

# FAN COILS ACCESSORY ELECTRIC HEATERS

## WIRING DIAGRAMS

FIG.	FIELD INSTALLED HEATER MODEL	FB4C	FE4A FE5A	FH4C	FV4C	FX4D	FY5B	PF4MA	PF4MB	LABEL
1	KFCEH0401N03	18,24		001		19,25	18,24	18,19,24,25		328613-101
1	KFCEH0501N05	18-60	002-006	001-002	002-006	19-61	18-60	18-61	19-61	328613-101
1	KFCEH0801N08	18-60	002-006	001-003	002-006	19-61	18-60	18-61	19-61	328613-101
1	KFCEH0901N10	18-60	002-006	001-004	002-006	19-61	18-60	18-61	19-61	328613-101
5	KFCEH1601315	42-60	002-006	001-004	002-006	43-61	18-60	18-61	19-61	328614-101
6	KFCEH2001318	42-60	003-006	001-004	002-006	43-61	42-60	42-61	37-61	328615-101
1	KFCEH2401C05	18-60	002-006	001-002	002-006	19-61	18-60	18-61	19-61	328613-101
1	KFCEH2501C08	18-60	002-006	001-003	002-006	19-61	18-60	18-61	19-61	328613-101
1	KFCEH2601C10	18-60	002-006	001-004	002-006	19-61	18-60	18-61	19-61	328613-101
2	KFCEH2901N09	36-60	002-006	003-004	002-006	37-61	36-60	36-60	31-61	328606-101
3	KFCEH3001F15	24-60	002-006	001-004	002-006	25-61	24-60	24-61	19-61	328605-101
3	KFCEH3101C15	24-60	002-006	001-004	002-006	25-61	24-60	24-61	19-61	328605-101
4	KFCEH3201F20	30-60	002-006	002-004	002-006	31-61	30-60	30-61	19-61	328604-101
4	KFCEH3301C20	30-60	002-006	002-004	002-006	31-61	30-60	30-61	19-61	328604-101
7,8	KFCEH3401F24	48,60	004-006	003-004	005-006	49-61	48-60	48-61	49-61	328602-101, 328603-101
7,8	KFCEH3501F30	48,60	004-006	003-004	005-006	49-61	48-60	48-61	49-61	328602-101, 328603-101

FIG.	FIELD INSTALLED HEATER MODEL	FY5B	LABEL
9	MKFCEH0501N05	18,24	328205-101
9	MKFCEH0801N08	18,30	328205-101
9	MKFCEH0901N10	24-48	328205-101
10	MKFCEH3001F15	36-60	328206-101

### FAN COIL WITH RBC X-13 MOTOR

FIG.	FIELD INSTALLED HEATER MODEL	FB4C	FX4D	LABEL
11	MKFCEH0501N05	18,24	19,25	335975-101
11	MKFCEH0801N08	18,30	31	335975-101
11	MKFCEH0901N10	24-48	37-61	335975-101
12	MKFCEH3001F15	36-60	61	336923-101

**FAN COIL WITH BROAD OCEAN DIGI-MOTOR**

FIG.	FIELD INSTALLED HEATER MODEL	FB4C	FX4D	LABEL
13	MKFCEH0501N05	24	-	337518-101
13	MKFCEH0801N08	18,30	31	337518-101
13	MKFCEH0901N10	24-36	37-49	337518-101
14	MKFCEH3001F15	36	-	338001-101

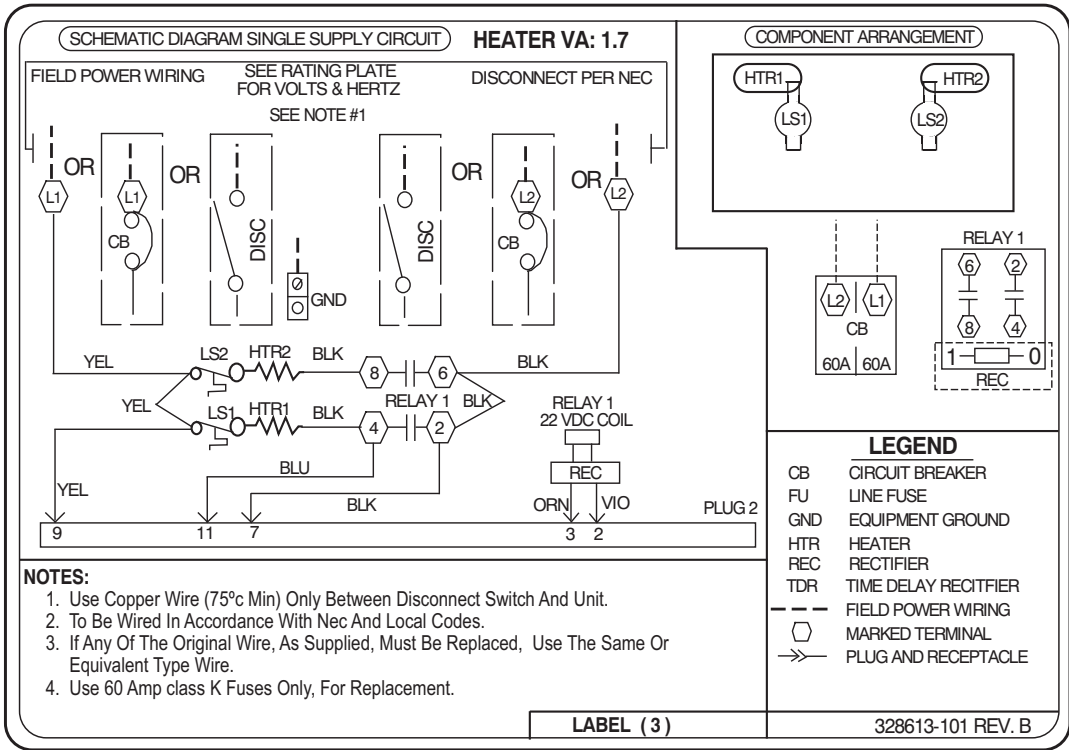
**FAN COIL WITH COOLING ONLY CONTROL**

FIG.	MODEL	SIZE	LABEL
15	FV4C	002-006	326014-101
16	FE4A/FE5A	002-006	333107-101
17	FY5B/PF4MNA	18-60	328964-101
17	FH4C	001-004	328964-101
18	FB4C/FX4D (RBC)	18-61	336228-101
18	PF4MNA/B	19,25,31,37,43,49,61	336228-101
19	FB4C/FX4D (BOM)	18-61	337519-101

**ELECTRIC HEATERS**

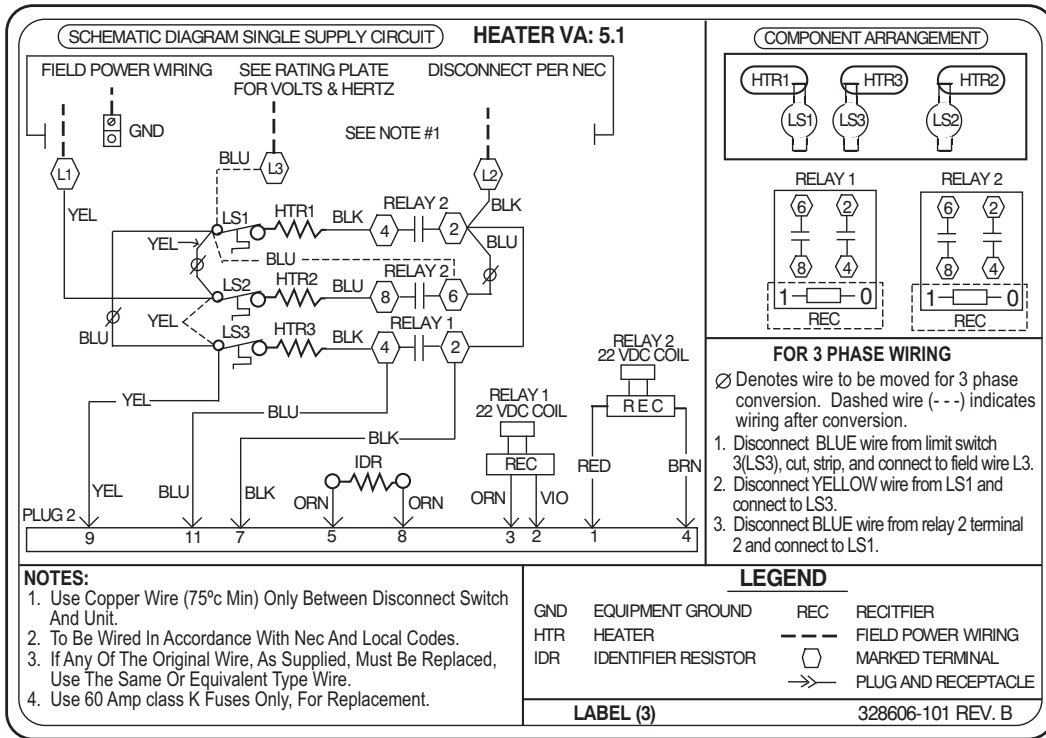
FIG.	HEATER MODEL	FF1E	LABEL
20	KFDEH0801D05	18,24,30,36	324494-101
20	KFDEH0901D75	18,24,30,36	324494-101
20	KFDEH1001D11	18,24,30,36	324494-101
20	MKFDEH0801D05	18,24,30,36	324494-101
20	MKFDEH0901D75	18,24,30,36	324494-101
20	MKFDEH1001D11	18,24,30,36	324494-101
21	KFEEH0101D05	19,25,31,37	335826-101
21	KFEEH0201D75	19,25,31,37	335826-101
21	KFEEH0301D11	19,25,31,37	335826-101

FIG.	HEATER MODEL	FFMA	LABEL
22	EHK2-05B	18,24,30,36	NA
22	EHK2-08B	18,24,30,36	NA
22	EHK2-10B	18,24,30,36	NA



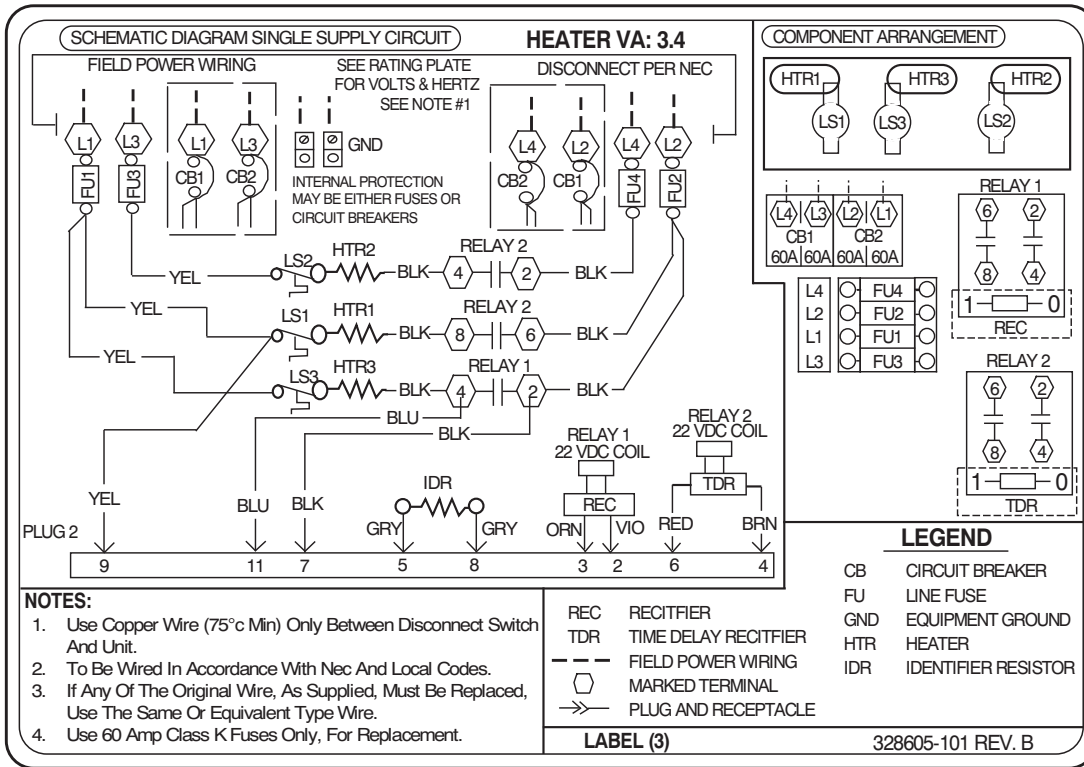
**Fig. 1 - 328613-101**

A07001



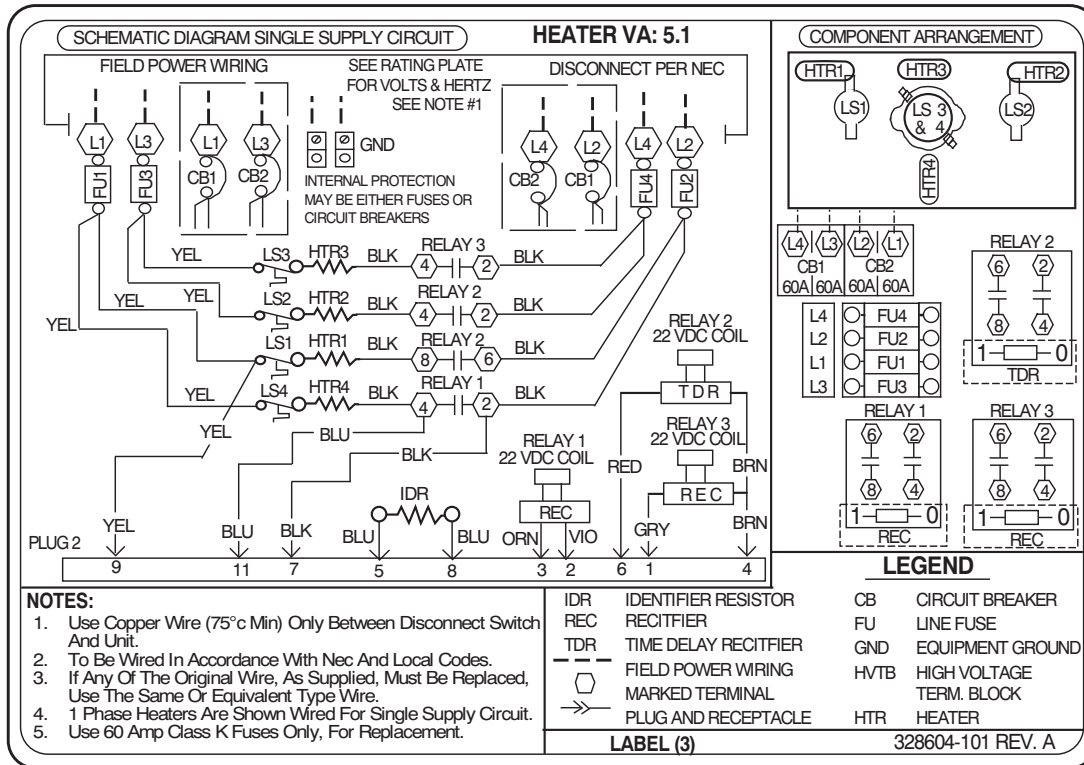
**Fig. 2 - 328606-101**

A07002



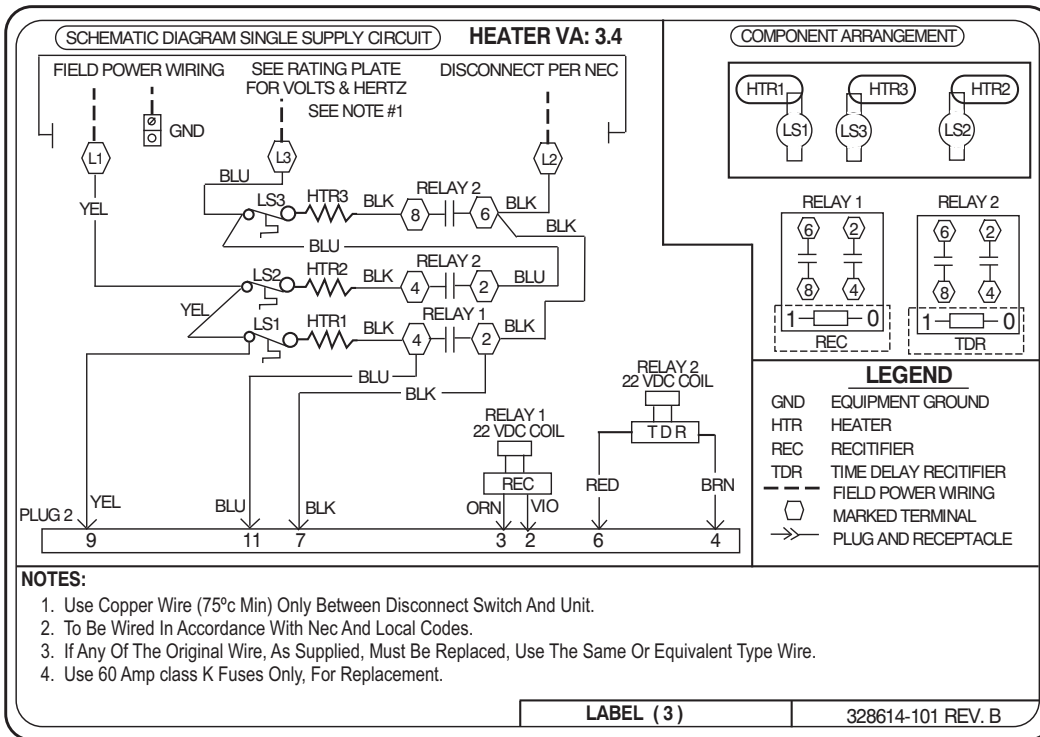
**Fig. 3 - 328605-101**

A07003



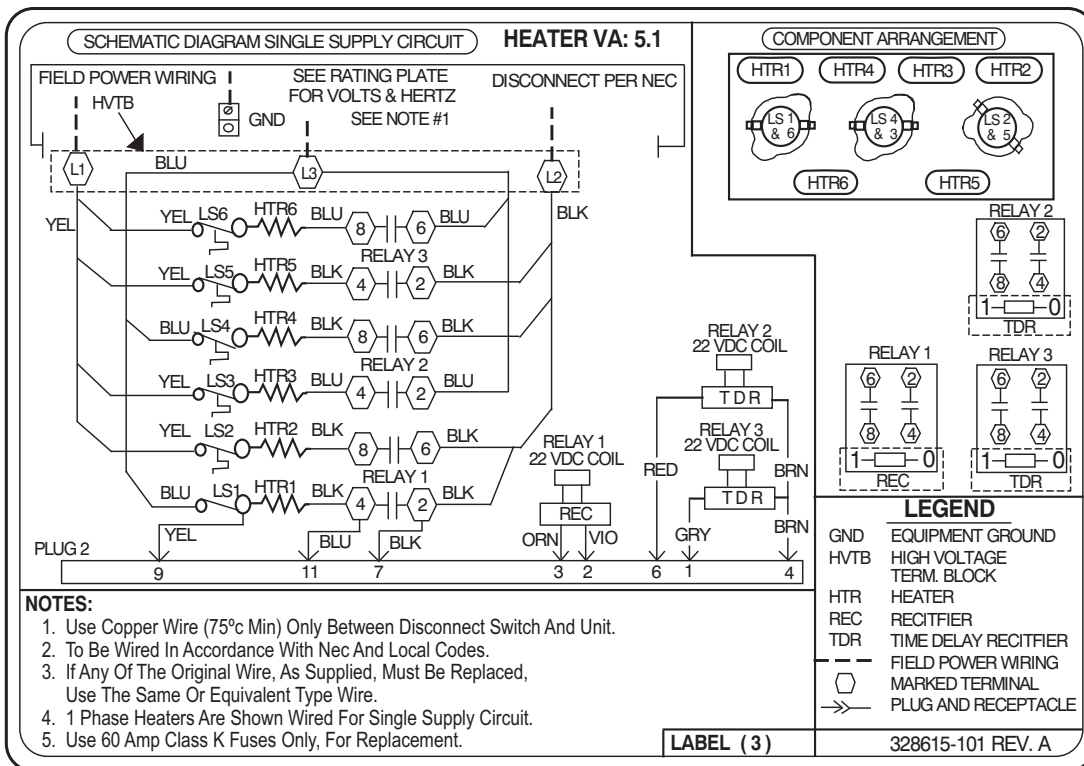
**Fig. 4 - 328604-101**

A07004



**Fig. 5 - 328614-101**

A07005



**Fig. 6 - 328615-101**

A07006

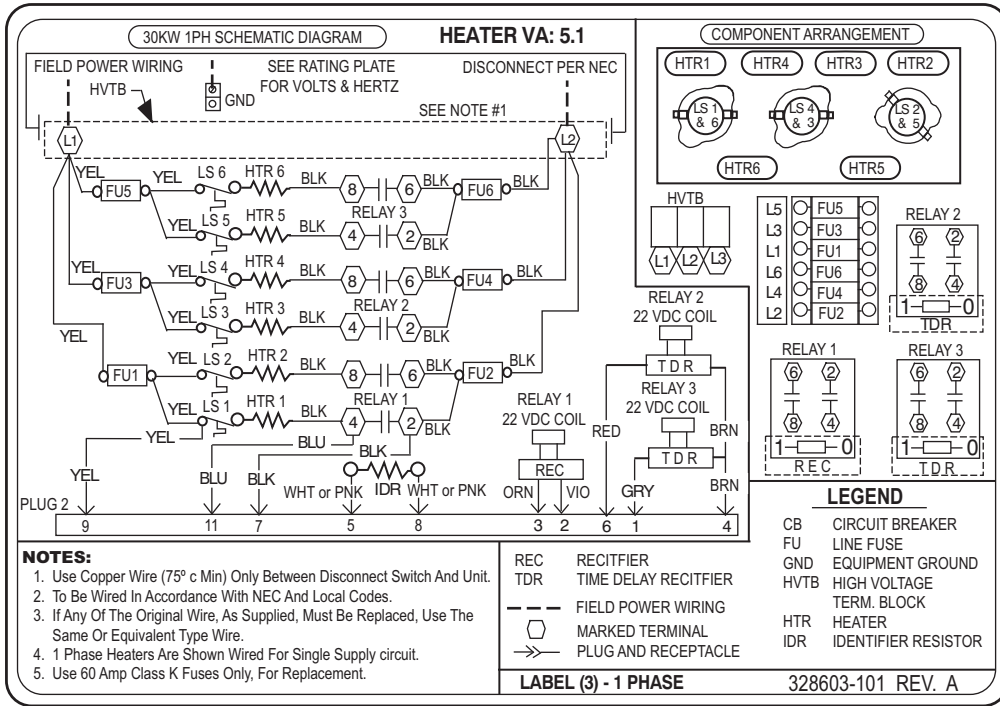


Fig. 7 - 328603-101

A07007

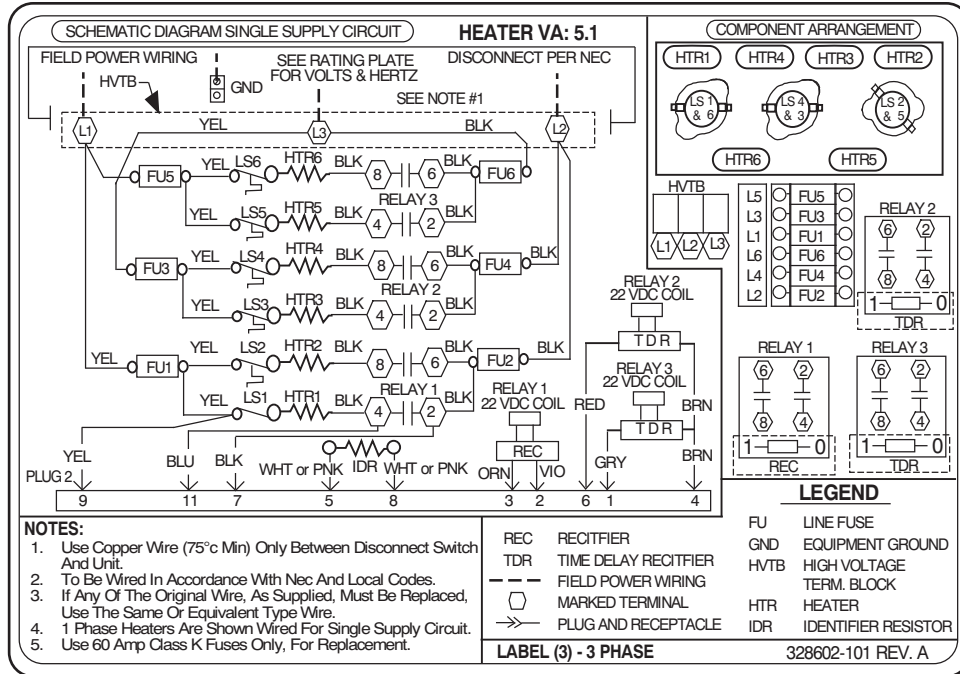


Fig. 8 - 328602-101

A07038



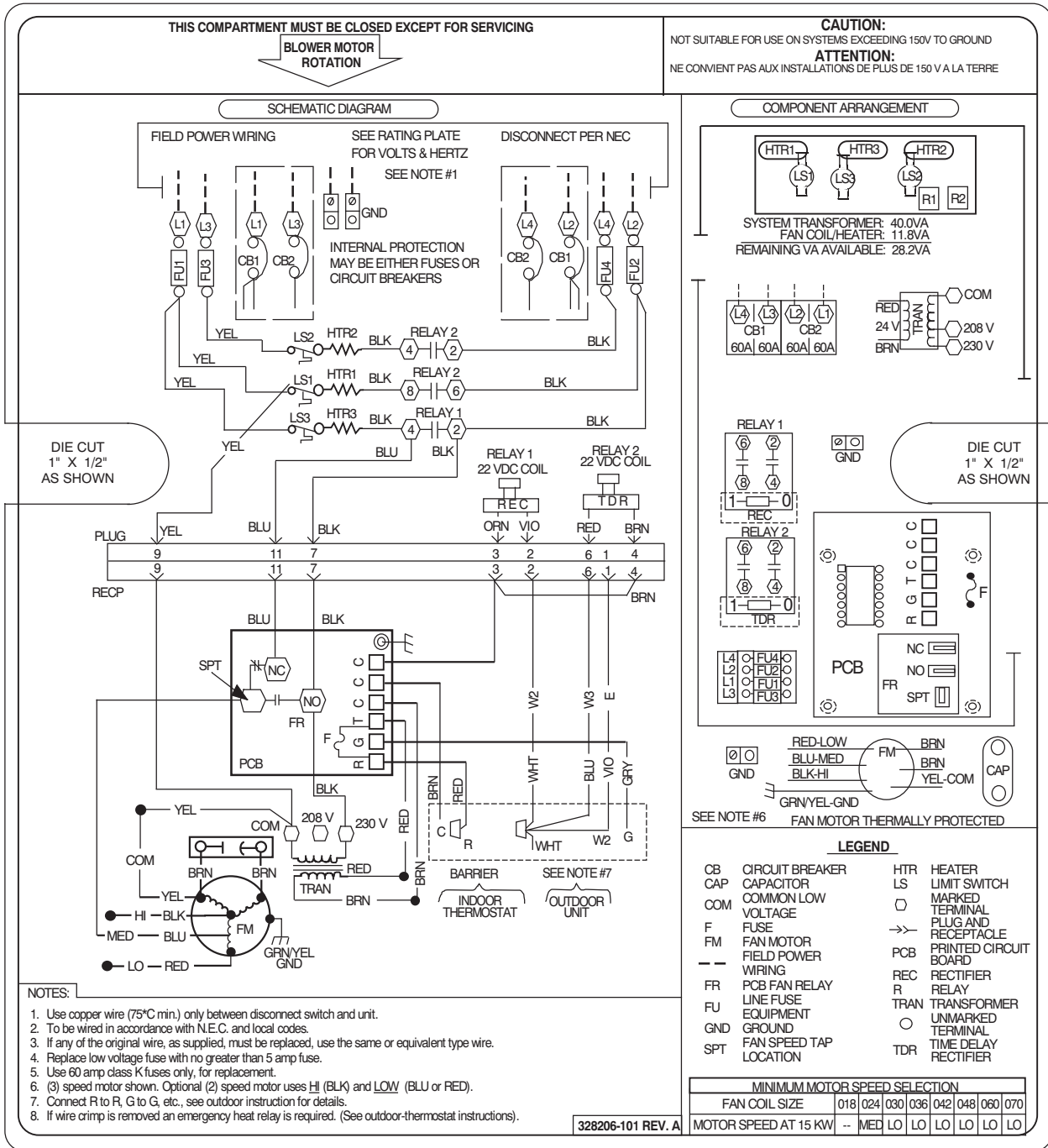


Fig. 10 - 328206-101

A07009



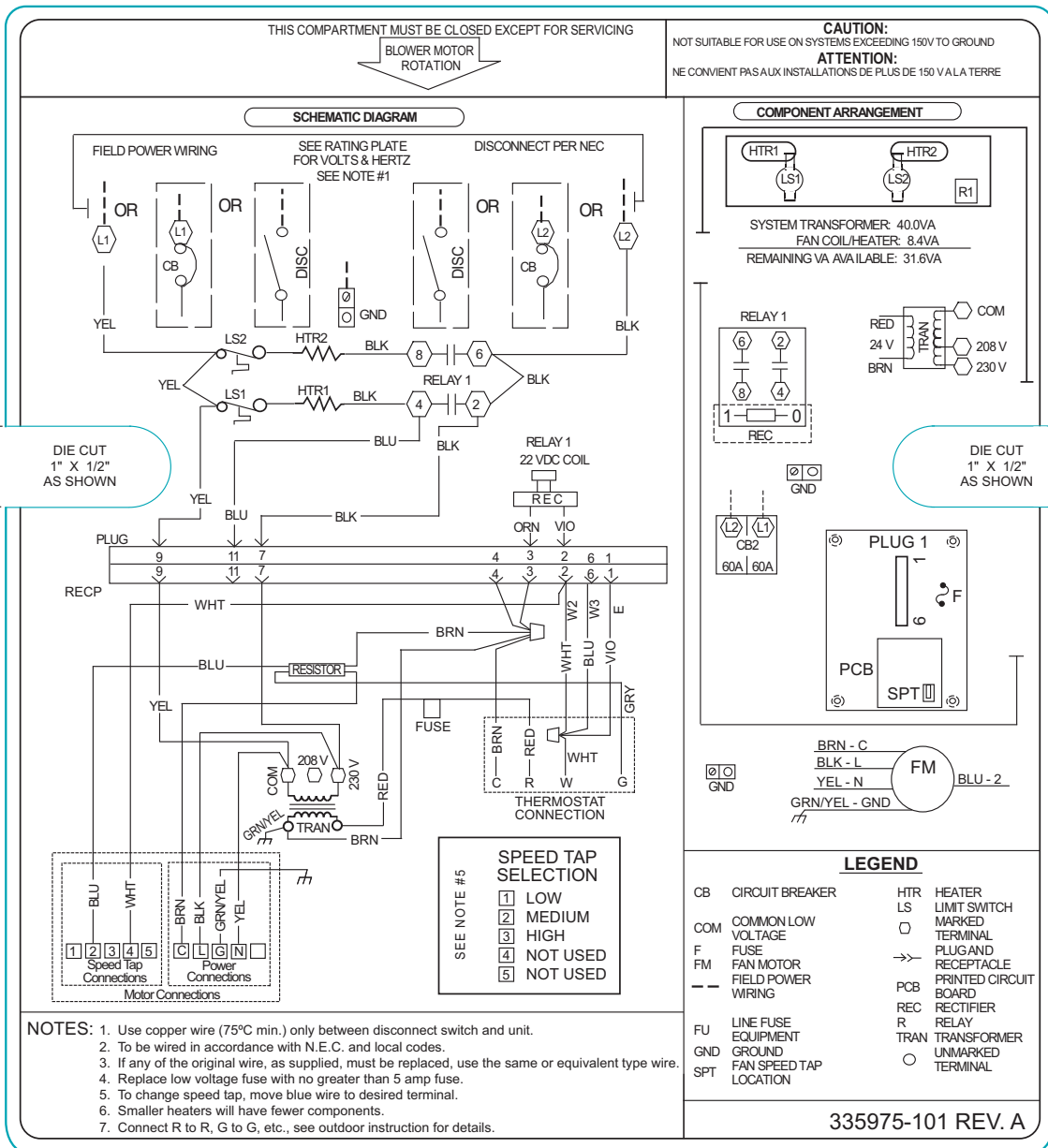


Fig. 11 - 335975-101

A12359

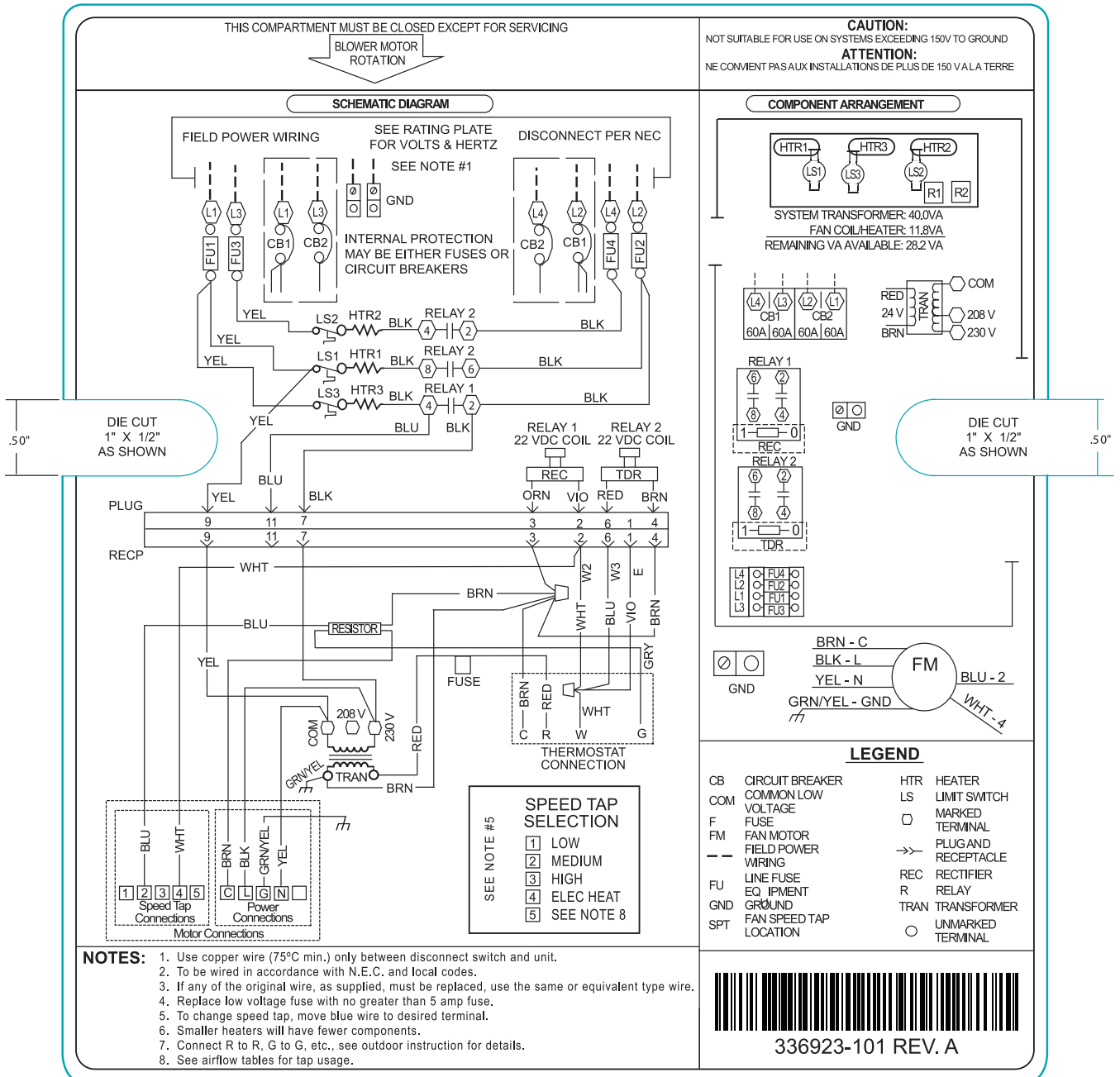


Fig. 12 - 336923-101

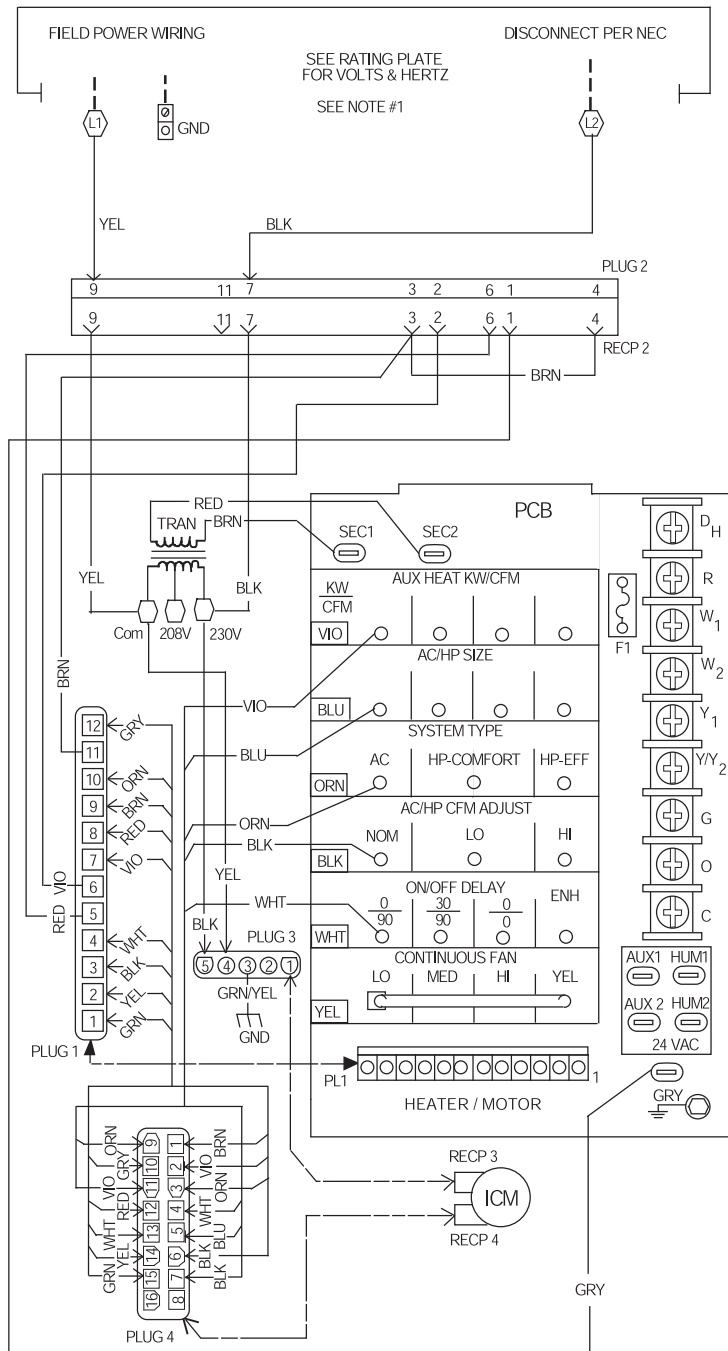




**THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING**

**BLOWER MOTOR ROTATION**

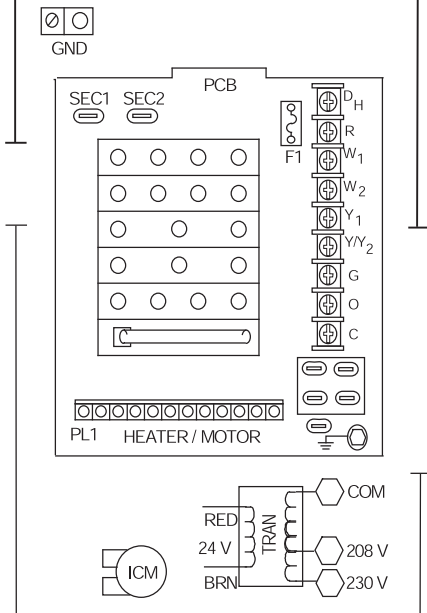
**COOLING ONLY SCHEMATIC DIAGRAM**



**LEGEND**

- FIELD POWER WIRING
- ⊕ MARKED TERMINAL
- ⎓ PLUG AND RECEPTACLE
- COM COMMON
- F1 LOW VOLTAGE FUSE
- GND EQUIPMENT GROUND
- ICM FAN MOTOR
- PCB PRINTED CIRCUIT BOARD
- RECP RECEPTACLE
- TRAN TRANSFORMER

**COMPONENT ARRANGEMENT**



**NOTES:**

1. USE COPPER WIRE (75°C MIN) ONLY BETWEEN DISCONNECT SWITCH AND UNIT.
2. TO BE WIRED IN ACCORDANCE WITH N.E.C. AND LOCAL CODES.
3. TRANSFORMER PRIMARY LEADS, BLUE 208V, RED 230V.
4. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED, MUST BE REPLACED, USE THE SAME OR EQUIVALENT TYPE WIRE.
5. REPLACE LOW VOLTAGE FUSE WITH NO GREATER THAN 5 AMP FUSE.
7. USE 60 AMP CLASS K FUSES ONLY, FOR REPLACEMENT.
8. CONNECT R TO R, G TO G, ETC., SEE OUTDOOR INSTRUCTION FOR DETAILS.

326014-101 REV. D

**Fig. 15 - 326014-101**

A07029

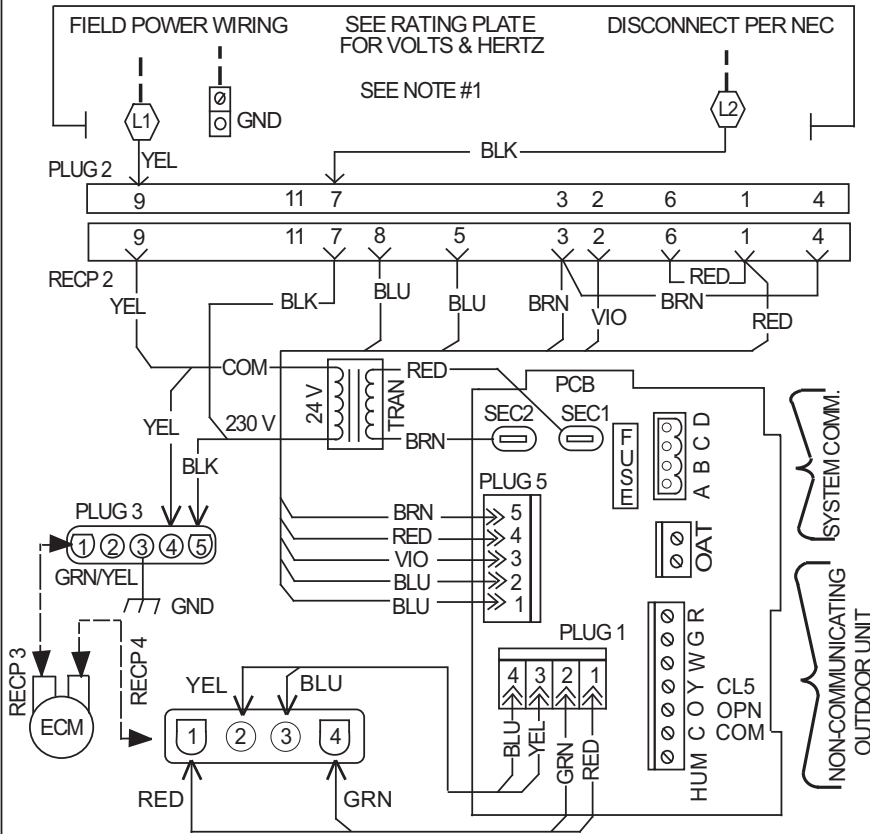
THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

BLOWER MOTOR  
ROTATION

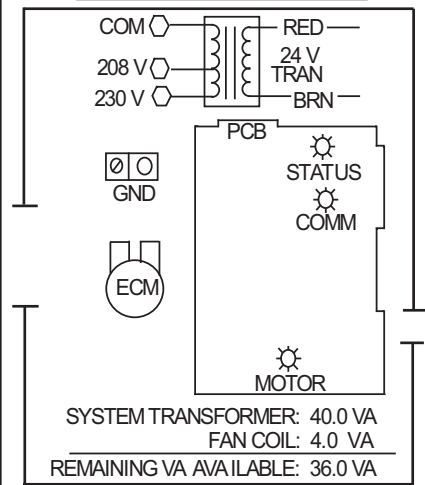
CAUTION:  
NOT SUITABLE FOR USE  
ON SYSTEMS EXCEEDING  
150V TO GROUND

ATTENTION:  
NE CONVIENT PAS A UX  
INSTALLATIONS DE PLUS DE  
150 V A LA TERRE

COOLING CONTROL ONLY



COMPONENT ARRANGEMENT



NOTES:

1. Use Copper Wire (75°C Min) Only Between Disconnect Switch And Unit.
2. To Be Wired In Accordance With N.E.C. And Local Codes.
3. If Any Of The Original Wire, As Supplied, Must Be Replaced, Use The Same Or Equivalent Type Wire.
4. Replace Low Voltage Fuse With No Greater Than 5 Amp Fuse.
5. For Use With Communicating Thermostat Only, Connect A To A, B To B, Etc.
6. Communicating Outdoor Units Connect A To A, B To B, Etc.
7. Non - Communicating Outdoor Units Connect R To R, Y To Y, Etc.

TRUBLE SHOOTING INFORMATION:

MOTOR LED	MOTOR	FAULT / ACTION
OFF	NOT RUNNING	NONE - CHECK STATUS LED
OFF	RUNNING	MOTOR
ON (FLASHING)	NOT RUNNING	MOTOR / HARNESS
ON (FLASHING)	RUNNING	NONE

STATUS LED	FAULT / ACTION
ON	NONE - STANDBY MODE
OFF	NO LOW VOLTAGE OR CONTROL - CHECK POWER AND FUSE
16	NO SYSTEM COMMUNICATIONS - CHECK WIRING
OTHER	REFER TO SERVICE SCREENS ON USER INTERFACE OR THE FAN COIL TROUBLESHOOTING GUIDE

LEGEND

- FIELD POWER WIRING
- ⬡ MARKED TERMINAL
- ⌞ PLUG AND RECEPTACLE
- COM COMMON
- GND EQUIPMENT GROUND
- ECM FAN MOTOR
- OAT OUTDOOR AIR THERMISTOR
- PCB PRINTED CIRCUIT BOARD
- RECP RECEPTACLE
- TRAN TRANSFORMER

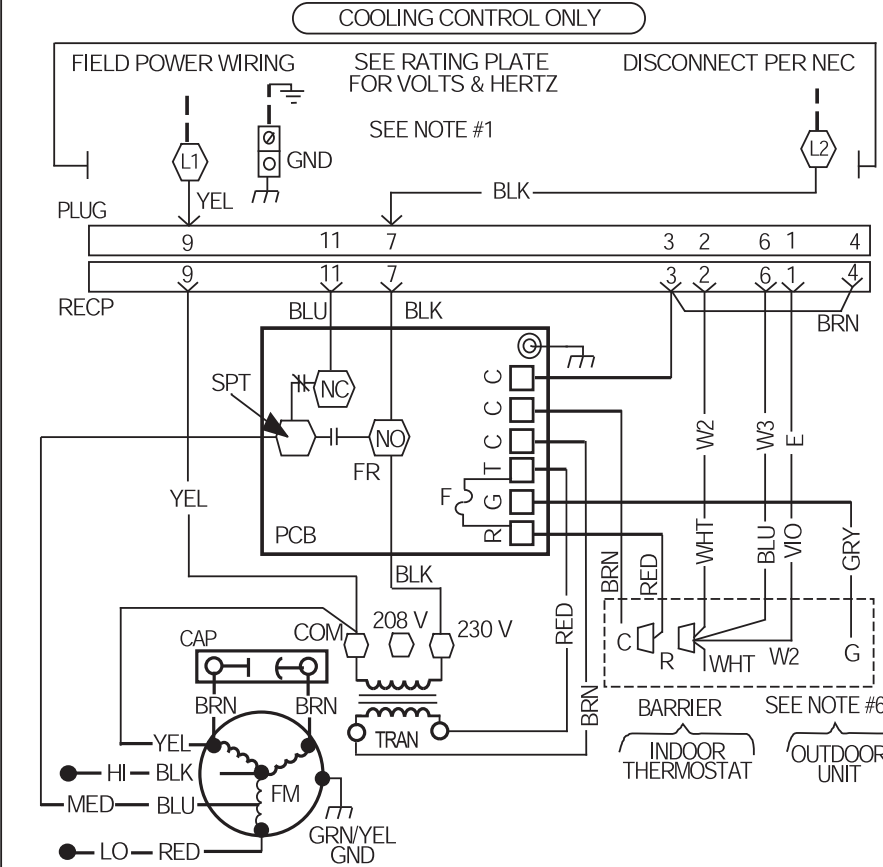
333107-101 REV. B

Fig. 16 - 333107-101

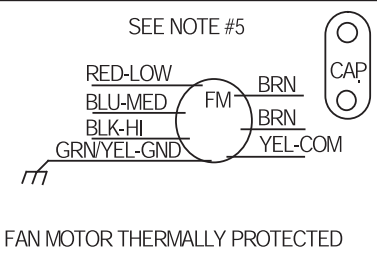
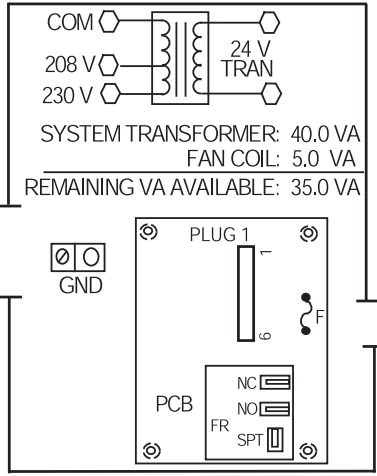
A12363

THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

BLOWER MOTOR  
ROTATION



COMPONENT ARRANGEMENT



FAN MOTOR THERMALLY PROTECTED

Minimum Motor Speed Tap Selection  
For Electric Heater

MODEL SIZE	HEATER SIZE KW						
	3,5,8	9	10	15	18	20	24, 30
18	MED*	----	HI	----	----	----	----
24	MED‡	----	MED‡	MED‡	----	---	----
30	----	----	LO	LO	----	MED*	----
36, 42, 48, 60	----	LO	LO	LO	LO	LO	LO
70	----	MED	MED	MED	MED	MED	MED

\* - MED speed on 3 speed motors and HI speed on 2 speed motors.  
‡ - MED speed on 3 speed motors and LO speed on 2 speed motors.

NOTES

1. Use Copper Wire (75°C Min) Only Between Disconnect Switch And Unit.
2. To Be Wired In Accordance With NEC And Local Codes.
3. If Any Of The Original Wire, As Supplied, Must Be Replaced, Use The Same Or Equivalent Type Wire.
4. Replace Low Voltage Fuse With No Greater Than 5 Amp Fuse.
5. (3) Speed Motor Shown Optional (2) Speed Motor Uses HI (BLK) And LOW (BLUE or RED).
6. Connect R To R, G To G, Etc. See Outdoor Instruction For Details.

LEGEND

- CAP CAPACITOR
- COM COMMON
- F LOW VOLTAGE FUSE
- FR PCB FAN RELAY
- FM FAN MOTOR
- GND EQUIPMENT GROUND
- PCB PRINTED CIRCUIT BOARD
- RECP RECEPTACLE
- SPT FAN SPEED TAP LOCATION
- TRAN TRANSFORMER
- UNMARKED TERMINAL
- FIELD POWER WIRING
- ◻ MARKED TERMINAL
- ⇨ PLUG AND RECEPTACLE

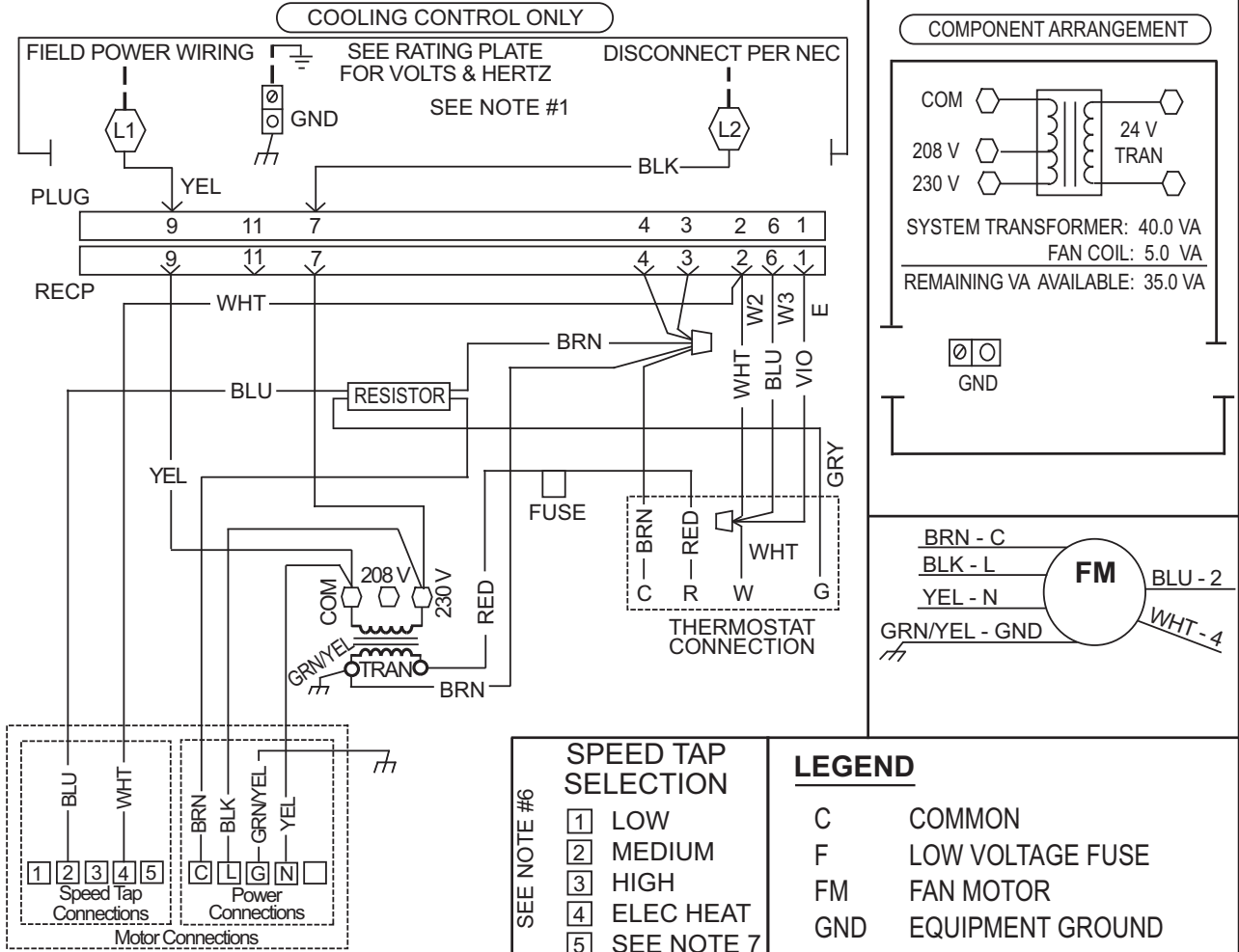
328964-101 REV. A

Fig. 17 - 328964-101

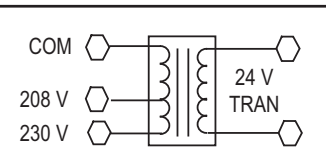
A07027

THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

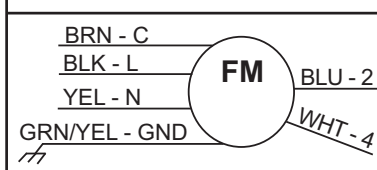
BLOWER MOTOR  
ROTATION



COMPONENT ARRANGEMENT



SYSTEM TRANSFORMER: 40.0 VA  
REMAINING VA AVAILABLE: 35.0 VA



**NOTES**

1. Use Copper Wire (75°C Min) Only Between Disconnect Switch And Unit.
2. To Be Wired In Accordance With NEC And Local Codes.
3. If Any Of The Original Wire, As Supplied, Must Be Replaced. Use The Same Or Equivalent Type Wire.
4. Replace Low Voltage Fuse With No Greater Than 5 Amp Fuse.
5. Connect R To R, G To G, Etc. See Outdoor Instruction For Details.
6. To change speed tap, move blue wire to desired terminal.
7. See airflow tables for tap usage.

SEE NOTE #6

**SPEED TAP SELECTION**

1 LOW  
2 MEDIUM  
3 HIGH  
4 ELEC HEAT  
5 SEE NOTE 7

**LEGEND**

- C COMMON
- F LOW VOLTAGE FUSE
- FM FAN MOTOR
- GND EQUIPMENT GROUND
- RECP RECEPTACLE
- SPT FAN SPEED TAP LOCATION
- TRAN TRANSFORMER
- UNMARKED TERMINAL
- ◻ MARKED TERMINAL
- ≫ PLUG AND RECEPTACLE

336228-101 REV. A

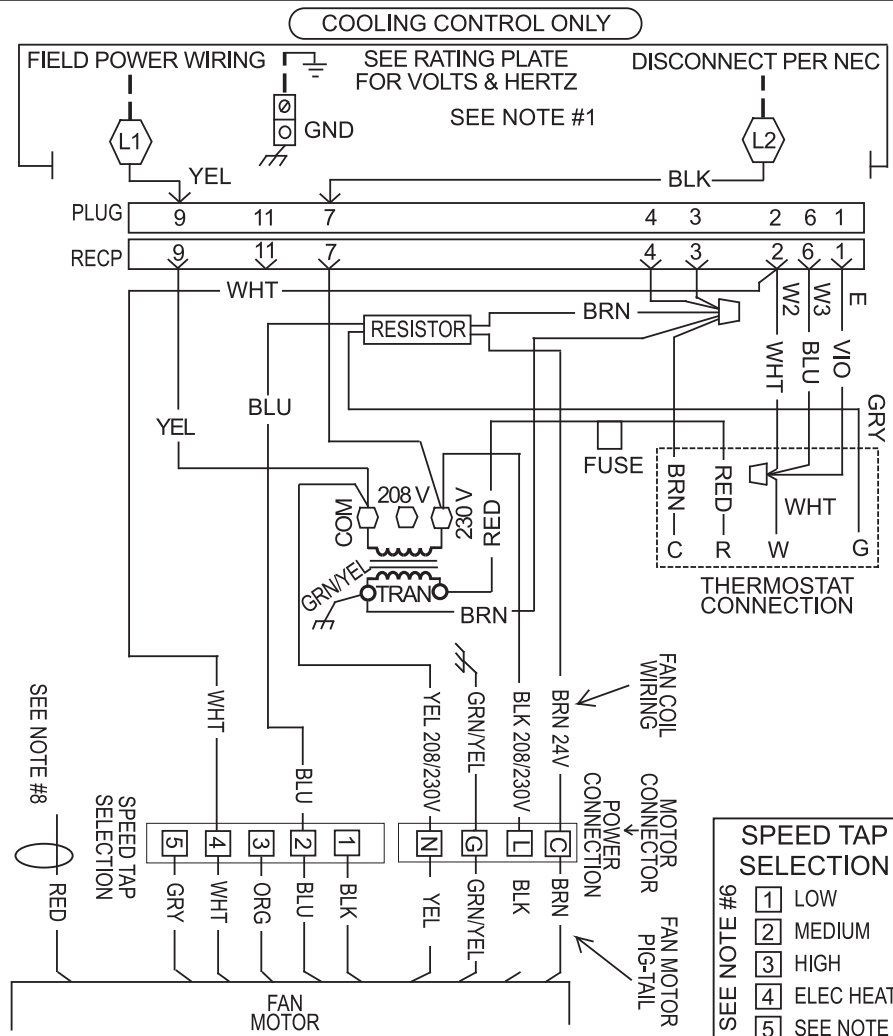
Fig. 18 - 336228-101

A12364

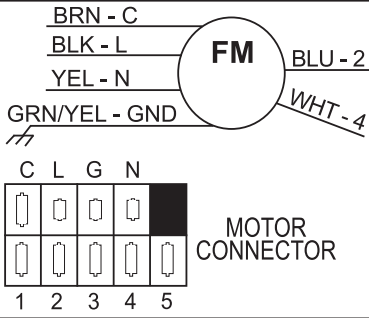
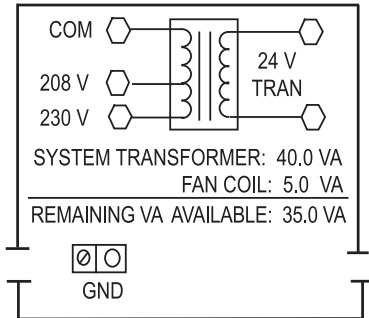


THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

BLOWER MOTOR ROTATION



COMPONENT ARRANGEMENT

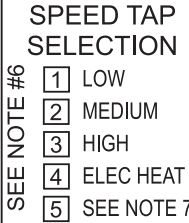


LEGEND

- C COMMON
- F LOW VOLTAGE FUSE
- FM FAN MOTOR
- GND EQUIPMENT GROUND
- RECP RECEPTACLE
- SPT FAN SPEED TAP LOCATION
- TRAN TRANSFORMER
- UNMARKED TERMINAL
- - - FIELD POWER WIRING
- ⬡ MARKED TERMINAL
- ⤵ PLUG AND RECEPTACLE

NOTES

1. Use Copper Wire (75°C Min) Only Between Disconnect Switch And Unit.
2. To Be Wired In Accordance With NEC And Local Codes.
3. If Any Of The Original Wire, As Supplied, Must Be Replaced. Use The Same Or Equivalent Type Wire.
4. Replace Low Voltage Fuse With No Greater Than 5 Amp Fuse.
5. Connect R To R, G To G, Etc. See Outdoor Instruction For Details.
6. To Change Speed Tap, Move Blue Wire To Desired Terminal.
7. See Airflow Tables For Tap Usage.
8. Factory wires may be present. DO NOT USE



337519-101 REV. B



Fig. 19 - 337519-101

A12365

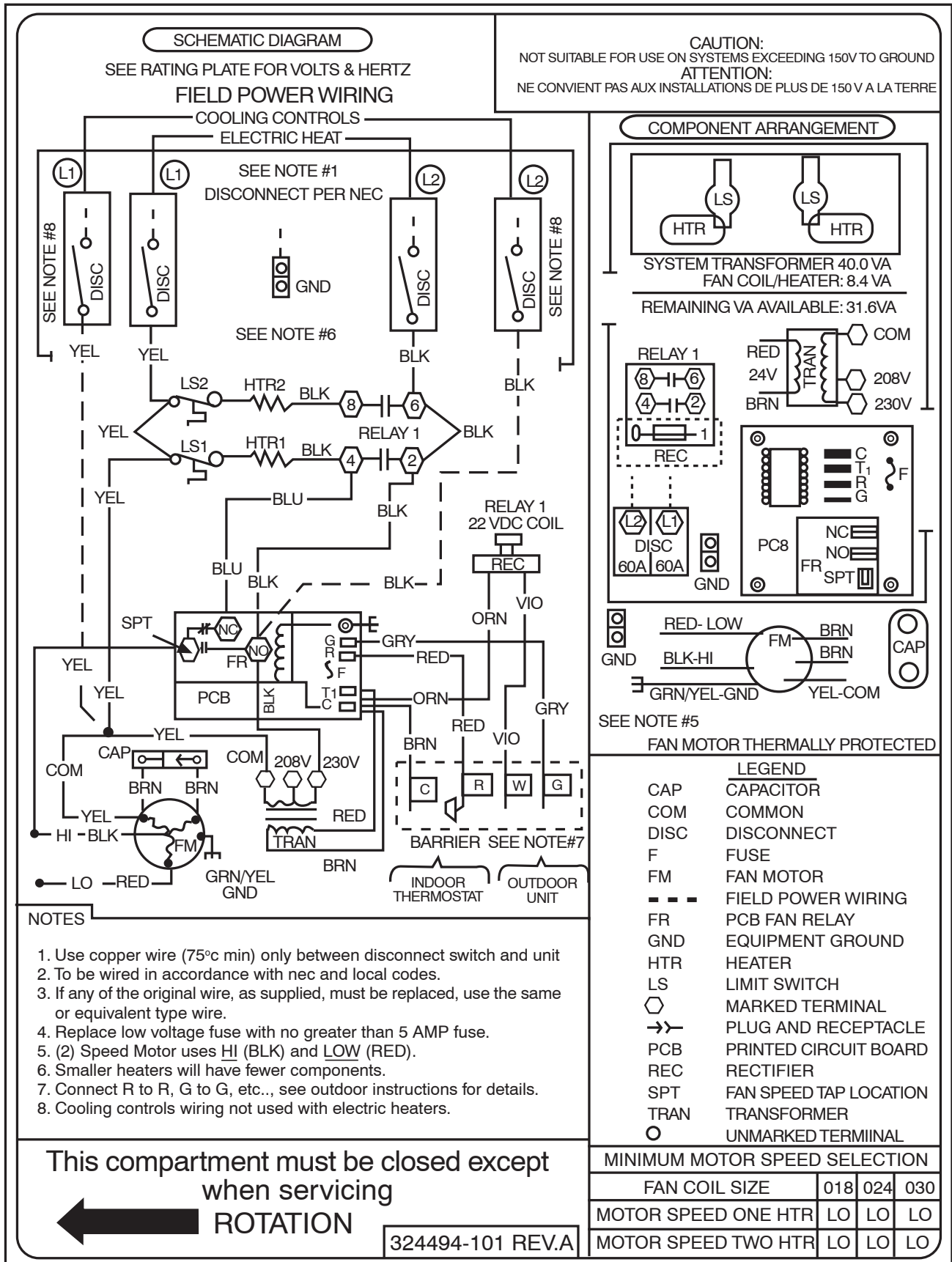
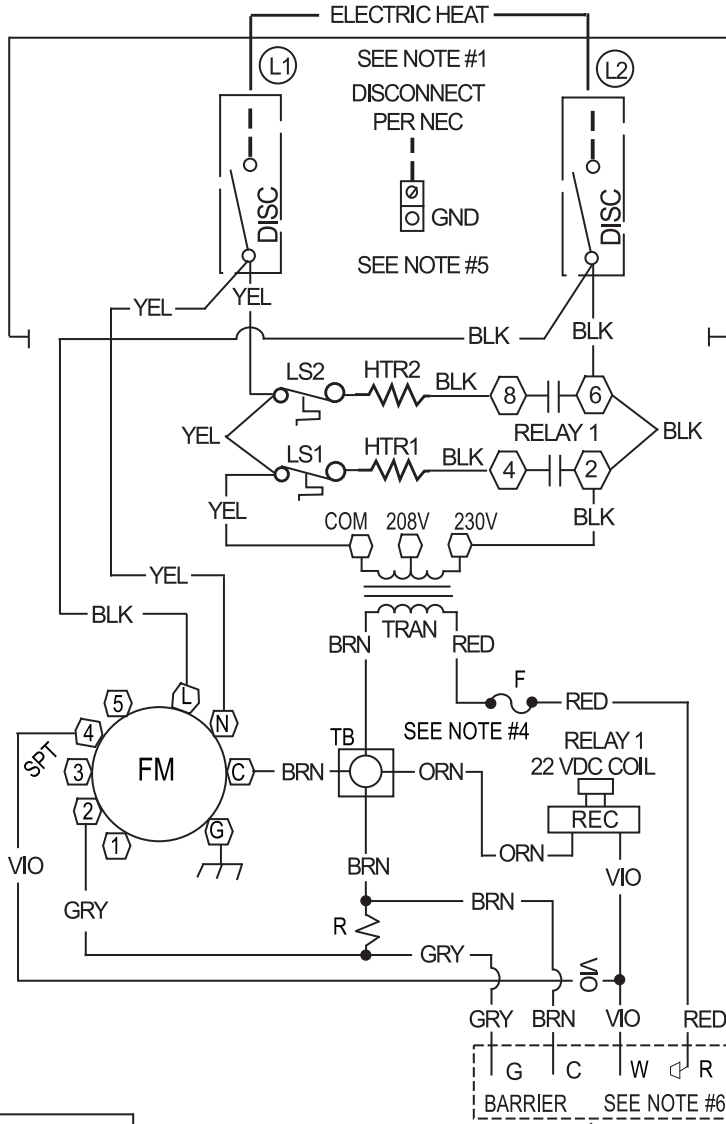


Fig. 20 - 324494-101

**SCHEMATIC DIAGRAM**

SEE RATING PLATE FOR VOLTS & HERTZ

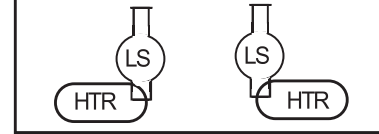
**FIELD POWER WIRING**



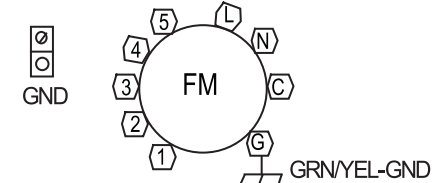
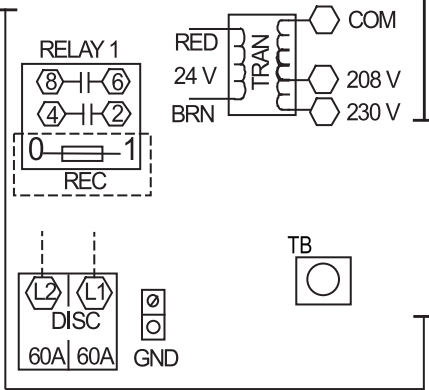
**NOTES:**

1. Use copper wire (75° C min) only between disconnect switch and unit.
2. To be wired in accordance with N.E.C. and local codes.
3. If any of the original wire, as supplied, must be replaced, use the same or equivalent type wire.
4. Replace low voltage fuse with no greater than 3 AMP fuse.
5. Smaller heaters will have fewer components.
6. Connect R to R, G to G, etc., see outdoor instructions for details.
7. Cooling speed selection can be tap 1, 2, 3, or 5.
8. Heating speed selection must be tap 4 only.

**COMPONENT ARRANGEMENT**



SYSTEM TRANSFORMER: 40.0VA  
 FAN COIL/HEATER: 8.4VA  
 REMAINING VA/AVI LABEL: 31.6VA



FAN MOTOR ELECTRONICALLY PROTECTED

**LEGEND**

- FIELD POWER WIRING
- ◻ MARKED TERMINAL
- PLUG AND RECEPTACLE
- UNMARKED TERMINAL
- ⌋ WIRE NUT
- COM COMMON
- DISC DISCONNECT
- F FUSE
- FM FAN MOTOR
- GND EQUIPMENT GROUND
- HTR HEATER
- LS LIMIT SWITCH
- R RESISTOR
- REC RECTIFIER
- SPT FAN SPEED TAP LOCATION
- TB TERMINAL BLOCK
- TRAN TRANSFORMER

**This compartment must be closed except when servicing.**



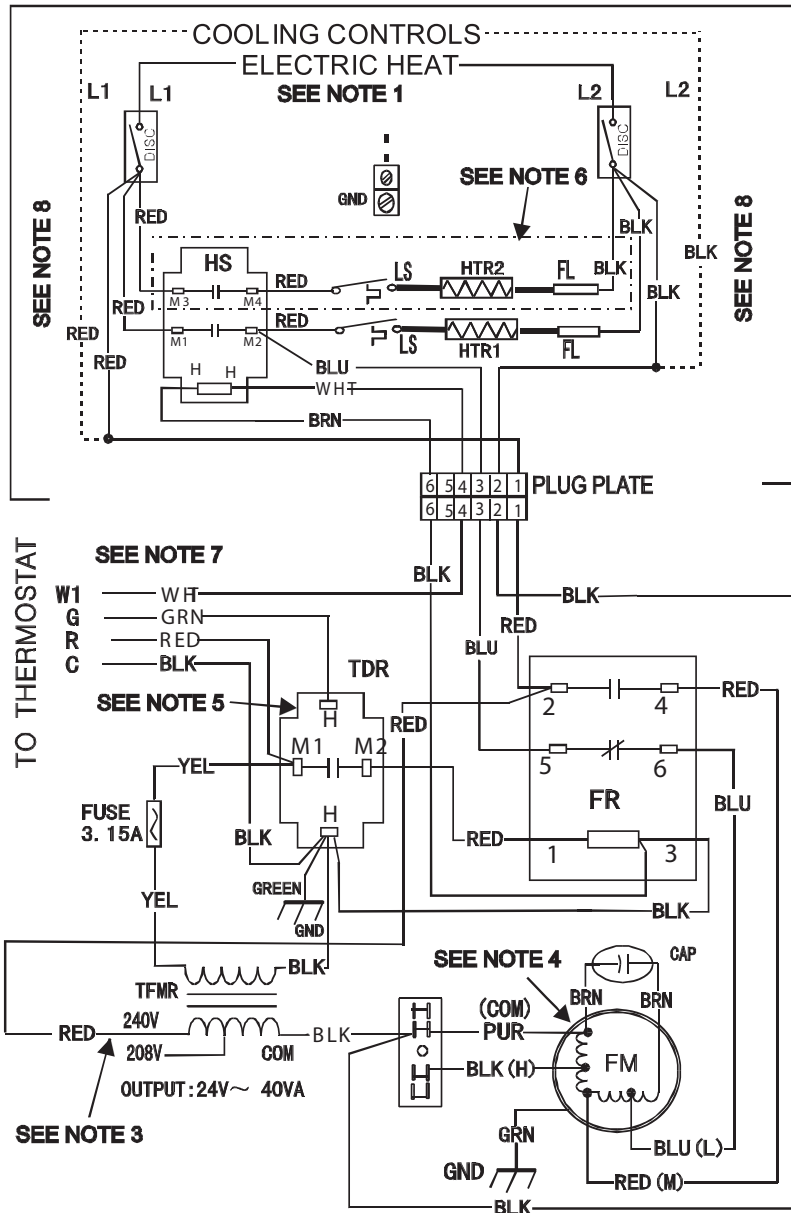
**335826-101 REV. A**

Fig. 21 - 335826-101

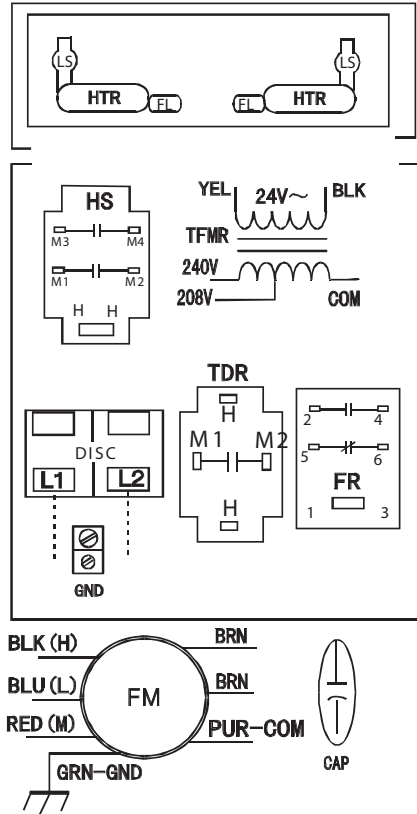
**SCHEMATIC DIAGRAM**

SEE RATING PLATE FOR VOLTS & HERTZ  
**FIELD POWER WIRING**

**CAUTION:**  
NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V TO GROUND  
**ATTENTION:**  
NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150V ALA TERRE



**COMPONENT ARRANGEMENT**



- DISC DISCONNECT
- FR FAN RELAY
- HS HEAT SEQUENCER
- LS LIMIT SWITCH
- TDR TIME DELAY RELAY
- TFMR TRANSFORMER
- FL FUSE LINK
- FM FAN MOTOR
- CAP FAN CAPACITOR
- GND GROUND
- - - FIELD POWER WIRING

**NOTES:**

- 1: Use copper wire (75°C min) only between disconnect switch and unit, To be wired in accordance with N.E.C. and local codes.
- 2: If any of the original wire as supplied must be replaced, use the same or equivalent type wire.
- 3: Remove the red lead from "240V" terminal and then connect the red lead to "208V" terminal on the transformer for 208 volts.
- 4: Factory default fan speed is medium; FM red wire connected to FR #4. For HI speed connect FM black wire to FR #4. For LOW speed connect FM blue wire to FR #4 and FM red wire to FR #6. Always connect the unused FM wire to the dummy terminal block.
- 5: TDR has a 1-30s on delay when "G" is energized and a 45-75s off delay when "G" is de-energized.
- 6: The 5kW heater kit has HTR1 only. Fan coils equipped with electric heat connect power supply to circuit breaker.
- 7: Connect R to R, G to G, etc. See outdoor or indoor instructions for details.
- 8: Cooling controls wiring not used with electric heaters.

202070290385

Fig. 22 - EHK2 Electric Heaters

A13131