

Air-Cooled Condensing Units

INDEX

MODEL		V/PH (60-Hz)	LABEL DIAGRAM		STARTING SERIAL NO.
			Fig.	No.	
38GR	002300 002310 003300 003310 004300 004310	230/1	1	38GR502424	K200001
	045300		1	38GR502444	
	005300		2	38GR502434	
	006300		3	38GR502454	
	003410 004410 045400	208/3	4	38GR502464	
	003510 004510 045500	230/3			
	005400 006400	208/3			
	005500 006500	230/3			
	004610 045600	460/3	6	38GR502474	
	005600 006600		7	38GR502494	

38GR Control Circuit Connections Fig 8

NOTES

- 1 Compressor and fan motor thermally protected
- 2 Power required for control relay on 24-volt NEC Class 2 circuit is 10 va
- 3 Compressor Protection Control System (CPCS) set to trip at 140% compressor FLA

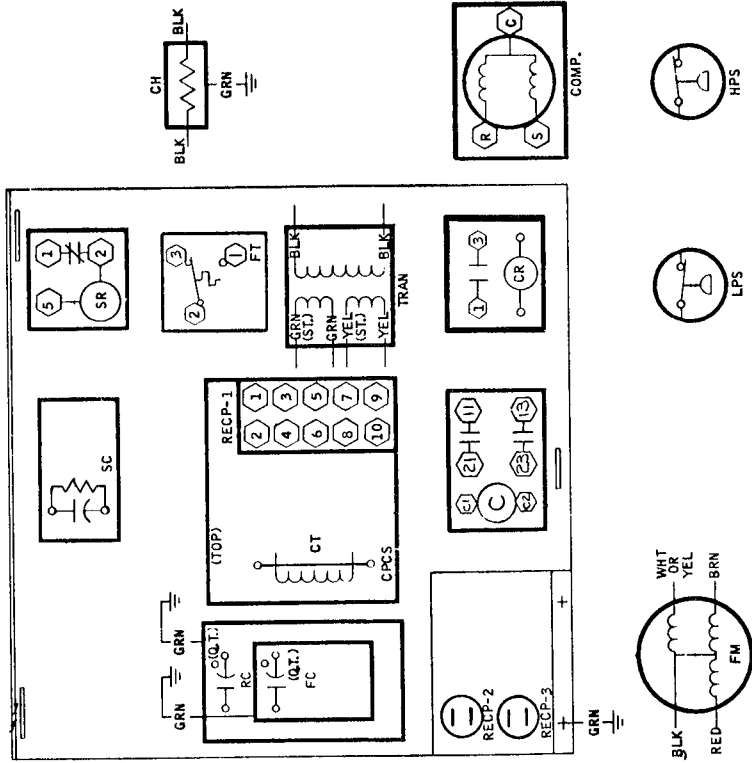
MODEL	COMPRESSOR PROTECTION CONTROL SYSTEM NO.	TRIP AMPS
38GR002300,310	38GR500474	20 7
38GR003300,310	38GR500484	26 8
38GR004300,310	38GR500494	32.0
38GR045300	38GR500504	37.6
38GR005300	38GR500514	42 6
38GR006300	38GR500524	54 6
38GR003410	38GR500664	18 2
38GR003510	38GR500674	16 1
38GR004410	38GR500684	19 6
38GR004510	38GR500694	17 6
38GR045400	38GR500904	20 8
38GR045500	38GR500914	22.1
38GR005400	38GR500934	26 0
38GR005500	38GR500944	22.5
38GR006400	38GR500964	32 2
38GR006500	38GR500974	28 6
38GR004610	38GR500704	9 1
38GR045600	38GR500924	11 3
38GR005600	38GR500954	11 6
38GR006600	38GR500984	14.4

LEGEND (Fig. 1 thru 7)

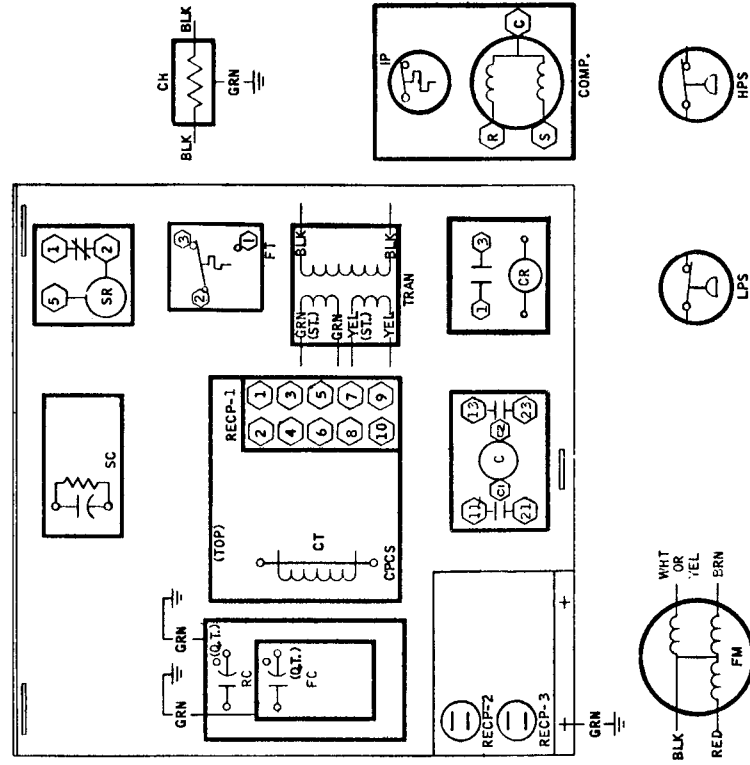
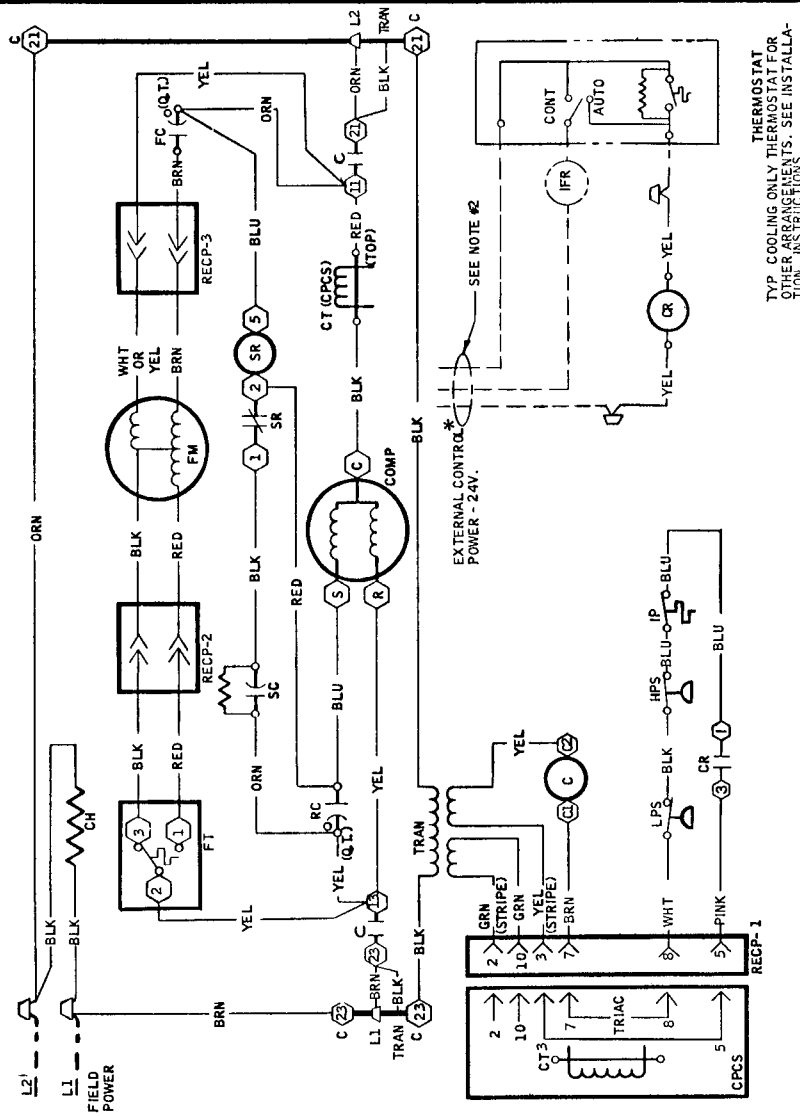
C — Contactor
CH — Crankcase Heater
Comp — Compressor
CPCS — Compressor Protection Control System
CR — Control Relay
CT — Current Transformer
FC — Fan Capacitor
FM — Fan Motor
FT — Fan Thermostat
HPS — High-Pressure Switch
IFR — Indoor Fan Relay
IP — Internal Protector
LPS — Low-Pressure Switch
QT — Quad Terminal
RC — Run Capacitor
Recp — Receptacle

SC — Start Capacitor
SR — Start Relay
Tran — Transformer
 Component Connections (Marked)
 Component Connections (Unmarked)
 Field Splice
 Junction
 Field Power Wiring
 Field Control Wiring NEC Class 2
 To indicate common potential only
 Not to represent wire
 Plug Connection
 Receptacle Connection

COMPONENT ARRANGEMENT

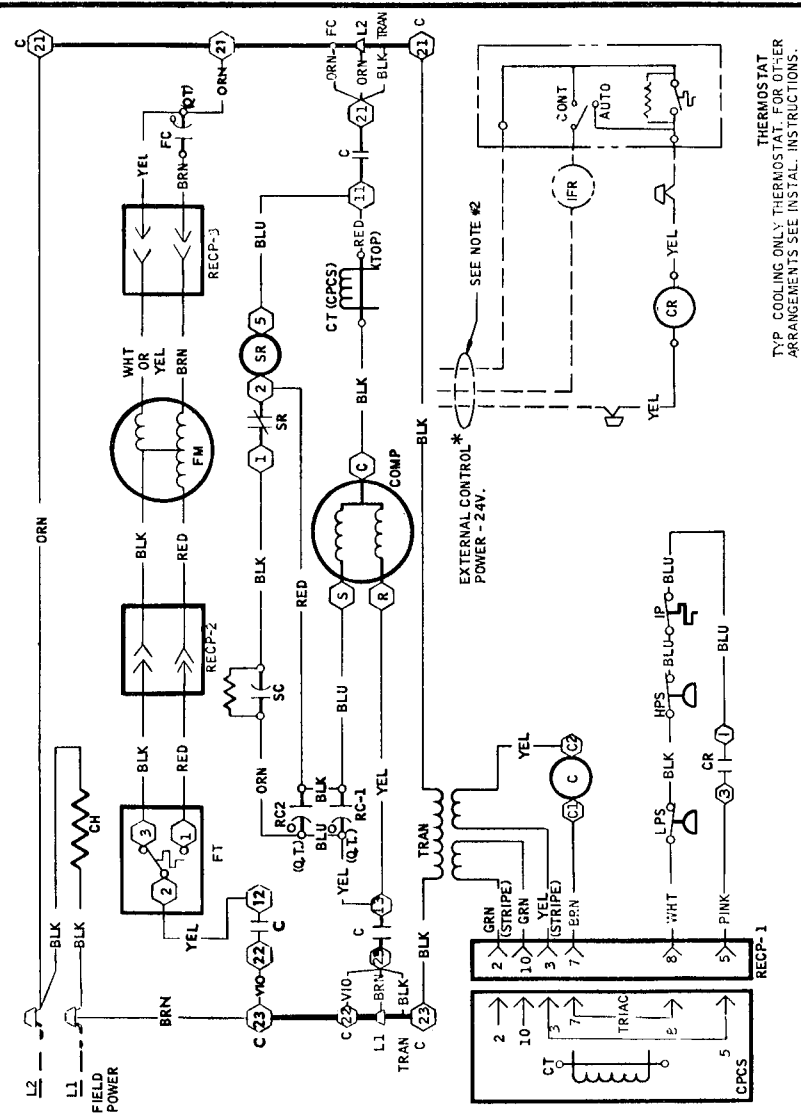


*See Fig. 8 for condensing unit control connections.



*See Fig. 8 for condensing unit control connections.

SCHEMATIC DIAGRAM



COMPONENT ARRANGEMENT

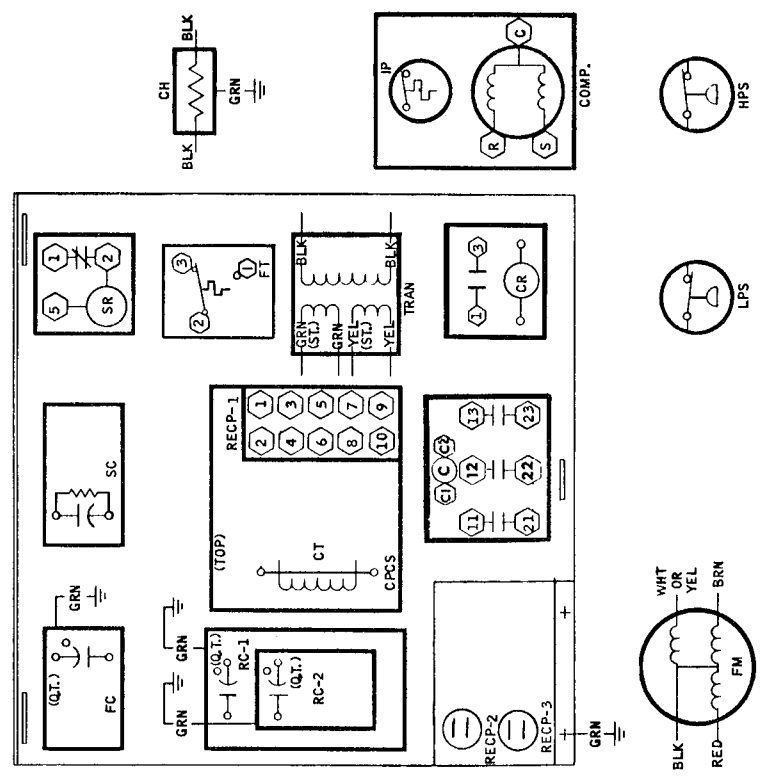
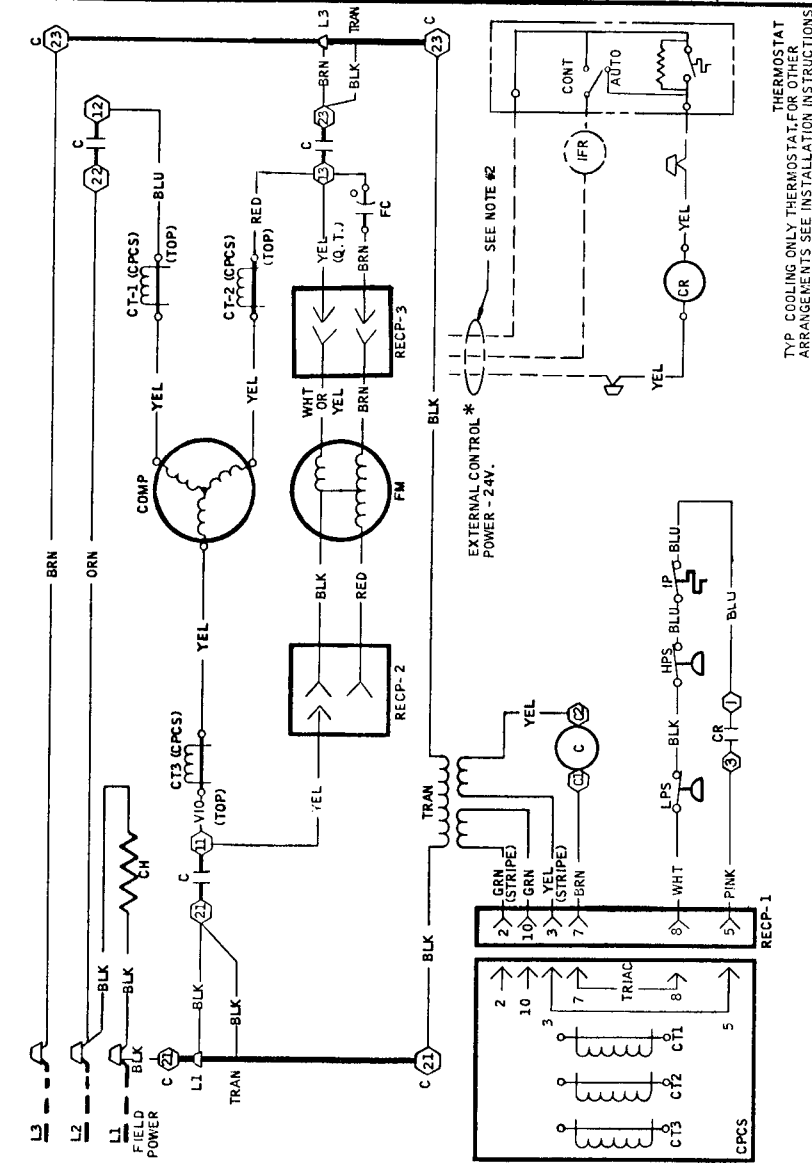


Fig. 3 — 38GR006 Label Diagram; 230-1-60

*See Fig. 8 for condensing unit control connections.

SCHEMATIC DIAGRAM



COMPONENT ARRANGEMENT

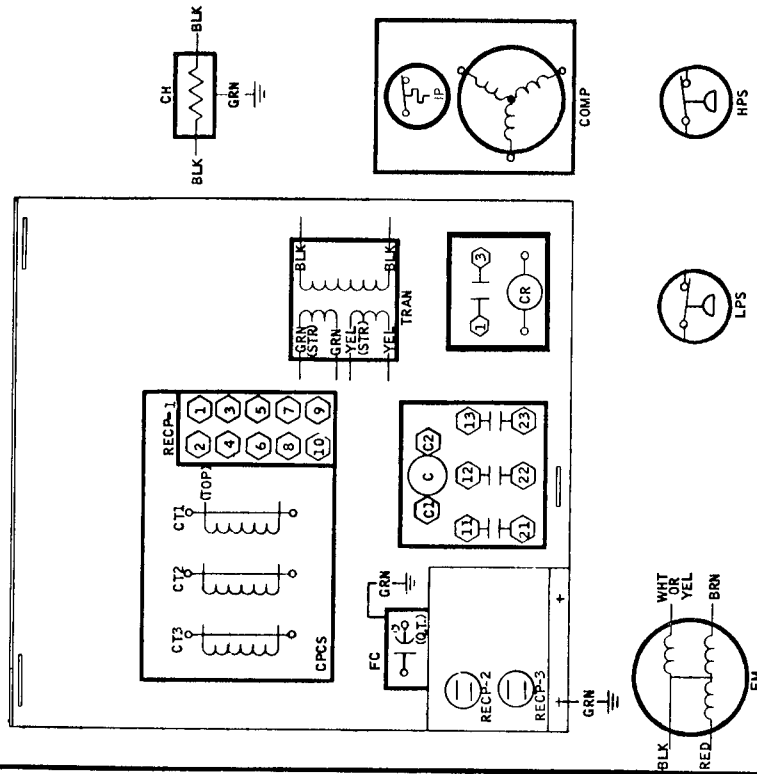
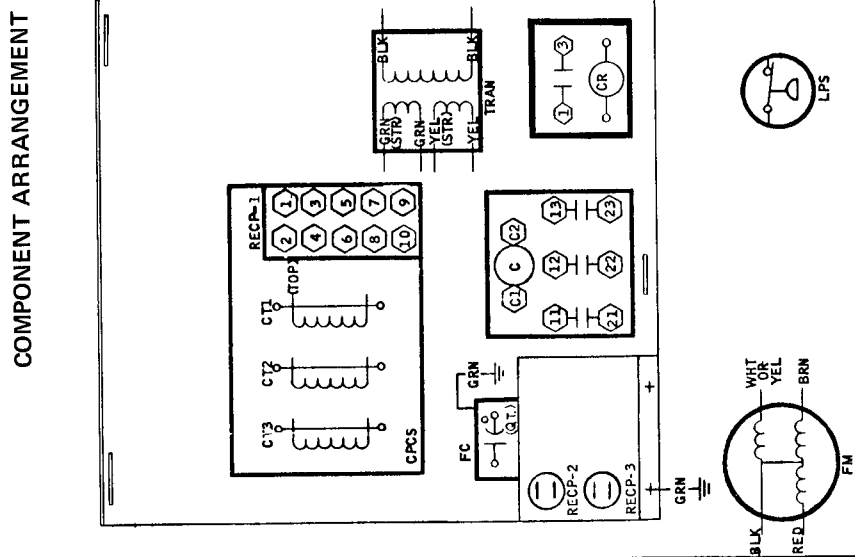
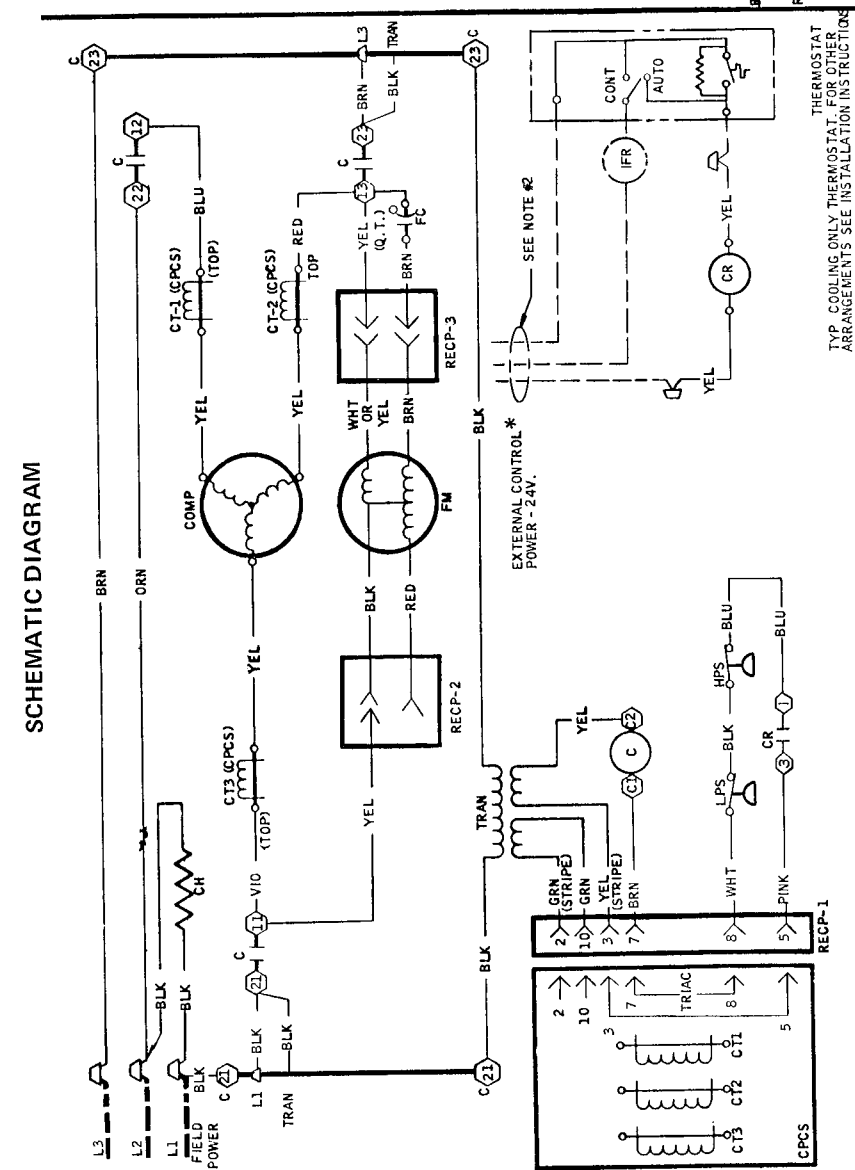


Fig. 4 — 38GR003,004,045 Label Diagram; 208-3-60 and 230-3-60

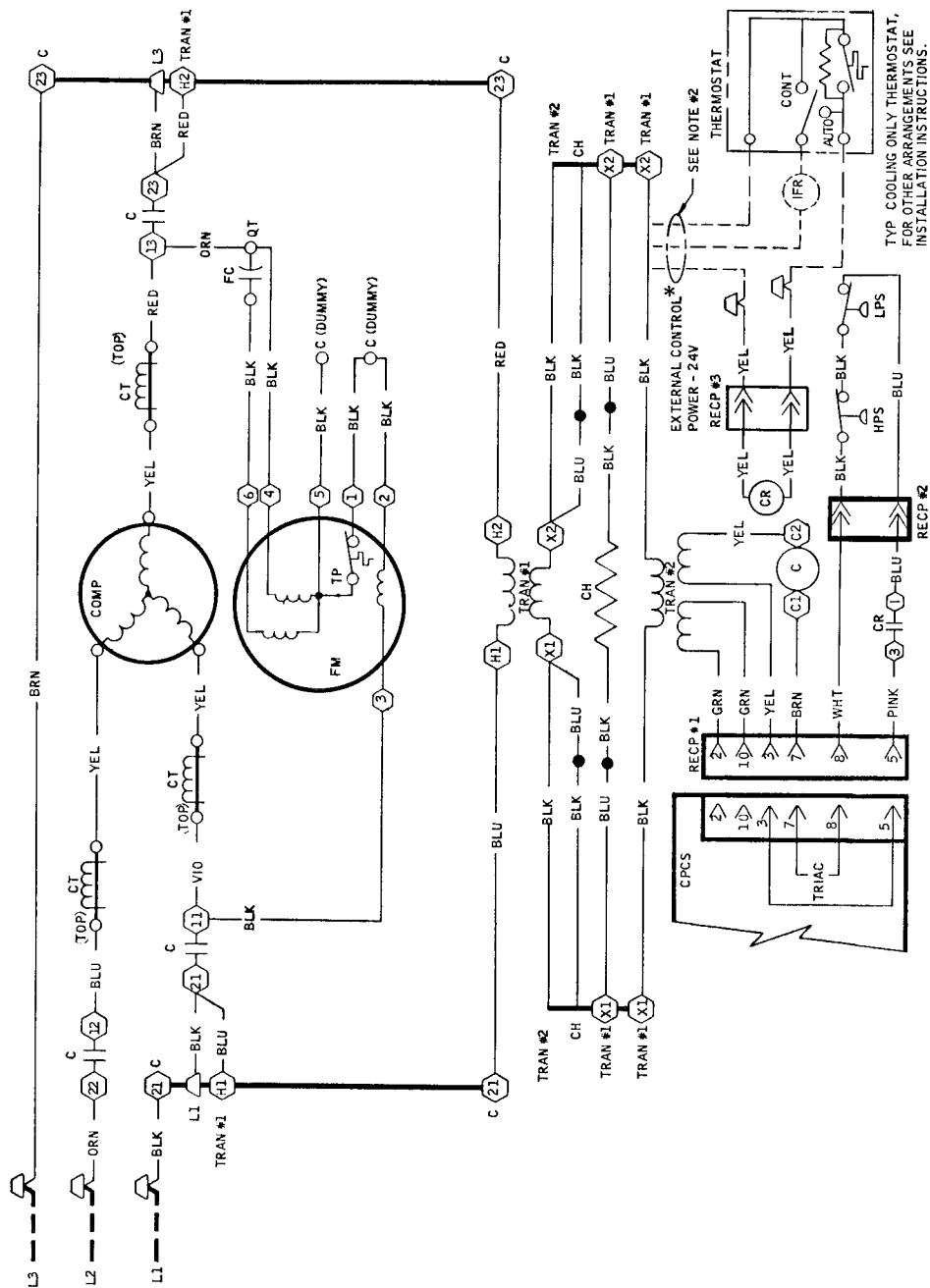
*See Fig. 8 for condensing unit control connections.



*See Fig. 8 for condensing unit control connections.

Fig. 5 — 38GR005,006 Label Diagram; 208-3-60 and 230-3-60

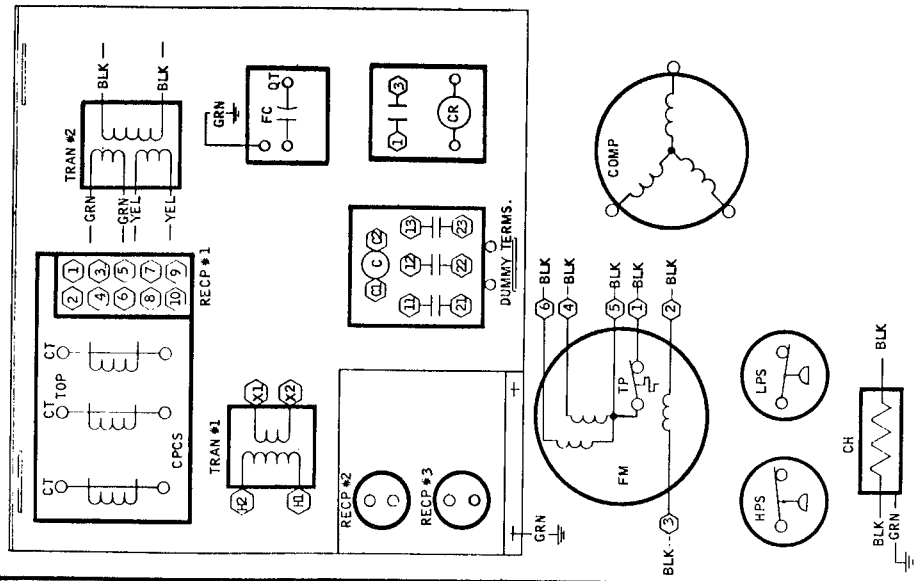
SCHEMATIC DIAGRAM



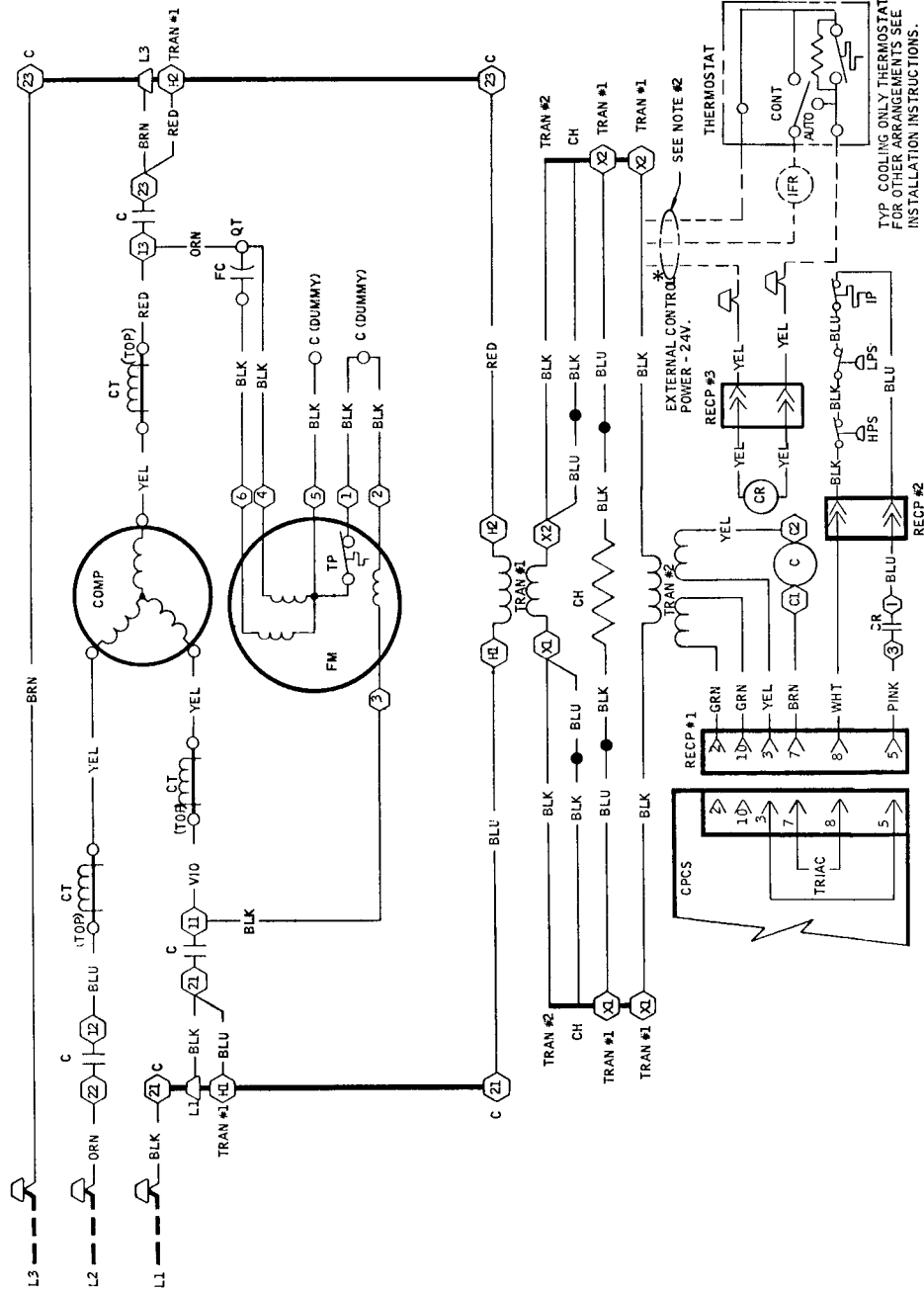
*See Fig. 8 for condensing unit control connections.

Fig. 6 — 38GR004,045 Label Diagram; 460-3-60

COMPONENT ARRANGEMENT



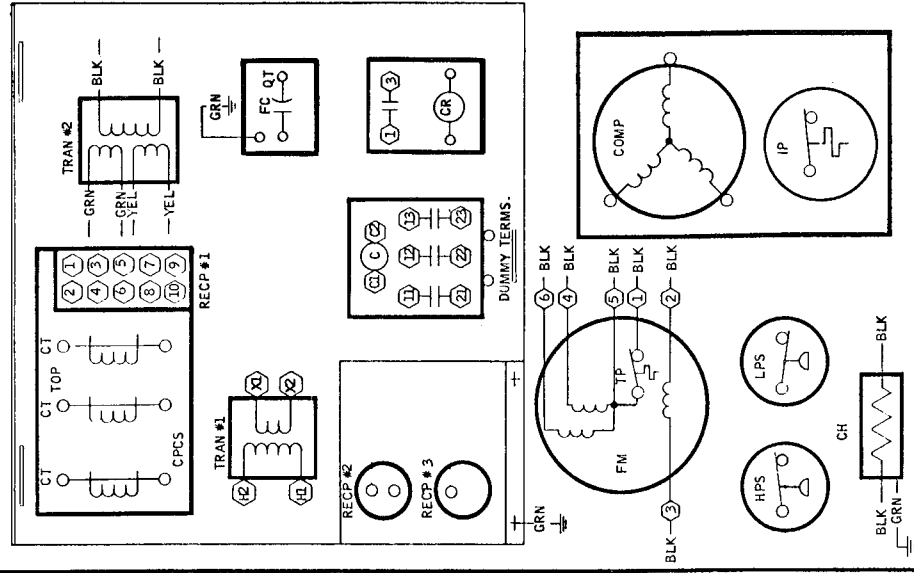
SCHEMATIC DIAGRAM



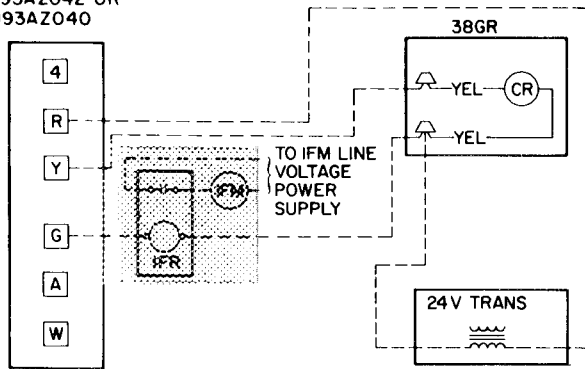
*See Fig. 8 for condensing unit control connections.

Fig. 7 – 38GR005,006 Label Diagram; 460-3-60

COMPONENT ARRANGEMENT

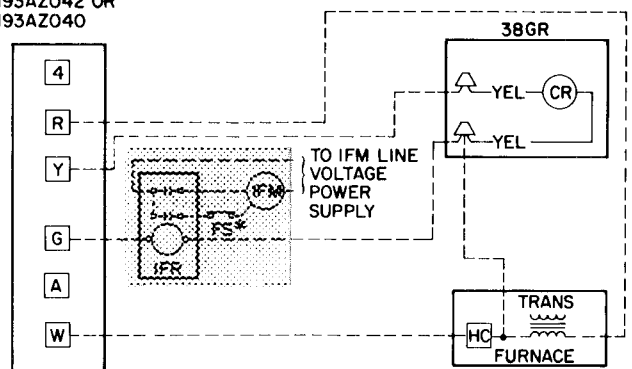


THERMOSTAT SUBBASE
HH93AZ042 OR
HH93AZ040



ARRANGEMENT A-
COOLING ONLY

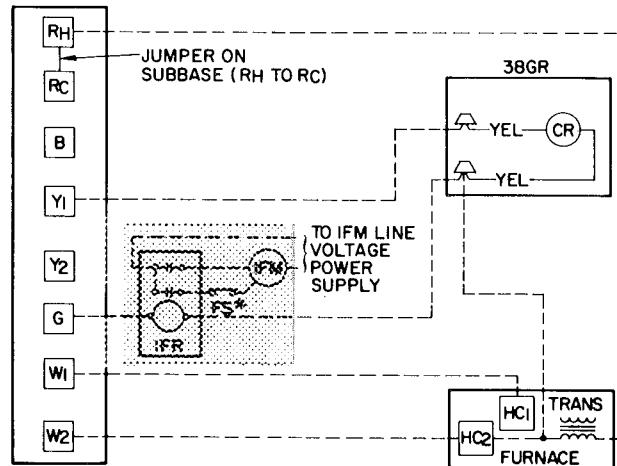
THERMOSTAT SUBBASE
HH93AZ042 OR
HH93AZ040



ARRANGEMENT B-
ONE TRANSFORMER
(COOLING AND ONE STAGE HEAT)

*CONNECT FS TO LOW-SPEED INDOOR FAN TERMINAL
WHEN TWO-SPEED FAN IS USED

THERMOSTAT SUBBASE
HH93AZ076



ARRANGEMENT C-
ONE TRANSFORMER
(COOLING AND TWO-STAGE HEAT)

*CONNECT FS TO LOW-SPEED INDOOR FAN TERMINAL
WHEN TWO-SPEED FAN IS USED

IFR, FS and IFM are located in furnace on heating-cooling applications. If accessory IFR is required for cooling only applications, locate (IFR) in fan coil

Clg — Cooling
CR — Control Relay (10 va)
FS — Fan Switch
HC — Heating Control

Htg — Heating
IFM — Indoor Fan Motor
IFR — Indoor Fan Relay
Trans — Transformer
Field Splice
Field Wiring
Factory Wiring

Fig. 8 — Control Circuit Connections

Manufacturer reserves the right to change any product specifications without notice.

CARRIER AIR CONDITIONING COMPANY • SYRACUSE, NEW YORK