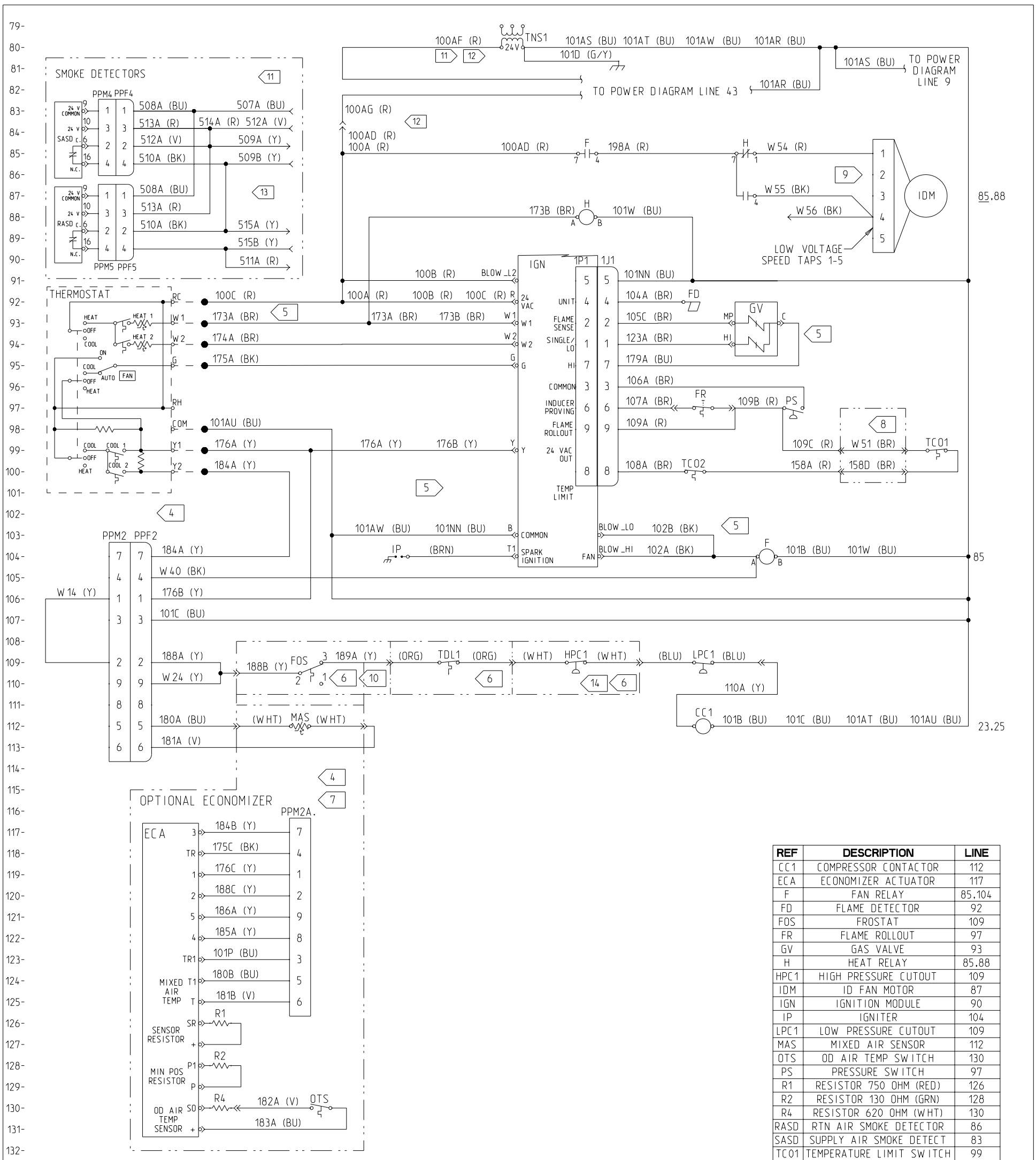

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	112
ECA	ECONOMIZER ACTUATOR	117
F	FAN RELAY	85,104
FD	FLAME DETECTOR	92
FOS	FROSTAT	109
FR	FLAME ROLLOUT	97
GV	GAS VALVE	93
H	HEAT RELAY	85,88
HPC1	HIGH PRESSURE CUTOUT	109
IDM	ID FAN MOTOR	87
IGN	IGNITION MODULE	90
IP	IGNITER	104
LPC1	LOW PRESSURE CUTOUT	109
MAS	MIXED AIR SENSOR	112
OTS	OD AIR TEMP SWITCH	130
PS	PRESSURE SWITCH	97
R1	RESISTOR 750 OHM (RED)	126
R2	RESISTOR 130 OHM (GRN)	128
R4	RESISTOR 620 OHM (WHT)	130
RASD	RTN AIR SMOKE DETECTOR	86
SASD	SUPPLY AIR SMOKE DETECT	83
TC01	TEMPERATURE LIMIT SWITCH	99
TC02	TEMPERATURE LIMIT SWITCH	100
TDL1	THERMOSTAT DISCHARGE LINE	109
TNS1	LOW VOLTAGE TRANSFORMER	80

COLOR	ABBR	COLOR	ABBR
BLACK	BK	ORANGE	O
BLUE	BU	RED	R
BROWN	BR	VIOLET (PURPLE)	V
GRAY (SLATE)	GY	WHITE	W
GREEN/YELLOW	G/Y	YELLOW	Y

NOTES:

1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25°C (77°F), AT ATMOSPHERIC PRESSUREAT 50% RELATIVE HUMIDITY WITH ALL UTILITIES TURNED OFF AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.

2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.

3. NUMBERS ALONG THE RIGHT SIDE OF THE SCHEMATIC DESIGNATE THE LOCATION OF CONTACTS BY LINE NUMBER. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT.

4 WHEN INSTALLING OPTIONAL ECONOMIZER, REMOVE CONFIG PLUG PPM2, AND CONNECT ECONOMIZER PLUG PPM2A TO PPF2, AND CONNECT MAS TO WIRES 180A AND 181A.

5 (FUTURE) CONNECTIONS SHOWN ARE FOR 2-STAGE GAS HEAT OPERATION. WHEN 1-STAGE OPERATION IS REQUIRED, WIRE 102B IS REMOVED, WIRES 101NN AND 174A ARE NOT CONNECTED TO IGN, AND WIRE 123A IS NOT CONNECTED TO GV.

6 CONNECTIONS SHOWN INCLUDE FOS, TDL1, AND HPC1. IF NONE OF THESE OPTIONS ARE INSTALLED, CONNECT WIRE LPC1-BLU TO WIRES W24/188A. IF ANY OR ALL OF THESE OPTIONS ARE INSTALLED, CONNECT THEM IN SERIES AS SHOWN. (NOTE 10 FOR EXCEPTION)

7 FOR MOTORIZED OUTSIDE AIR DAMPER, OPTIONAL MAS AND OTS (AND ASSOCIATED WIRING) ARE NOT USED, AND R4 IS REMOVED BETWEEN SO AND +.

8 WHEN WIRES 158D AND W51 ARE NOT PRESENT, CONNECT WIRES 158A AND 109C DIRECTLY TO TC01.

9 MINIMUM HEATING SPEED IS TAP 4. TO SET COOLING AND HEATING TO THE SAME SPEED (TAP 4 OR TAP 5), DISCONNECT WIRE W54 FROM IDM AND CONNECT IT TO THE EXTRA TERMINAL PROVIDED ON WIRE W56.

10 FROSTAT CONNECTIONS/WIRE NUMBERS HAVE AN EXCEPTION. FOR ALL 4-5 TON UNITS WITH R410A REFRIGERANT AND HIGH EFFICIENCY, CONNECT WIRE 132C TO FOS PIN 2 AND 101TT TO FOS PIN 3.

11 WHEN INSTALLING OPTIONAL SMOKE DETECTOR (SD), CONNECT SASD PLUG PPM4 TO PPF4 AND RASD PLUG PPM5 TO PPF5. REMOVE 100AF OR 100A/100AD AS REQUIRED FROM TNS1, 24V PWR AND CONNECT TO 511A. CONNECT 514A/512A TO TNS1, 24V PWR. CONNECT 507A TO TNS1 SECONDARY COM.

12 (FUTURE) PHASE MONITOR (PHM) CONNECTIONS SHOWN. IF PHM NOT INSTALLED CONNECT WIRE 100A/100AD TO TNS1 24V PWR, OR WIRE 511A IF SD IS INSTALLED. WIRES 100AF, 100AG AND 101AR ARE NOT PRESENT.

13 CONNECTIONS SHOWN INCLUDE RASD AND SASD. IF RASD IS NOT INSTALLED, CONNECT 515A TO 515B. IF SASD IS NOT INSTALLED, CONNECT 509A TO 509B.

14 HPC SHOWN IS FOR 410A. HPC FOR R22 REFRIGERANT (DIGIT 7 IN MODEL NUMBER IS "A" or "B") WILL HAVE BLACK LEADS FOR HPC01 AND RED LEADS FOR HPC02.

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DRAWN BY: J.Woosley
DATE: 09Jun2005
DO NOT SCALE PRINT
THIRD ANGLE PROJECTION

4366-4570

DIAGRAM
CONTROLS - GAS HEAT.
3-4 TON, EM CNTL.
X13 IDM

REV F