Wiring Diagrams

UNITS WITH STARTING SERIAL NUMBERS 1307UXXXXX AND LATER

INDEX

TYPE	UNIT	VOLTAGE	NUMBER	FIG. NO.
Power Schematic	48ZG,ZN030-050 50ZG,ZN,Z2,Z3030-050	208/203-3-60, 460-3-60, 380-3-60, 400-3-50	50ZZ500356	1
		575-3-60	50ZZ500357	2
	48ZG,ZN055-075 50ZG,ZN,Z2,Z3055-075	208/203-3-60, 460-3-60, 380-3-60, 400-3-50	50ZZ500352	3
		575-3-60	50ZZ500353	4
	48ZT,ZW075 50ZT,ZW,ZX,ZZ075	460-3-60	50ZZ500364	5
		575-3-60	50ZZ500365	6
	48Z6,Z8075 50Z6,Z7,Z8,Z9075	460-3-60	50ZZ500361	7
		575-3-60	50ZZ500986	8
	48ZG,ZN090-105 50ZG,ZN,Z2,Z3090-105	460-3-60	50ZZ500359	9
		575-3-60	50ZZ500360	10
	48ZT,ZW090-105 50ZT,ZW,ZX,ZZ090-105	460-3-60	50ZZ500366	11
		575-3-60	50ZZ500367	12
	48Z6,Z8090-105 50Z6,Z7,Z8,Z9090-105	460-3-60	50ZZ500363	13
		575-3-60	50ZZ500358	14
Input/Output Connections (MBB)	All	All	50ZZ500345	15
Input/Output Connections (RCB,ECB,CEM,SCB)	All	All	50ZZ500346	16
Control Wiring	48ZG,ZN030-050	All	50ZZ500355	17
	48ZG,ZN055-105 48ZT,ZW,Z6,Z8075-105	All	50ZZ500349	18
	50ZG,ZN,Z2,Z3030-105 50ZT,ZW,ZX,ZZ,Z6,Z7,Z8,Z9075-105	All	50ZZ500348	19
Power Wiring (115-v)	48ZG,ZN030-105 48ZT,ZW,Z6,Z8075-105	All	50ZZ500351	20
	50ZG,ZN,Z2,Z3030-105 50ZT,ZW,ZX,ZZ,Z6,Z7,Z8,Z9075-105	All	50ZZ500350	21
Gas Heat Section	48ZG,ZN030-050	All	50ZZ500354	22
	48ZG,ZN055-105 48ZT,ZW,Z6,Z8075-105	All	50ZZ500347	23
Component Arrangement	48ZG,ZN030-050 50ZG,ZN,Z2,Z3030-050	All	50ZZ500601 50ZZ501012	24
	48ZG,ZN055-070 50ZG,ZN,Z2,Z3055-070	All	50ZZ500422 50ZZ500425	25
	48ZG,ZN,ZT,ZW,Z6,Z8075-105 50ZG,ZN,ZT,ZW,ZX,ZZ,Z2,Z3,Z6,Z7,Z8,Z9075-105	All	50ZZ500934 50ZZ500935	26

ACCESSORIES

ACCESSORY OR APPLICATION	UNIT	FIG. NO.
Space Sensor Temperature Averaging	All	27
Return Air Smoke Detector	All	15
Return Air CO_2 Sensor	All	15
Hydronic Valve Actuator	50Z	15
Outdoor Temperature Sensor	All	15
Supply Air Temperature Sensor	All	15
Return Air Temperature Sensor	All	15
Filter Status Switch	All	15
IAQ Sensor	All	15
Space Temperature Sensor	All	15
CCN and LEN Connections	All	15
Fire Shutdown	All	15
Hydronic Heat Freezestat	50Z	16
Fan Status Switch	All	16
Outdoor Air Enthalpy Switch	All	16
Remote Occupied Switch	All	16
Plenum Pressure Safety Switch	All	16
IAQ Switch*	All	16
Fire Purge*	All	16
Fire Evacuation*	All	16
Fire Pressurization*	All	16
Loadshed*	All	16
Redline*	All	16
Demand Limit*	All	16
SAT Reset*	All	16
OAQ Sensor*	All	16
Outdoor Air Humidity Sensor*	All	16
Indoor Space Humidity Sensor*	All	16
Return Air Humidity Sensor*	All	16
Heat Interlock Relay	All	17-19
Humidifier	All	17-19

* The accessory can only be installed if the accessory/optional CEM board is installed.

NOTE: Accessory wiring is shown on the unit wiring diagrams. Refer to the appropriate drawing for accessory wiring.

ELECTRIC HEAT POWER DIAGRAMS

UNIT SIZES 50Z	ELEC CHARACTERISTICS	NOMINAL kW	FIG. NO.	DRAWING NO.
030-050	208/230-3-60	36 72 108	28 29 30	50ZZ500390 50ZZ500389 50ZZ500532
	460-3-60, 380-3-60, 400-3-50	36 72 108	31 31 32	50ZZ500392 50ZZ500392 50ZZ500533
	575-3-60	36 72 108	33 33 32	50ZZ500394 50ZZ500394 50ZZ500533
055-070	208/230-3-60	36 72 108	28 29 34	50ZZ500390 50ZZ500389 50ZZ500388
	460-3-60, 380-3-60, 400-3-50	36 72 108	31 31 35	50ZZ500392 50ZZ500392 50ZZ500391
	575-3-60	36 72 108	33 33 36	50ZZ500394 50ZZ500394 50ZZ500393
075-105	460-3-60	108 216	37 38	50DW411978 50DW411785

MAIN CONTROL BOARD (MBB) INPUTS AND OUTPUTS

POINT NAME	POINT DESCRIPTION	TYPE OF I/O	I/O POINT NAME	CONNECTOR PIN NO.
INPUTS				
IGCIFO	IGC IFO input	Switch Input	DI1	J6, 3-4
FSD	Fire Shutdown Switch	Switch Input	DI2	J6, 5-6
G	Thermostat 'G' Input	Switch Input	DI3	J7, 1-2
W2	Thermostat 'W2' Input	Switch Input	DI4	J7, 3-4
W1	Thermostat 'W1' Input	Switch Input	DI5	J7, 5-6
Y2	Thermostat 'Y2' Input	Switch Input	DI6	J7, 7-8
Y1	Thermostat 'Y1' Input	Switch Input	DI7	J7, 9-10
CSB_A1	Compressor A1 Lockout — Current Sensor Board	Digital Input	DIG1	J9, 10-12
CSB_B1	Compressor B1 Lockout — Current Sensor Board	Digital Input	DIG2	J9, 7-9
CSB_A2	Compressor A2 Lockout — Current Sensor Board	Digital Input	DIG3	J9, 4-6
CSB_B2	Compressor B2 Lockout — Current Sensor Board	Digital Input	DIG4	J9, 1-3
DP_A	Discharge Pressure Circuit A	Pressure Transducer	AN1	J8, 21-23
DP_B	Discharge Pressure Circuit B	Pressure Transducer	AN2	J8, 24-26
SP_A	Suction Pressure Circuit A	Pressure Transducer	AN3	J8, 15-17
SP_B	Suction Pressure Circuit B	Pressure Transducer	AN4	J8, 18-20
RAT	Return Air Temperature	10 K Thermistor	AN5	J8, 9-10
SAT	Air Temperature Leaving Supply Fan	10 K Thermistor	AN6	J8, 11-12
OAT	Outside Air Temperature	10 K Thermistor	AN7	J8, 13-14
SPT	Space Temperature	10 K Thermistor	AN8	J8, 1-2
SPTO	Space Temperature Offset	10 K Thermistor	AN9	J8, 3-4
IAQ, IAQMINOV	IAQ Input	4-20 ma	AN10	J8, 5-6
FLTS	Filter Status Switch	Switch Input	AN11	J8, 7-8
OUTPUTS				
CMPB2	Compressor B2	Relay	RLY 1	J10, 20-21
CMPB1	Compressor B1	Relay	RLY 2	J10, 22-23
CMPA2	Compressor A2	Relay	RLY 3	J10, 24-25
CMPA1	Compressor A1	Relay	RLY 4	J10, 26-27
CONDFANB	Condenser Fan Circuit B	Relay	RLY 5	J10, 10-11
CONDFANA	Condenser Fan Circuit A	Relay	RLY 6	J10, 12-13
HS2	Heat Stage 2	Relay	RLY7	J10, 14-16
HS1	Heat Stage 1	Relay	RLY 8	J10, 17-19
PE1	Power Exhaust #1 (MPE/PR)	Relay	RLY 9	J10, 4-6
SFAN	Indoor Fan (VAV)/Supply Fan (CV)	Relay	RLY 10	J10, 7-9
ALRM	Alarm Relay	Relay	RLY 11	J10, 1-3

ROOFTOP CONTROL BOARD (RCB) INPUTS AND OUTPUTS

POINT NAME	POINT DESCRIPTION	TYPE OF I/O	I/O POINT NAME	CONNECTOR PIN NO.
INPUTS				
RMTIN	Remote Occupancy Switch	Switch Input	DI1	J4, 1-2
ENTH	Outdoor Enthalpy Switch	Switch Input	DI2	J4, 3-4
SFS	Fan Status Switch	Switch Input	DI3	J4, 5-6
CIRCAHPS	Compressor A1 HPS Feedback	Switch Input	DI4	J4, 7-8
CIRCBHPS	Compressor B1 HPS Feedback	Switch Input	DI5	J4, 9-10
FRZ	Hydronic Heat Freeze Stat	Switch Input	DI6	J4, 11-12
BP	Building Pressure	Pressure Transducer	AN1	J5, 1-3
SP	Supply Duct Pressure	Pressure Transducer	AN2	J5, 4-6
CCT	Air Temp Leaving Evaporator Coil	10 K Thermistor	AN3	J6, 1-2
Not Used	—	—	AN4	J6, 3-4
Not Used	—	—	AN5	J6, 5-6
Not Used	—	—	AN6	J6, 7-8
OUTPUTS				
SFAN_VFD	Supply Fan VFD Speed	4 - 20 ma	AO1	J9, 1-2
PULSCFAB	Pulsed Condenser Fan AB	Digital	PP/MP	J7, 1-3
UNL_1_A1	Unloader A1 (VAV)	Relay	RLY1	J8, 1-3
UNL_2_A1	Unloader A2 (VAV)	Relay	RLY 2	J8, 4-6
PE2/ HIR	Power Exhaust 2 (CV) — HIR (VAV)	Relay	RLY 3	J8, 7-9
UNL_1_B1	Unloader B1 (VAV)	Relay	RLY 4	J8, 10-12
HUMIDRLY	Humidifier Relay	Relay	RLY 5	J8, 13-15
UNL_2_B1	Unloader B2 (VAV)	Relay	RLY 6	J8, 16-18

ECONOMIZER CONTROL BOARD (ECB) INPUTS AND OUTPUTS

POINT NAME	POINT DESCRIPTION	TYPE OF I/O	I/O POINT NAME	CONNECTOR PIN NO.
INPUTS				
PPS	Plenum Pressure Switch	Switch Input	DI1	J4, 1-2
Not Used	—	—	DI2	J4, 3-4
Not Used	—	—	DI3	J4, 5-6
Not Used	—	—	DI4	J4, 7-8
Not Used	—	—	DI5	J4, 9-10
Not Used	—	—	DI6	J4, 11-12
SACFM	Supply Air CFM 4-20	Pressure Transducer	AN1	J5, 1-3
RACFM	Return Air CFM 4-20	Pressure Transducer	AN2	J5, 4-6
Not Used	—	—	AN3	J6, 1-2
Not Used	—	—	AN4	J6, 3-4
Not Used	—	—	AN5	J6, 5-6
Not Used	—	—	AN6	J6, 7-8
OUTPUTS				
EFAN_VFD	Building Pressure VFD Speed	4 - 20 ma	AO1	J9, 1-2
Not Used	—	—	PP/MP	J7, 1-3
PE2_VFD	Power Exhaust 2	Relay	RLY1	J8, 1-3
Not Used	—	—	RLY 2	J8, 4-6
Not Used	—	—	RLY 3	J8, 7-9
Not Used	—	—	RLY 4	J8, 10-12
Not Used	—	—	RLY 5	J8, 13-15
Not Used	—	—	RLY 6	J8, 16-18

CONTROLS EXPANSION MODULE (CEM) INPUTS AND OUTPUTS

POINT NAME	POINT DESCRIPTION	TYPE OF I/O	I/O POINT NAME	CONNECTOR PIN NO.
INPUTS				
			DI 1	J7, 1-2
DMD_SW1	Demand Limit 1 — Redline	Switch	DI 2	J7, 3-4
DMD_SW2	Demand Limit 2 — Loadshed	Switch	DI 3	J7, 5-6
PRES	Pressurization	Switch	DI 4	J7, 7-8
EVAC	Evacuation	Switch	DI 5	J7, 9-10
PURG	Purge	Switch	DI 6	J7, 11-12
IAQIN	IAQ Switch	Switch	DI 7	J7, 13-14
OACFM	Outside Air CFM — 4-20 (VAV)	4 - 20 ma	AN7	J6, 1-3
OARH	Outside Air RH (VAV)	4 - 20 ma	AN8	J6, 4-6
SPRH	Space RH	4 - 20 ma	AN9	J6, 7-9
RARH	Return Air RH	4 - 20 ma	AN10	J6, 10-12
DMDLMTMA	Demand Limit — 4-20	4 - 20 ma	AN1	J5, 1-2
SATRESMA	SAT Reset 4-20 (VAV)	4 - 20 ma	AN2	J5, 3-4
OAQ	OAQ — 4-20	4 - 20 ma	AN3	J5, 5-6
Not Used	—	—	AN4	J5, 7-8
Not Used	—	—	AN5	J5, 9-10
Not Used	—	—	AN6	J5, 11-12

STAGED GAS CONTROL BOARD (SCB) INPUTS AND OUTPUTS

POINT NAME	POINT DESCRIPTION	TYPE OF I/O	I/O POINT NAME	CONNECTOR PIN NO.
INPUTS				
LIMSWTMP	Limit Switch Temp	10 K Thermistor	AN1	J5, 1-3
LAT1SGAS	Supply Air Temp #1	10 K Thermistor	AN2	J5, 4-6
LAT2SGAS	Supply Air Temp #2	10 K Thermistor	AN3	J5, 7-9
LAT3SGAS	Supply Air Temp #3	10 K Thermistor	AN4	J5, 10-12
Not Used	—	—	AN5	J5, 13-15
Not Used	—	—	AN8	J6, 1-3
Not Used	—	—	AN7	J6, 4-6
Not Used	—	—	AN6	J6, 7-9
Not Used	—	—	AN9	J7, 1-2
Not Used	—	—	AN10	J7, 3-4
OUTPUTS				
HTSGCALC	Staged Gas Capacity Calc	0-20 mA OUT	AO1	J8, 1-2
Not Used	—	—	AO2	J8, 3-4
HS3	Relay 3 W1 Gas Valve 2	Relay	RLY1	J9, 1-3
HS4	Relay 4 W2 Gas Valve 2	Relay	RLY 2	J9, 4-6
HS5	Relay 5 W1 Gas Valve 3	Relay	RLY 3	J9, 7-9
HS6	Relay 6 W2 Gas Valve 3	Relay	RLY 4	J9, 10-12
Not Used	—	—	RLY 5	J9, 13-15

LEGEND FOR FIG. 1-26

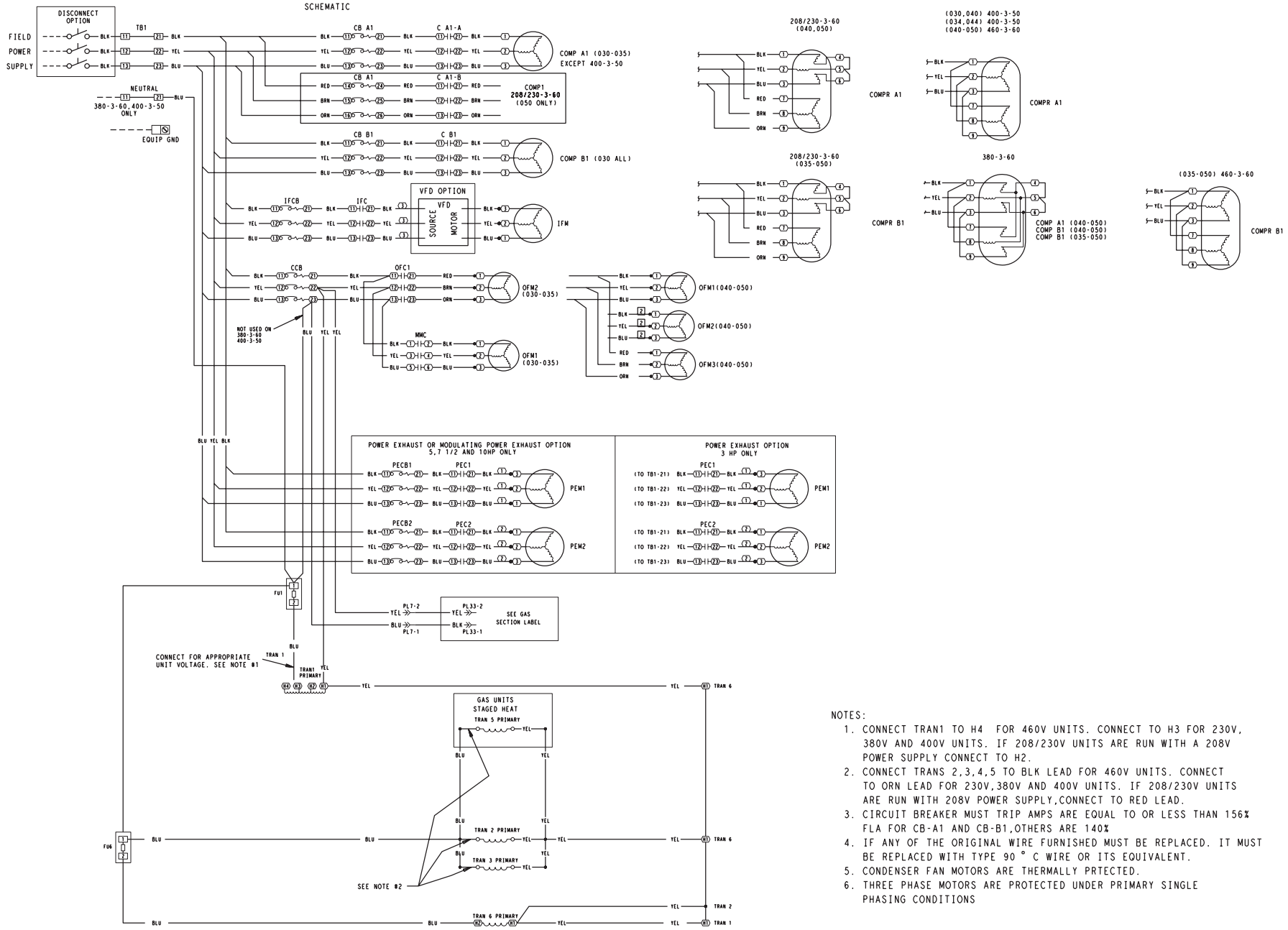
ACCSY — Accessory
ACC'Y — Accessory
AF — Airfoil
AN — Analog
APS — Air Pressure Switch
BM — Blower Motor
BR — Blower Relay
C — Compressor Contactor
CB — Compressor Circuit Breaker
CBT — Circuit Breaker, Transformer
CCB — Control Circuit Breaker
CCN — Carrier Comfort Network®
CCT — Cooling Coil Thermistor
CEM — Controls Expansion Module
CH — Crankcase Heater
CM — Combustion Motor
COMP — Compressor
CR — Control Relay
CSB — Current Sensor Board
CV — Constant Volume
DI — Digital Input
DPT — Discharge Pressure Transducer
D/S — Down Shot (Vertical Supply)
ECB — Economizer Control Board
ECON — Economizer
EQUIP — Equipment
FU — Fuse
GND — Ground
GVR — Gas Valve Relay
HC — Heater Contactor
HIR — Heat Interlock Relay
HPS — High-Pressure Switch
HS — Hall Effect Sensor
HV — High Voltage
I — Ignitor
IAQ — Indoor Air Quality
IDM — Induced Draft Motor
IFC — Indoor Fan Contactor
IFCB — Indoor Fan Circuit Breaker
IFM — Indoor Fan Motor
IGC — Integrated Gas Controller
IGV — Inlet Guide Vane
IP — Internal Protector
LEI — Local Equipment Interface
LEN — Local Equipment Network
LS — Limit Switch
MBB — Main Base Board
MGV — Main Gas Valve
MMC — Motormaster® Contactor
MMR — Motormaster Relay
MOD PE — Modulating Power Exhaust
NEC — National Electrical Code
OA — Outdoor Air
OAQ — Outdoor Air Quality
OD — Outdoor
OFC — Outdoor Fan Contactor
OFM — Outdoor Fan Motor
OPT — Option
PE — Power Exhaust
PEC — Power Exhaust Contactor
PECB — Power Exhaust Circuit Breaker
PEM — Power Exhaust Motor
PL — Plug Assembly
PPSS — Plenum Pressure Safety Switch
PTC — Positive Temperature Coefficient Power Reference
RA — Return Air
RAT — Return Air Thermistor
RCB — Rooftop Control Board
RF — Return Fan
RS — Rollout Switch
SAT — Supply Air Thermistor
SCB — Staged Gas Control Board
SEN — Sensor
SPT — Suction Pressure Transducer
STDU — Standard Tier Display Unit
S/S — Side Shot (Horizontal Supply)
TB — Terminal Block
TRAN — Transformer
T'STAT — Thermostat
U — Unloader
VAV — Variable Air Volume
VFD — Variable Frequency Drive

Terminal Block
Terminal (Unmarked)
Terminal (Marked)
Splice
Factory Wiring
Field Wiring
To indicate common potential only, not to represent wiring.
To indicate FIOP or Accessory

NOTES FOR FIG. 1, 3
1. Connect TRAN1 to H4 for 460-V units. Connect to H3 for 230-V, 380-V, and 400-V units. If 208/230-V units are run with a 208-V power supply, connect to H2.
2. Connect TRANS 2,3,4,5 to BLK lead for 460-V units. Connect to ORN lead for 230-V, 380-V, and 400-V units. If 208/230-V units are run with a 208-V power supply, connect to RED lead.
3. Circuit breaker must trip amps are equal to or less than 156% FLA for CB-A1 and CB-B1. Others are 140%.
4. If any of the original wire furnished must be replaced, it must be replaced with type 90 C wire or its equivalent.
5. Condenser fan motors are thermally protected.
6. Three-phase motors are protected under primary single phasing conditions.

NOTES FOR FIG. 2, 4, 5, 6, 7, 8
1. Circuit breaker must trip amps are equal to or less than 156% FLA for CB-A1 and CB-B1. Others are 140%.
2. If any of the original wire furnished must be replaced, it must be replaced with type 90 C wire or its equivalent.
3. Condenser fan motors are thermally protected.
4. Three-phase motors are protected under primary single phasing conditions.

NOTES FOR FIG. 9, 10, 11, 12, 13, 14
1. Circuit breaker must trip amps are equal to or less than 156% FLA for CB-A1,A2 and CB-B1,B2. Others are 140%.
2. If any of the original wire furnished must be replaced, it must be replaced with type 90 C wire or its equivalent.
3. Condenser fan motors are thermally protected.
4. Three-phase motors are protected under primary single phasing conditions.



NOTES:

1. CONNECT TRAN1 TO H4 FOR 460V UNITS. CONNECT TO H3 FOR 230V, 380V AND 400V UNITS. IF 208/230V UNITS ARE RUN WITH A 208V POWER SUPPLY CONNECT TO H2.
2. CONNECT TRANS 2,3,4,5 TO BLK LEAD FOR 460V UNITS. CONNECT TO ORN LEAD FOR 230V,380V AND 400V UNITS. IF 208/230V UNITS ARE RUN WITH 208V POWER SUPPLY,CONNECT TO RED LEAD.
3. CIRCUIT BREAKER MUST TRIP AMPS ARE EQUAL TO OR LESS THAN 156% FLA FOR CB-A1 AND CB-B1,OTHERS ARE 140%
4. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED. IT MUST BE REPLACED WITH TYPE 90 ° C WIRE OR ITS EQUIVALENT.
5. CONDENSER FAN MOTORS ARE THERMALLY PRTECTED.
6. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS

Fig. 1 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 030-050; 208/230, 460, 380, 400-V Units

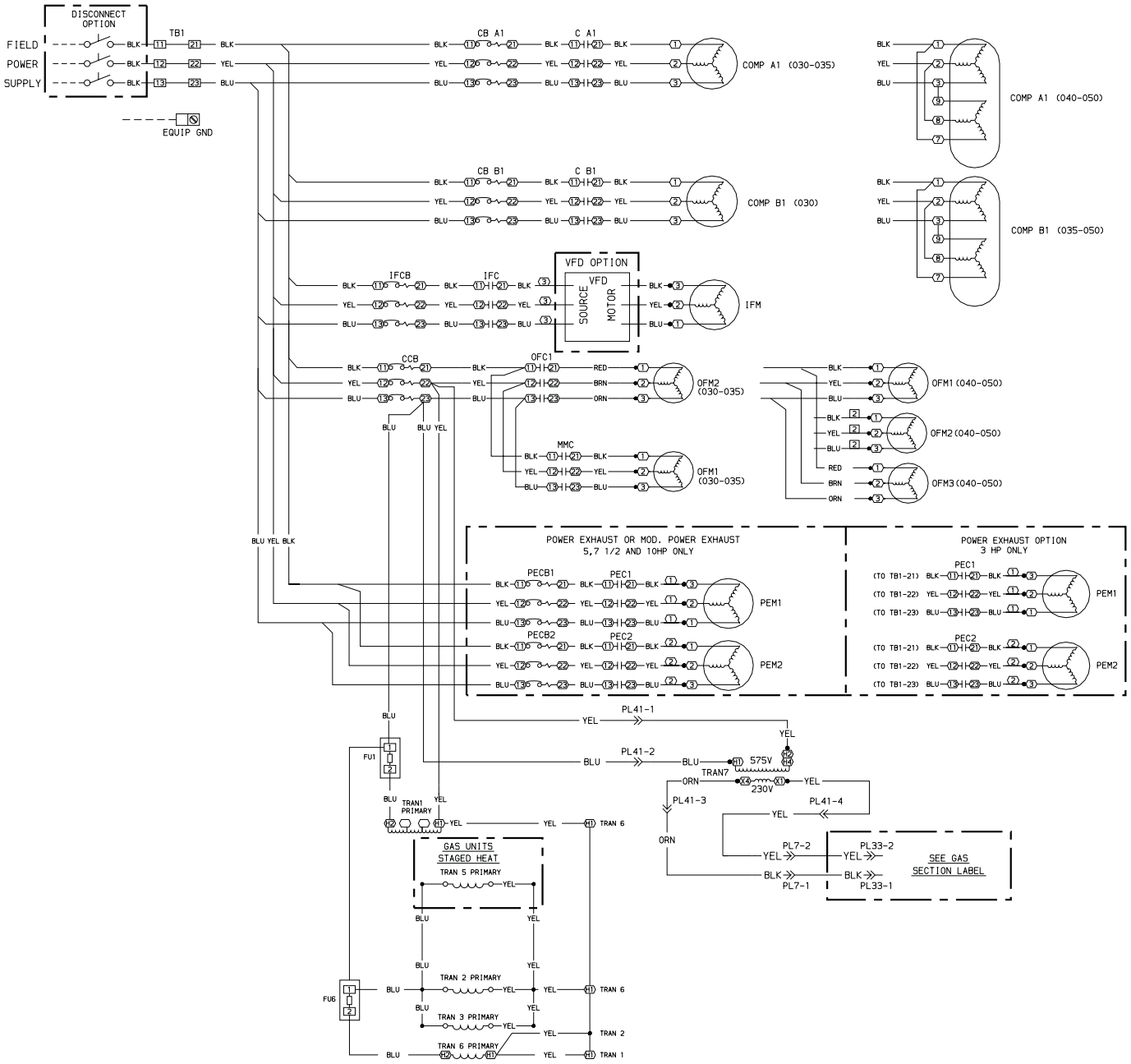


Fig. 2 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 030-050; 575-V Units

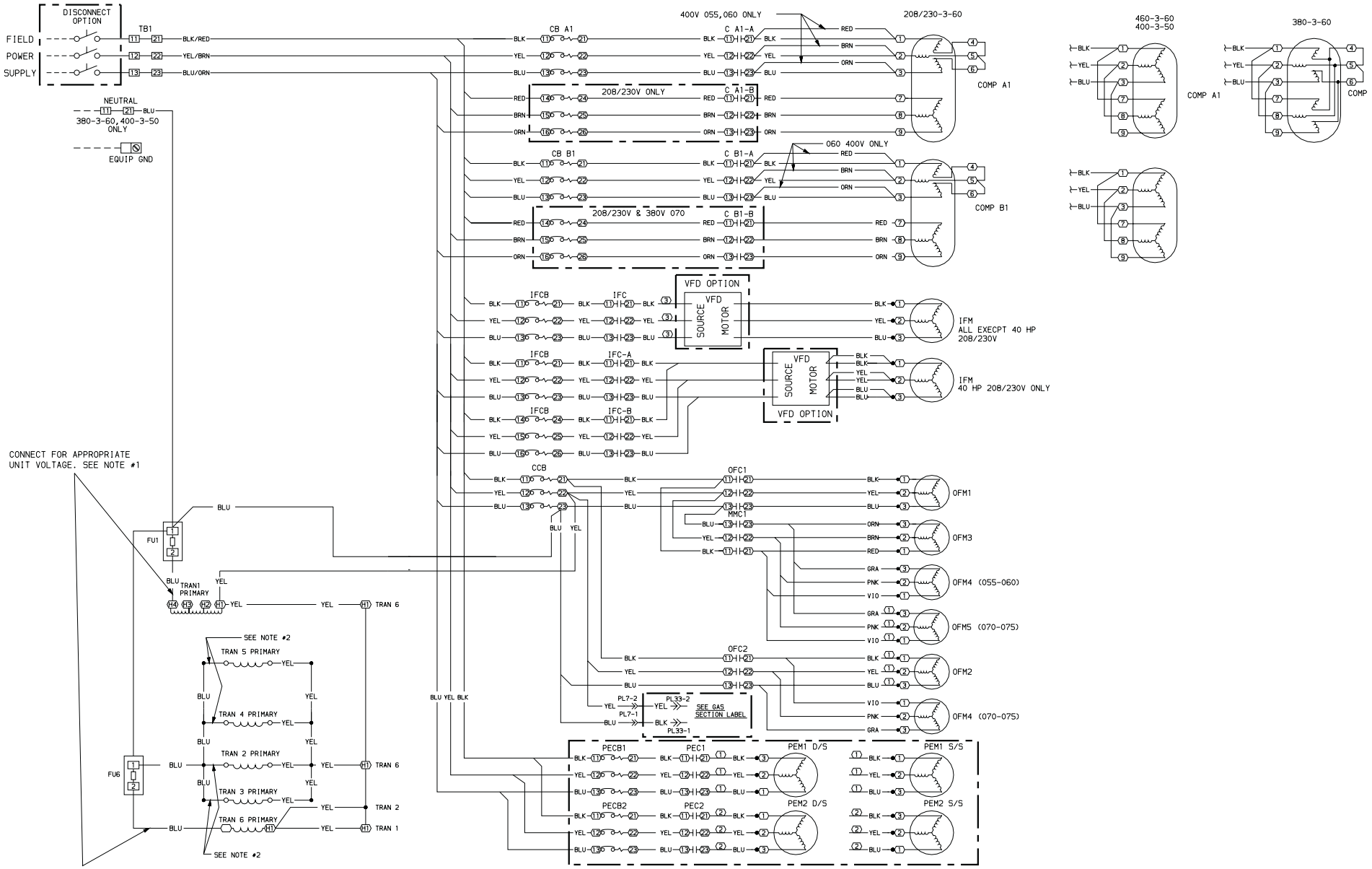


Fig. 3 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 055-075; 208/230, 460, 380, 400-V Units

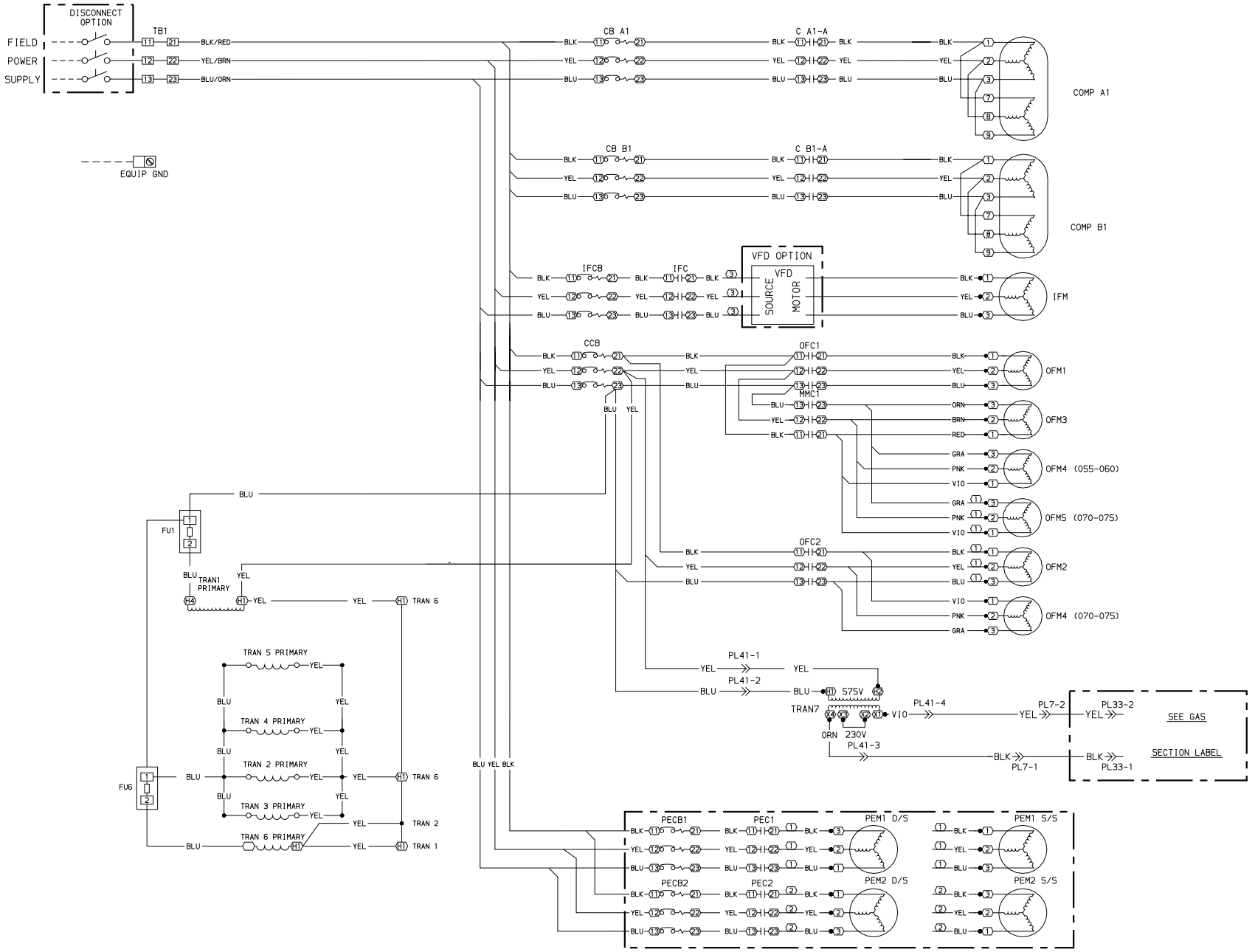


Fig. 4 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 055-075; 575-V Units

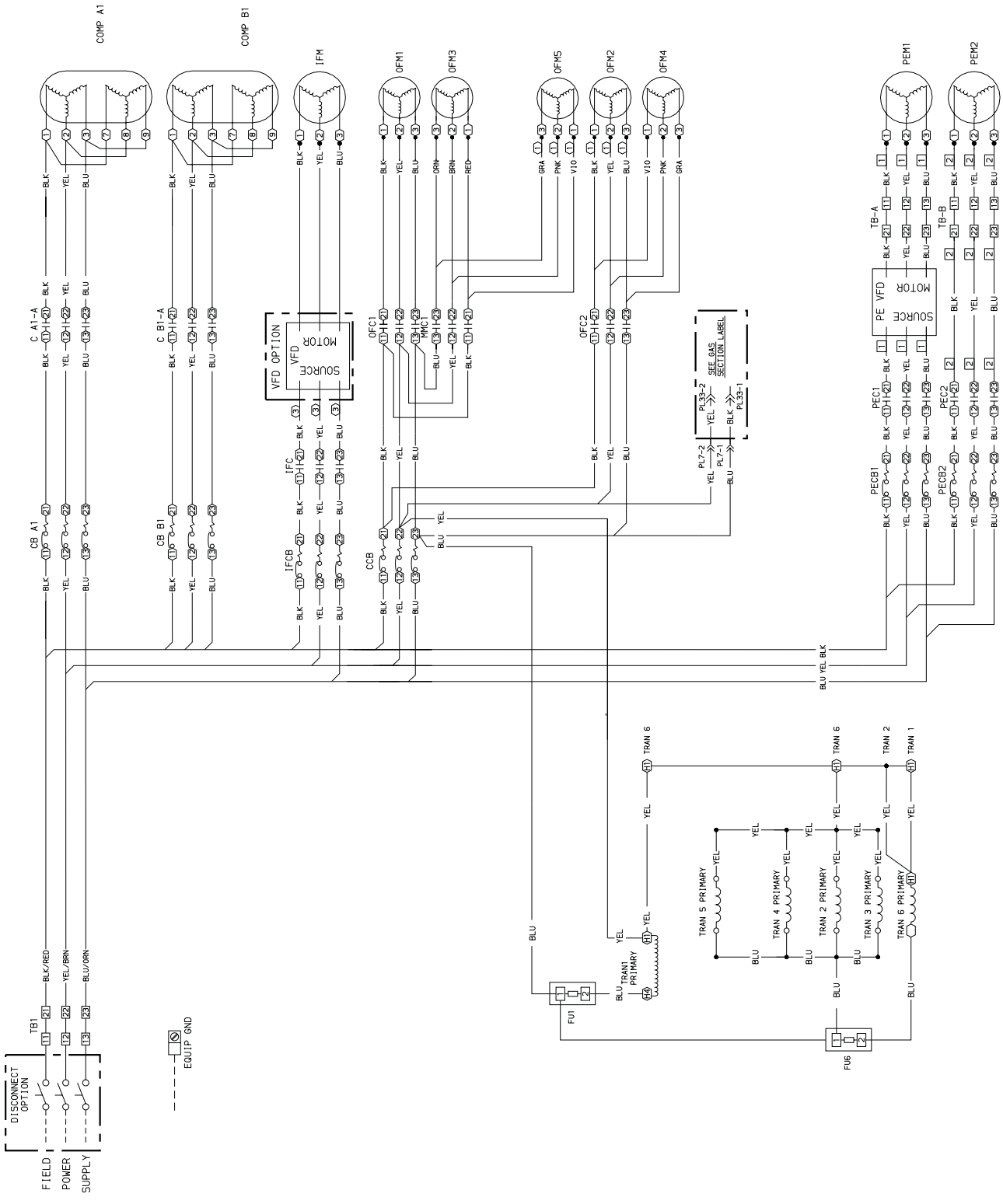


Fig. 5 — Power Schematic — 48ZT,ZW and 50ZT,ZW,ZX,ZZ075; 460-V Units

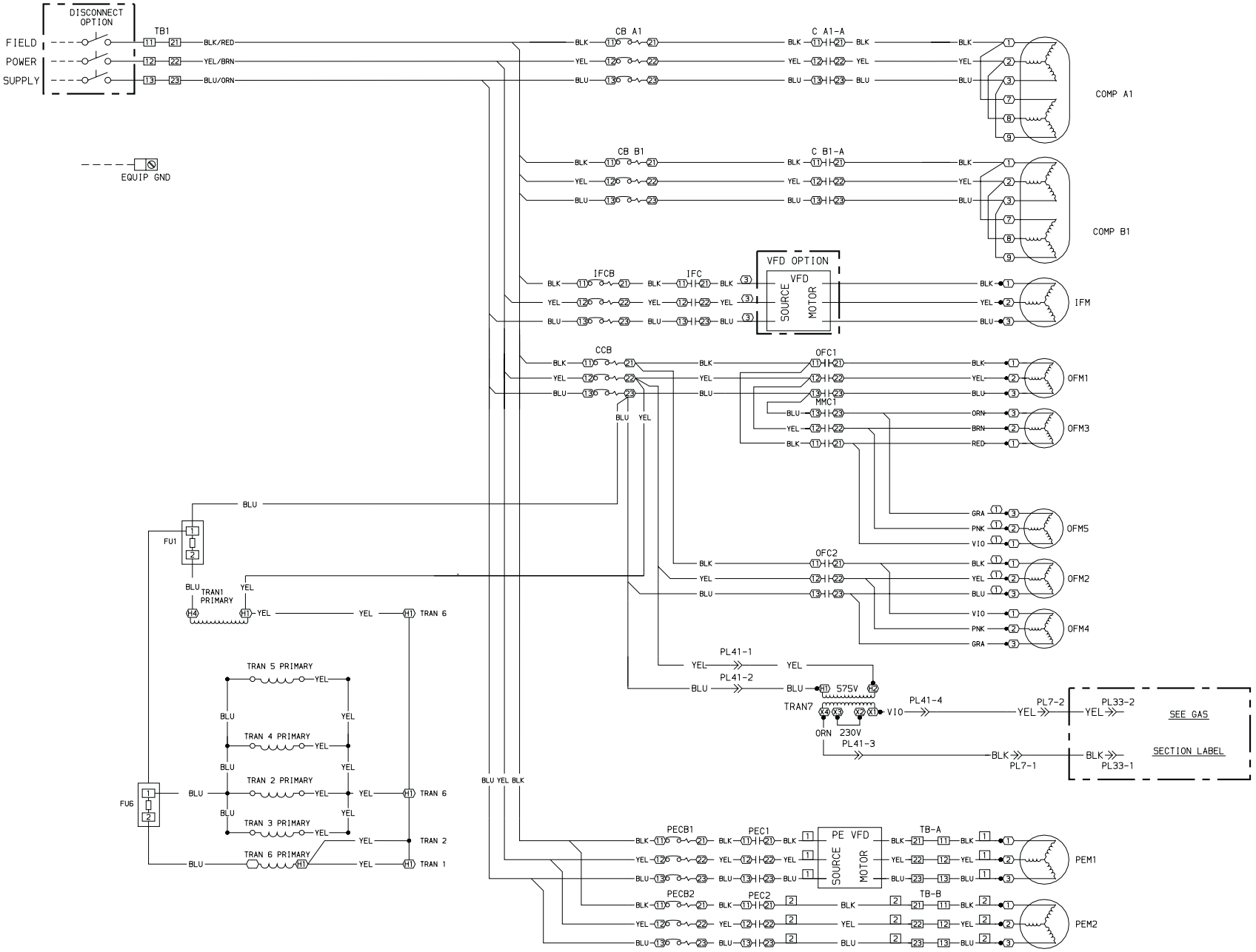


Fig. 6 — Power Schematic — 48ZT,ZW and 50ZT,ZW,ZX,ZZ 075; 575-V Units

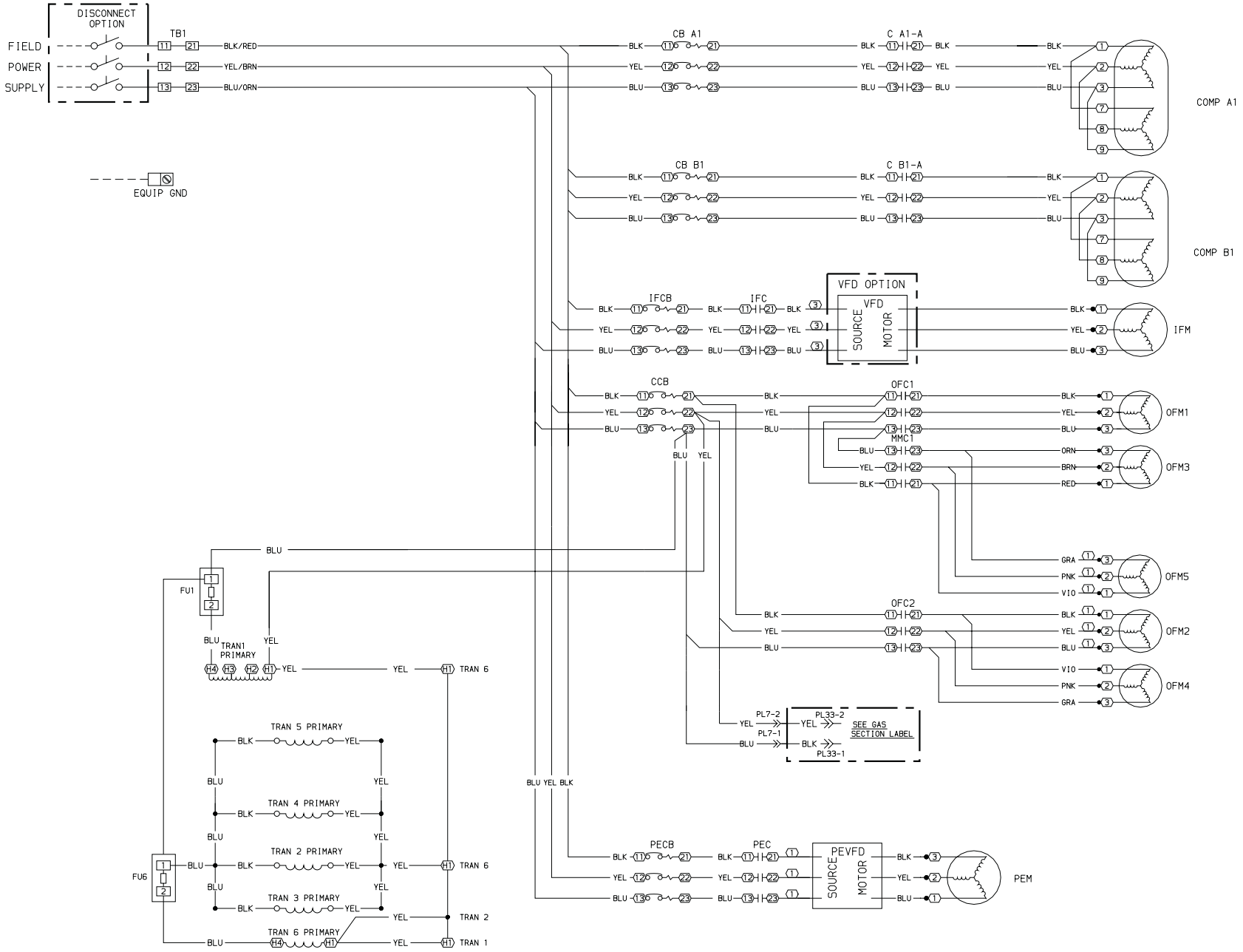


Fig. 7 — Power Schematic — 48Z6,Z8 and 50Z6,Z7,Z8,Z9 075; 460-V Units

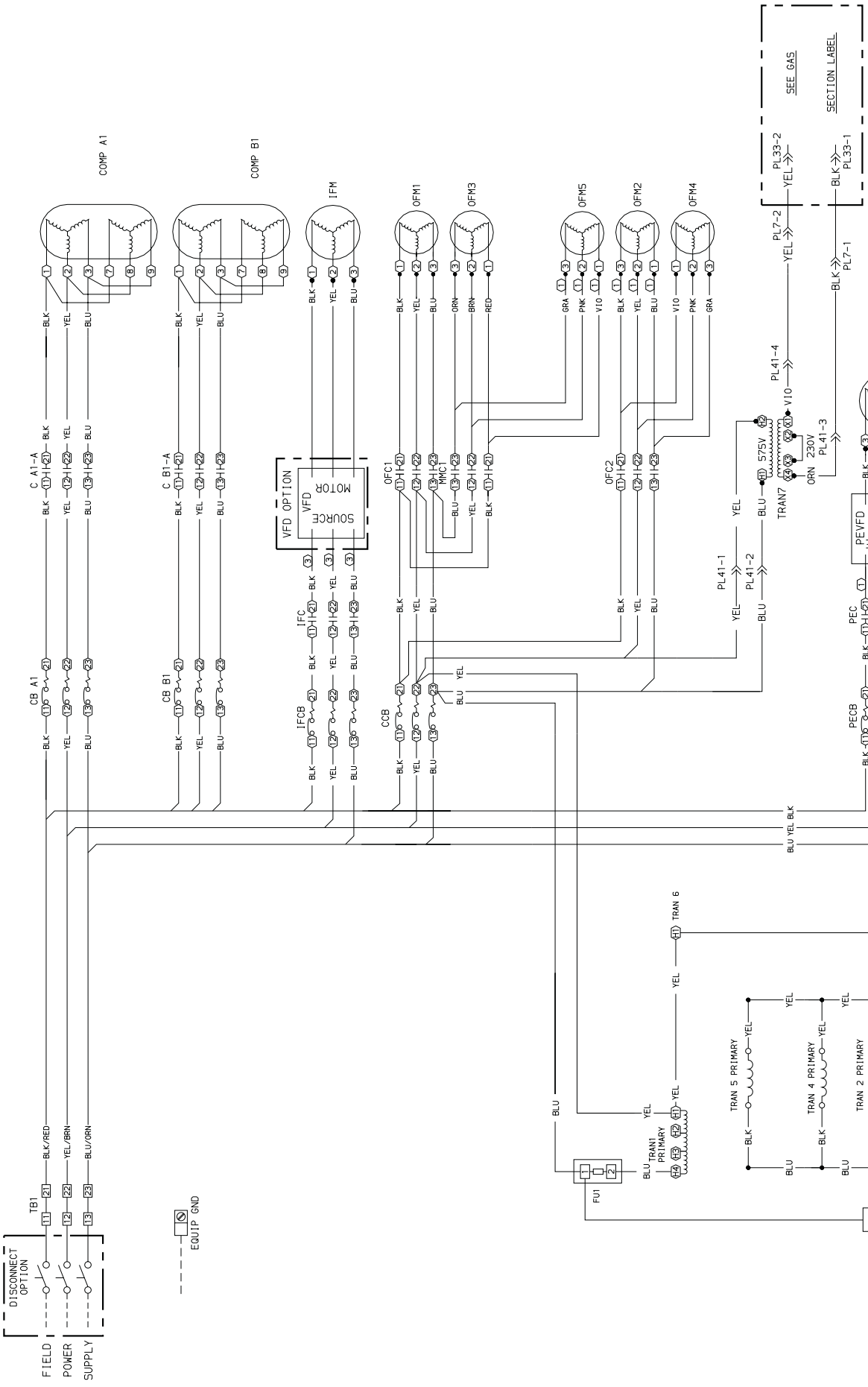


Fig.8 — Power Schematic — 48Z6,Z8 and 50Z6,Z7,Z8,Z9 075; 575-V Units

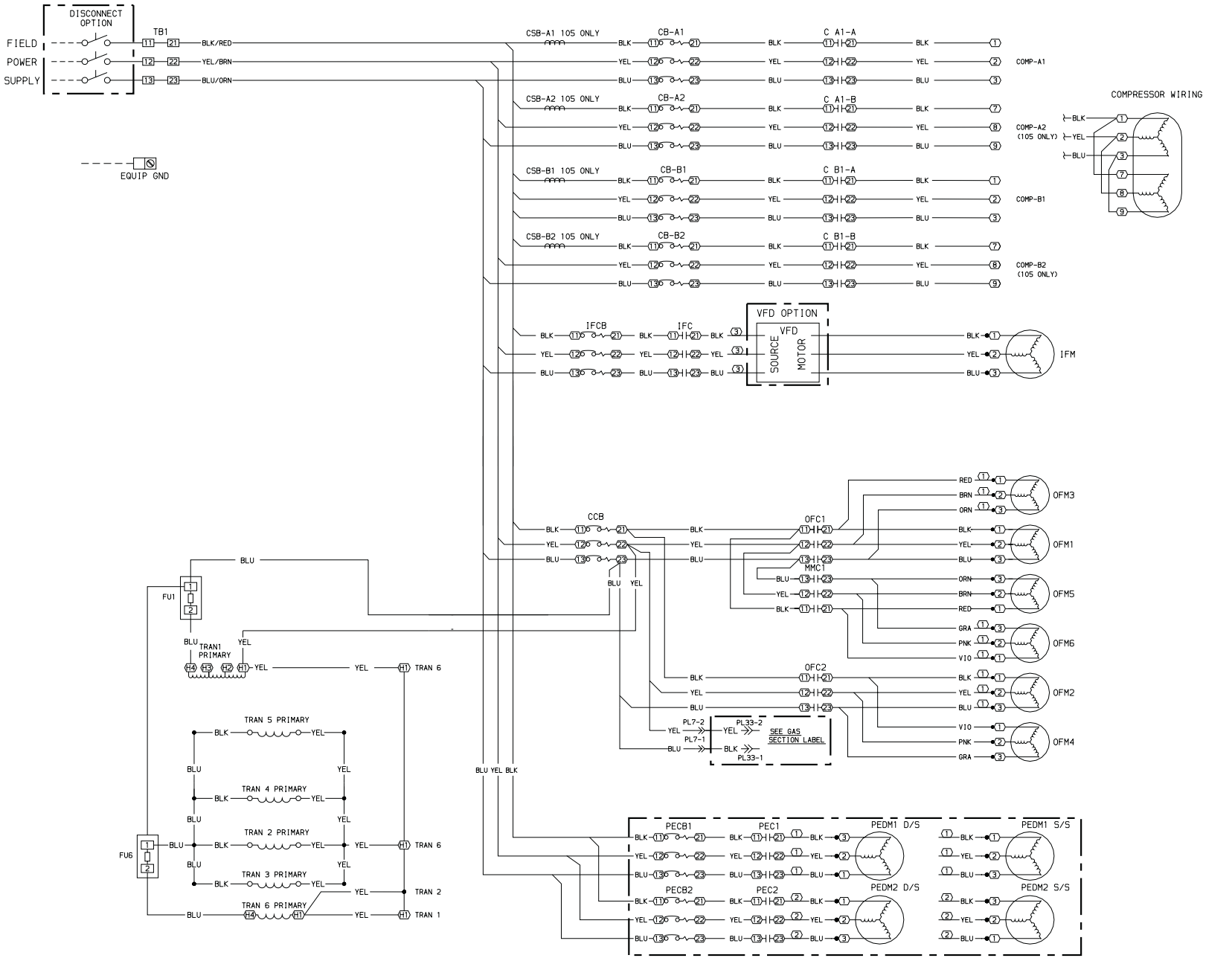


Fig. 9 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 090-105; 460-V Units

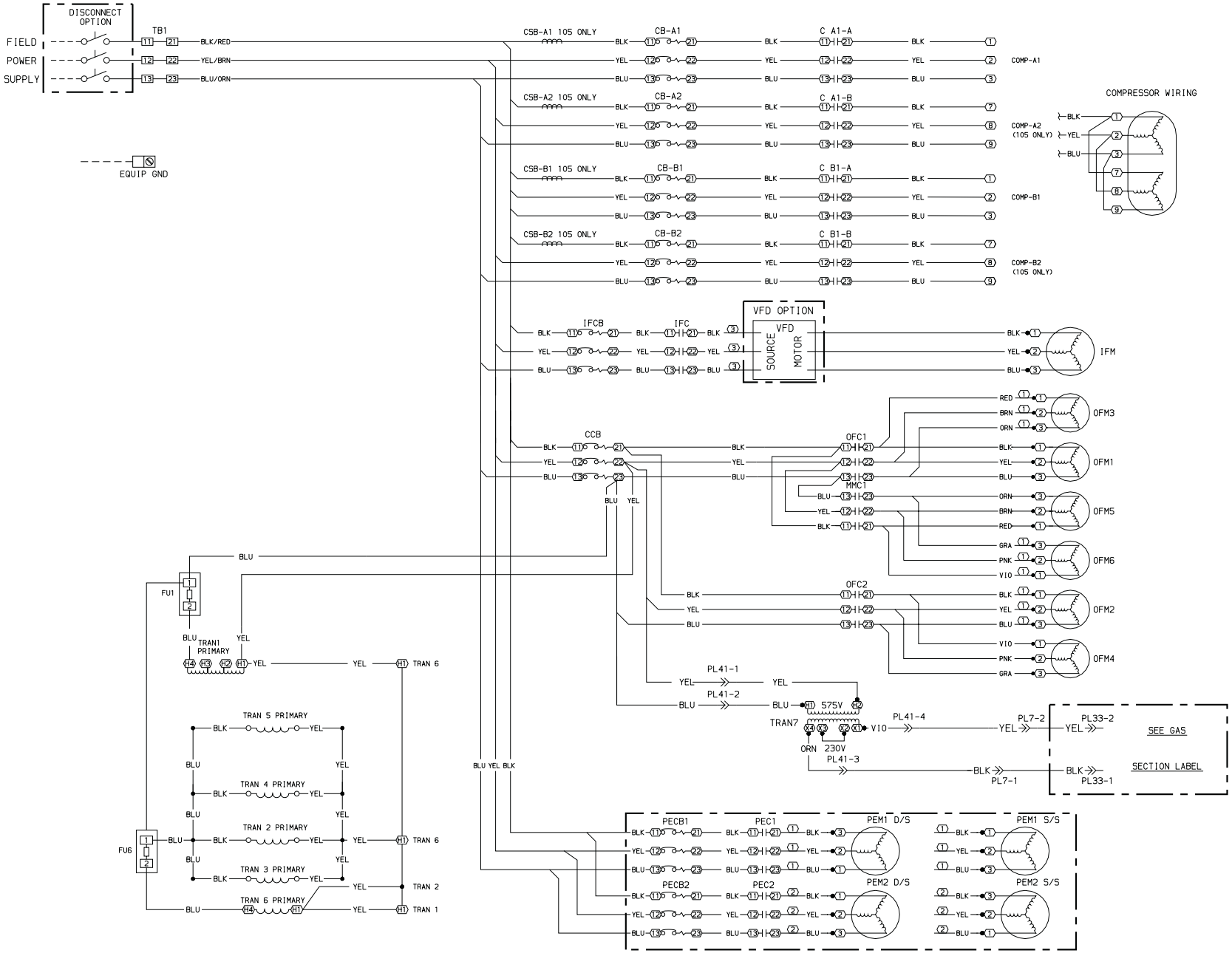


Fig. 10 — Power Schematic — 48ZG,ZN and 50ZG,ZN,Z2,Z3 090-105; 575-V Units

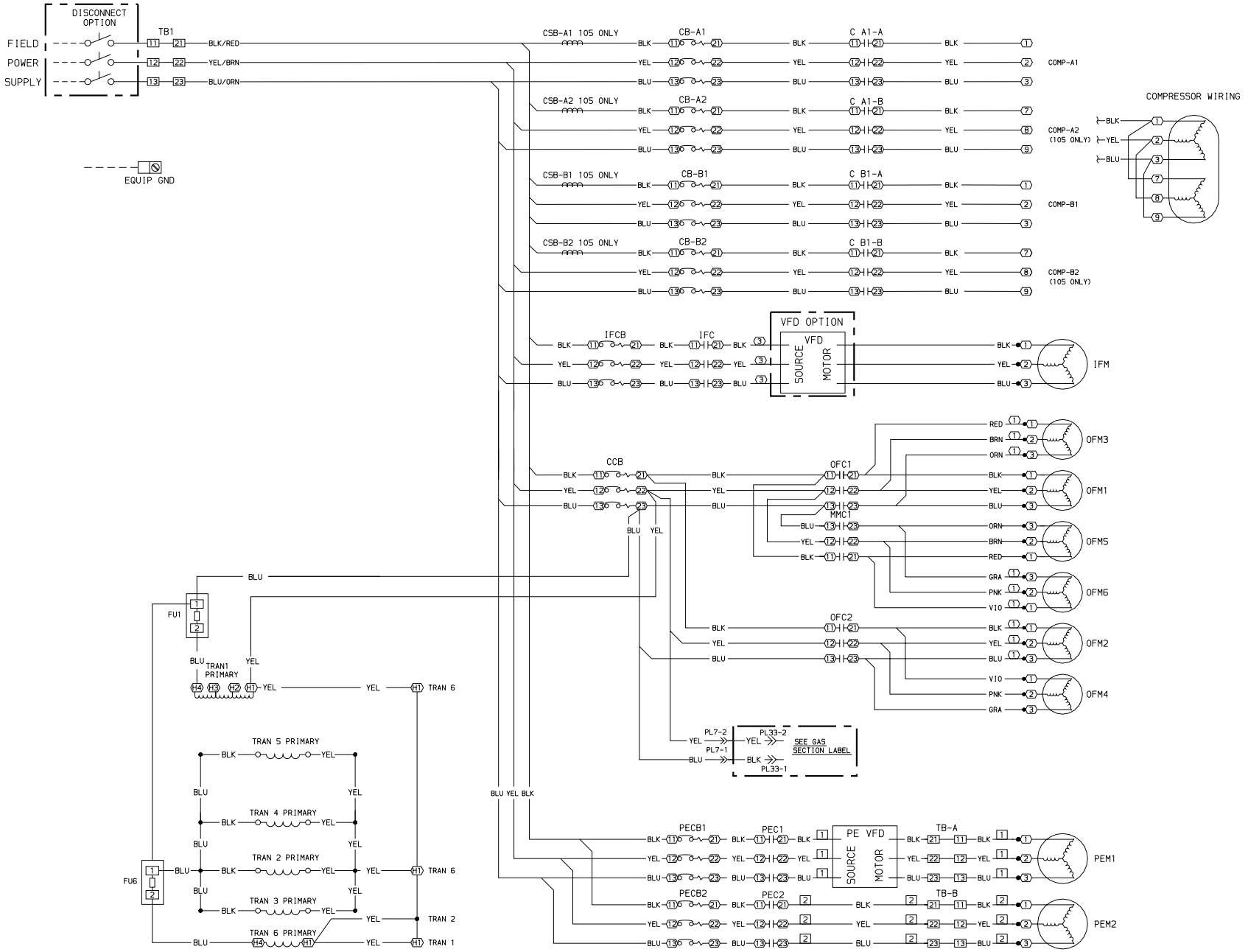


Fig. 11 — Power Schematic — 48ZT,ZW and 50ZT,ZW,ZX,ZZ 090-105; 460-V Units

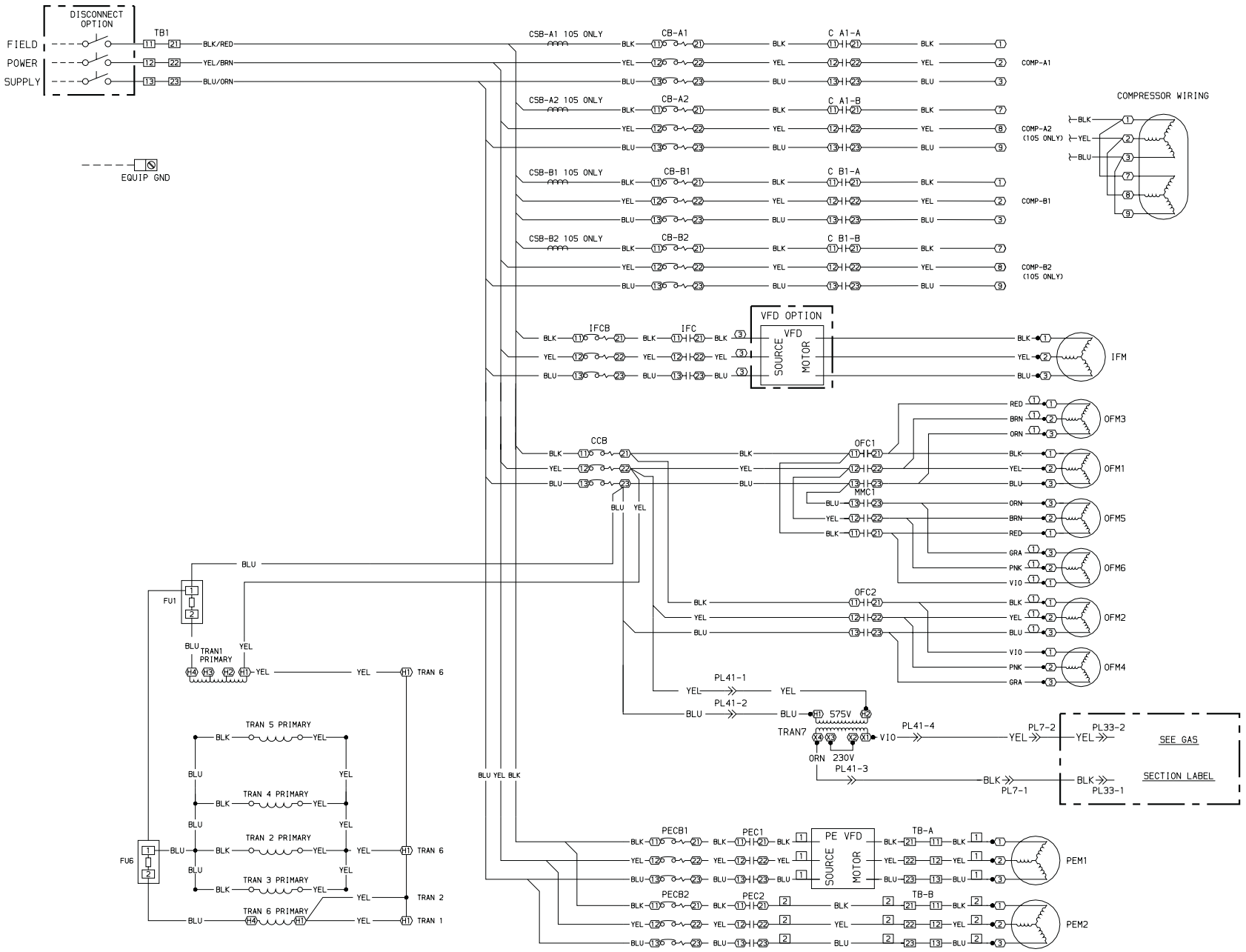


Fig. 12 — Power Schematic — 48ZT,ZW and 50ZT,ZW,ZX,ZZ 090-105; 575-V Units

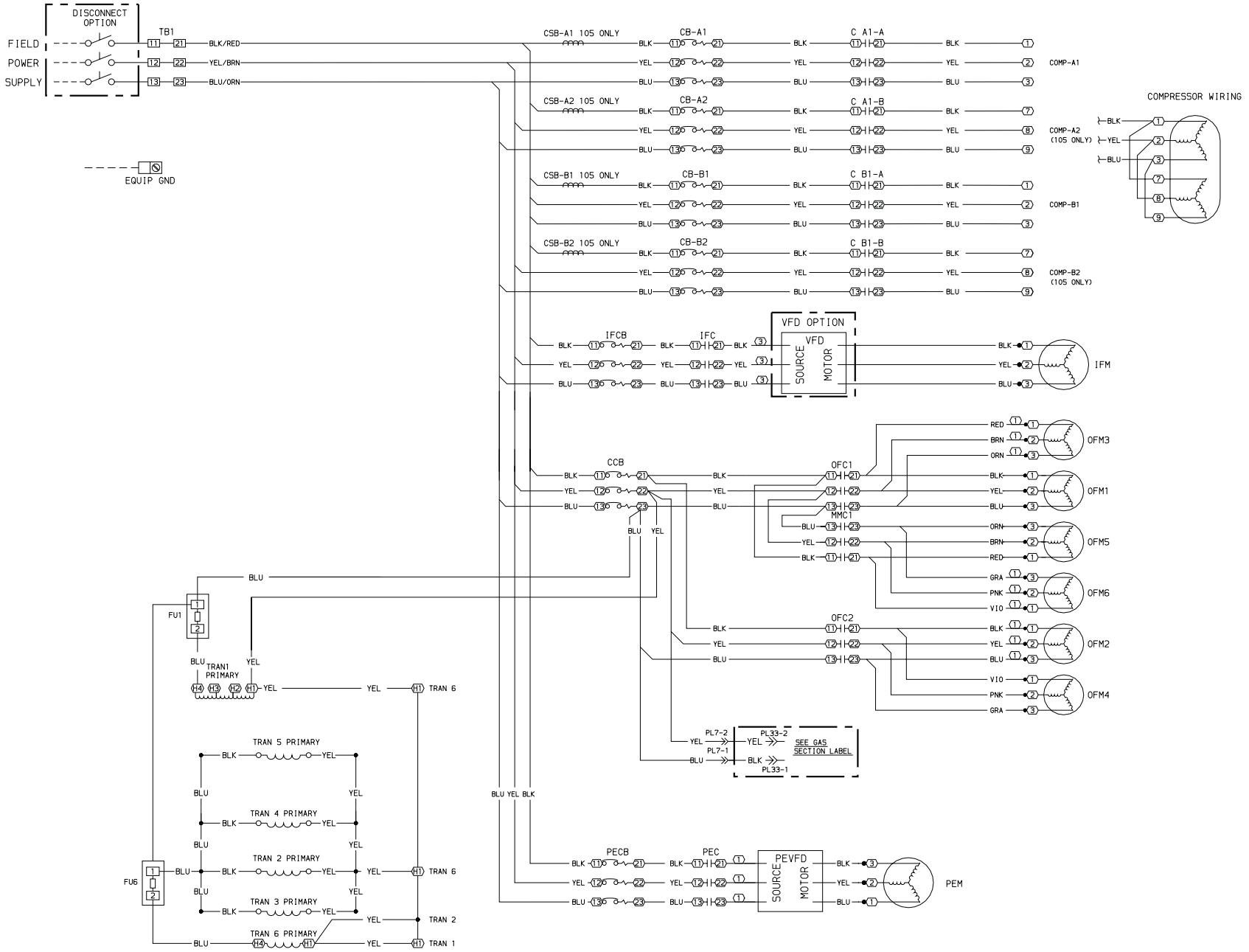


Fig. 13 — Power Schematic — 48Z6,Z8 and 50Z6,Z7,Z8,Z9 090-105; 460-V Units

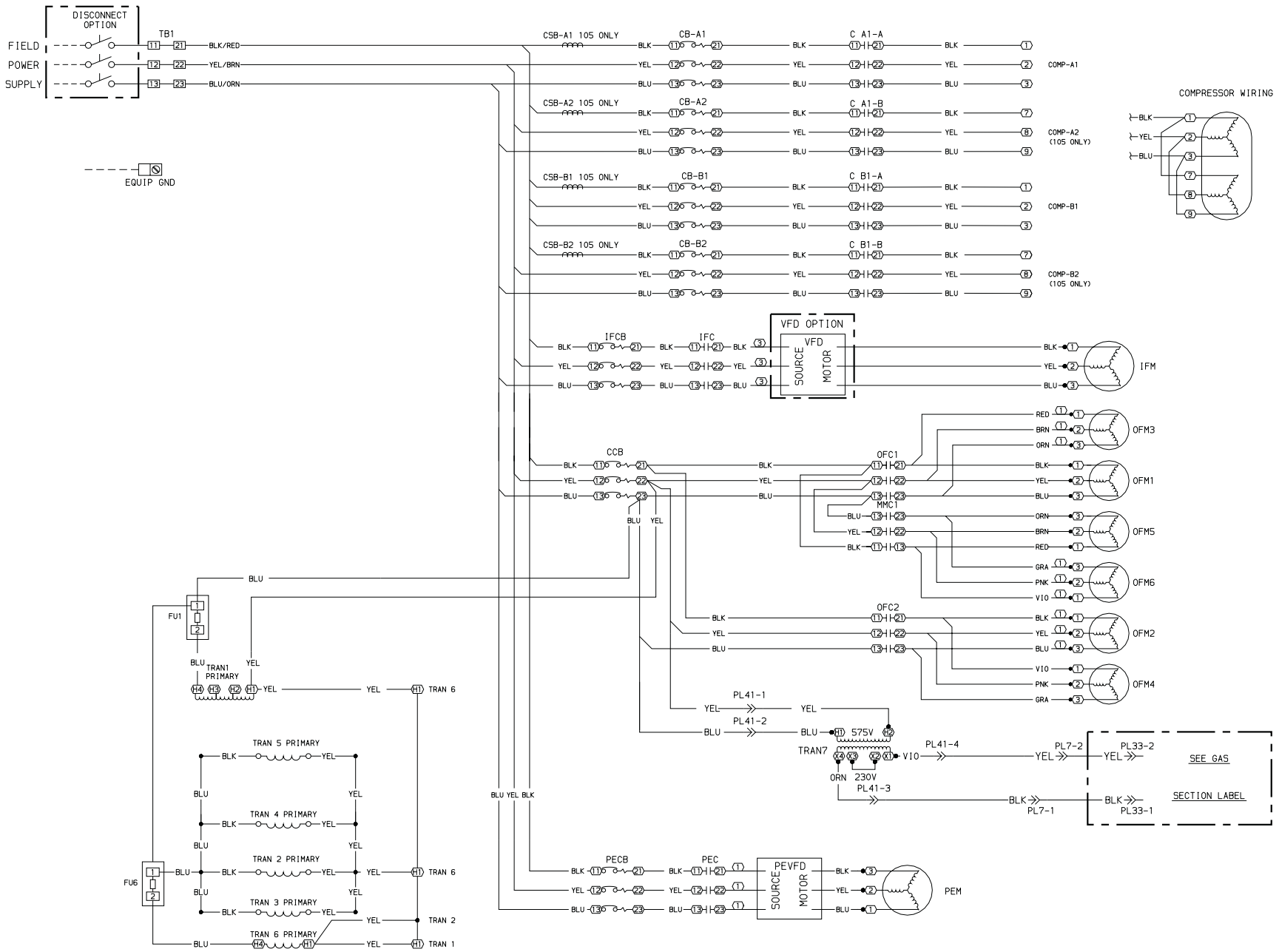


Fig. 14 — Power Schematic — 48Z6,Z8 and 50Z6,Z7,Z8,Z9 090-105; 575-V Units

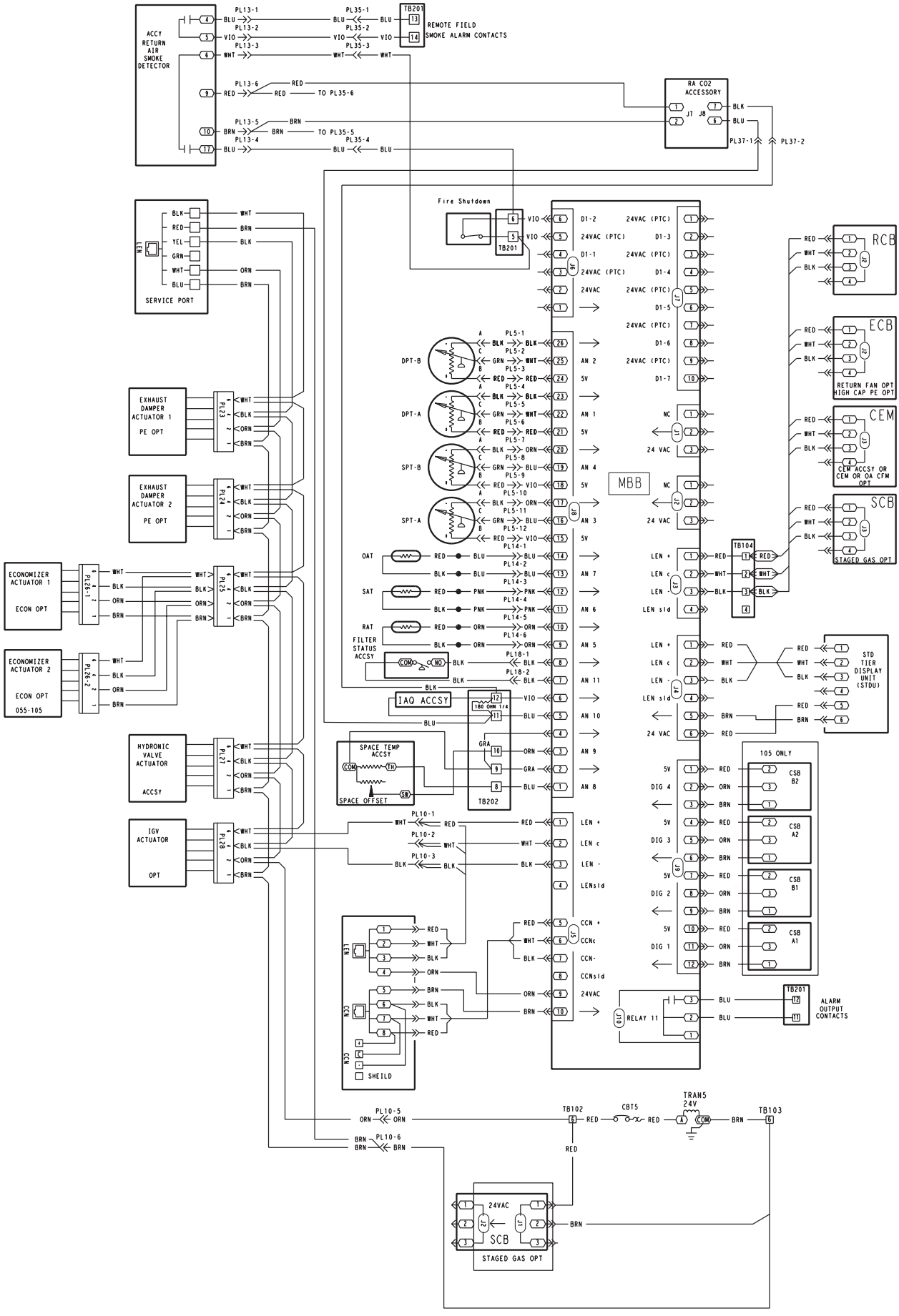


Fig. 15 — Input/Output Connections — Main Base Board (MBB)

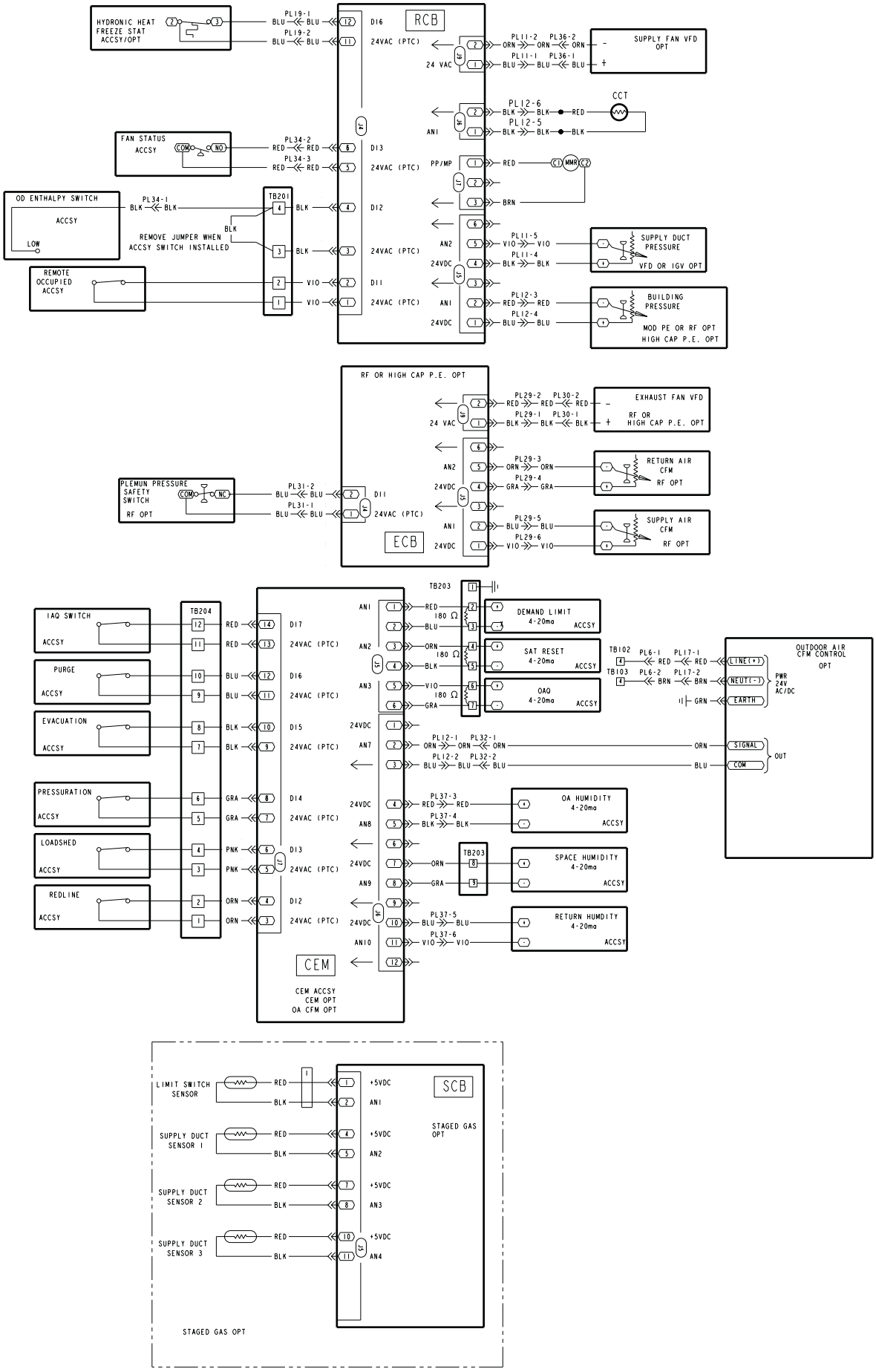


Fig. 16 — Input/Output Connections — RCB, ECB, CEM, SCB

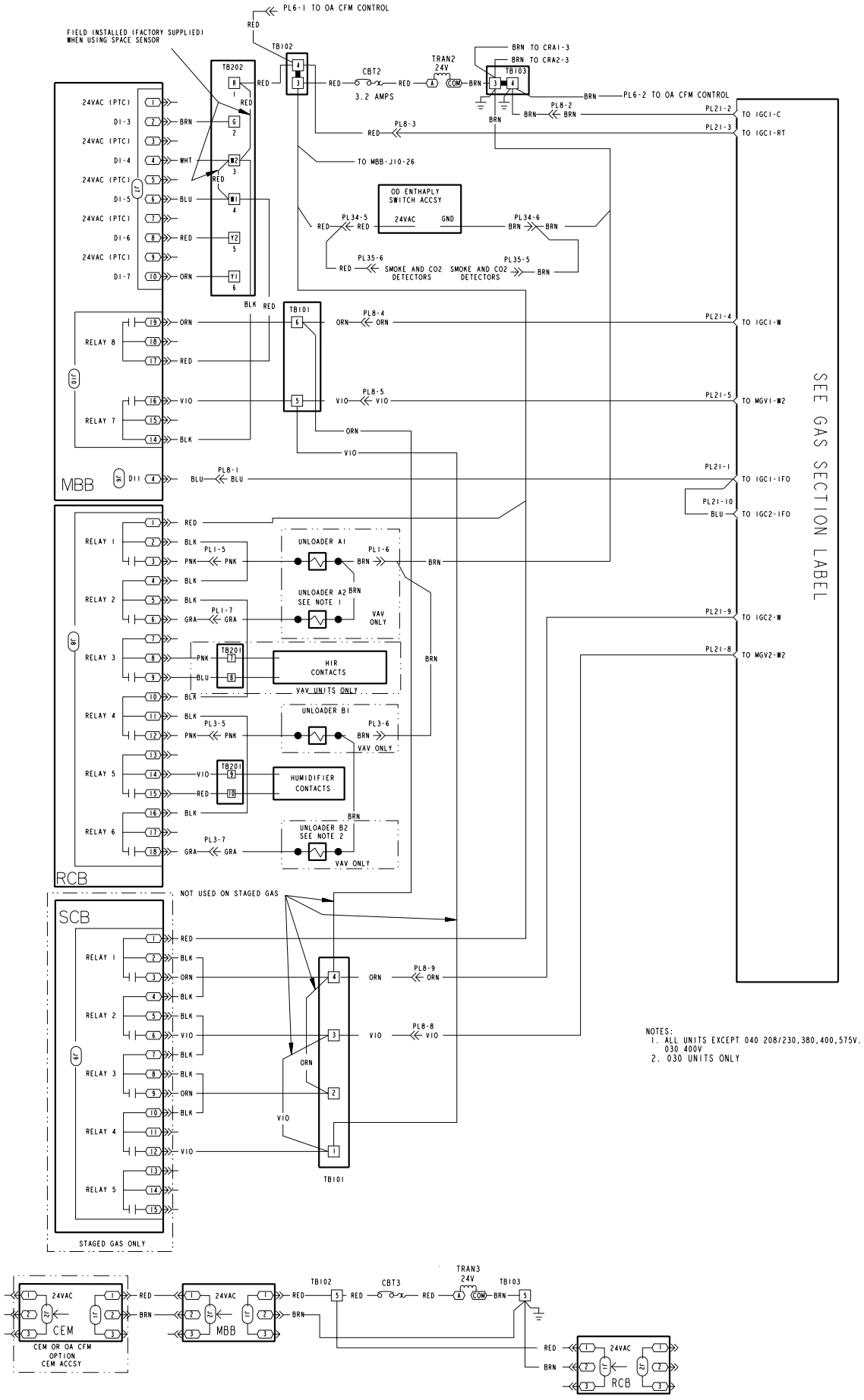


Fig. 17 — Control Wiring — 48ZG,ZN 030-050 Units

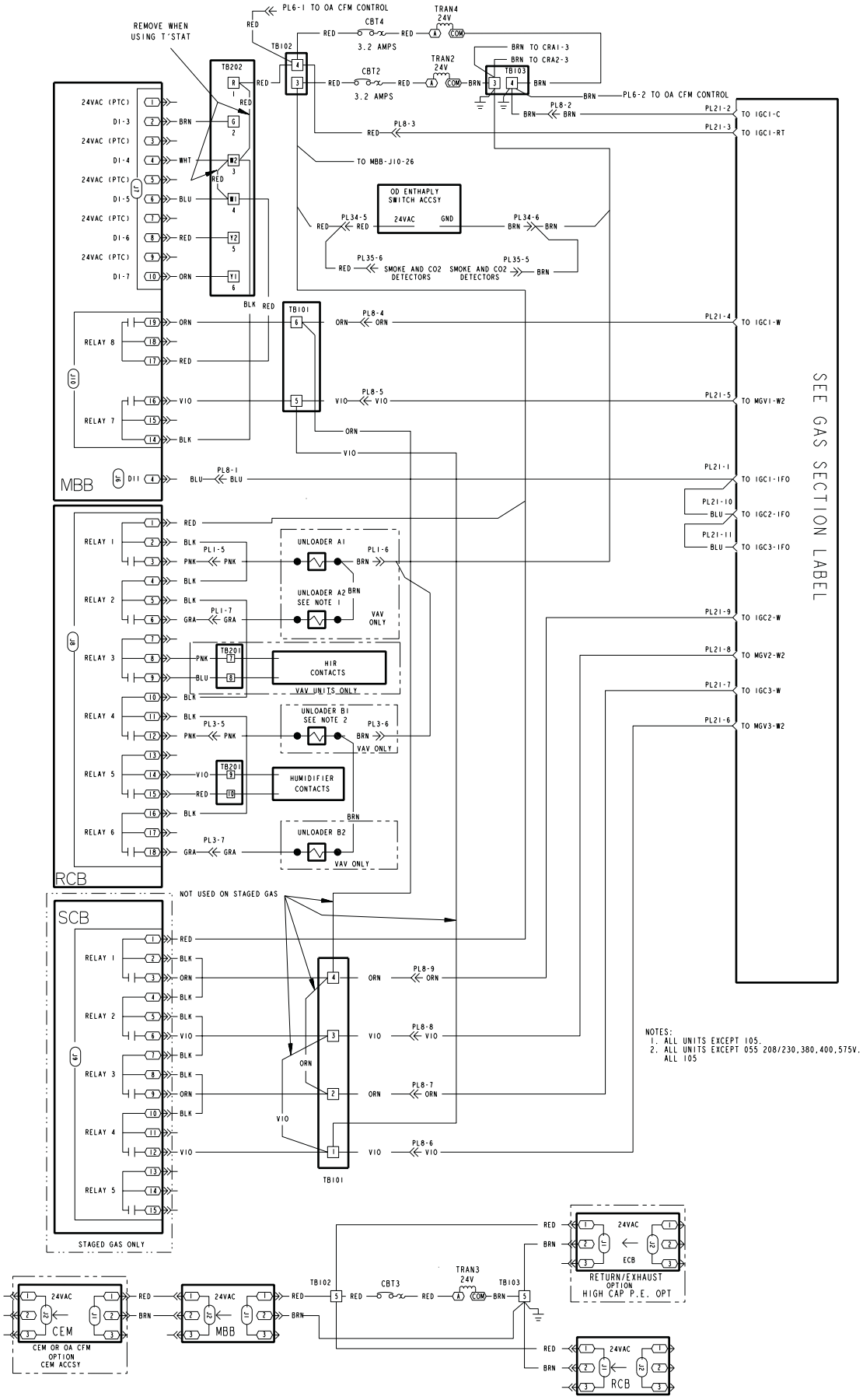


Fig. 18 — Control Wiring — 48ZG,ZN 055, 105 and 48ZT,ZW,Z6,Z8 075-105 Units

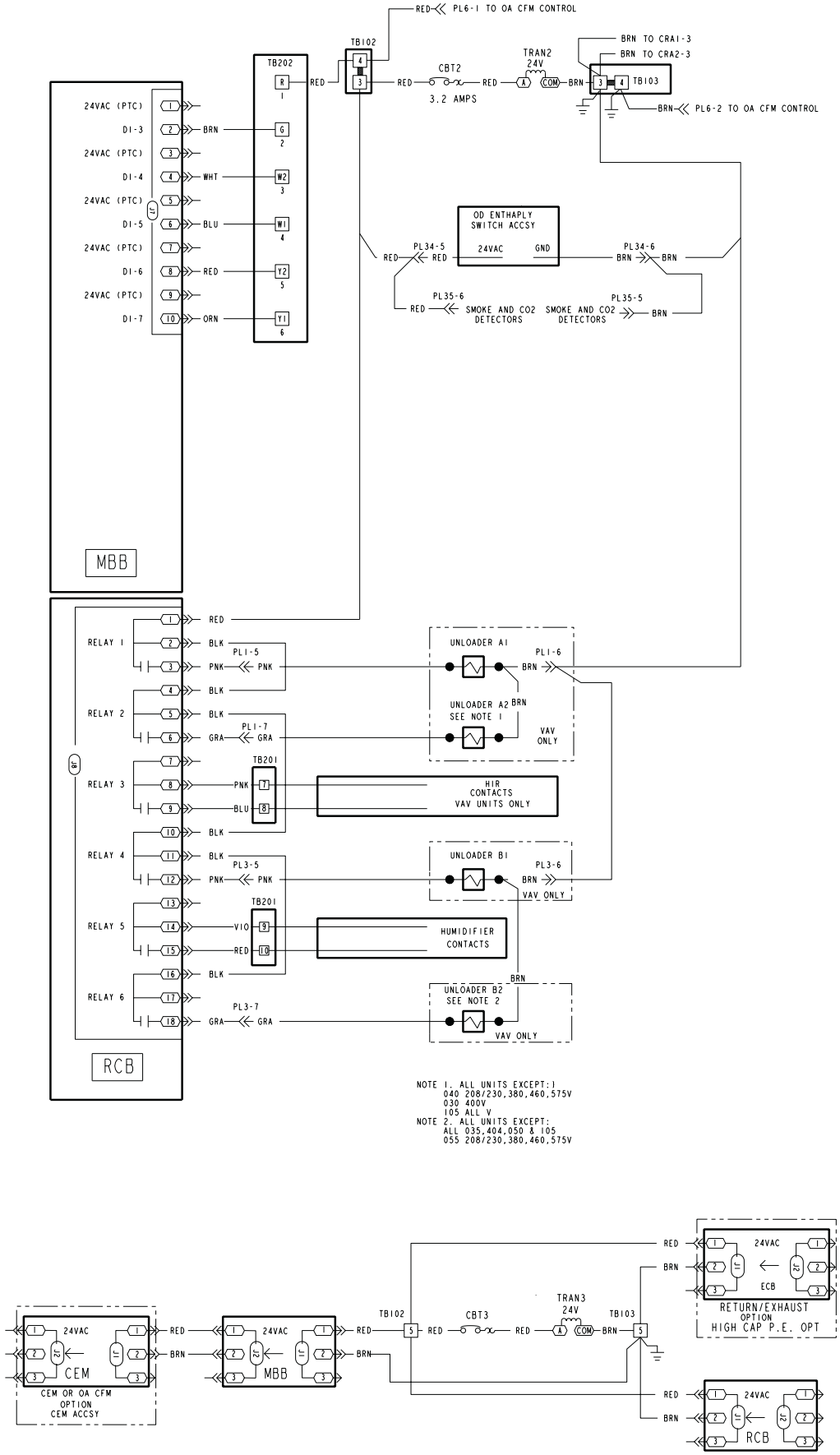


Fig. 19 — Control Wiring — 50ZG,ZN,Z2,Z3 030-105 and 50ZW,ZT,ZX,ZZ,Z6,Z7,Z8,Z9 075-105 Units

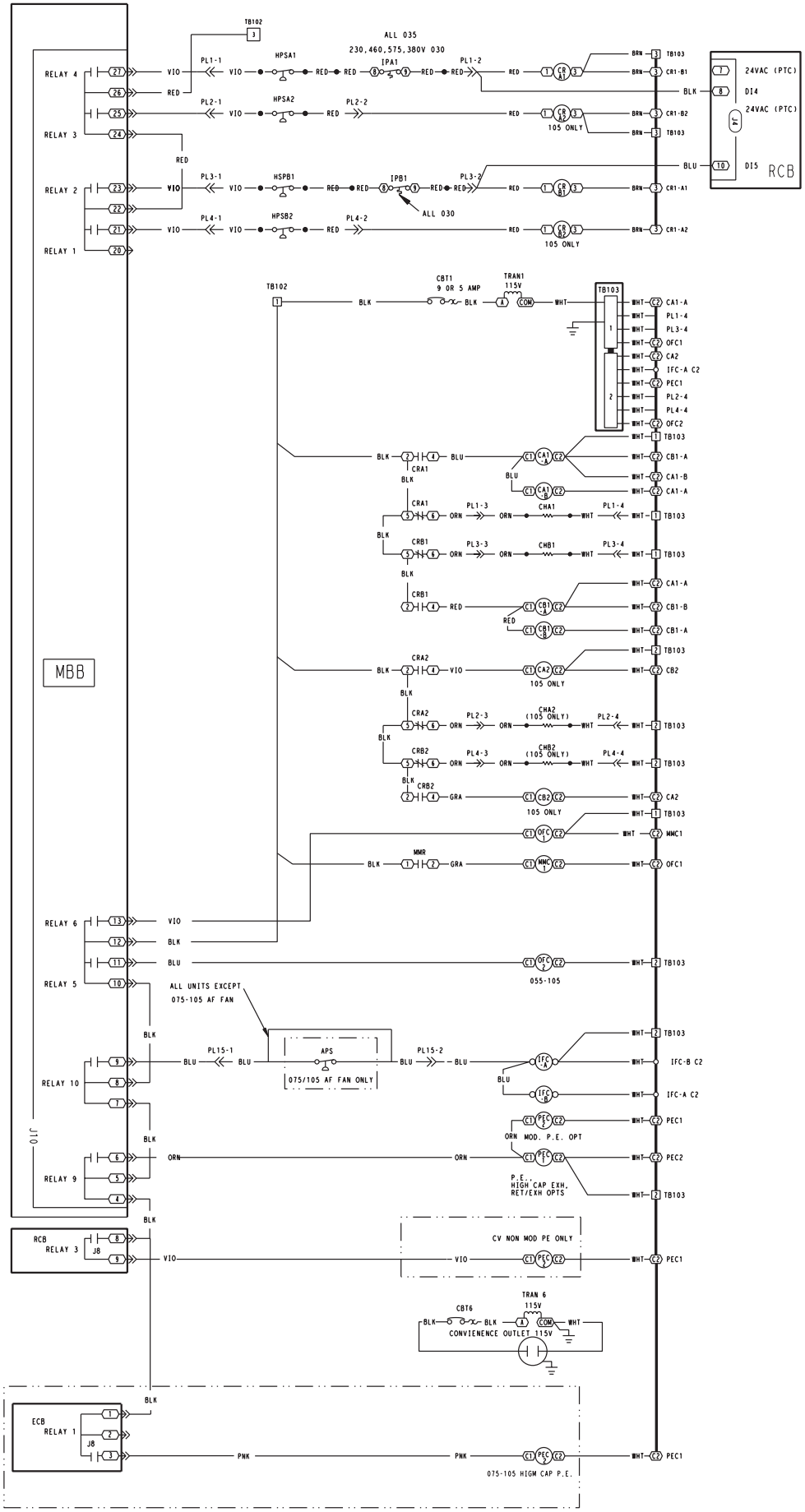


Fig. 20 — Power Wiring — 48ZG,ZN030-105 and 48ZT,ZW,Z6,Z8 075-105 Units

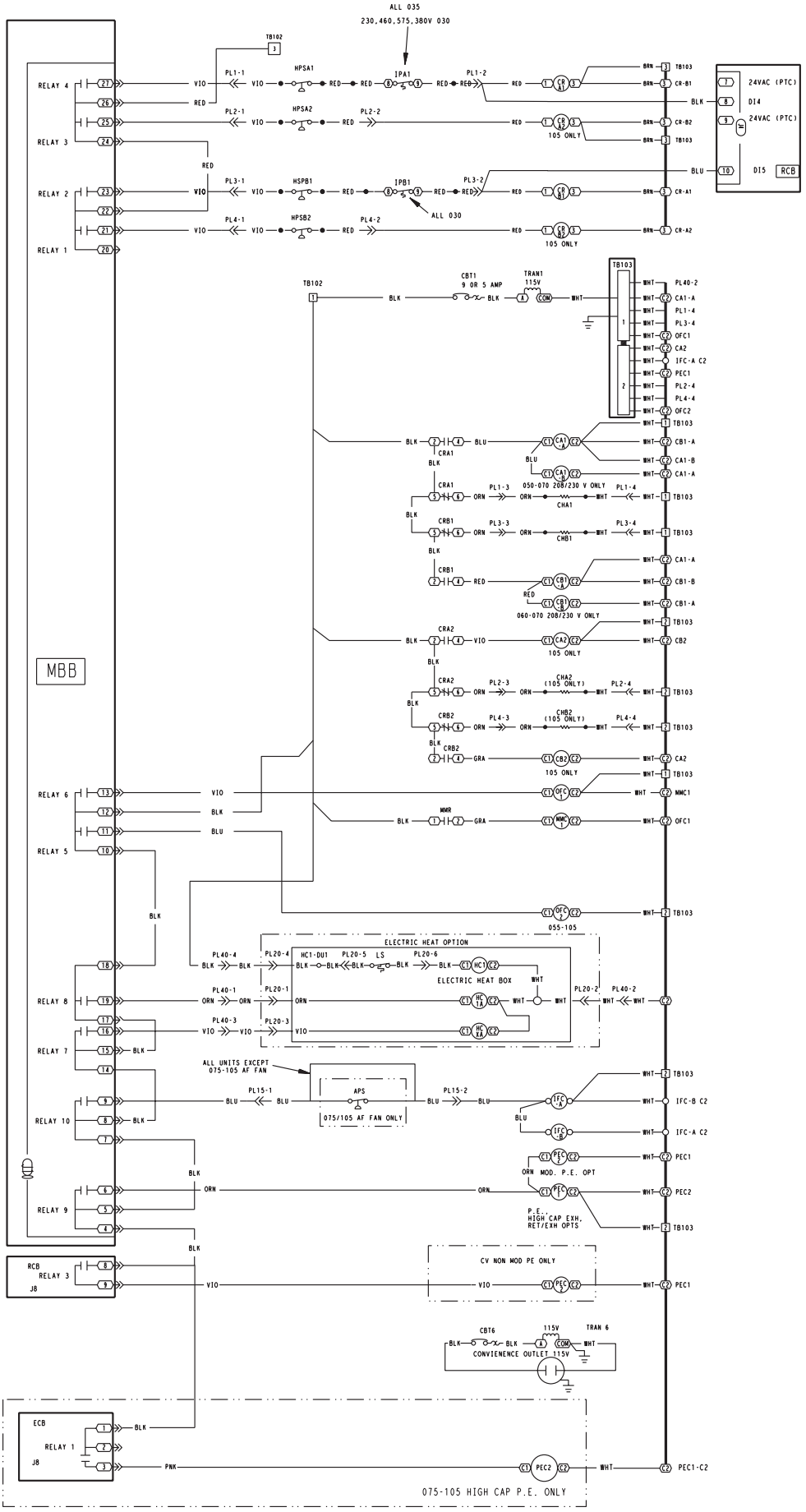


Fig. 21 — Power Wiring — 50ZG,ZN,Z2,Z3 030-105 and 50ZT,ZW,ZX,ZZ,Z6,Z7,Z8,Z9 075-105 Units

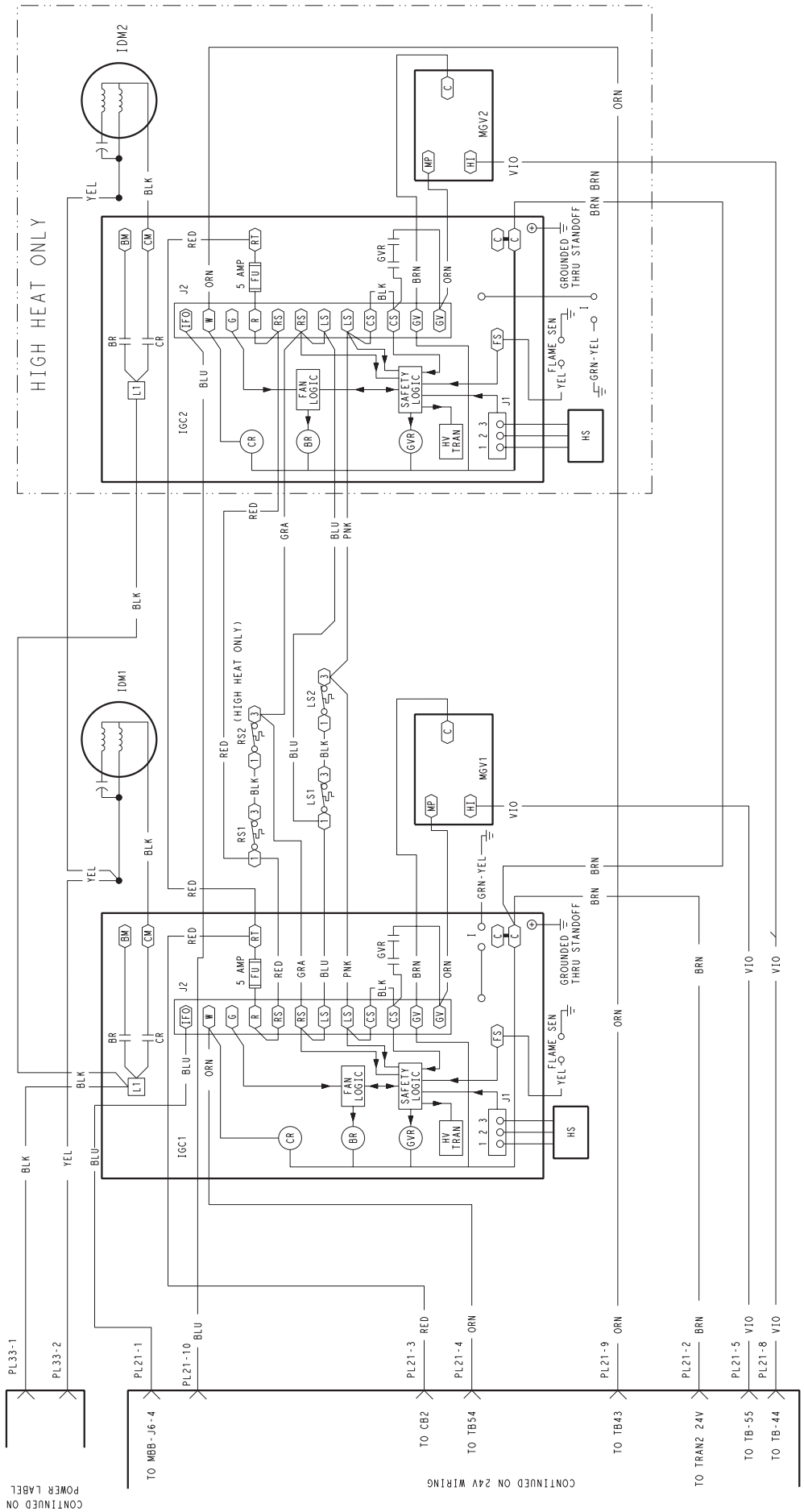


Fig. 22 — Gas Heat Section — 48ZG,ZN 030-050 Units

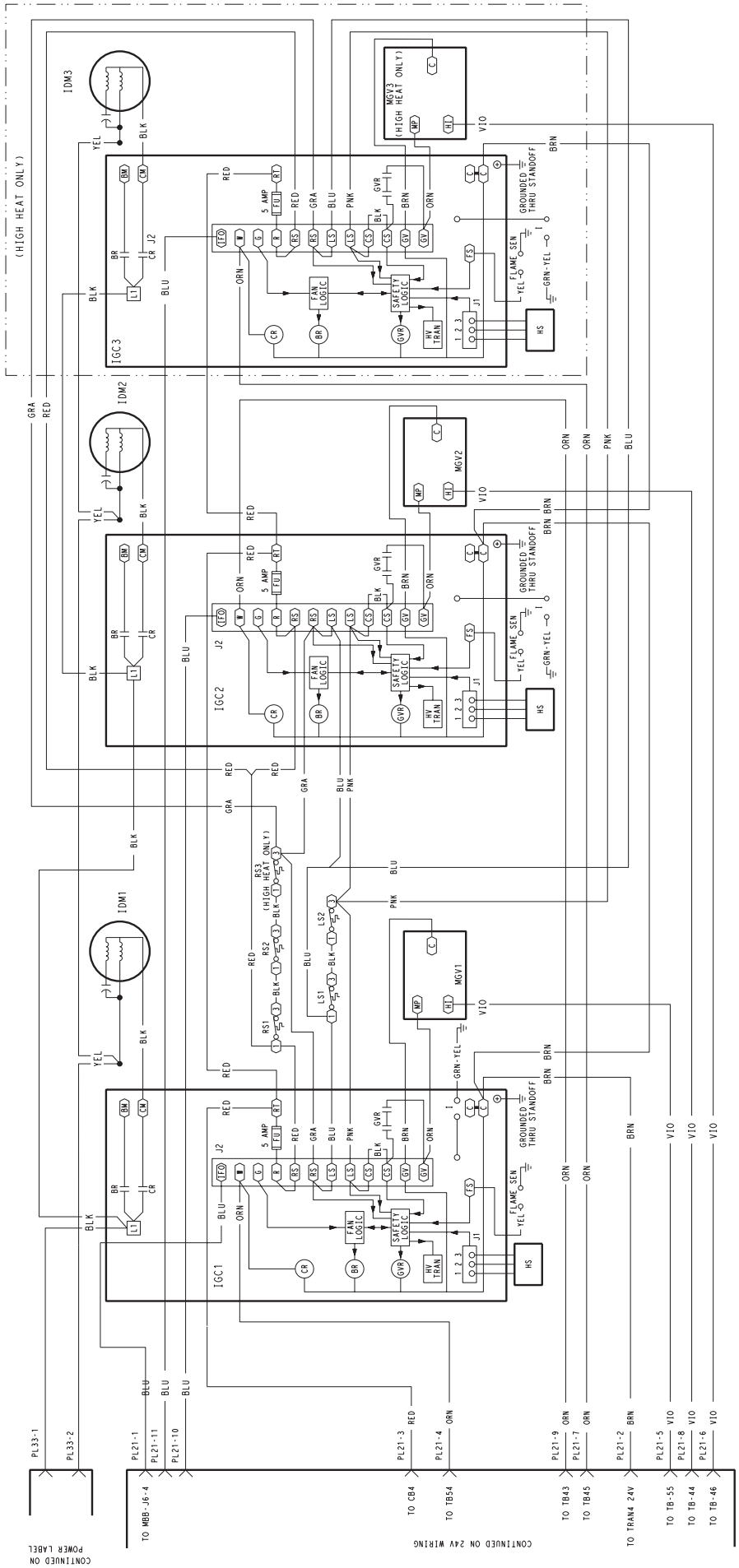


Fig. 23 — Gas Heat Section — 48ZG,ZN055-105 and 48ZT,ZW,Z6,Z8 075-105 Units

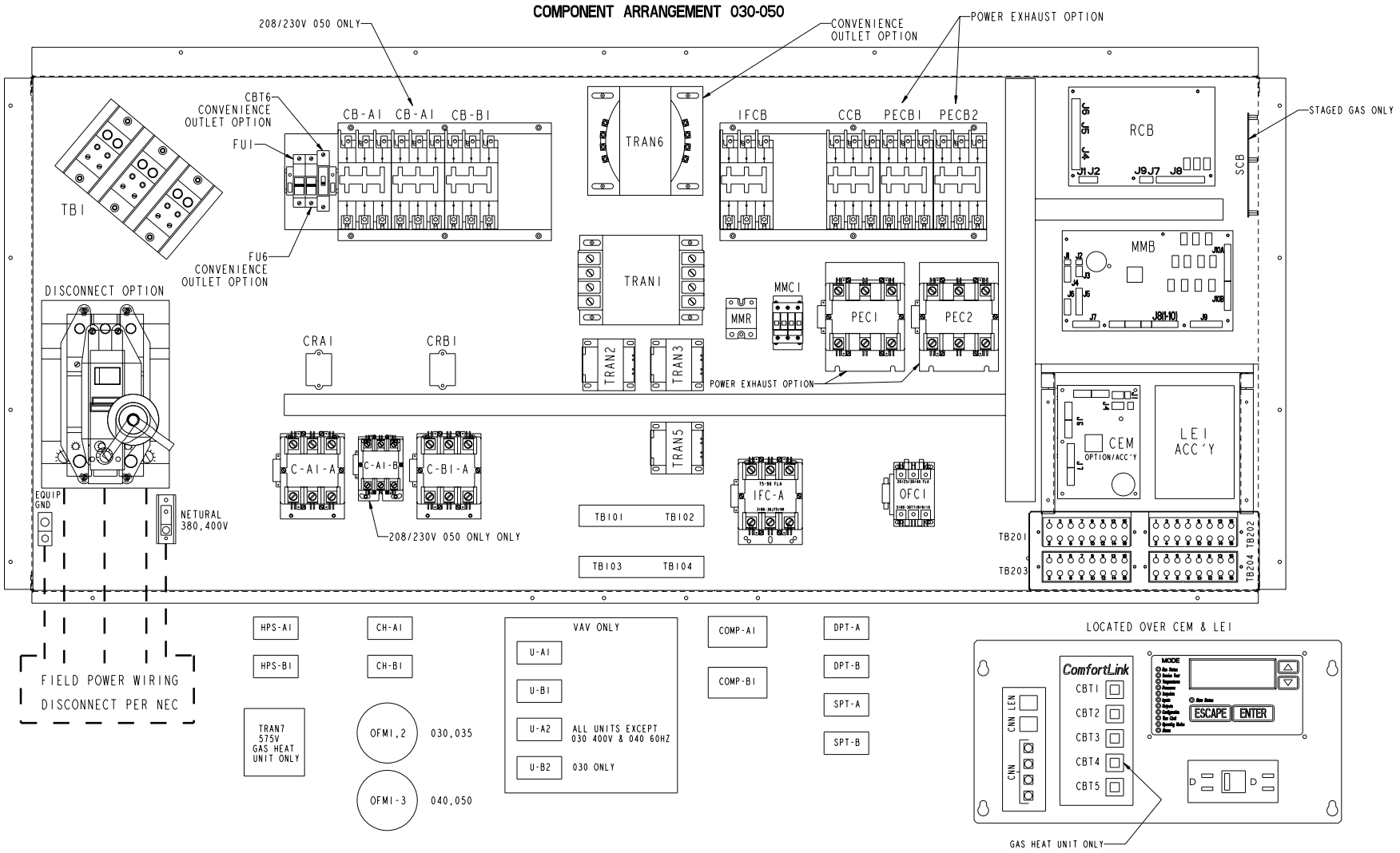


Fig. 24 — Component Arrangement — Size 030-050 Units

COMPONENT ARRANGEMENT 030-050

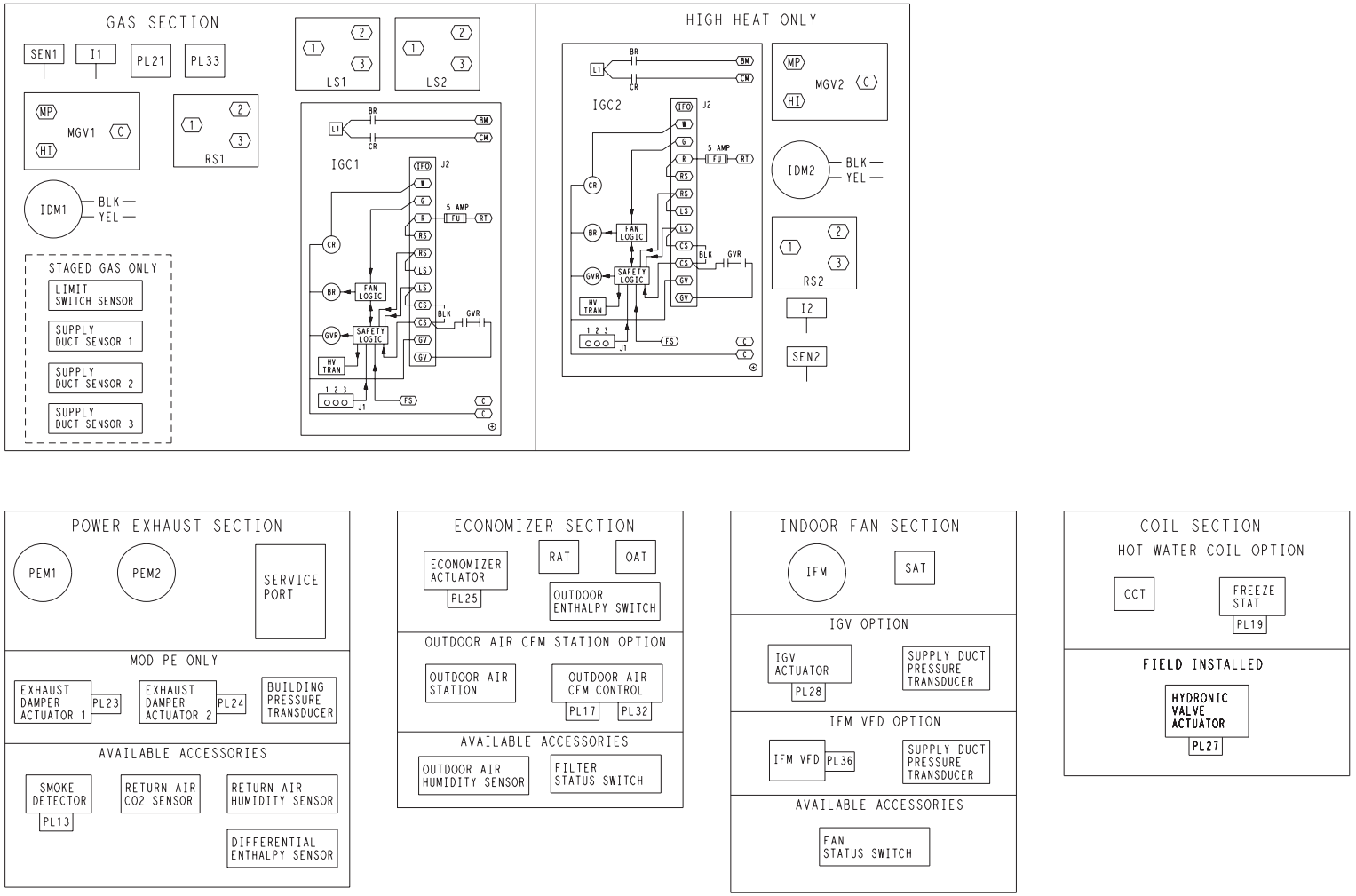


Fig. 24 — Component Arrangement — Size 030-050 Units (cont)

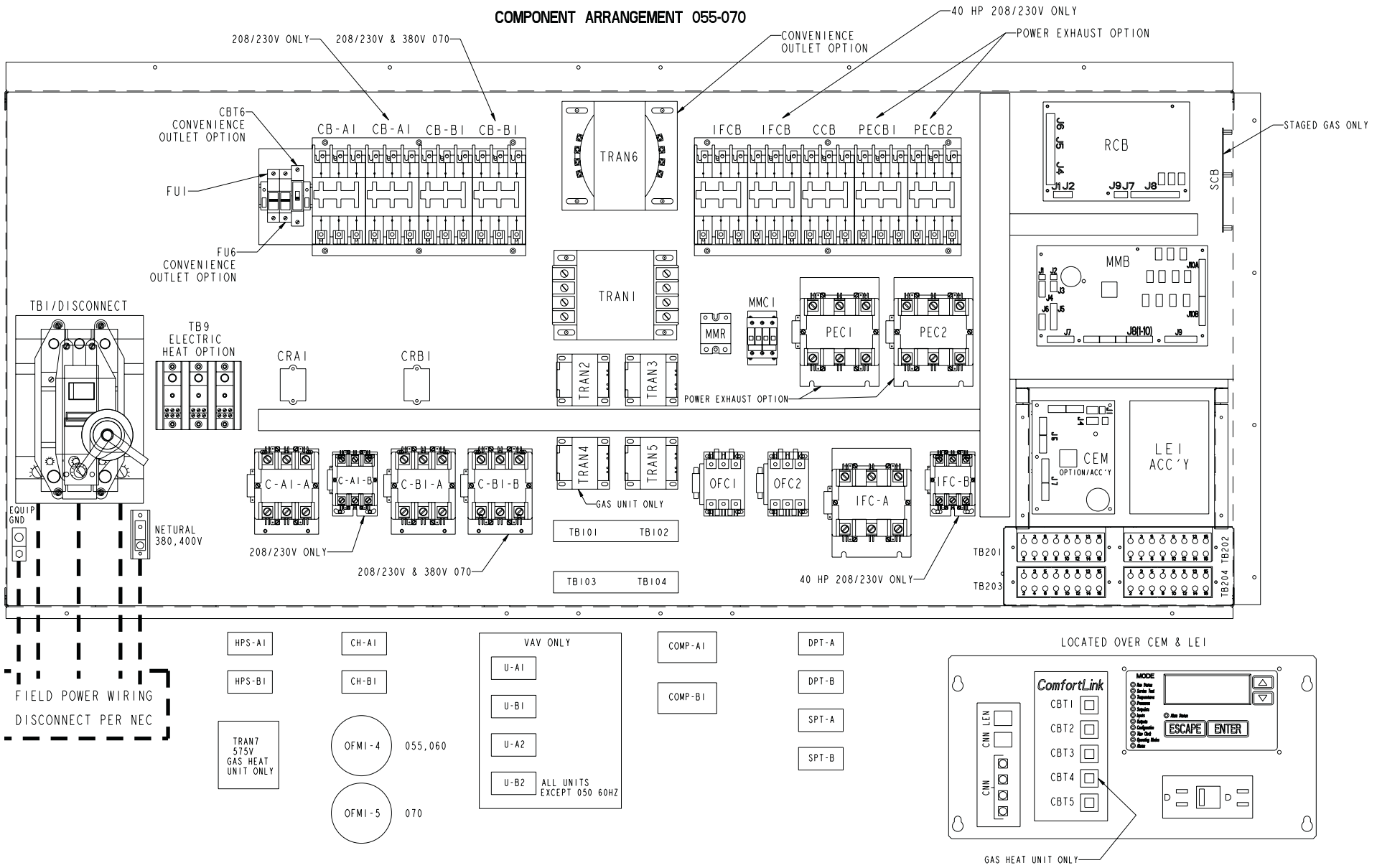


Fig. 25 — Component Arrangement — Size 055-070 Units

COMPONENT ARRANGEMENT 055-070

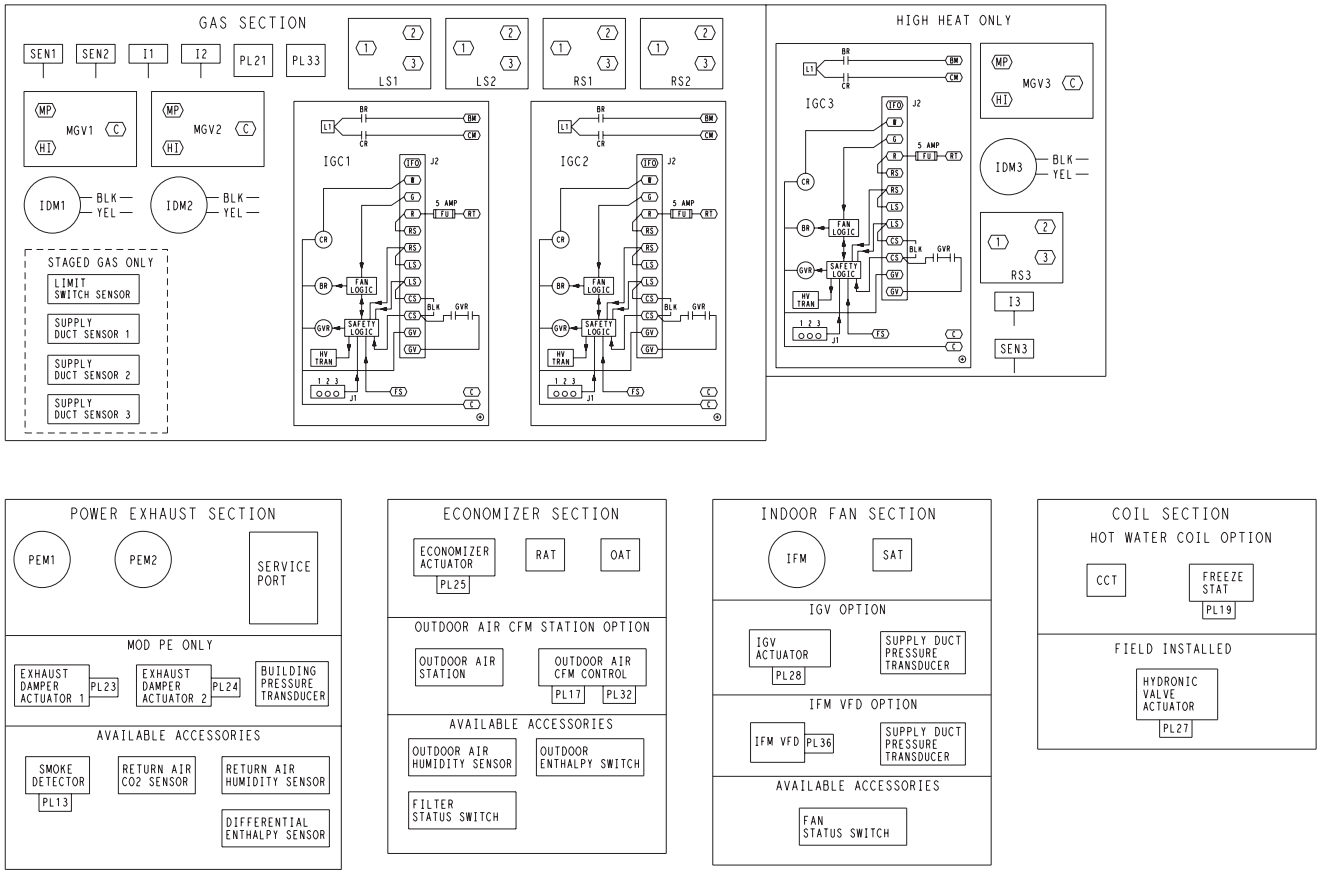


Fig. 25 — Component Arrangement — Size 055-070 Units (cont)

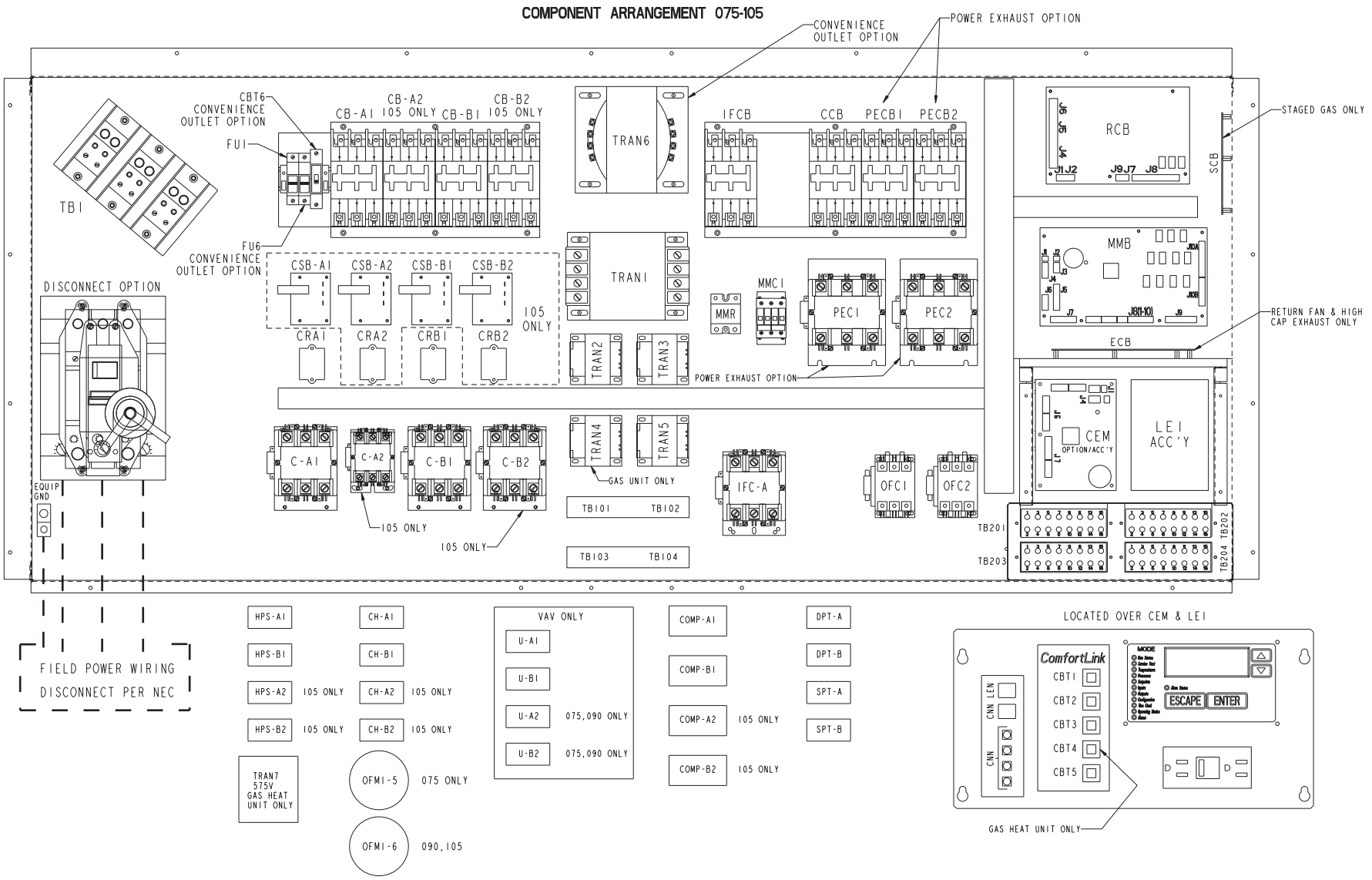


Fig. 26 — Component Arrangement — Size 075-105 Units

COMPONENT ARRANGEMENT 075-105

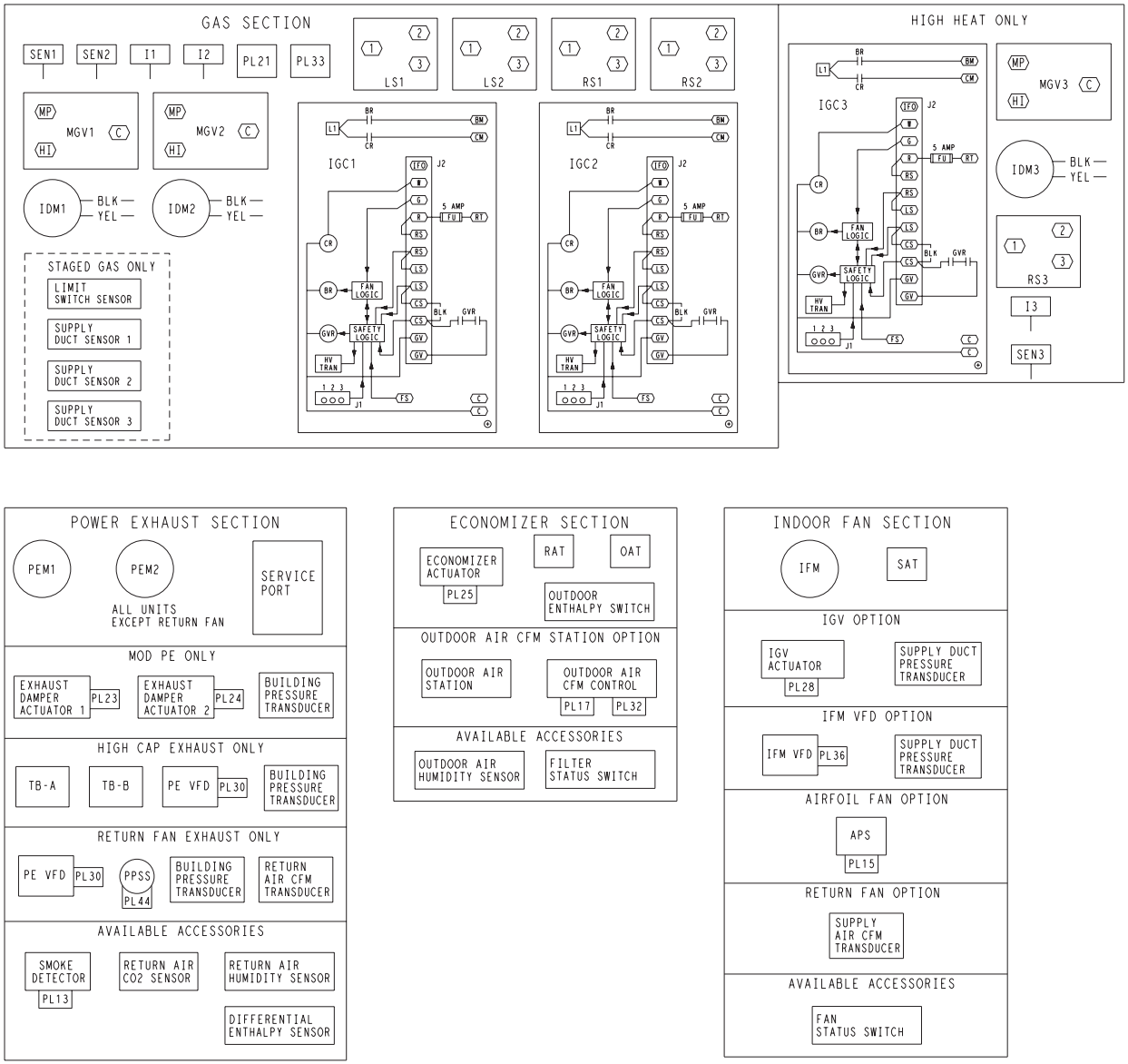
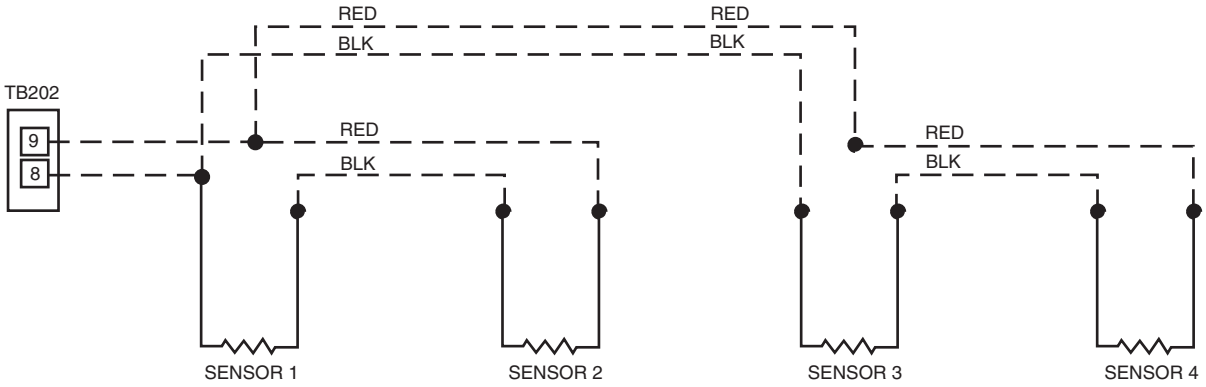
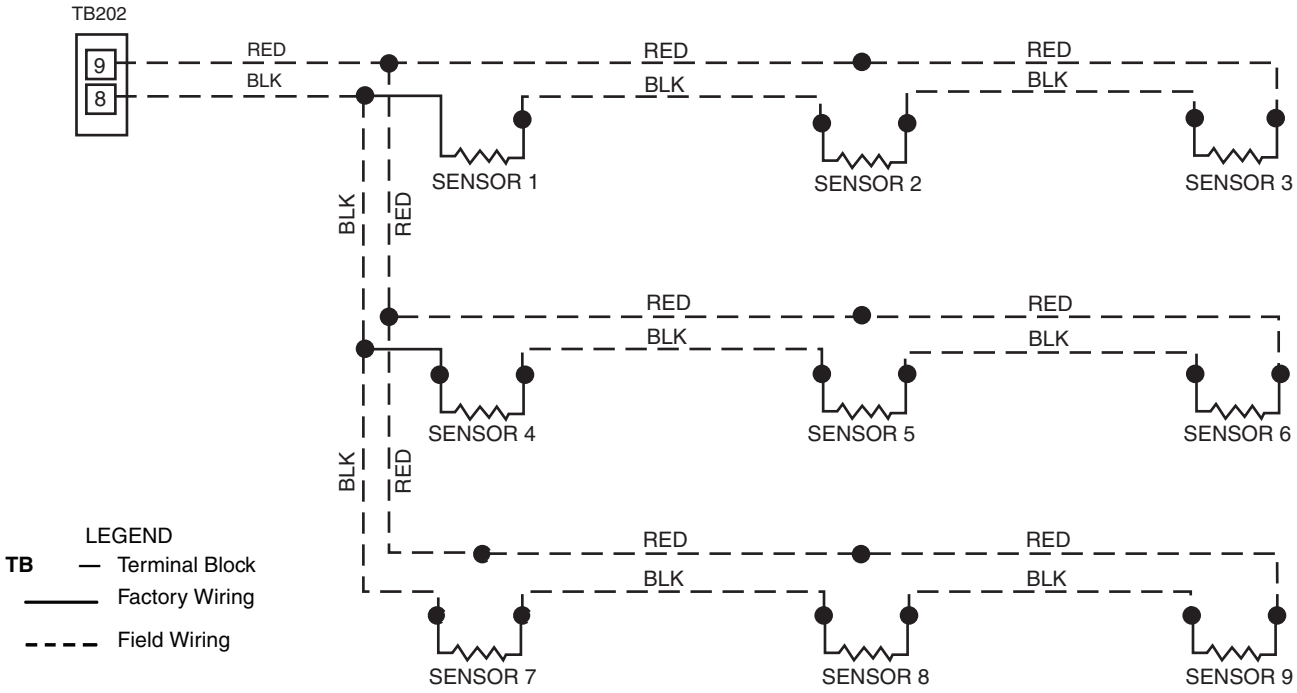


Fig. 26 — Component Arrangement — Size 075-105 Units (cont)



SPACE TEMPERATURE AVERAGING — 4 SENSOR APPLICATION



SPACE TEMPERATURE AVERAGING — 9 SENSOR APPLICATION

Fig. 27 — Space Temperature Sensor Averaging

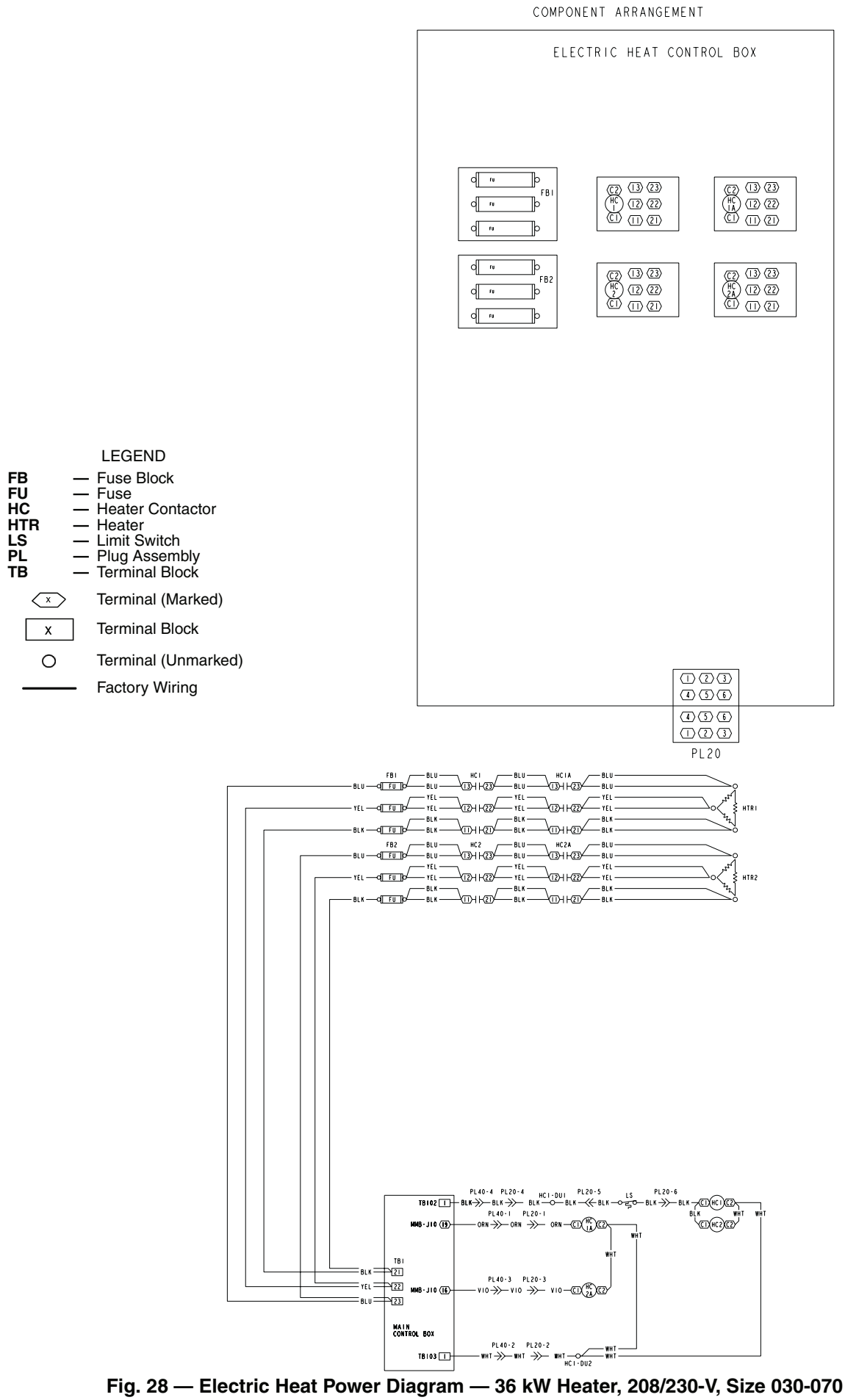
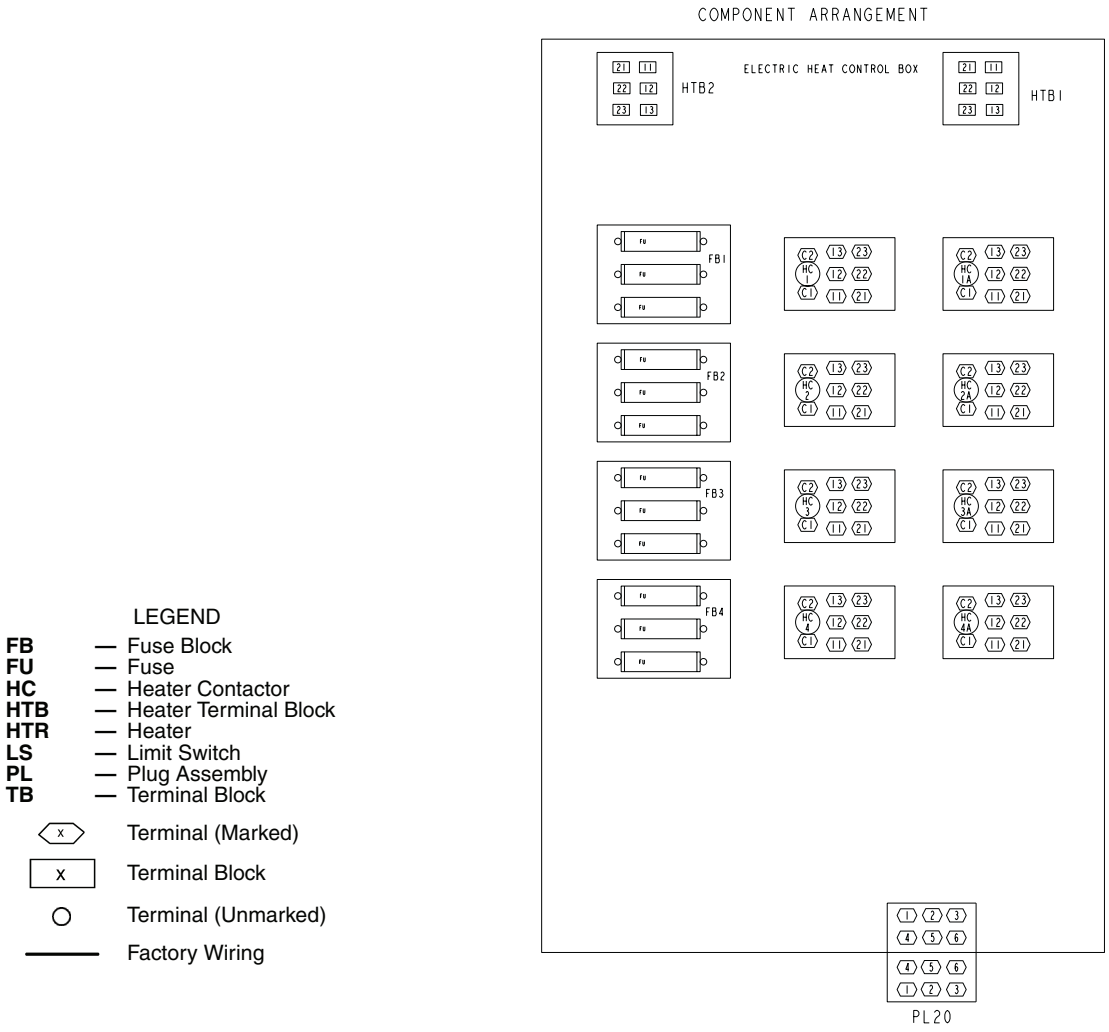


Fig. 28 — Electric Heat Power Diagram — 36 kW Heater, 208/230-V, Size 030-070 Units



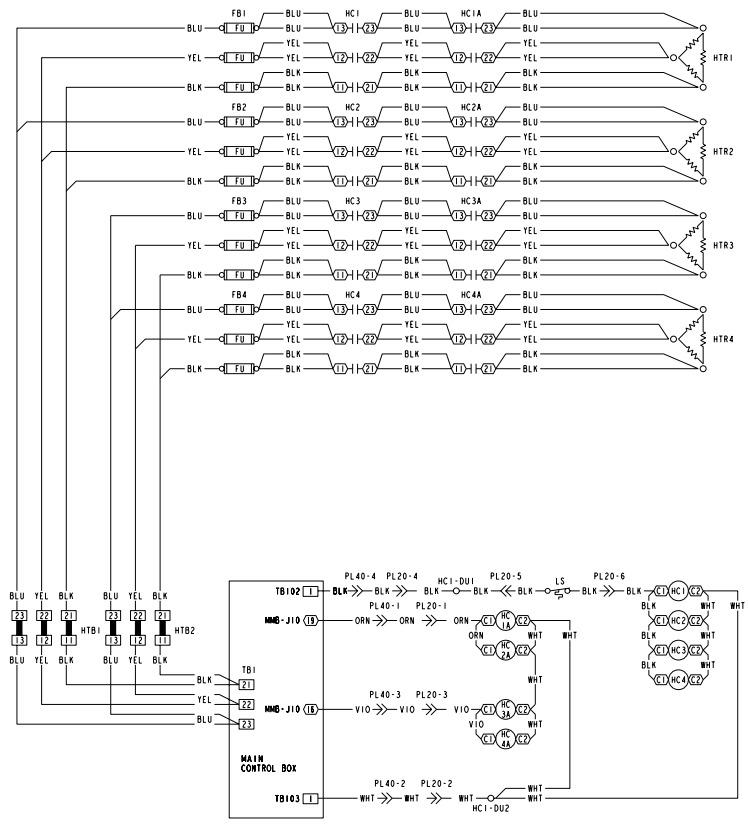


Fig. 29 — Electric Heat Power Diagram — 72 kW Heater, 208/230-V, Size 030-070 Units

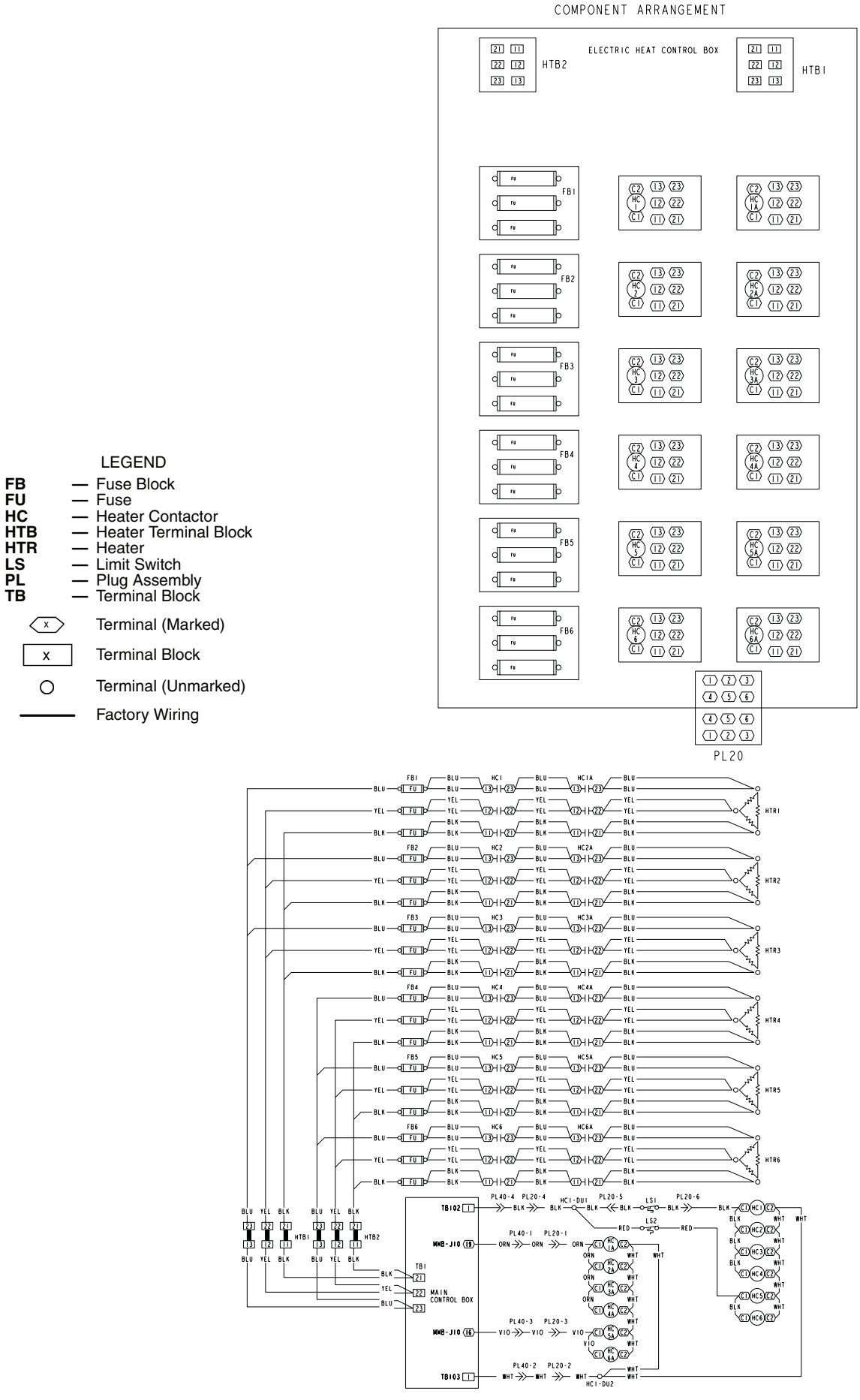


Fig. 30 — Electric Heat Power Diagram — 108 kW Heater, 208/230-V, Size 030-050 Units

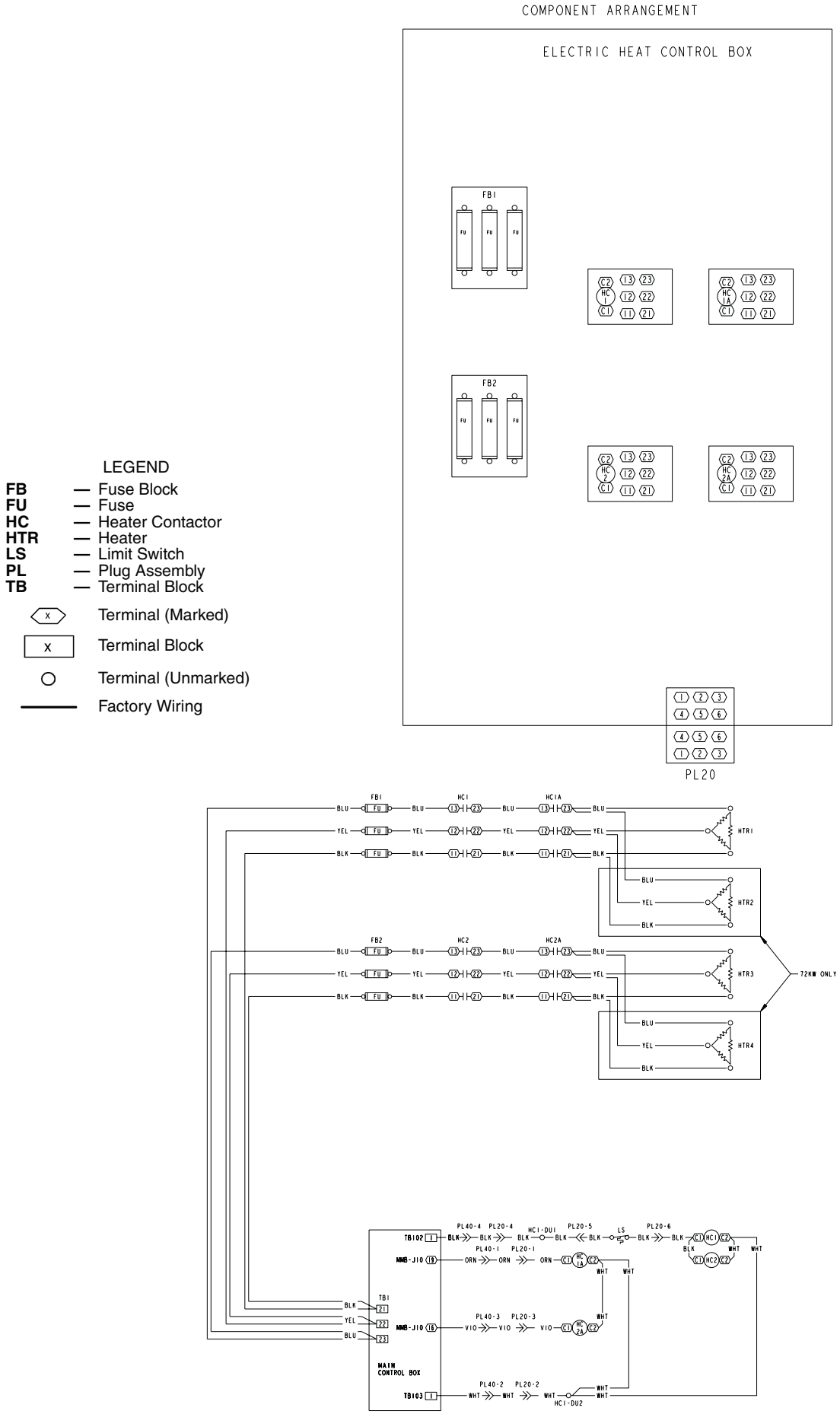


Fig. 31 — Electric Heat Power Diagram — 36 and 72 kW Heaters, 380/400/460-V, Size 030-070 Units

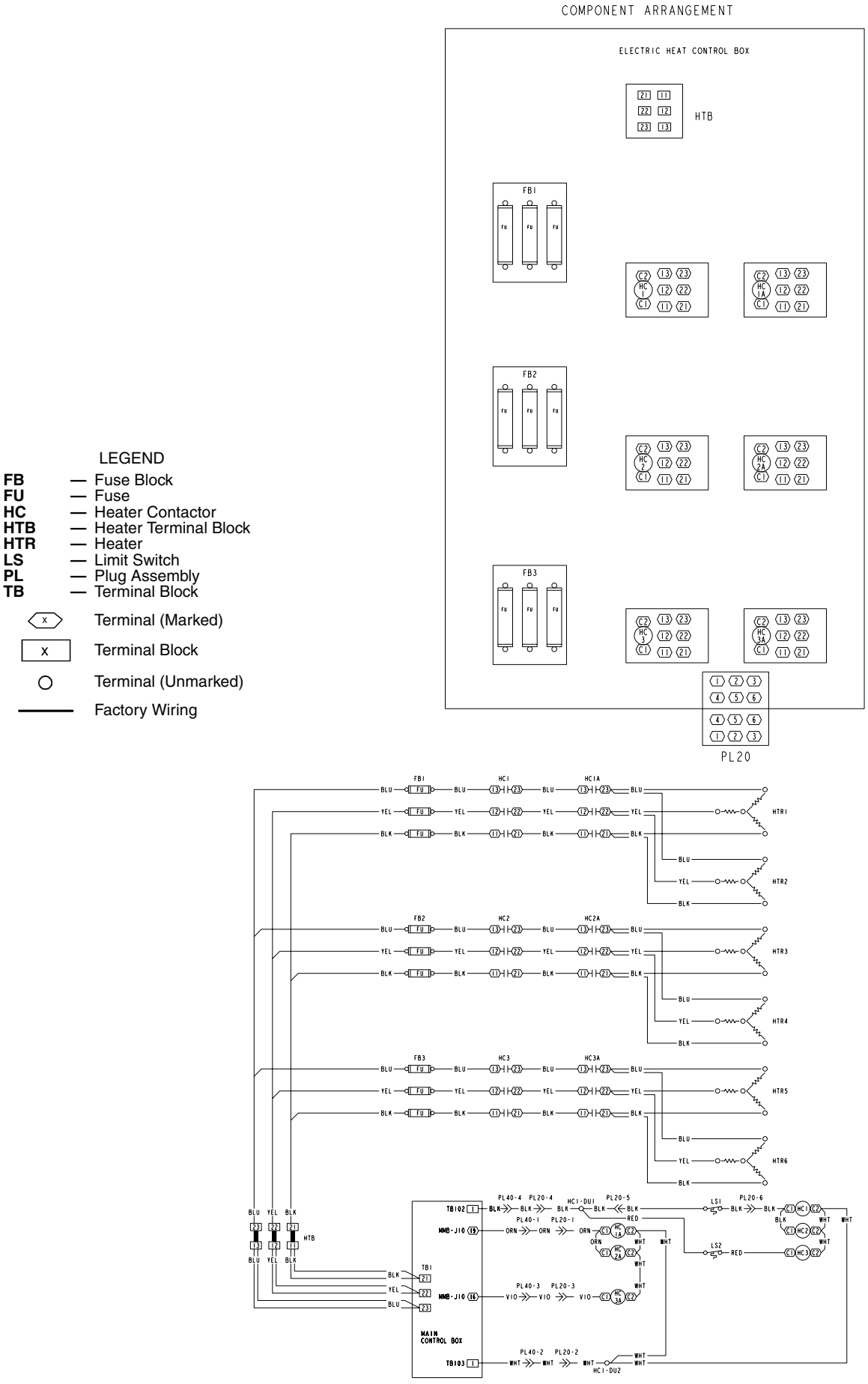


Fig. 32 — Electric Heat Power Diagram — 108 kW Heater, 380/400/460/575-V, Size 030-050 Units

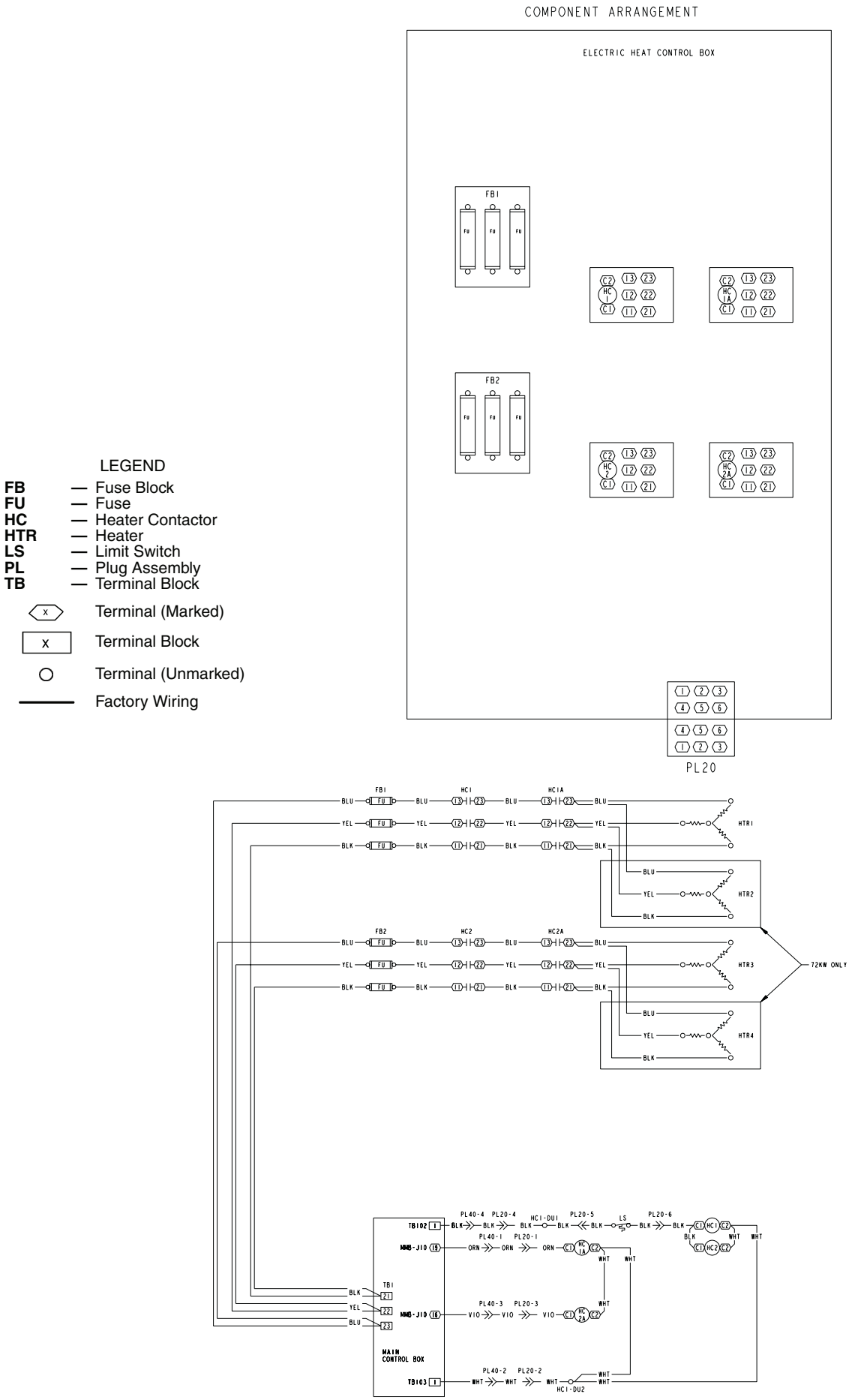


Fig. 33 — Electric Heat Power Diagram — 36 and 72 kW Heaters, 575-V, Size 030-070 Units

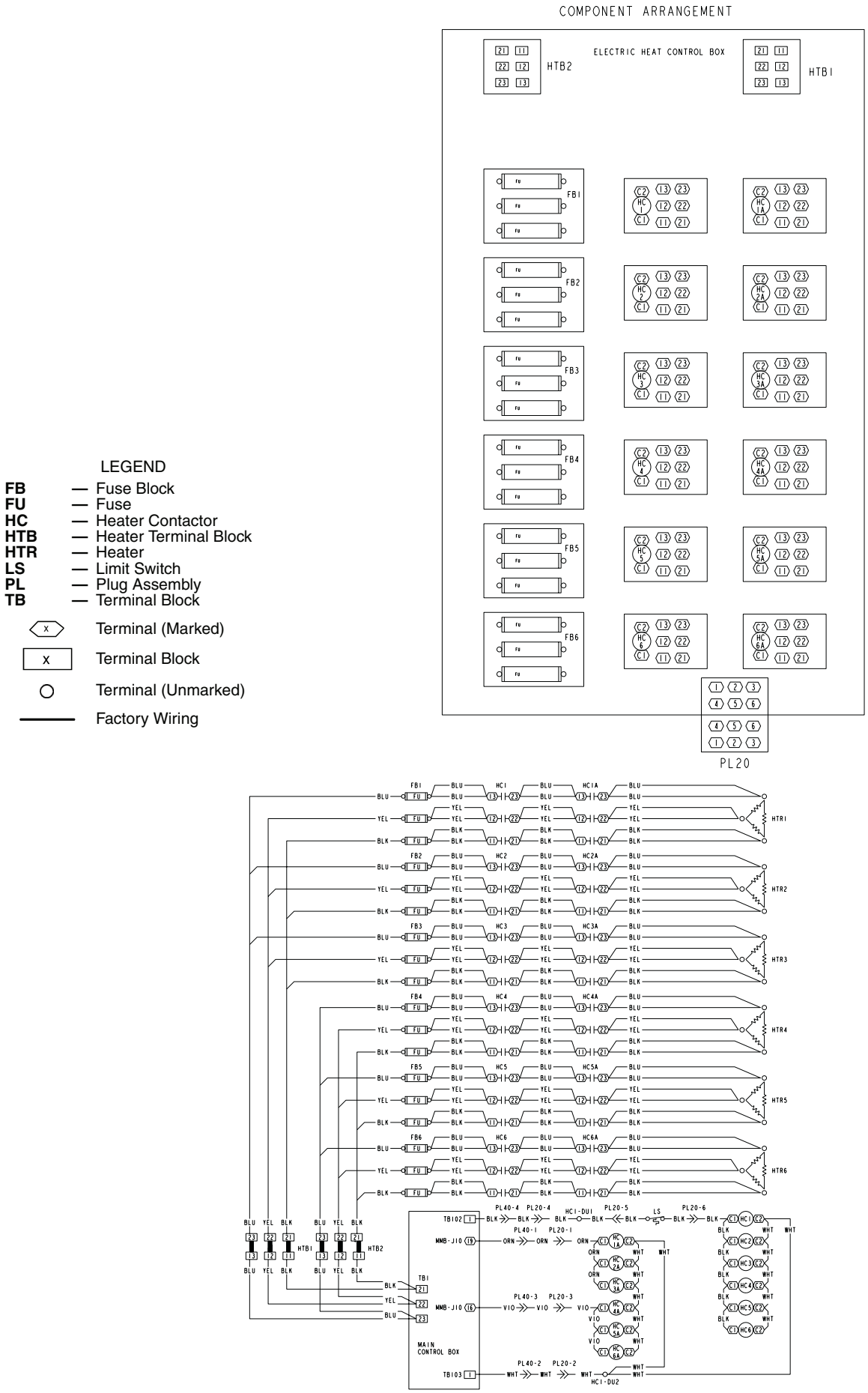
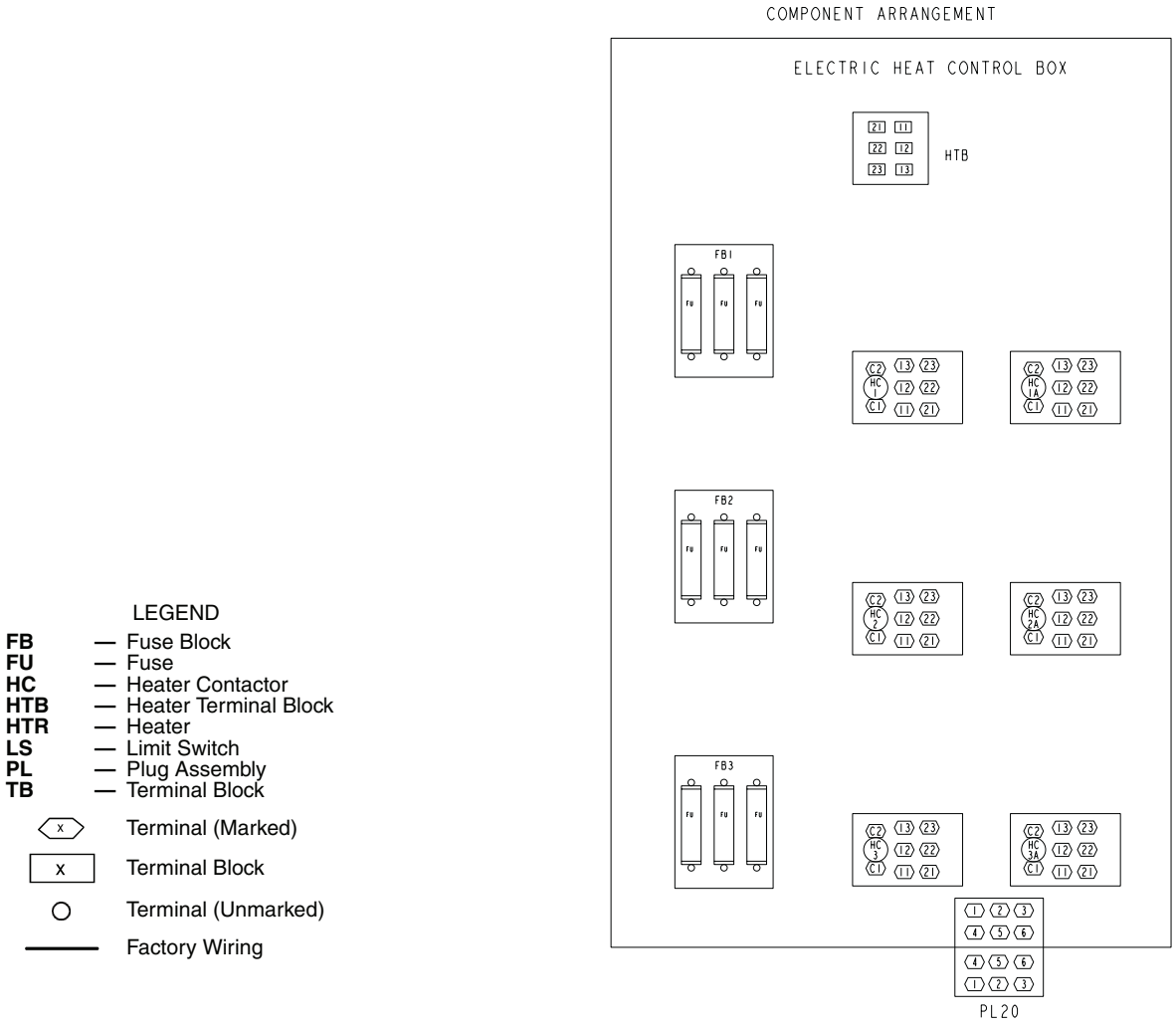


Fig. 34 — Electric Heat Power Diagram — 108 kW Heater, 208/230-V, Size 055-070 Units



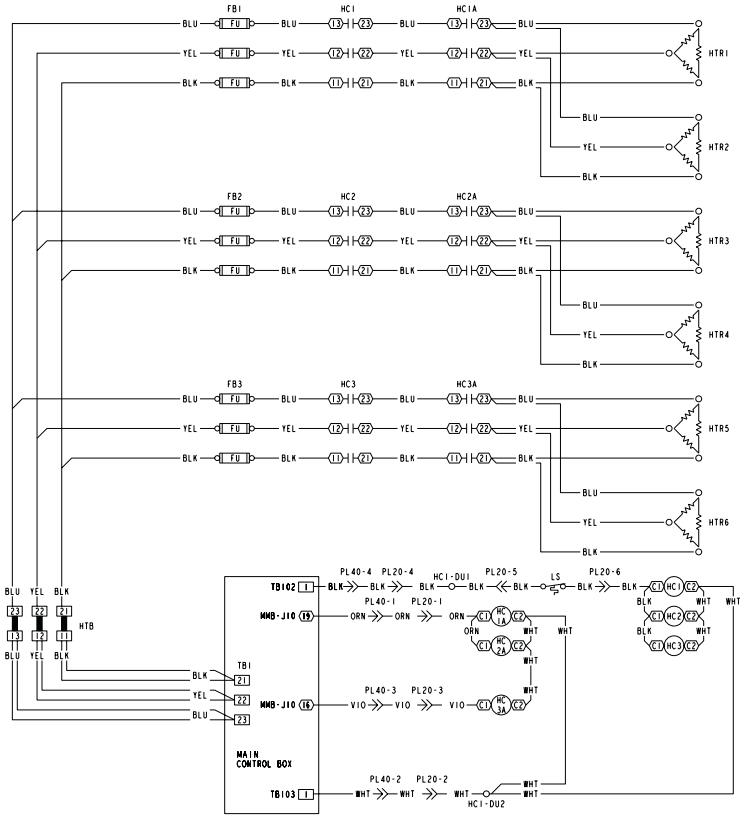


Fig. 35 — Electric Heat Power Diagram — 108 kW Heater, 380/400/460-V, Size 055-070 Units

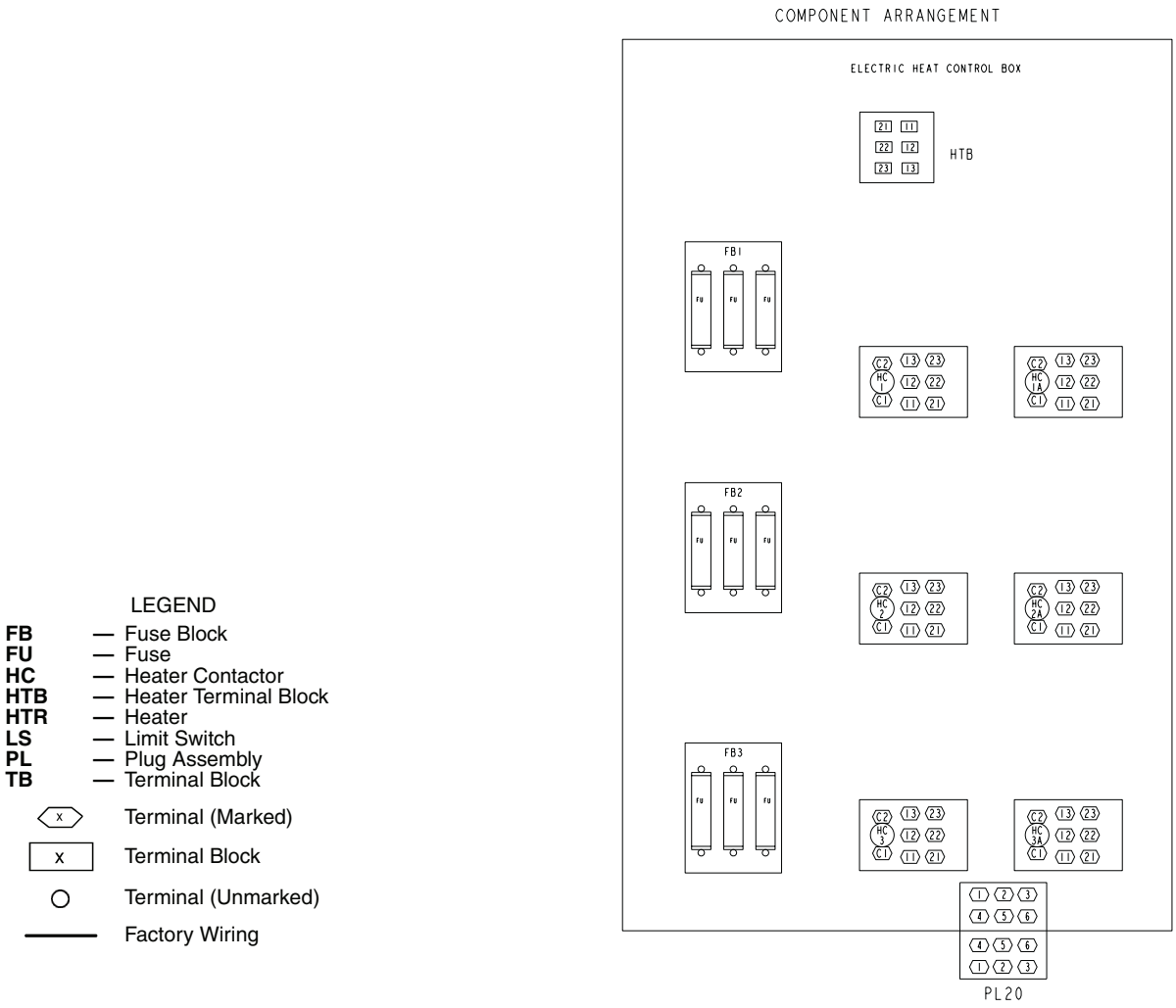
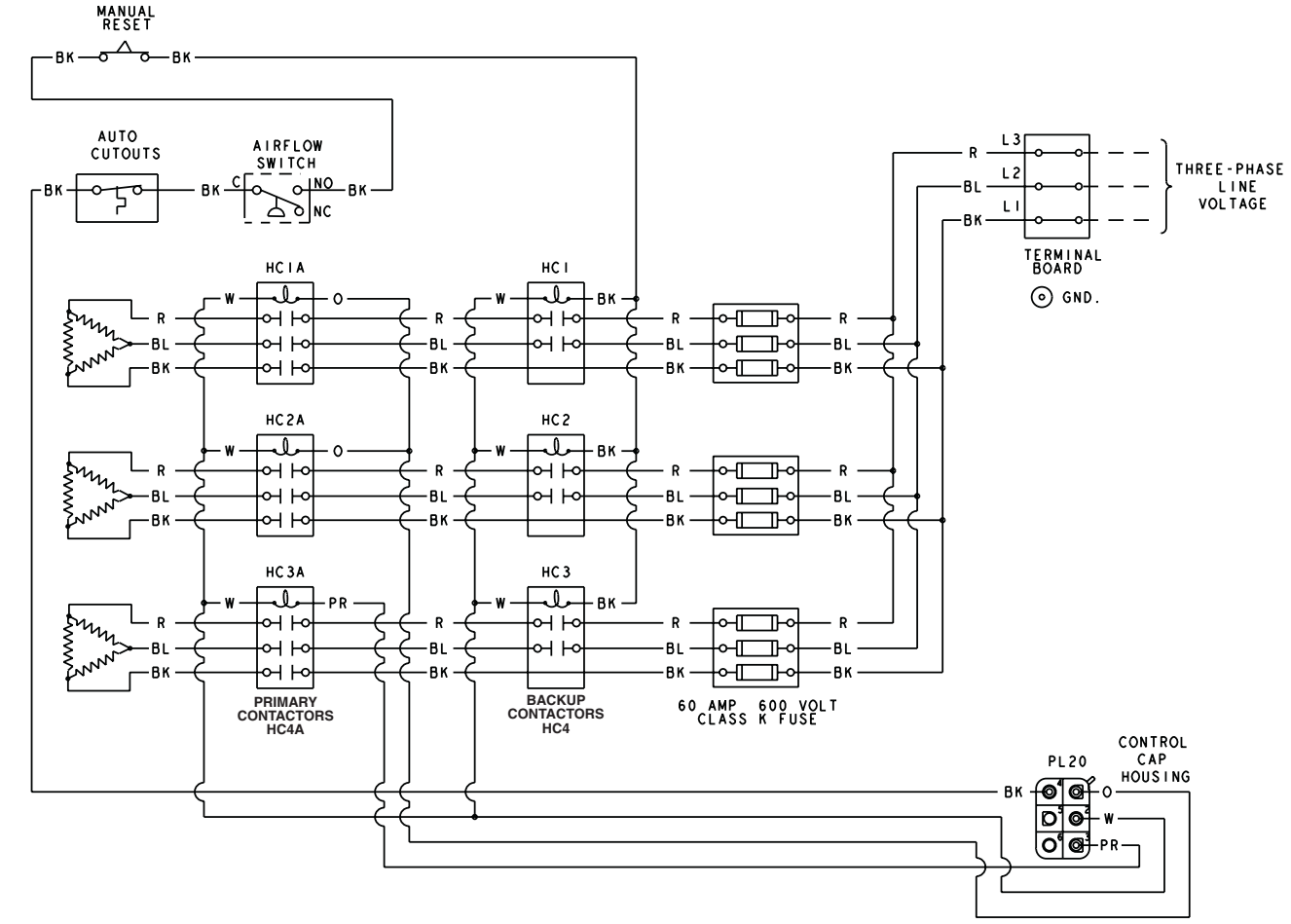


Fig. 36 — Electric Heat Power Diagram — 108 kW Heater, 575-V, Size 055-070 Units



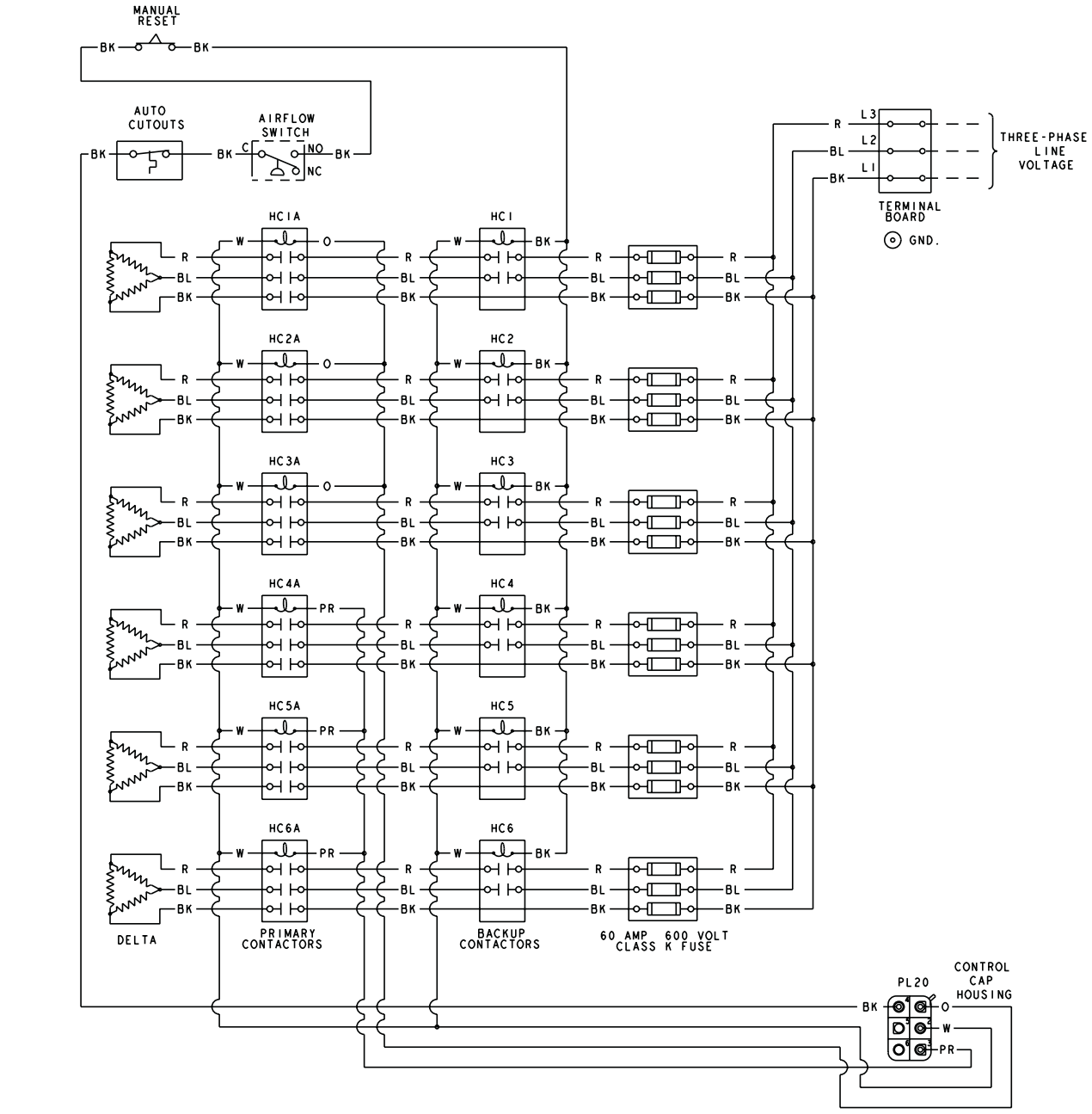
LEGEND

GND	—	Ground
HC	—	Heater Contactor
NC	—	Normally Closed
NO	—	Normally Open
PL	—	Plug
———		Factory Wiring
- - - -		Field Wiring

WIRE COLOR CODE

BK	—	Black
BL	—	Blue
BR	—	Brown
O	—	Orange
PR	—	Purple
R	—	Red
W	—	White
Y	—	Yellow

Fig. 37 — Electric Heat Power Diagram — 108 kW Heater, 460-V, Size 075-105 Units



LEGEND

GND — Ground
HC — Heater Contactor
NC — Normally Closed
NO — Normally Open
PL — Plug
——— Factory Wiring
– – – – Field Wiring

WIRE COLOR CODE

BK — Black
BL — Blue
BR — Brown
O — Orange
PR — Purple
R — Red
W — White
Y — Yellow

Fig. 38 — Electric Heat Power Diagram — 216 kW Heater, 460-V, Size 075-105 Units