

**Approvals:**

**Canadian Standards Association:** CSA Certified: 120V models only; File No. LR1620

**Factory Mutual:** Approved: Report No. 17678,19417,19784

**Underwriters Laboratories, Inc:** UL Listed: 120V models only; File No. MP268, Guide No. MCCZ

**Accessories:**

**123514A** Flame Simulator, Rectification Type Flame Amplifiers

Product Number	Flame Failure Response Time	Electrical Ratings		Description
		Power Supply (Vac)	Frequency (Hz)	
RA890F1270	0.8 sec	120 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1288	3.0 sec	120 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1296	3.0 sec	208 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1304	0.8 sec	220 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1338	0.8 sec	120 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1346	3.0 sec	120 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1387	3.0 sec	240 Vac	50/60 Hz	Rectification, with alarm contacts
RA890F1478	0.8 sec	120 Vac	50/60 Hz	Rectification, with alarm contacts, fast safe start check