

# SINGLE BURNER SOLID STATE

## FORM 7256

# Protectofier

## COMBUSTION SAFEGUARD

Operates with FLAME ROD  
and/or  
P-C II (Ultra-Violet) SCANNER

- Compact Design.
- Time Proven Plug-In Solid State FLAME-PAK Amplifier.
- Plug-In, Interchangeable Relays.
- Plug-In Power Transformer.
- Flame Rod and/or Ultra-Violet Sensing. Independent or simultaneously using same FLAME-PAK Amplifier.



IRI ACCEPTED

Enclosed  
Dimensions  
6" wide  
7-5/16" high  
5" deep

Open  
Dimensions  
6" wide  
6" high  
5" deep



FORM 7256-BTNRE

- Solid State Plug-In Purge Timer Available in 15, 30, 60 and 90 Seconds. (Form 7256-BTNR)
- Safe Start Check on each light-off cycle.
- High Flame Signals minimize nuisance shutdowns.
- "NR" indicates automatic models provided with additional relay to prevent re-light attempt on flame failure.

### SPECIFICATIONS:

Ambient temperature: minus 20° to plus 140° F  
Flame response: 2 to 4 seconds (0.8 sec. available)  
Voltage/Frequency:  
120V AC  $\pm$  10%, 50-60 Hz  
Voltage at E terminal to ground:  
390V AC  
Voltage at UV terminal to ground:  
590V AC  
Power consumption: 35 VA or less  
Rating: 125 VA pilot duty

### COMPONENTS

**CHECK RELAY (ACF):** The plug-in relay makes certain that the PROTECTOFIER is functioning properly. It is energized thru NC contacts of the Flame Relay. Failure of the Check Relay to provide safe-start check will prevent ignition and energizing of the fuel valve.

**FLAME-PAK (SS100A):** The plug-in electronic amplifier provides immediate response via the flame rectification principle. Sensing is achieved either by (1) a flame rod which creates a DC signal to the FLAME-PAK, or by (2) the P-C II U-V Scanner in which a DC signal is developed by an ultra-violet sensitive tube. In either system if the signal from the flame to the FLAME-PAK is interrupted, the fuel valves are de-energized, and an alarm circuit can be energized if required.

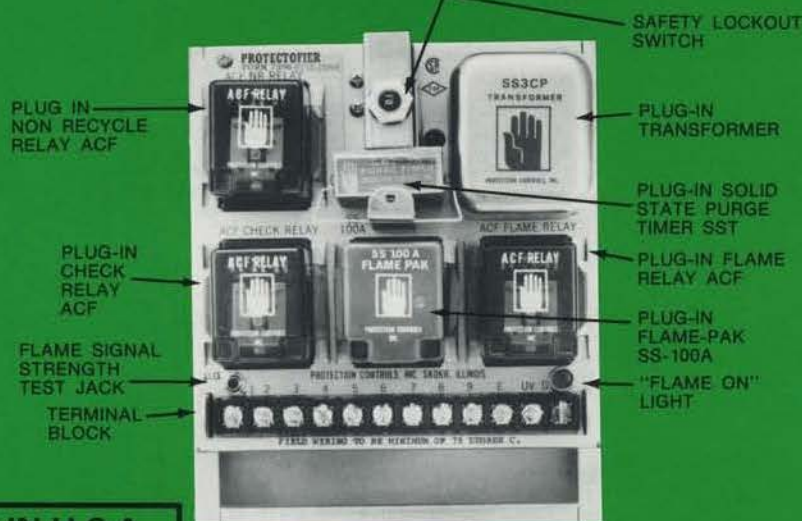
**FLAME RELAY (ACF):** The plug-in relay responds to FLAME-PAK operation energizing the circuit to the fuel valves.

**TEST JACK:** Provides convenient checking of input signal by placing a DC microammeter in series with the flame rod or P-C II Ultra-Violet Scanner.

**FLAME ROD OR ULTRA-VIOLET SCANNER (P-C II):** (either or both can operate in the same PROTECTOFIER system). The P-C II Ultra-Violet Scanner can be used with gas or oil flame. It is compact, containing only an ultra-violet sensing tube for direct 2-wire connection to the PROTECTOFIER.

**TRANSFORMER (SS3CP):** Provides low voltage for FLAME-PAK circuit and power source for "E" and "UV" terminals.

**FLAME RESPONSE LIGHT:** Neon indicator built-in energized with flame present.



MADE IN U.S.A.



PROTECTION CONTROLS, INC.

ELECTRICAL SAFETY EQUIPMENT



# FORM 7256

## MODELS AVAILABLE

Designation and Function

120V 50-60 Hz

Single Burner

FORM DESIGNATION	MANUAL	AUTOMATIC	PURGE	LIMITED TRIAL FOR IGNITION **	RECYCLE ON FLAME FAILURE MANUAL	RECYCLE ON FLAME FAILURE AUTOMATIC	FLAME FAILURE ALARM
7256-AHE	×	—	—	—	—	—	×
7256-BE	×	×	—	15 sec	—	×	—
7256-BHE	×	×	—	15 sec	—	×	×
7256-BNRE	—	×	—	15 sec	—	—	—
7256-BNRHE	—	×	—	15 sec	—	—	×
7256-BT * NRE	—	×	*×	*×	—	—	—
7256-BT * NRHE	—	×	*×	*×	—	—	×
Above models with "E" suffix are enclosed. Omit "E" suffix for open style.							

Models with suffix "T" in Form number are provided with a plug-in "SST" purge timer to provide for fixed pre-purged cycle. Timing ranges available are listed in Table 1 below.

\*Purge and trial for ignition cycle. Select from timing schedule in Table 2 below.

\*\*15 second trial for ignition standard, 5 second and 10 second also available—specify.

TABLE 1

SST PURGE TIMER	
DESIGNATION	PURGE CYCLE***
SST-15	15 sec.
SST-30	30 sec.
SST-60	60 sec.
SST-90	90 sec.

TABLE 2

TIMING SCHEDULE—TIME IN SECONDS		
*	PURGE***	IGN TRIAL
15-5	15	5
15-10	15	10
15-15	15	15
30-5	30	5
30-10	30	10
30-15	30	15
60-5	60	5
60-10	60	10
60-15	60	15
90-5	90	5
90-10	90	10
90-15	90	15

INSTALLATION, OPERATION AND MAINTENANCE SHALL CONFORM WITH NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS, NATIONAL AND LOCAL CODES, AND AUTHORITIES HAVING JURISDICTION. ANY MODIFICATION VOIDS APPROVALS.

\*\*\*Purge time shall allow system to have a minimum of four fresh air changes.