PROTECTION CONTROLS, INC.
Skokie, Illinois

PROTECTOFIER
Form 7256AH
Drawing X-340

Single Burner Supervision, Manual Pushbutton Ignition, Plug-in Type Control Relays, Plug-in Type SS100A FLAME-PAK.

OPERATING SEQUENCE

Power on PROTECTOFIER terminal 1 and 2 provide power to electronic network.

Power on PROTECTOFIER terminal 3 thru safety limit switch circuits permits manual pushbutton ignition.

1 - Press and hold START pilot pushbutton.
   a - "ACF" CHECK relay "C" is energized thru N.C. contacts of "ACF" FLAME relay "F".
   b - Ignition transformer is energized thru contact of START button to provide spark ignition to the pilot.
   c - Pilot solenoid valve is energized to open (from PROTECTOFIER terminal 6).
2 - With pilot flame established "ACF" FLAME relay "F" is energized.
   a - FLAME relay "F" contacts transfer.
      1) N.C. "F" contact in safe-start checking circuit opens.
      2) N.O. "F" contact between terminal 3 and terminal 5 closes providing holding circuit around START pilot pushbutton contact.
      3) N.O. "F" contact in main valve circuit closes to energize main valve (thru N.O. CHECK relay "C" contact). Neon indicator light on PROTECTOFIER chassis will glow to indicate flame is established.
3 - Release START button. Ignition transformer is de-energized.

Flame failure during operation shuts off fuel supply by de-energizing fuel valves.

Power interruption to PROTECTOFIER terminal 3 de-energizes relays and fuel valves.

Failure of CHECK relay "C" to prove safe-start check will prevent opening of fuel valves and also prevent ignition.

If alarm horn is connected in circuit, alarm will sound anytime terminals 1 and 2 are energized and no flame signal is present.

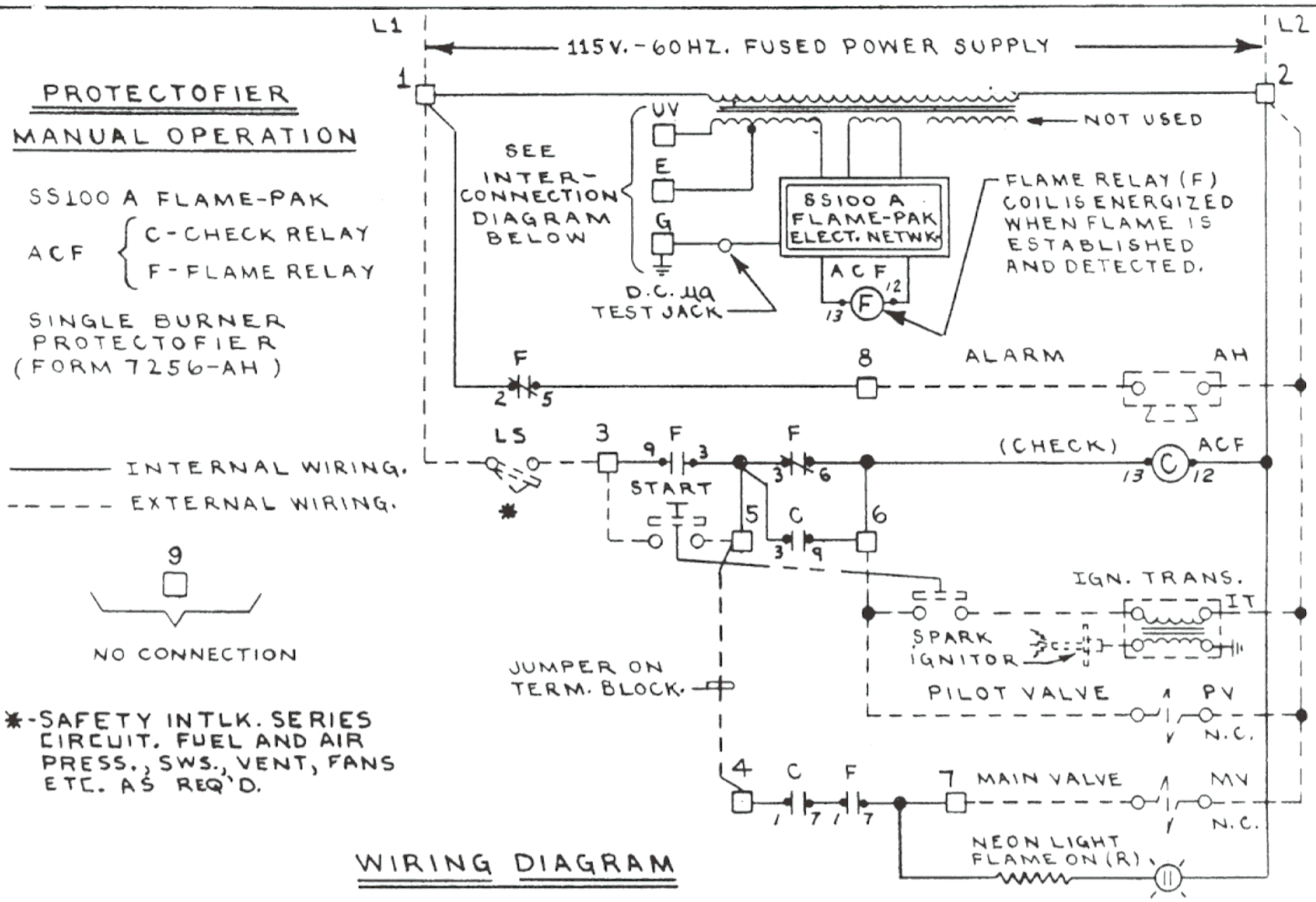
A suffix letter "E" in Form number indicates PROTECTOFIER is enclosed type.

PROTECTOFIER
MANUAL OPERATION

SS100 A FLAME-PAK

ACF { C - CHECK RELAY
F - FLAME RELAY

SINGLE BURNER
PROTECTOFIER
(FORM 7256-AH)



WIRING DIAGRAM

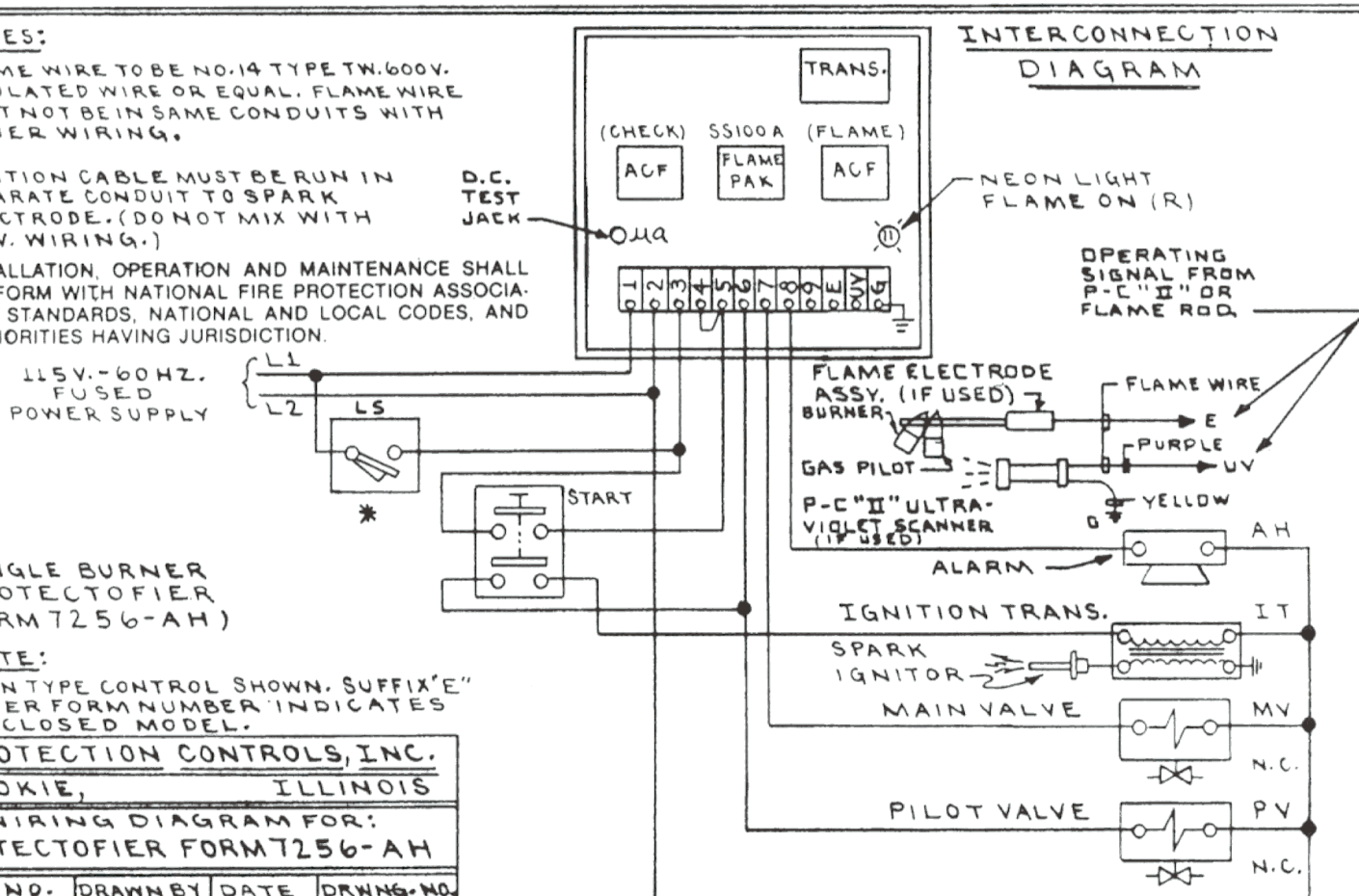
NOTES:

FLAME WIRE TO BE NO. 14 TYPE TW. 600V. INSULATED WIRE OR EQUAL. FLAME WIRE MUST NOT BE IN SAME CONDUITS WITH POWER WIRING.

IGNITION CABLE MUST BE RUN IN SEPARATE CONDUIT TO SPARK ELECTRODE. (DO NOT MIX WITH 115 V. WIRING.)

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

INTERCONNECTION DIAGRAM



SINGLE BURNER
PROTECTOFIER
(FORM 7256-AH)

NOTE:
OPEN TYPE CONTROL SHOWN. SUFFIX 'E' AFTER FORM NUMBER INDICATES ENCLOSED MODEL.

PROTECTION CONTROLS, INC.
SKOKIE, ILLINOIS

WIRING DIAGRAM FOR:
PROTECTOFIER FORM 7256-AH

JOB NO.	DRAWN BY	DATE	DRWNG. NO.
TR	R.R.	9-20-73	X-340

REV. 9-24-82