

## SINGLE BURNER SOLID STATE

# rotectofier

### **COMBUSTION SAFEGUARD**

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

## **FORM 7256**

- 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

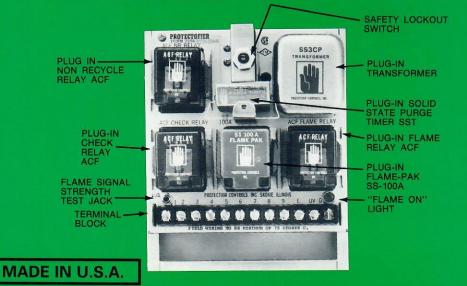
6" high

5" deep

- 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.



**FORM 7256-BTNRE** 



#### **SPECIFICATIONS:**

Ambient temperature: minus 20° to plus 140° F

Flame response: 2 to 4 seconds (0.8 sec. available)

Voltage/Frequency:

120V AC ± 10%, 50-60 Hz

Voltage at E terminal to ground:

Stage at LIV

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 prove 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.

<u>TEST JACK:</u> 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 PROTECTO-FIER 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 bulb energized with flame present.



## **FORM 7256**

#### **MODELS AVAILABLE**

Designation and Function 120V 50-60 Hz Single Burner

FORM DESIGNATION	MANULAL	AUTOMA	PUNGE	STATE OF THE PARTY	RECYCLE ON TANKE FAUN	RECYCLE CON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7256-AHE	×	_	_	_	_	_	×
7256-BE	×	×	_	15 sec	_	×	
7256-BHE	×	×	_	15 sec	_	· ×	×
7256-BNRE	_	×	_	15 sec	9. <del></del> 36	_	_
7256-BNRHE	_	×	_	15 sec	_	_	×
7256-BT * NRE	_	×	*×	*×	_	_	_
7256-BT * NRHE	_	×	*×	*×	_		×

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.

TABLE 1

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

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

#### TABLE 2

*	PURGE***	IGN TRIA	
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	

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

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

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