

FAN COILS, and ACCESSORY ELECTRIC HEATERS

WIRING DIAGRAMS

FIG.	FIELD- INSTALLED HEATER MODEL	FB4C/ PF4MNP	FE4A/ FE5A	FH4C	FV4C	FX4D	FY5B	FZ4A	PF4MA	PF4MB	LABEL
1	KFCEH0401N03B	18,24	x	001	x	19,25	18,24	24	18,19,24,25	x	344631-101
1	KFCEH0501N05B	18-60	002-006	001-002	002-006	19-61	18-60	24-61	18-61	19-61	344631-101
2	KFCEH0801N08B	18-60	002-006	001-003	002-006	19-61	18-60	24-61	18-61	19-61	344599-101
2	KFCEH0901N10B	18-60	002-006	001-004	002-006	19-61	18-60	24-61	18-61	19-61	344599-101
6	KFCEH1601315B	42-60	002-006	001-004	002-006	43-61	18-60	48-61	18-61	19-61	344635-101
7	KFCEH2001318B	42-60	003-006	001-004	002-006	43-61	42-60	48-61	42-61	37-61	344632-101
1	KFCEH2401C05B	18-60	002-006	001-002	002-006	19-61	18-60	24-61	18-61	19-61	344631-101
2	KFCEH2501C08B	18-60	002-006	001-003	002-006	19-61	18-60	24-61	18-61	19-61	344599-101
2	KFCEH2601C10B	18-60	002-006	001-004	002-006	19-61	18-60	24-61	18-61	19-61	344599-101
3	KFCEH2901N09B	36-60	002-006	003-004	002-006	37-61	36-60	36-61	36-60	31-61	344634-101
4	KFCEH3001F15B	24-60	002-006	001-004	002-006	25-61	24-60	24-61	24-61	19-61	344597-101
4	KFCEH3101C15B	24-60	002-006	001-004	002-006	25-61	24-60	24-61	24-61	19-61	344597-101
5	KFCEH3201F20B	30-60	002-006	002-004	002-006	31-61	30-60	36-61	30-61	19-61	344598-101
5	KFCEH3301C20B	30-60	002-006	002-004	002-006	31-61	30-60	36-61	30-61	19-61	344598-101
8,9	KFCEH3401F24B	48,60	004-006	003-004	005-006	49-61	48-60	48-61	48-61	49-61	344633-101, 344636-101
8,9	KFCEH3501F30B	48,60	004-006	003-004	005-006	49-61	48-60	48-61	48-61	49-61	344633-101 344636-101

FAN COIL WITH RBC X-13 MOTOR OR BROAD OCEAN DIGI MOTOR

FIG.	FACTORY-INSTALLED HEATER MODEL	FB4C	FX4D	FZ4A	LABEL
11	MKFCEH0501N05B	18,24	19,25	--	344637-101
10	MKFCEH0801N08B	18,30	31	--	344624-101
10	MKFCEH0901N10B	24-48	37-61	--	
12	MKFCEH1501F15B	36-60	61	--	344623-101
32	MKFCEH0501N05B	--	--	24	344771-101
30	MKFCEH0801N08B	--	--	36,48	344772-101
	MKFCEH0901N10B	--	--		
31	MKFCEH1501F15B	--	--	60,61	344773-101

FAN COIL WITH COOLING ONLY CONTROL

FIG.	MODEL	SIZE	LABEL
13	FV4C	002-006	326014-101
14	FE4A / FE5A	002-006	333107-101
15	FY5B / PF4MNA	18-60	328964-101
15	FH4C	001-004	328964-101
16	FB4C / FX4D / PF4MNP (RBC)	18-61	336228-101
16	PF4MNA/B	19,25,31,37,43,49,61	336228-101
17	FB4C / FX4D / PF4MNP (BOM)	18-61	337519-101
33	FZ4A	24-61	342415-101

50 HZ EXPORT FAN COILS

FIG.	MODEL	SIZE	LABEL
34	FB4(C/Q)SL (Regal Beloit motor)	018-060	336228-101
35	FB4(C/Q)SL (Broad Ocean motor)	018-060	337519-101

ELECTRIC HEATERS

FIG.	HEATER MODEL	FF1E	LABEL
18	KFDEH0801D05A	18,24,30,36	341080-101
19	KFDEH0901D75A	18,24,30,36	341081-101
19	KFDEH1001D11A	18,24,30,36	341081-101
20	KFEEH0101D05A	19,25,31,37	341082-101
21	KFEEH0201D75A	19,25,31,37	341083-101
21	KFEEH0301D11A	19,25,31,37	341083-101

FIG.	HEATER MODEL	CONTROL TYPE	FFMA / FMA4	LABEL
22	EHK2-05B	Sequencer - HS	18,24,30,36 Prior to serial number date code 1715V.	202070290385
22	EHK2-08B	Sequencer - HS	18,24,30,36 Prior to serial number date code 1715V.	202070290385
22	EHK2-10B	Sequencer - HS	18,24,30,36 Prior to serial number date code 1715V.	202070290385
23			18-37 Serial number date code 1715V and later.	2020702A717
24	EHK205B	Relay - HR	18-37	06-7094-07
24	EHK208B	Relay - HR	18-37	06-7094-07
24	EHK210B	Relay - HR	18-37	06-7094-07

FIG.	FFMA	LABEL
25	19,31	--
26	25,37	--

FIG.	FPM(A,B)N(C,U)	LABEL
27	ALL with Time Delay Relay	202070290388 Valid for models FPM(A,B)N(C,U)0**000AAAA
28	ALL with Time Delay Board	2020702A1716 Valid for models FPM(A,B)N(C,U)T00ACAA

FIG.	HEATER MODEL	FPMAN(C,U)	FPMBN(C,U)	FMC4 / FMU4	LABEL
29	EHK305B	18-36	18-30	18-36	06-7094-04
29	EHK308B	18-36	18-30	18-36	06-7094-04
29	EHK310B	18-36	18-30	18-36	06-7094-04

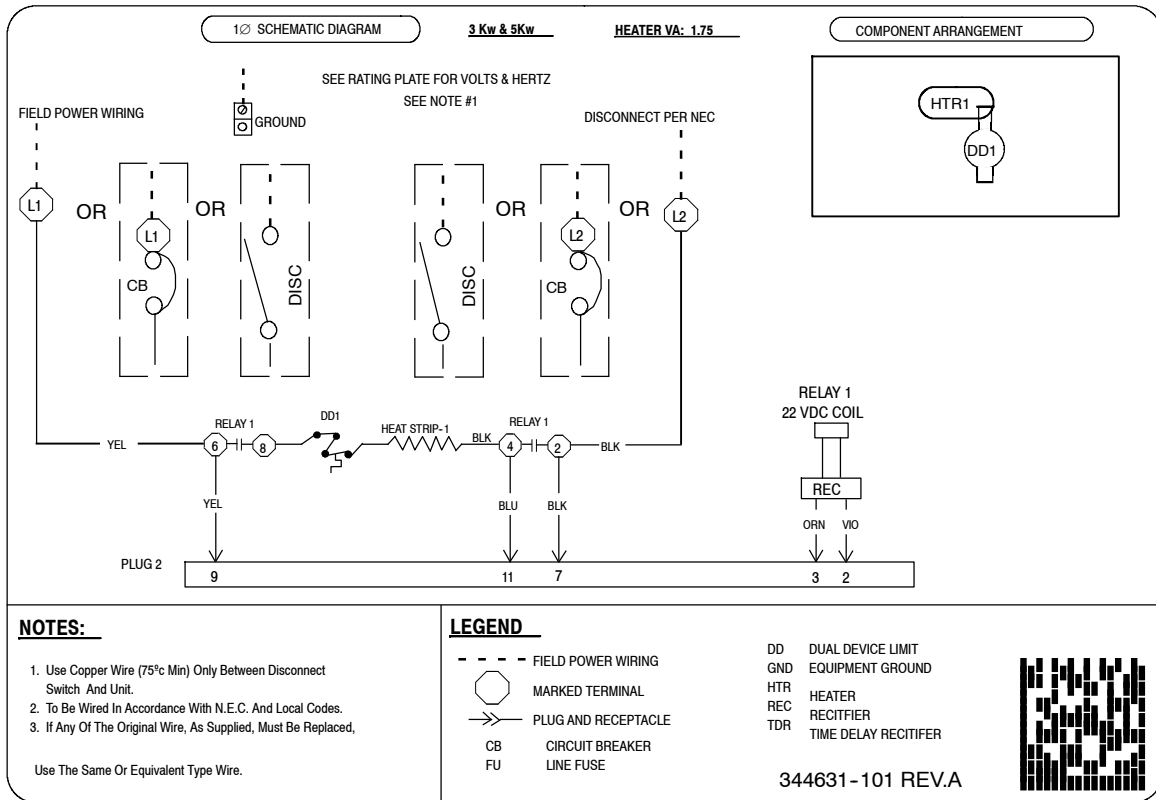


Fig. 1 - Heaters KFCEH0401N03B / KFCEH0501N05B / KFCEH2401C05B

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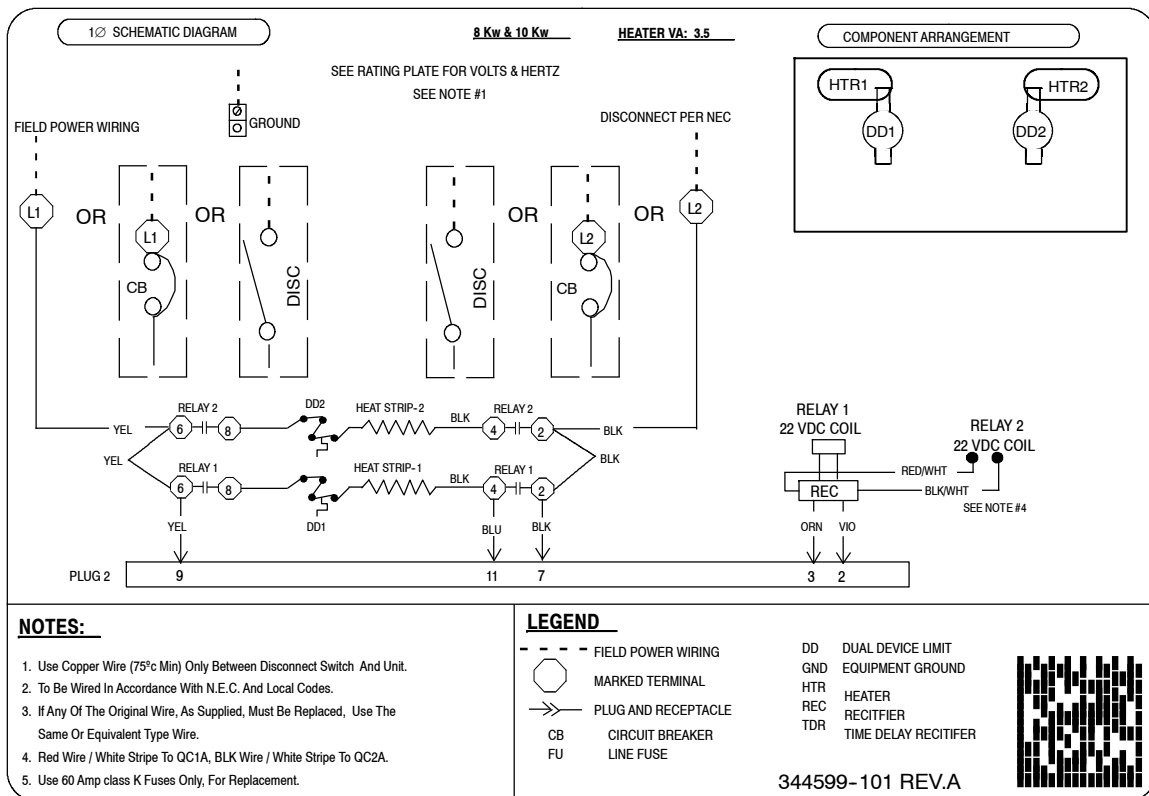


Fig. 2 - Heaters KFCEH0801N08B / KFCEH0901N10B / KFCEH2501C08B / KFCEH2601C10B

A190004

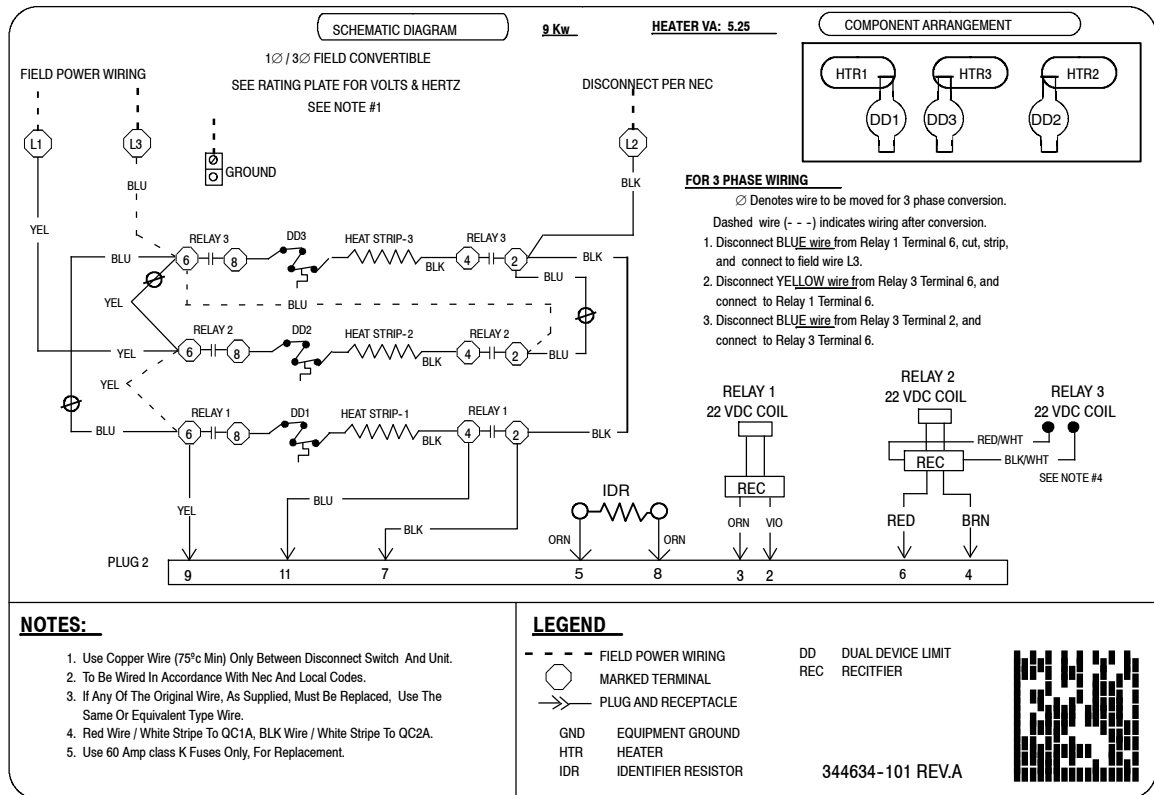


Fig. 3 - Heater KFCEH2901N09B

A190005

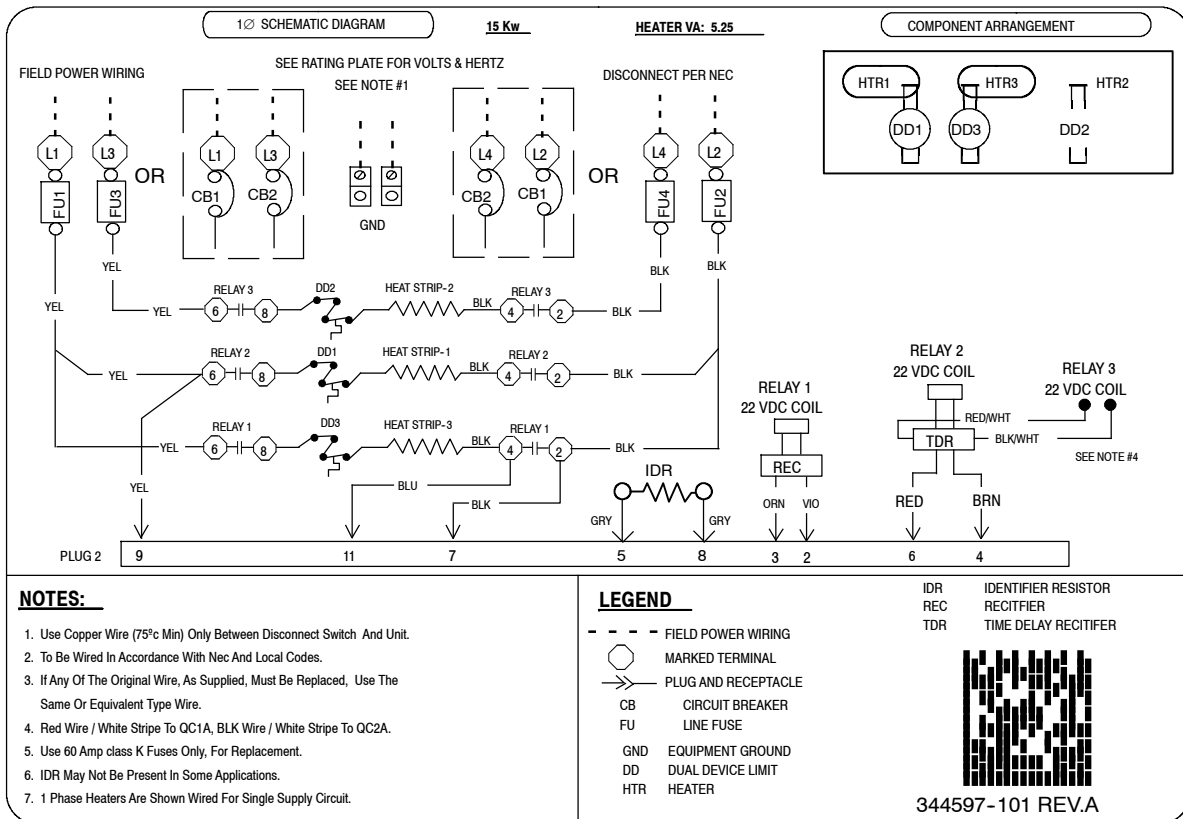


Fig. 4 - Heaters KFCEH3001F15B / FCEH3101C15B

A190006

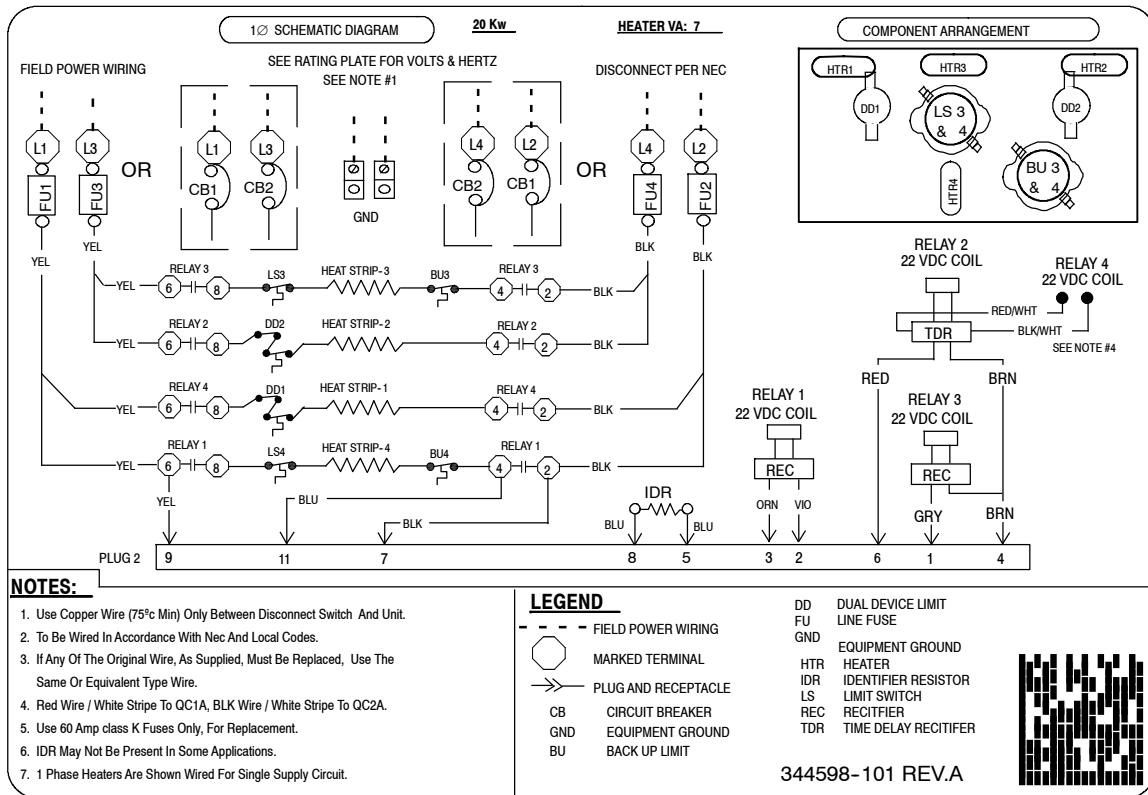


Fig. 5 - Heaters KFCEH3201F20B / KFCEH3301C20B

A190007

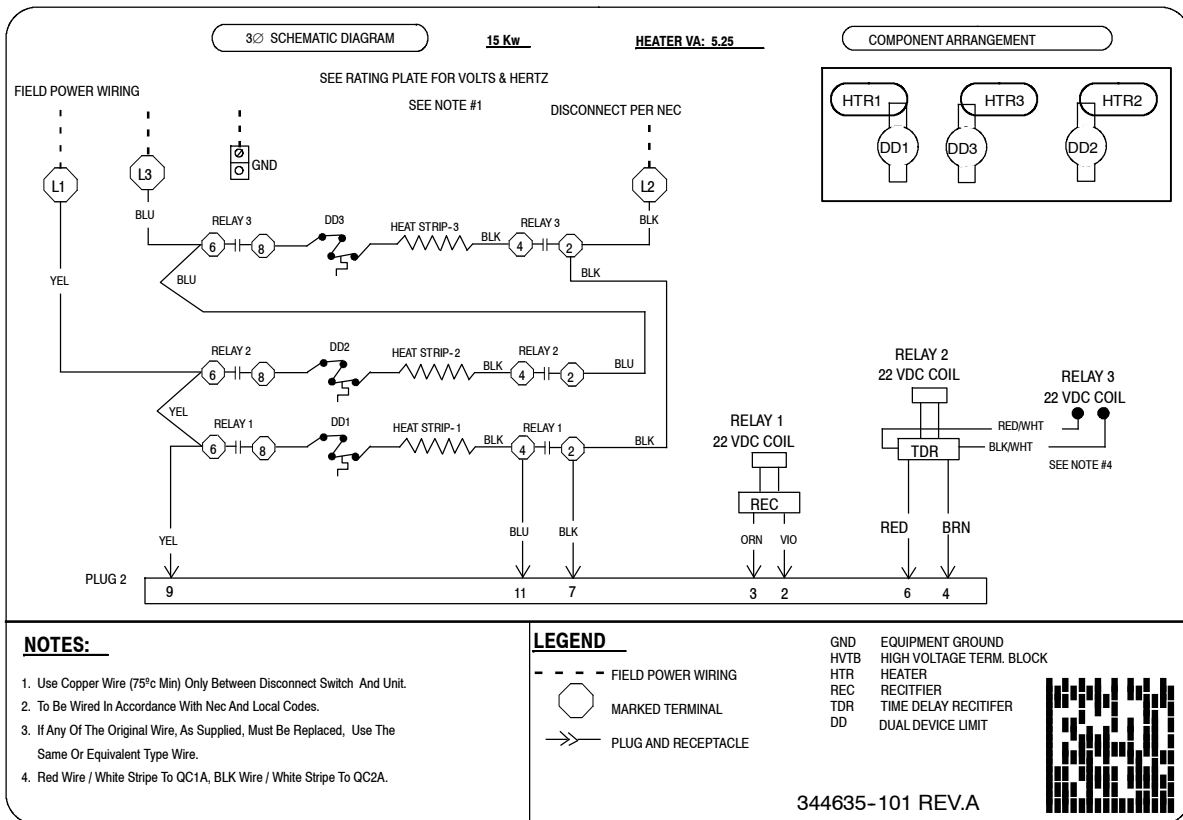


Fig. 6 - Heater KFCEH1601315B

A190008

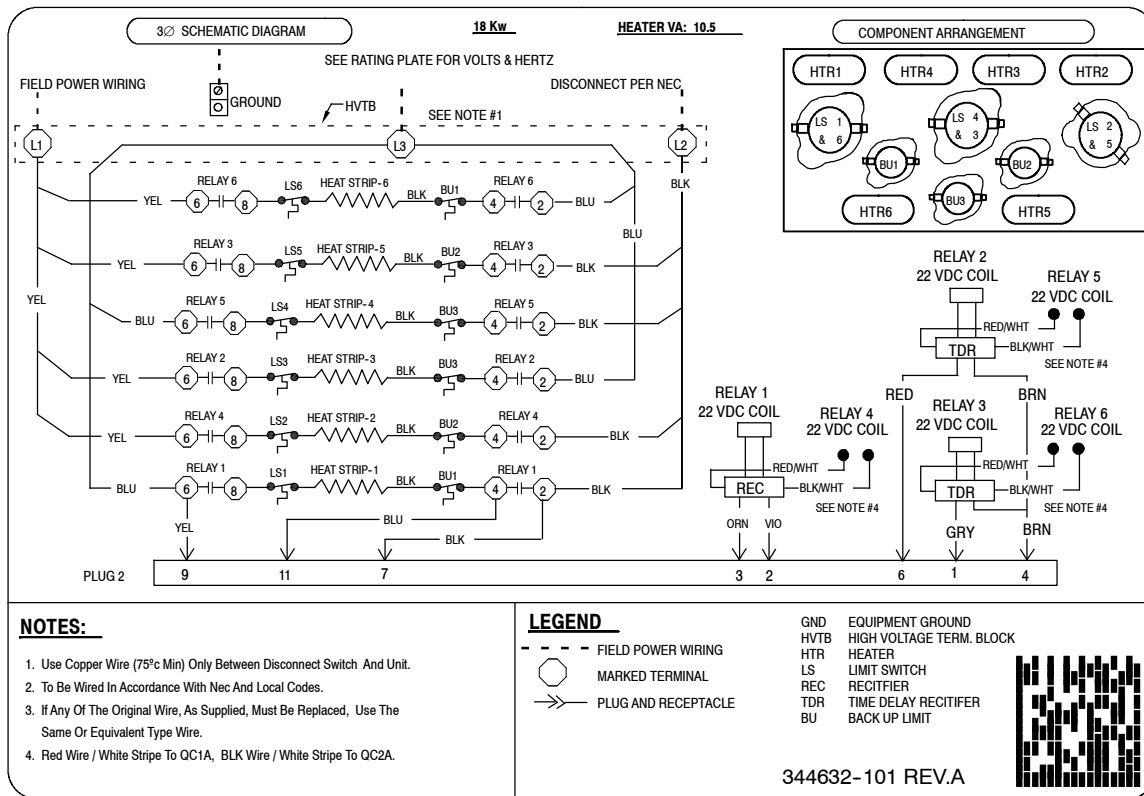


Fig. 7 - Heater KFCEH2001318B

A190009

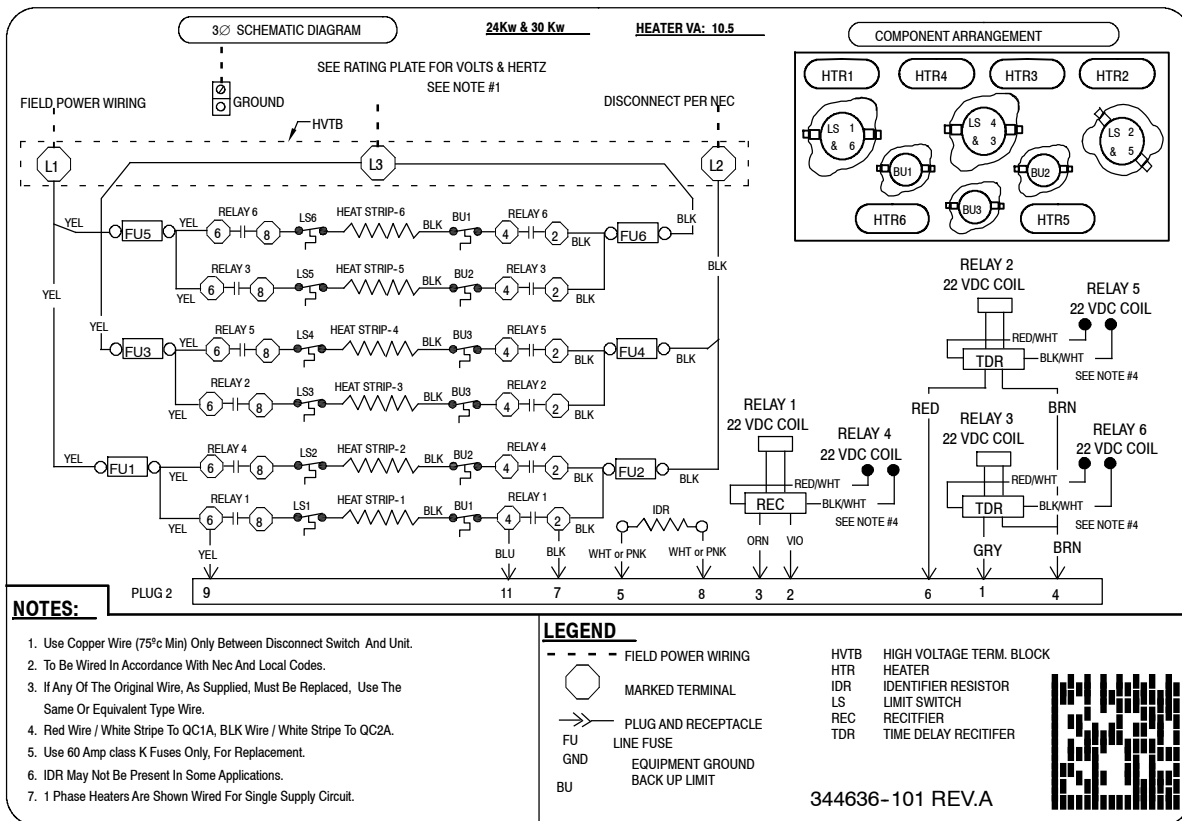


Fig. 8 - Heaters KFCEH3401F24B / KFCEH3501F30B

A190011

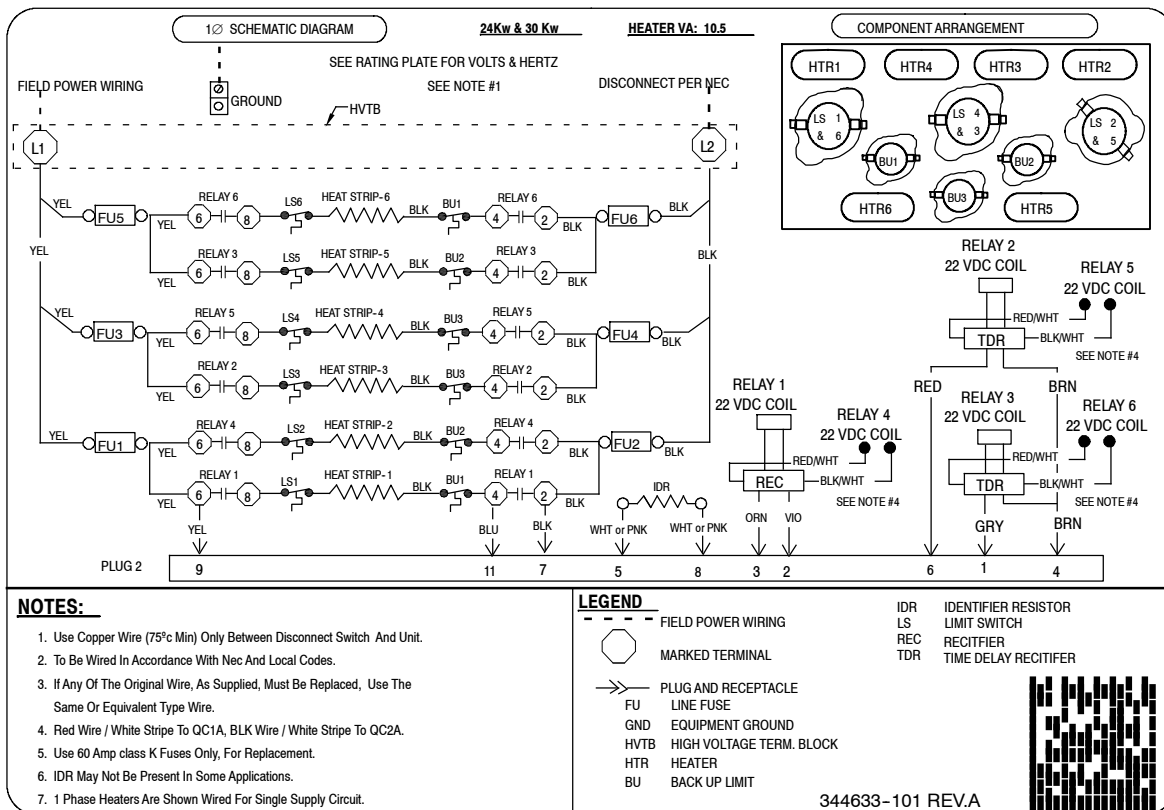
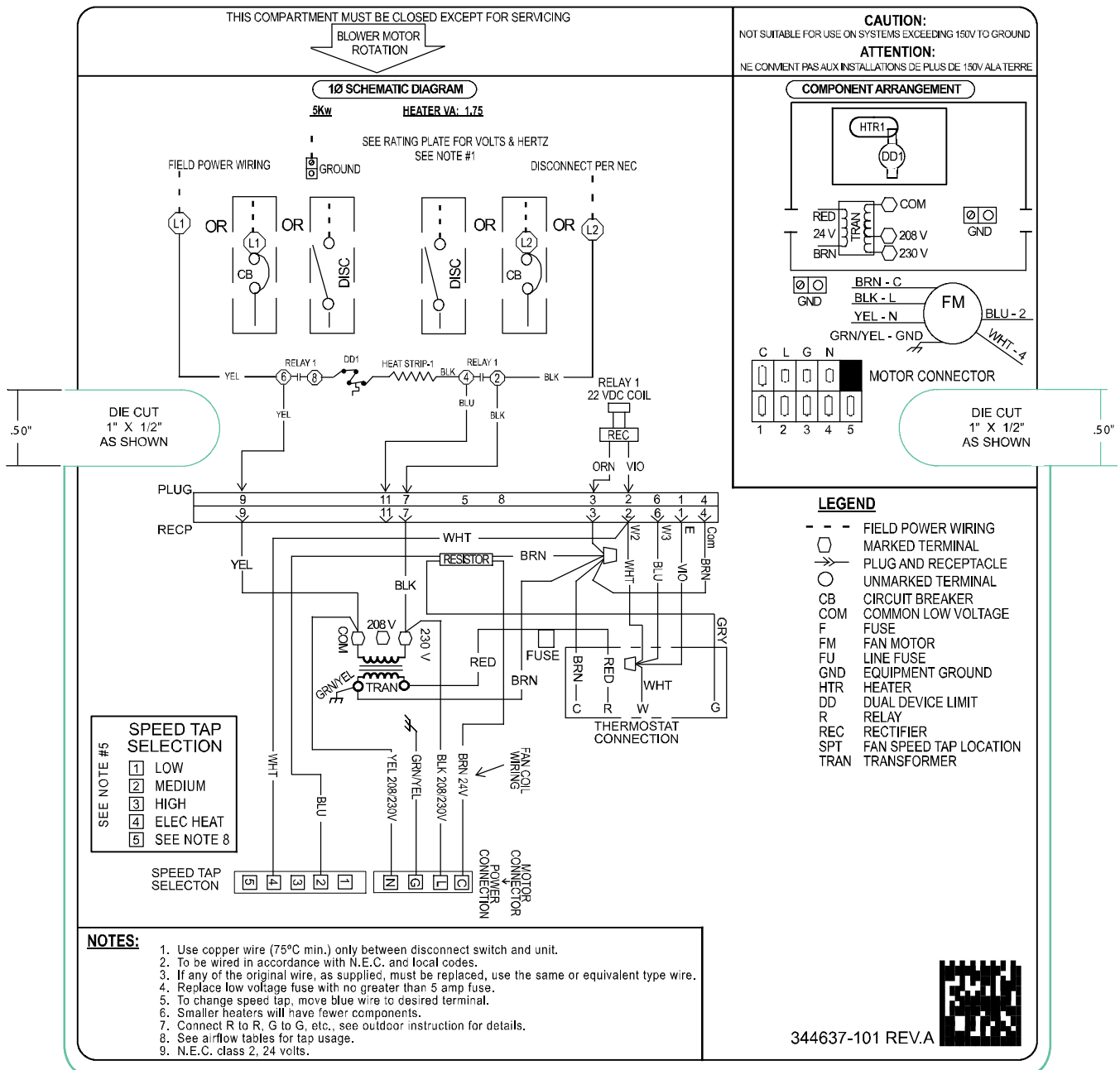


Fig. 9 - Heaters KFCEH3401F24B / KFCEH3501F30B

A190010



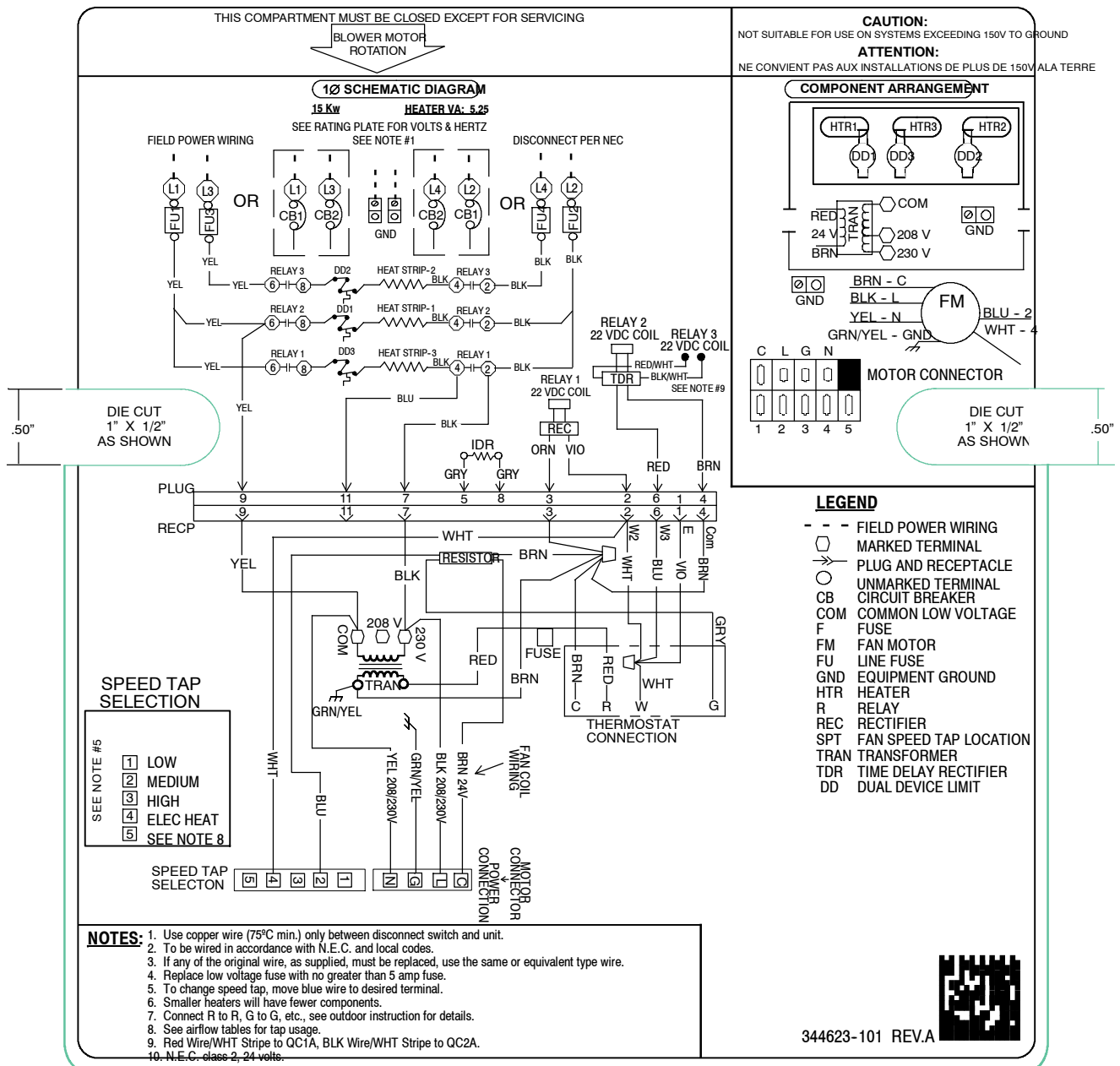


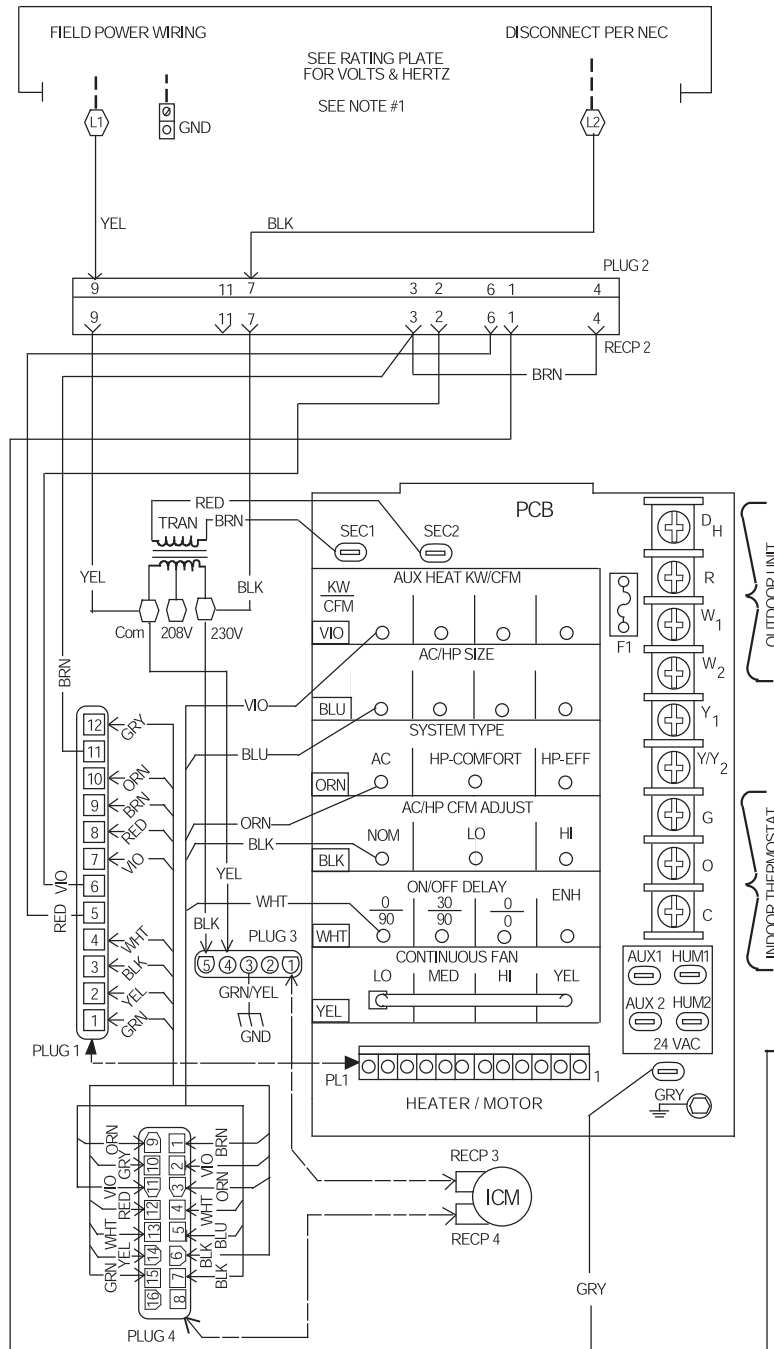
Fig. 12 - FB4C, FX4D - Heater MKFCEH1501F15B

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

**BLOWER MOTOR
ROTATION**

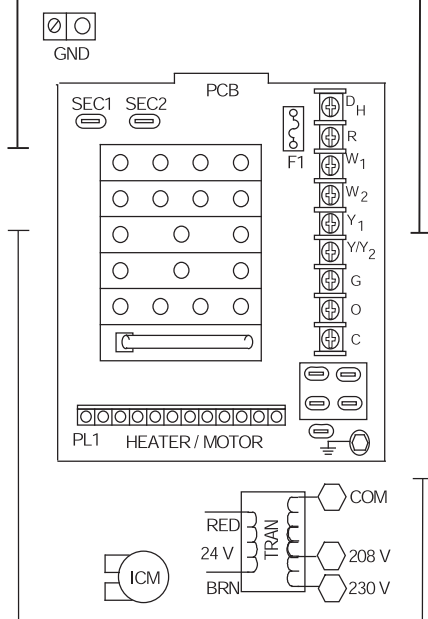
COOLING ONLY SCHEMATIC DIAGRAM



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. 13 - FV4C with Cooling Only Control

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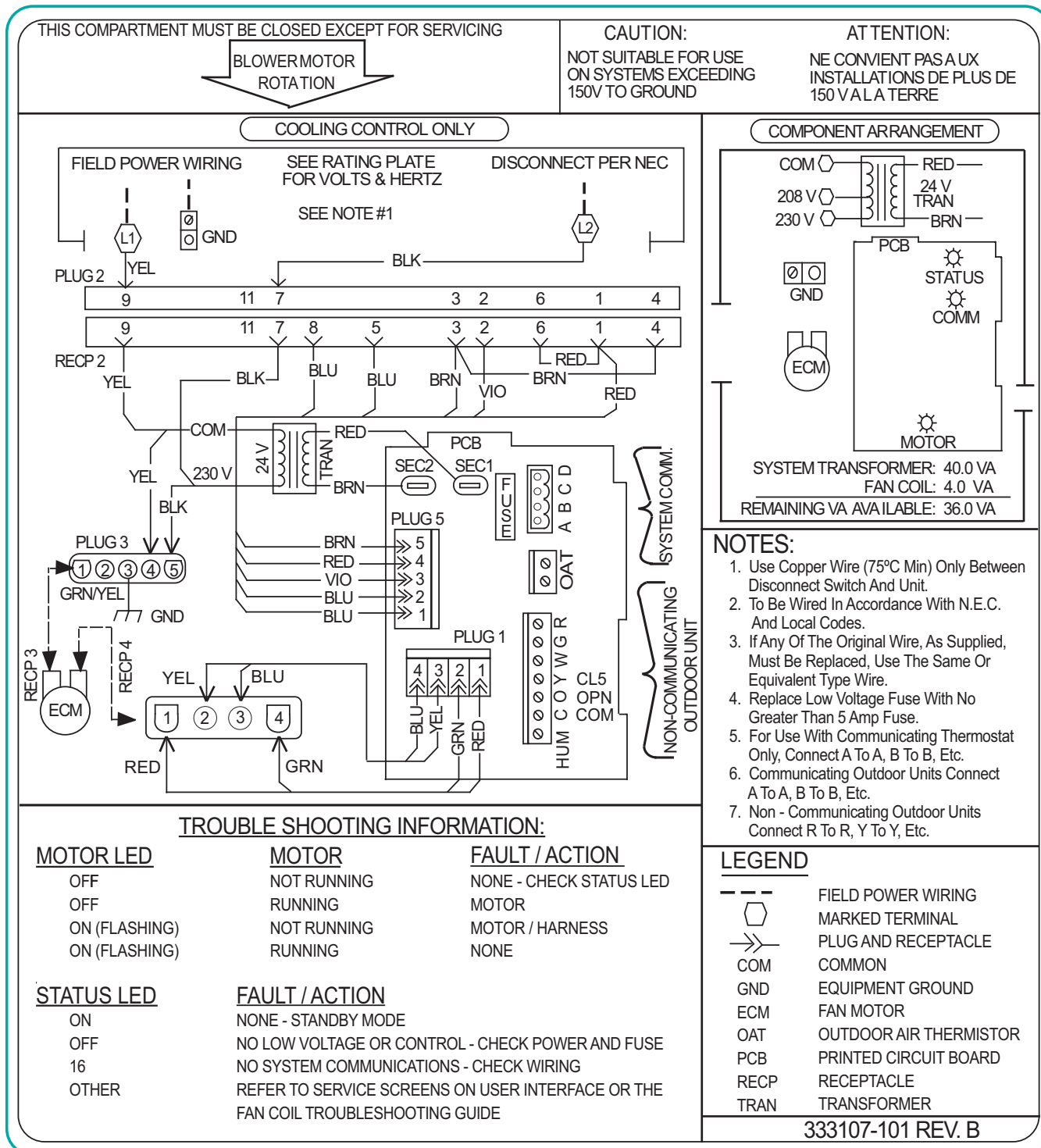


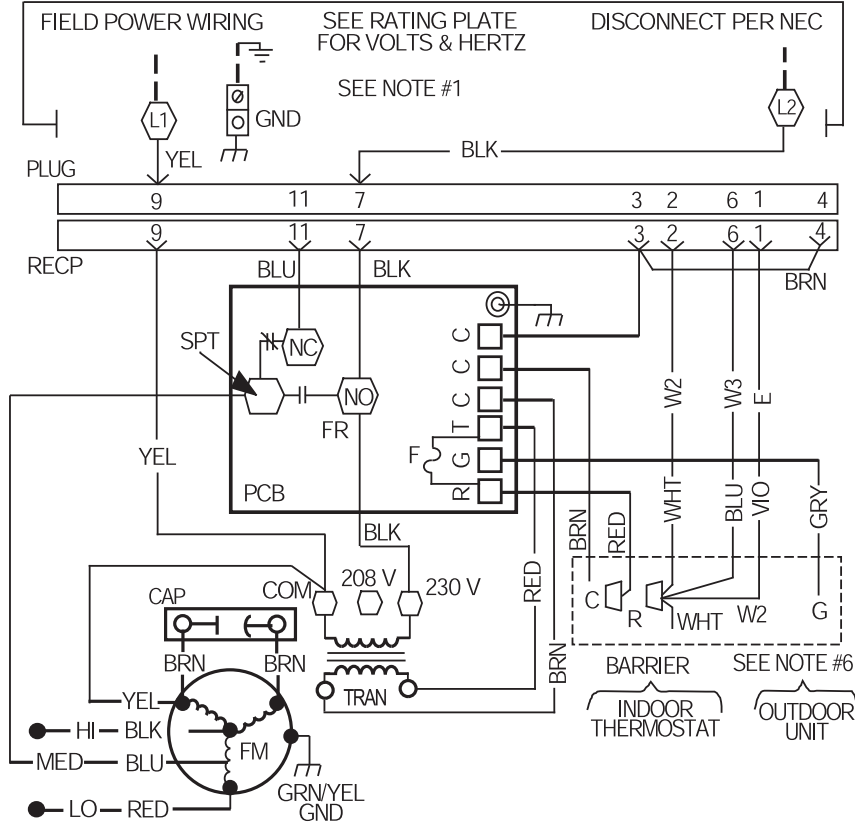
Fig. 14 - FE4A / FE5A with Cooling Only Control

A12363

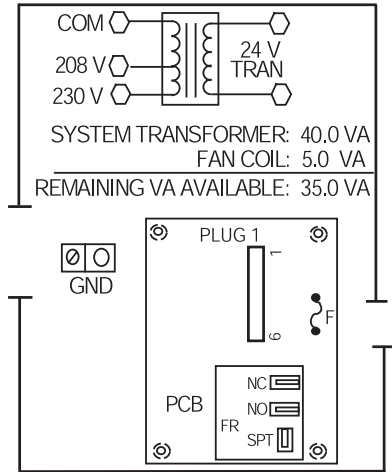
THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

BLOWER MOTOR
ROTATION

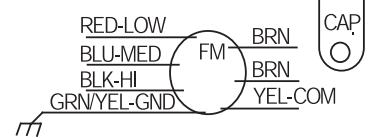
COOLING CONTROL ONLY



COMPONENT ARRANGEMENT



SEE NOTE #5



FAN MOTOR THERMALLY PROTECTED

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

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.

Fig. 15 - FH4C / FY5B / PF4MNA with Cooling Only Control

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THIS COMPARTMENT MUST BE CLOSED EXCEPT FOR SERVICING

BLOWER MOTOR
ROTATION

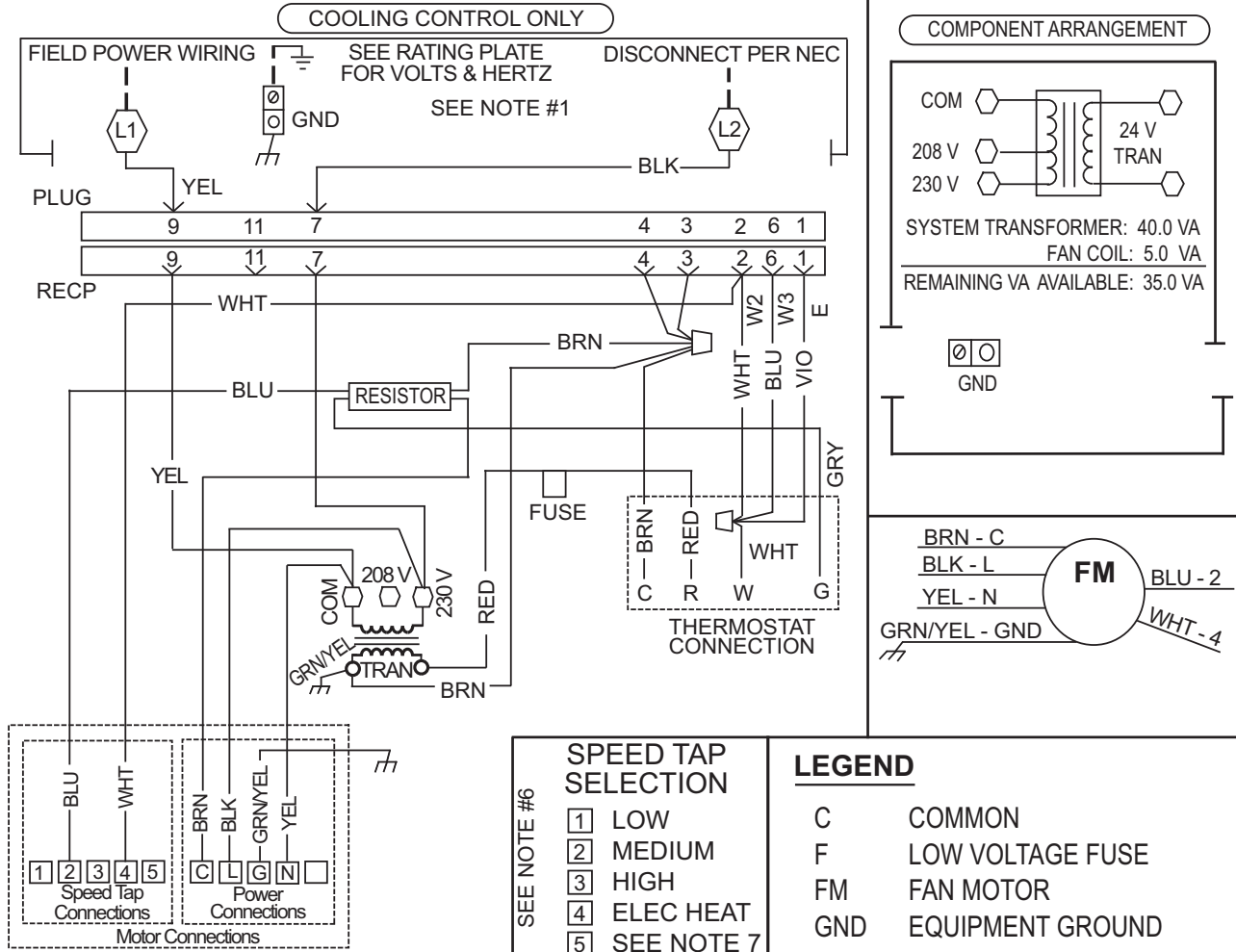
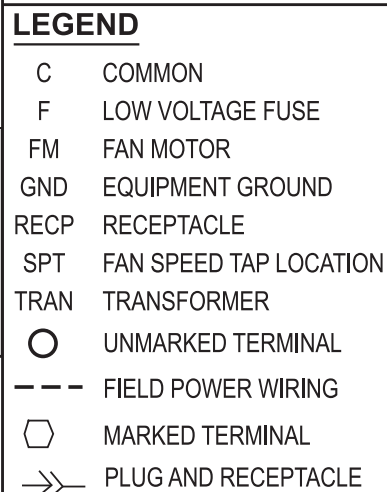


Fig. 16 - FB4C / FX4D / PF4MNP (RBC) / PF4MNA/B with Cooling Only Control

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BLOWER MOTOR ROTATION



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



A12365

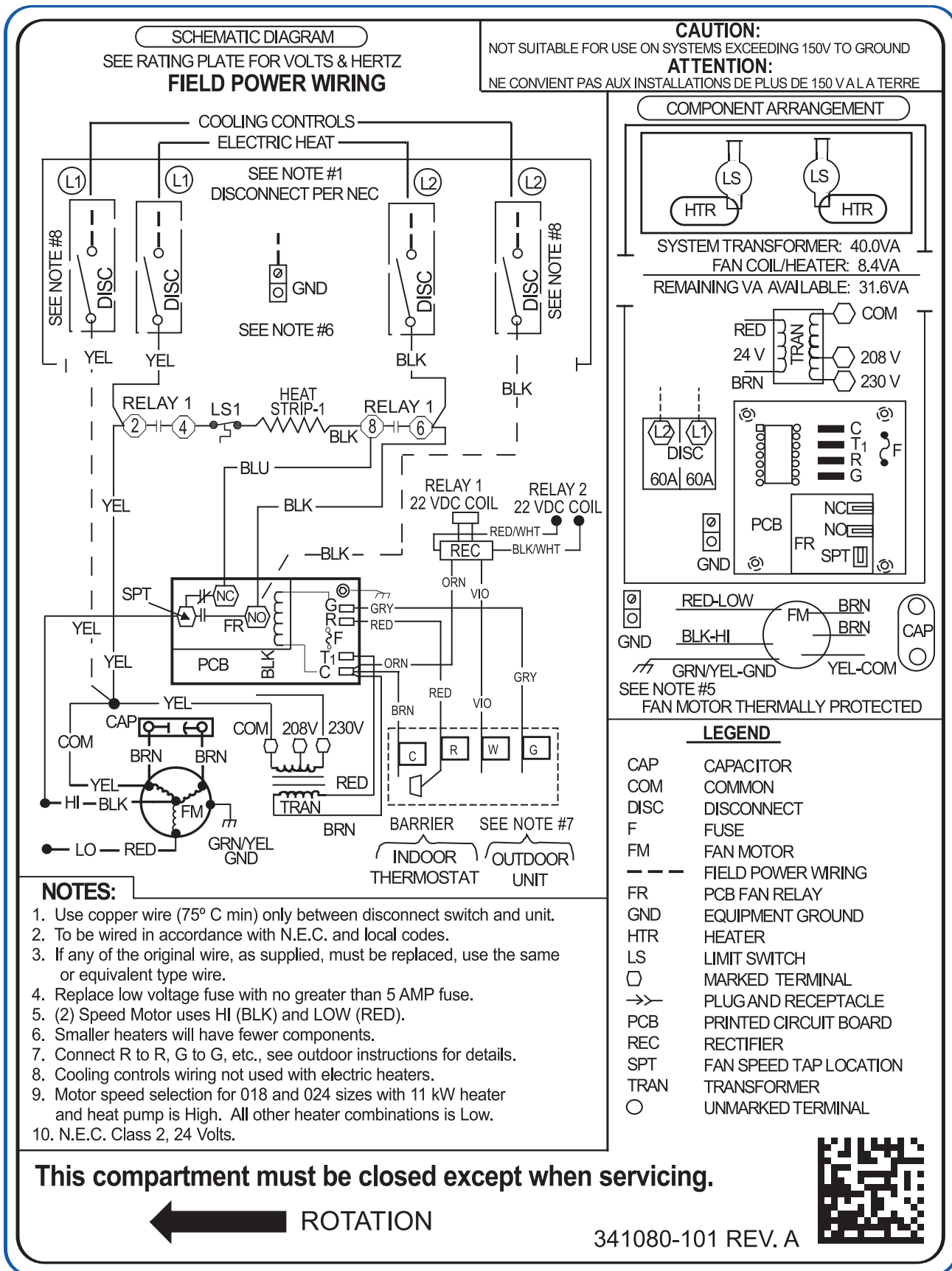


Fig. 18 - FF1E - Heater KFDEH0801D05A

A150114

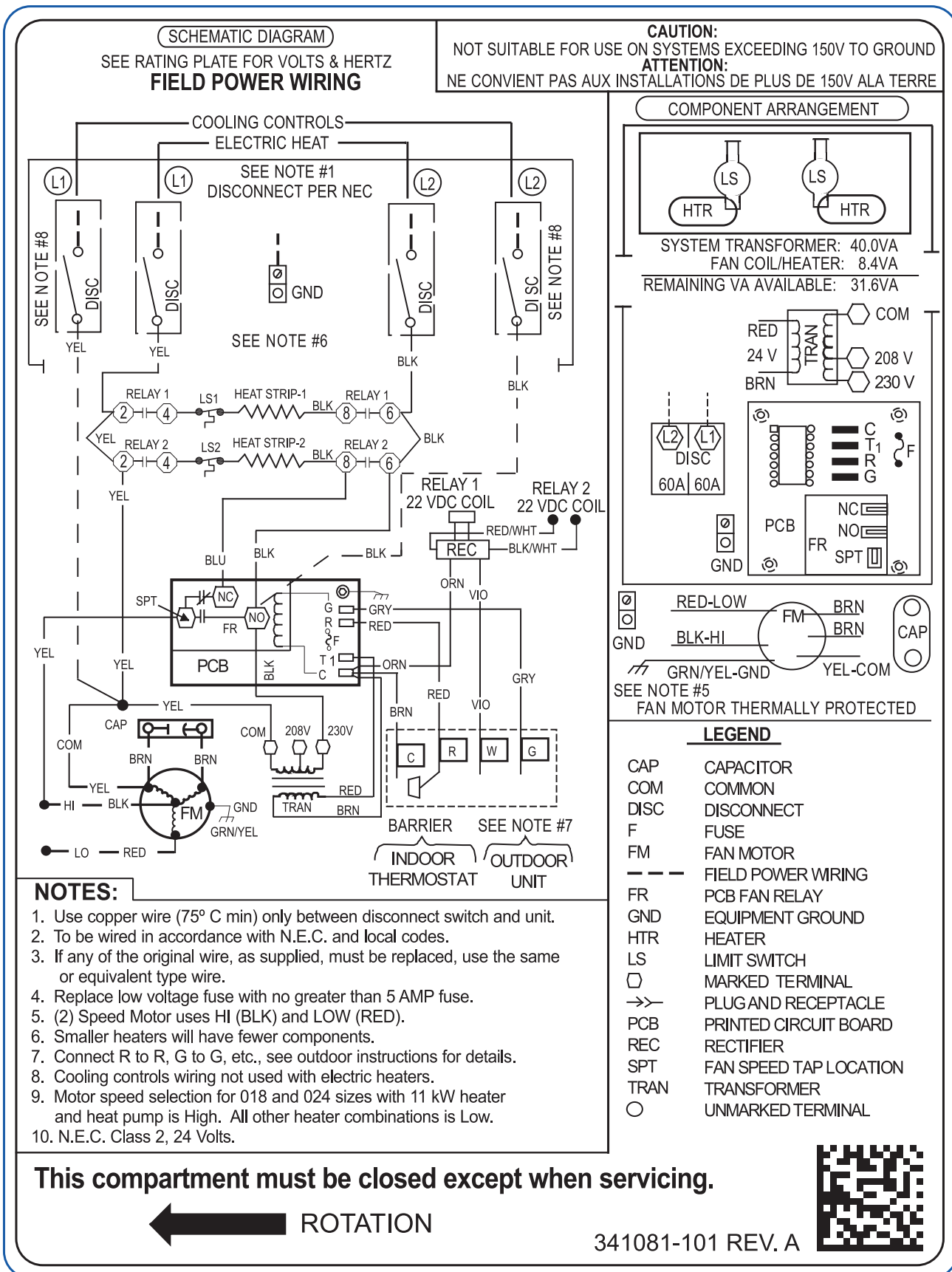


Fig. 19 - FF1E - Heaters KFDEH0901D75A / KFDEH1001D11A

A150115

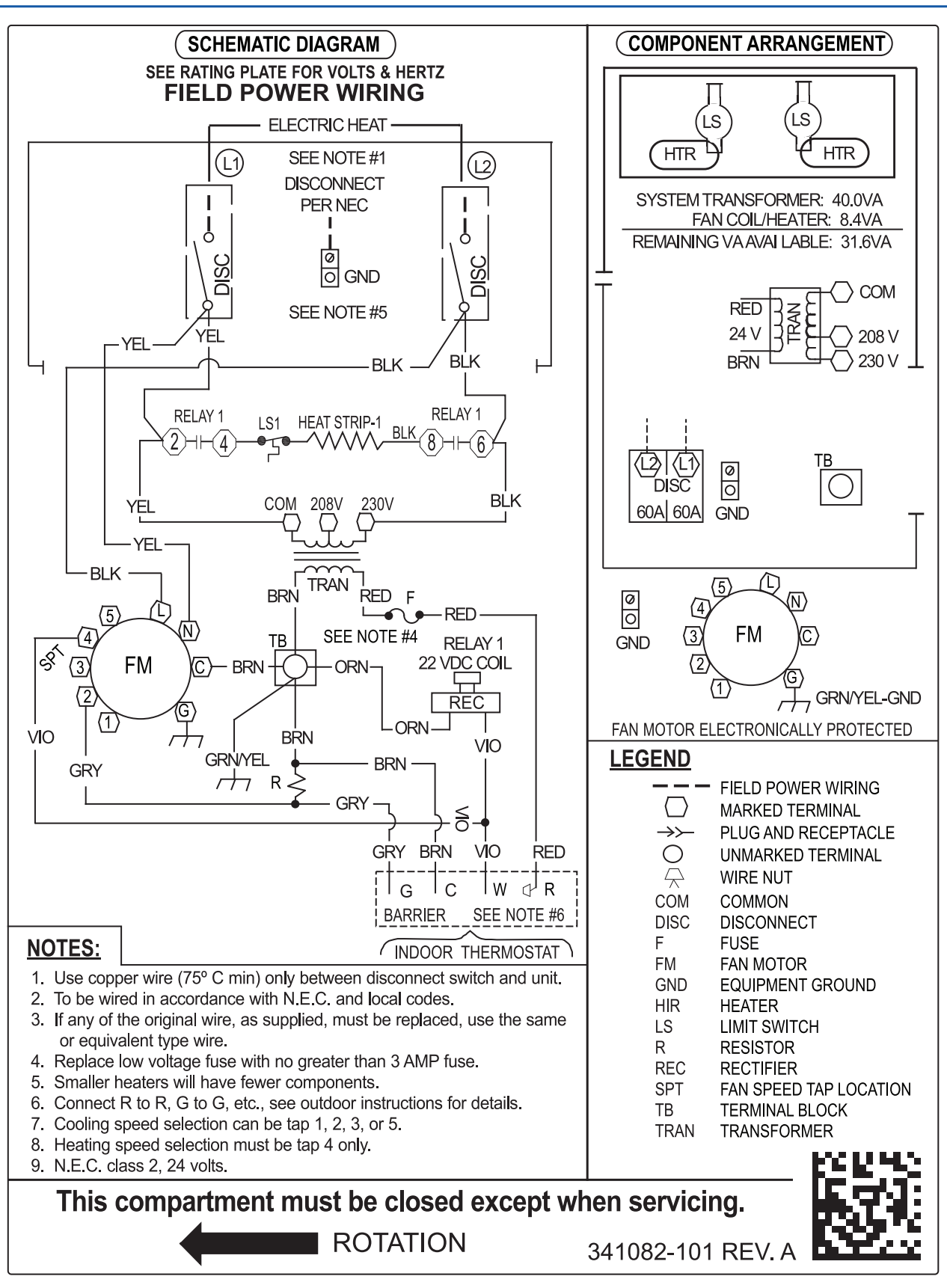


Fig. 20 - FF1E - Heater KFEEH0101D05A

A150116

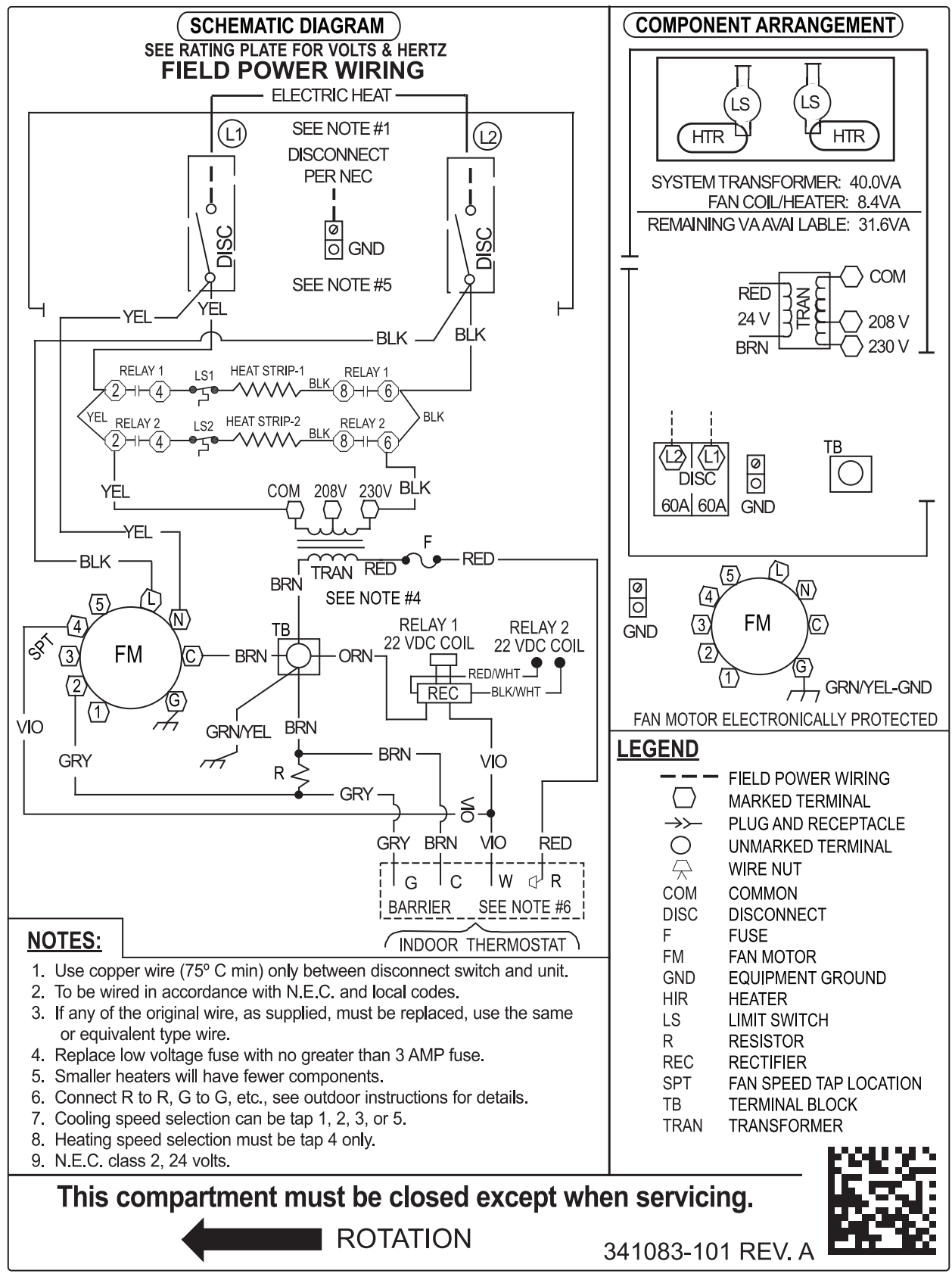


Fig. 21 - FF1E - Heaters KFEH0201D75A / KFEH0301D11A

A150117

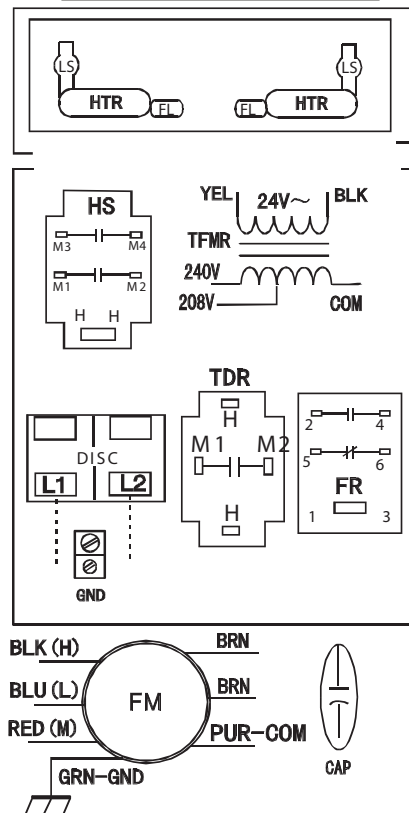
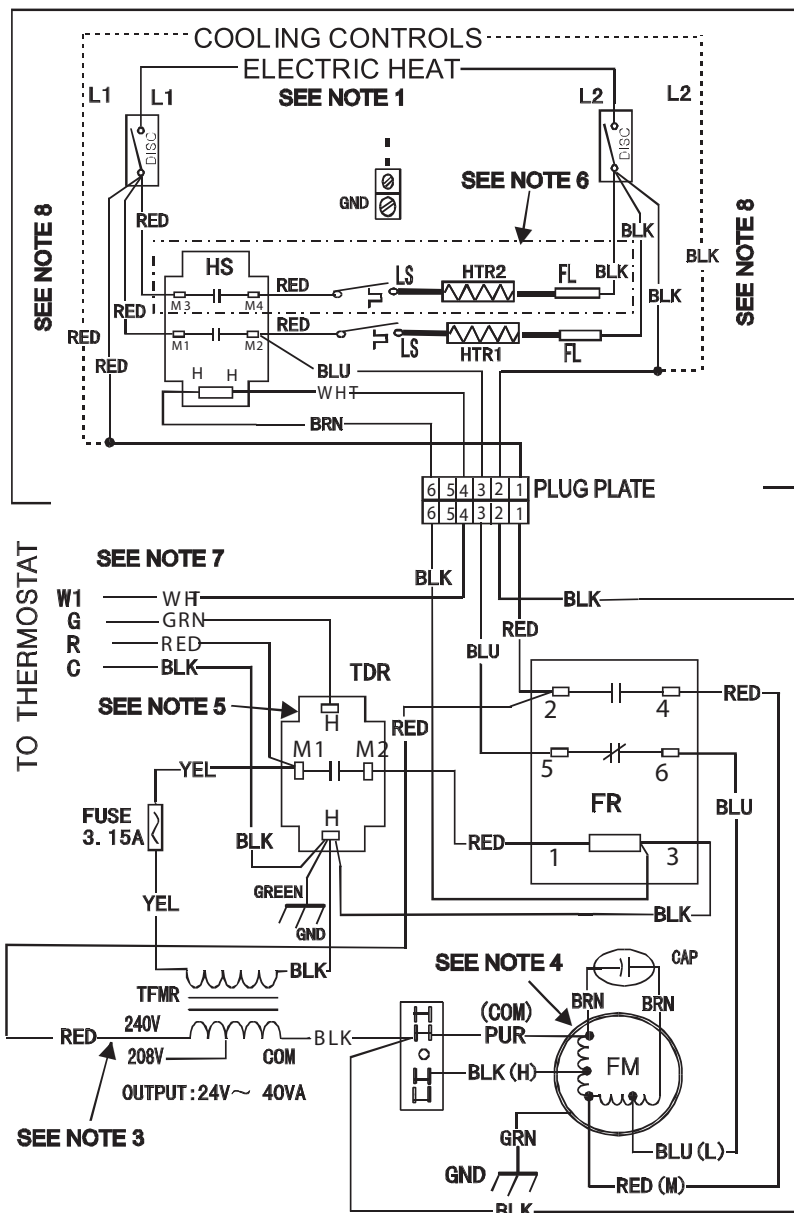
SCHEMATIC DIAGRAM

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 A LA 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.

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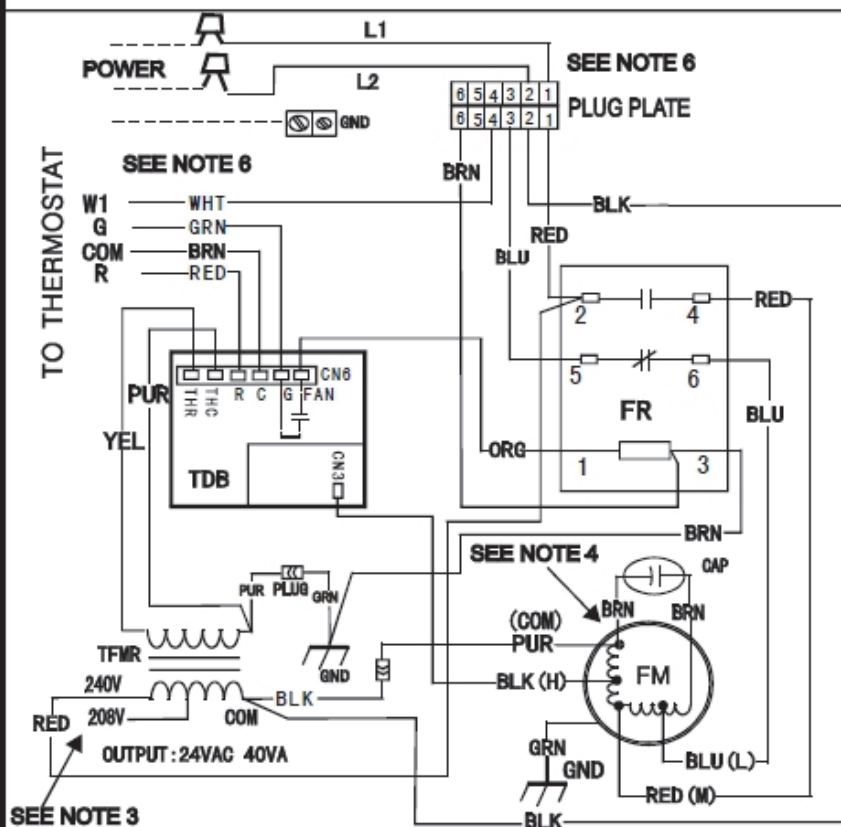
Fig. 22 - FFMANP(018,024,030,036 and EHK2 Electric Heaters with Sequencers
NOTE: Representative for FFMANP(018,024,030,036) prior to serial number date code 1715V

A13131

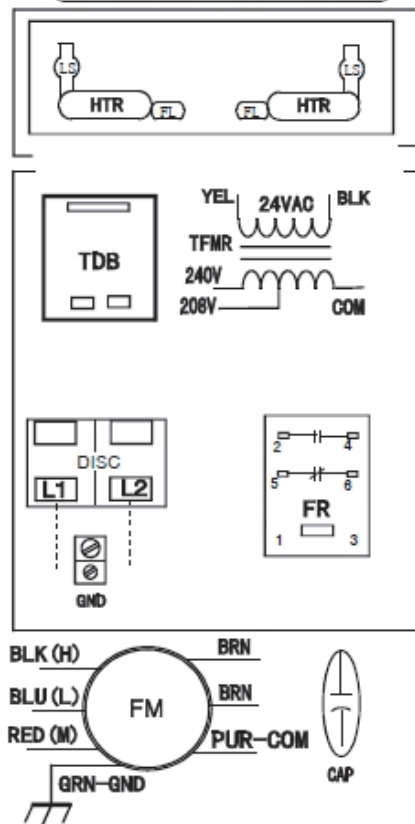
SCHEMATIC DIAGRAM
SEE RATING PLATE FOR VOLTS&HERTZ

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

ELECTRIC HEAT WIRING
CONNECTION (WHEN APPLIED)



COMPONENT ARRANGEMENT



FR FAN RELAY
TDB TIME DELAY BOARD
TFMR TRANSFORMER
FM FAN MOTOR
CAP FAN CAPACITOR
GND GROUND
- - - FIELD POWER WIRING

NOTES:

- 1: Use copper wire (75°C min), 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 CN3.
- 5: TDB has a 90-100s off delay when "G" is de-energized.
- 6: Connect R to R, G to G, etc. See outdoor or indoor instructions for details.
- 7: Cooling controls wiring not used with electric heaters, connect the plug to electric heaters kit when applied.
- 8: N.E.C., class 2, 24volts.

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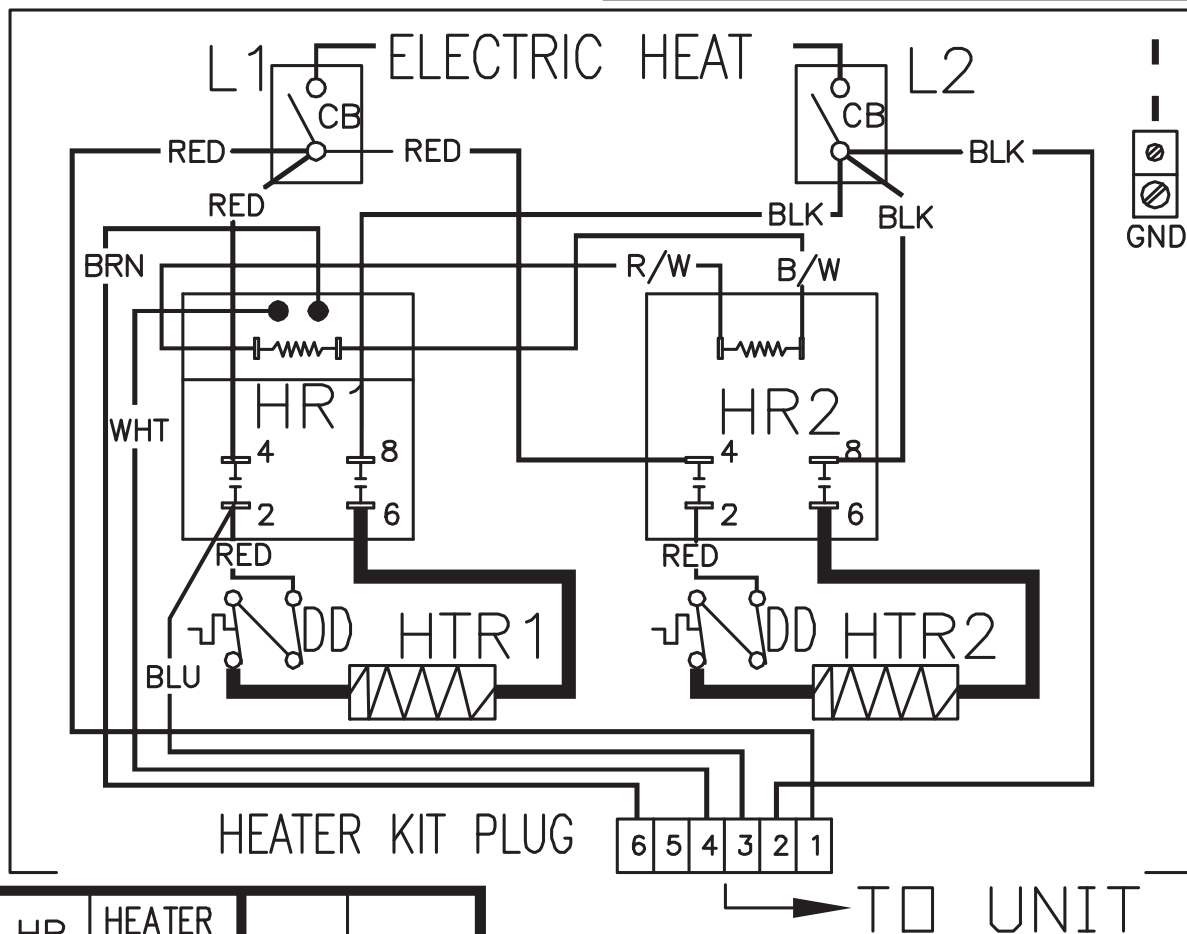
Fig. 23 - FFMANP(018,024,030,036 with PCB Time Delay

NOTE: Representative for FFMANP(018,024,030,036) serial number date code 1715V and later.

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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 A LA TERRE



HR	HEATER RELAY						
CB	CIRCUIT BREAKER	DD	DUAL DEVICE	WHT	WHITE	B/W	BLACK/WHITE
				BLU	BLUE	R/W	RED/WHITE
HTR	HEATER	GND	GROUND	BLK	BLACK	BRN	BROWN

NOTES:

- 1: Use copper wire (75°C min) only between circuit breaker 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: The 5KW heater kit has HTR1 only. Fan coils equipped with electric heat connect power supply to circuit breaker.

06-7094-07

Fig. 24 - EHK2 With Heater Relays

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SCHEMATIC DIAGRAM

SEE RATING PLATE FOR VOLTS&HERTZ

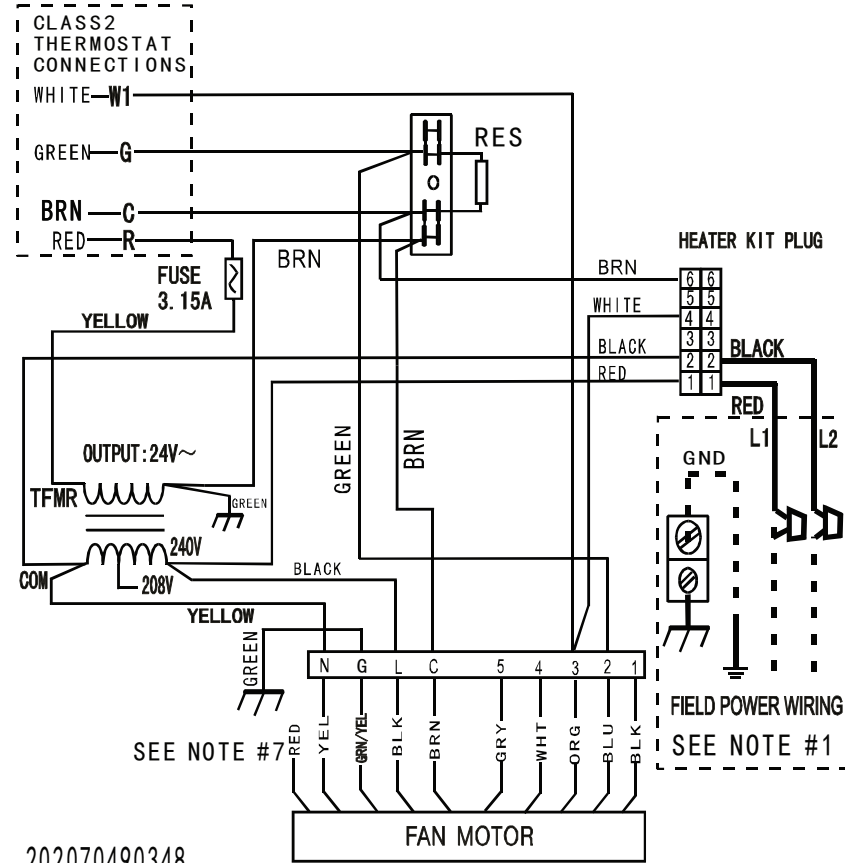
FIELD POWER WIRING

CAUTION:

NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V TO GROUND

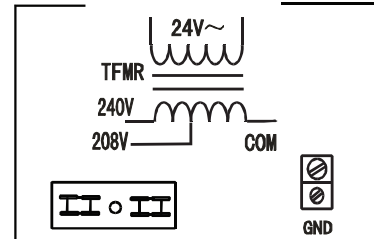
ATTENTION:

NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150V ALA TERRE



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COMPONENT ARRANGEMENT



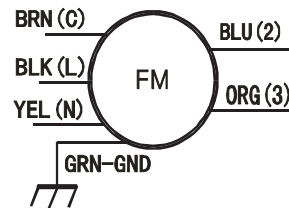
SPEED TAP SELECTION

- 1 LOW
- 2 MEDIUM LOW
- 3 MEDIUM
- 4 MEDIUM HIGH
- 5 HIGH

SEE NOTE #5, #6 & #8.

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: Connect R To R, G To G, Etc. See Outdoor Instruction For Details.
- 5: To Change Speed Tap, Move Green Wire Desired Terminal.
- 6: See Airflow Tables For Tap Usage.
- 7: Factory Wires May Be Present, DO NOT USE.
- 8: Taps 2 & 4 Have a 90s Delay Off, Taps 1, 3 & 5 are 30s.



TFMR TRANSFORMER
FM FAN MOTOR
GND GROUND
RES RESISTOR
- - - FIELD POWER WIRING

Fig. 25 - FFMANP(019, 031)

A14323

SCHEMATIC DIAGRAM

SEE RATING PLATE FOR VOLTS&HERTZ

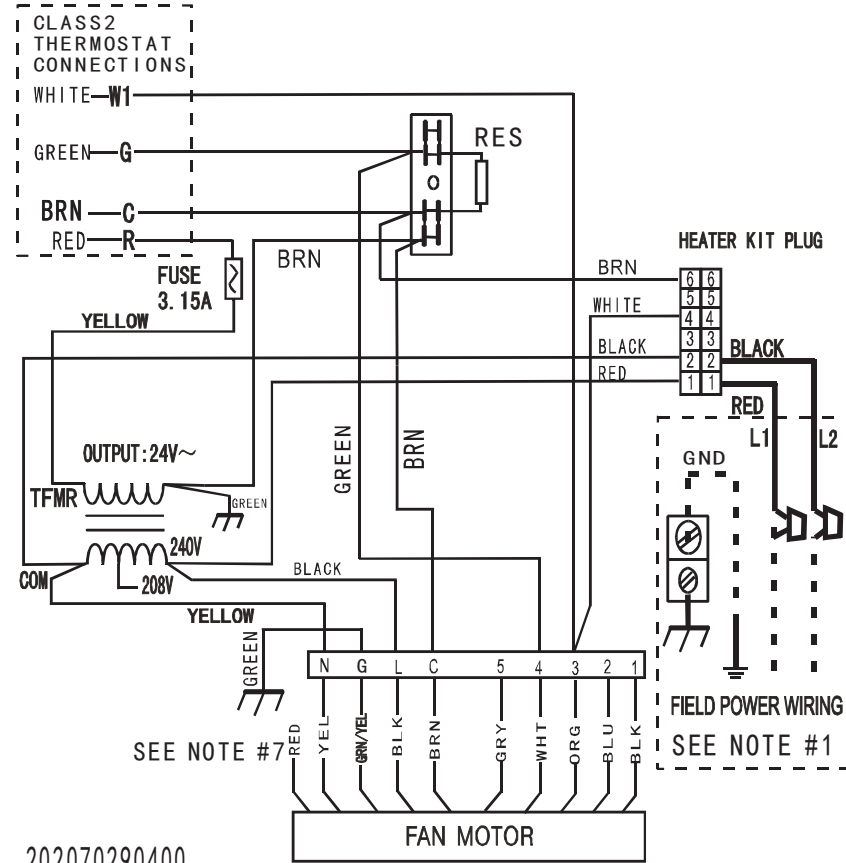
FIELD POWER WIRING

CAUTION:

NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V TO GROUND

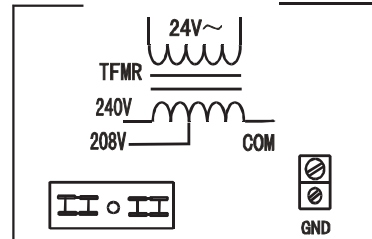
ATTENTION:

NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150V A LA TERRE



202070290400

COMPONENT ARRANGEMENT



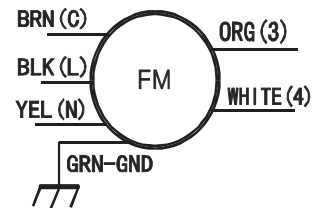
SPEED TAP SELECTION

- 1 LOW
- 2 MEDIUM LOW
- 3 MEDIUM
- 4 MEDIUM HIGH
- 5 HIGH

SEE NOTE #5, #6 & #8.

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: Connect R To R,G To G,Etc.See Outdoor Instruction For Details.
- 5: To Change Speed Tap,Move Green Wire Desired Terminal.
- 6: See Airflow Tables For Tap Usage.
- 7:Factory Wires May Be Present,DO NOT USE.
- 8: Taps 2 & 4 Have a 90s Delay Off, Taps 1, 3 & 5 are 30s.



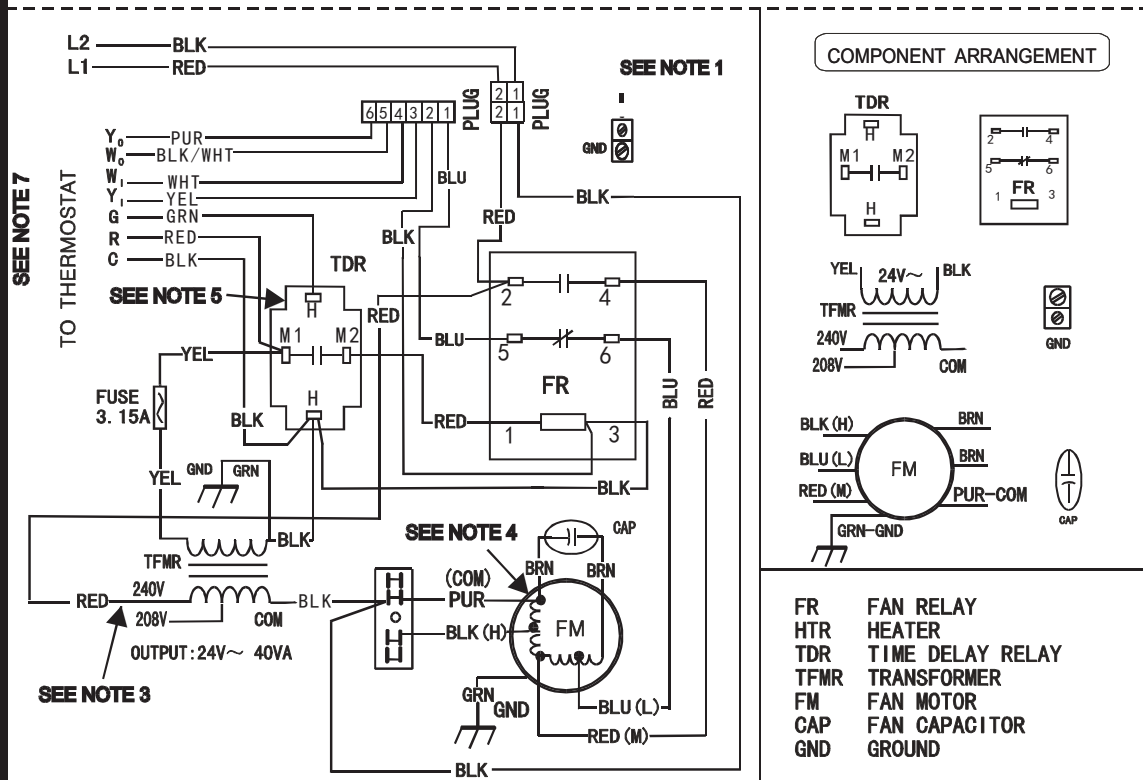
TFMR TRANSFORMER
FM FAN MOTOR
GND GROUND
RES RESISTOR
- - - FIELD POWER WIRING

Fig. 26 - FFMANP(025, 037)

A14324

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



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. Fan coils equipped with electric heater connect power supply to terminal block. Cooling controls wiring not used with electric heaters.
- 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 connected to FR #6. Always connect the unused FM wire to the dummy terminal block.
- 5: TDR has a 1-20s on delay when "G" is energized and a 50-70s off delay when "G" is de-energized.
- 6: Connect R to R, G to G, etc. See outdoor or indoor instructions for details.

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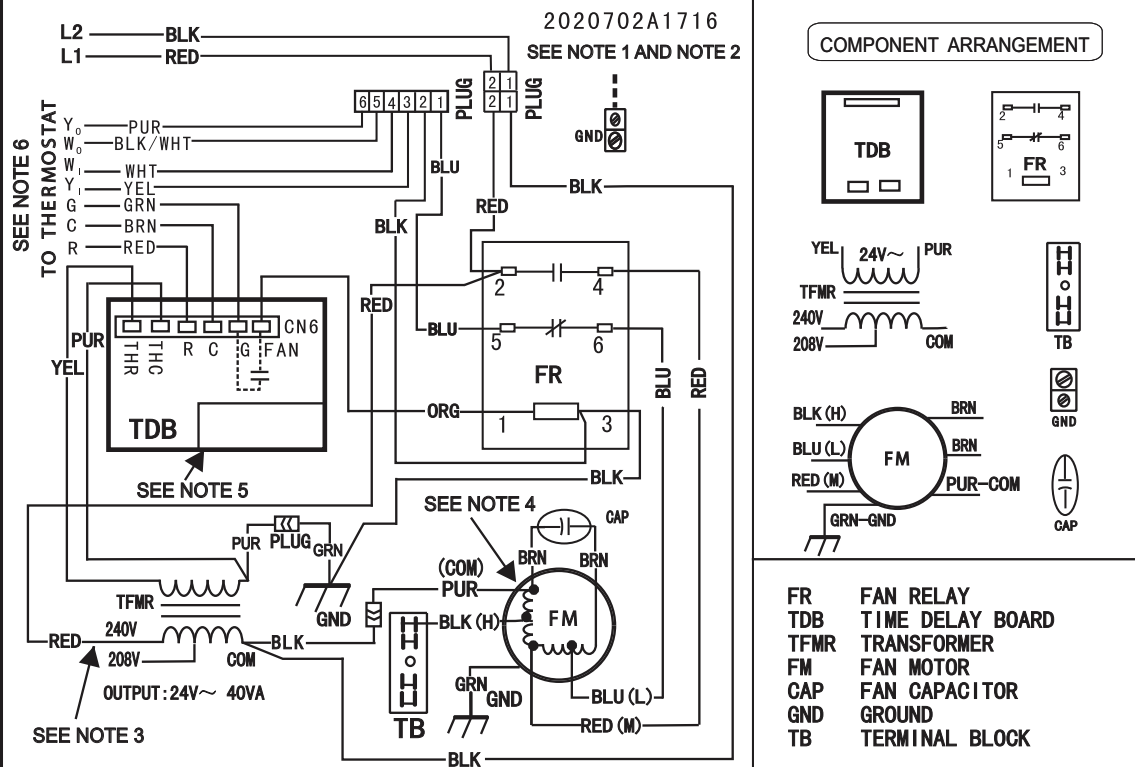
Fig. 27 - FPM(A,B)N(U,C) with Time Delay Relay

A14325

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

ELECTRIC HEAT WIRING CONNECTION (WHEN APPLIED)



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. Fan coils equipped with electric heater connect power supply to terminal block. Cooling controls wiring not used with electric heaters.
- 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 connected to FR #6. Always connect the unused FM wire to the dummy terminal block.
- 5: TDB has a 90-100s off delay when "G" is de-energized.
- 6: Connect R to R, G to G, etc. See outdoor or indoor instructions for details.
- 7: N.E.C. Class 2, 24volts.

Fig. 28 - FPM(A,B)N(C,U) with Time Delay Board

A170018

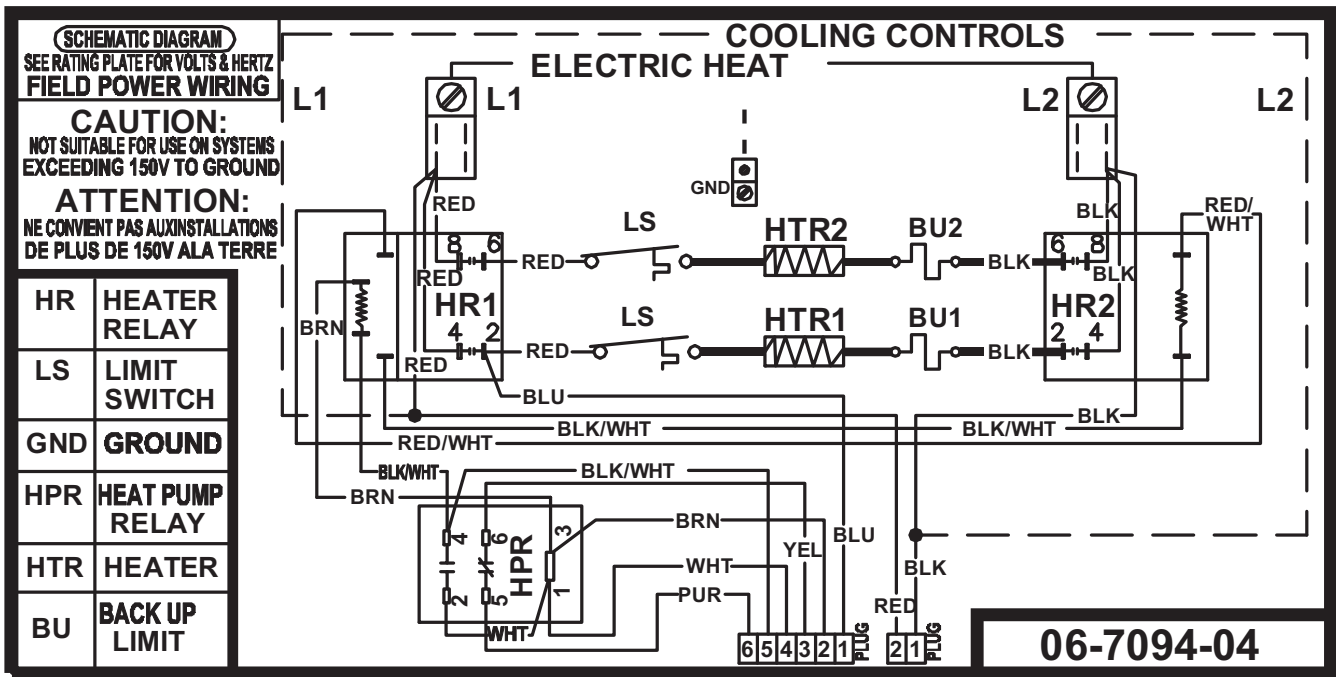


Fig. 29 - EHK3 With Heater Relays

A190016

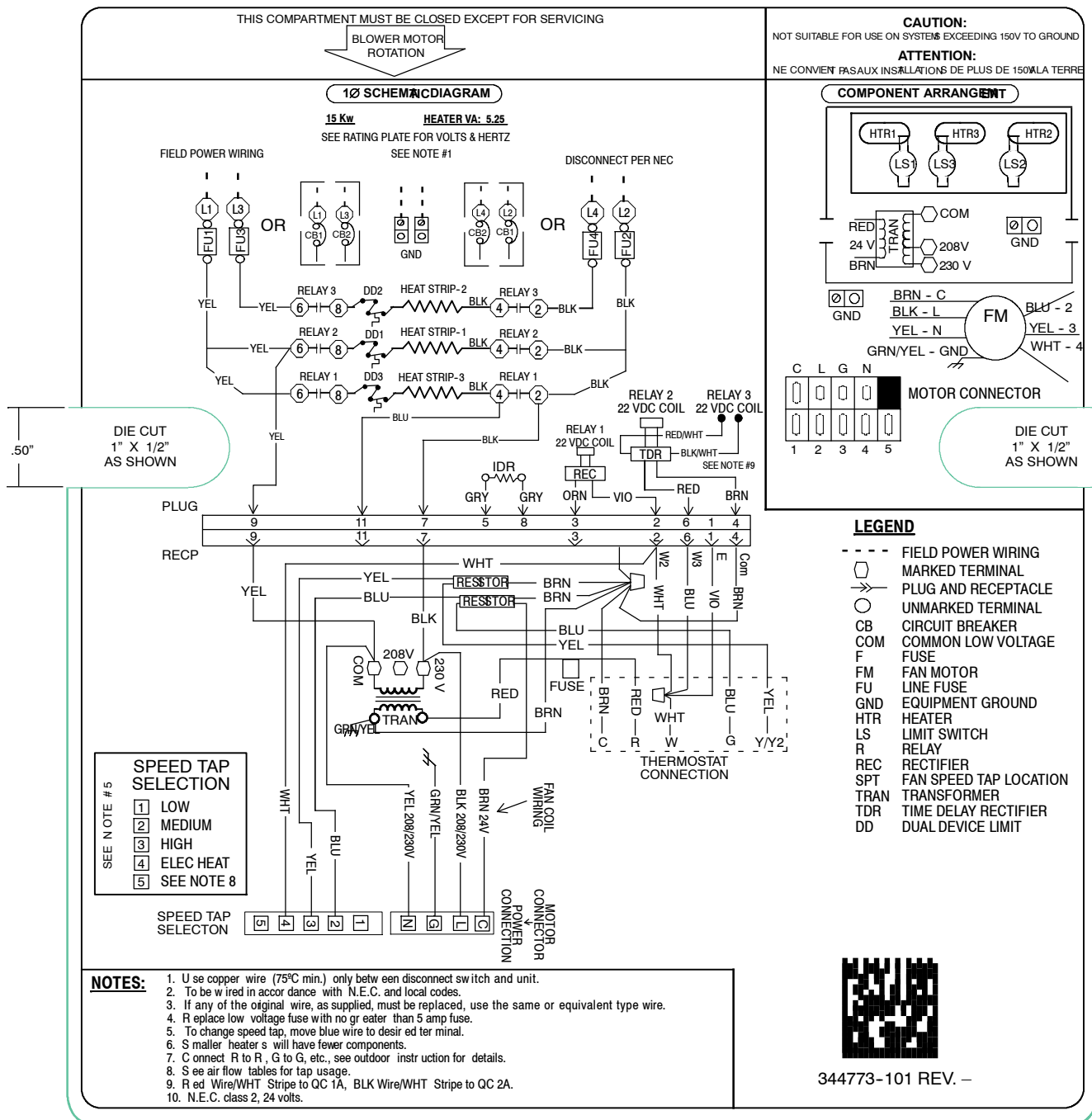


Fig. 31 - FZ4A, 5 Ton, with MKFCEH1501F15B Heater

A190021

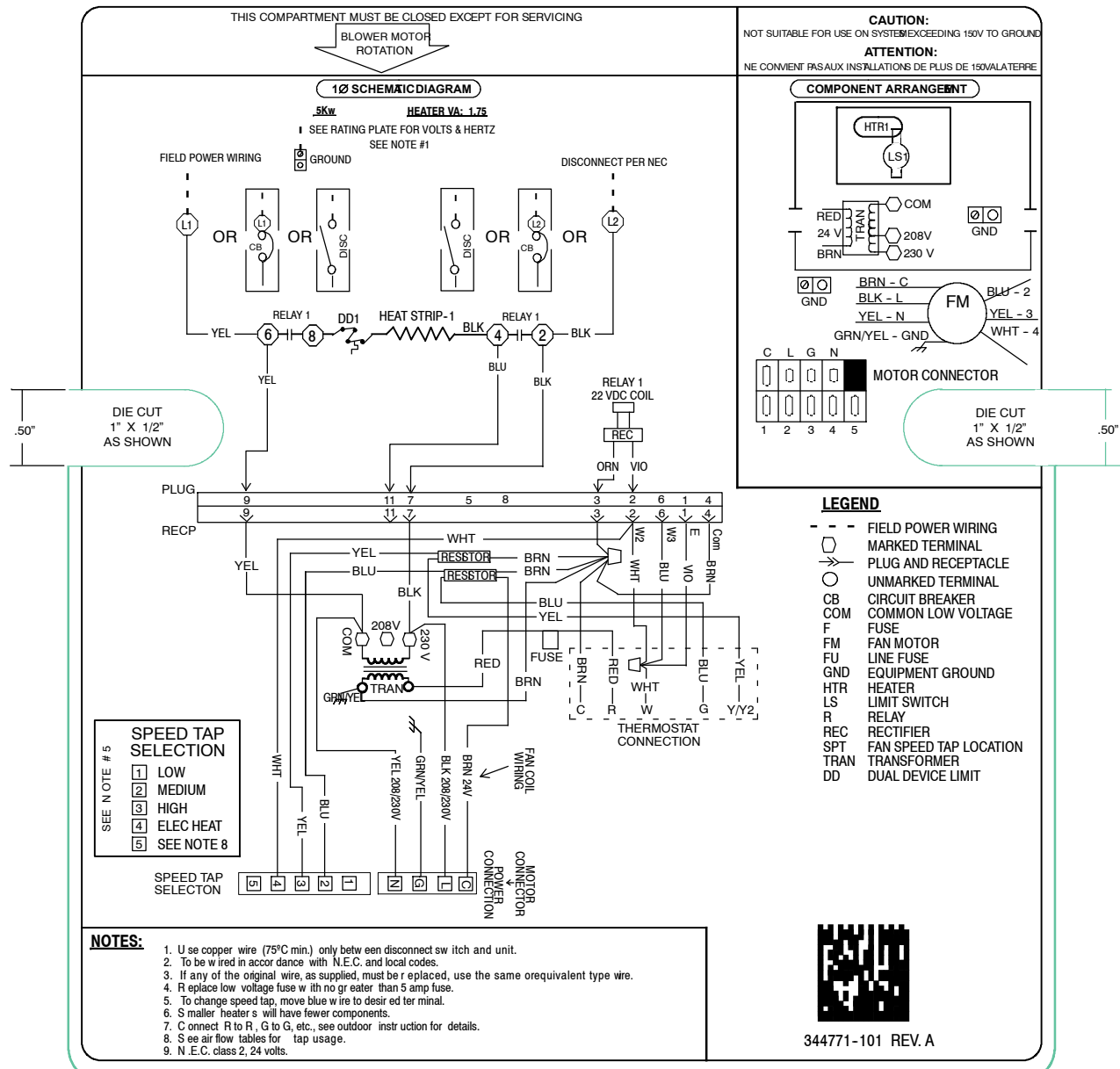


Fig. 32 - FZ4A, 2 Ton, with MKFCEH0501N05B Heater

A190019

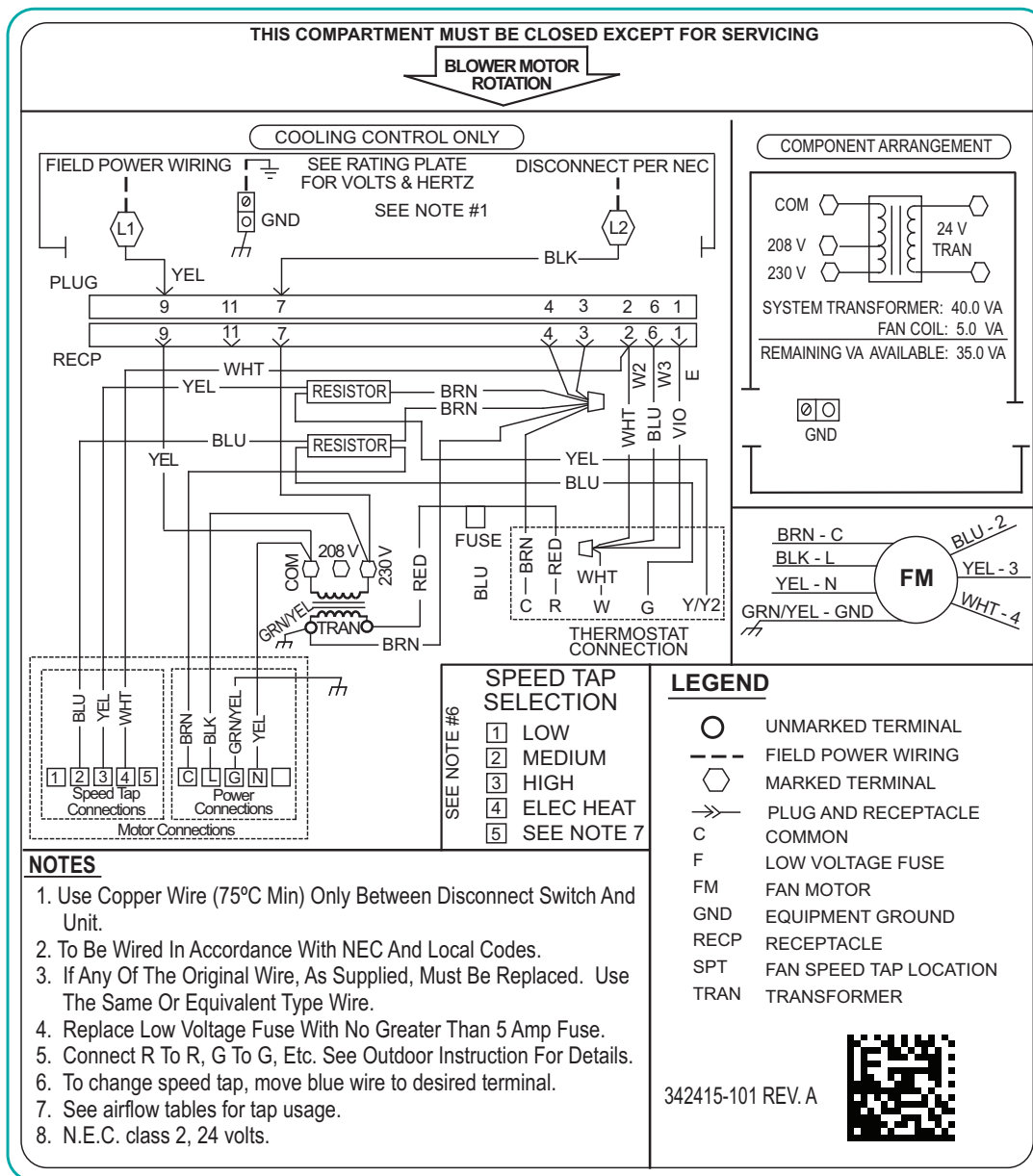


Fig. 33 - FZ4A

A160101

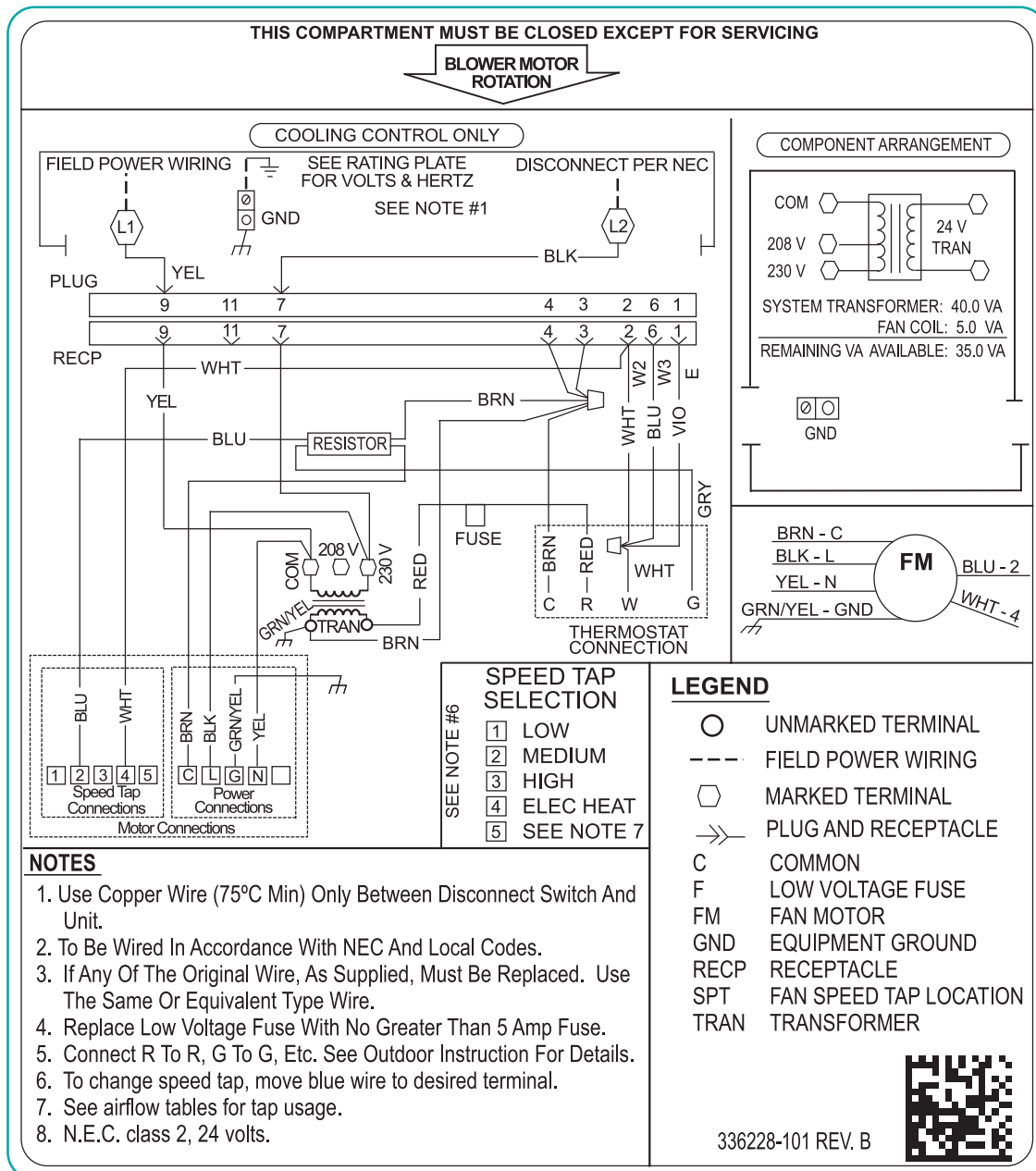


Fig. 34 - FB4(C/Q)SL

A170278

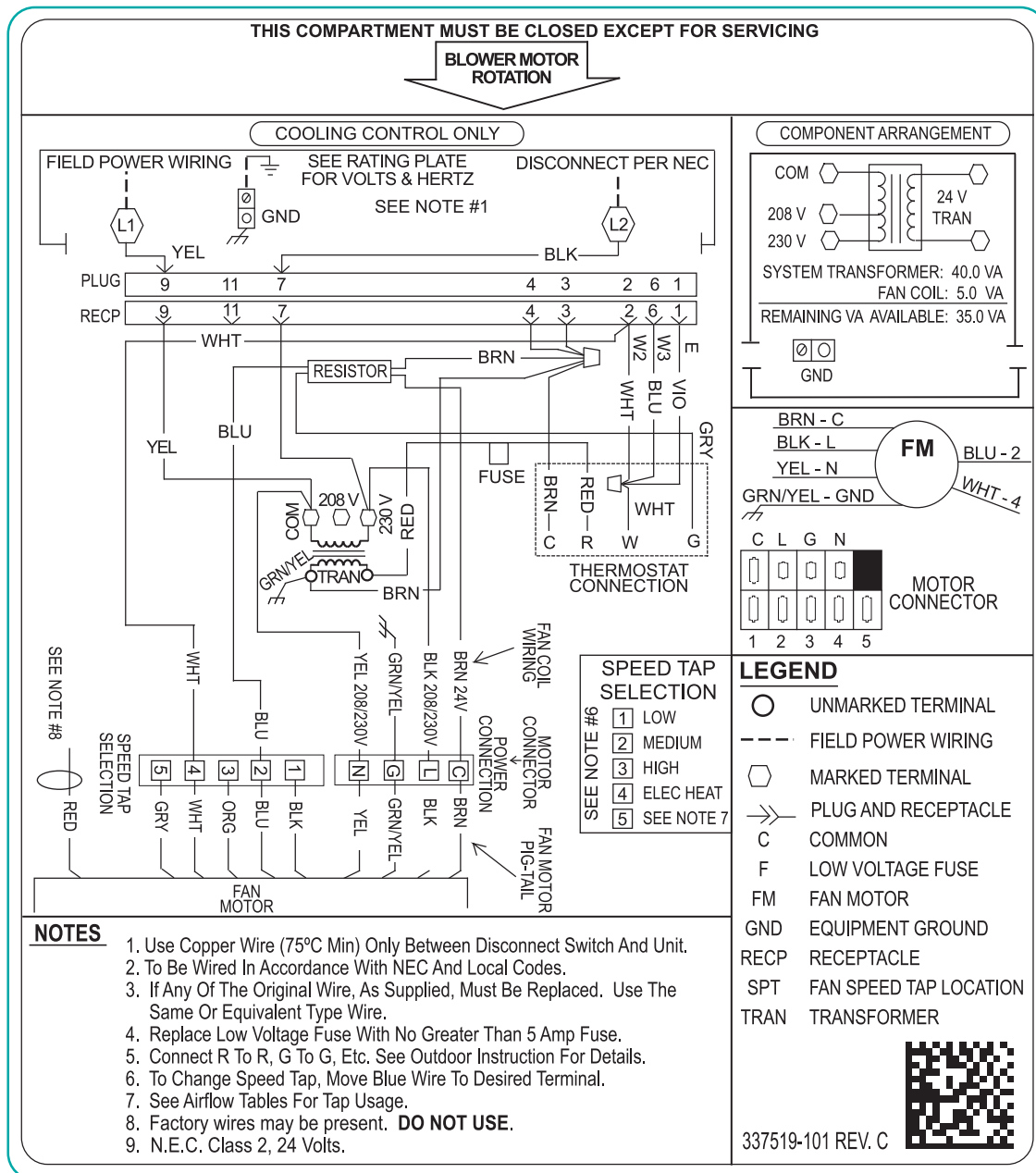


Fig. 35 - FB4(C/Q)SL

A170279

