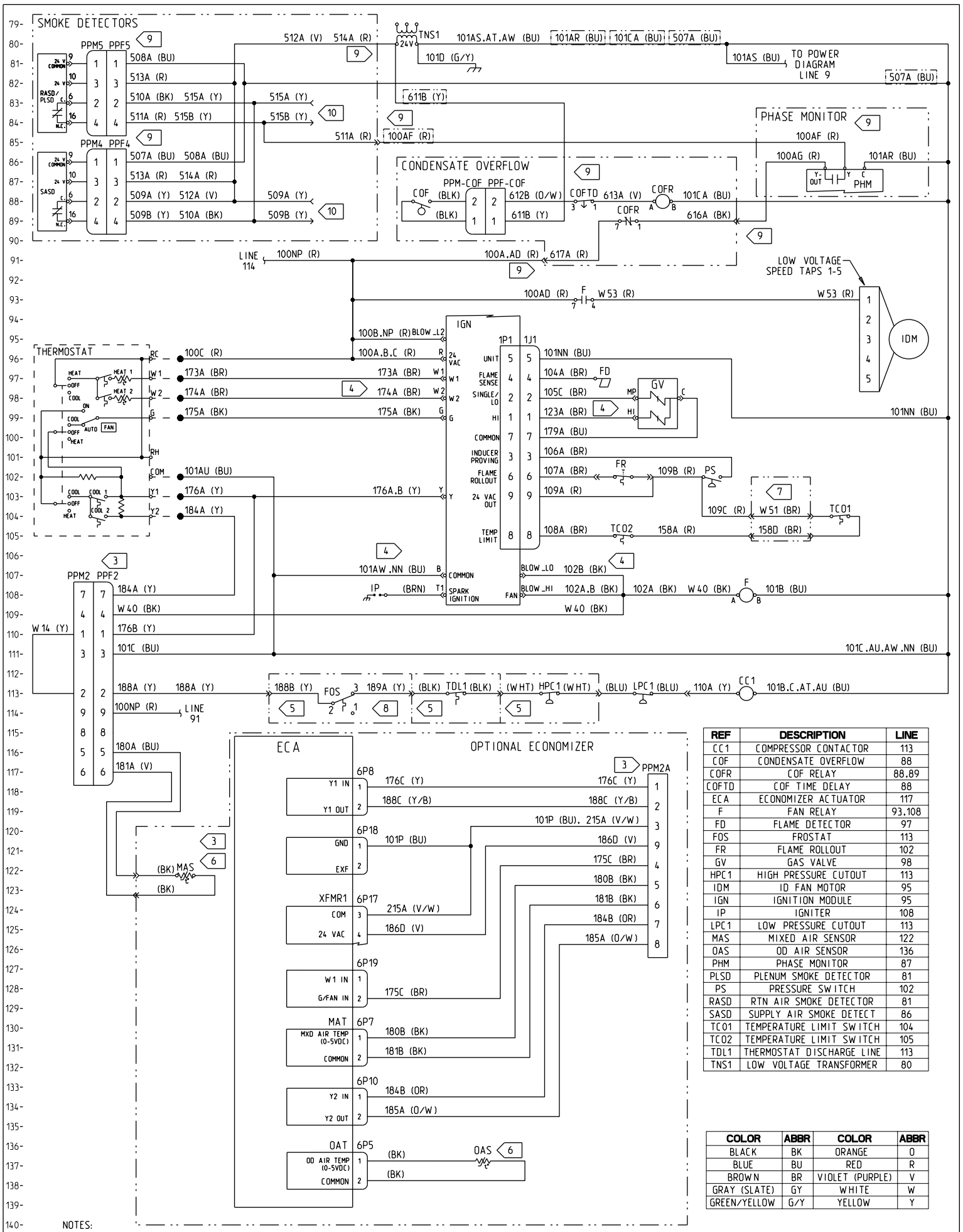

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	113
COF	CONDENSATE OVERFLOW	88
COFR	COF RELAY	88,89
COFTD	COF TIME DELAY	88
ECA	ECONOMIZER ACTUATOR	117
F	FAN RELAY	93,108
FD	FLAME DETECTOR	97
FOS	FROSTAT	113
FR	FLAME ROLLOUT	102
GV	GAS VALVE	98
HPC1	HIGH PRESSURE CUTOUT	113
IDM	ID FAN MOTOR	95
IGN	IGNITION MODULE	95
IP	IGNITER	108
LPC1	LOW PRESSURE CUTOUT	113
MAS	MIXED AIR SENSOR	122
OAS	OD AIR SENSOR	136
PHM	PHASE MONITOR	87
PLSD	PLENUM SMOKE DETECTOR	81
PS	PRESSURE SWITCH	102
RASD	RTN AIR SMOKE DETECTOR	81
SASD	SUPPLY AIR SMOKE DETECT	86
TC01	TEMPERATURE LIMIT SWITCH	104
TC02	TEMPERATURE LIMIT SWITCH	105
TDL1	THERMOSTAT DISCHARGE LINE	113
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 PRESSURE, AT 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 WHEN INSTALLING OPTIONAL ECONOMIZER, REMOVE CONFIG PLUG PPM2, AND CONNECT ECONOMIZER PLUG PPM2A TO PPF2, AND CONNECT MAS TO WIRES 180A AND 181A.

4 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.

5 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 8 FOR EXCEPTIONS)

6 FOR MOTORIZED OUTSIDE AIR DAMPER, OPTIONAL MAS AND OAS (AND ASSOCIATED WIRING) ARE NOT USED.

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

8 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.

9 CONNECTIONS SHOWN INCLUDE THE PHASE MONITOR, OPTIONAL SMOKE DETECTORS, AND OPTIONAL CONDENSATE OVERFLOW.
>> IF ONLY THE PHASE MONITOR IS INSTALLED, MOVE WIRE 100AF FROM WIRE 511A TO TNS1-24VAC, AND MOVE WIRE 100AG FROM WIRE 616A TO WIRES 100A/AD.
>> IF ONLY THE SMOKE DETECTORS ARE INSTALLED, MOVE WIRES 100A/AD FROM WIRE 617A TO WIRE 511A.
>> IF ONLY THE CONDENSATE OVERFLOW IS INSTALLED, MOVE WIRE 616A FROM WIRE 100AG TO TNS1-24VAC.
>> IF ONLY THE PHASE MONITOR AND SMOKE DETECTORS ARE INSTALLED, MOVE WIRES 100A/AD FROM WIRE 617A TO WIRE 100AG.
>> IF ONLY THE PHASE MONITOR AND CONDENSATE OVERFLOW ARE INSTALLED, MOVE WIRE 100AF FROM WIRE 511A TO TNS1-24VAC.
>> IF ONLY THE SMOKE DETECTORS AND CONDENSATE OVERFLOW ARE INSTALLED, MOVE WIRE 616A FROM WIRE 100AG TO WIRE 511A.

10 CONNECTIONS SHOWN INCLUDE OPTIONAL SMOKE DETECTORS. THE FOLLOWING COMBINATIONS ARE ALLOWED: RASD ONLY, SASD ONLY, RASD & SASD, AND PLSD ONLY. IF RASD OR PLSD IS NOT INSTALLED, CONNECT WIRE 515A TO WIRE 515B. IF SASD IS NOT INSTALLED, CONNECT WIRE 509A TO WIRE 509B.

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DRAWN BY: R JOHNSON
DATE: 6/6/2013
DO NOT SCALE PRINT
THIRD ANGLE PROJECTION

DIAGRAM
CONTROLS - GAS HEAT,
5 TON, EM CNTL,
X13 IDM

4366-8387

REV A