

Single-Package Cooling Units

INDEX

UNIT MODEL	V/PH/HZ	FIG.	LABEL DIAGRAM	STARTING SERIAL NO.
50BJ,BK 016	500	<u>208-230/3/60</u>	3	50BA508724
	600	460/3/60	3	50BA508724
	100	575/3/60	3	50BA508724
50BJ,BK 024	500	<u>208-230/3/60</u>	4	50BA508804
	600	460/3/60	4	50BA508804
	100	575/3/60	4	50BA508804
50BJ,BK 028	500	<u>208-230/3/60</u>	5	50BA508754
	600	460/3/60	5	50BA508754
	100	575/3/60	5	50BA508754
50BJ,BK 034	500	<u>208-230/3/60</u>	5	50BA508754
	600	460/3/60	5	50BA508754
	100	575/3/60	5	50BA508754

Extended Voltage Compressor

Timer Sequence Chart

Fig 1

Simplified Wiring Schematic (Typical)

Fig 2

Accessory Timer Control Box (All Units)

Fig 6

CONTROL SEQUENCE

When unit power supply is on and circuit breakers are engaged, the 7-day timer clock cycles the unit on and off at programmed times for a full 7-day cycle.

At each ON point, the indoor fans start immediately and remain on as long as the 7-day clock calls for cooling.

Upon initial start-up (with 7-day clock at unit operation position), there is a delay of from 20 to 30 minutes before the first stage of cooling starts. This time interval allows the microprocessor to develop a memory bank history and allows the fan to operate until a sensor can sense conditioned space temperature rather than initial unit ambients.

The microprocessor cycles compressors and unloaders to control discharge air temperature at a temperature close to a preselected setting.

On completion of the occupied mode on the time clock, the unit is switched to the unoccupied mode and indoor fan and compressor(s) stop.

The system can be placed temporarily in the occupied mode by means of a 5-hour spring driven bypass timer. This allows the building to be used during normally unoccupied hours without reprogramming the time clock.

NOTES

1. Numbers at right of diagram indicate line location of used contacts. Bracket over 2 numbers signifies that contact is single pole, double

throw. Underlined number signifies that contact is normally closed. Plain number (no line) signifies normally open contact.

- Compressor and fan motors are thermally protected.
- All 3-phase motors are protected against primary single-phasing conditions.
- Outdoor fan motor must not exceed 1/2 hp.
- Primary terminals for 115-v transformer are:

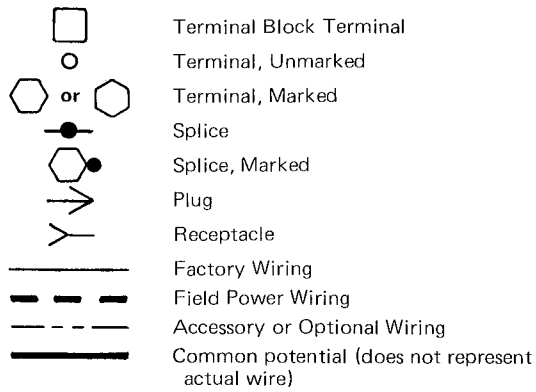
200 v	H1 and H2
208 v	H1 and H2
230 v	H1 and H3
460 v	H1 and H4
575 v	H1 and H2

On 208-230-v (extended voltage) unit, transformer is factory connected for 208-v application. For 230-v design center application, re-connect transformer as listed above.

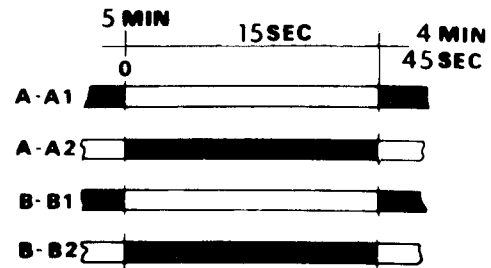
LEGEND

Access.	— Accessory
BS	— Bypass Switch
C	— Compressor Contactor
CB	— Circuit Breaker
CCH or CH	— Crankcase Heater
Ck	— Clock
CKM	— Clock Motor
Clg	— Cooling
Comp	— Compressor
DU	— Dummy Terminal
Equip	— Equipment
FC	— Fan Contactor
FCB	— Fan Circuit Breaker
FM	— Fan Motor
Fu	— Fuse
Gn or Gnd	— Ground
HPS	— High-Pressure Switch
HR	— Holding Relay
IFC	— Indoor Fan Contactor
IFM	— Indoor Fan Motor
IP	— Internal Protector
IT	— Internal Thermostat
LPS	— Low-Pressure Switch
PI	— Plug
Pri	— Primary
Sec	— Secondary
Sys ON	— System ON
TB	— Terminal Block
TM	— Timer Motor
TR	— Timer Relay
Tran	— Transformer
U	— Unloader

LEGEND (Cont)



TIMER SEQUENCE CHART



(BLACK DENOTES CLOSED CONTACTS)

Fig. 1 – Timer Sequence Chart (All Units)

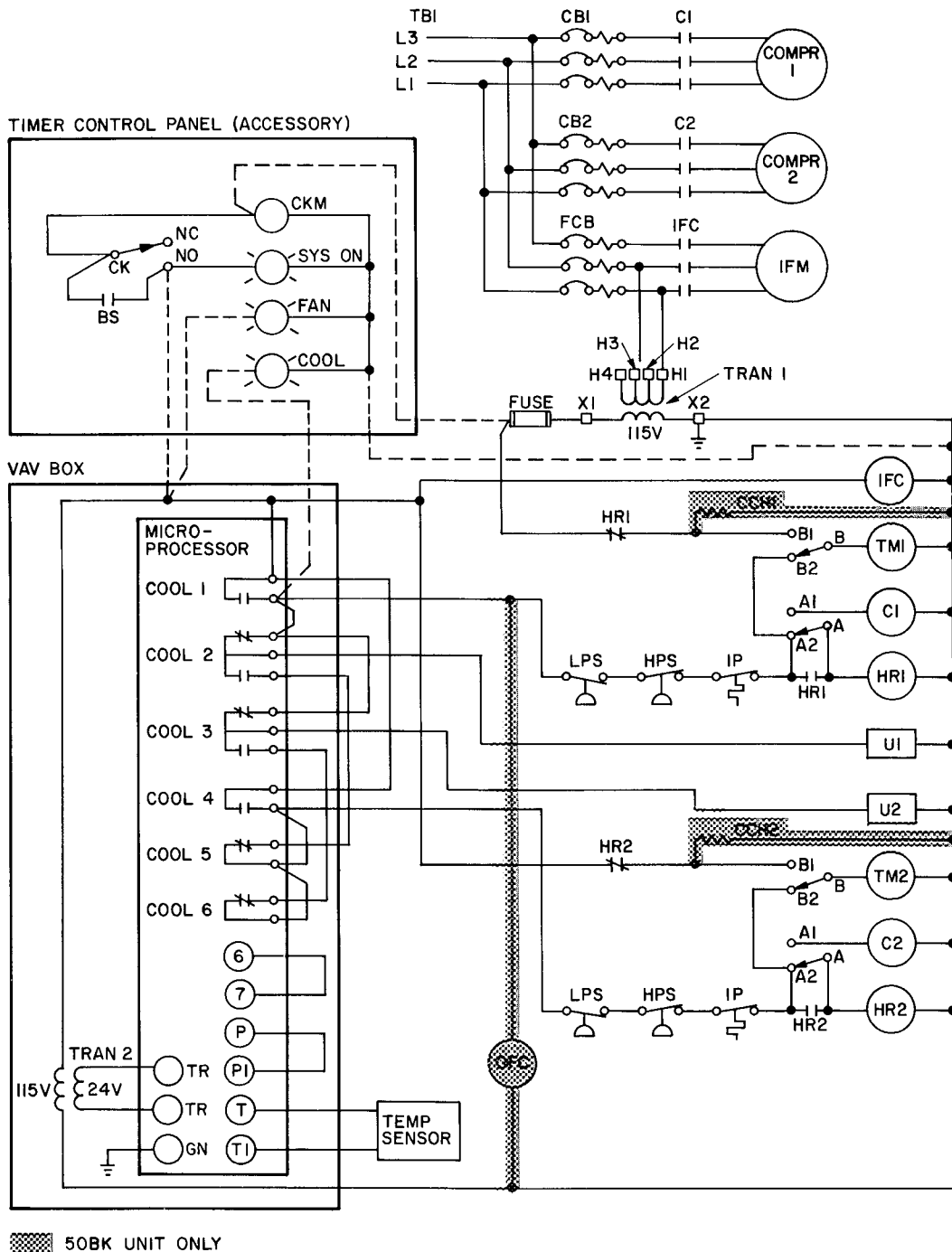
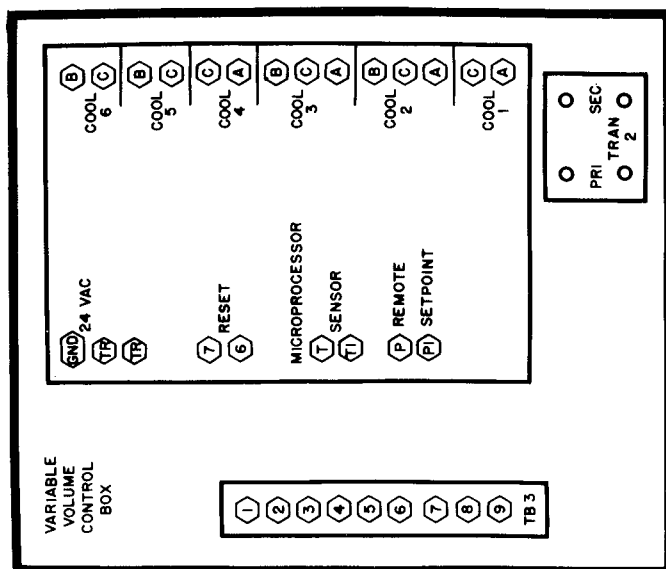
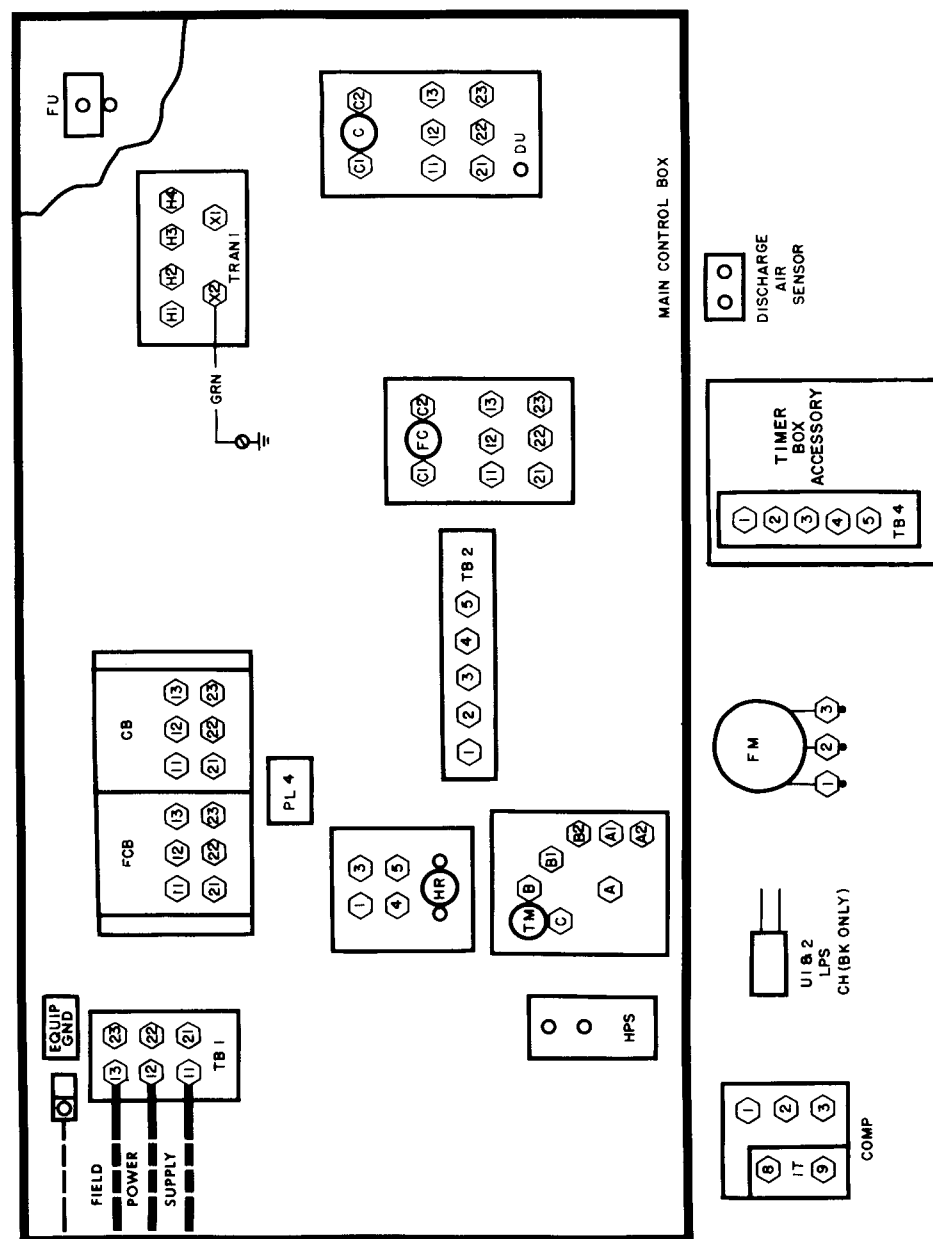


Fig. 2 – Simplified Wiring Schematic (Typical)

See page 1 for Notes and Legend

For detailed wiring diagram, refer to Fig. 3 thru 6

COMPONENT ARRANGEMENT



SCHEMATIC

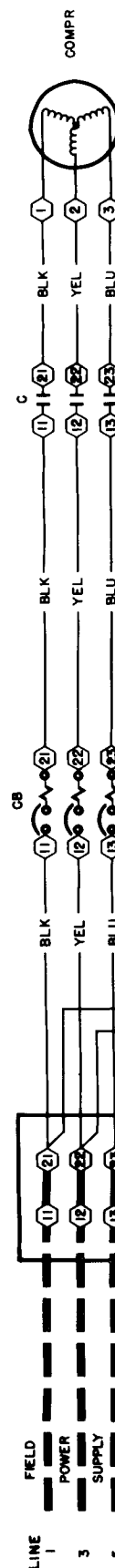
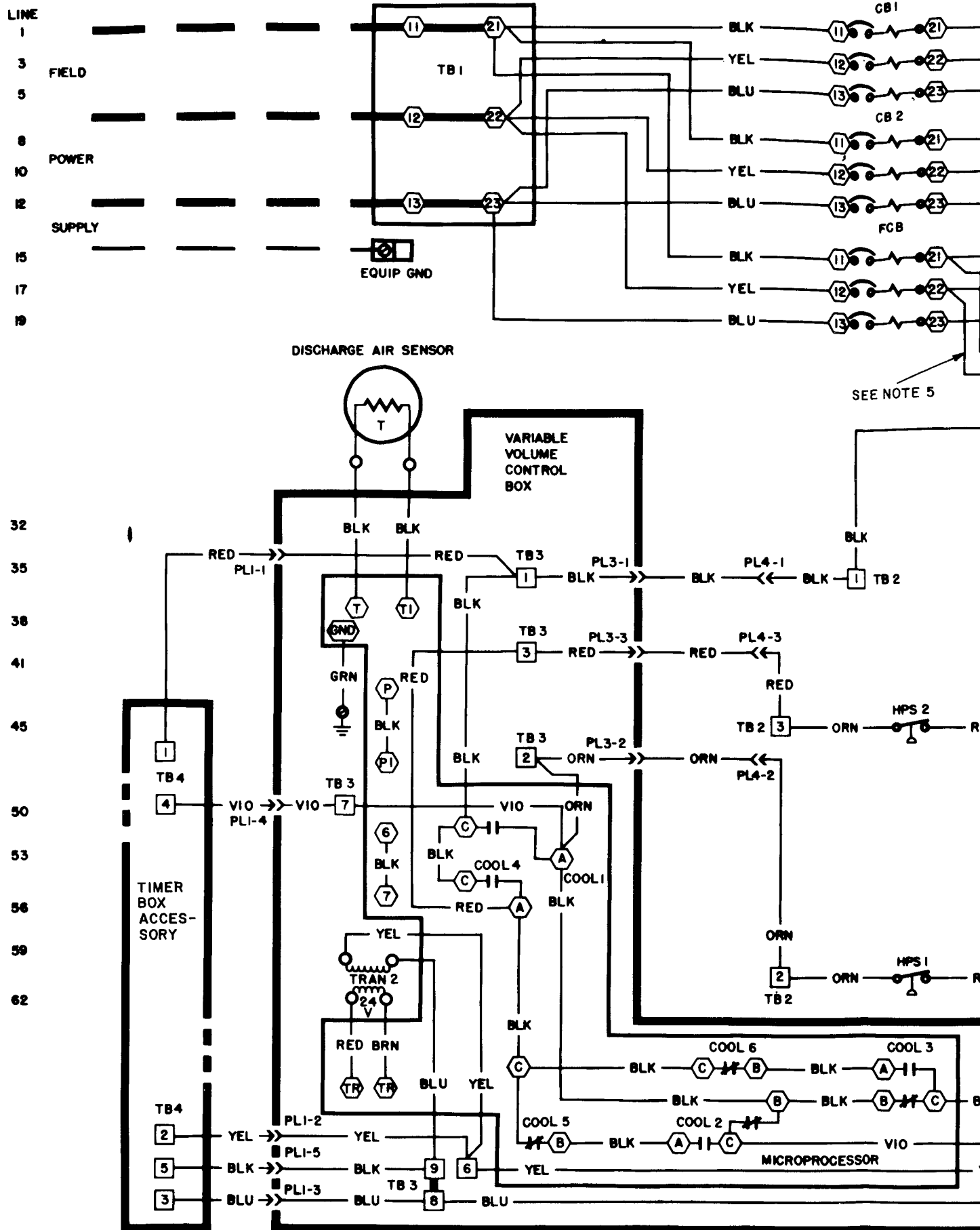




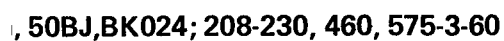
Fig. 3 — Label Diagram, 50BJ,BK016; 208-230, 460, 575-3-60

SCHEMATIC



See page 1 for Notes and Legend

Fig. 4 – Label Diagram, 50BJ, BK024



COMPONENT ARRANGEMENT

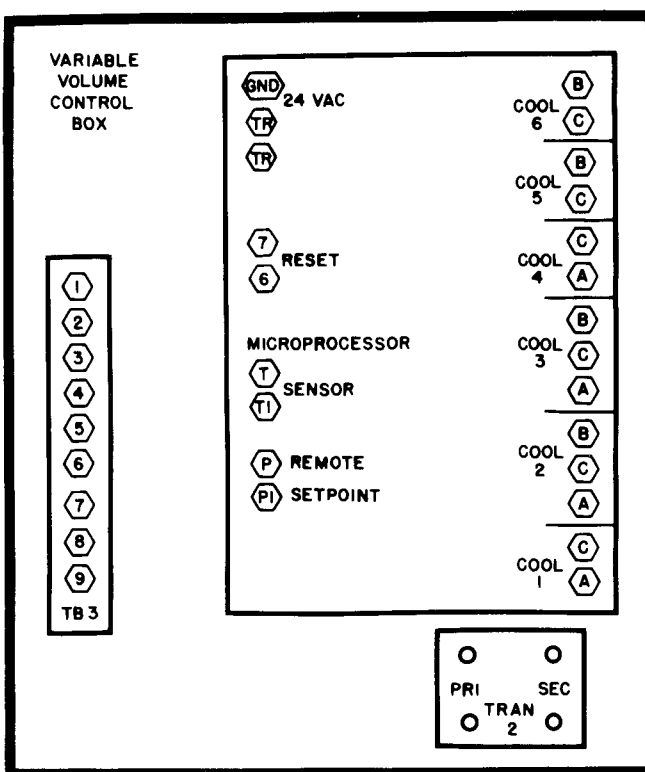
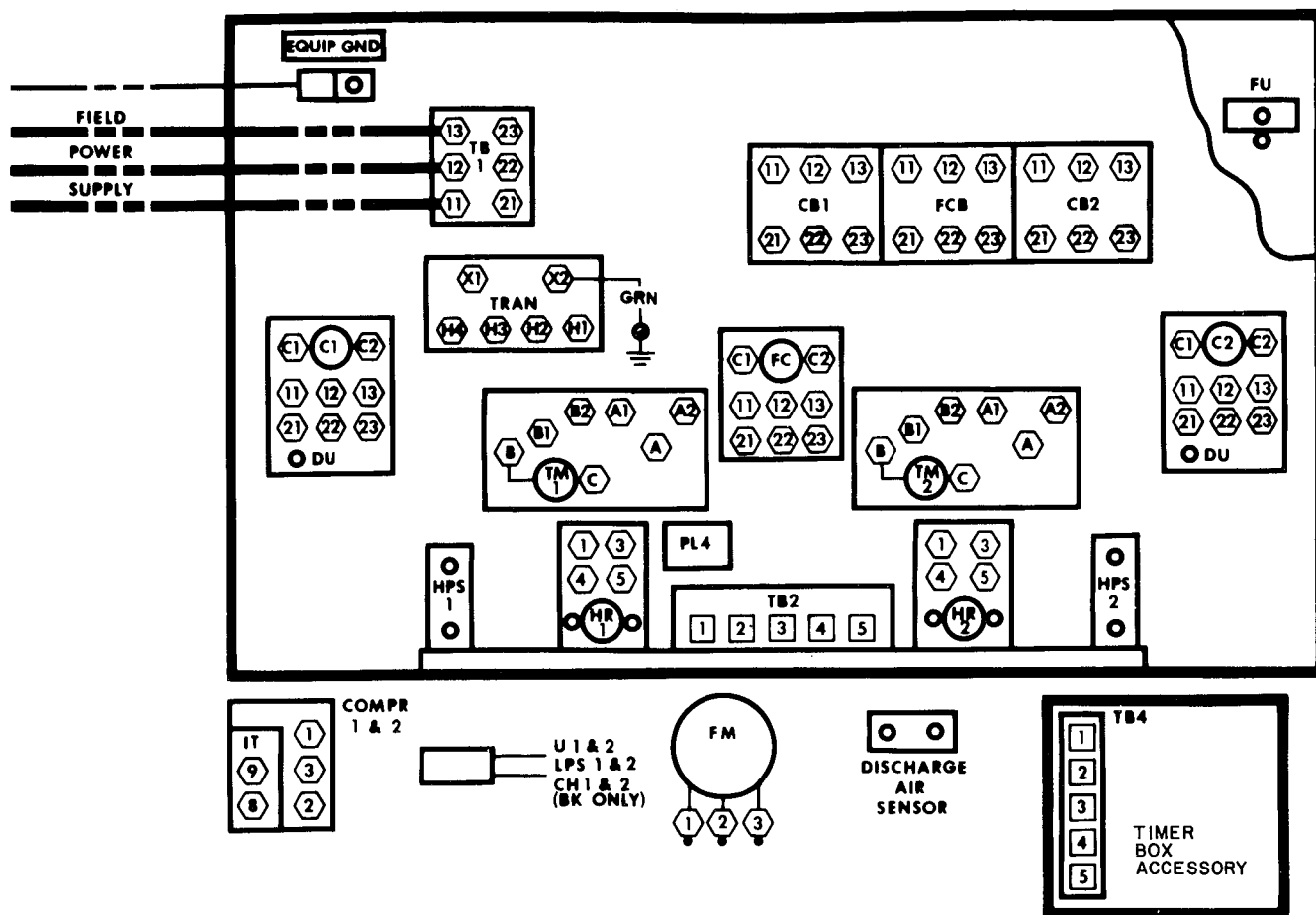


Fig. 4 — Label Diagram, 50BJ,BK024; 208-230, 460, 575-3-60 (cont)

SCHEMATIC

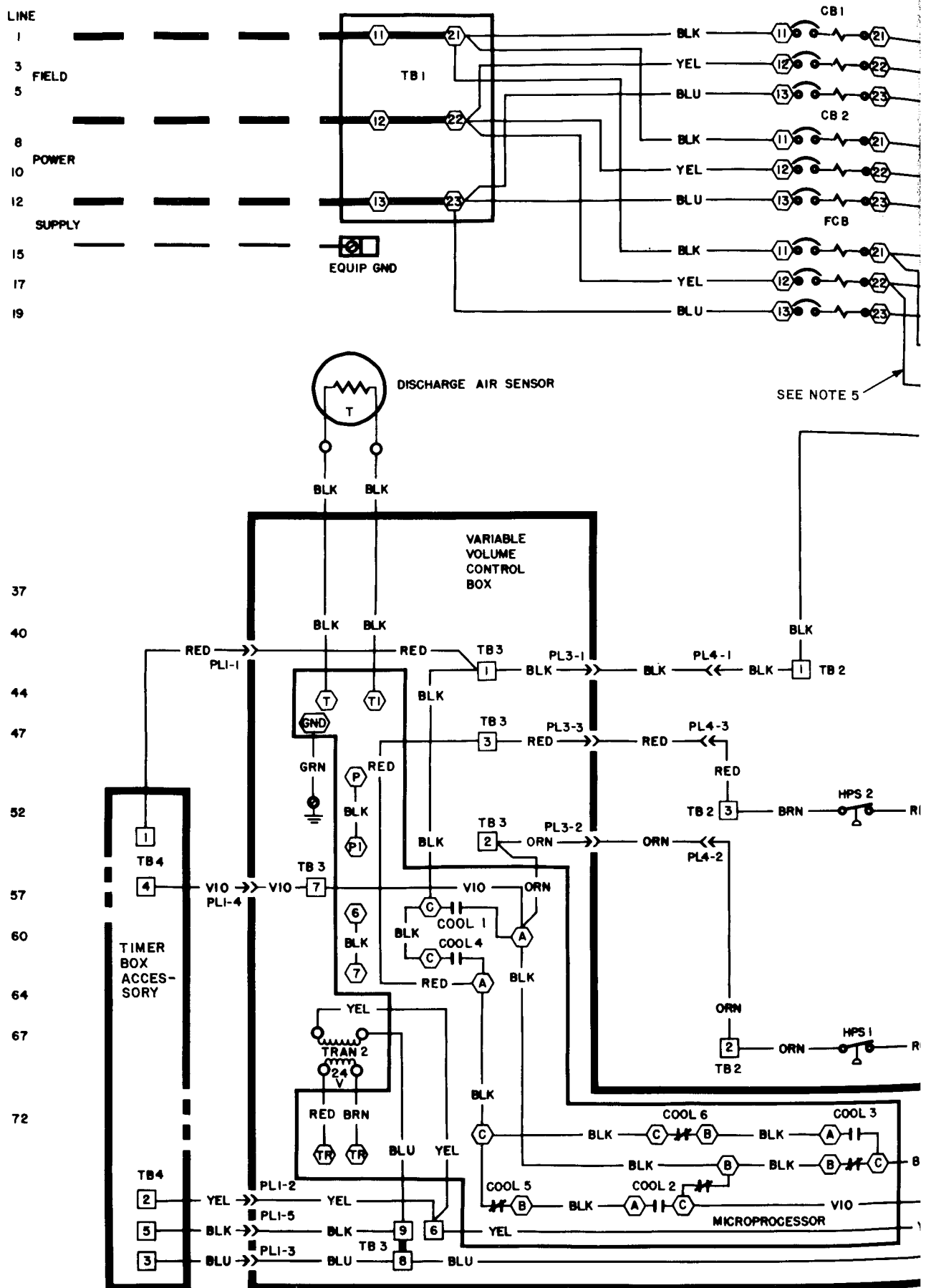


Fig. 5 — Label Diagram, 50BJ,BK028

COMPONENT ARRANGEMENT

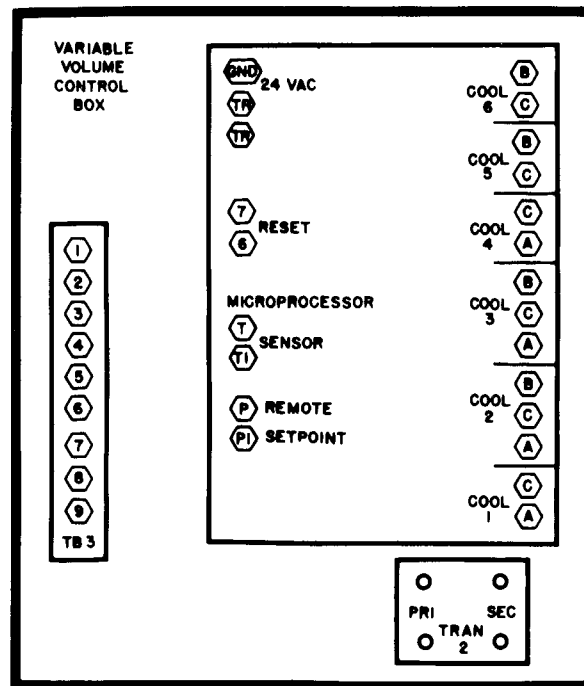
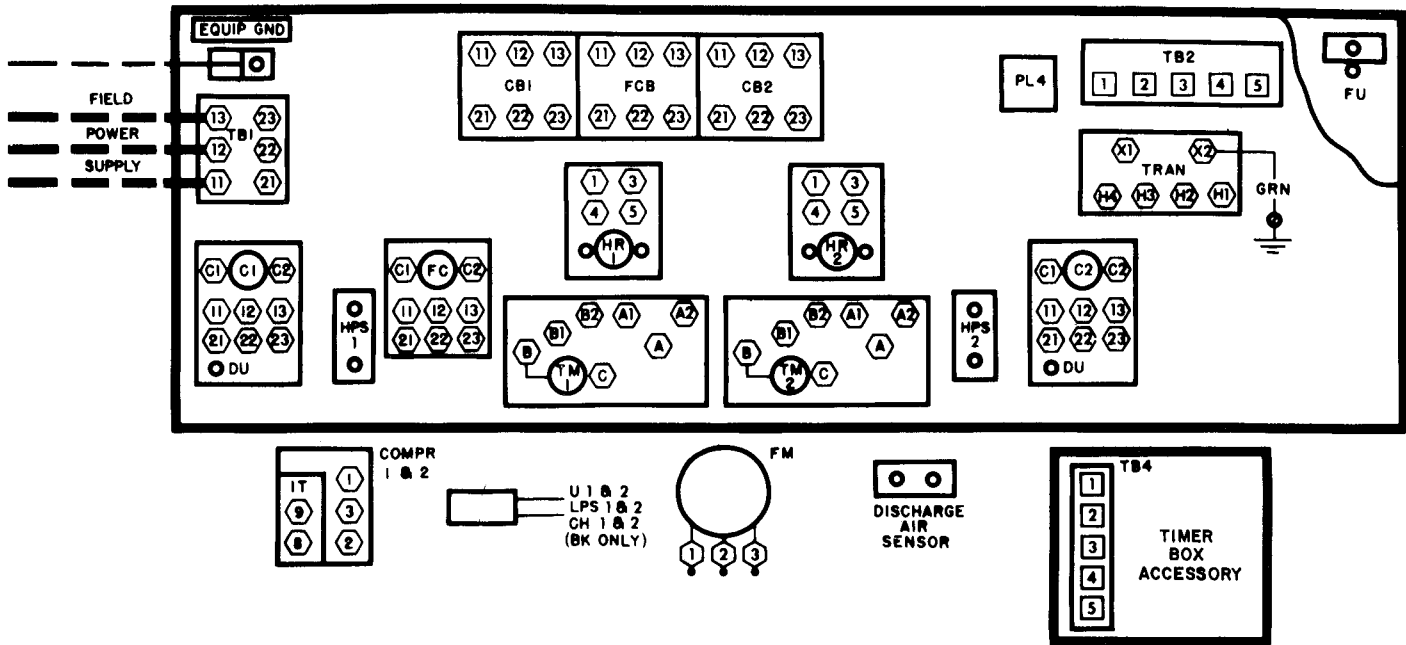
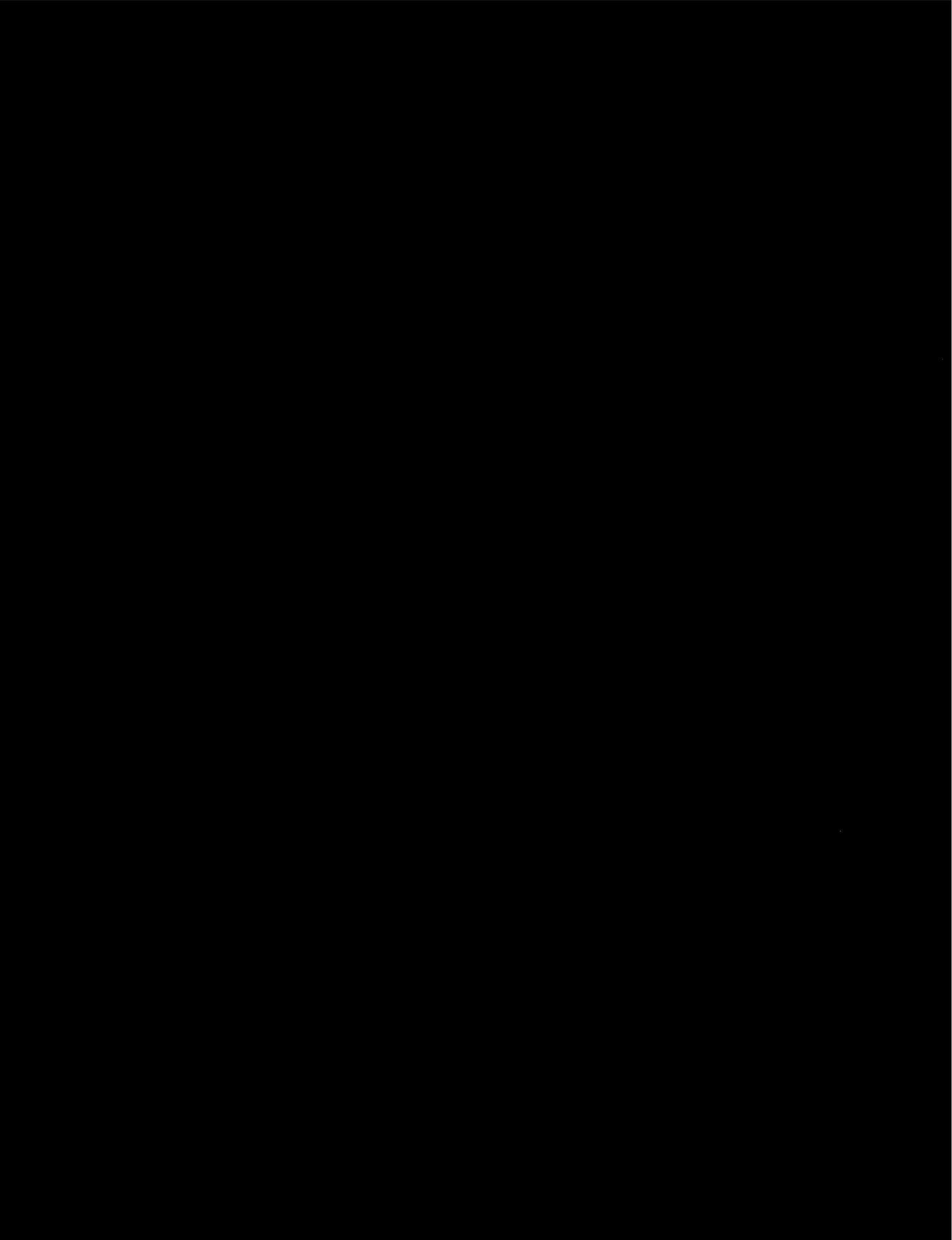


Fig. 5 — Label Diagram, 50BJ,BK028 and 034; 208-230, 460, 575-3-60



SCHEMAT

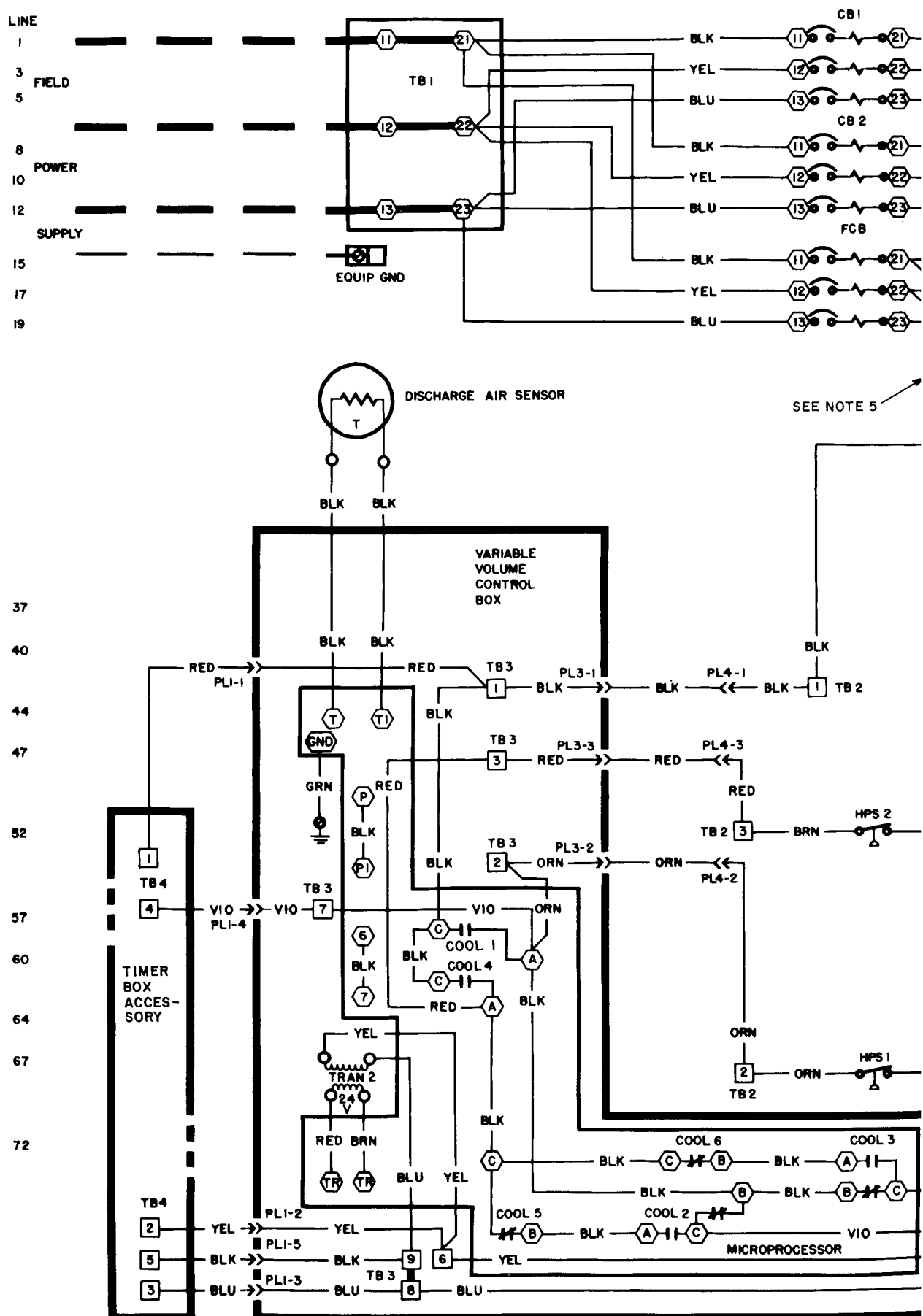
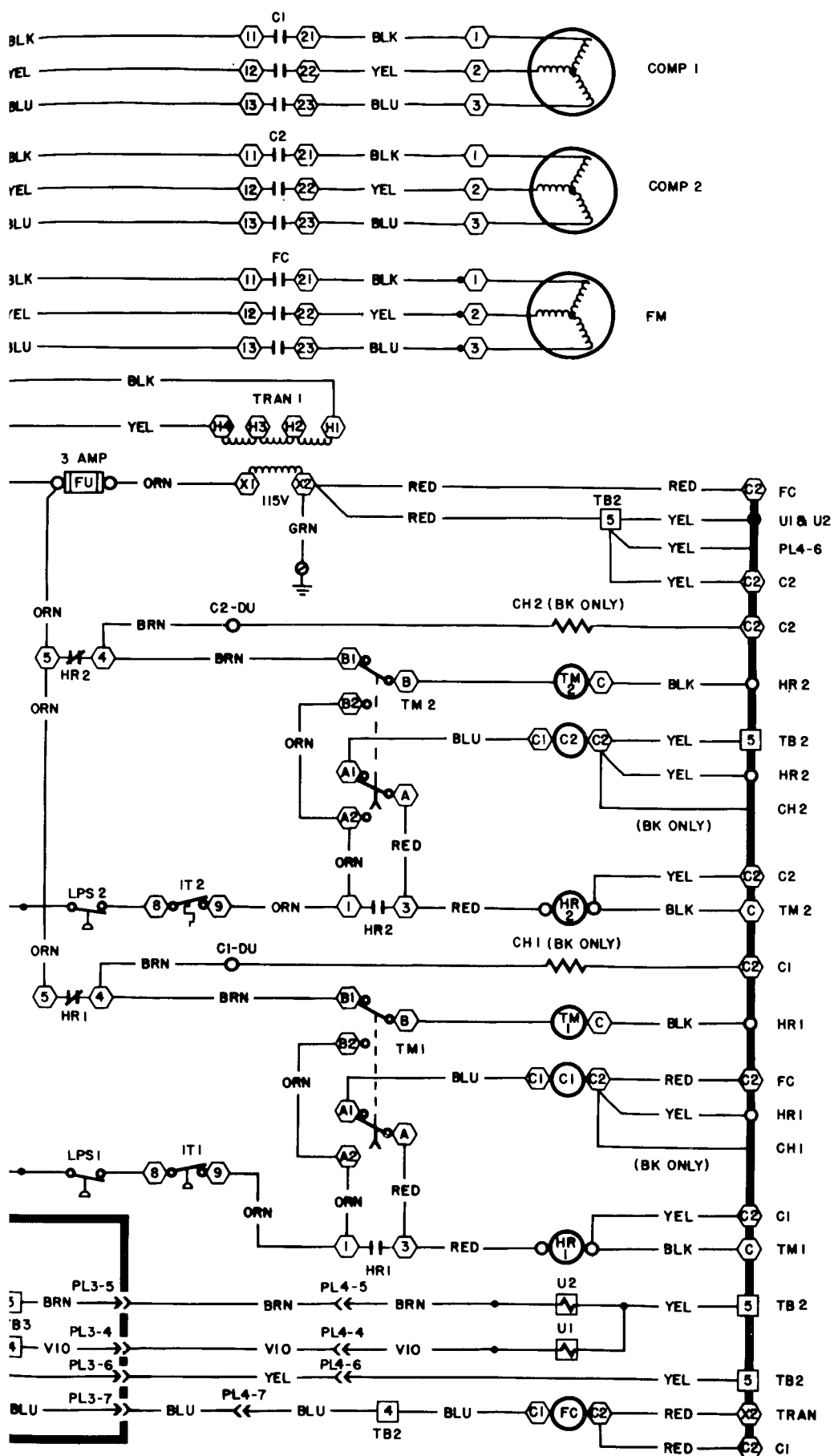


Fig. 5 — Label Diagram, 50BJ, BK0



SEE NOTE 1

37, 40 44, 47

8, 10, 12

37, 52

57, 60 64, 67

1, 3, 5

57, 72

15, 17, 19

See page 1 for Notes and Legend

LINE

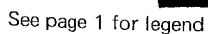


Fig. 6 — Label Diagram, Accessory Timer Control Box (60-Hz)

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

Book	1
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Form 50BJ,BK-1W New

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