## **RA890F Protectorelay™ Primary Control**



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

- Uses rectification principle of electronic flame detection.
- Replaces RA890E in most applications and 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.
- Application: Primary control for rectification application (Flame Rod for example)

Frequency: 50 Hz; 60 Hz

- Temperature Range: 60 Hz models -20°F to +115°F, 50 Hz models -20°F to +105°F (50 Hz Models -29°C to +41°C, 60 Hz Models -29°C to +46°C)
- Approximate, Dimensions: 5 in. high x 5 in. wide x 4 3/4 in. deep (including subbase) (127 mm high x 127 mm wide x 121 mm deep (including subbase))
- Approvals, Underwriters Laboratories Inc.: UL Listed: 120V models only; File No. MP268, Guide No. MCCZ

Approvals, CSA: CSA Certified: 120V models only; File No. LR1620Approvals, Factory Mutual: Approved: Report No. 17678, 19417, 19784

Material Number	Voltage	Flame Failure Response Time (sec)	Alarm Relay Switching	Safety Switch Timing	Description
RA890F1270/U	120 Vac	0.8 sec	SPDT	15 seconds	Rectification, with alarm contacts
RA890F1288/U	120 Vac	3.0 sec	SPDT	15 seconds	Rectification, with alarm contacts
RA890F1296/U	208 Vac	3.0 sec	SPDT	15 seconds	Rectification, with alarm contacts
RA890F1304/U	220 Vac	0.8 sec	SPDT	15 seconds	Rectification, with alarm contacts
RA890F1338/U	120 Vac	0.8 sec	SPDT	30 seconds	Rectification, with alarm contacts
RA890F1346/U	120 Vac	3.0 sec	SPDT	30 seconds	Rectification, with alarm contacts
RA890F1387/U	240 Vac	3.0 sec	SPDT	15 seconds	Rectification, with alarm contacts
RA890F1478/U	120 Vac	0.8 sec	SPDT	15 seconds	Rectification, with alarm contacts, fast safe start check.

## **RA890G Protectorelay<sup>™</sup> Primary Control**



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

- Design for interrupted ignition with intermittent pilot on gas burners, and interrupted or intermittent ignition on oil burners.
- Use with a C7027, C7035 or C7044 Minipeeper Ultraviolet Flame Detector for flame sensing.
- 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 SPDT alarm contacts.
- Solid state circuitry, eliminates warm-up and increases resistance to vibration.
- Mounts and removes easily through use of captive mounting screws.
- · Mounting base is made of strong thermoplastic.

**Application:** Either a line or low voltage controller can be used **Frequency:** 50 Hz; 60 Hz

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

- **Approximate, Dimensions:** 5 in. high x 5 in. wide x 4 3/4 in. deep (including subbase) (127 mm high x 127 mm wide x 121 mm deep (including subbase))
- Approvals, Underwriters Laboratories Inc.: UL Listed: 120V models only; File No. MP268, Guide No. MCCZ

Approvals, CSA: CSA Certified: 120V models only; File No. LR9S329 Approvals, Factory Mutual: Approved: Report No. 22013

Material Number	Voltage		Alarm Relay Switching	Safety Switch Timing	Description
RA890G1229/U	120 Vac	0.8 sec	SPDT	15 seconds	Ultraviolet, with alarm contacts
RA890G1245/U	220 Vac	0.8 sec	SPDT	15 seconds	Ultraviolet, with alarm contacts
RA890G1260/U	120 Vac	3.0 sec	SPDT	15 seconds	Ultraviolet, with alarm contacts
RA890G1286/U	240 Vac	3.0 sec	SPDT	15 seconds	Ultraviolet, with alarm contacts

## **Q270 Wiring Mount Base**

Application: Wiring Mounting Base for RA890, R4795

Material Number	Description	Used With
Q270A1024/U	Wiring Mounting Base for RA890, R4795	RA890, R4795