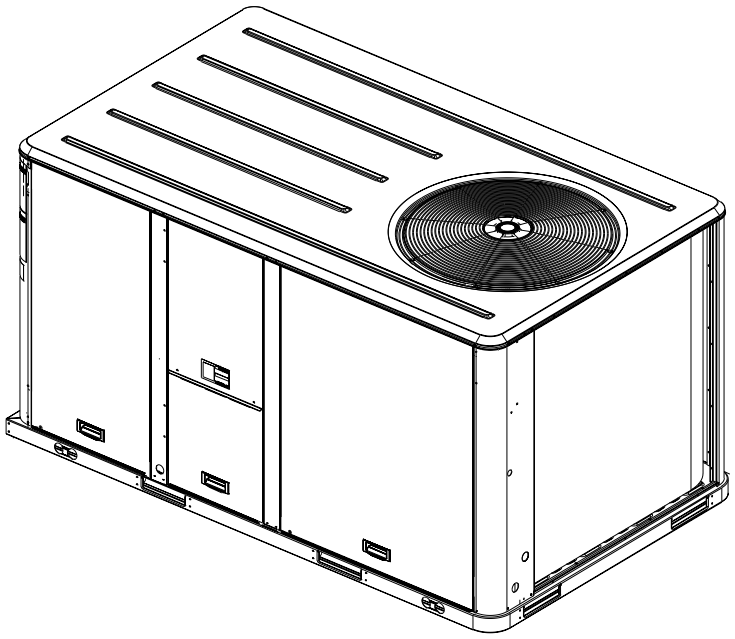
T_C-SVE002A-EN

Wiring Manual

Packaged Electric/Electric with ReliaTel™ Controls

3 - 10 Tons



Models:

(60 Hz)

TSC036A*R - TSC120A*R
THC036A*R - THC120A*R

November 2003

Page D995-752

Introduction

Literature Change History

T_C-SVE-001A-EN (Nov. 2003)
Updated wiring diagrams.

Overview of Manual

This manual provides wiring diagrams for unit models listed on the front page. Refer to the Table of Contents for proper wiring diagrams.

NOTICE:

Warnings and Cautions appear at appropriate sections throughout this manual. Read these carefully.

WARNING– Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION – Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

CAUTION – Indicates a situation that may result in equipment or property-damage-only accidents.

Contents

Contents

Model Number Description

T	S	C	036	A	3	R	B	A	**	C	0	0	0	A	1	0	0	0	1	A	1
1	2	3	4,5,6	7	8	9	10	11	12,13	14	15	16	17	18	19	20	21	22	23	24	25

DIGIT 1 - Unit Function

T = DX Cooling

DIGIT 2 - Efficiency

S = Standard Efficiency
H = High Efficiency

DIGIT 3 - Airflow

C = Convertible

DIGITS 4,5,6 - Nominal Gross Cooling Capacity (MBh)

036 = 3 Ton
048 = 4 Ton
060 = 5 Ton
072 = 6 Ton
090 = 7½ Ton, Single Compressor
092 = 7½ Ton, Dual Compressor
102 = 8½ Ton
120 = 10 Ton

DIGIT 7 - Major Design Sequence

A = First

DIGIT 8 - Unit Voltage

1 = 208-230/60/1
3 = 208-230/60/3
4 = 460/60/3
W = 575/60/3
K = 380/60/3

DIGIT 9 - Unit Controls

E = Electromechanical
R = ReliaTel™ Microprocessor

DIGIT 10 - Heating Capacity

0 = No Electric Heat
A = 5 kW (1 phase)
B = 6 kW (3 phase)
C = 9 kW (3 phase)
D = 10 kW (1 phase)
E = 12 kW (3 phase)
F = 14 kW (1 phase)
G = 18 kW (1 and 3 phase)
J = 23 kW (3 phase)
K = 27 kW (3 phase)
N = 36 kW (3 phase)
P = 54 kW (3 phase)

DIGIT 11 - Minor Design Sequence

A = First Sequence

DIGITS 12, 13 - Service Sequence

** = Factory Assigned

DIGIT 14 - Fresh Air Selection

0 = No Fresh Air
A = Manual Outside Air Damper 0-50%
B = Motorized Outside Air Damper 0-50%
C = Economizer, Dry Bulb 0-100% without Barometric Relief
D = Economizer, Dry Bulb 0-100% with Barometric Relief
E = Economizer, Reference Enthalpy 0-100% without Barometric Relief
F = Economizer, Reference Enthalpy 0-100% with Barometric Relief
G = Economizer, Comparative Enthalpy 0-100% without Barometric Relief
H = Economizer, Comparative Enthalpy 0-100% with Barometric Relief

DIGIT 15 - Supply Fan/Drive Type/Motor

0 = Standard Drive
1 = Oversized Motor
2 = Optional Belt Drive Motor

DIGIT 16 - Hinged Service Access/Filters

0 = Standard Panels/Standard Filters
A = Hinged Access Panels/Standard Filters
B = Standard Panels/2" Pleated Filters
C = Hinged Access Panels/2" Pleated Filters

DIGIT 20 - Convenience Outlet

0 = No Convenience Outlet
A = Unpowered Convenience Outlet
B = Powered Convenience Outlet (3 phase only)

DIGIT 21 - Communications Options

0 = No Communications Interface
1 = Trane Communications Interface
2 = LonTalk® Communications Interface
3 = Novar 2024 Controls
4 = Novar 3051 Controls

DIGIT 22 - Refrigeration System Option

0 = Standard Refrigeration System
A = Thermal Expansion Valve (TXV)
B = Dehumidification (Hot Gas Reheat Coil)

DIGIT 23 - Refrigeration Controls

0 = No Refrigeration Control
1 = High Pressure Control
2 = Frostat
3 = Crankcase Heater
4 = High Pressure Control and Frostat
5 = High Pressure Control and Crankcase Heater
6 = Frostat and Crankcase Heater
7 = High Pressure Control, Frostat and Crankcase Heater

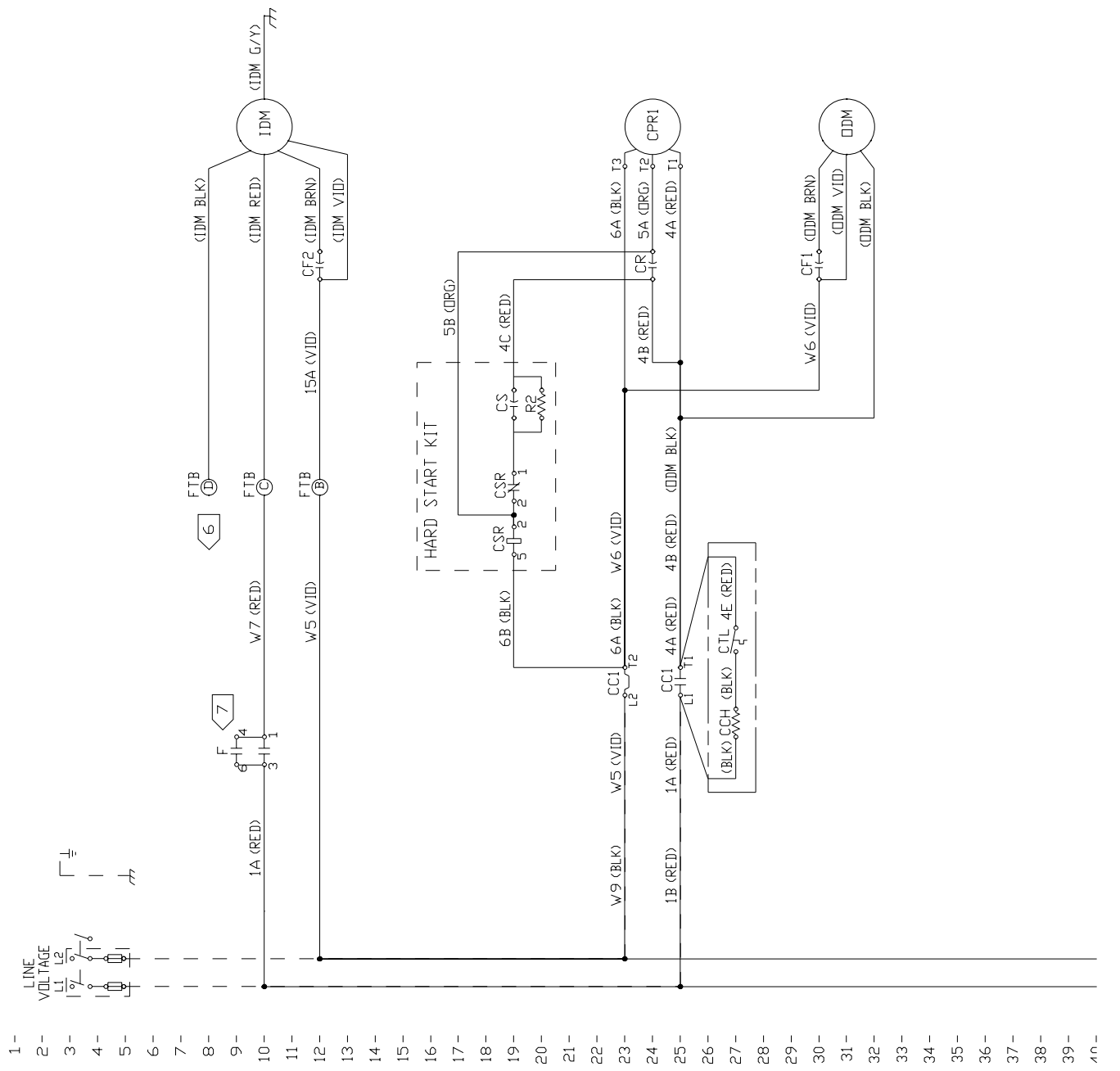
DIGIT 24 - Smoke Detector

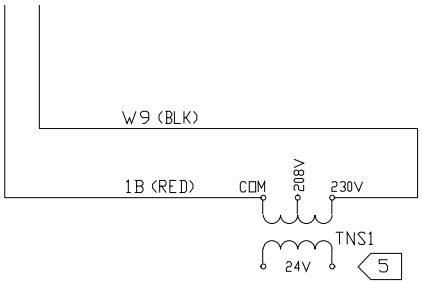
0 = No Smoke Detector
A = Return Air Smoke Detector
B = Supply Air Smoke Detector
C = Supply and Return Air Smoke Detectors

DIGIT 25 - Monitoring Controls

0 = No Monitoring Control
1 = Clogged Filter Switch
2 = Fan Failure Switch
3 = Discharge Air Sensing Tube
4 = Clogged Filter Switch and Fan Fail Switch
5 = Clogged Filter Switch and Discharge Air Sensing Tube
6 = Fan Fail Switch and Discharge Air Sensing Tube
7 = Clogged Filter and Fan Fail Switches and Discharge Air Sensing Tube
8 = Novar Return Air Sensor

Diagram 1
Power Schematic - 230v/60hz/1ph
2 - 5 Ton Cooling Only
4366-1019





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. 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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/1PH UNITS. WHEN 208V/60HZ/1PH OPERATION IS REQUIRED, MOVE WIRE W9 (BLK) FROM THE 230V TERMINAL ON TNS1 TO THE 208V TERMINAL.

6 CONNECTIONS SHOWN ARE FOR LOW SPEED OPERATION. WHEN HIGH SPEED OPERATION IS REQUIRED, MOVE WIRE W7 FROM FTB-C TO FTB-D.

7 CONNECTIONS SHOWN ARE FOR 4 AND 5 TON UNITS. FOR 3 TON UNITS (AND BELOW), THERE ARE NO FAN RELAY (F) JUMPERS FROM PIN 3 TO PIN 6 OR FROM PIN 1 TO PIN 4.

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	23,25
CCH	CRANKCASE HEATER	27
CF1	OD MOTOR CAPACITOR	30
CF2	ID MOTOR CAPACITOR	12
CPR1	COMPRESSOR	24
CR	CPR RUN CAPACITOR	24
CS	CPR START CAPACITOR	19
CSR	CPR START RELAY	19
CTL	COIL TEMP LIMIT SWITCH	27
F	FAN RELAY	9,10
FTB	FAN TERMINAL BLOCK	8,10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	31
R2	CPR START RESISTOR	20
TNS1	LOW VOLTAGE TRANSFORMER	45

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

⚠ WARNING
HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.

FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!

DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION

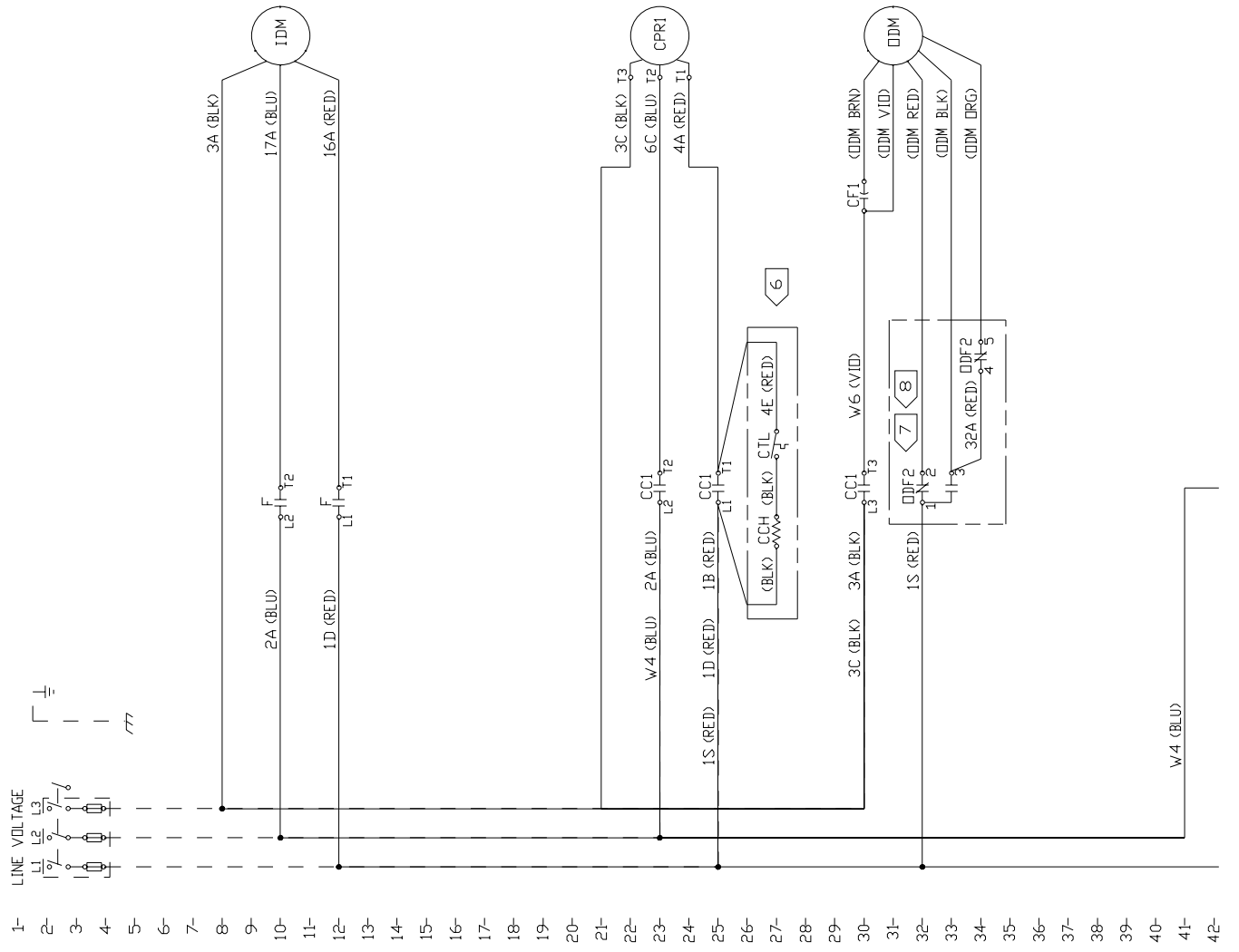
USE COPPER CONDUCTORS ONLY!

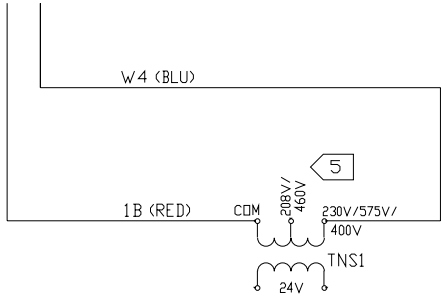
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

4366-1019D

Diagram 2
Power Schematic - 230v/60hz/3ph
2 - 7.5 Ton Cooling Only / Belt Drive Motor
4366-1020





REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	23,25,30
CCH	CRANKCASE HEATER	27
CF1	OD MOTOR CAPACITOR	30
CPR1	COMPRESSOR	23
CTL	COIL TEMP LIMIT SWITCH	27
F	FAN CONTACTOR	10,12
IDM	ID FAN MOTOR	10
ODF2	OD FAN SPEED RELAY	32,33,34
ODM	OD FAN MOTOR	31
TNS1	LOW VOLTAGE TRANSFORMER	45

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

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. 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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH, 575V/60HZ/3PH AND 380V-415V/50HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 (BLU) FROM THE 230V/575V TERMINAL ON TNS1 TO THE 208V/460V TERMINAL.

6 CONNECTIONS SHOWN ARE FOR 5-TON AND SMALLER UNITS. FOR UNITS GREATER THAN 5-TON, CTL AND WIRE 4E (RED) ARE NOT PRESENT, AND CCH WIRES ARE CONNECTED TO CC1-L1 AND CC1-T1.

7 CONNECTIONS SHOWN ARE FOR 380V-415V/50HZ/3PH, 380V/60HZ/3PH, 460V/60HZ/3PH, AND 575V/60HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 230V/60HZ/3PH OPERATION IS REQUIRED, WIRES 32A (RED), (ODM ORG), AND PINS 4 AND 5 ON ODF2 ARE NOT PRESENT.

8 CONNECTIONS SHOWN ARE FOR DEHUMIDIFICATION OPTION (2-SPEED ODM). FOR 1-SPEED ODM, WIRES 1S (RED), 32A (RED), (ODM RED), (ODM ORG) AND COMPONENT ODF2 ARE NOT PRESENT AND WIRE (ODM BLK) IS CONNECTED TO CC1-L1.

⚠ WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.

FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ AVERTISSEMENT

VOLTAGE HASARDEUX!

DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION

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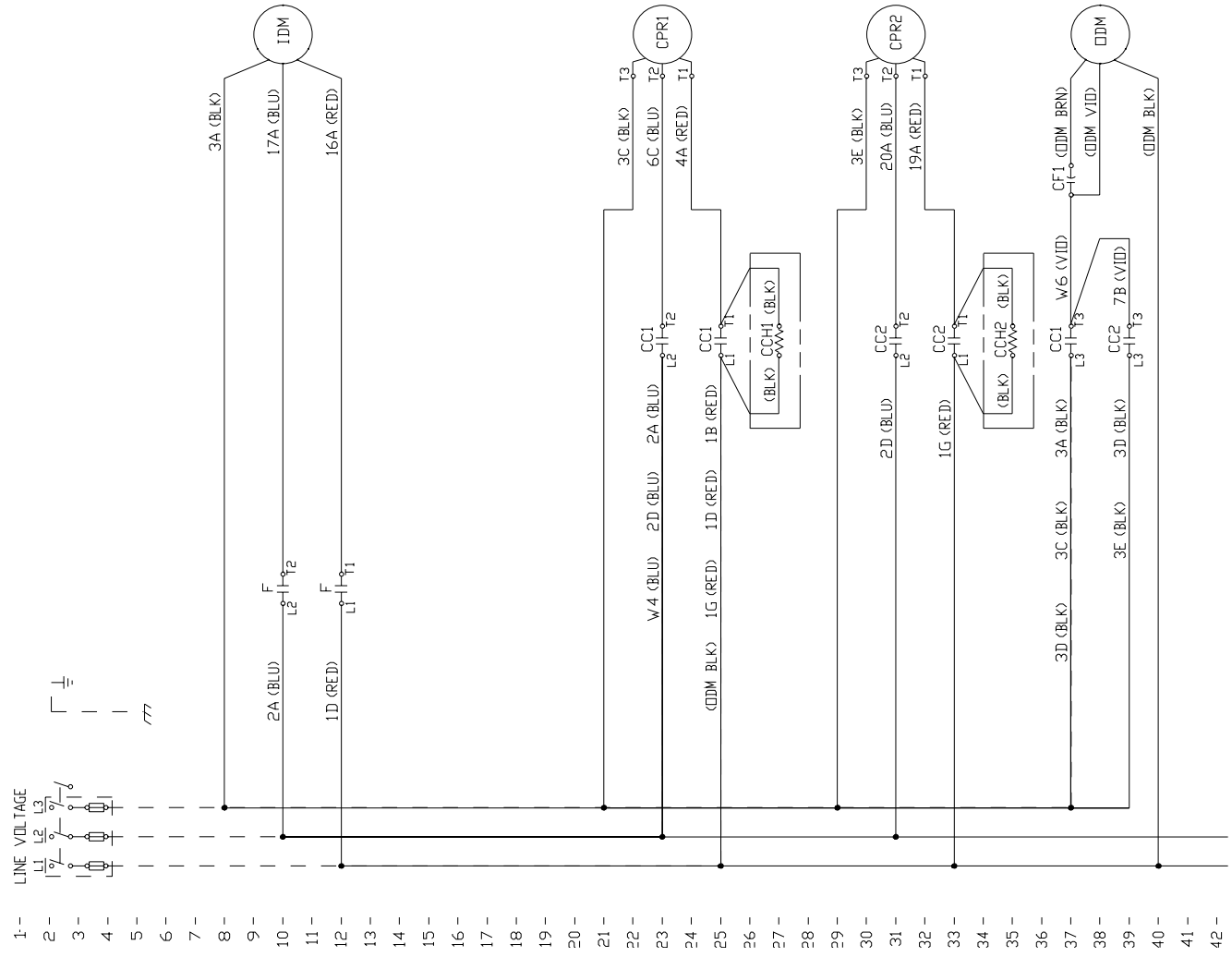
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

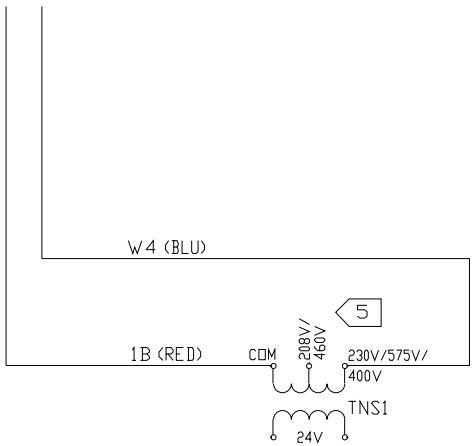
IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

4366-1020H

Diagram 3
Power Schematic - 230v/60hz/3ph
7.5 - 10 Ton Cooling Only / Dual Compressor
4366-1037





REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR 1	23,25,37
CC2	COMPRESSOR CONTACTOR 2	31,33,39
CCH1	CRANKCASE HEATER 1	27
CCH2	CRANKCASE HEATER 2	35
CF1	OD FAN CAPACITOR	37
CPR1	COMPRESSOR 1	23
CPR2	COMPRESSOR 2	31
F	FAN CONTACTOR	10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	38
TNS1	LOW VOLTAGE TRANSFORMER	51

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. 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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH, 575V/60HZ/3PH, AND 380V-415V/50HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4(BLU) FROM THE 230V/575V TERMINAL ON TNS1 TO THE 208V/460V TERMINAL.

IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

⚠ WARNING

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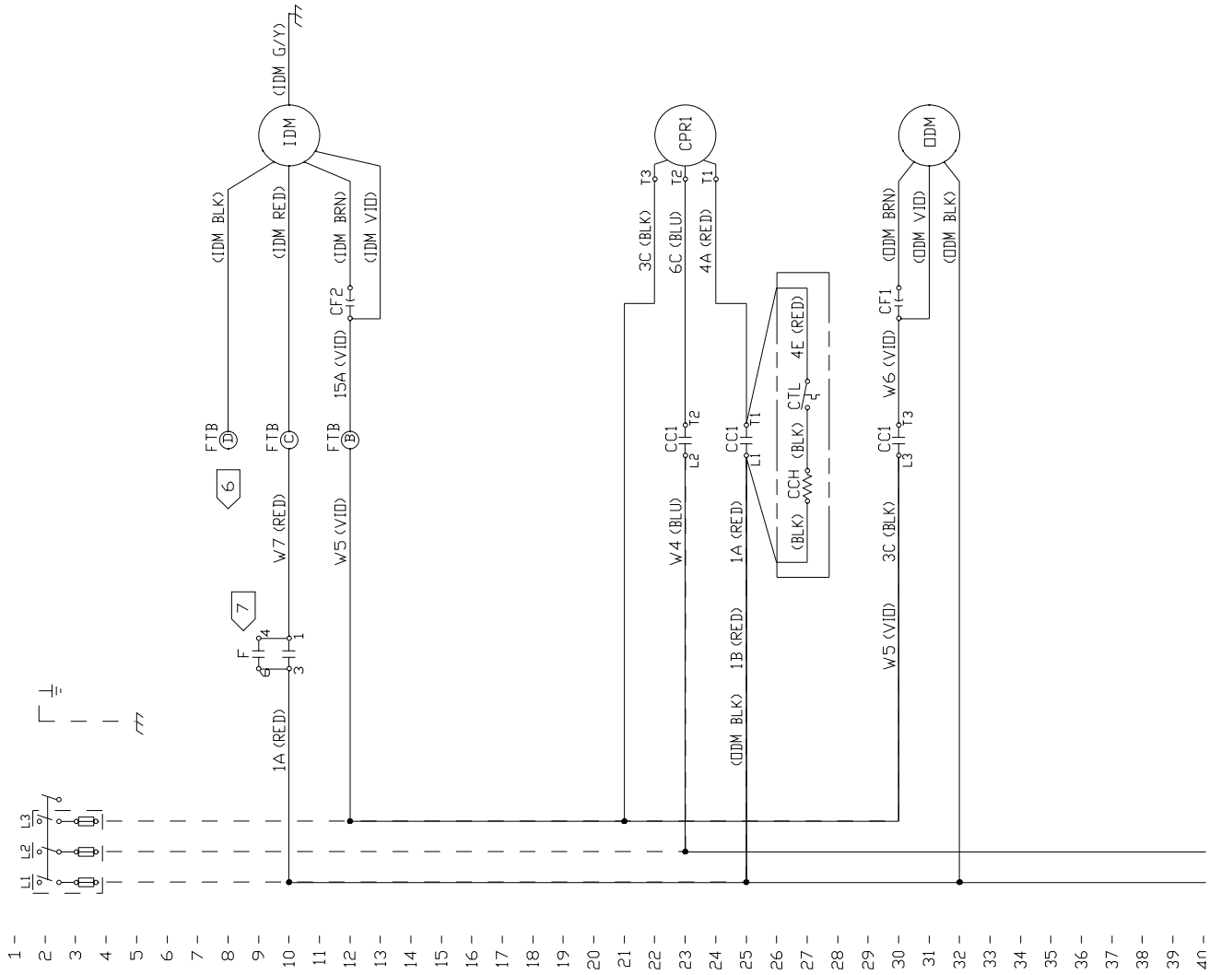
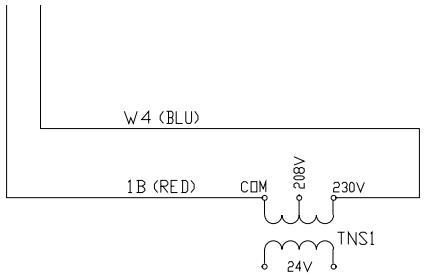
4366-1037C

Diagram 4
Power Schematic - 230v/60hz/3ph
2 - 5 Ton Cooling Only / Direct Drive Motor
4366-1022





REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	23,25,30
CCH	CRANKCASE HEATER	27
CF1	OD MOTOR CAPACITOR	30
CF2	ID MOTOR CAPACITOR	12
CPR1	COMPRESSOR	23
CTL	COIL TEMP LIMIT SWITCH	27
F	FAN RELAY	9,10
FTB	ID FAN TERMINAL BLOCK	8,10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	31
TNS1	LOW VOLTAGE TRANSFORMER	45

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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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH UNITS. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 (BLU) FROM THE 230V TERMINAL ON TNS1 TO THE 208V TERMINAL.

6 CONNECTIONS SHOWN ARE FOR LOW SPEED OPERATION. WHEN HIGH SPEED OPERATION IS REQUIRED, MOVE WIRE W7 FROM FTB-C TO FTB-D.

7 CONNECTIONS SHOWN ARE FOR 4 AND 5 TON UNITS. FOR 3 TON UNITS (AND BELOW), THERE ARE NO FAN RELAY (F) JUMPERS FROM PIN 3 TO PIN 6 OR FROM PIN 1 TO PIN 4.

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

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FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

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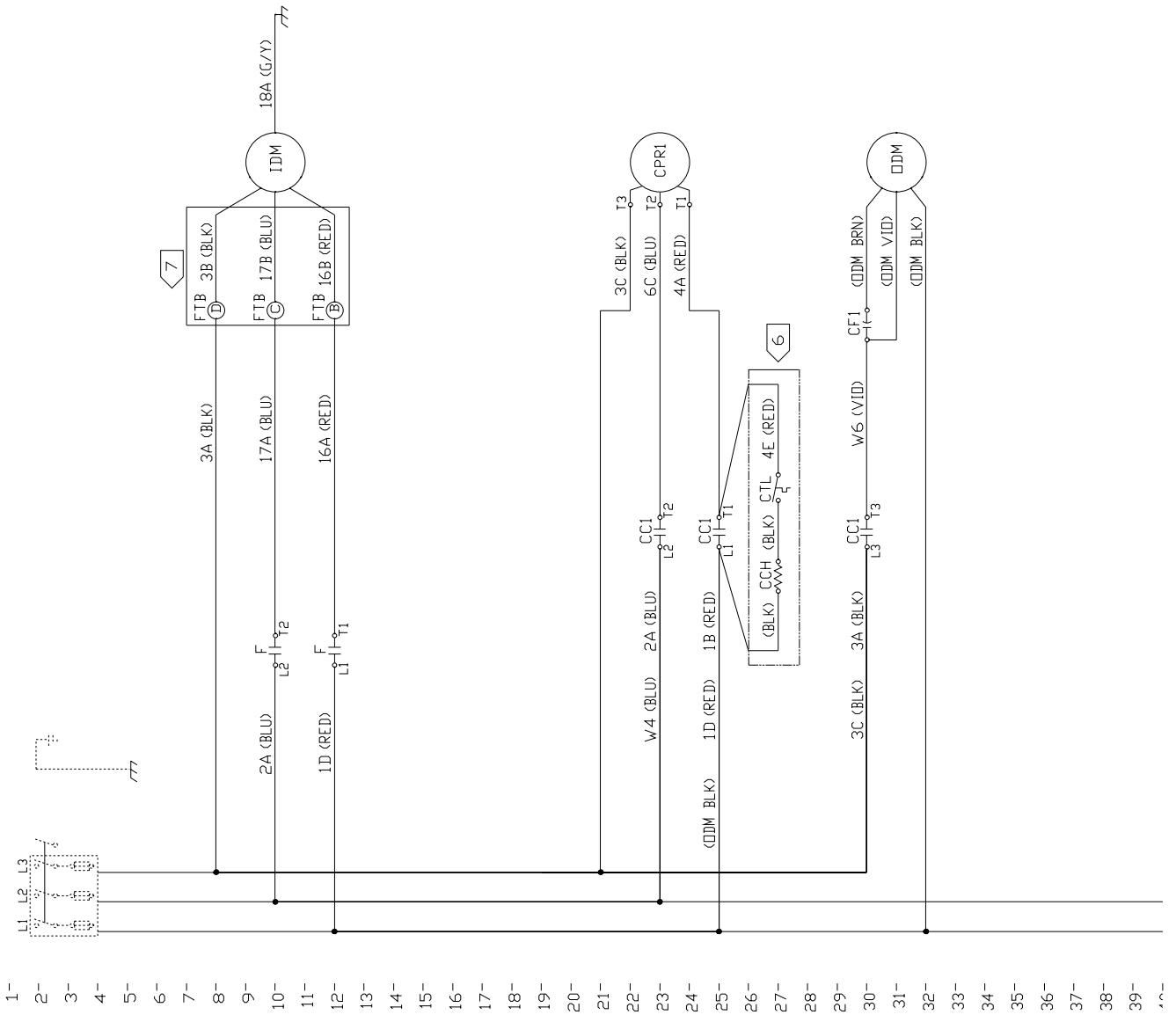
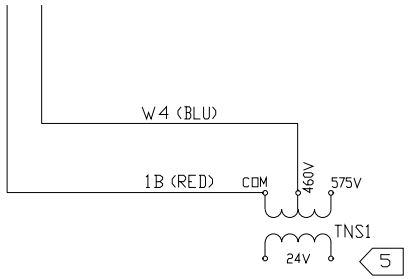
4366-1022D

Diagram 5
Power Schematic - 460-575v/60hz/3ph
2 - 7.5 Ton Cooling Only / Belt Drive Motor
4366-1023





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4. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING :CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH UNITS. WHEN 575V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 (BLU) FROM THE 460V TERMINAL ON TNS1 TO THE 575V TERMINAL.

6 CONNECTIONS SHOWN ARE FOR 5-TON AND SMALLER UNITS. FOR UNITS GREATER THAN 5-TON, CTL AND WIRE 4E (RED) ARE NOT PRESENT, AND CCH WIRES ARE CONNECTED TO CC1-L1 AND CC1-T1.

7 CONNECTIONS SHOWN ARE FOR 5-TON (AND SMALLER) UNITS. FOR UNITS GREATER THAN 5-TON, WIRES 3B, 16B,17B AND FTB ARE NOT PRESENT, AND WIRES 3A, 16A, AND 17A ARE CONNECTED DIRECTLY TO IDM.

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	23,25,30
CCH	CRANKCASE HEATER	27
CF1	OD MOTOR CAPACITOR	30
CPR1	COMPRESSOR	23
CTL	COIL TEMP LIMIT SWITCH	27
F	FAN CONTACTOR	10,12
FTB	ID FAN TERMINAL BLOCK	8,10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	31
TNS1	LOW VOLTAGE TRANSFORMER	35

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

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VOLTAGE HASARDEUX!

DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION

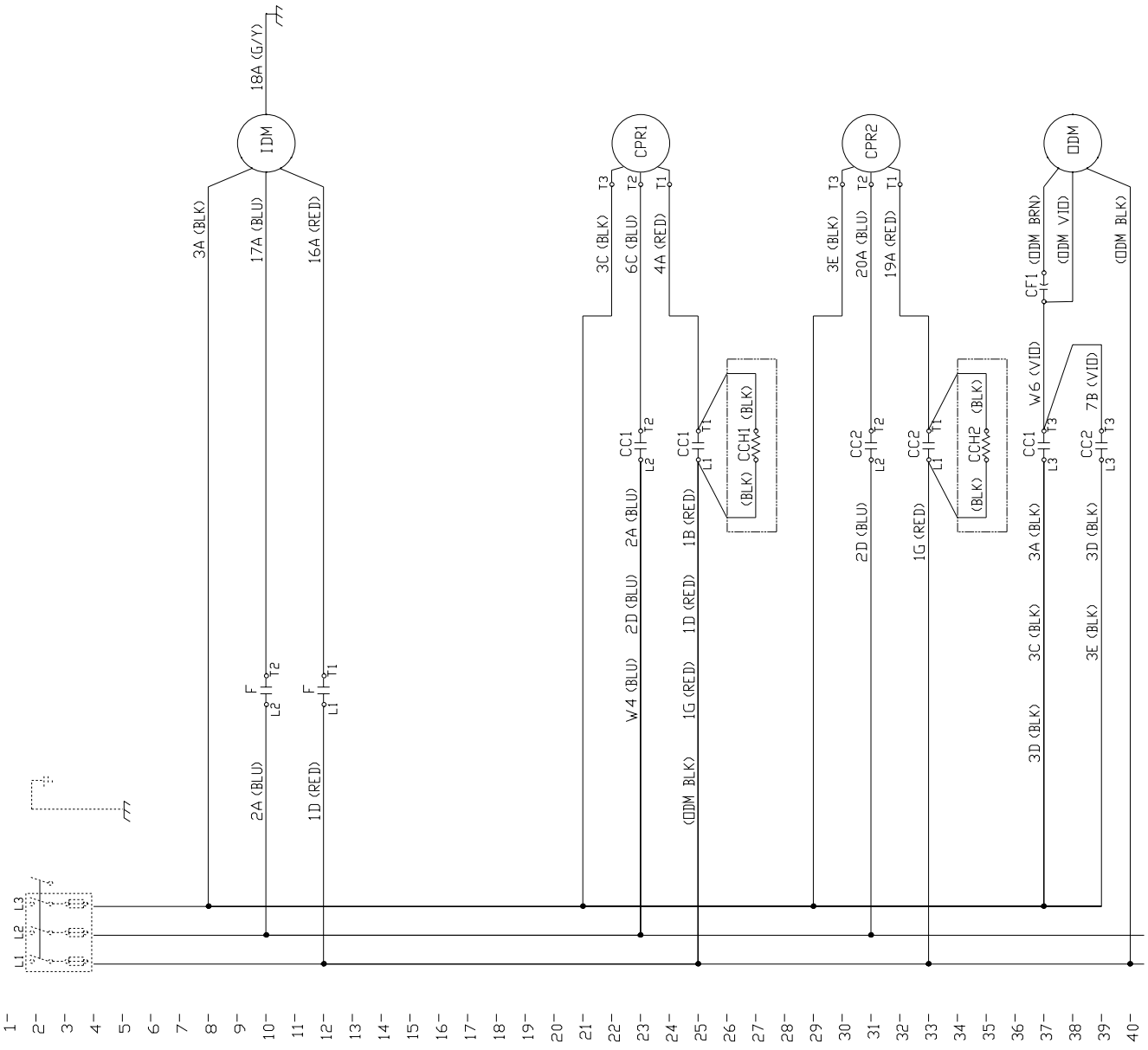
USE COPPER CONDUCTORS ONLY!

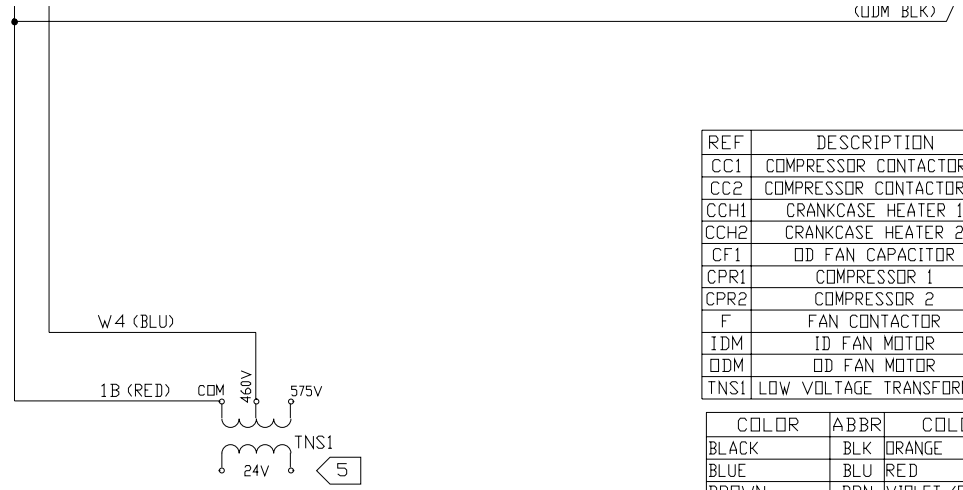
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

4366-1023E

Diagram 6
Power Schematic - 460-575v/60hz/3ph
7.5 - 10 Ton Cooling Only / Dual Compressor
4366-1038





REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR 1	23,25,37
CC2	COMPRESSOR CONTACTOR 2	31,33,39
CCH1	CRANKCASE HEATER 1	27
CCH2	CRANKCASE HEATER 2	35
CF1	OD FAN CAPACITOR	37
CPR1	COMPRESSOR 1	23
CPR2	COMPRESSOR 2	31
F	FAN CONTACTOR	10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	38
TNS1	LOW VOLTAGE TRANSFORMER	51

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

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. 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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH UNITS. WHEN 575V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 (BLU) FROM THE 460V TERMINAL ON TNS1 TO THE 575V TERMINAL.

IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

⚠ WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.

FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ AVERTISSEMENT

VOLTAGE HASARDEUX!

DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION

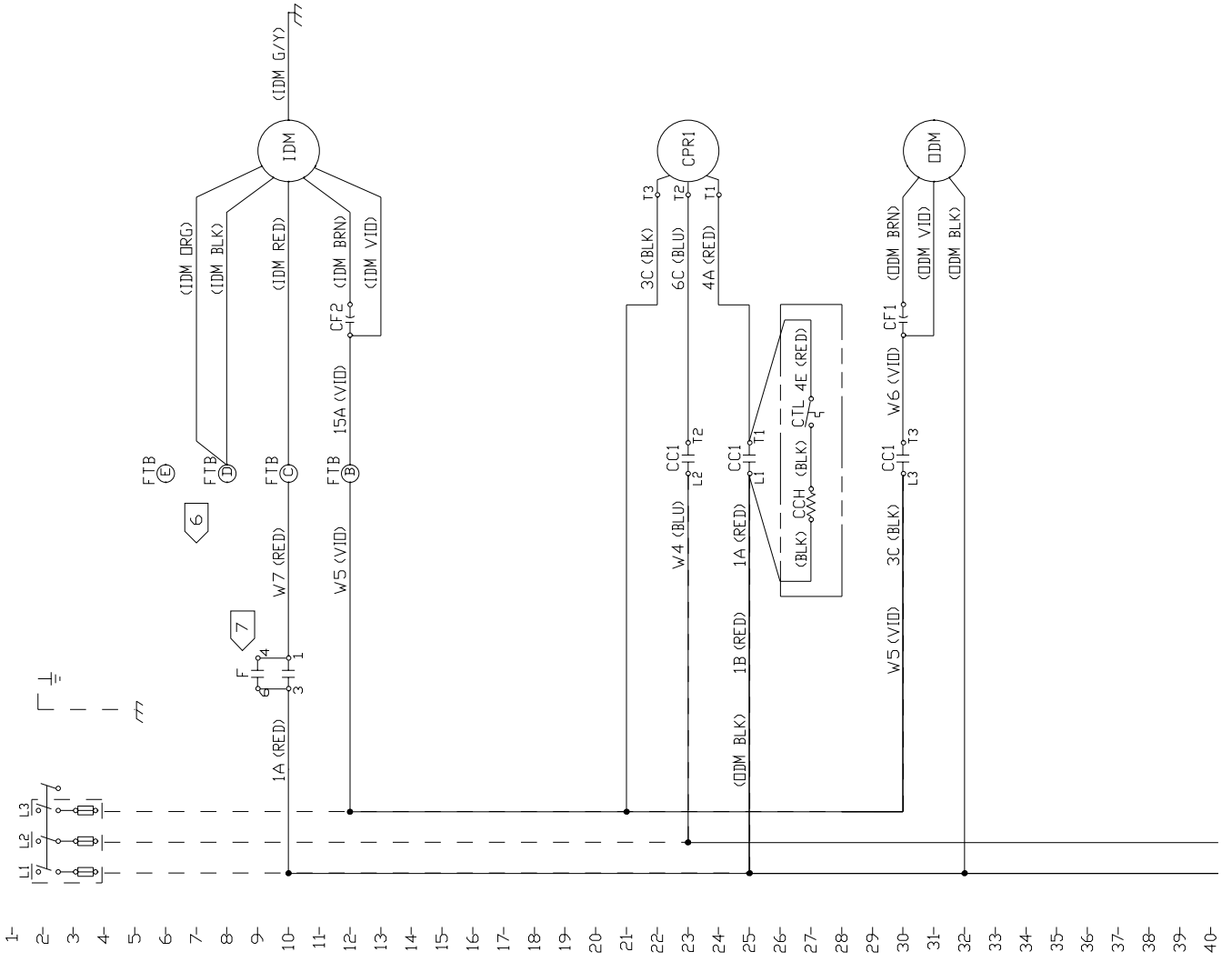
USE COPPER CONDUCTORS ONLY!

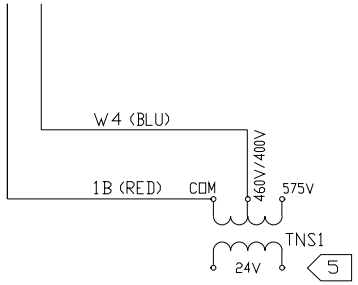
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

4366-1038A

Diagram 7
Power Schematic - 460-575v/60hz/3ph
2 - 5 Ton Cooling Only / Direct Drive Motor
4366-1025





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. 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. THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

5 CONNECTIONS SHOWN ARE FOR 380V/60HZ/3PH AND 460V/60HZ/3PH UNITS. WHEN 575V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 (BLU) FROM THE 460V TERMINAL ON TNS1 TO THE 575V TERMINAL.

6 CONNECTIONS SHOWN ARE FOR LOW SPEED OPERATION. WHEN HIGH SPEED OPERATION IS REQUIRED, MOVE ORANGE WIRE FROM FTB-D TO FTB-E AND MOVE W7 FROM FTB-C TO FTB-D.

7 CONNECTIONS SHOWN ARE FOR 4 AND 5 TON UNITS. FOR 3 TON UNITS (AND BELOW) THERE ARE NO FAN RELAY (F) JUMPERS FROM PIN 3 TO PIN 6 OR FROM PIN 1 TO PIN 4.

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	23,25,30
CCH	CRANKCASE HEATER	27
CF1	OD MOTOR CAPACITOR	30
CF2	ID MOTOR CAPACITOR	12
CPR1	COMPRESSOR	23
CTL	COIL TEMP LIMIT SWITCH	27
F	FAN RELAY	9,10
FTB	ID FAN TERMINAL BLOCK	6,8,10,12
IDM	ID FAN MOTOR	10
ODM	OD FAN MOTOR	31
TNS1	LOW VOLTAGE TRANSFORMER	45

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

IMPORTANT!

DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

⚠ WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.

FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

⚠ AVERTISSEMENT

VOLTAGE HASARDEUX!

DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

⚠ CAUTION

USE COPPER CONDUCTORS ONLY!

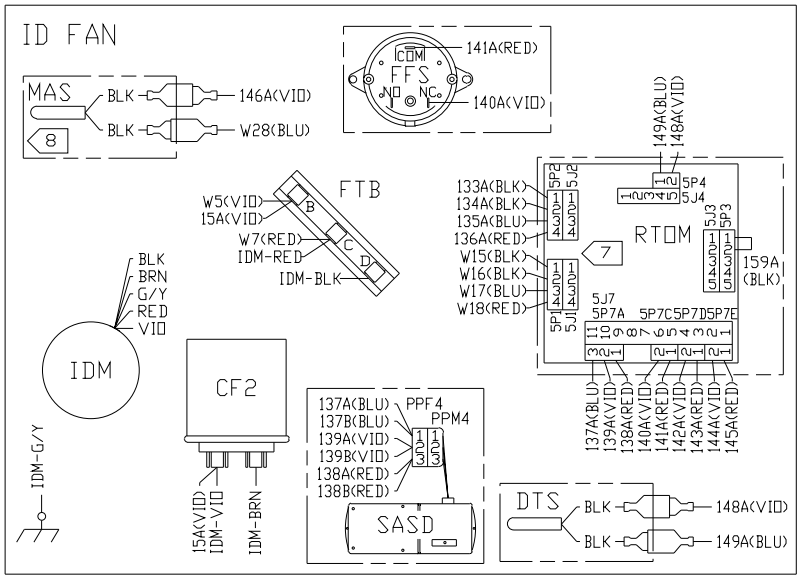
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

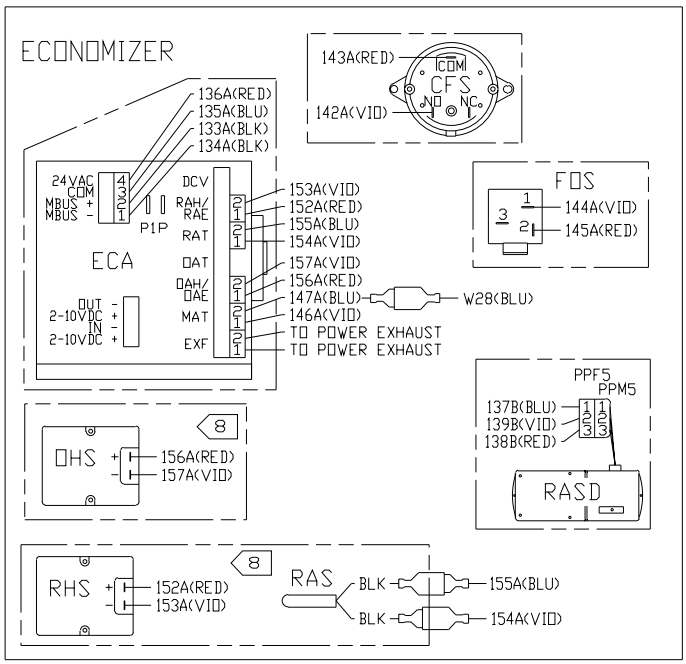
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.

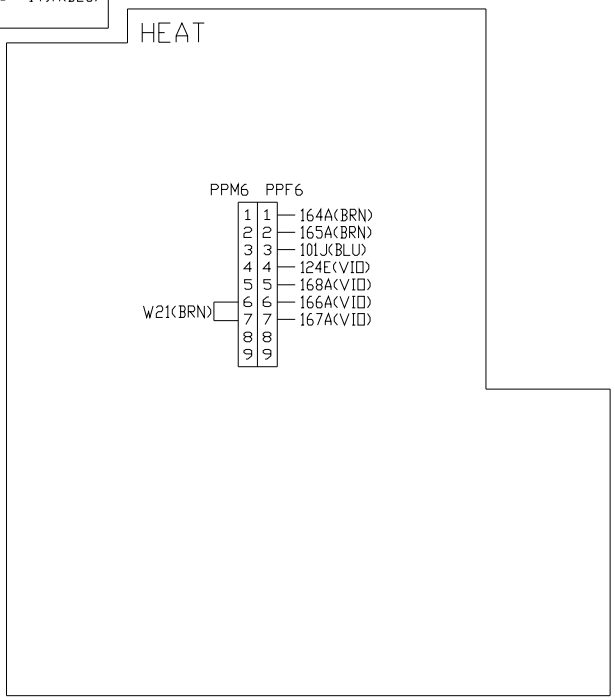
4366-1025D

Diagram 8
Connection Diagram - 230v/60hz/1ph
2 -5 Ton Cooling Only
4366-1506

1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.
4. CONNECTIONS SHOWN ARE FOR 230V/60HZ/1PH UNITS. WHEN 208V/60HZ/1PH OPERATION IS REQUIRED, MOVE WIRE W9(BLK) FROM THE 230V TERMINAL ON TNS1 TO THE 208V TERMINAL.
5. ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL PANEL TO THE ID FAN AND ECONOMIZER SECTIONS. IF NO OPTIONS ARE INSTALLED, DO NOT CONNECT THE HARNESS TO RTRM. IF COMM IS INSTALLED, CONNECT AS SHOWN. IF OPTIONS ARE INSTALLED WITHOUT COMM, CONNECT 3P4 TO 3J4 ON RTRM.
6. CONNECTIONS SHOWN INCLUDE OPTIONAL HPC1. IF HPC1 IS NOT INSTALLED, CONNECT W23(YEL) TO 122A(YEL).
7. CONNECTIONS SHOWN INCLUDE OPTIONAL RTOM. IF RTOM IS NOT INSTALLED, CONNECT 5P1 AND 5P2 THROUGH GENDER CHANGER HARNESS 4366-1172-01.
8. OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.







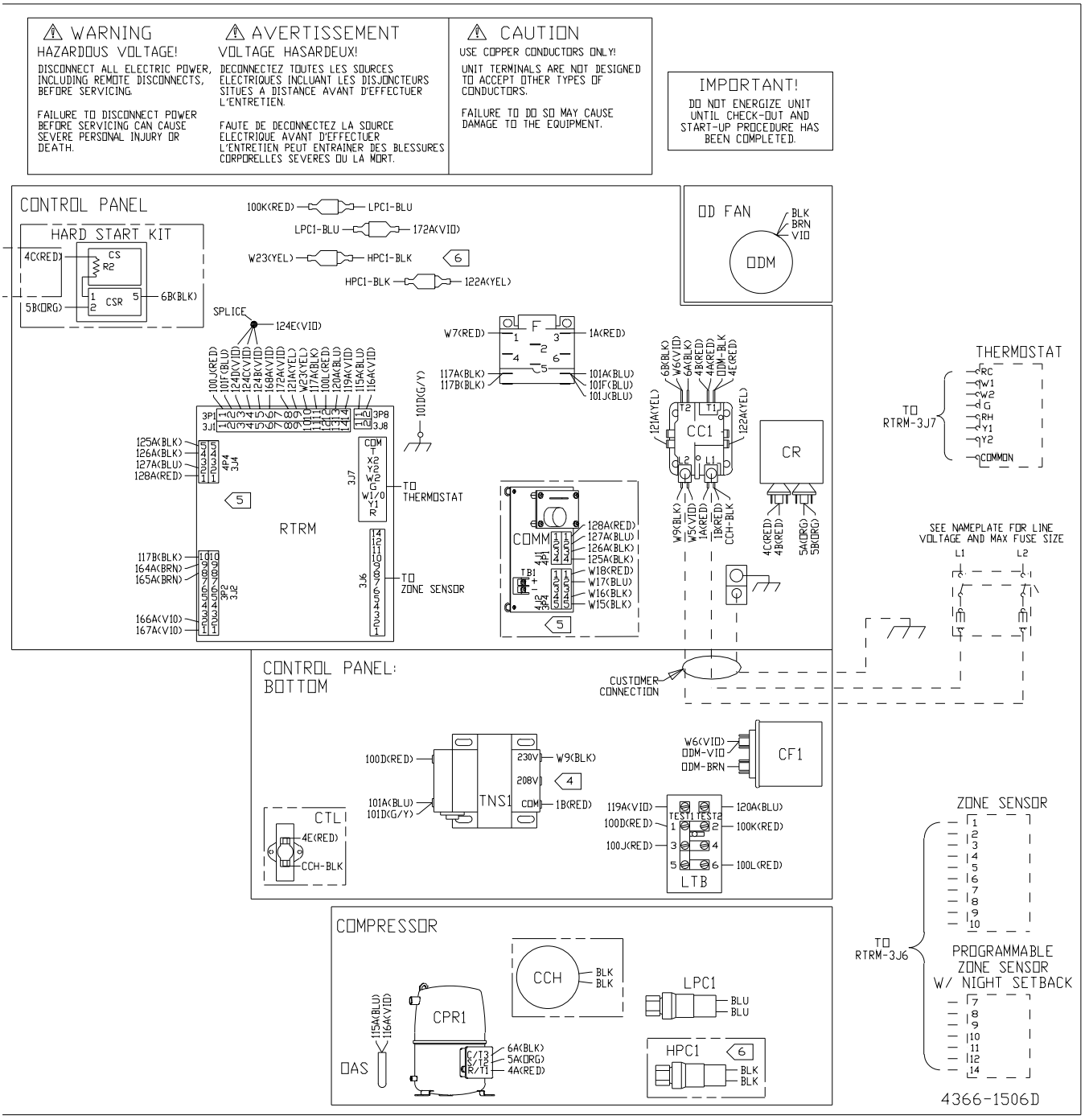

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.
⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.
⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.
IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.
CONTROL PANEL
HARD START KIT
4C(RED)
CS
R2
CSR
5B(ORG)
6B(BLK)
100K(RED)
LPC1-BLU
LPC1-BLU
172A(VIO)
W23(YEL)
HPC1-BLK
6
HPC1-BLK
122A(YEL)
SPLICE
124E(VIO)
100J(RED)
101F(BLU)
124D(VIO)
124C(VIO)
124B(VIO)
168A(VIO)
172A(VIO)
121A(YEL)
W23(YEL)
117A(BLK)
100L(RED)
120A(BLU)
119A(VIO)
115A(BLU)
116A(VIO)
3P1
3J1
3P8
3J8
125A(BLK)
126A(BLK)
127A(BLU)
128A(RED)
4P4
3J4
5
RTRM
COM
W2
G
W1/O
Y1
3J7
TO THERMOSTAT
117B(BLK)
164A(BRN)
165A(BRN)
166A(VIO)
167A(VIO)
3P2
3J2
3J6
TO ZONE SENSOR
W7(RED)
F
1A(RED)
117A(BLK)
117B(BLK)
101A(BLU)
101F(BLU)
101J(BLK)
101D(G/Y)
COMM
128A(RED)
127A(BLU)
126A(BLK)
125A(BLK)
W18(RED)
W17(BLU)
W16(BLK)
W15(BLK)
TB1
4J1
4J2
3P4
5
CONTROL PANEL: BOTTOM
CUSTOMER CONNECTION
100D(RED)
230V
W9(BLK)
208V
4
101A(BLU)
101D(G/Y)
TNS1
COM
1B(RED)
CTL
4E(RED)
CCH-BLK
W6(VIO)
ODM-VIO
ODM-BRN
CF1
119A(VIO)
100D(RED)
100J(RED)
TEST1
TEST2
120A(BLU)
100K(RED)
100L(RED)
LTB
COMPRESSOR
CCH
BLK
BLK
LPC1
BLU
BLU
CPR1
115A(BLU)
116A(VIO)
ODS
6A(BLK)
5A(ORG)
4A(RED)
HPC1
6
BLK
BLK
OD FAN
BLK
BRN
VIO
ODM
6B(BLK)
W6(VIO)
6A(BLK)
4B(RED)
4A(RED)
ODM-BLK
4E(RED)
121A(YEL)
122A(YEL)
CC1
CR
W9(BLK)
W5(VIO)
1A(RED)
1BK(RED)
CCH-BLK
4C(RED)
4B(RED)
5A(ORG)
5B(ORG)
THERMOSTAT
TO RTRM-3J7
RC
W1
W2
G
RH
Y1
Y2
COMMON
SEE NAMEPLATE FOR LINE VOLTAGE AND MAX FUSE SIZE
L1
L2
ZONE SENSOR
1
2
3
4
5
6
7
8
9
10
TO RTRM-3J6
PROGRAMMABLE ZONE SENSOR W/ NIGHT SETBACK
7
8
9
10
11
12
14
4366-1506D

Diagram 9
Connection Diagram - 230-460-575v/60hz/3ph
2 - 5 Ton Cooling Only / Direct Drive Motor
4366-1508

1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.

2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.

3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

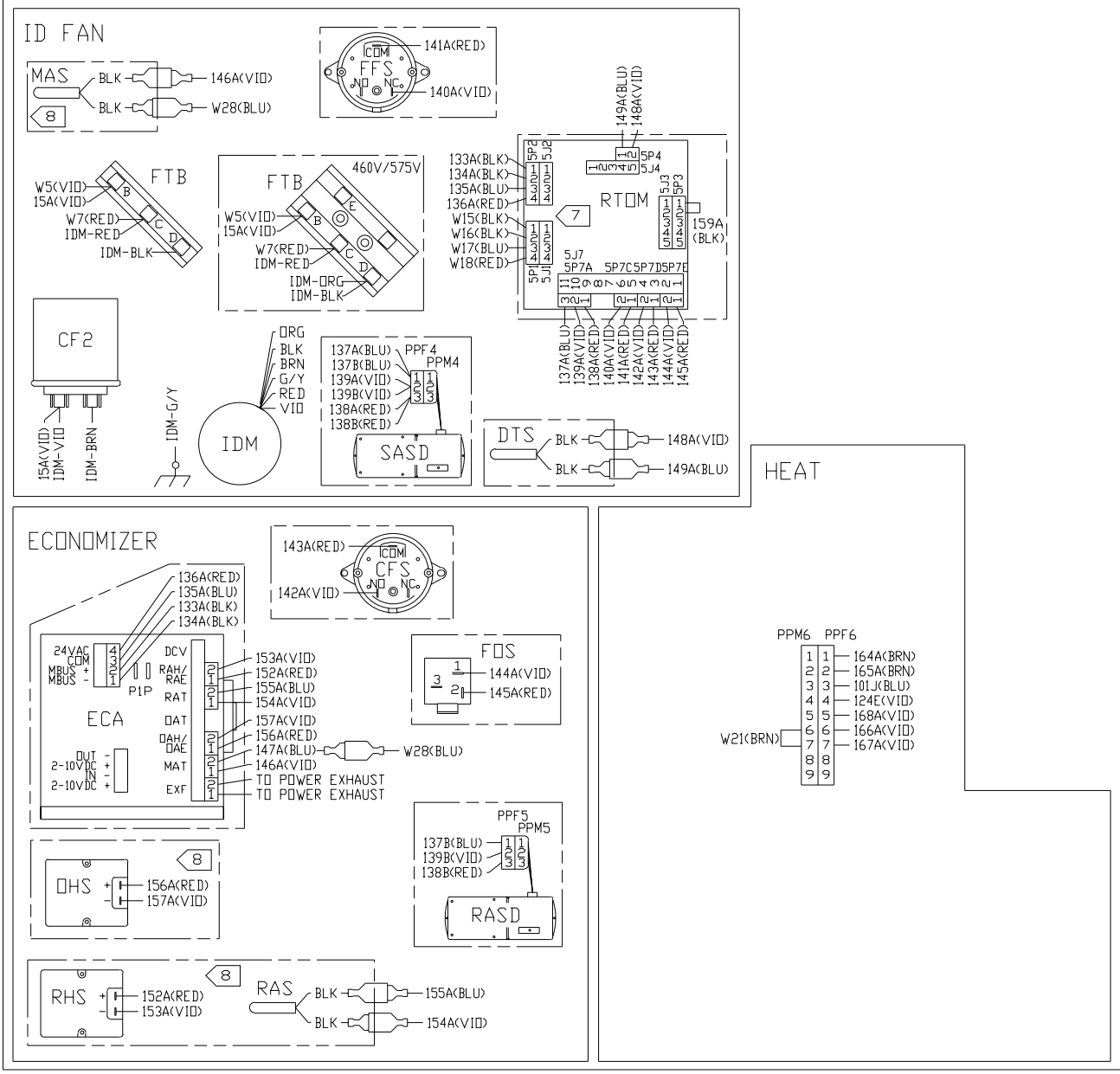
4 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH OR 575V/60HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4(BLU) FROM THE 230V/400V/575V TERMINAL ON TNS1 TO THE 208V/460V TERMINAL.

5 ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL PANEL TO THE ID FAN AND ECONOMIZER SECTIONS. IF NO OPTIONS ARE INSTALLED, DO NOT CONNECT THE HARNESS TO RTRM. IF COMM IS INSTALLED, CONNECT AS SHOWN. IF OPTIONS ARE INSTALLED WITHOUT COMM, CONNECT 3P4 TO 3J4 ON RTRM.

6 CONNECTIONS SHOWN INCLUDE OPTIONAL HPC1. IF HPC1 IS NOT INSTALLED, CONNECT W23(YEL) TO 122A(YEL).

7 CONNECTIONS SHOWN INCLUDE OPTIONAL RTOM. IF RTOM IS NOT INSTALLED, CONNECT 5P1 AND 5P2 THROUGH GENDER CHANGER HARNESS 4366-1172-01.

8 OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.



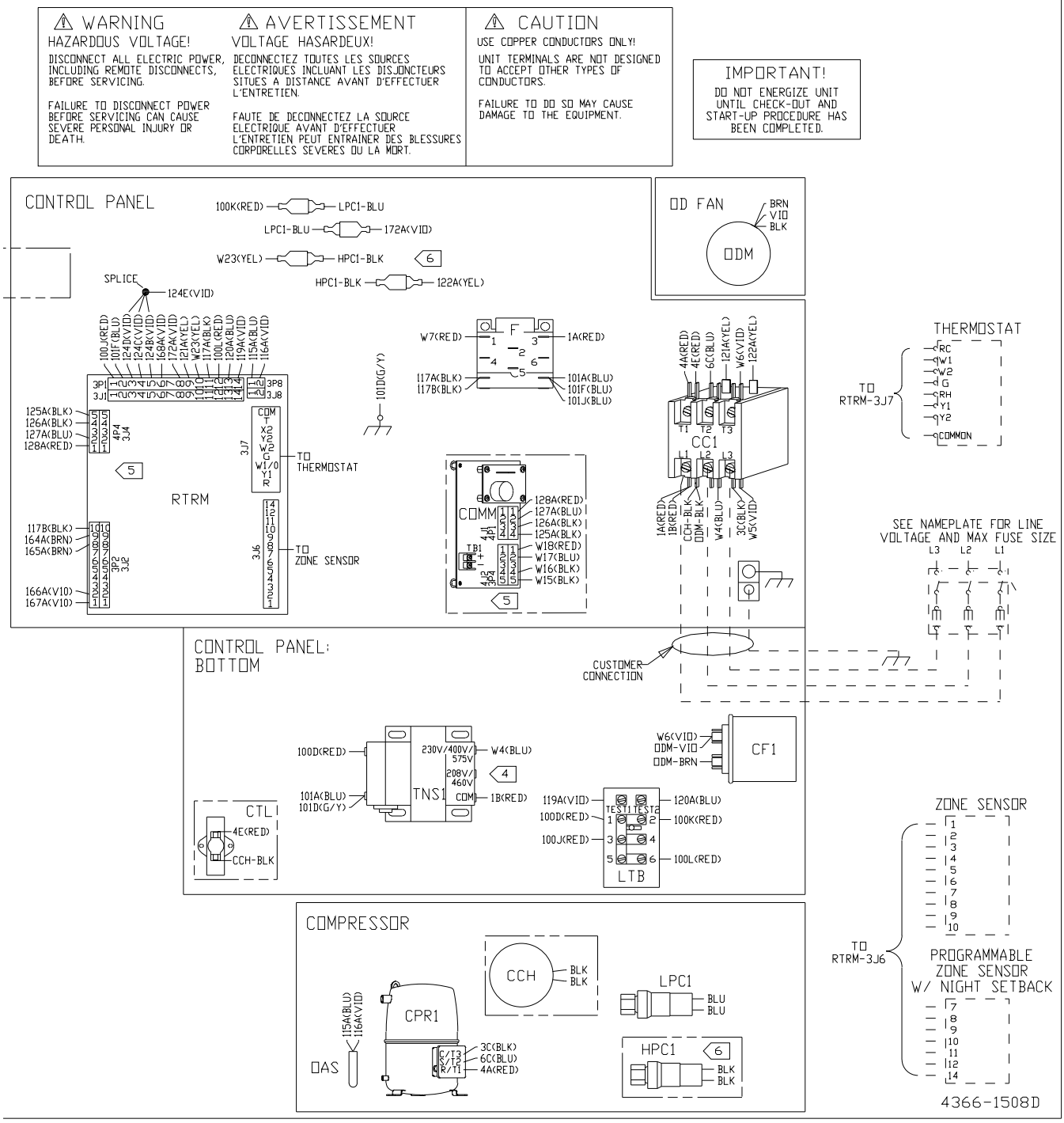
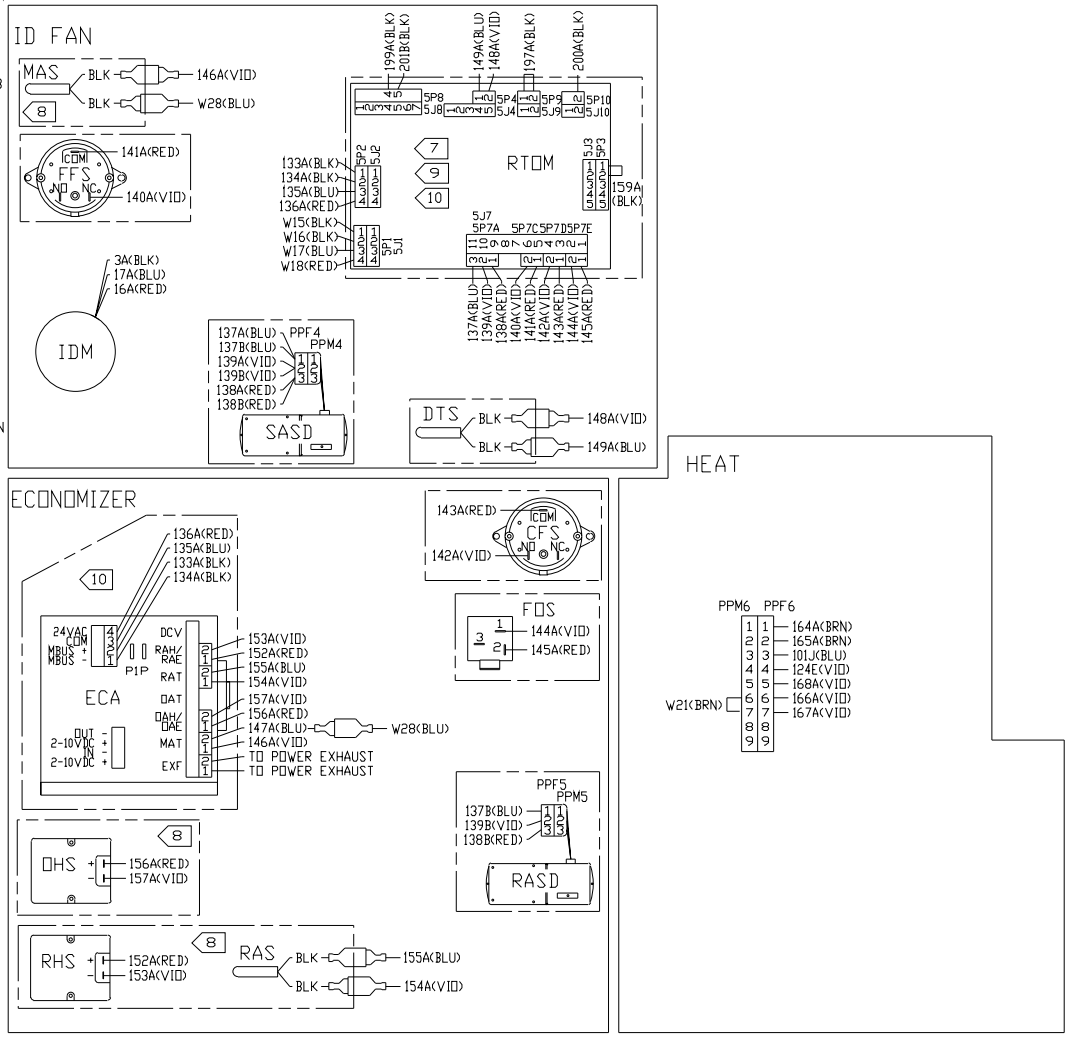

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.
⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.
⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.
IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.
CONTROL PANEL
SPLICE
124E(VIO)
RTRM
TO THERMOSTAT
TO ZONE SENSOR
CONTROL PANEL: BOTTOM
CUSTOMER CONNECTION
CTL
TNS1
LTB
CF1
COMPRESSOR
CPR1
CCH
LPC1
HPC1
OAS
OD FAN
ODM
CC1
THERMOSTAT
TO RTRM-3J7
SEE NAMEPLATE FOR LINE VOLTAGE AND MAX FUSE SIZE
ZONE SENSOR
PROGRAMMABLE ZONE SENSOR W/ NIGHT SETBACK
TO RTRM-3J6
4366-1508D

Diagram 10
Connection Diagram - 208-230,460,575v/60hz/3ph
2 - 5 Ton Cooling Only / Belt Drive Motor
4366-1509

1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.
4. CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH, 575V/60HZ/3PH AND 380V-415V/50HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4(BLU) FROM THE 230V/400V/575V TERMINAL TO THE 208V/460V TERMINAL ON TNS1.
5. ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL PANEL TO THE ID FAN AND ECONOMIZER SECTIONS. IF NO OPTIONS ARE INSTALLED, DO NOT CONNECT THE HARNESS TO RTRM. IF COMM IS INSTALLED, CONNECT AS SHOWN. IF OPTIONS ARE INSTALLED WITHOUT COMM, CONNECT 3P4 TO 3J4 ON RTRM.
6. CONNECTIONS SHOWN INCLUDE OPTIONAL HPC1. IF HPC1 IS NOT INSTALLED, CONNECT W23 TO 122A.
7. CONNECTIONS SHOWN INCLUDE OPTIONAL RTOM. IF NOT INSTALLED, CONNECT 5P1 AND 5P2 THROUGH GENDER CHANGER HARNESS 4366-1172-01.
8. OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.
9. COMPONENTS 3P3, 5P8, 5P9, 5P10, NLTB, LTB 7-14, RHV, RTCM AND ASSOCIATED WIRING ARE PRESENT ONLY WITH DEHUMIDIFICATION OPTION.
10. SEE CO2 & VENT. OVERRIDE ACCESSORY DIAGRAM 4366-1003 FOR ADDITIONAL WIRING
11. CONNECTIONS SHOWN ARE FOR DEHUMIDIFICATION OPTION (2-SPEED IDM), FOR 1-SPEED IDM, WIRES IDM-ORG, IDM-RED, 32A (RED),IS (RED), 101AL (BLU), 196A (BLK), AND RELAY IDF2 ARE NOT PRESENT AND WIRE IDM-BLK IS CONNECTED TO CC1, TERMINAL L1.
12. CONNECTIONS SHOWN ARE FOR 400V/460V/575V. FOR 200V/208V/230V, WIRES IDM-ORG & IDF2 TERMINALS 4-6 ARE NOT PRESENT AND WIRE 32A (RED) IS NOT CONNECTED.
13. CUT AND ISOLATE WIRE 124B(VIO) IF DEHUMIDIFICATION OPTION IS INSTALLED.



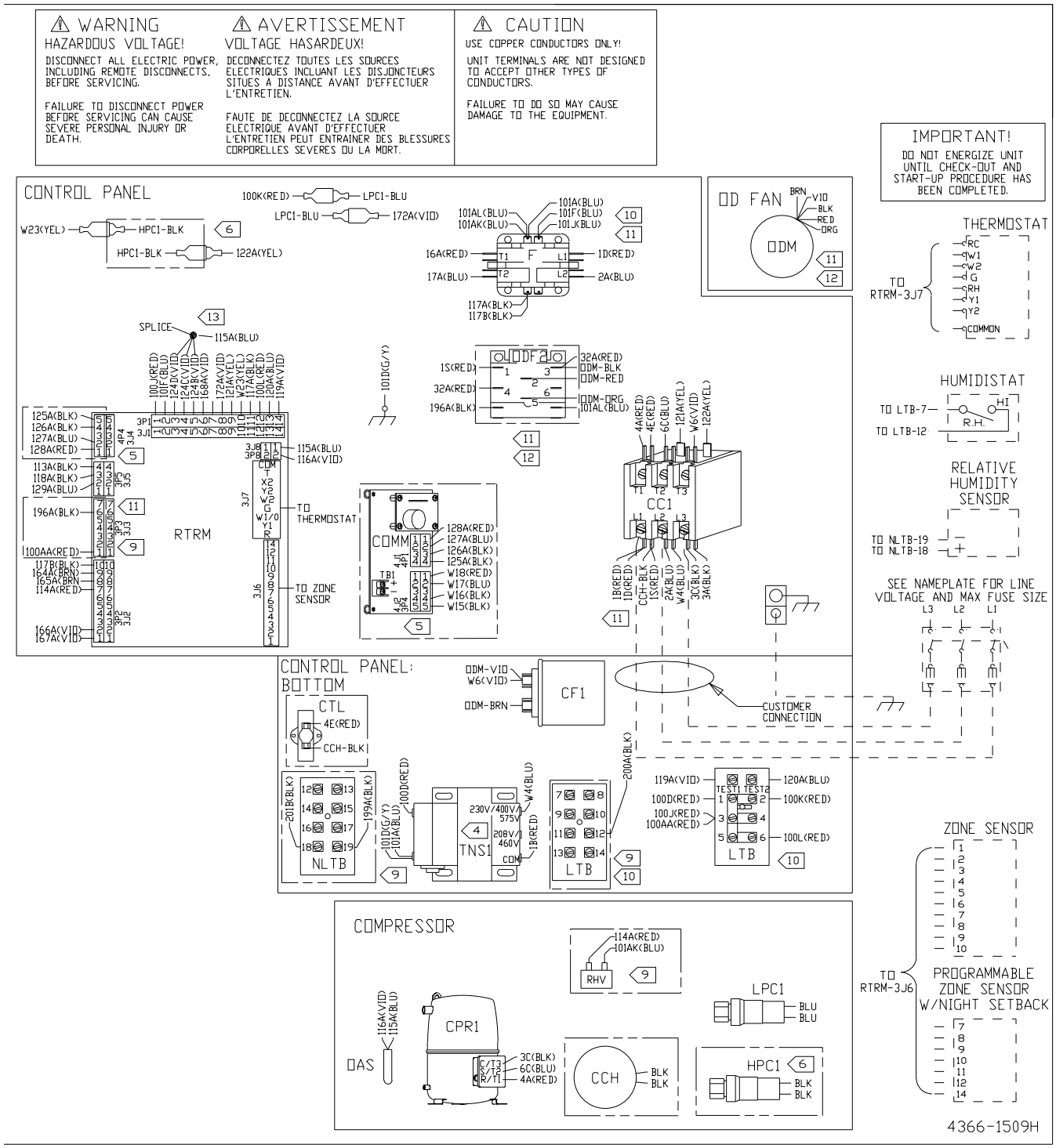

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.
⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.
⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.
IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.
CONTROL PANEL
RTRM
TO THERMOSTAT
TO ZONE SENSOR
COMM
CC1
CF1
CONTROL PANEL: BOTTOM
CTL
NLTB
TNS1
LTB
CUSTOMER CONNECTION
SEE NAMEPLATE FOR LINE VOLTAGE AND MAX FUSE SIZE
L3 L2 L1
OD FAN
ODM
THERMOSTAT
TO RTRM-3J7
RC
W1
W2
G
RH
Y1
Y2
COMMON
HUMIDISTAT
TO LTB-7
TO LTB-12
HI
R.H.
RELATIVE HUMIDITY SENSOR
TO NLTB-19
TO NLTB-18
ZONE SENSOR
PROGRAMMABLE ZONE SENSOR W/NIGHT SETBACK
TO RTRM-3J6
COMPRESSOR
CPR1
RHV
LPC1
HPC1
CCH
OAS
4366-1509H

Diagram 11
Connection Diagram - 208-230,460,575v/60hz/3ph
6 - 7.5 Ton Cooling Only / Belt Drive Motor
4366-1541

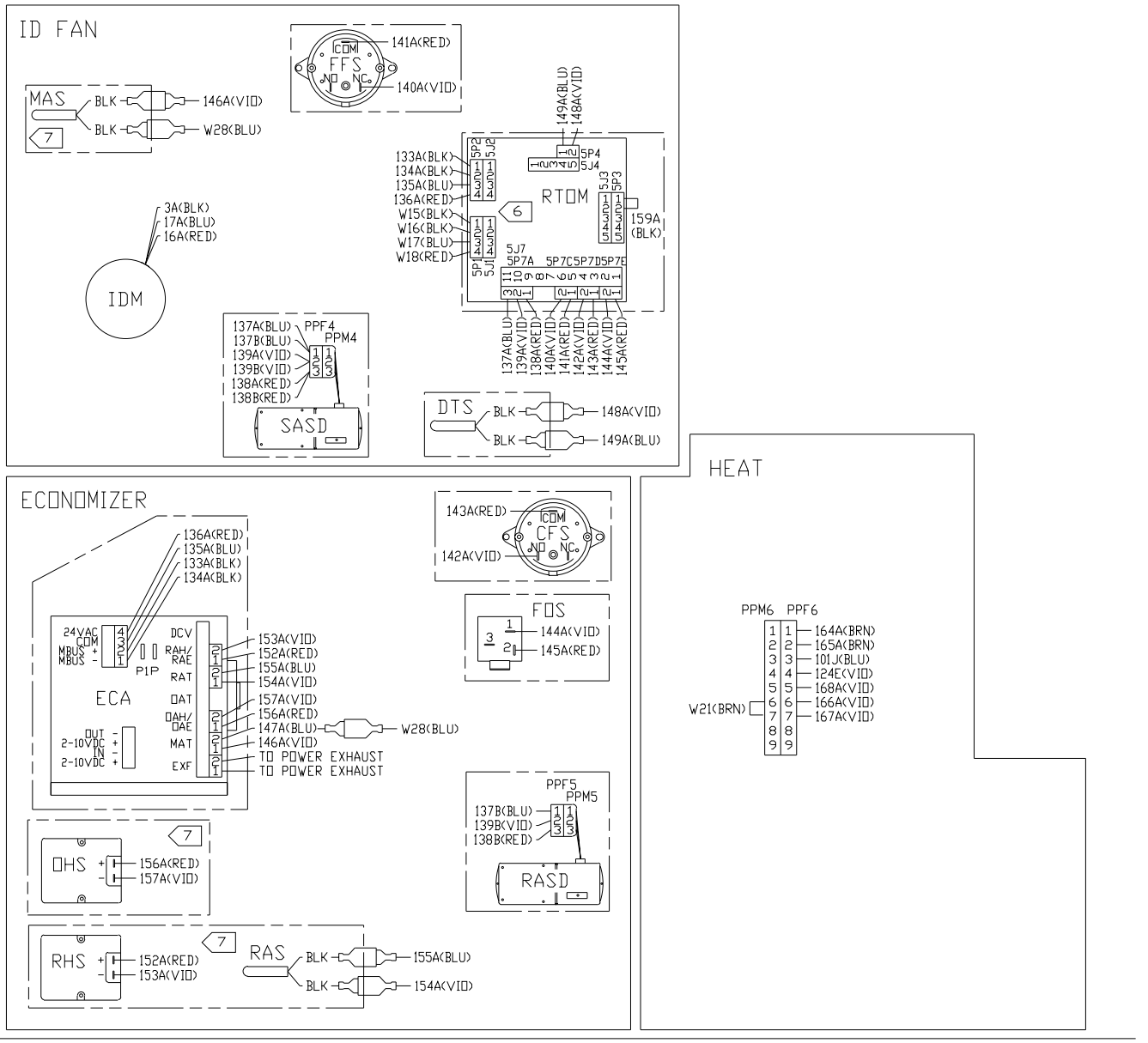
1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

4 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH, 575V/60HZ/3PH AND 380V-415V/50HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4(BLU) FROM THE 230V/400V/575V TERMINAL ON TNS1 TO THE 208V/460V TERMINAL.

5 ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL PANEL TO THE ID FAN AND ECONOMIZER SECTIONS. IF NO OPTIONS ARE INSTALLED, DO NOT CONNECT THE HARNESS TO RTRM. IF COMM IS INSTALLED, CONNECT AS SHOWN. IF OPTIONS ARE INSTALLED WITHOUT COMM, CONNECT 3P4 TO 3J4 ON RTRM.

6 CONNECTIONS SHOWN INCLUDE OPTIONAL RTOM. IF NOT INSTALLED, CONNECT 5P1 AND 5P2 THROUGH GENDER CHANGER HARNESS 4366-1172-01.

7 OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.



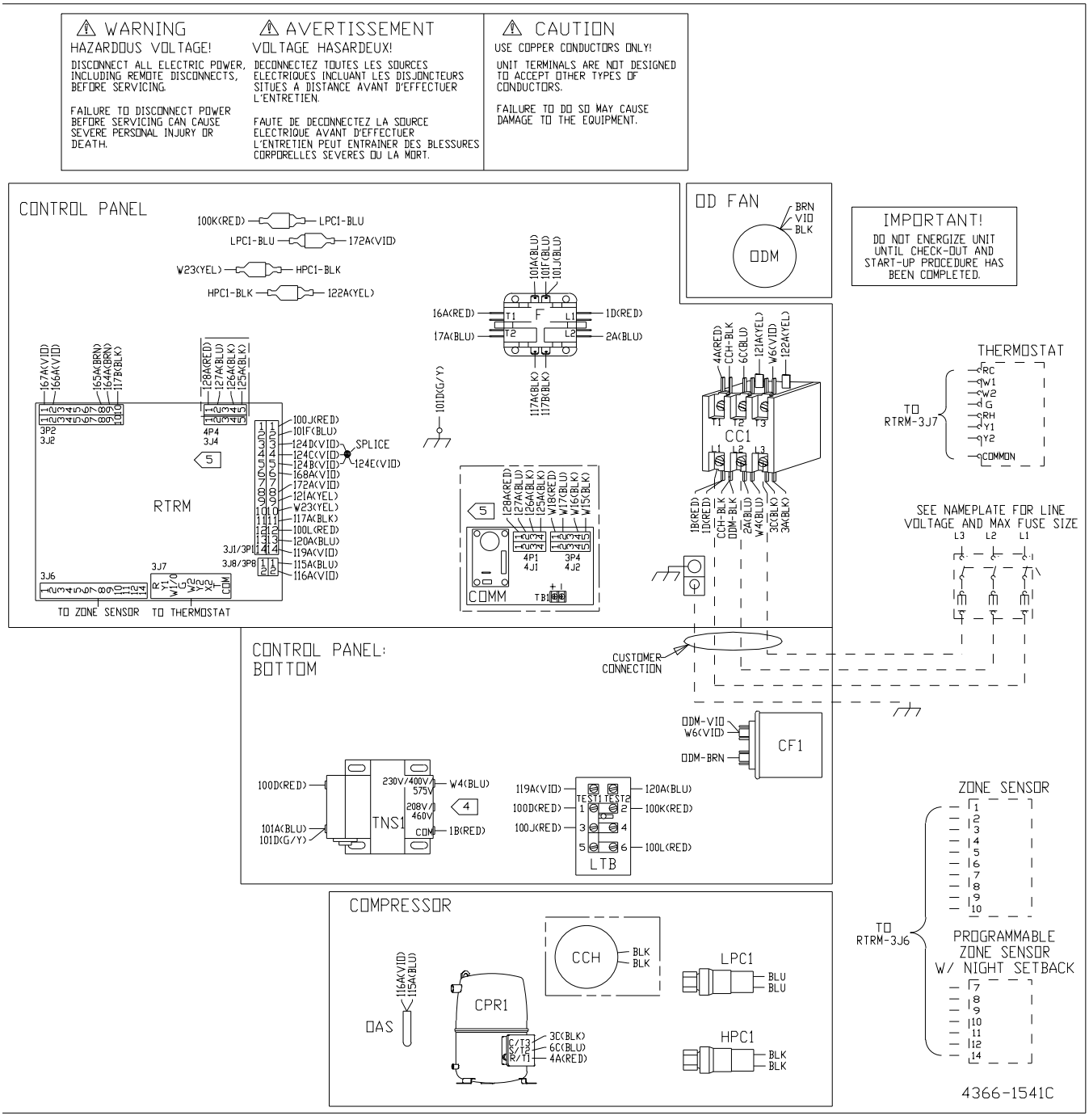

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.
⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.
⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.
CONTROL PANEL
100K(RED)
LPC1-BLU
LPC1-BLU
172A(VIO)
W23(YEL)
HPC1-BLK
HPC1-BLK
122A(YEL)
101A(BLU)
101F(BLU)
101J(BLU)
16A(RED)
17A(BLU)
F
1D(RED)
2A(BLU)
117A(BLK)
117B(BLK)
101D(G/Y)
167A(VIO)
166A(VIO)
165A(BRN)
164A(BRN)
117B(BLK)
128A(RED)
127A(BLU)
126A(BLK)
125A(BLK)
3P2
3J2
4P4
3J4
5
RTRM
100J(RED)
101F(BLU)
124D(VIO)
124C(VIO)
124B(VIO)
168A(VIO)
172A(VIO)
121A(YEL)
W23(YEL)
117A(BLK)
100L(RED)
120A(BLU)
119A(VIO)
115A(BLU)
116A(VIO)
SPLICE
124E(VIO)
3J1/3P1
3J8/3PB
3J6
3J7
R
Y1
W1
W2
X2
COM
TO ZONE SENSOR
TO THERMOSTAT
5
128A(RED)
127A(BLU)
126A(BLK)
125A(BLK)
W18(RED)
W17(BLU)
W16(BLK)
W15(BLK)
4P1
4J1
3P4
4J2
COMM
TB
DD FAN
BRN
VIO
BLK
DDM
IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.
4A(RED)
CCH-BLK
6C(BLU)
121A(YEL)
W6(VIO)
122A(YEL)
CC1
1B(RED)
1D(RED)
CCH-BLK
DDM-BLK
2A(BLU)
W4(BLU)
3C(BLK)
3A(BLK)
THERMOSTAT
TO RTRM-3J7
RC
W1
W2
G
RH
Y1
Y2
COMMON
SEE NAMEPLATE FOR LINE VOLTAGE AND MAX FUSE SIZE
L3
L2
L1
CUSTOMER CONNECTION
CONTROL PANEL: BOTTOM
DDM-VIO
W6(VIO)
DDM-BRN
CF1
100D(RED)
101A(BLU)
101D(G/Y)
230V/400V/575V
208V/460V
W4(BLU)
4
TNS1
COM
1B(RED)
119A(VIO)
100D(RED)
100J(RED)
TEST1
TEST2
120A(BLU)
100K(RED)
100L(RED)
LTB
ZONE SENSOR
TO RTRM-3J6
PROGRAMMABLE ZONE SENSOR W/ NIGHT SETBACK
COMPRESSOR
116A(VIO)
115A(BLU)
DAS
CPR1
CCH
BLK
BLK
LPC1
BLU
BLU
HPC1
BLK
BLK
3C(BLK)
6C(BLU)
4A(RED)
4366-1541C

Diagram 12
Connection Diagram - 208-230,460,575v/60hz/3ph
7.5 - 10 Ton Cooling Only / Dual Compressor
4366-1534

1. ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
2. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
3. THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

4 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH, 380V/60HZ/3PH, 575V/60HZ/3PH OR 380V-415V/50HZ/3PH UNITS. WHEN 208V/60HZ/3PH OR 460V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4(BLU) FROM THE 230V/400V/575V TERMINAL ON TNS1 TO THE 208V/460V TERMINAL.

5 CCH2 CONDUCTORS ARE IDENTIFIED BY BROWN TAPE PLACED NEAR WIRE TERMINATIONS INSIDE CONTROL PANEL.

6 ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL PANEL TO THE ID FAN AND ECONOMIZER SECTIONS. IF NO OPTIONS ARE INSTALLED, DO NOT CONNECT THE HARNESS TO THE RTRM. IF COMM IS INSTALLED, CONNECT AS SHOWN. IF OPTIONS ARE INSTALLED WITHOUT COMM, CONNECT 3P4 TO 3J4 ON RTRM.

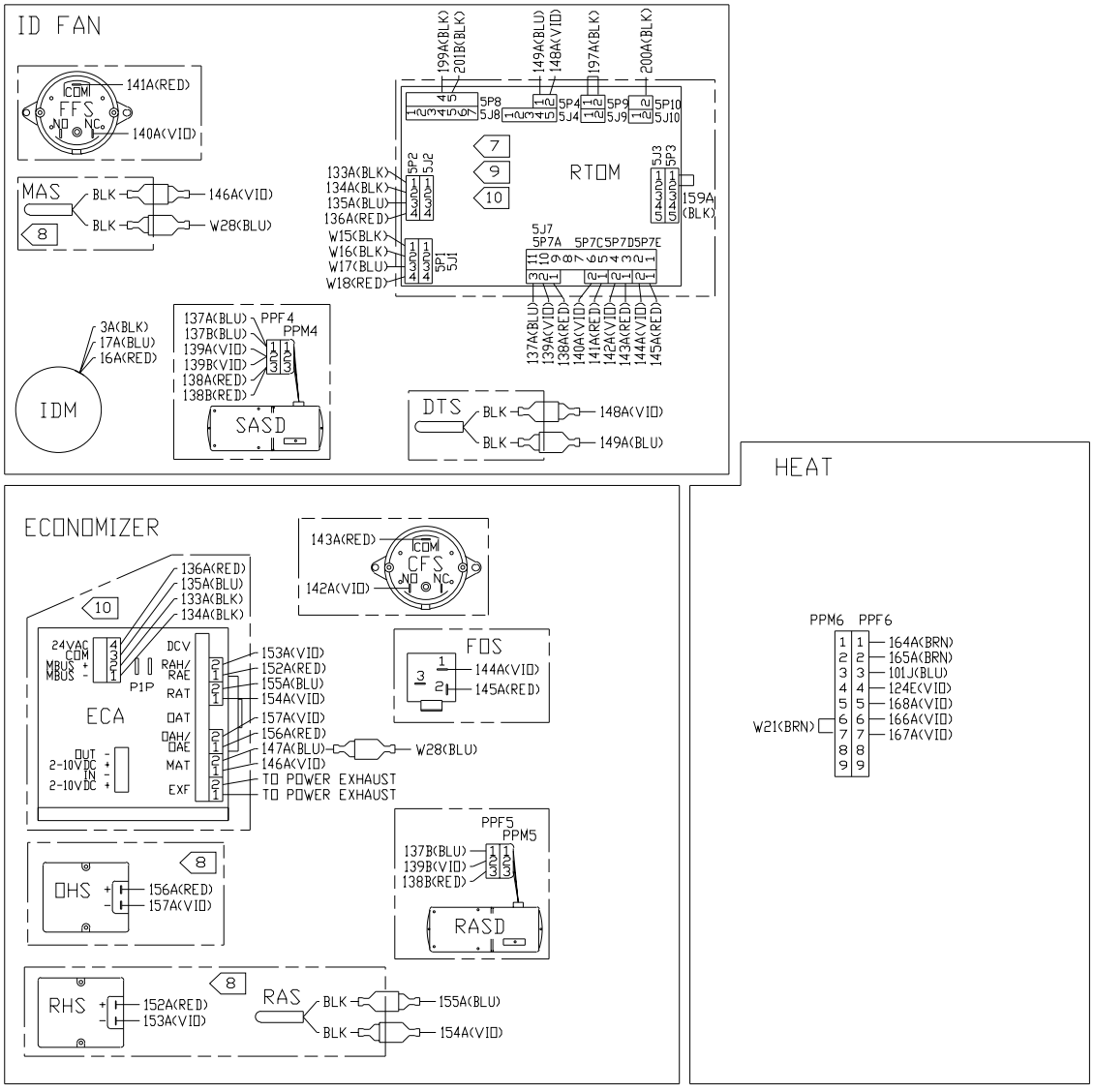
7 CONNECTIONS SHOWN INCLUDE OPTIONAL RTOM. IF NOT INSTALLED, CONNECT 5P1 AND 5P2 THROUGH GENDER CHANGER HARNESS 4366-1172-01.

8 OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.

9 COMPONENTS 5P8, 5P9, 5P10, NLTB, LTB 7-14, RHV, RTOM AND ASSOCIATED WIRING ARE PRESENT ONLY WITH DEHUMIDIFICATION OPTION.

10 SEE CO2 & VENT. OVERRIDE ACCESSORY DIAGRAM 4366-1003 FOR ADDITIONAL WIRING.

11 CUT AND ISOLATE WIRE 124B(VIO) IF DEHUMIDIFICATION OPTION IS INSTALLED.



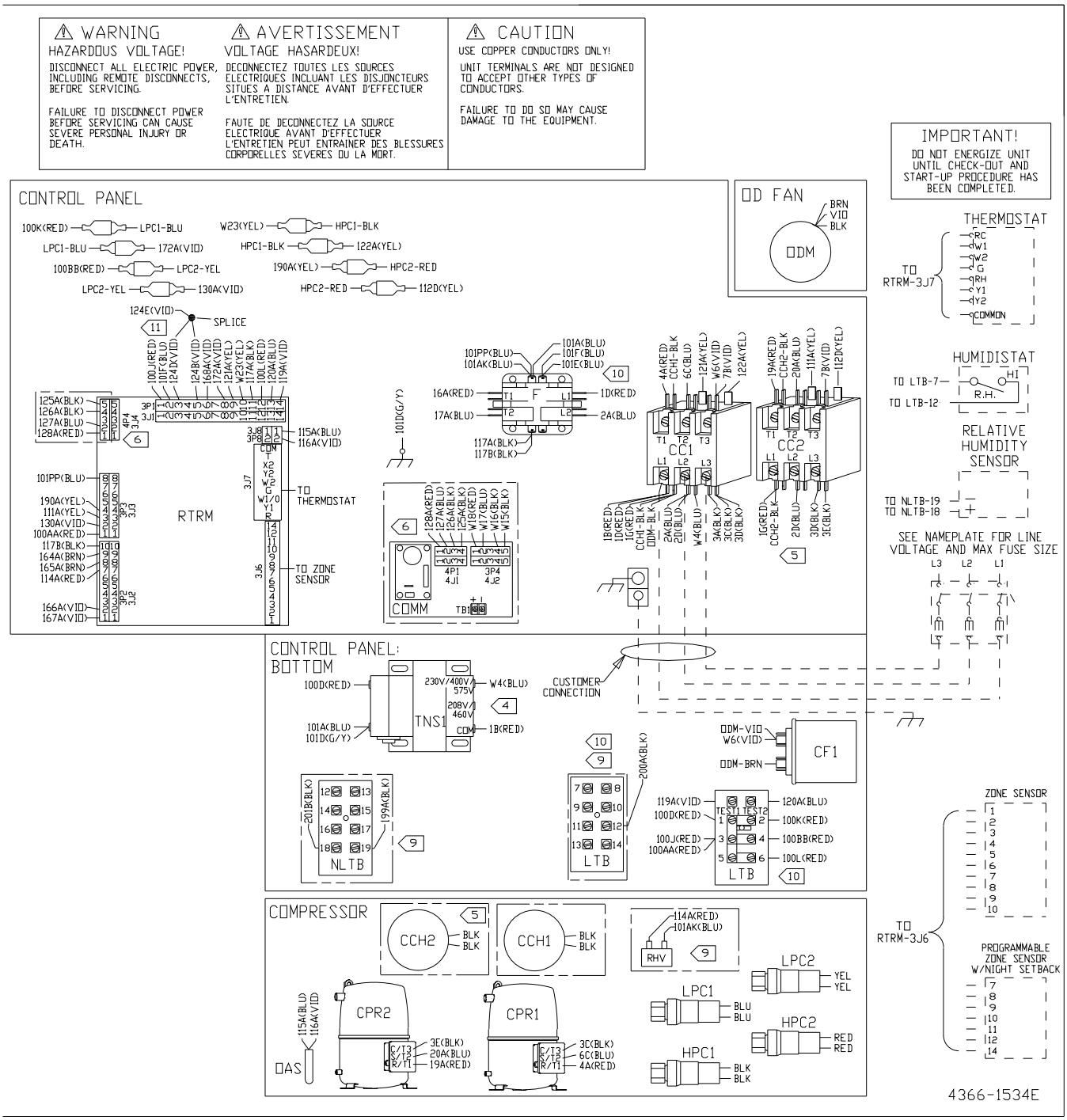
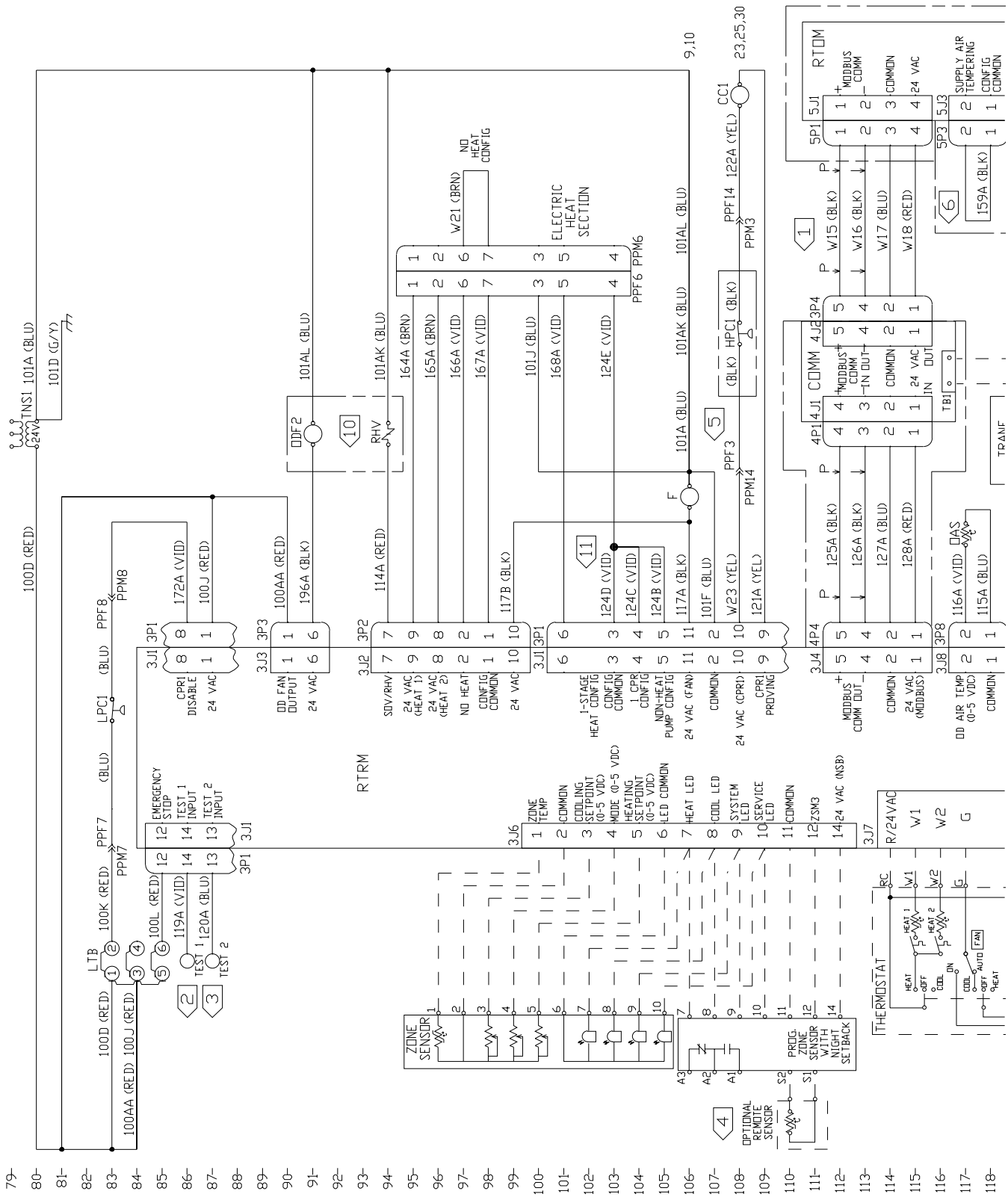
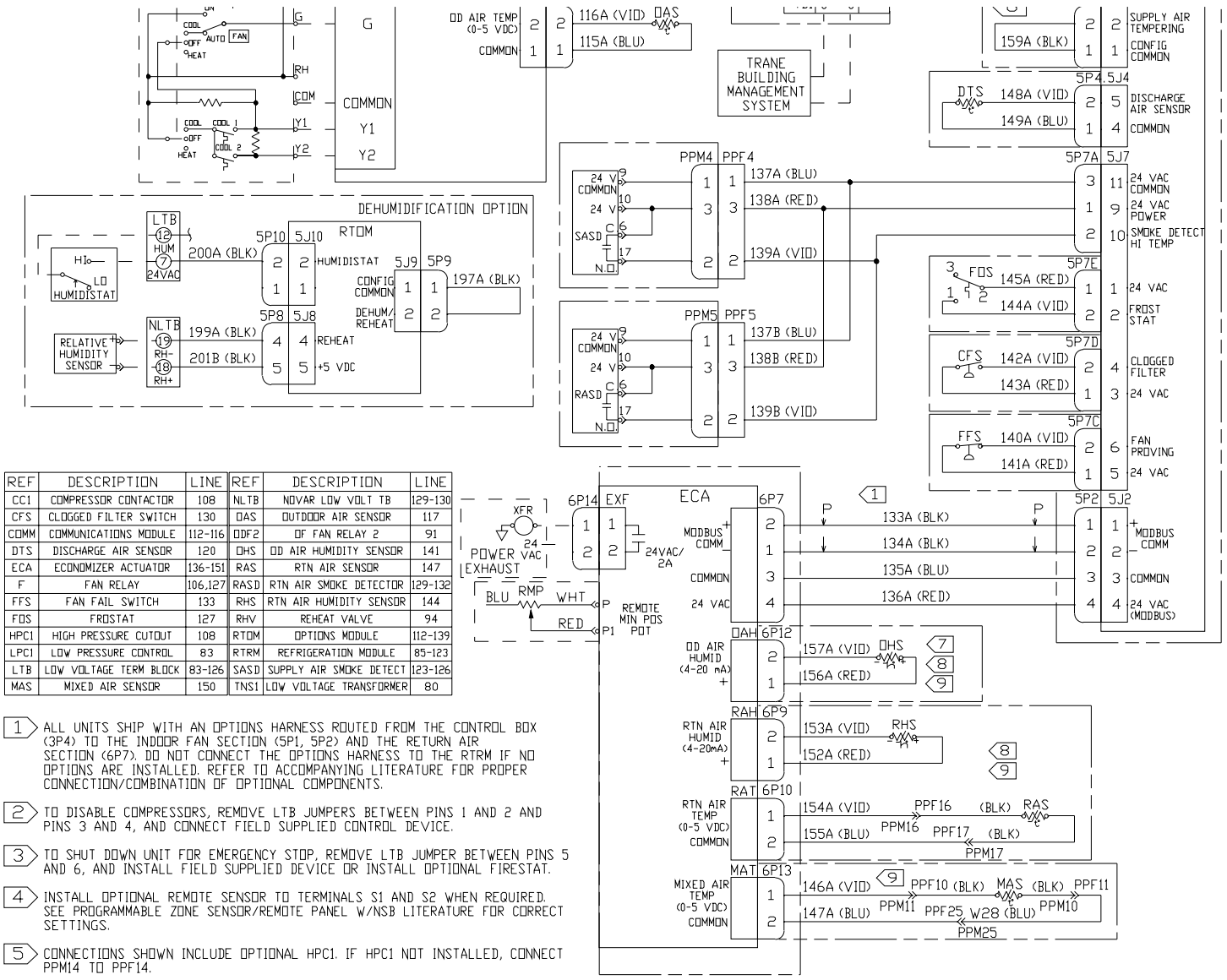

⚠ WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER, INCLUDING REMOTE DISCONNECTS, BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.
⚠ AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTEZ LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAINER DES BLESSURES CORPORELLES SEVERES OU LA MORT.
⚠ CAUTION
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.
FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT.
IMPORTANT!
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.
CONTROL PANEL
RTRM
TO THERMOSTAT
TO ZONE SENSOR
COMM
OD FAN
BRN
VIO
BLK
ODM
THERMOSTAT
TO RTRM-3J7
RC
W1
W2
G
RH
Y1
Y2
COMMON
HUMIDISTAT
TO LTB-7
TO LTB-12
H1
R.H.
RELATIVE HUMIDITY SENSOR
TO NLTB-19
TO NLTB-18
SEE NAMEPLATE FOR LINE VOLTAGE AND MAX FUSE SIZE
L3 L2 L1
CC1
CC2
CONTROL PANEL: BOTTOM
TNS1
CUSTOMER CONNECTION
CF1
ODM-VIO
W6(VIO)
ODM-BRN
NLTB
LTB
ZONE SENSOR
TO RTRM-3J6
PROGRAMMABLE ZONE SENSOR W/NIGHT SETBACK
COMPRESSOR
CCH2
CCH1
RHV
CPR2
CPR1
OAS
LPC2
LPC1
HPC2
HPC1
4366-1534E

Diagram 13
Control Diagram
2 - 7.5 Ton Cooling Only
4366-1026

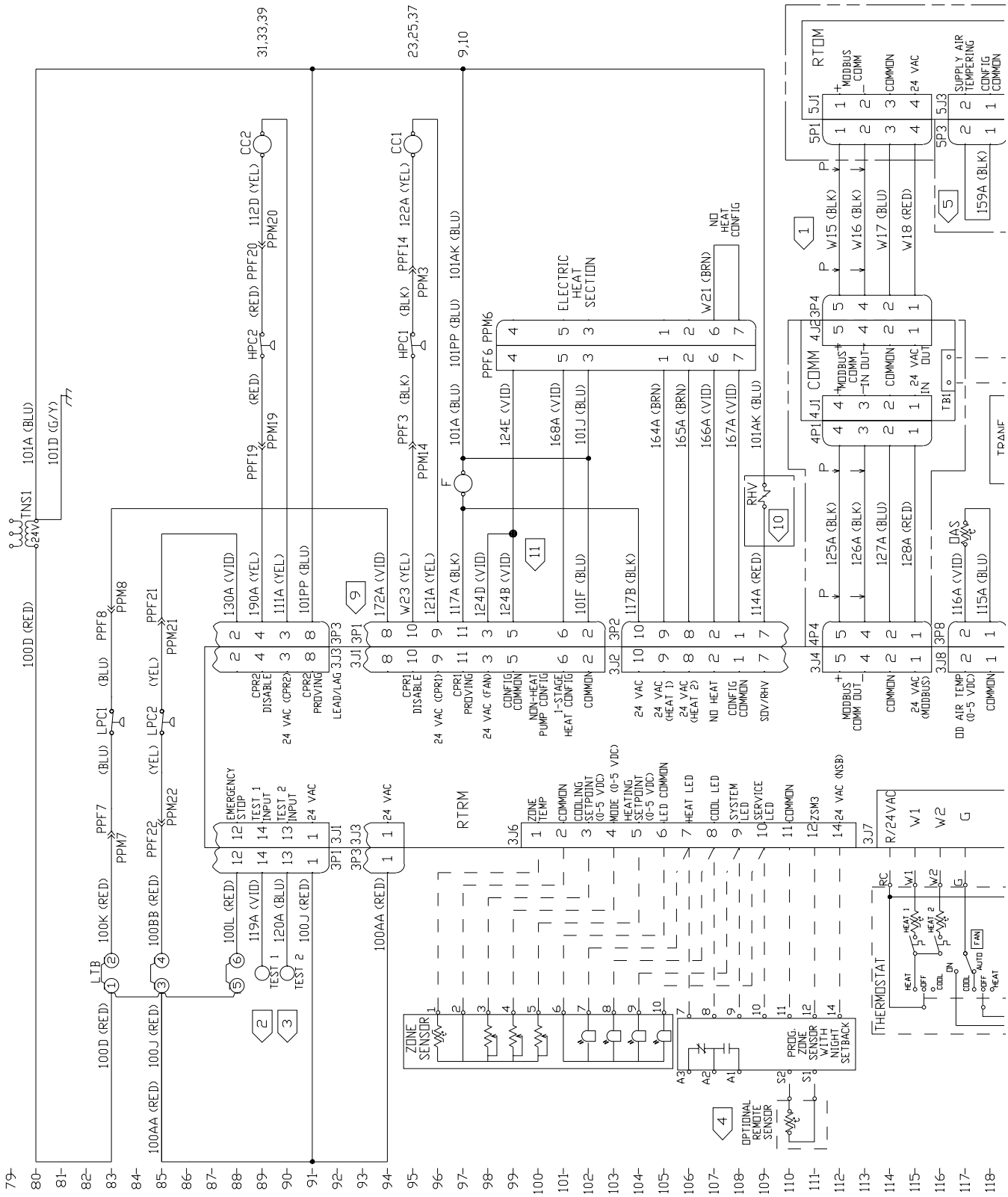


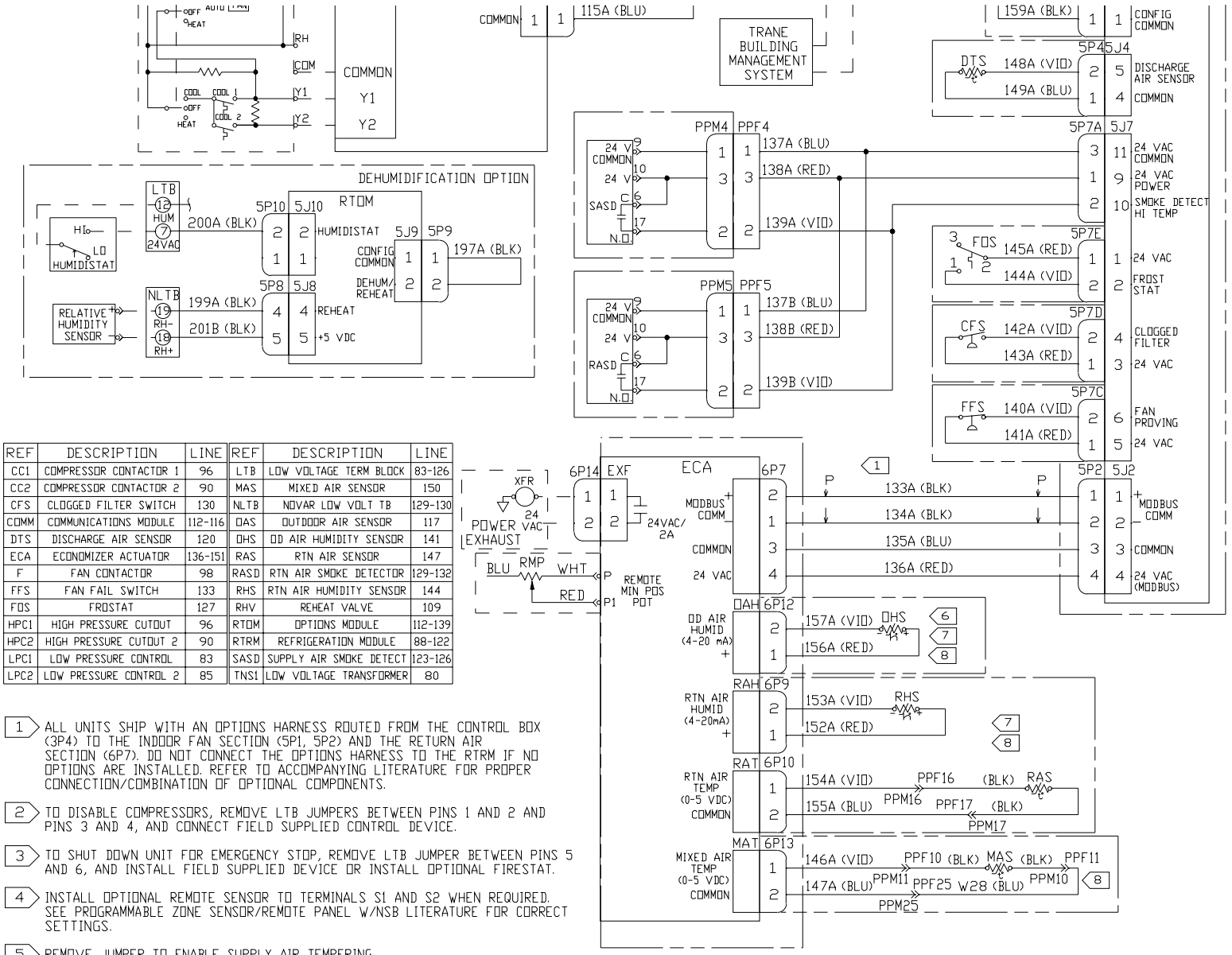


REF	DESCRIPTION	LINE	REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR	108	NLTB	NOVAR LOW VOLT TB	129-130
CFS	CLOGGED FILTER SWITCH	130	OAS	OUTDOOR AIR SENSOR	117
COMM	COMMUNICATIONS MODULE	112-116	ODF2	OF FAN RELAY 2	91
DTS	DISCHARGE AIR SENSOR	120	OHS	OD AIR HUMIDITY SENSOR	141
ECA	ECONOMIZER ACTUATOR	136-151	RAS	RTN AIR SENSOR	147
F	FAN RELAY	106,127	RASD	RTN AIR SMOKE DETECTOR	129-132
FFS	FAN FAIL SWITCH	133	RHS	RTN AIR HUMIDITY SENSOR	144
FOS	FROSTAT	127	RHV	REHEAT VALVE	94
HPC1	HIGH PRESSURE CUTOUT	108	RTOM	OPTIONS MODULE	112-139
LPC1	LOW PRESSURE CONTROL	83	RTRM	REFRIGERATION MODULE	85-123
LTB	LOW VOLTAGE TERM BLOCK	83-126	SASD	SUPPLY AIR SMOKE DETECT	123-126
MAS	MIXED AIR SENSOR	150	TNS1	LOW VOLTAGE TRANSFORMER	80

1. ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL BOX (3P4) TO THE INDOOR FAN SECTION (5P1, 5P2) AND THE RETURN AIR SECTION (6P7). DO NOT CONNECT THE OPTIONS HARNESS TO THE RTRM IF NO OPTIONS ARE INSTALLED. REFER TO ACCOMPANYING LITERATURE FOR PROPER CONNECTION/COMBINATION OF OPTIONAL COMPONENTS.
2. TO DISABLE COMPRESSORS, REMOVE LTB JUMPERS BETWEEN PINS 1 AND 2 AND PINS 3 AND 4, AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
3. TO SHUT DOWN UNIT FOR EMERGENCY STOP, REMOVE LTB JUMPER BETWEEN PINS 5 AND 6, AND INSTALL FIELD SUPPLIED DEVICE OR INSTALL OPTIONAL FIRESTAT.
4. INSTALL OPTIONAL REMOTE SENSOR TO TERMINALS S1 AND S2 WHEN REQUIRED. SEE PROGRAMMABLE ZONE SENSOR/REMOTE PANEL W/NSB LITERATURE FOR CORRECT SETTINGS.
5. CONNECTIONS SHOWN INCLUDE OPTIONAL HPC1. IF HPC1 NOT INSTALLED, CONNECT PPM14 TO PPF14.
6. REMOVE JUMPER TO ENABLE SUPPLY AIR TEMPERING.
7. REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
8. REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
9. OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.
10. 3P3, ODF2, RHV, AND ASSOCIATED WIRING ARE NOT PRESENT IF DEHUMIDIFICATION OPTION IS NOT INSTALLED.
11. CUT AND ISOLATE WIRE 124B(VIO) IF DEHUMIDIFICATION OPTION IS INSTALLED.

Diagram 14
Control Diagram
7.5 - 10 Ton Cooling Only / Dual Compressor
4366-1044



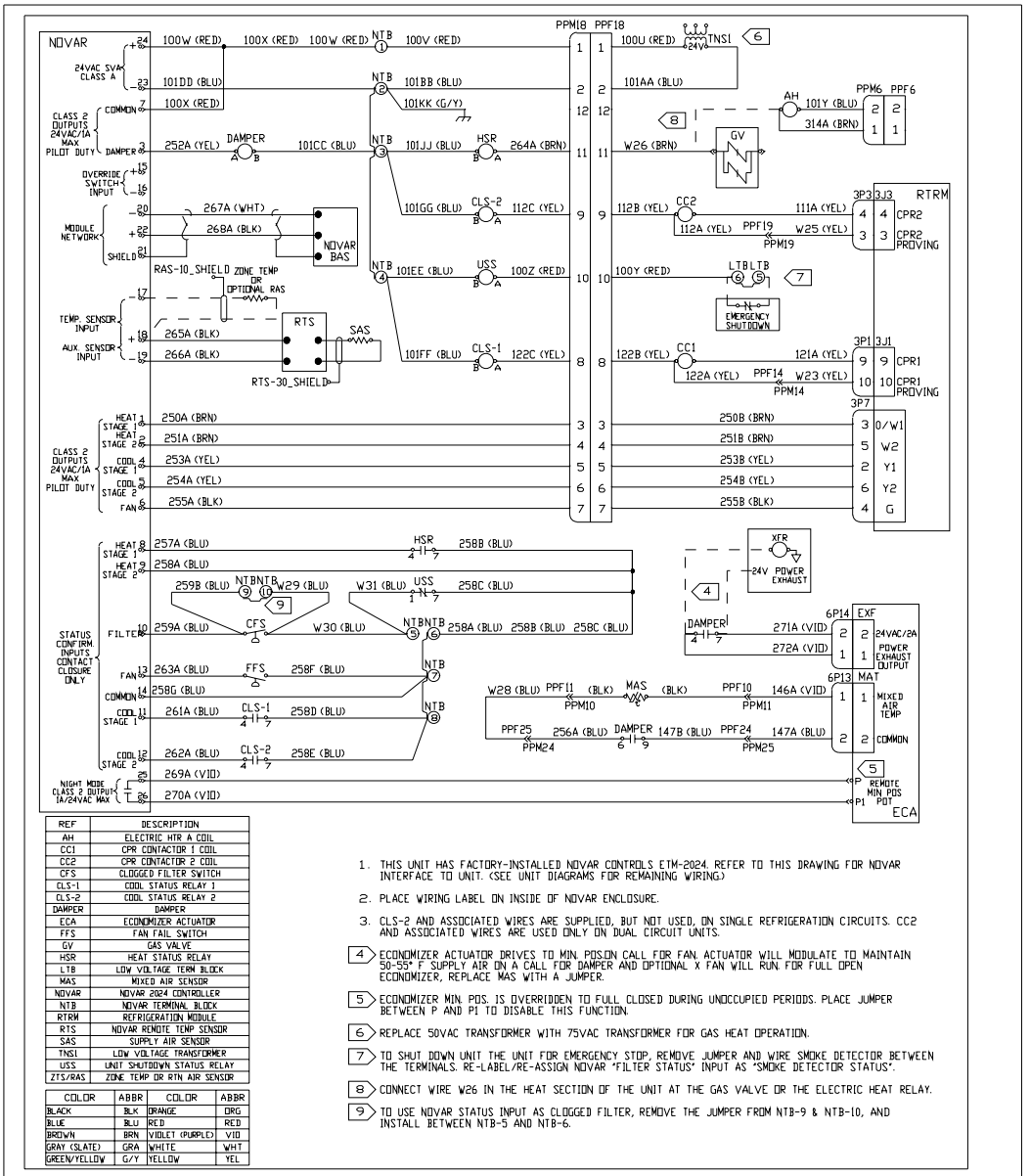


REF	DESCRIPTION	LINE	REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONTACTOR 1	96	LTB	LOW VOLTAGE TERM BLOCK	83-126
CC2	COMPRESSOR CONTACTOR 2	90	MAS	MIXED AIR SENSOR	150
CFS	CLOGGED FILTER SWITCH	130	NLTB	NOVAR LOW VOLT TB	129-130
COMM	COMMUNICATIONS MODULE	112-116	OAS	OUTDOOR AIR SENSOR	117
DTS	DISCHARGE AIR SENSOR	120	OHS	OD AIR HUMIDITY SENSOR	141
ECA	ECONOMIZER ACTUATOR	136-151	RAS	RTN AIR SENSOR	147
F	FAN CONTACTOR	98	RASD	RTN AIR SMOKE DETECTOR	129-132
FFS	FAN FAIL SWITCH	133	RHS	RTN AIR HUMIDITY SENSOR	144
FDS	FROSTAT	127	RHV	REHEAT VALVE	109
HPC1	HIGH PRESSURE CUTOUT	96	RTOM	OPTIONS MODULE	112-139
HPC2	HIGH PRESSURE CUTOUT 2	90	RTRM	REFRIGERATION MODULE	88-122
LPC1	LOW PRESSURE CONTROL	83	SASD	SUPPLY AIR SMOKE DETECT	123-126
LPC2	LOW PRESSURE CONTROL 2	85	TNS1	LOW VOLTAGE TRANSFORMER	80

1. ALL UNITS SHIP WITH AN OPTIONS HARNESS ROUTED FROM THE CONTROL BOX (3P4) TO THE INDOOR FAN SECTION (5P1, 5P2) AND THE RETURN AIR SECTION (6P7). DO NOT CONNECT THE OPTIONS HARNESS TO THE RTRM IF NO OPTIONS ARE INSTALLED. REFER TO ACCOMPANYING LITERATURE FOR PROPER CONNECTION/COMBINATION OF OPTIONAL COMPONENTS.
2. TO DISABLE COMPRESSORS, REMOVE LTB JUMPERS BETWEEN PINS 1 AND 2 AND PINS 3 AND 4, AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
3. TO SHUT DOWN UNIT FOR EMERGENCY STOP, REMOVE LTB JUMPER BETWEEN PINS 5 AND 6, AND INSTALL FIELD SUPPLIED DEVICE OR INSTALL OPTIONAL FIRESTAT.
4. INSTALL OPTIONAL REMOTE SENSOR TO TERMINALS S1 AND S2 WHEN REQUIRED. SEE PROGRAMMABLE ZONE SENSOR/REMOTE PANEL W/NSB LITERATURE FOR CORRECT SETTINGS.
5. REMOVE JUMPER TO ENABLE SUPPLY AIR TEMPERING.
6. REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
7. REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
8. OPTIONAL MAS, RAS, RHS, OHS, AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR DAMPER.
9. TO ENABLE LEAD/LAG, CUT WIRE 101PP.
10. RHV AND ASSOCIATED WIRING ARE NOT PRESENT IF DEHUMIDIFICATION OPTION IS NOT INSTALLED.
11. CUT AND ISOLATE WIRE 124B(VIO) IF DEHUMIDIFICATION OPTION IS INSTALLED.

4366-1044E

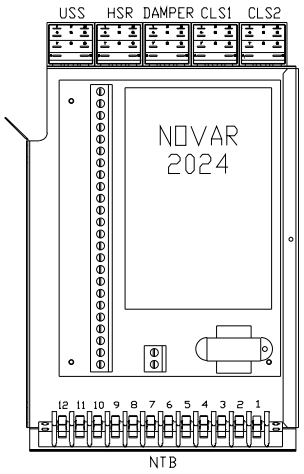
Diagram 15
Novar Schematic - 2024



REF	DESCRIPTION
AH	ELECTRIC HTR A COIL
CC1	CPR CONTACTOR 1 COIL
CC2	CPR CONTACTOR 2 COIL
CFS	CLOGGED FILTER SWITCH
CLS-1	COOL STATUS RELAY 1
CLS-2	COOL STATUS RELAY 2
DAMPER	DAMPER
ECA	ECONOMIZER ACTUATOR
FFS	FAN FAIL SWITCH
GV	GAS VALVE
HSR	HEAT STATUS RELAY
LTB	LOW VOLTAGE TERM BLOCK
MAS	MIXED AIR SENSOR
NOVAR	NOVAR 2024 CONTROLLER
NTB	NOVAR TERMINAL BLOCK
RTRM	REFRIGERATION MODULE
RTS	NOVAR REMOTE TEMP SENSOR
SAS	SUPPLY AIR SENSOR
TNS1	LOW VOLTAGE TRANSFORMER
USS	UNIT SHUTDOWN STATUS RELAY
ZTS/RAS	ZONE TEMP OR RTN AIR SENSOR

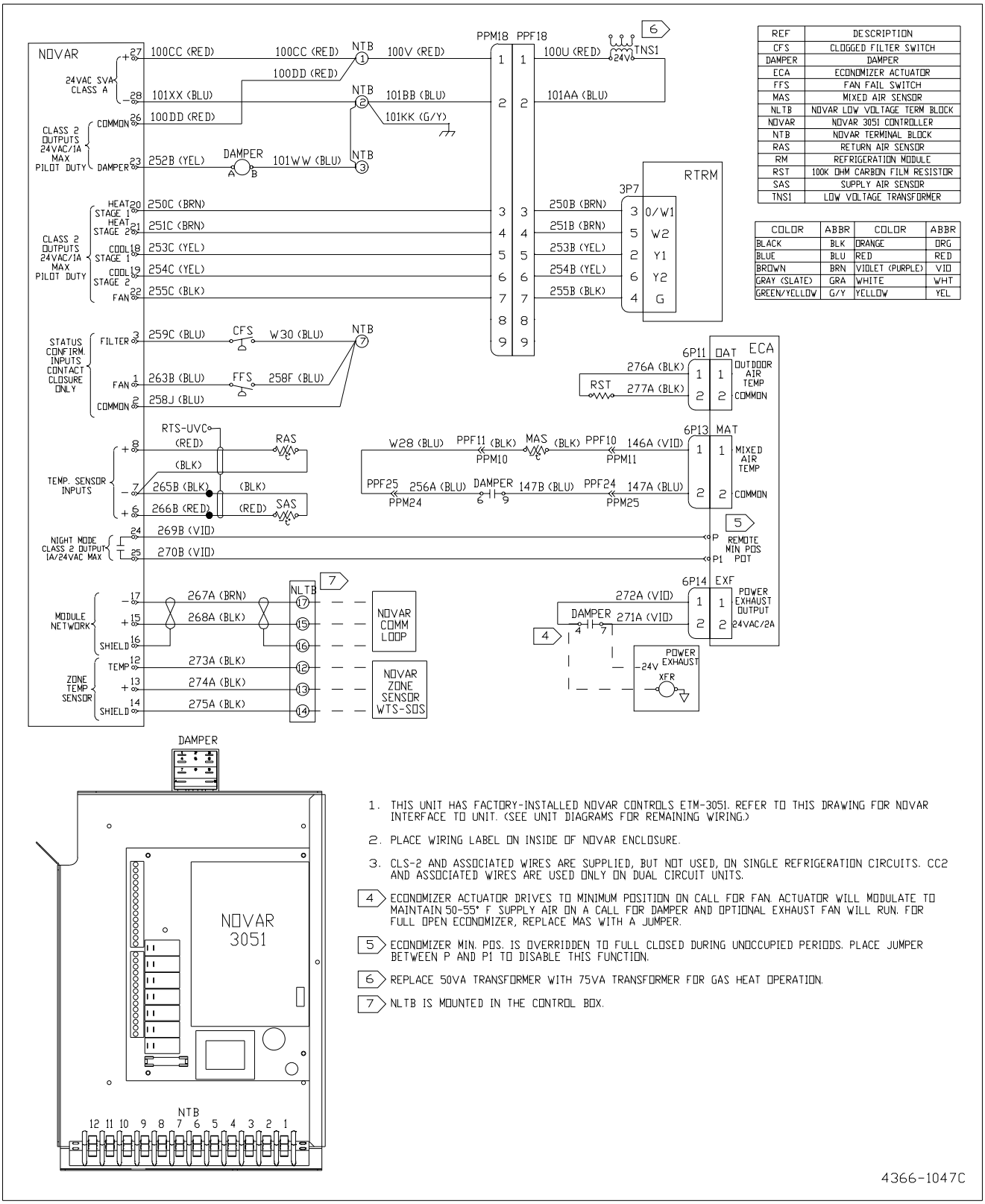
COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

1. THIS UNIT HAS FACTORY-INSTALLED NOVAR CONTROLS ETM-2024. REFER TO THIS DRAWING FOR NOVAR INTERFACE TO UNIT. (SEE UNIT DIAGRAMS FOR REMAINING WIRING.)
2. PLACE WIRING LABEL ON INSIDE OF NOVAR ENCLOSURE.
3. CLS-2 AND ASSOCIATED WIRES ARE SUPPLIED, BUT NOT USED, ON SINGLE REFRIGERATION CIRCUITS. CC2 AND ASSOCIATED WIRES ARE USED ONLY ON DUAL CIRCUIT UNITS.
4. ECONOMIZER ACTUATOR DRIVES TO MIN. POS.ON CALL FOR FAN. ACTUATOR WILL MODULATE TO MAINTAIN 50-55° F SUPPLY AIR ON A CALL FOR DAMPER AND OPTIONAL X FAN WILL RUN. FOR FULL OPEN ECONOMIZER, REPLACE MAS WITH A JUMPER.
5. ECONOMIZER MIN. POS. IS OVERRIDDEN TO FULL CLOSED DURING UNOCCUPIED PERIODS. PLACE JUMPER BETWEEN P AND P1 TO DISABLE THIS FUNCTION.
6. REPLACE 50VAC TRANSFORMER WITH 75VAC TRANSFORMER FOR GAS HEAT OPERATION.
7. TO SHUT DOWN UNIT THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND WIRE SMOKE DETECTOR BETWEEN THE TERMINALS. RE-LABEL/RE-ASSIGN NOVAR "FILTER STATUS" INPUT AS "SMOKE DETECTOR STATUS".
8. CONNECT WIRE W26 IN THE HEAT SECTION OF THE UNIT AT THE GAS VALVE OR THE ELECTRIC HEAT RELAY.
9. TO USE NOVAR STATUS INPUT AS CLOGGED FILTER, REMOVE THE JUMPER FROM NTB-9 & NTB-10, AND INSTALL BETWEEN NTB-5 AND NTB-6.



4366-1099B

Diagram 16
Novar Schematic - 3051



REF	DESCRIPTION
CFS	CLOGGED FILTER SWITCH
DAMPER	DAMPER
ECA	ECONOMIZER ACTUATOR
FFS	FAN FAIL SWITCH
MAS	MIXED AIR SENSOR
NLTB	NOVAR LOW VOLTAGE TERM BLOCK
NOVAR	NOVAR 3051 CONTROLLER
NTB	NOVAR TERMINAL BLOCK
RAS	RETURN AIR SENSOR
RM	REFRIGERATION MODULE
RST	100K OHM CARBON FILM RESISTOR
SAS	SUPPLY AIR SENSOR
TNS1	LOW VOLTAGE TRANSFORMER

COLOR	ABBR	COLOR	ABBR
BLACK	BLK	ORANGE	ORG
BLUE	BLU	RED	RED
BROWN	BRN	VIOLET (PURPLE)	VIO
GRAY (SLATE)	GRA	WHITE	WHT
GREEN/YELLOW	G/Y	YELLOW	YEL

1. THIS UNIT HAS FACTORY-INSTALLED NOVAR CONTROLS ETM-3051. REFER TO THIS DRAWING FOR NOVAR INTERFACE TO UNIT. (SEE UNIT DIAGRAMS FOR REMAINING WIRING.)
2. PLACE WIRING LABEL ON INSIDE OF NOVAR ENCLOSURE.
3. CLS-2 AND ASSOCIATED WIRES ARE SUPPLIED, BUT NOT USED, ON SINGLE REFRIGERATION CIRCUITS. CC2 AND ASSOCIATED WIRES ARE USED ONLY ON DUAL CIRCUIT UNITS.

4 ECONOMIZER ACTUATOR DRIVES TO MINIMUM POSITION ON CALL FOR FAN. ACTUATOR WILL MODULATE TO MAINTAIN 50-55° F SUPPLY AIR ON A CALL FOR DAMPER AND OPTIONAL EXHAUST FAN WILL RUN. FOR FULL OPEN ECONOMIZER, REPLACE MAS WITH A JUMPER.

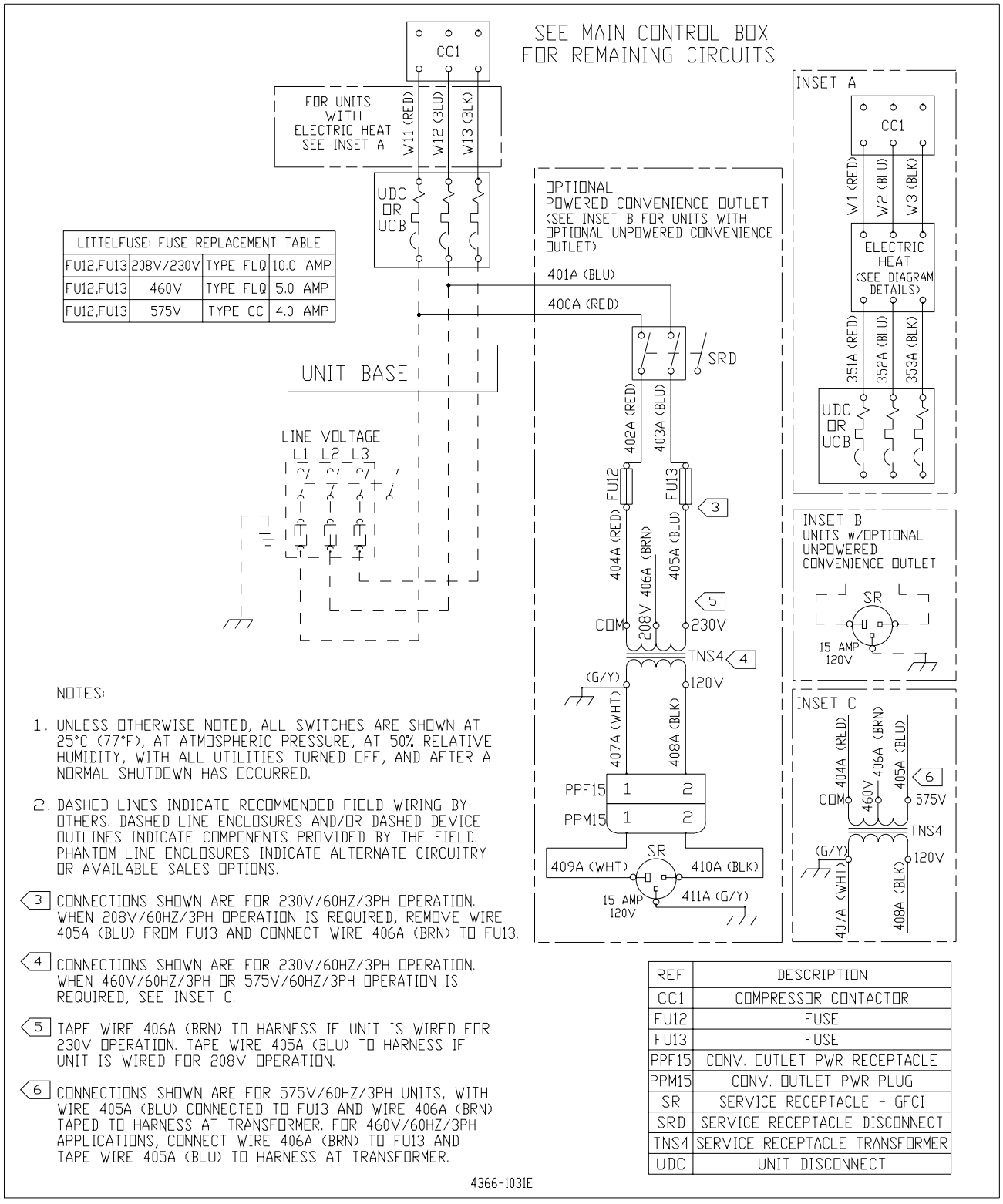
5 ECONOMIZER MIN. POS. IS OVERRIDDEN TO FULL CLOSED DURING UNOCCUPIED PERIODS. PLACE JUMPER BETWEEN P AND P1 TO DISABLE THIS FUNCTION.

6 REPLACE 50VA TRANSFORMER WITH 75VA TRANSFORMER FOR GAS HEAT OPERATION.

7 NLTB IS MOUNTED IN THE CONTROL BOX.

4366-1047C

Diagram 17
Through The Base Utilities Schematic -



LITTELFUSE: FUSE REPLACEMENT TABLE			
FU12,FU13	208V/230V	TYPE FLQ	10.0 AMP
FU12,FU13	460V	TYPE FLQ	5.0 AMP
FU12,FU13	575V	TYPE CC	4.0 AMP

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> CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH OPERATION. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 405A (BLU) FROM FU13 AND CONNECT WIRE 406A (BRN) TO FU13.

<4> CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH OPERATION. WHEN 460V/60HZ/3PH OR 575V/60HZ/3PH OPERATION IS REQUIRED, SEE INSET C.

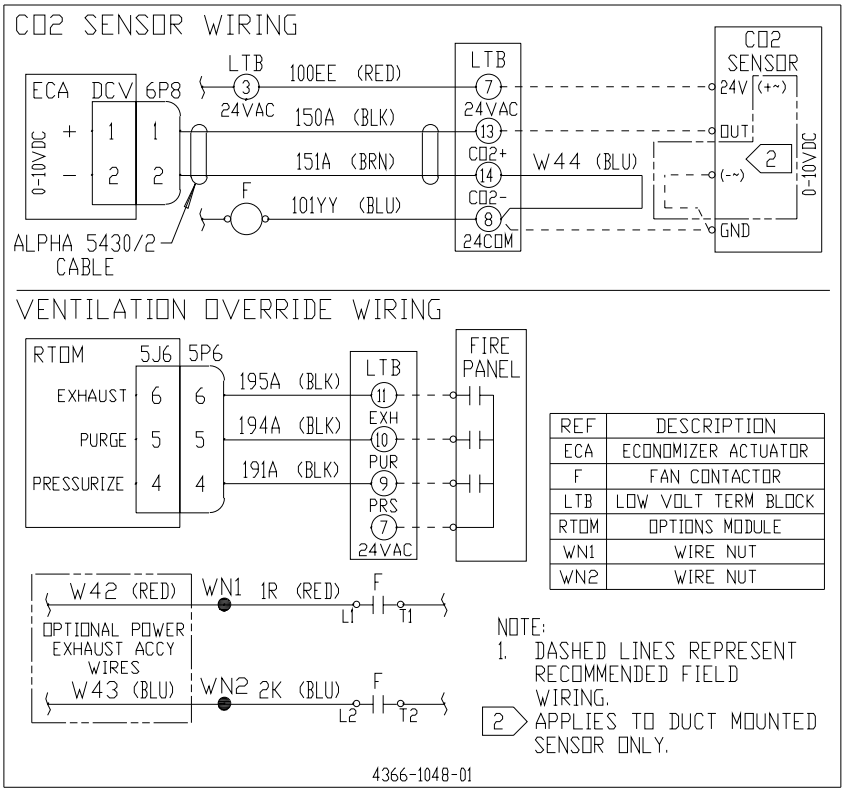
<5> TAPE WIRE 406A (BRN) TO HARNESS IF UNIT IS WIRED FOR 230V OPERATION. TAPE WIRE 405A (BLU) TO HARNESS IF UNIT IS WIRED FOR 208V OPERATION.

<6> CONNECTIONS SHOWN ARE FOR 575V/60HZ/3PH UNITS, WITH WIRE 405A (BLU) CONNECTED TO FU13 AND WIRE 406A (BRN) TAPED TO HARNESS AT TRANSFORMER. FOR 460V/60HZ/3PH APPLICATIONS, CONNECT WIRE 406A (BRN) TO FU13 AND TAPE WIRE 405A (BLU) TO HARNESS AT TRANSFORMER.

REF	DESCRIPTION
CC1	COMPRESSOR CONTACTOR
FU12	FUSE
FU13	FUSE
PPF15	CONV. OUTLET PWR RECEPTACLE
PPM15	CONV. OUTLET PWR PLUG
SR	SERVICE RECEPTACLE - GFCI
SRD	SERVICE RECEPTACLE DISCONNECT
TNS4	SERVICE RECEPTACLE TRANSFORMER
UDC	UNIT DISCONNECT

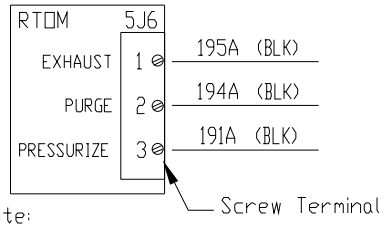
4366-103IE

Diagram 18
CO_2 Sensor / Ventilation Override Schematic



REF	DESCRIPTION
ECA	ECONOMIZER ACTUATOR
F	FAN CONTACTOR
LTB	LOW VOLT TERM BLOCK
RTOM	OPTIONS MODULE
WN1	WIRE NUT
WN2	WIRE NUT

Alternate RTOM Connection



Note:
Some RTOM versions have a 5J6 connector which only accepts bare wire. In this case remove plug 5P6 from harness, strip the wire ends and connect individual wires 191A, 194A, and 195A to the screw terminals of 5J6 as shown above.

Diagram 19
5.0 KW - 208-240v/60hz/1ph
BAYHTRR105A

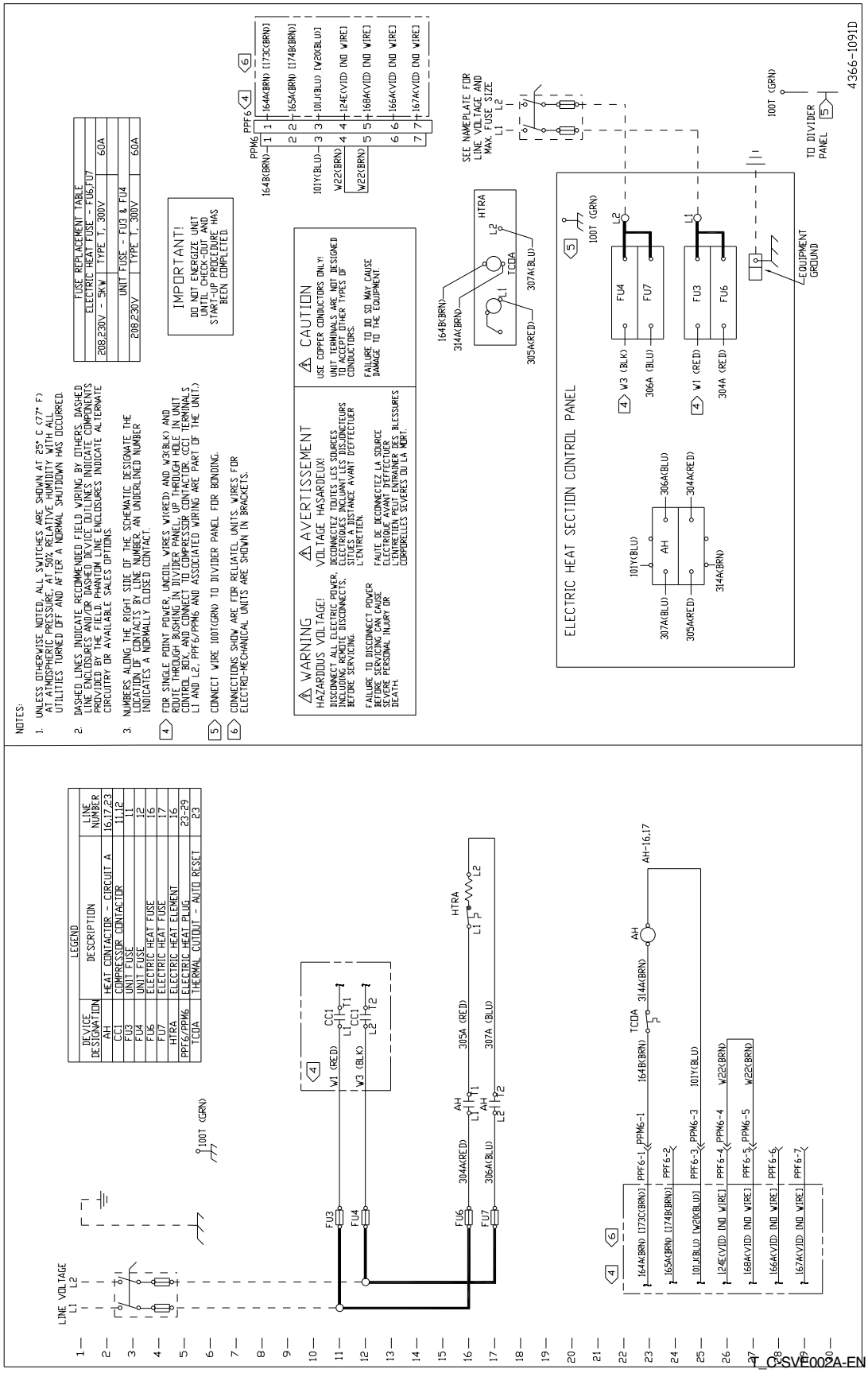


Diagram 20
10.0 KW - 208-240v/60hz/1ph
BAYHTRR110A

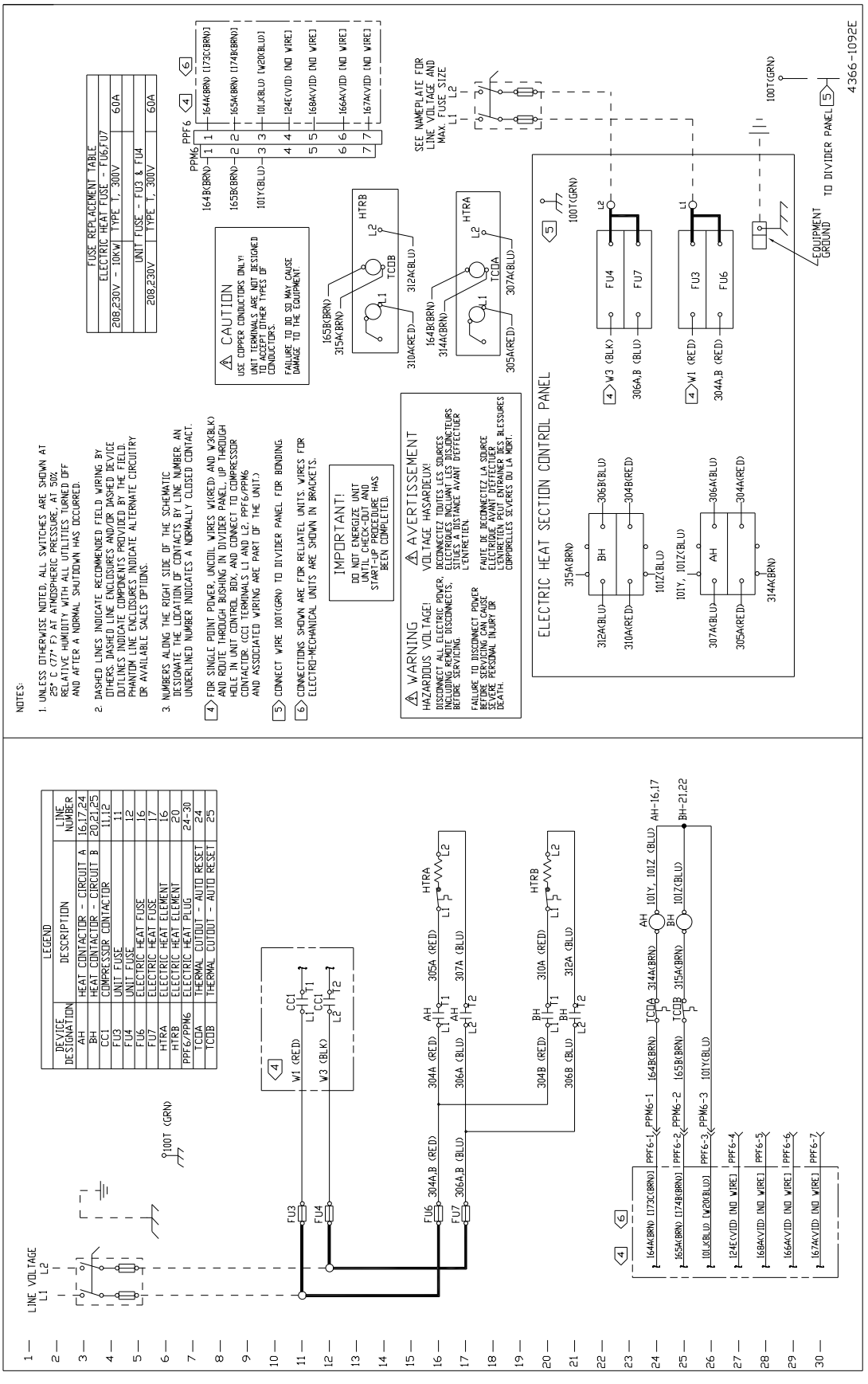


Diagram 21
13.8 KW - 208-240v/60hz/1ph
BAYHTRR114A

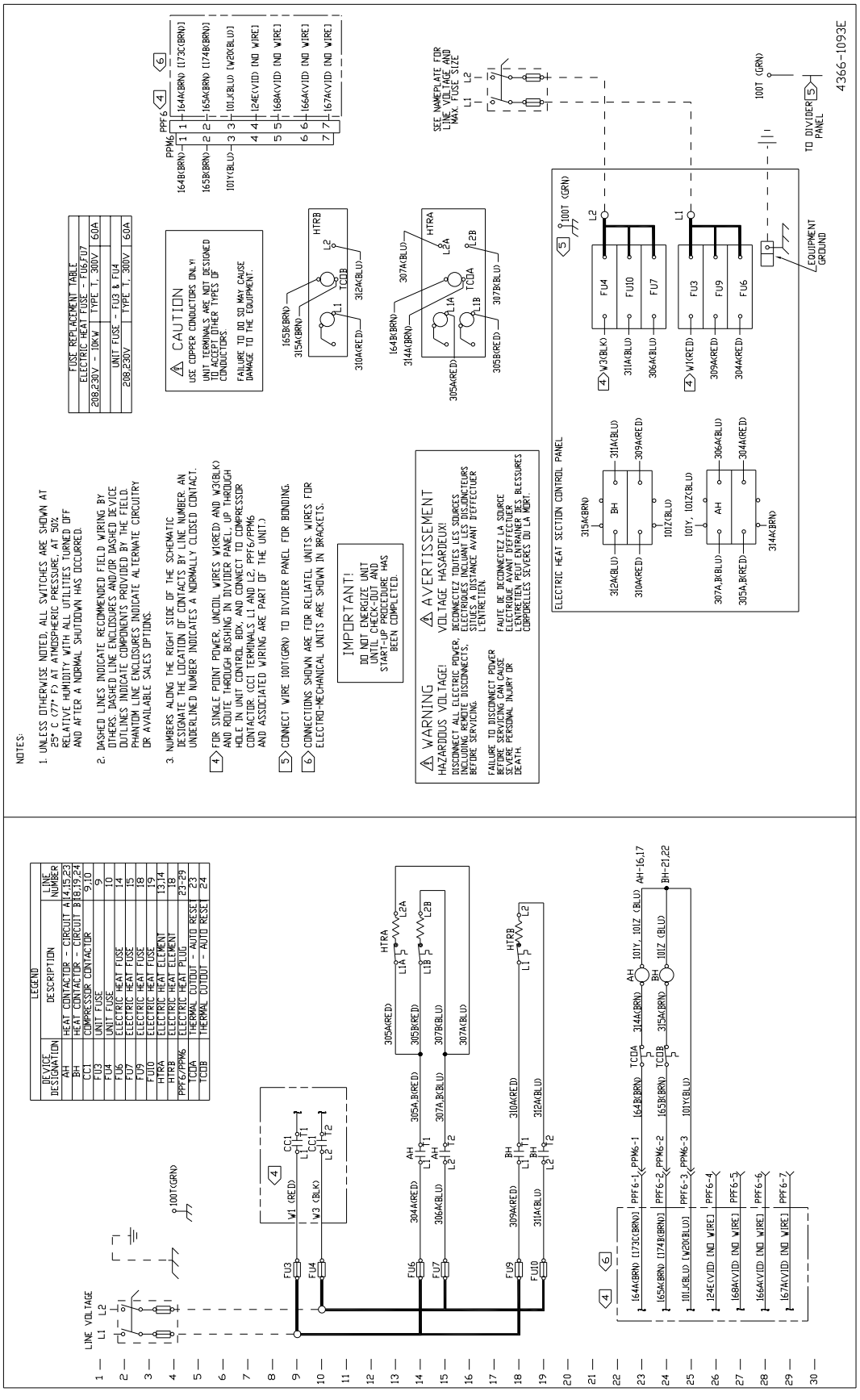


Diagram 22
17.6 KW - 208-240v/60hz/1ph
BAYHTRR118A

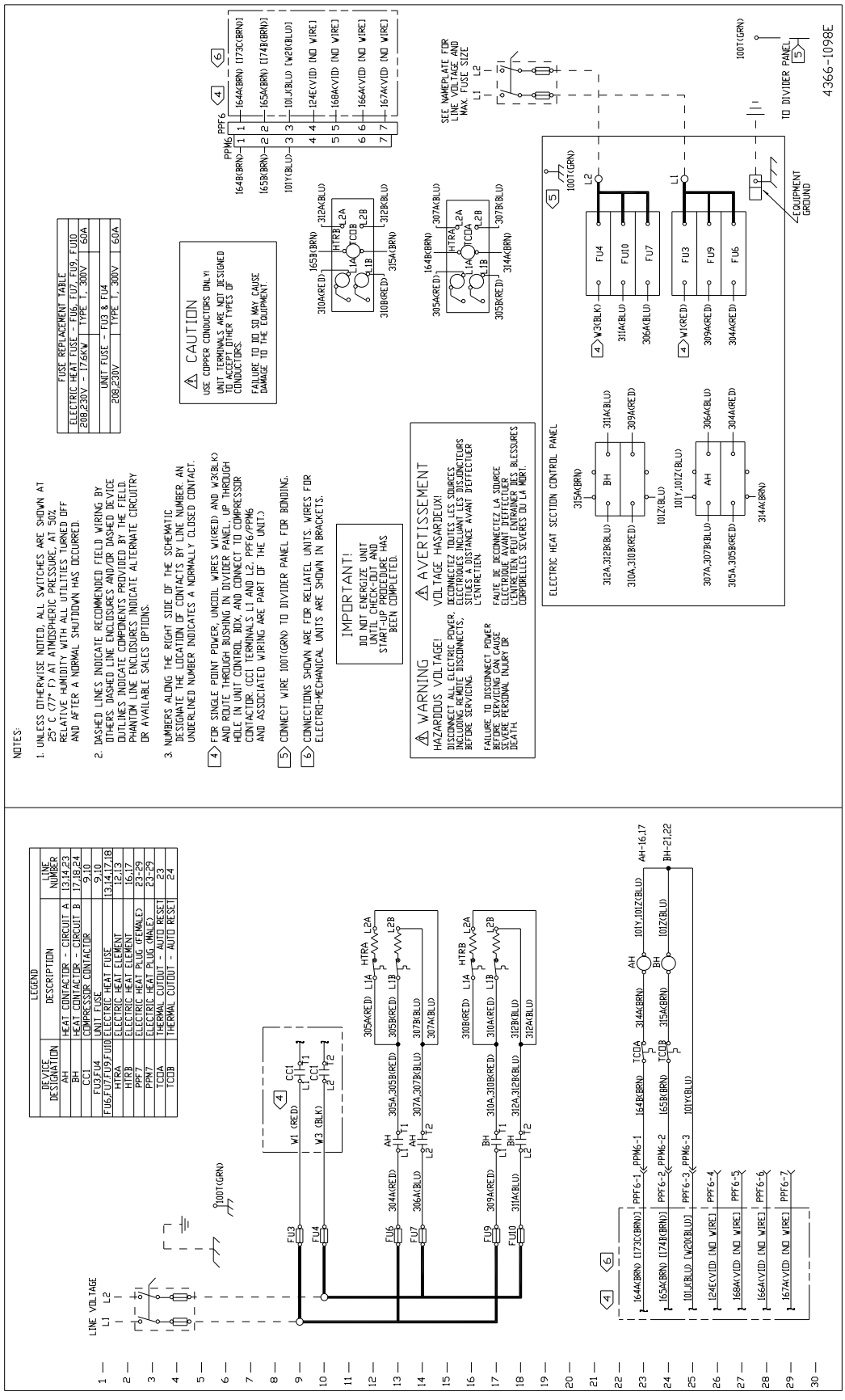


Diagram 23
6.0 KW - 208-600v/60hz/3ph
BAYHTRR306A, BAYHTRR406A, BAYHTRRW06A

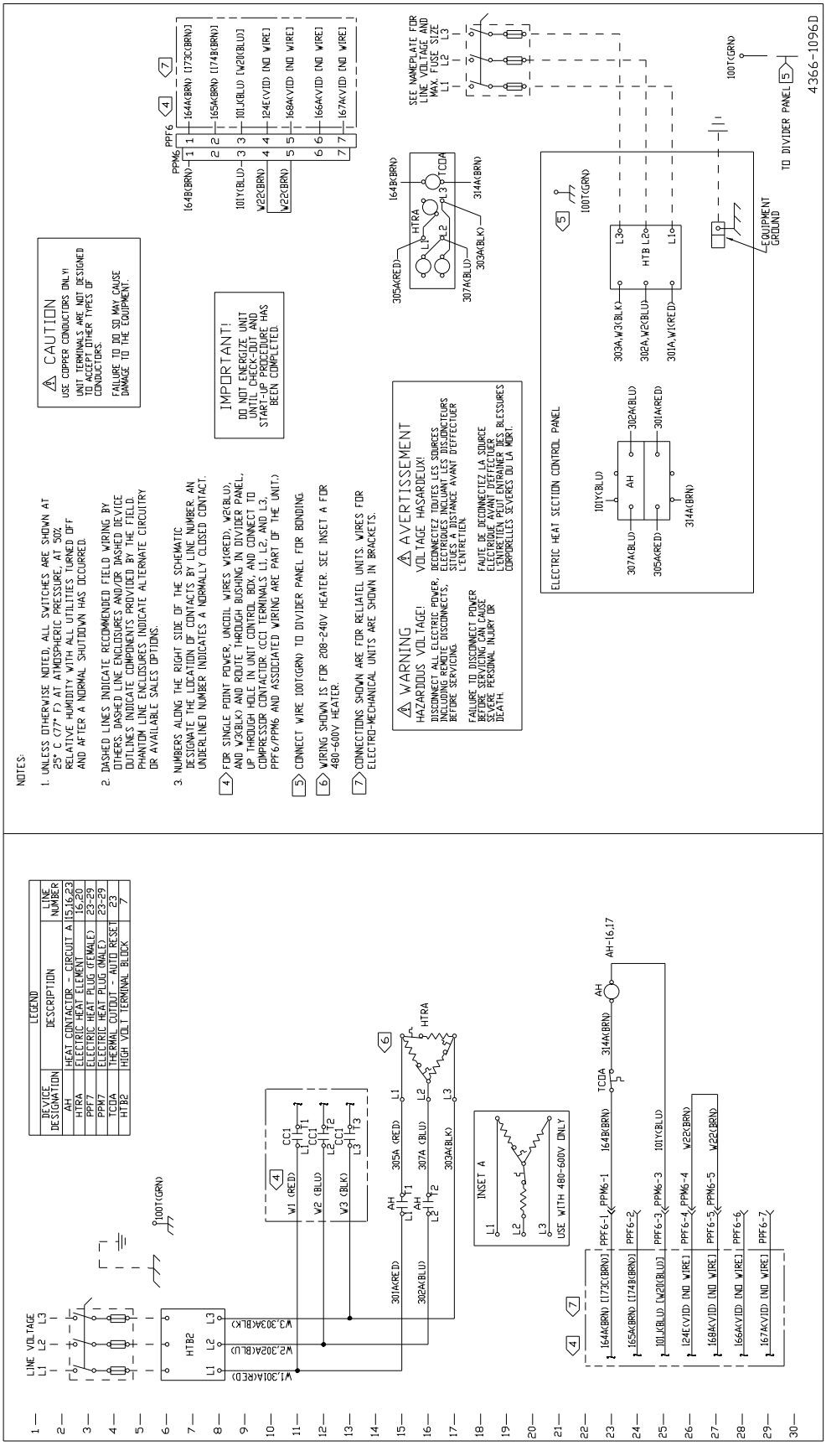


Diagram 24
9.0 & 18.0 KW - 208-240v/60hz/3ph
BAYHTRS309A, BAYHTRT309A,
BAYHTRS318A, BAYHTRT318A

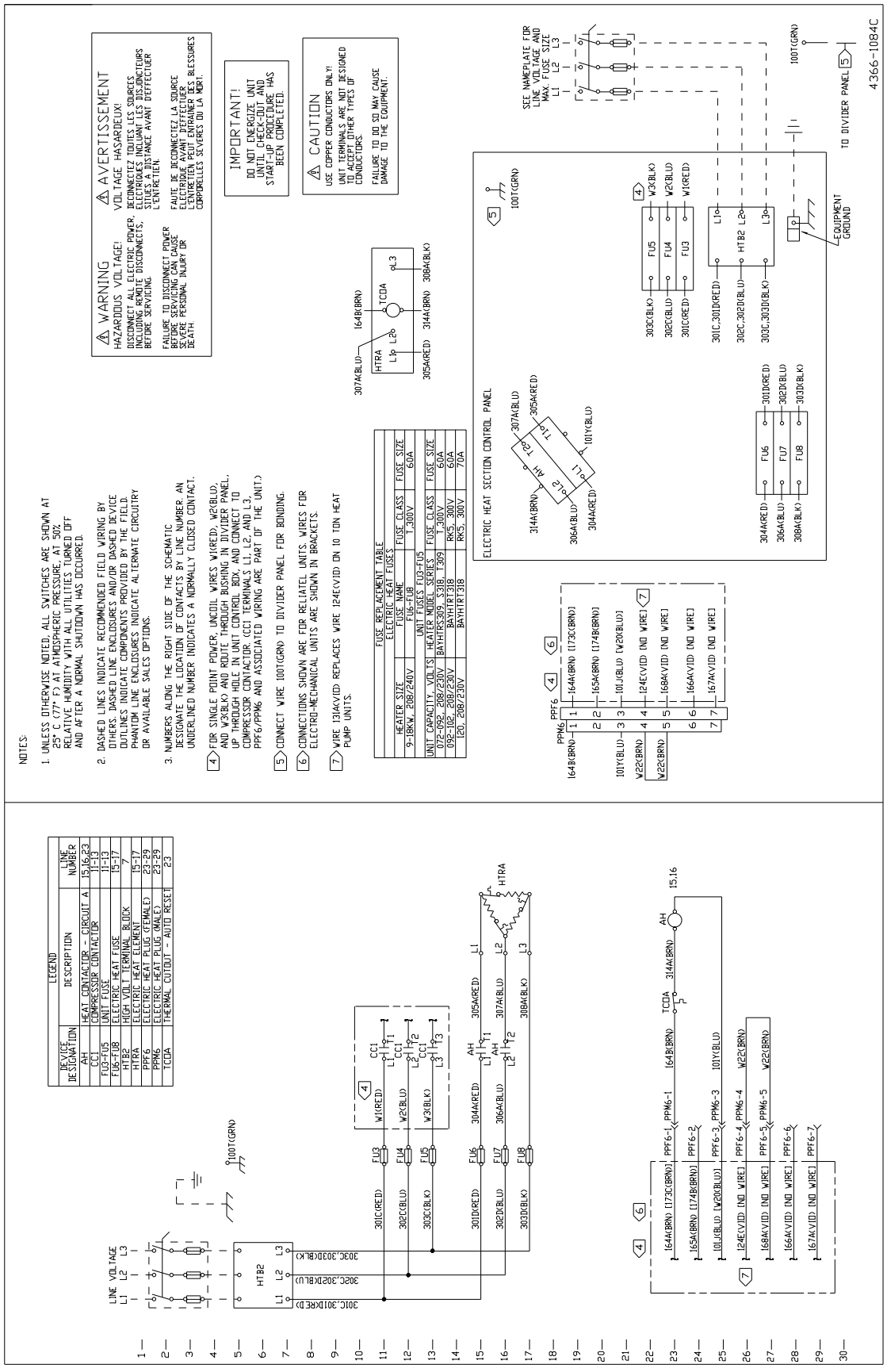


Diagram 25
12.0 & 17.4 KW - 208-240v/60hz/3ph
BAYHTRR312A, BAYHTRR318A

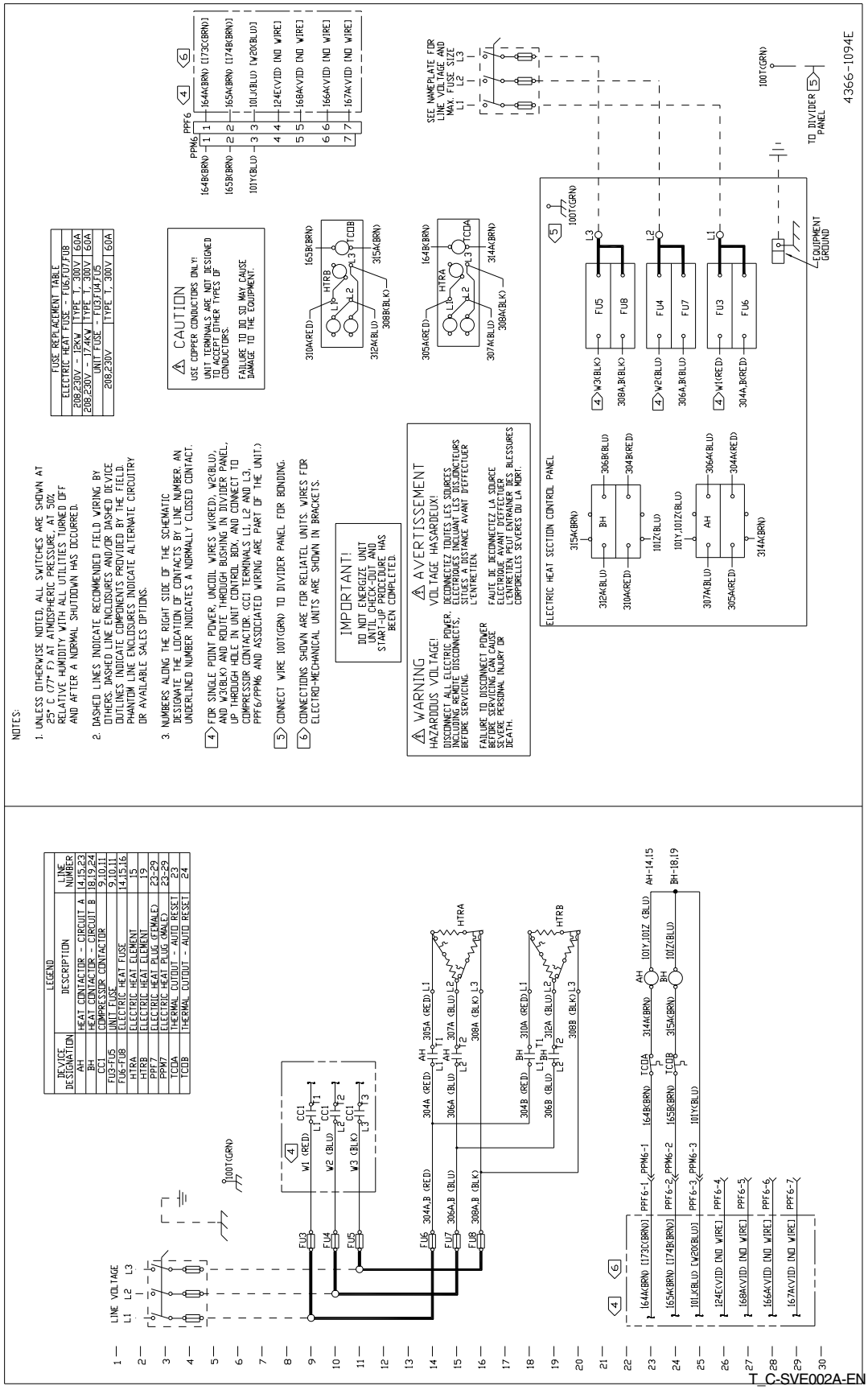


Diagram 26
23.0 KW - 208-240v/60hz/3ph
BAYHTRR323A

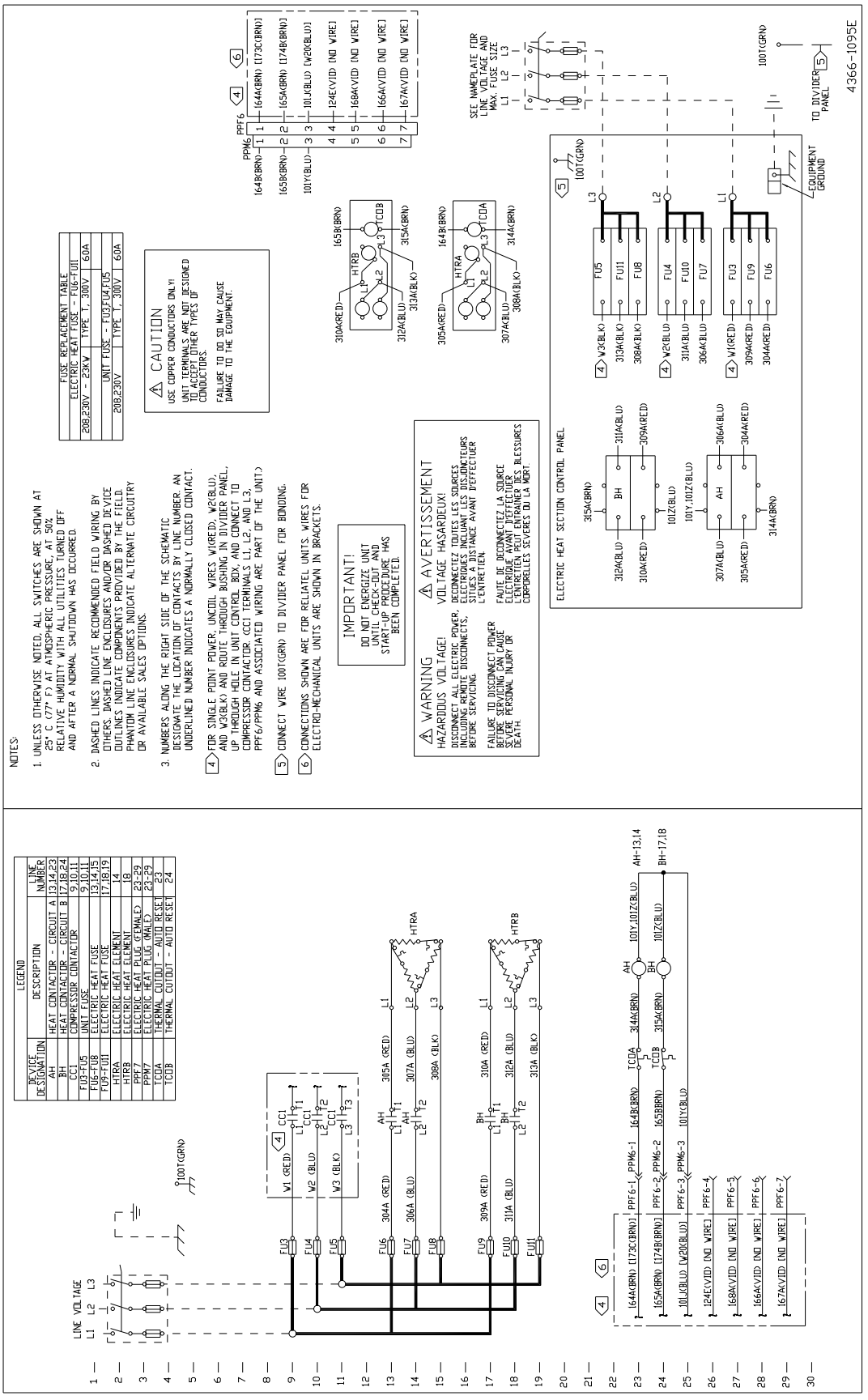


Diagram 27
27.0 & 36.0 KW - 208-240v/60hz/3ph
BAYHTRS327A, BAYHTRT327A,
BAYHTRS336A, BAYHTRT336A

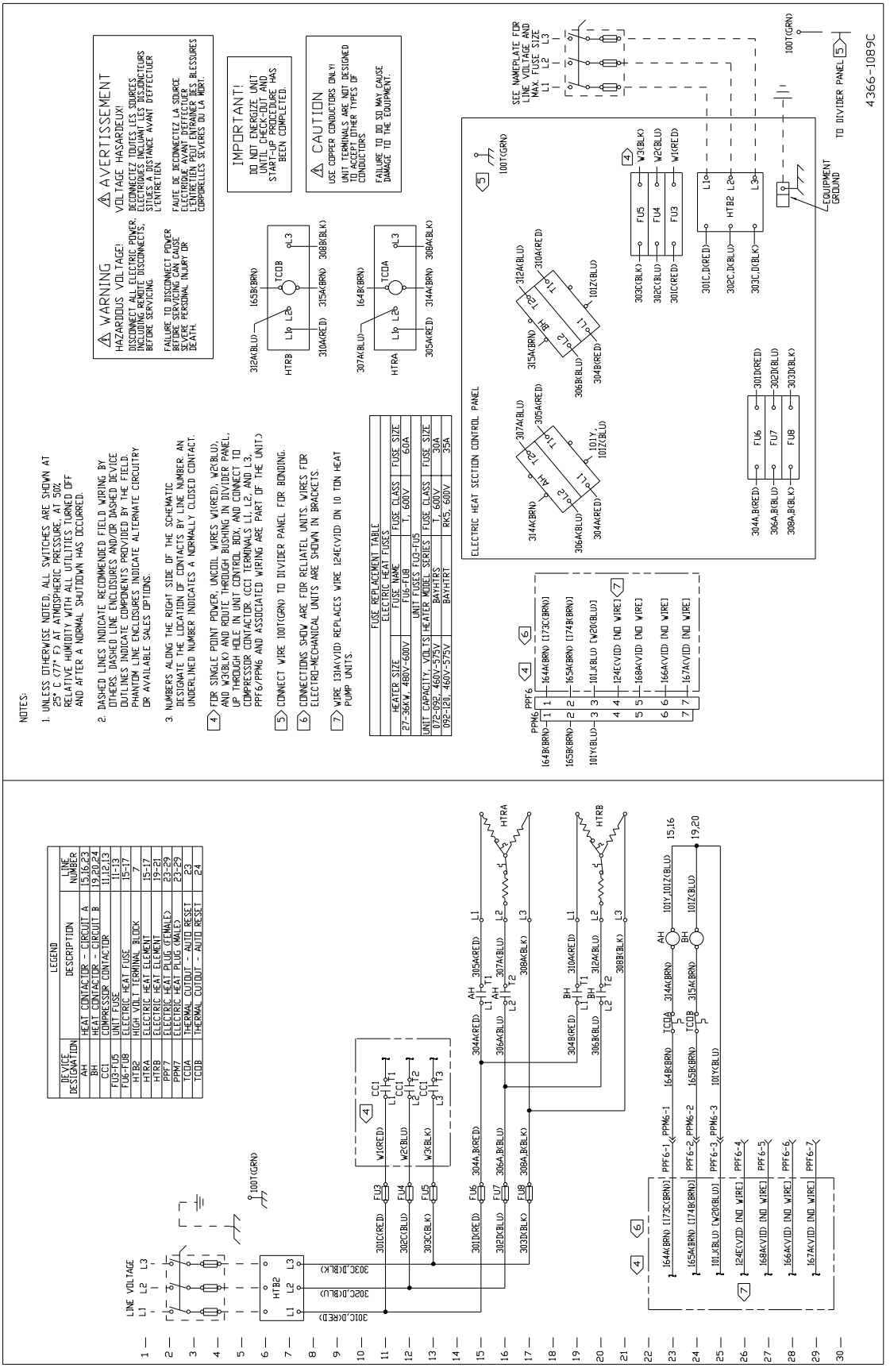


Diagram 28
54.0 KW - 208-240v/60hz/3ph
BAYHTRT354A

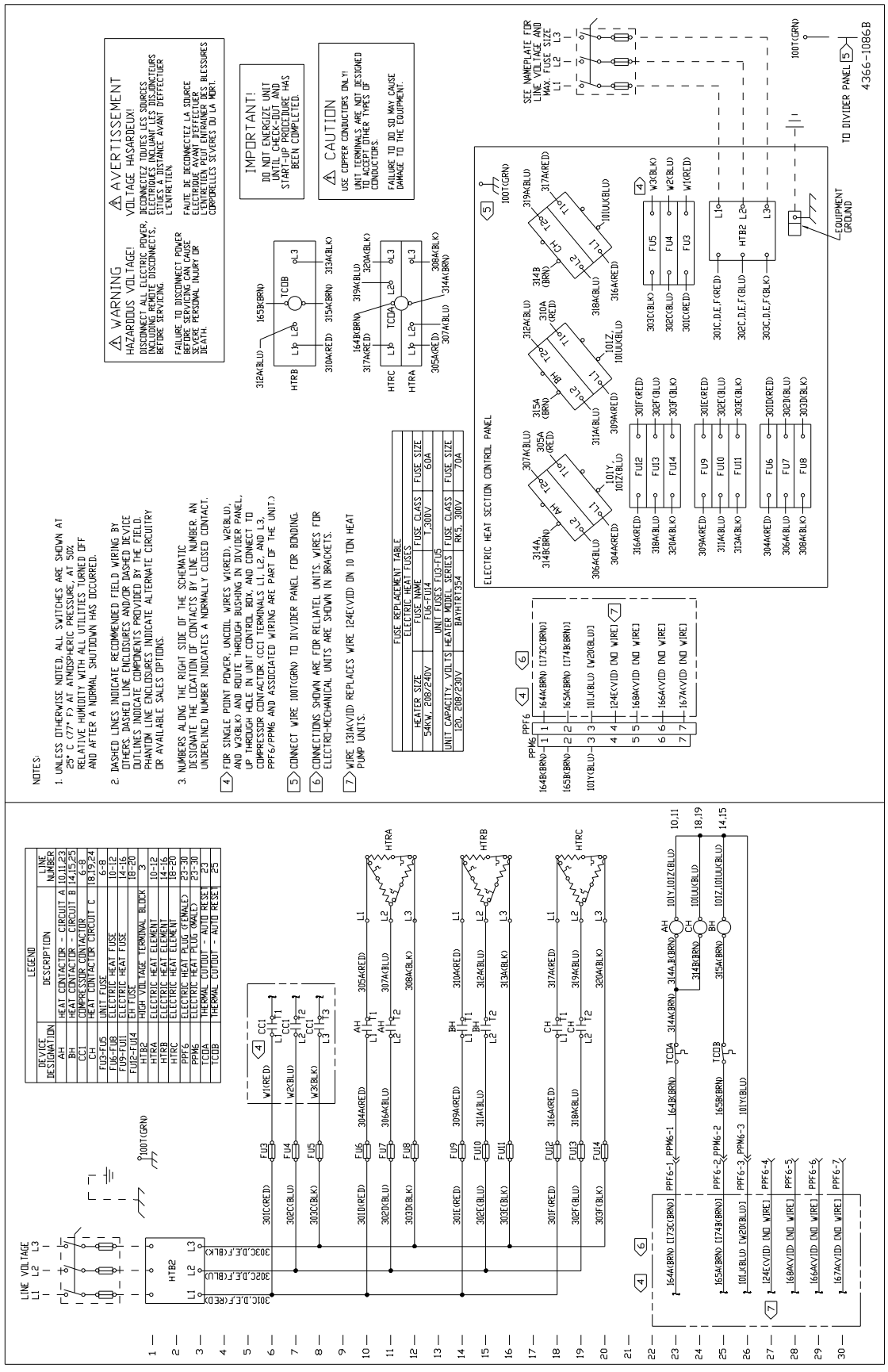


Diagram 29
9.0 & 18 KW - 480-600v/60hz/3ph
BAYHTRS409A, BAYHTRT409A,
BAYHTRSW09A, BAYHTRS418A,
BAYHTRT418A, BAYHTRSW18A,
BAYHTRTW18A

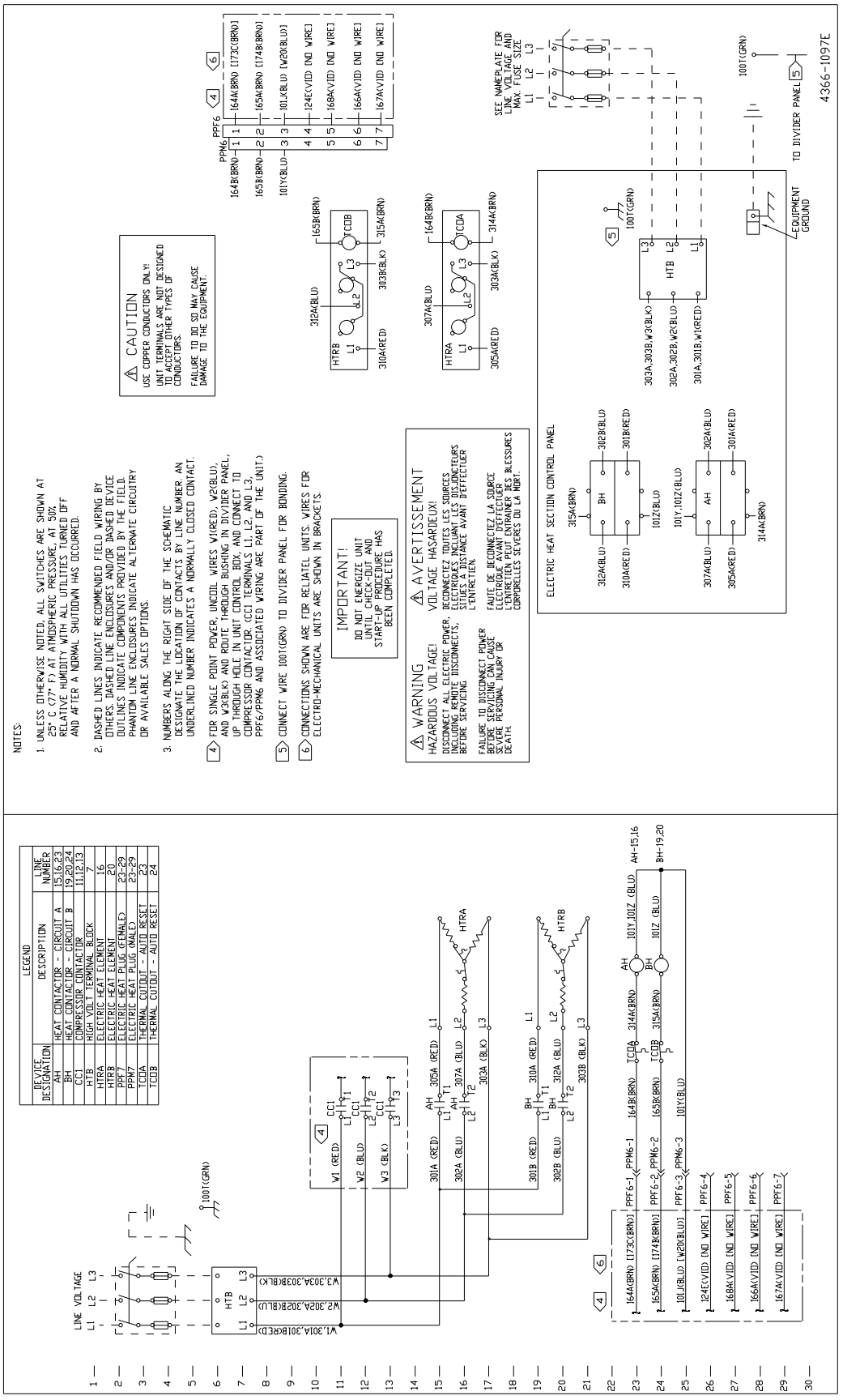


Diagram 30
12.0, 17.4 & 23.0 KW - 480-600v/60hz/3ph
BAYHTRR412A, BAYHTRR418A,
BAYHTRR423A
BAYHTRRW12A, BAYHTRRW18A,
BAYHTRRW23A

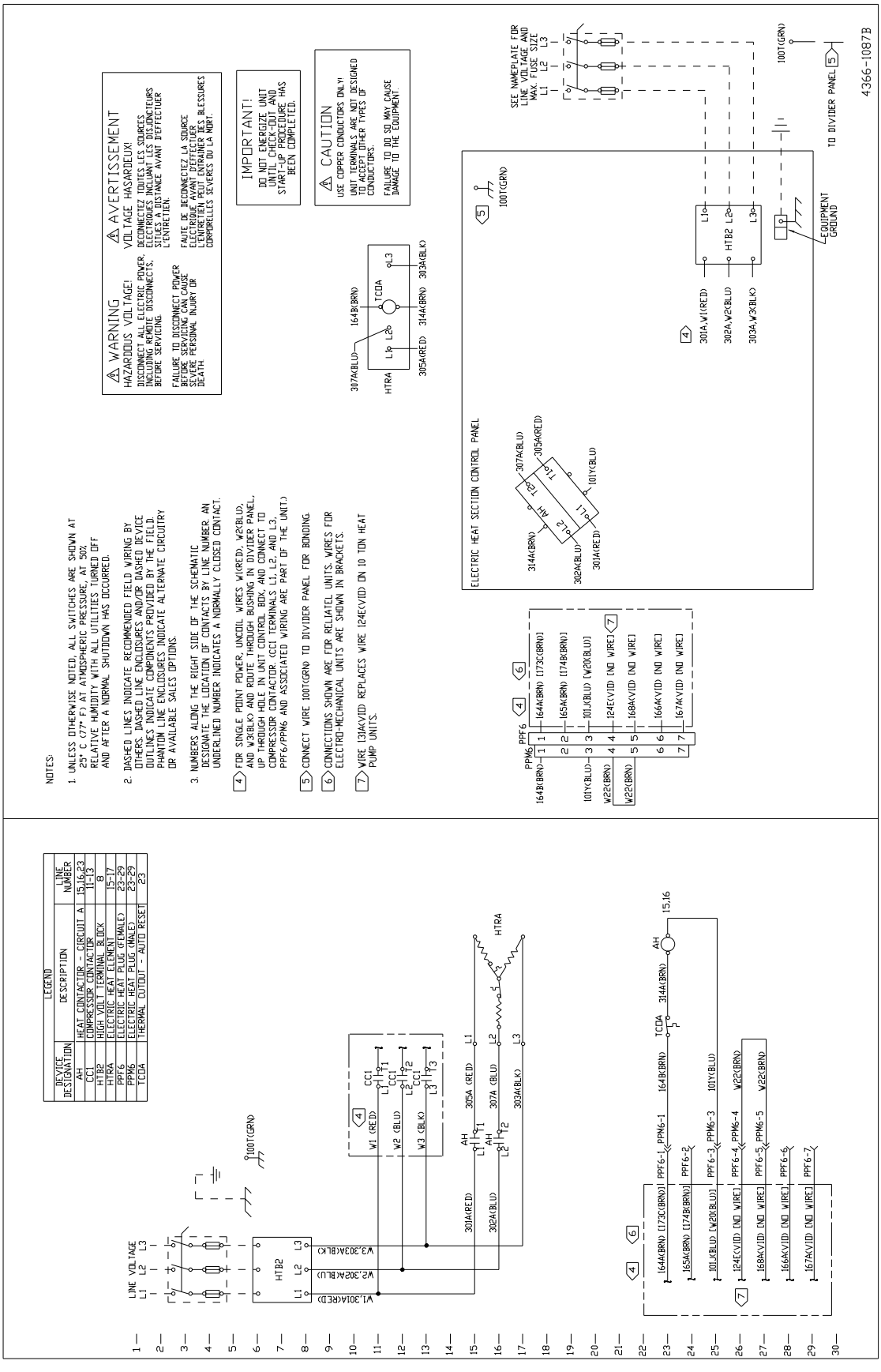


Diagram 31
27.0 & 36.0 KW - 480-600v/60hz/3ph
BAYHTRS427A, BAYHTRT427A, BAYHTRSW27A,
BAYHTRTW27A, BAYHTRS436A, BAYHTRT436A,
BAYHTRSW36A, BAYHTRTW36A

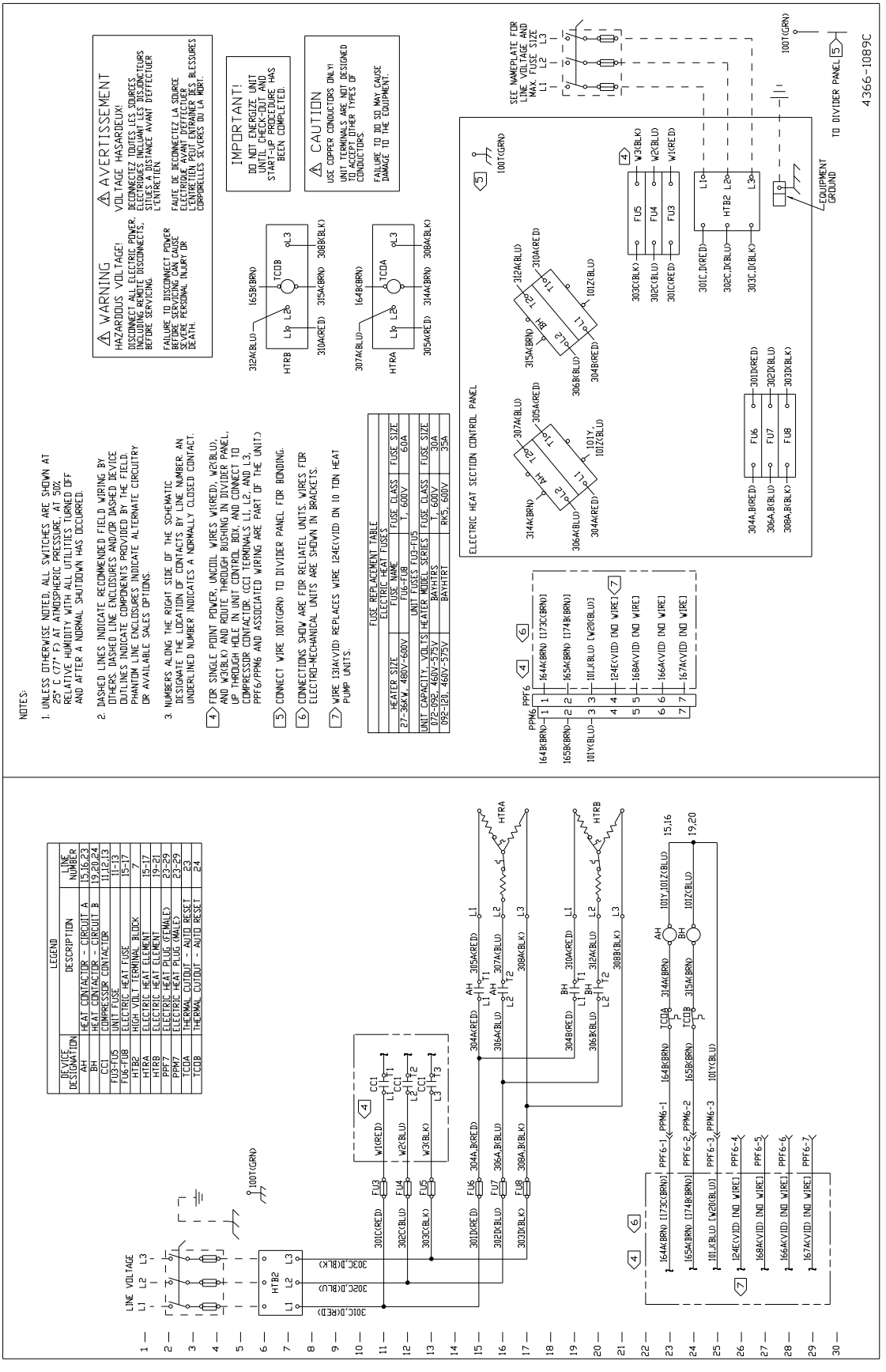
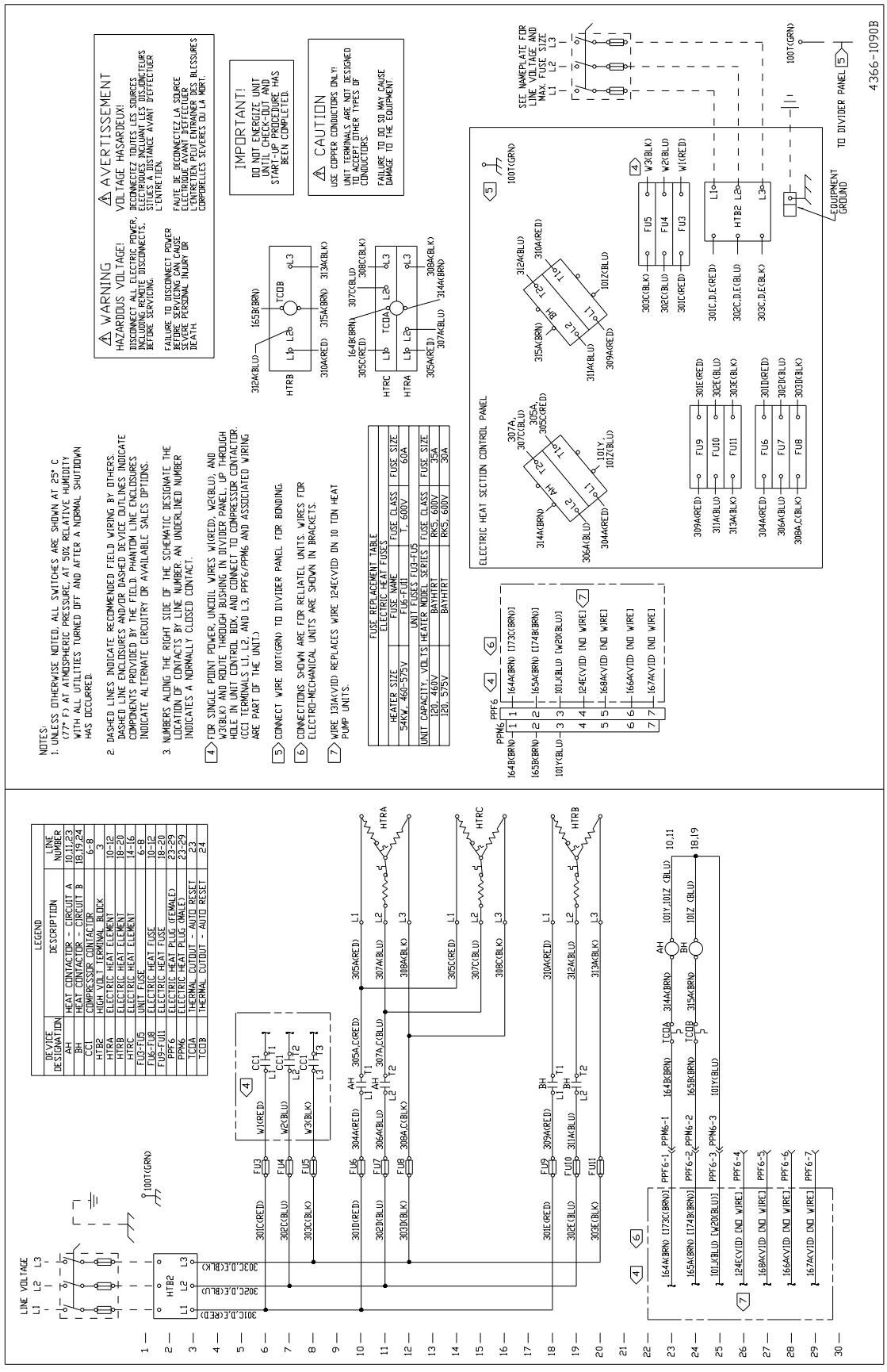


Diagram 32
54.0 KW - 480-600v/60hz/3ph
BAYHTRT454A, BAYHTRTW54A



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Supersedes	New
Stocking Location	Webb Mason

The manufacturer has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.