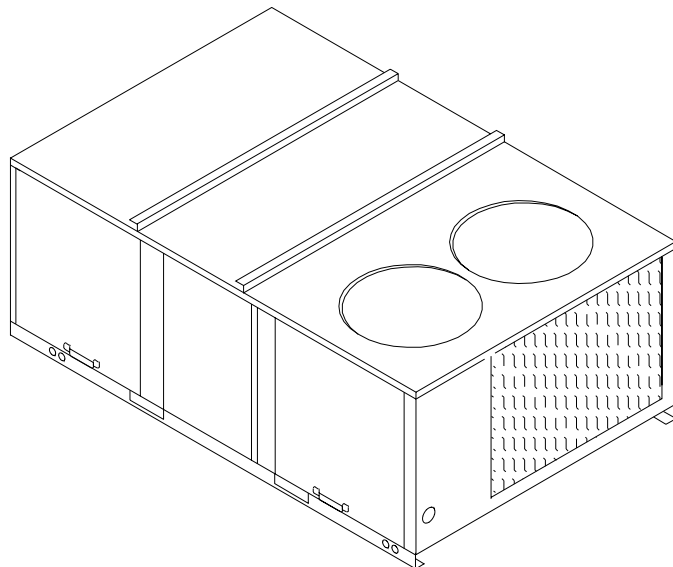


Wiring Manual

**Packaged Electric/Electric
Packaged Gas/Electric
Packaged Heat Pump
with ReliaTel™ Controls**

12 ½ - 25 Tons



Models:

TC*150D, TC*151C, TC*155B, TC*175C, TC*180B, TC*181C, TC*200B,
TC*210C, TC*211C, YC240B, TC*241C, TC*250B, TC*300B, TC*301C

YC*150D, YC*151C, YC*155B, YC*175C, YC*180B, YC*181C, YC*200B, YC*210C,
YC*211C, YC240B, YC*241C, YC*250B, YC*300B, YC*301C

WC*150C, WC*155B, WC* 180C, WC*200B, WC*240B

Introduction

Literature Change History

RT-SVE-06A-EN (April. 2005)
Created Wire 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.

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Electric/Electric Model Number Description

<u>T</u>	<u>C</u>	<u>D</u>	<u>1</u>	<u>5</u>	<u>0</u>	<u>C</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>A</u>	<u>A</u>
1	2	3	4	5	6	7	8	9	10	11	12

Digits 1, 2 - Product Type

TC = Packaged Cooling, Electric Heat
 TF = With Factory Installed Options

Digit 3 - Airflow Configuration

D = Downflow
 H = Horizontal

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

150	=	12½Tons Standard Efficiency
151	=	12½ Tons High Efficiency
180	=	15Tons Standard Efficiency
181	=	15Tons High Efficiency
210	=	17½Tons Standard Efficiency
211	=	17½ Tons High Efficiency
240	=	20Tons Standard Efficiency
241	=	20Tons High Efficiency
300	=	25Tons Standard Efficiency
301	=	25Tons High Efficiency

Digit 7- Major Development Sequence

Digit 8 - Electrical Characteristics

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

Digit 10 - Factory-Installed Options

0	=	No Factory-installed Options
A	=	Factory-installed Economizer
B	=	Oversized Motor
C	=	Downflow Economizer and Oversized Motor
F	=	Trane Communications Interface (TCI)
G	=	Downflow Economizer and TCI
H	=	TXV/Face-Split Evaporator
J	=	Oversized Motor and TXV/Face-Split Evaporator
K	=	Downflow Economizer, Oversized Motor, and TXV/Face-Split Evaporator
L	=	Downflow Economizer with TXV/Face-Split Evaporator
M	=	Reheat Coil
N	=	Downflow Economizer and Reheat Coil
P	=	Oversized Motor and Reheat Coil
R	=	Downflow Economizer, Oversized Motor and Reheat Coil

Digit 11- Minor Design Sequence

Digit 12- Service Digit

Gas/Electric Model Number Description

<u>Y</u>	<u>C</u>	<u>D</u>	<u>1</u>	<u>5</u>	<u>0</u>	<u>C</u>	<u>3</u>	<u>L</u>	<u>0</u>	<u>A</u>	<u>A</u>
1	2	3	4	5	6	7	8	9	10	11	12

Digits 1, 2 - Product Type

YC = Packaged Gas/Electric

YF = With Factory Installed Options

Digit 3 - Airflow Configuration

D = Downflow

H = Horizontal

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

150	=	12½ Ton Standard Efficiency
151	=	12½ Ton High Efficiency
180	=	15 Ton Standard Efficiency
181	=	15 Ton High Efficiency
210	=	17½ Ton Standard Efficiency
211	=	17½ Ton High Efficiency
240	=	20 Ton Standard Efficiency
241	=	20 Ton High Efficiency
300	=	25 Ton Standard Efficiency
301	=	25 Ton High Efficiency

Digit 7 - Major Development Sequence

Digit 8 - Electrical Characteristics

3 = 208-230/60/3

4 = 460/60/3

W = 575/60/3

K = 380/60/3

Digit 9 - Heating Capacity

L = Low Heat

M = Medium Heat

H = High Heat

Digit 10 - Factory-Installed Options

0 = Packed Stock, No Options

A = Downflow Economizer

B = Oversized Motor

C = Downflow Economizer and Oversized Motor

F = Trane Communications Interface (TCI)

G = Downflow Economizer and TCI

H = TXV/Face-Split Evaporator

J = Oversized Motor and TXV/Face-Split Evaporator

K = Downflow Economizer, Oversized Motor, and TXV/Face-Split Evaporator

L = Downflow Economizer with TXV/Face-Split Evaporator

M = Reheat Coil

N = Downflow Economizer and Reheat Coil

P = Oversized Motor and Reheat Coil

R = Downflow Economizer, Oversized Motor and Reheat Coil

Digit 11- Minor Design Sequence

Digit 12- Service Digit

Heat Pump Model Number Description

<u>W</u>	<u>C</u>	<u>D</u>	<u>1</u>	<u>5</u>	<u>0</u>	<u>C</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>B</u>	<u>A</u>
1	2	3	4	5	6	7	8	9	10	11	12

Digits 1,2 Product Type

WC = Heat Pump, Packaged
WF = With Factory Installed Options

Digit 3 - Airflow Configuration

D = Downflow
H = Horizontal

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

150 = 12½ ton
180 = 15 ton
240 = 20 ton

Digit 7- Major Development Sequence

Digit 8 - Electrical Characteristics

3 = 208-230/60/3
4 = 460/60/3
W = 575/60/3

Digits 9, 10 - Factory Installed Options

00 = Packed Stock, No Options
0A= Factory Installed Downflow Economizer
0B = Oversize Motor
0C = Downflow Economizer and Oversize Motor
0F = Trane Communications Interface (TCI)
0G = Downflow Economizer and TCI

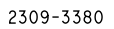
Digit 11- Minor Design Sequence

Digit 12- Service Digit



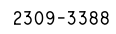
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- 11** TERMINALS MAY NOT BE PRESENT.

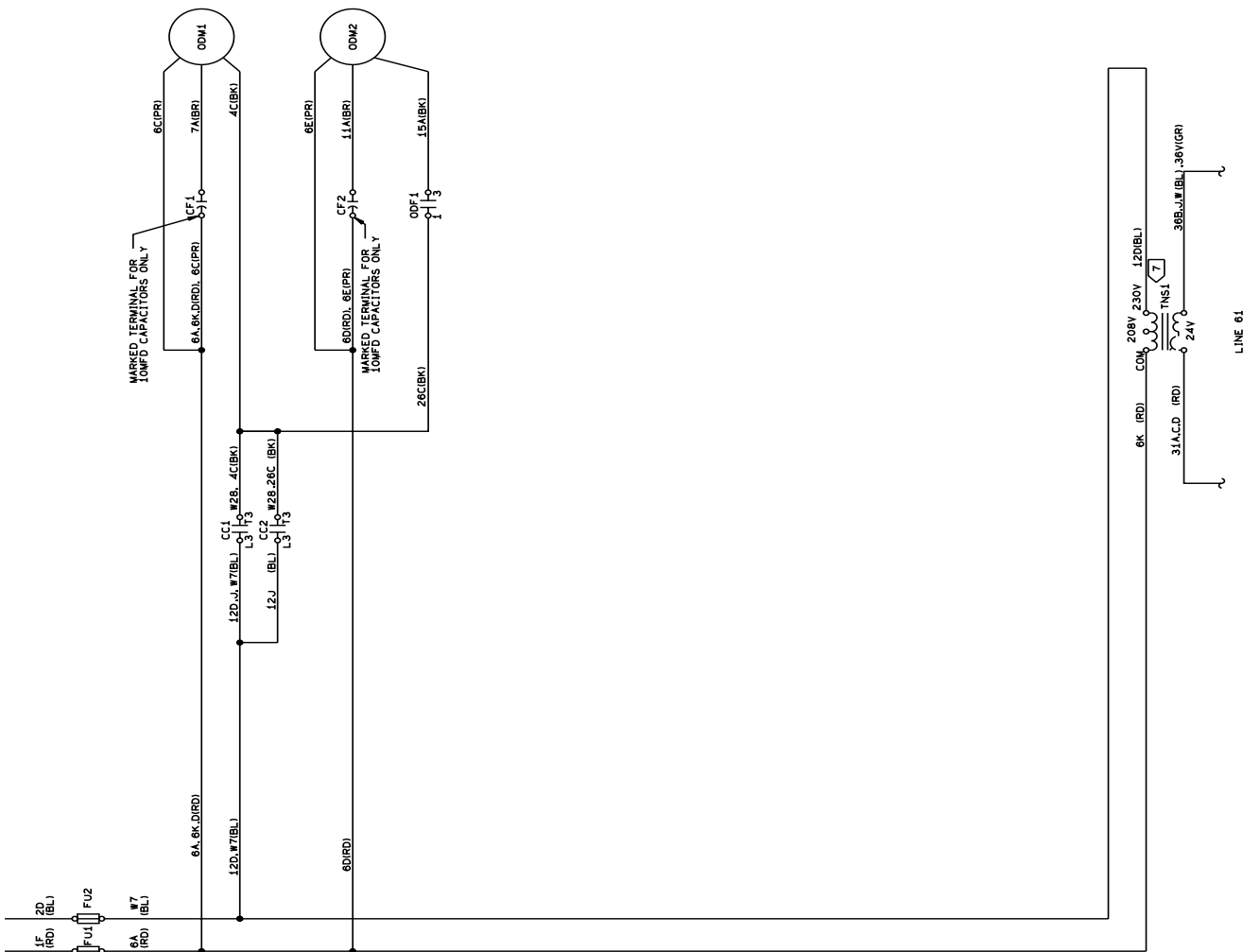
WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

2309-3136



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- NOTES:
- 1 UNLESS OTHERWISE NOTED ALL SWITCHES ARE SHOWN IN THE OPEN POSITION. SWITCHES ARE TO BE TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED. ALL THERMOSTATS ARE ON AT 25°C (77°F).
 - 2 DASHED LINES INDICATE RECOMMENDED FIELD WIRING. FIELD WIRING SHOULD BE DONE BY A QUALIFIED TECHNICIAN. THE FIELD PHANTOM LINE ENCLOSURES INDICATE AN ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
 - 3 NUMBERS ALONG THE RIGHT SIDE OF THE SCHEMATIC INDICATE THE LOCATION OF THE ACTUATING LINE NUMBER. AN OPEN LINE NUMBER INDICATES A NORMALLY CLOSED CONTACT.
 - 4 THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

7 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH UNIT OPERATION IS REQUIRED, REMOVE WIRING FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.

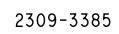
8 SEE APPLICABLE HEATING SECTION DIAGRAM FOR BALANCE OF CIRCUIT WHEN OPTIONAL ELECTRIC HEAT IS REQUIRED.

11 TERMINALS MAY NOT BE PRESENT.

WIRE	COLOR	ABBR	COLOR
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

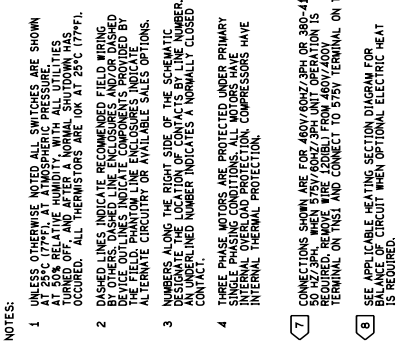
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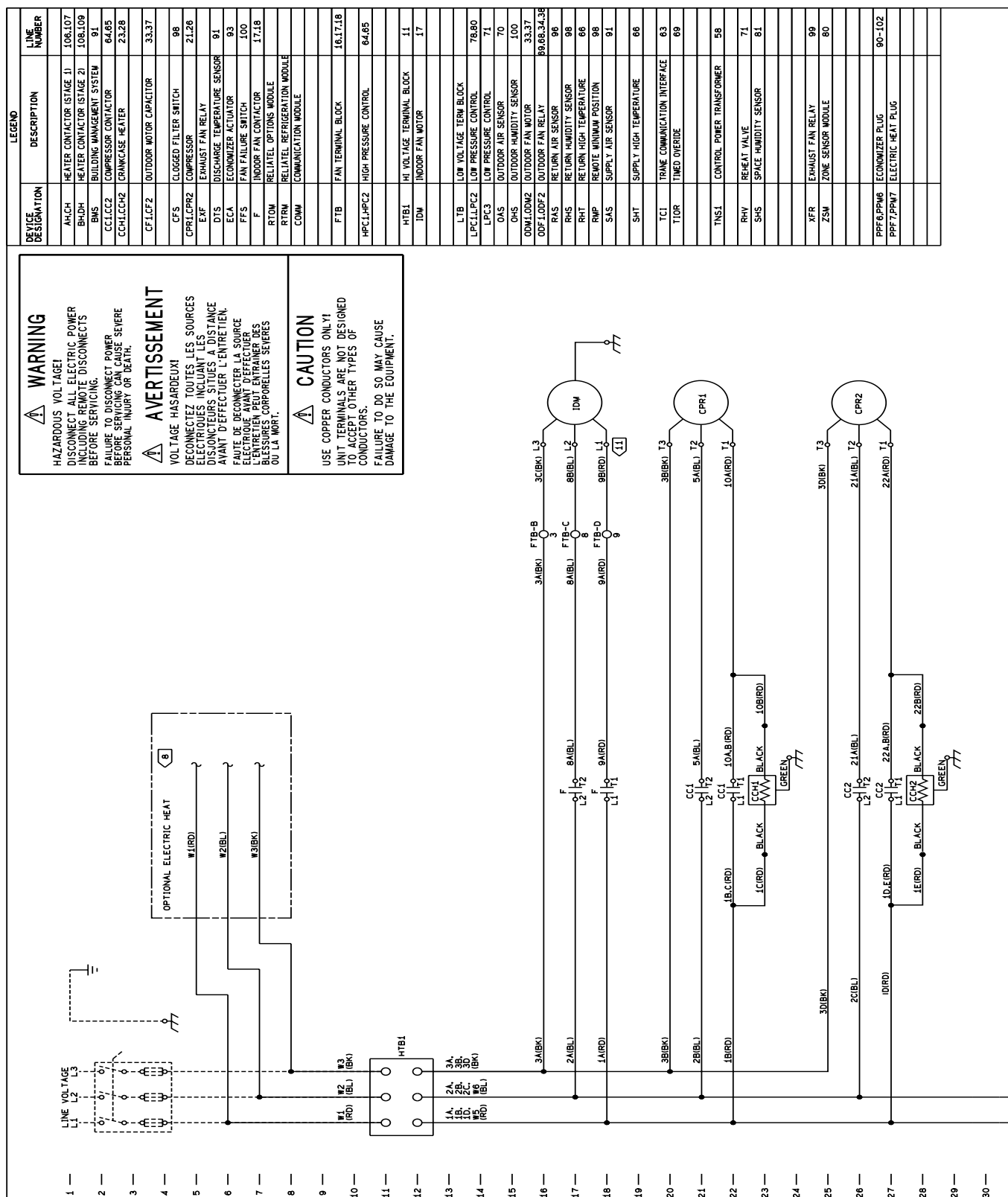


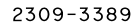
11 TERMINALS MAY NOT BE PRESENT.

11 TERMINALS MAY NOT BE PRESENT.

Diagram 6
Electrical Schematic - 400 - 575v - Power Reliatel (TC150, 155, 175, 180, 181, 210, 211)

2309-3389



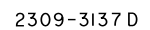


- 11 TERMINALS MAY NOT BE PRESENT.

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

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- 2309-3137 D

2309-3137 D

2309-3137 D

2309-3379



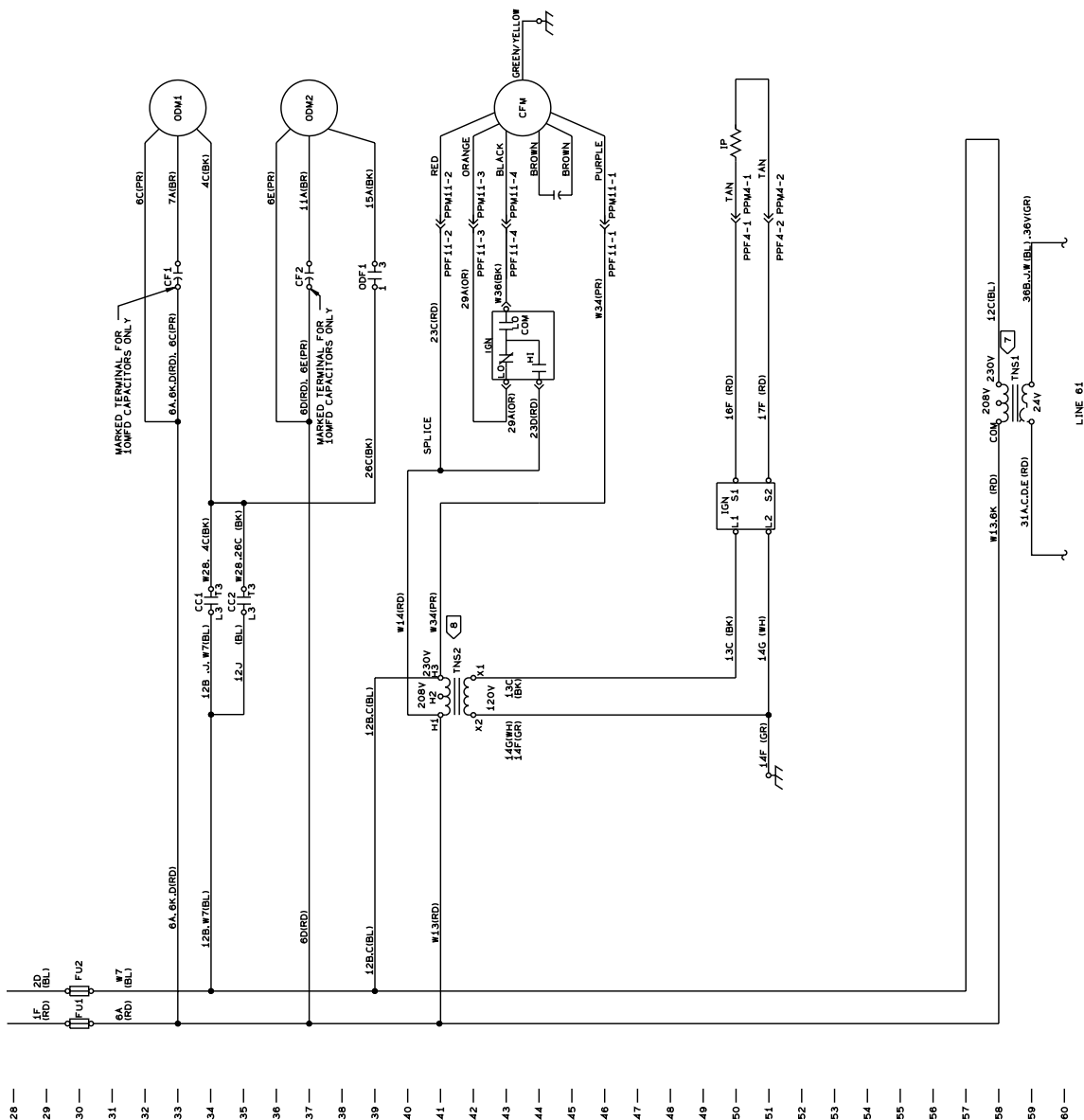
NOTES:

- 1 IN LESS ATHERMISTE MOTOR, ALL MOTORS ARE SHOWN AT 25°C (77°F) AT ATMOSPHERIC PRESSURE. IF THE MOTOR IS USED IN A HIGH ALTITUDE OR HIGH HUMIDITY AREA, THE THERMISTE MUST BE REPLACED BY A THERMISTE WITH A HIGHER RATING. ALL THERMISTES ARE OK AT 25°C (77°F).
- 2 DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINE ENCLOSURES AND/OR DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS.
- 3 NUMBERS ALONG THE RIGHT SIDE OF THE SCHEMATIC INDICATE THE WIRE NUMBER. A NUMBER IN A CIRCLE INDICATES A NORMALLY CLOSED CONTACT.
- 4 SINGLE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.

- 7 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN THE MOTOR IS USED IN A HIGH ALTITUDE OR HIGH HUMIDITY AREA, THE THERMISTE MUST BE REPLACED BY A THERMISTE WITH A HIGHER RATING. REMOVE WIRE 12C (BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.
- 8 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN THE MOTOR IS USED IN A HIGH ALTITUDE OR HIGH HUMIDITY AREA, THE THERMISTE MUST BE REPLACED BY A THERMISTE WITH A HIGHER RATING. REMOVE WIRE 12C (BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.

TERMINALS MAY NOT BE PRESENT.

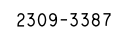
WIRE	COLOR	DESIGNATION
ABBR	COLOR	ABBR
BK	BLACK	PR
BL	BLUE	RD
BR	BROWN	WH
GR	GREEN	YL
OR	ORANGE	TN
		TAN



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2309-3138



LINE NUMBER	REVICE DESIGNATION	LEGEND	DESCRIPTION
	BMS	BUILDING MANAGEMENT SYSTEM	
91	CCLIC2C	COMPRESSOR CONTACTOR	
64.85	CCHLIC2H	CRANKCASE HEATER	
23.28			
	CFLC2C	OUTDOOR MOTOR CONTACTOR	
33.37	CFC2C	COMBUSTION FAN MOTOR	
98	CFS	CLOGGED FILTER RELAY	
21.28	CPRLCPC2	COMPRESSOR	
	EXF	EXHAUST FAN RELAY	
91	DTS	DISCHARGE TEMPERATURE SENSOR	
93	ECA	ECONOMIZER ACTUATOR	
100	FES	FAN FAILURE SWITCH	
17.18	F	INDOOR FAN CONTACTOR	
	RTOW	RELATL RELATION OPTIONS MODULE	
	RTHM	RELATL REFRIGERATION MODULE	
	TWHM	TEMPERATURE HUMIDITY MODULE	
30	FULP2C2	LIGHTNING TUBE	
16.17.18	FBV	FAN TERMINAL BLOCK	
76	GVS	GAS VALVE	
64.85	HPLC1LPRC2	HIGH PRESSURE CONTROL	
11	HTB1	HI VOLTAGE TERMINAL BLOCK	
17	IDM	INDOOR FAN MOTOR	
74.50	IGN	IGNITION CONTROL MODULE	
64	LTB	LOW VOLTAGE TERM. BLOCK	
76.80	LPLC2	LOW PRESSURE CONTROL	
71	LPRC3	LOW PRESSURE CONTROL	
70	OAS	OUTDOOR AIR SENSOR	
100	OHNS	OUTDOOR HUMIDITY SENSOR	
	ODMLDZ	OUTDOOR FAN MOTOR	
33.37	ODF.LDOP2	OUTDOOR FAN RELAY	
	PAS	RETURN AIR SENSOR	
98	RAS	RETURN AIR SENSOR	
98	RHS	RETURN HUMIDITY SENSOR	
66	RHT	RETURN HIGH TEMPERATURE	
91	SAS	SUPPLY AIR SENSATION	
91	SAS	SUPPLY AIR SENSOR	
86	SHT	SUPPLY HIGH TEMPERATURE	
63	TC1	TRAME COMMUNICATION INTERFACE	
69	TIOR	TIMED OVERRIE	
72	TCOL	LOW LIMIT CUTOUT	
72	TCO2	FAN FAILURE LUTOUT	
59	TNS1	CONTROL POWER TRANSFORMER	
41	TNS2	CONTROL TRANSFORMER	
71	VAV	VARIABLE AIR VALVE	
81	SAS	SPACE HUMIDITY SENSOR	
	XFM	EXHAUST FAN RELAY	
90	ZSM	ZONE SENSOR MODULE	
90-102	PPRC4.PRM6	ECONOMIZER PLUG	
90	PPR4.PLM1	INDOOR FAN MOTOR PLUG	
90	PPR4.PLM1A	IGNITER PLUG	
41-46	PPR4.PLM1A	COMBUSION FAN MOTOR PLUG	

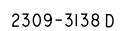
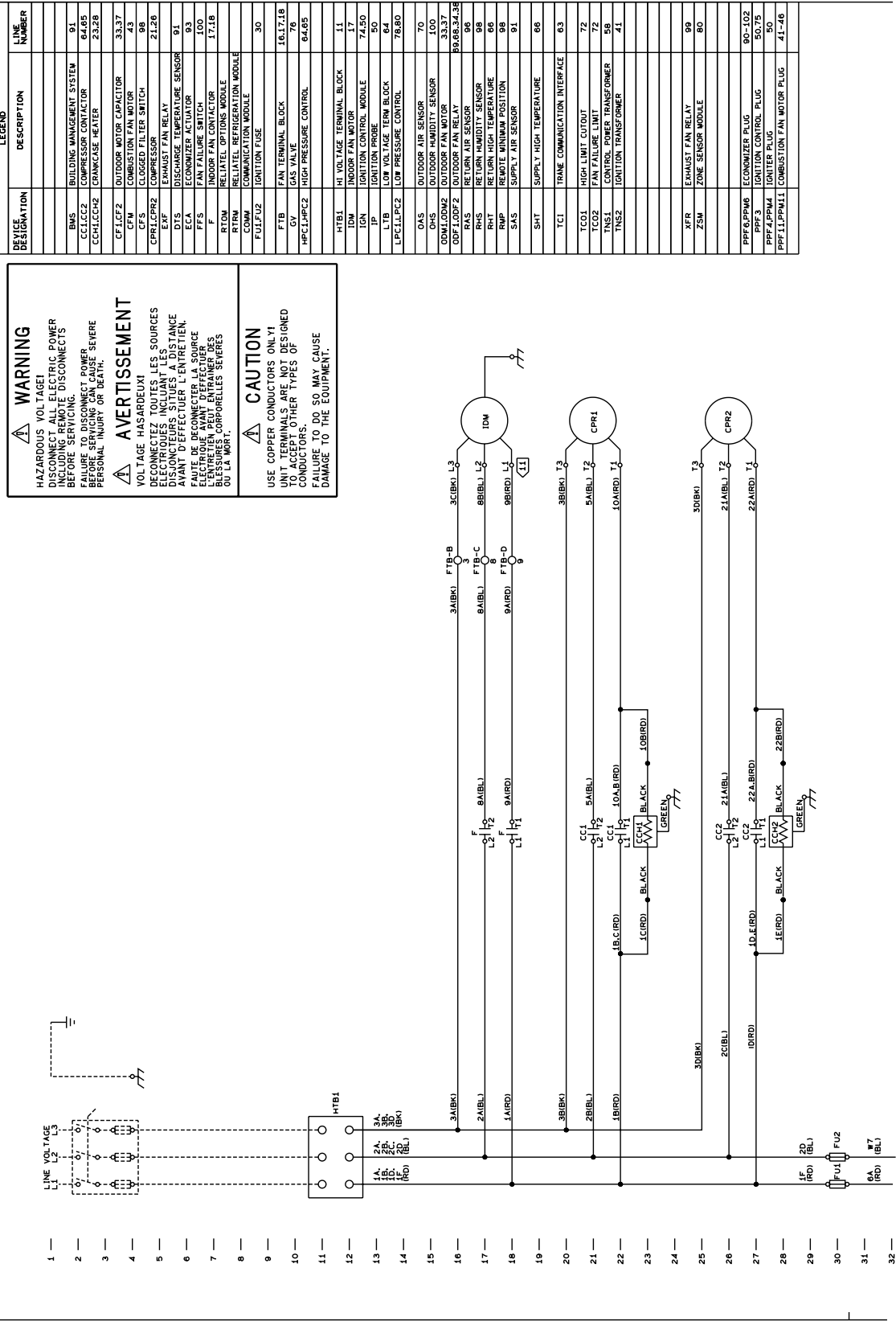
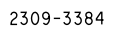


Diagram 11
Electrical Schematic - 380v - Power Reliatel (YC150, 210, 240, 300)

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2309-3378



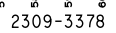
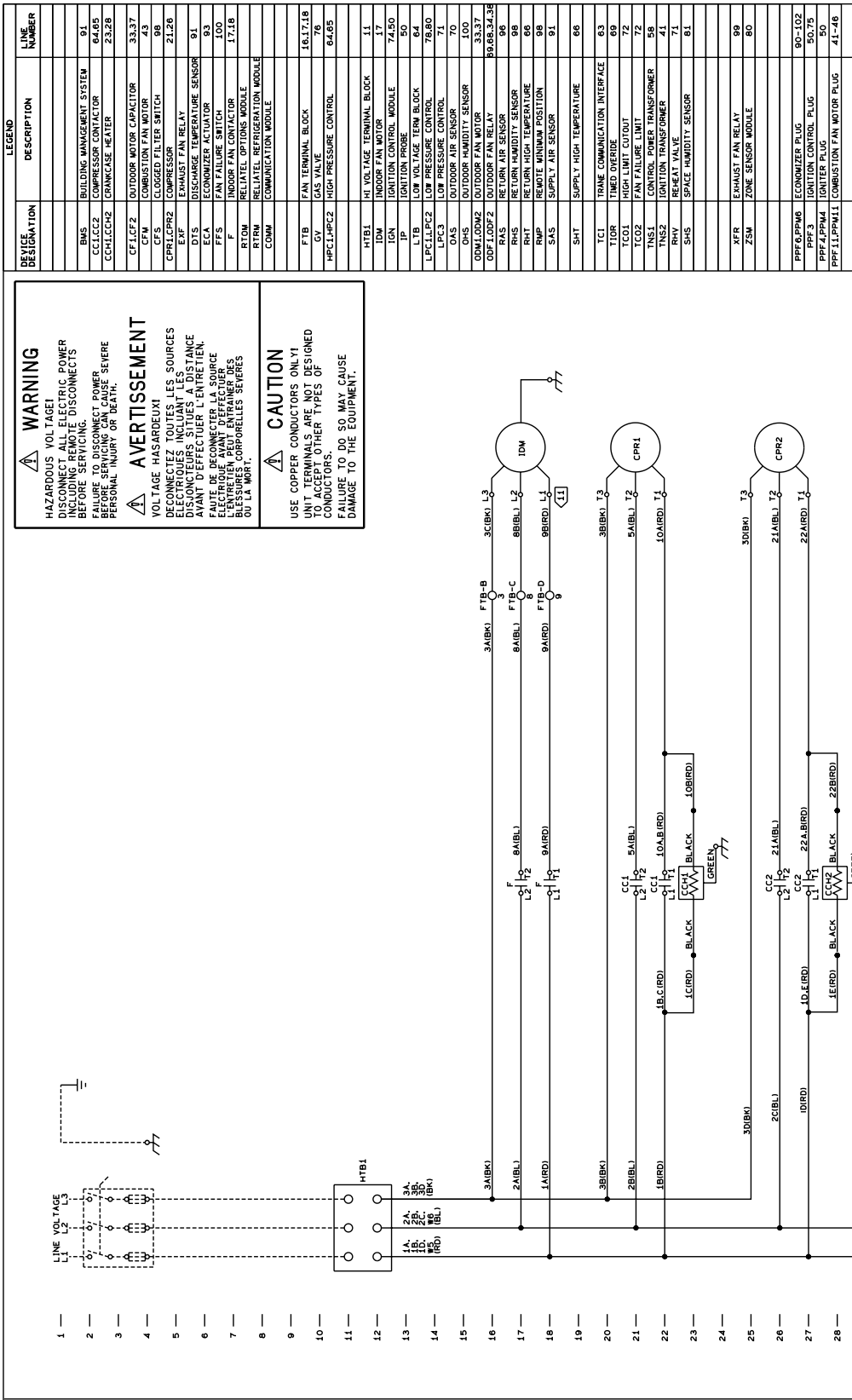
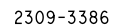


Diagram 13
Electrical Schematic - 400-575v - Power Reliabel (YC150, 155, 175, 180, 210, 211)

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2309-3139



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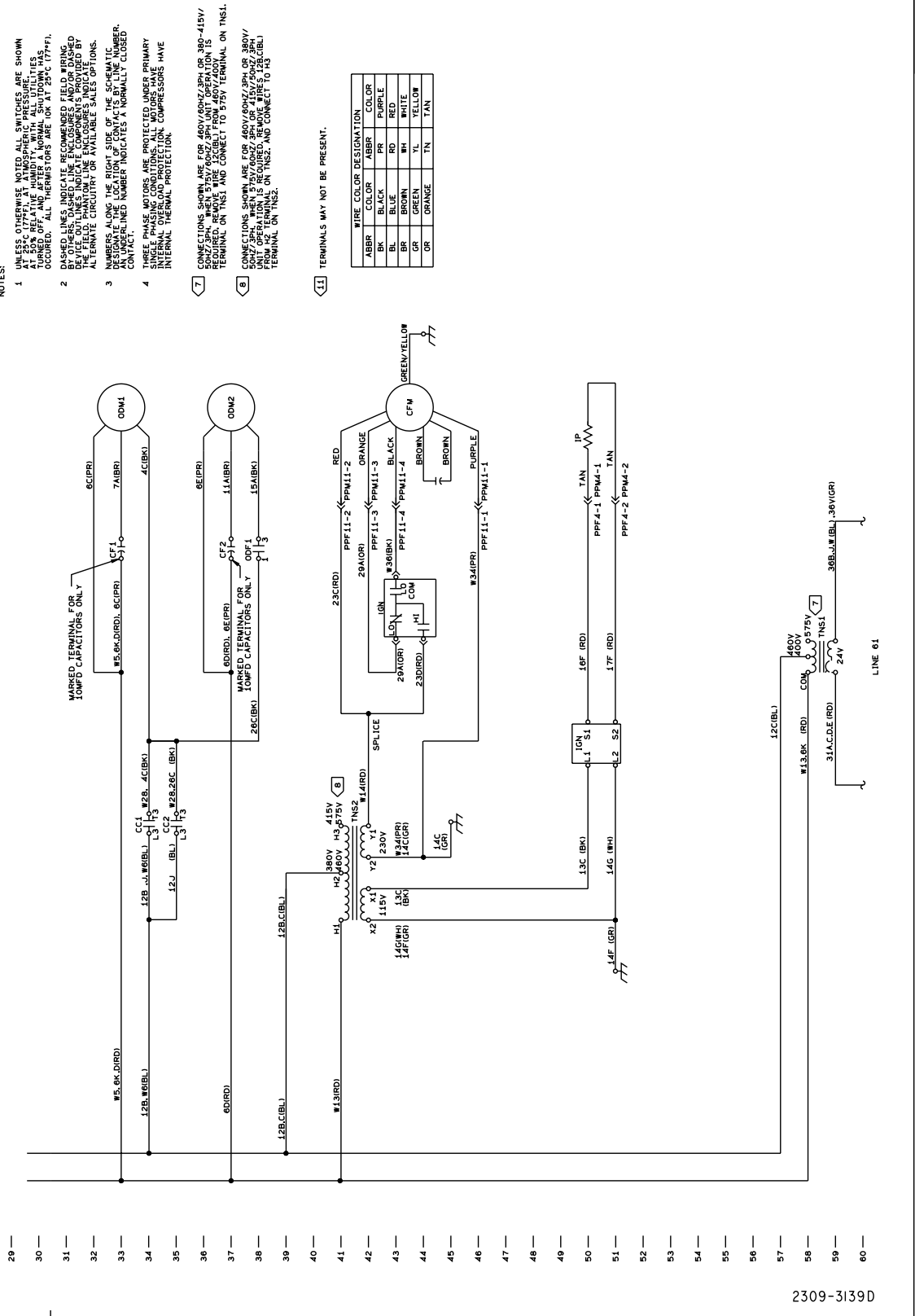
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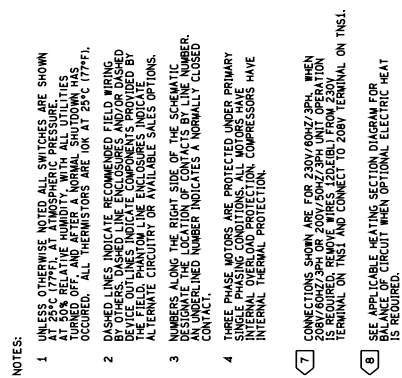
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2309-3382





WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

2309-3383



1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 28°C (77°F). AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES AND ALL OPERATING COMPONENTS IN NORMAL MODE OF OPERATION. IF A FAILURE OCCURRED, ALL THERMISTORS ARE ON AT 28°C (77°F).
2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING TO THE FIELD PHANTOM LINE ENCLOSURES PROVIDED BY THE FIELD PHANTOM LINE ENCLOSURES. INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SABLE 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 AND SECONDARY OVERCURRENT PROTECTION. ALL COMPRESSORS HAVE INTERNAL OVERLOAD PROTECTION. INTERNAL THERMAL PROTECTION.

8 SEE APPLICABLE HEATING SECTION DIAGRAM FOR BALANCE OF CIRCUIT WHEN OPTIONAL ELECTRIC HEAT IS REQUIRED.

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

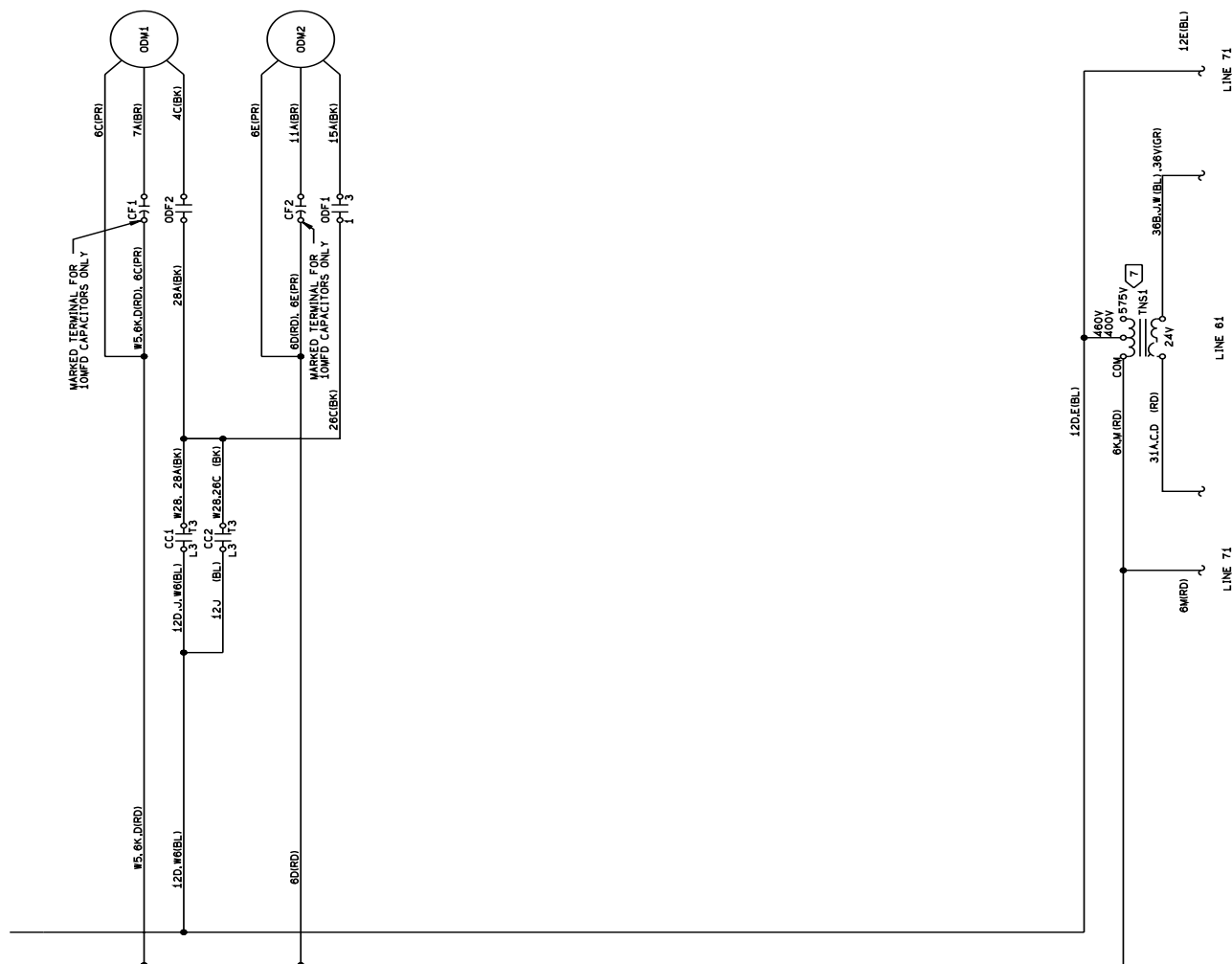
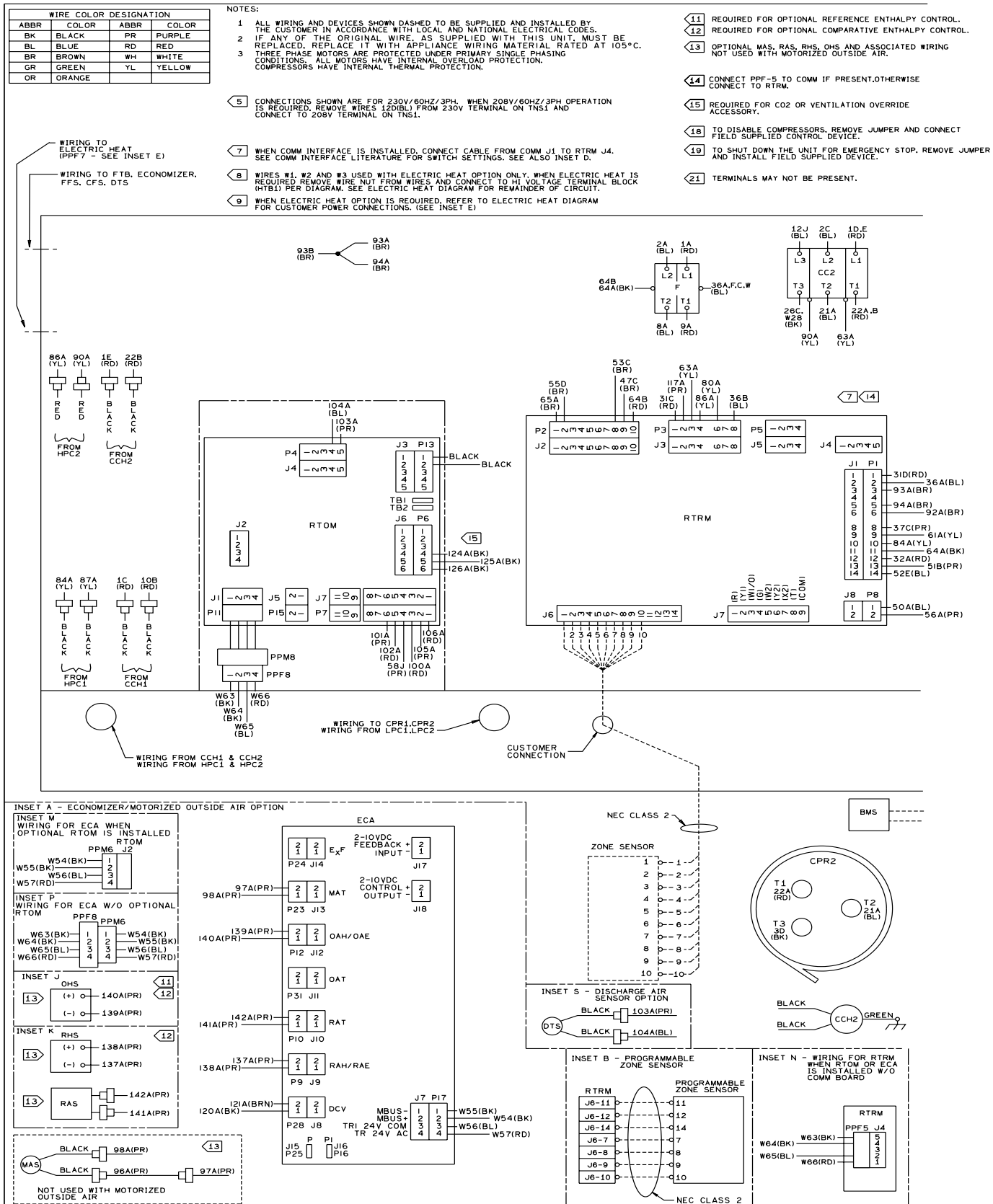


Diagram 17 Connection Electrical - 208 - 230v (TC150)

2309-3399



WARNING

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

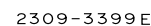
AVERTISSEMENT

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

CAUTION

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



2309-3397



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 SITUÉS A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.

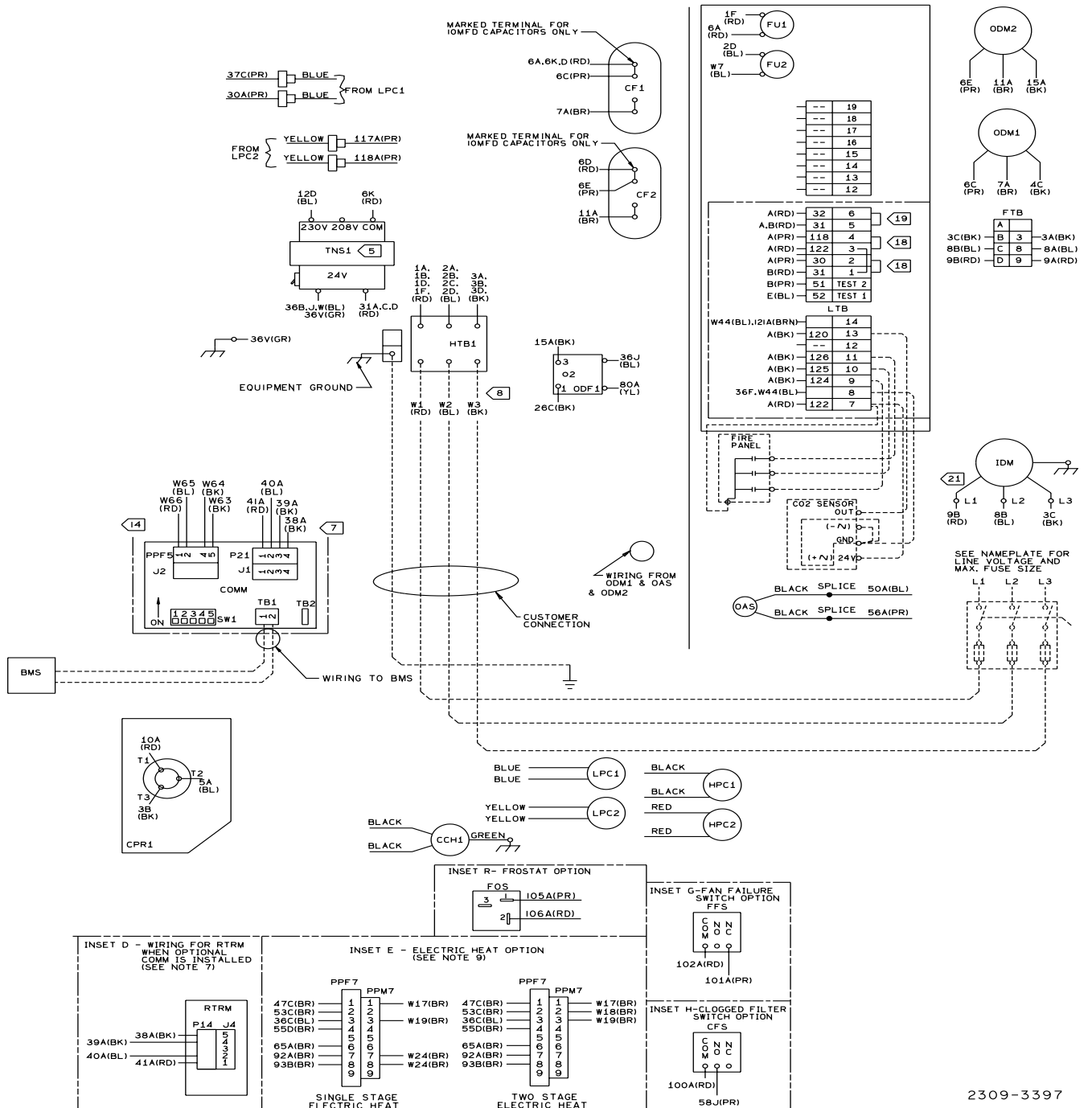
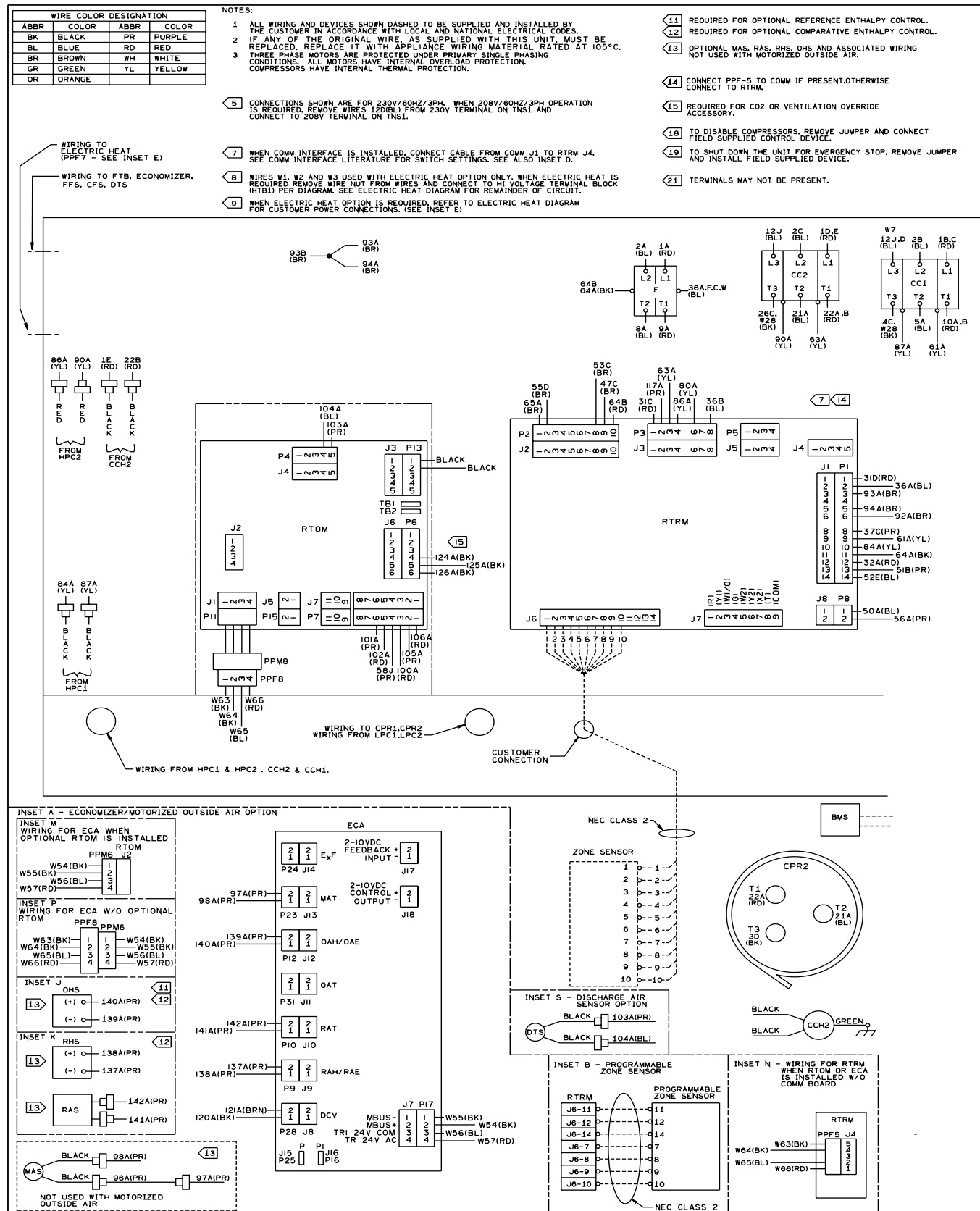


Diagram 19 Connection Electrical - 208 - 230v (TC180, 181, 210)

2309-3146





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.



2309-3175



⚠ Avertissement
VOLTAGE HASARDEUX!
 DECONNECTEZ TOUTES LES SOURCES
 ELECTRIQUES INCLUANT LES
 DISJONCTEURS SITUES A DISTANCE
 AVANT D'EFFECTUER L'ENTRETIEN.
 FAUTE DE DECONNECTER LA SOURCE
 ELECTRIQUE AVANT D'EFFECTUER
 L'ENTRETIEN PEUT ENTRAÎNER 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.

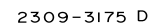


Diagram 21

Connection Electrical - 208 - 230v (TC240, 241, 300, 301)

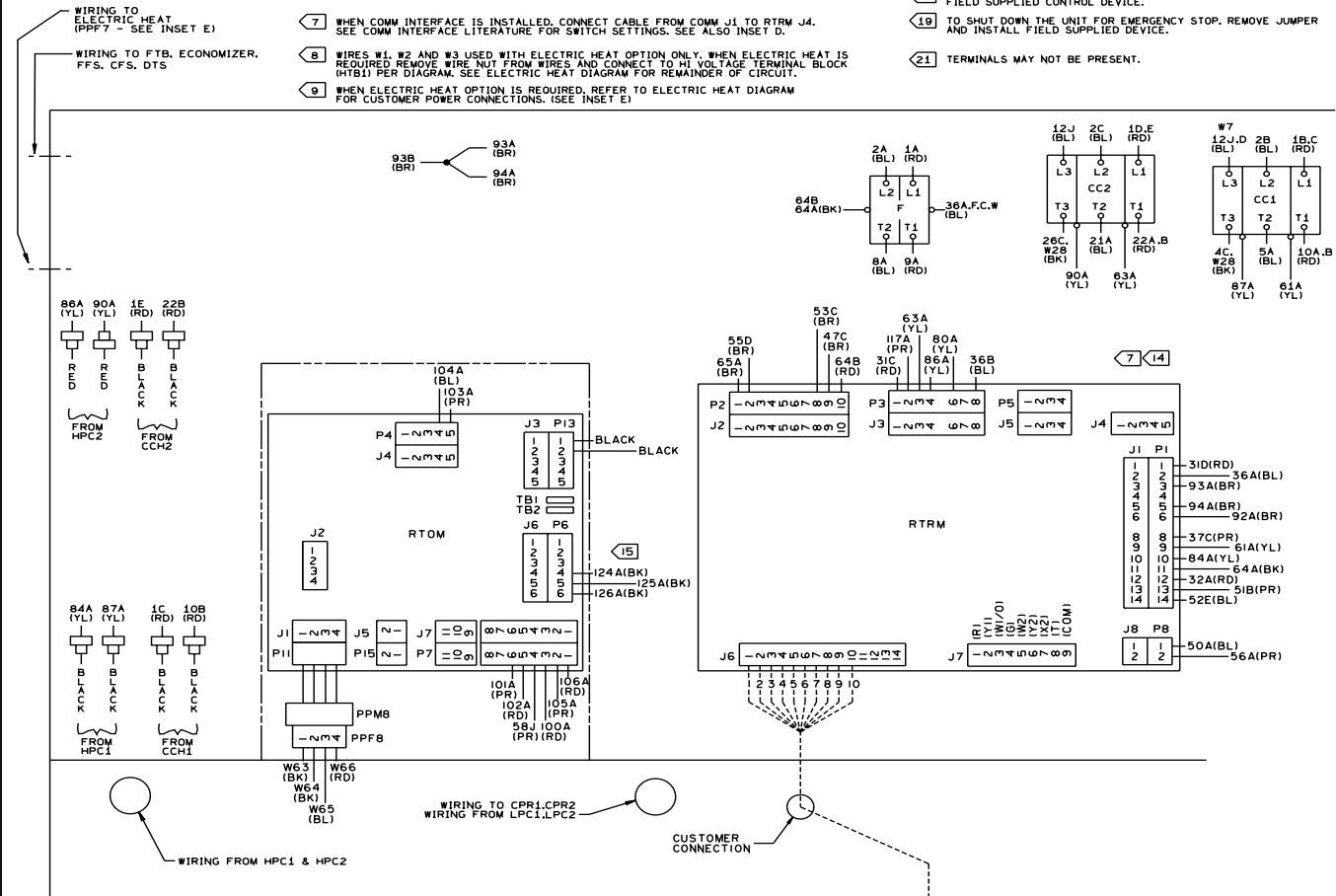
2309-3179

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

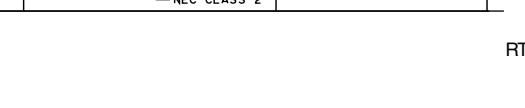
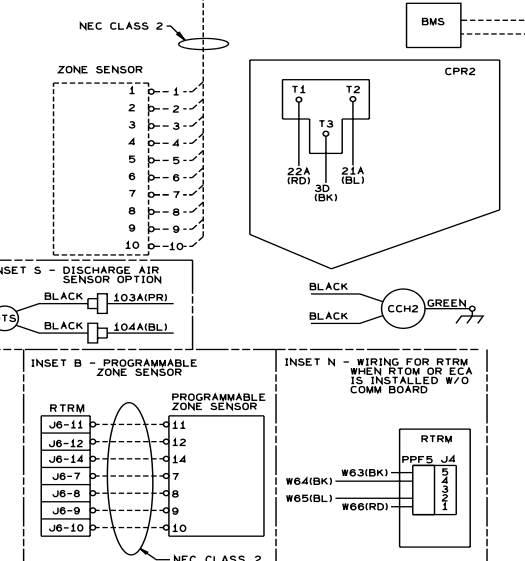
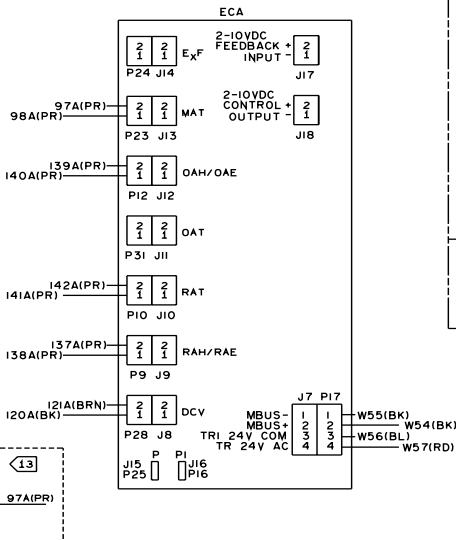
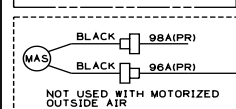
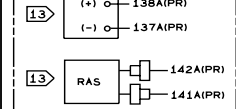
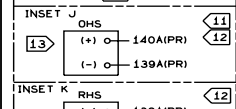
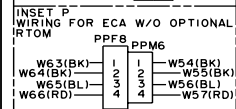
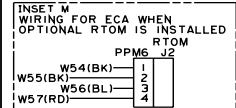
NOTES:

- 1 ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- 2 IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT 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.
- 5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 120(BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.
- 7 WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4. SEE COMM INTERFACE LITERATURE FOR SWITCH SETTINGS. SEE ALSO INSET D.
- 8 WIRES W1, W2 AND W3 USED WITH ELECTRIC HEAT OPTION ONLY. WHEN ELECTRIC HEAT IS REQUIRED REMOVE WIRE NOT FROM WIRES AND CONNECT TO HI VOLTAGE TERMINAL BLOCK (HTB1) PER DIAGRAM. SEE ELECTRIC HEAT DIAGRAM FOR REMAINDER OF CIRCUIT.
- 9 WHEN ELECTRIC HEAT OPTION IS REQUIRED, REFER TO ELECTRIC HEAT DIAGRAM FOR CUSTOMER POWER CONNECTIONS. (SEE INSET E)

- 11 REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- 12 REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- 13 OPTIONAL WAS, RAS, RAS, RAS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- 14 CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- 15 REQUIRED FOR C02 OR VENTILATION OVERRIDE ACCESSORY.
- 18 TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- 19 TO SHUT DOWN THE UNIT FOR EMERGENCY STOP. REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- 21 TERMINALS MAY NOT BE PRESENT.



INSET A - ECONOMIZER/MOTORIZED OUTSIDE AIR OPTION



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
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.

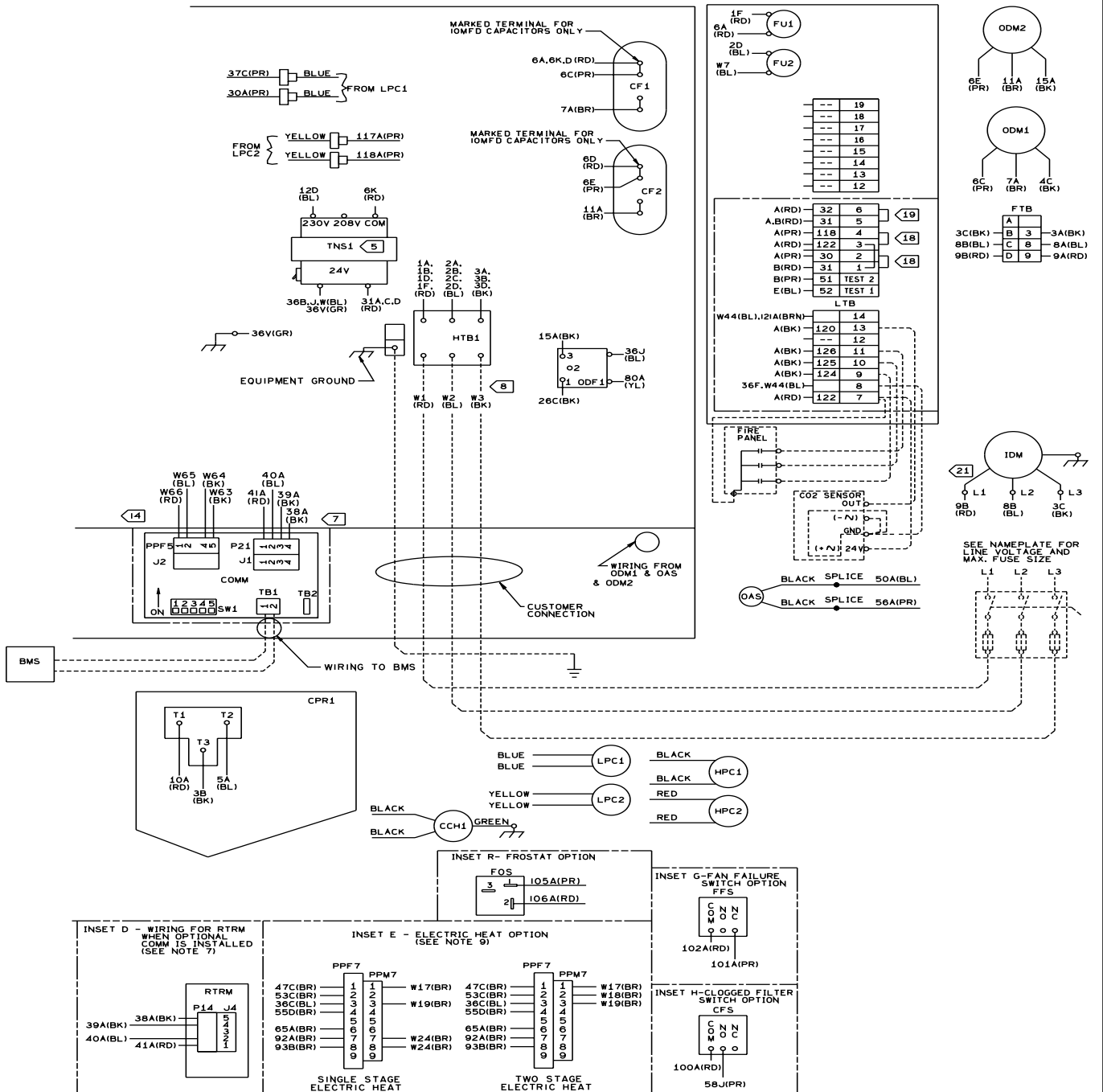


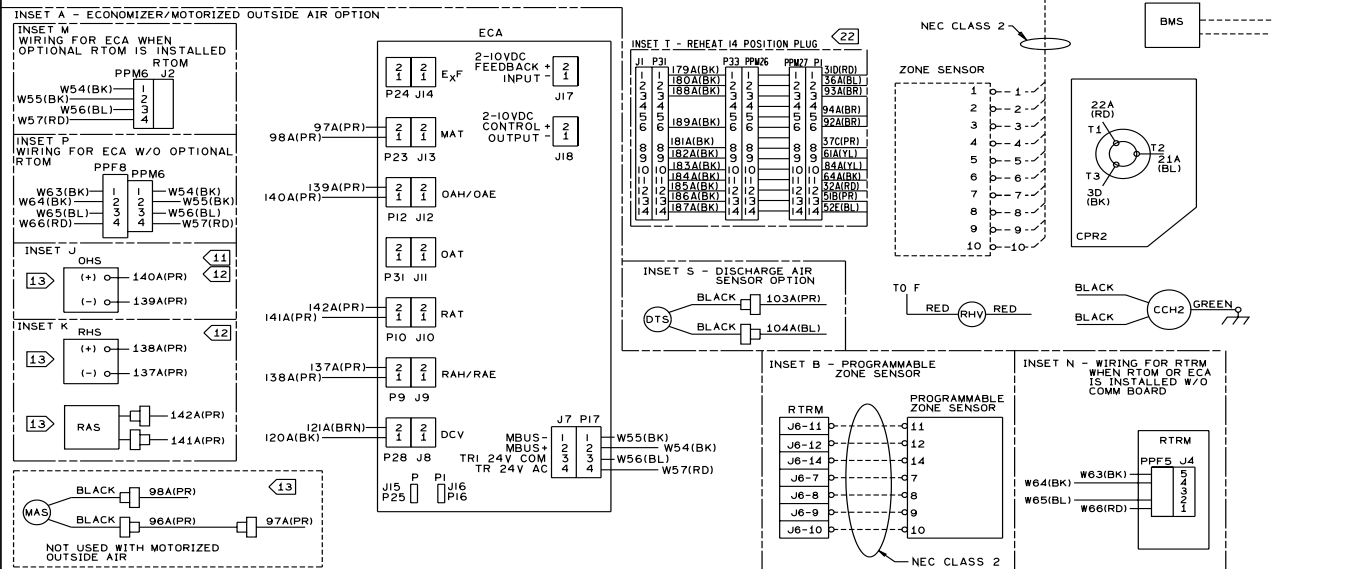
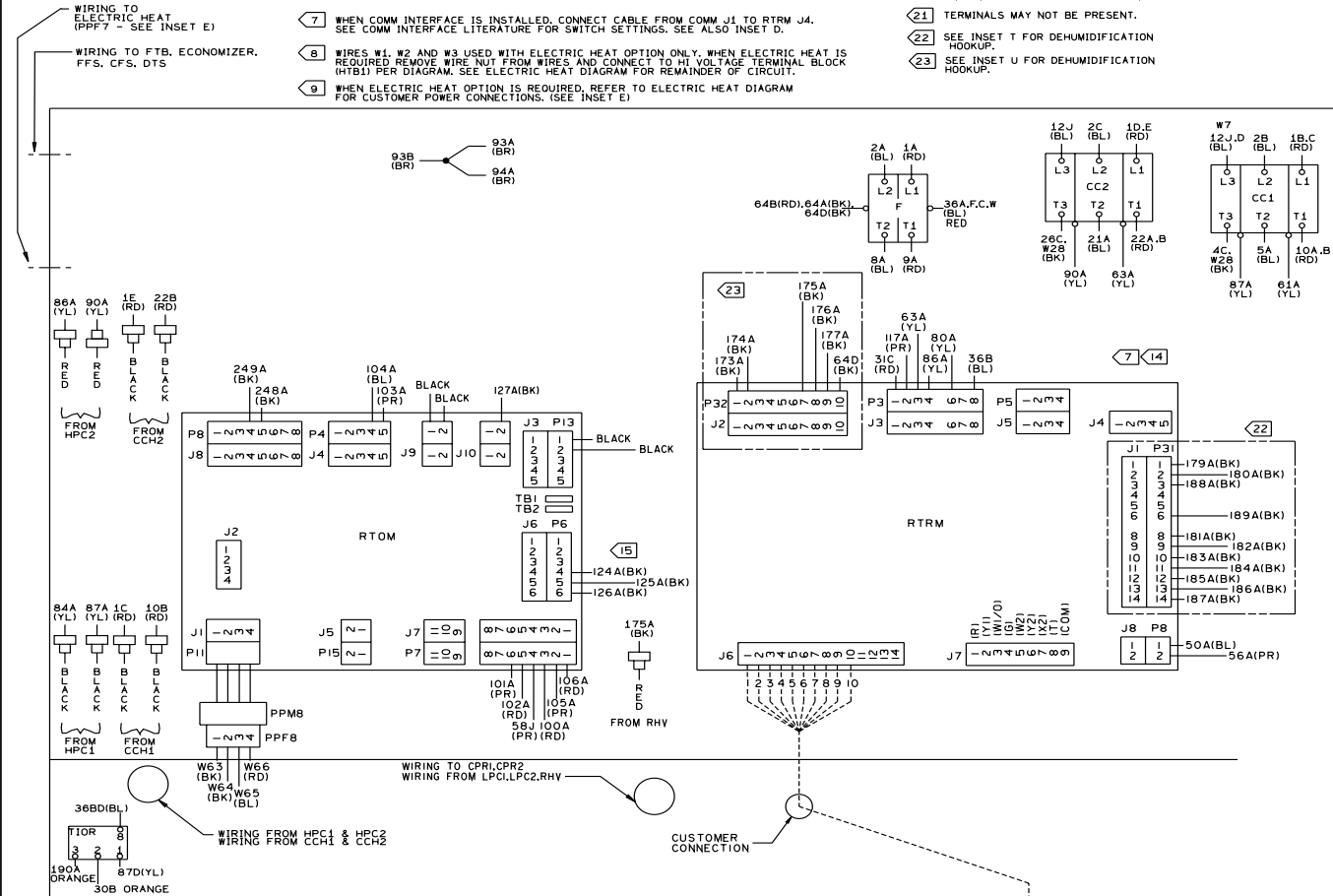
Diagram 22 Connection Electrical - 208 - 230v (TC151-With Dehumidification Option)

2309-3365

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

NOTES:

- ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
- THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION. COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.
- CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 12D(BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.
- WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4. SEE COMM INTERFACE LITERATURE FOR SWITCH SETTINGS. SEE ALSO INSET D.
- WIRES W1, W2 AND W3 USED WITH ELECTRIC HEAT OPTION ONLY. WHEN ELECTRIC HEAT IS REQUIRED REMOVE WIRE NUT FROM WIRES AND CONNECT TO HI VOLTAGE TERMINAL BLOCK (HTB1) PER DIAGRAM. SEE ELECTRIC HEAT DIAGRAM FOR REMAINDER OF CIRCUIT.
- WHEN ELECTRIC HEAT OPTION IS REQUIRED, REFER TO ELECTRIC HEAT DIAGRAM FOR CUSTOMER POWER CONNECTIONS. (SEE INSET E)
- REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- OPTIONAL MAS, RAS, RHS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- REQUIRED FOR CO2 OR VENTILATION OVERRIDE.
- TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- TERMINALS MAY NOT BE PRESENT.
- SEE INSET T FOR DEHUMIDIFICATION HOOKUP.
- SEE INSET U FOR DEHUMIDIFICATION HOOKUP.



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.

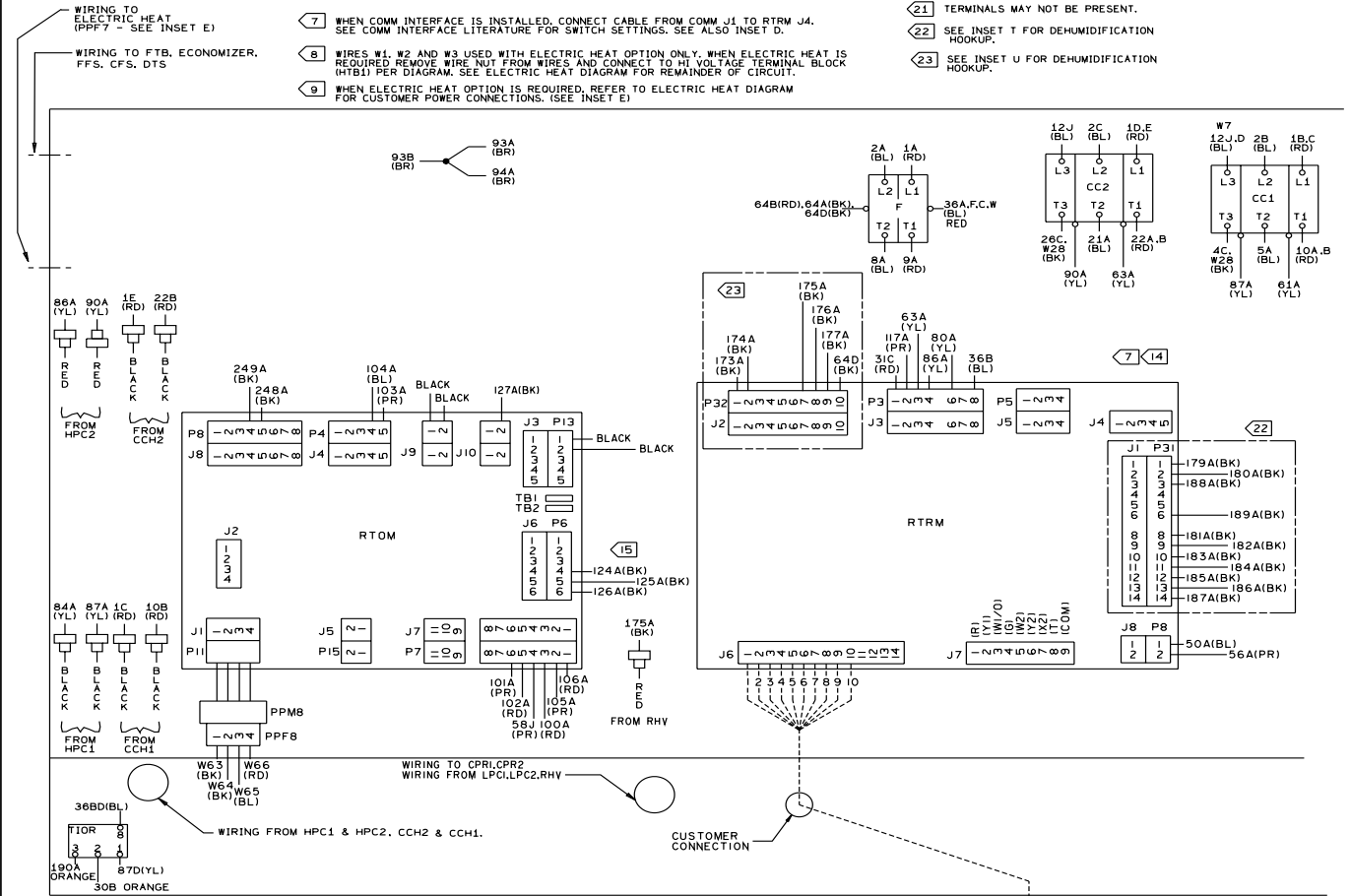
Diagram 23 Connection Electrical - 208 - 230v (TC181-With Dehumidification Option)

2309-3369

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

NOTES:

- 1 ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- 2 IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT 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.
- 5 CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 120(BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.
- 7 WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4.
- 8 WIRES W1, W2, AND W3 USED WITH ELECTRIC HEAT OPTION ONLY. WHEN ELECTRIC HEAT IS REQUIRED REMOVE WIRE NUT FROM WIRES AND CONNECT TO HI VOLTAGE TERMINAL BLOCK (HTB1) PER DIAGRAM. SEE ELECTRIC HEAT DIAGRAM FOR REMAINDER OF CIRCUIT.
- 9 WHEN ELECTRIC HEAT OPTION IS REQUIRED, REFER TO ELECTRIC HEAT DIAGRAM FOR CUSTOMER POWER CONNECTIONS. (SEE INSET E)
- 11 REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- 12 REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- 13 OPTIONAL WAS, PAS, RAS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- 14 CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- 15 REQUIRED FOR CO2 OR VENTILATION OVERRIDE ACCESSORY.
- 18 TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- 19 TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- 21 TERMINALS MAY NOT BE PRESENT.
- 22 SEE INSET T FOR DEHUMIDIFICATION HOOKUP.
- 23 SEE INSET U FOR DEHUMIDIFICATION HOOKUP.





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.

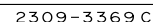
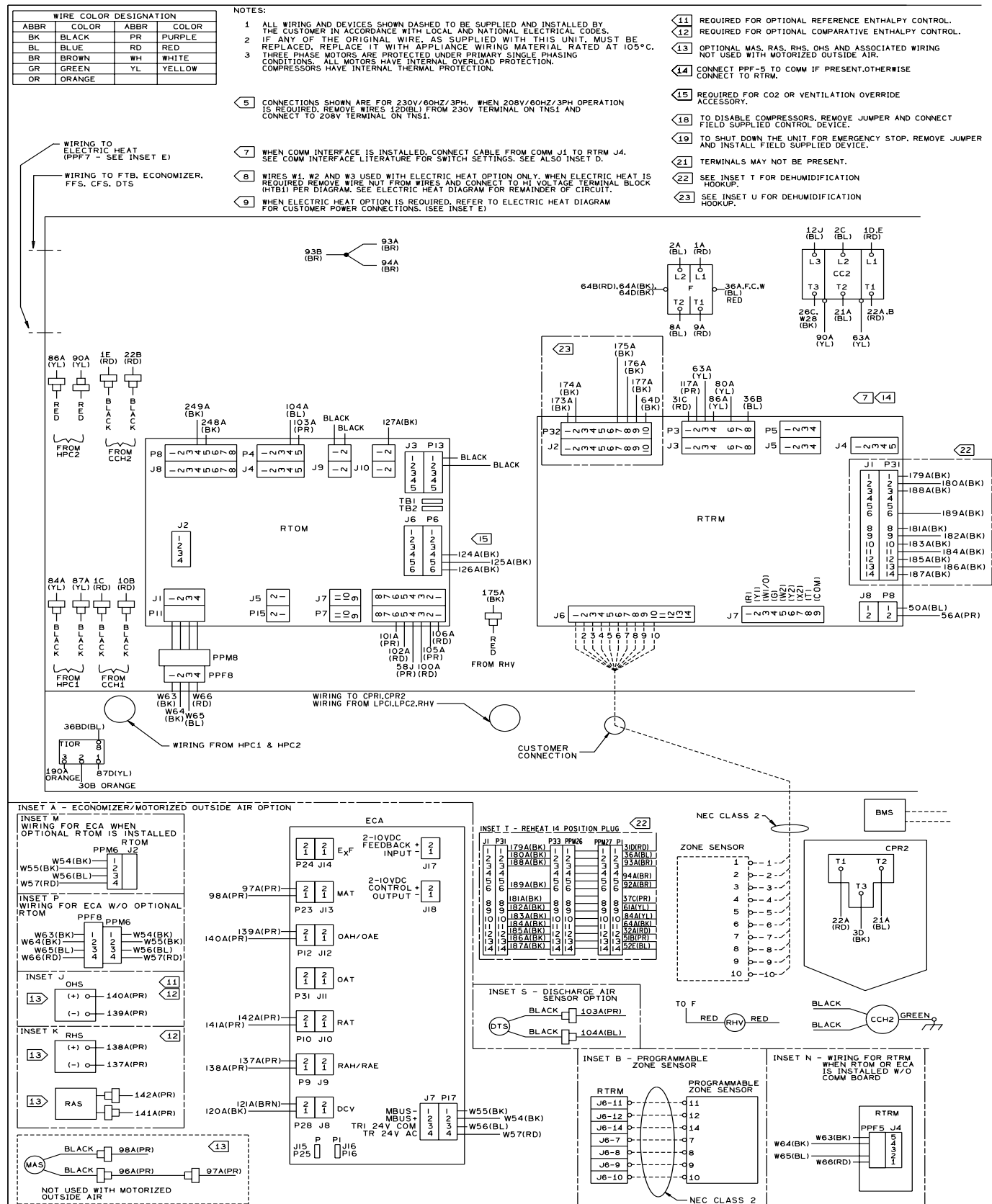


Diagram 24 Connection Electrical - 208 - 230v (TC241-With Dehumidification Option)

2309-3373



WARNING

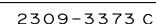
IMPORTANT!
DO NOT ENERGIZE
UNIT UNTIL CHECK-OUT
AND START-UP PROCEDURE
HAS BEEN COMPLETED

AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
**FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3353



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.



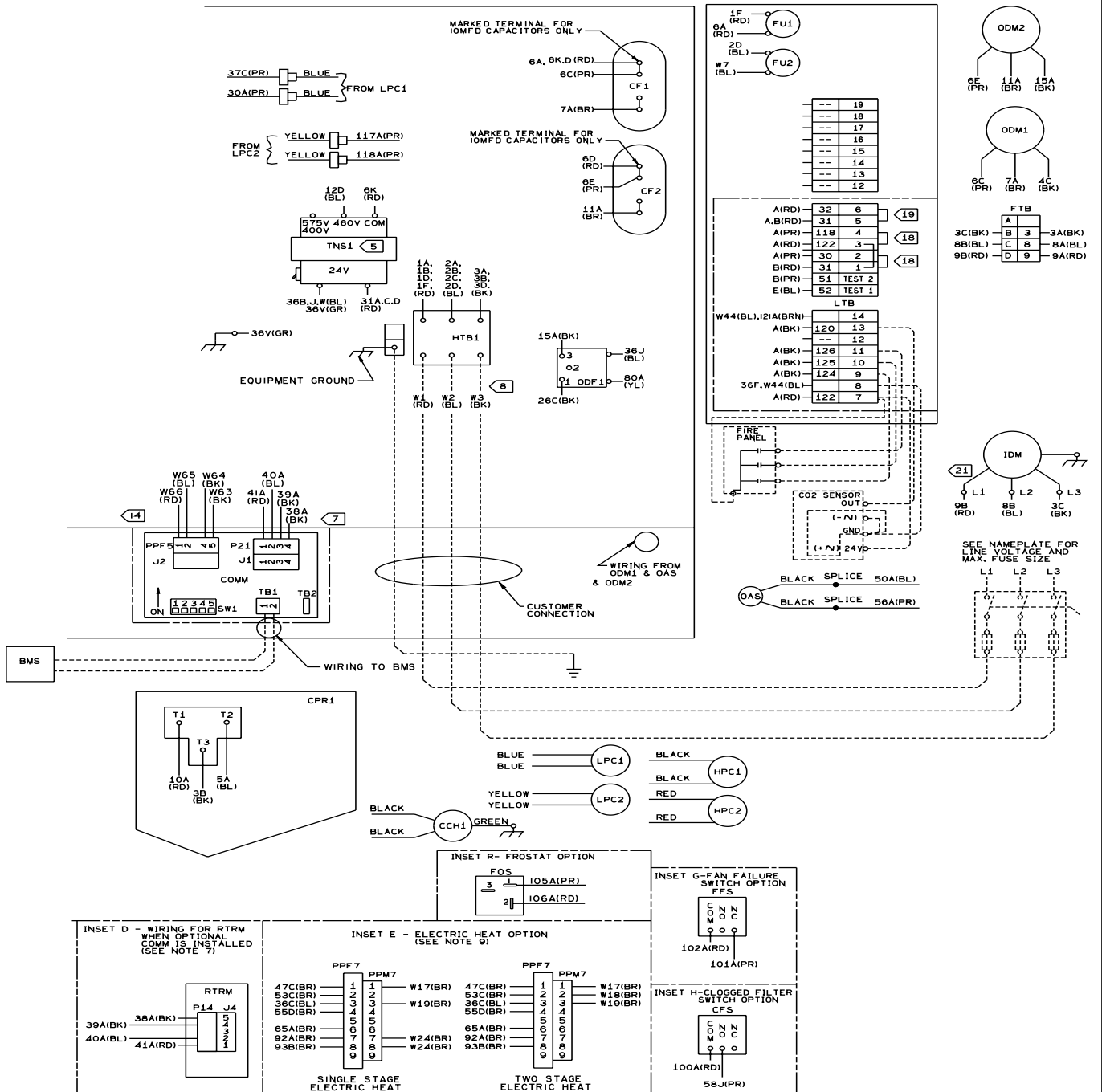
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER DES
BLESSURES CORPORELLES SEVERES
OU LA MORT.



CAUTION

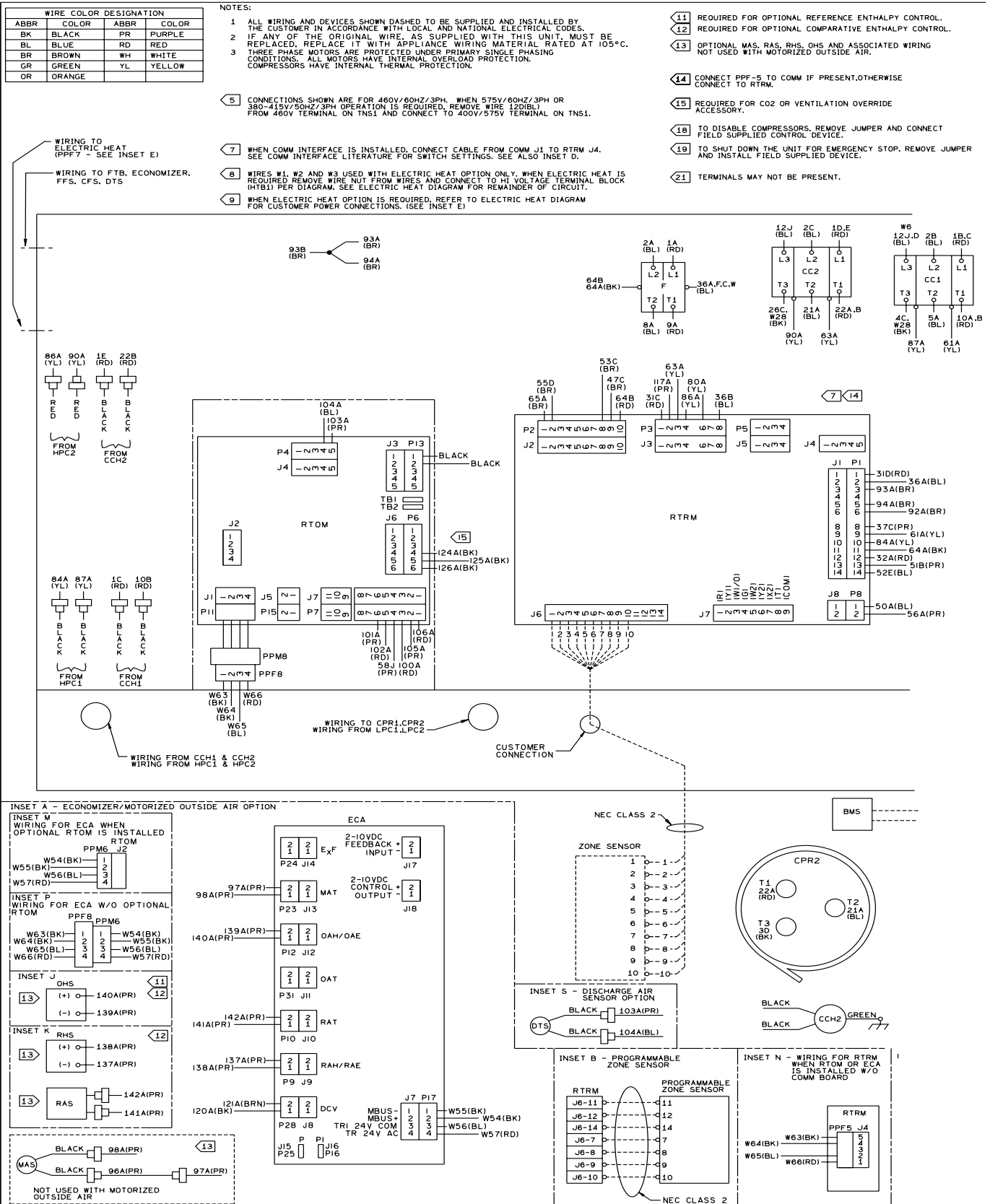
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF
CONDUCTORS.
FAILURE TO DO SO MAY CAUSE
DAMAGE TO THE EQUIPMENT.



2309-3353 C

Diagram 26 Connection Electrical - 400 - 575v (TC150)

2309-3400



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.



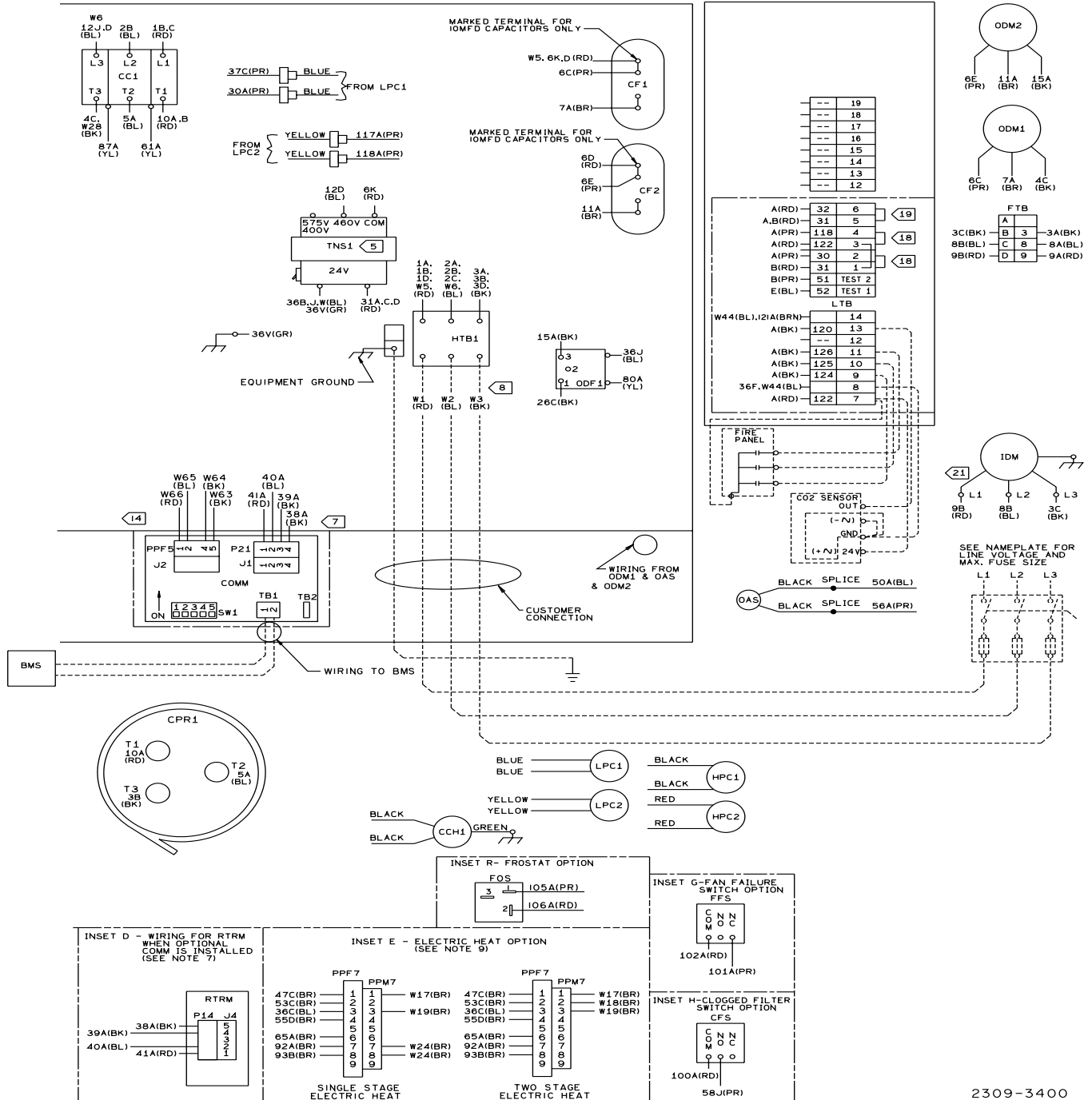
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
L'ENTRETIEN PEUT ENTRAÎNER DES
BLESSURES CORPORELLES SEVERES
OU LA MORT.



CAUTION

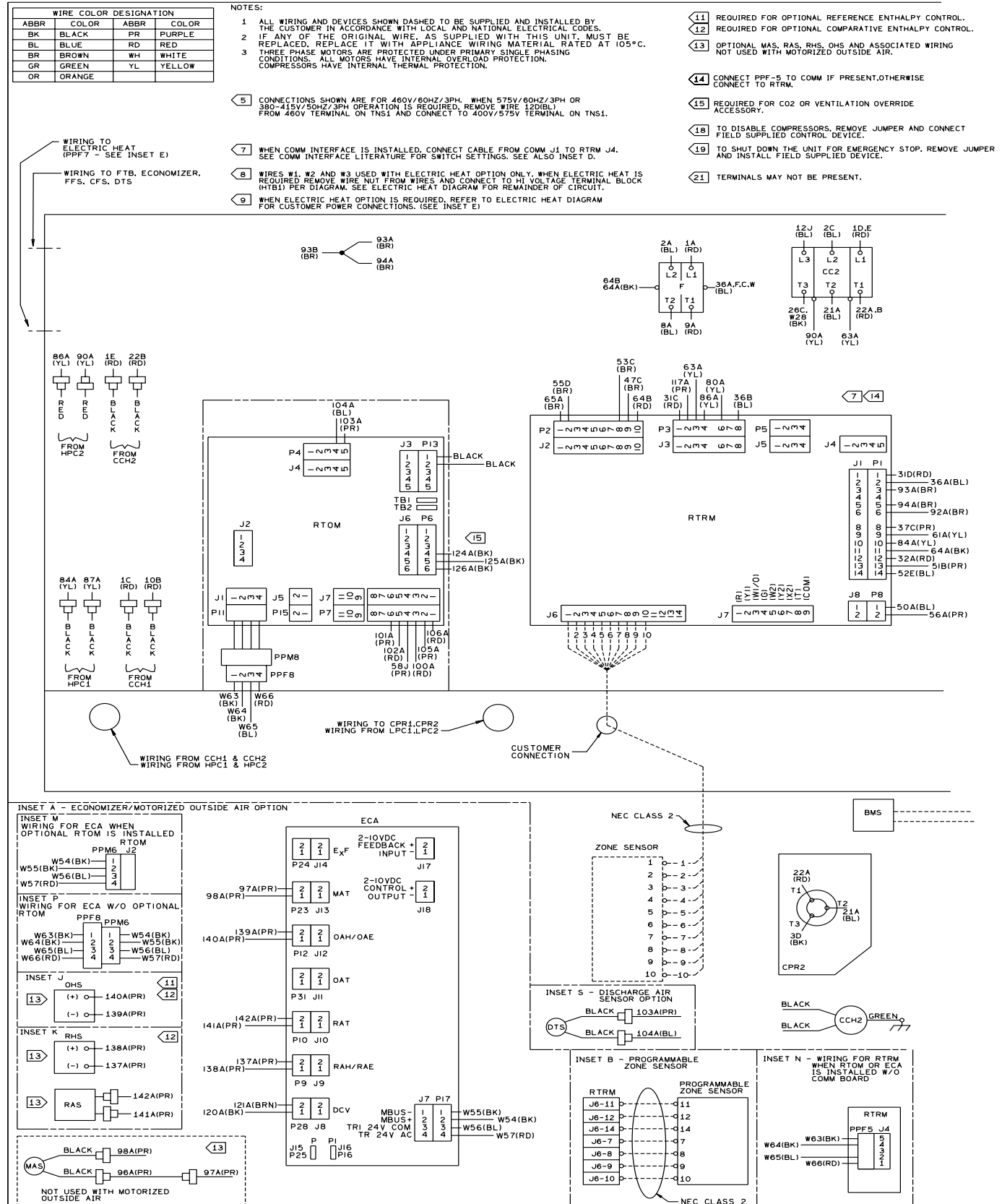
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF
CONDUCTORS.
FAILURE TO DO SO MAY CAUSE
DAMAGE TO THE EQUIPMENT.



2309-3400

Diagram 27 Connection Electrical - 400 - 575v (TC151)

2309-3398



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.



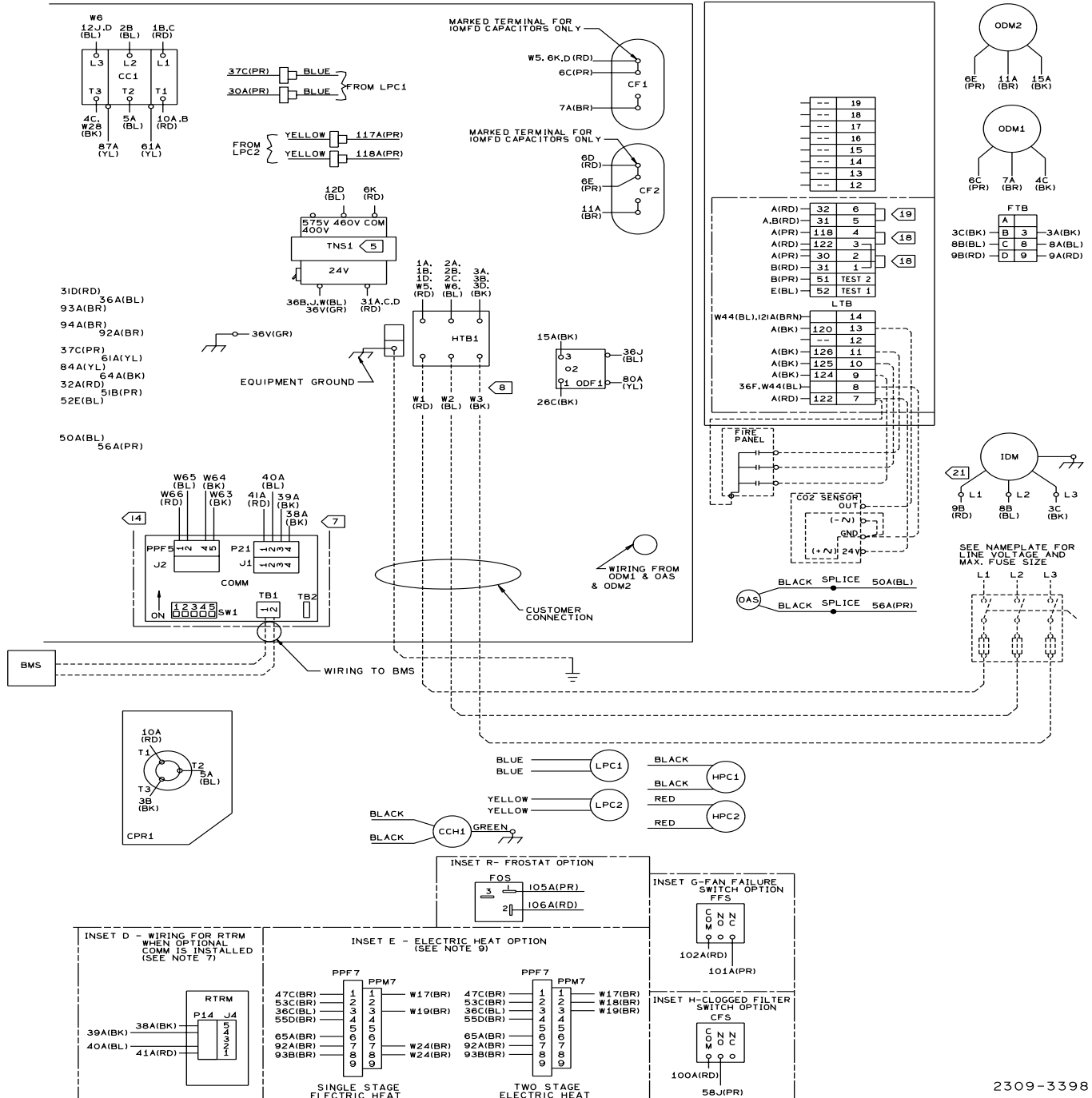
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3398

2309-3162



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
L'ENTRETIEN PEUT ENTRAÎNER 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.

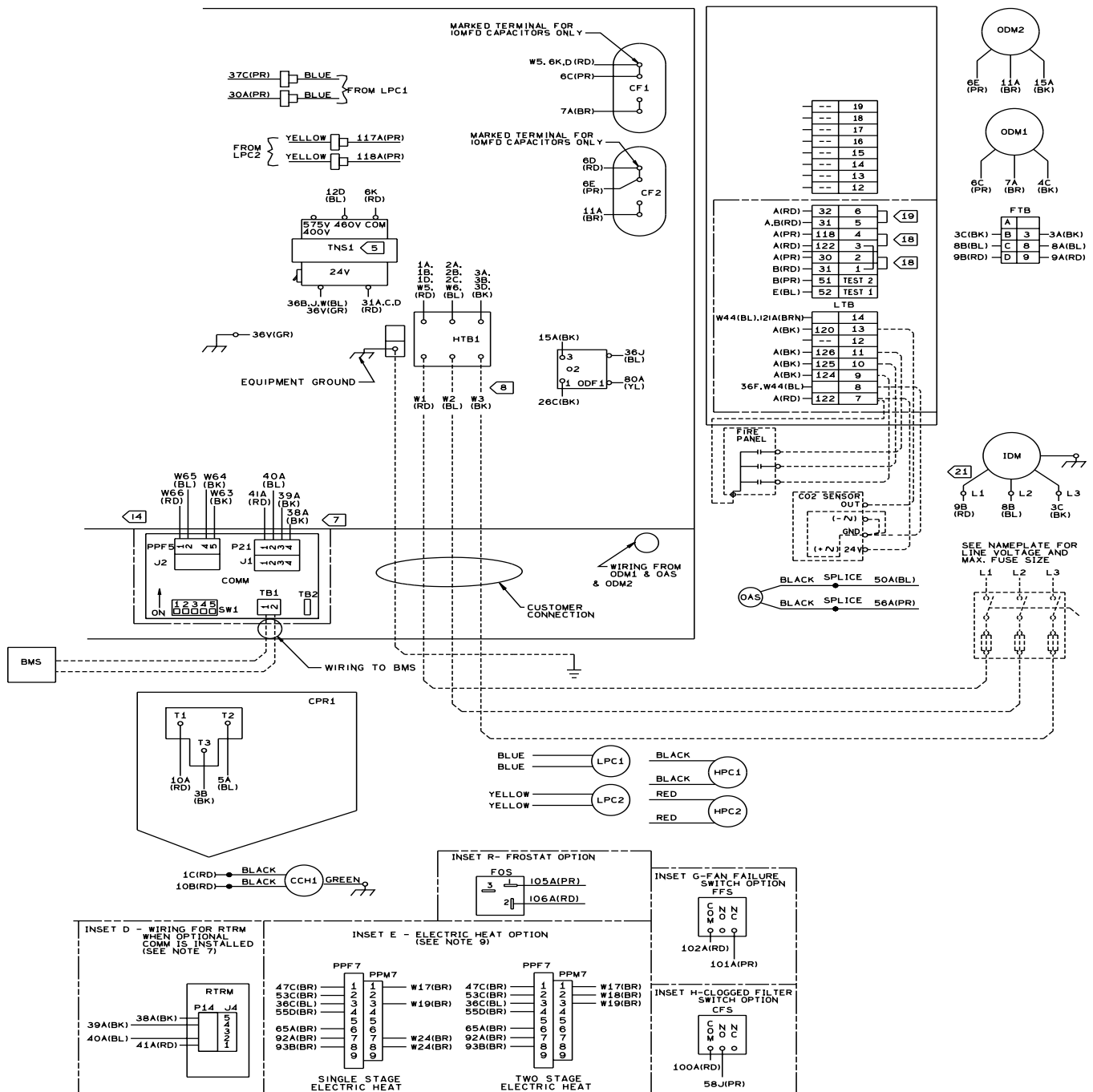
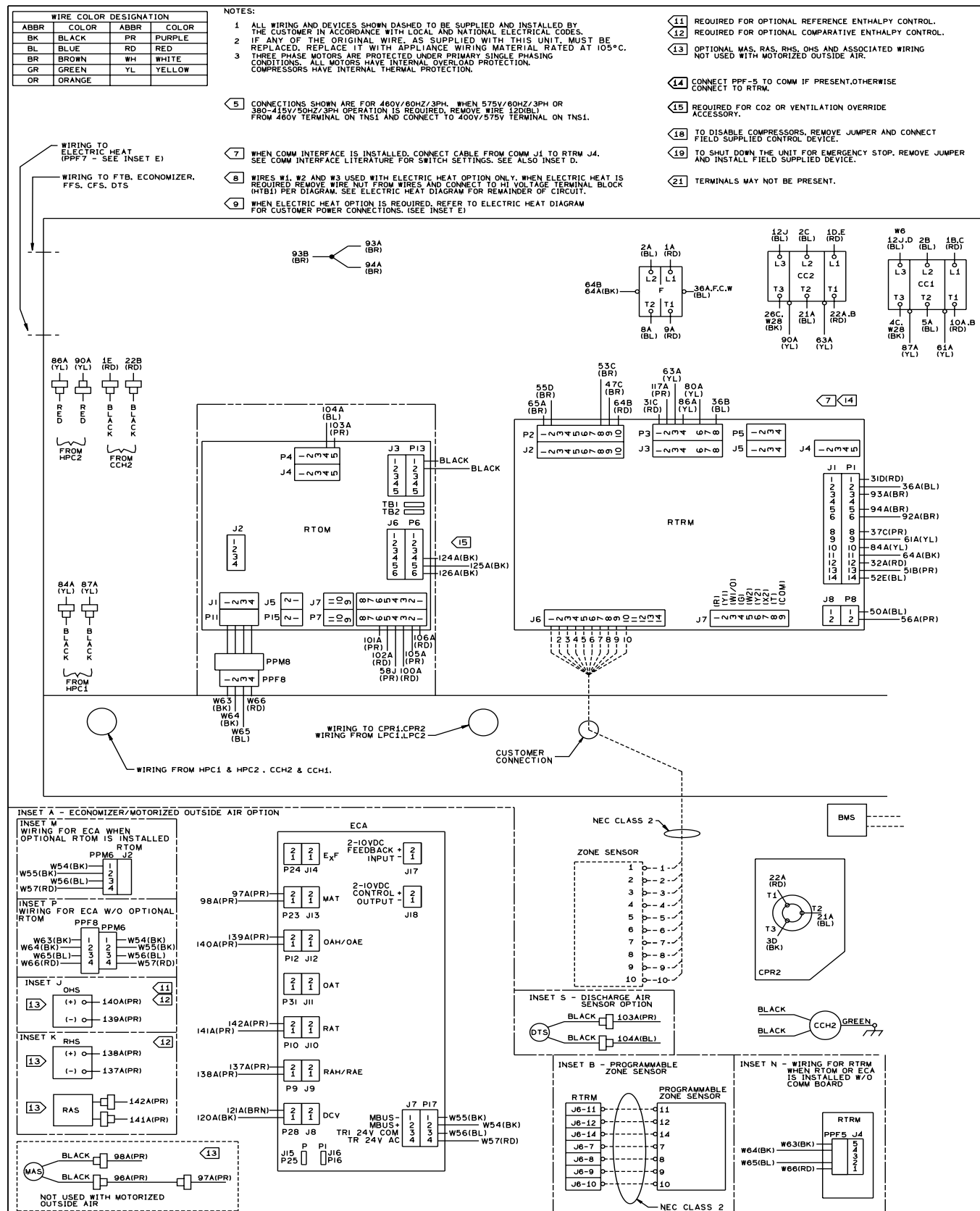


Diagram 22 Connection Electrical - 400 - 575v (TC211)

2309-3176



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.



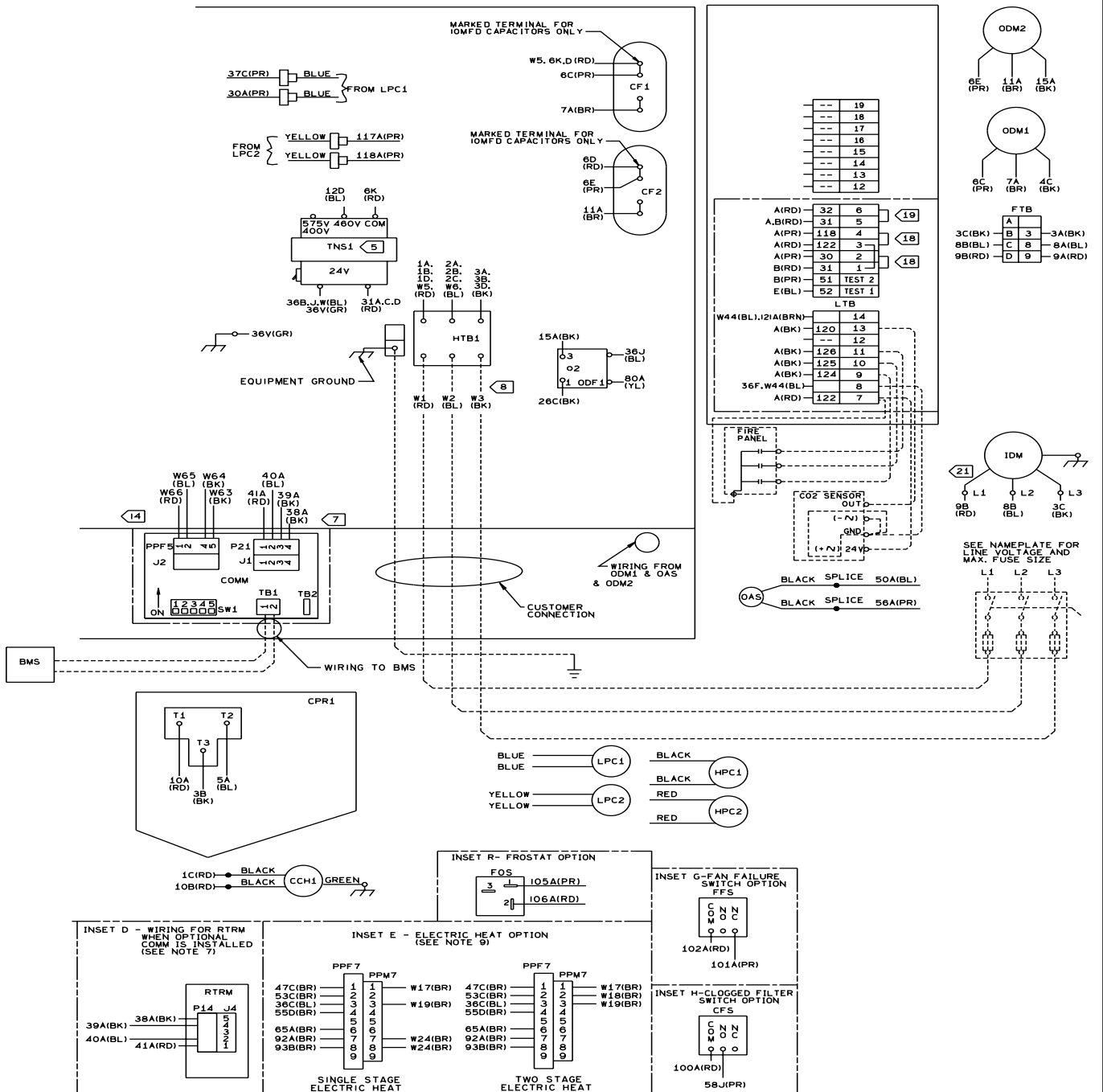
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3180



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.

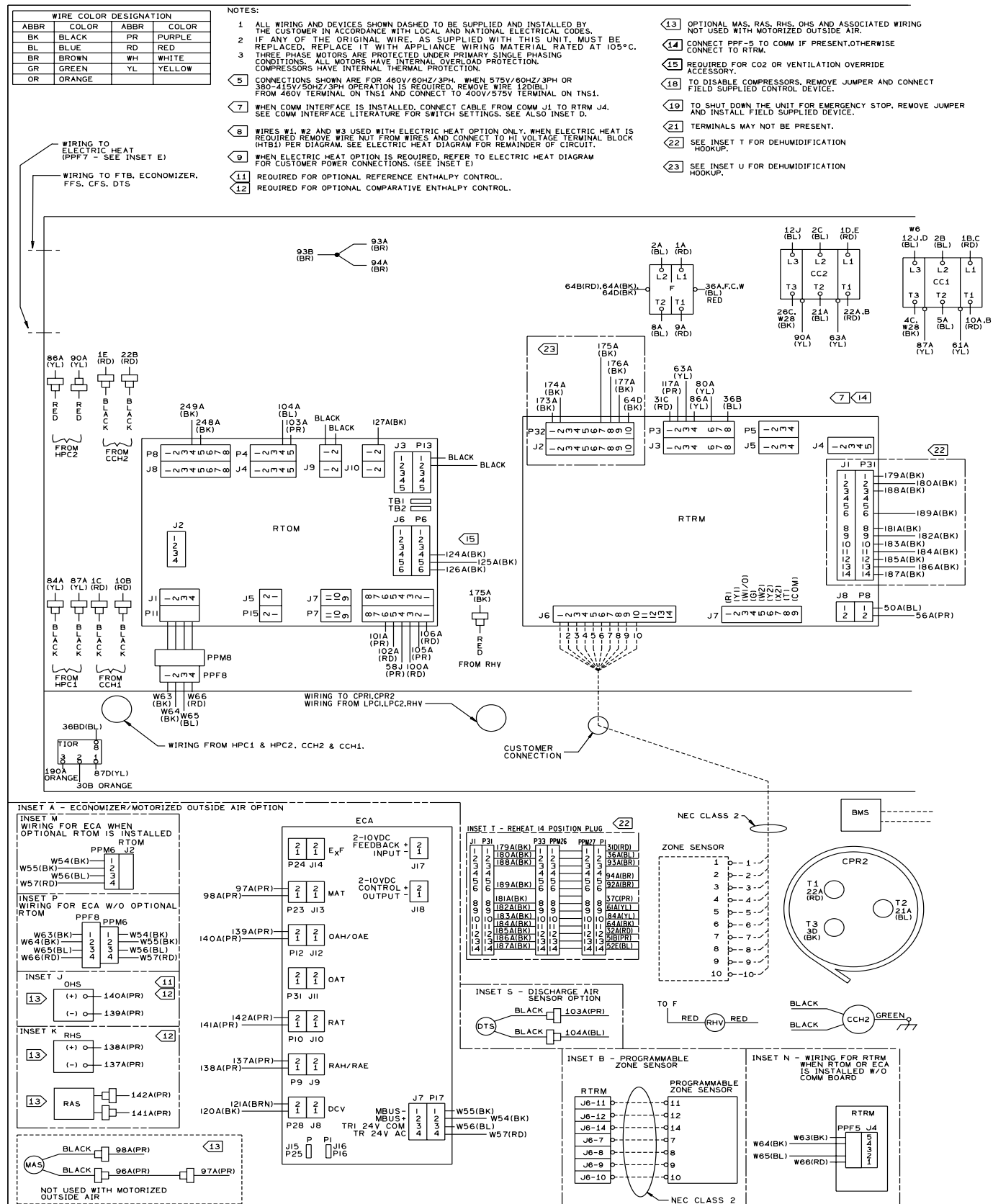
2309-3366



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.

Diagram 25 Connection Electrical - 400 - 575v (TC181 - With Dehumidification Option)

2309-3370



WARNING

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

AVERTISSEMENT

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

FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.

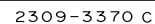
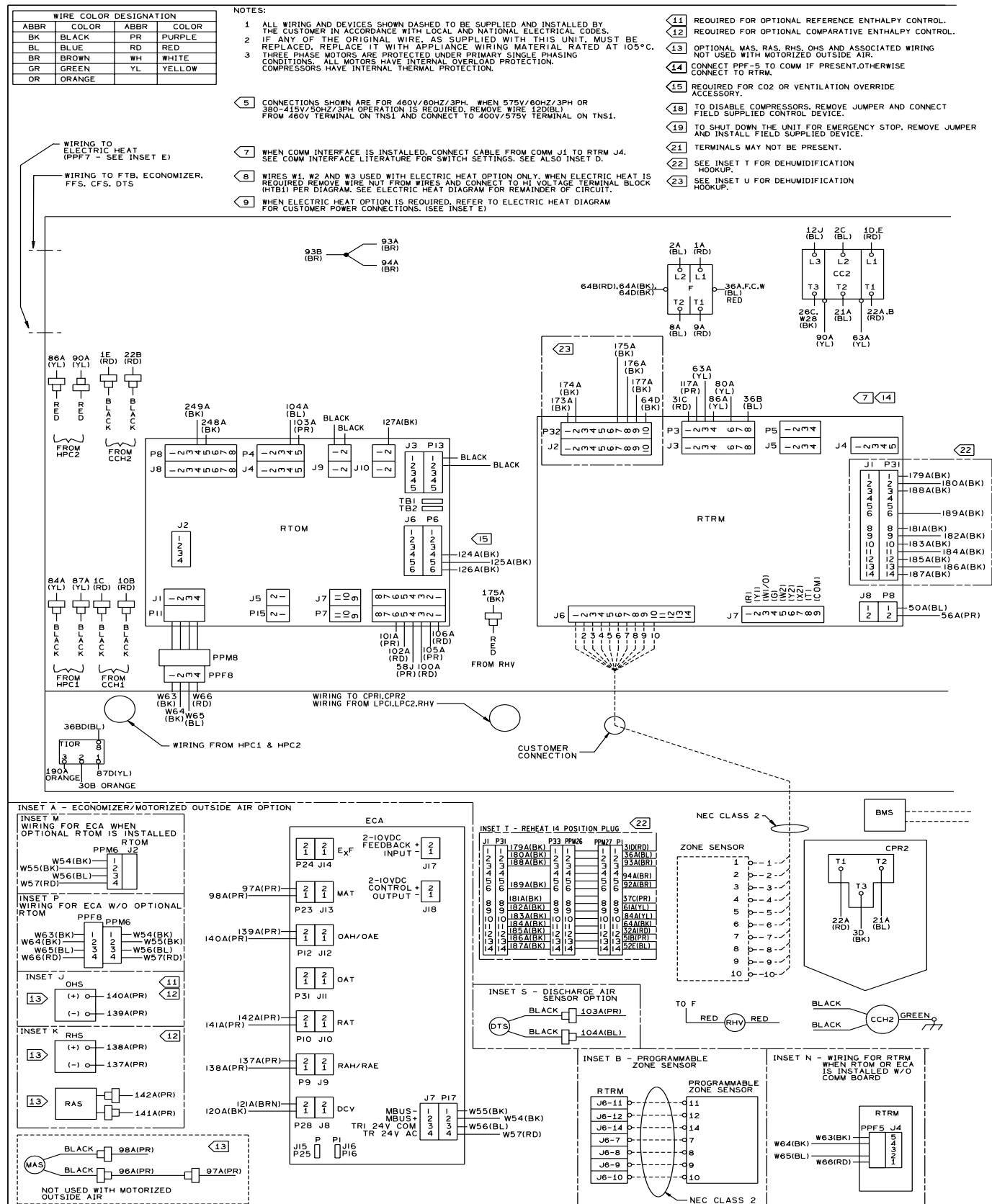


Diagram 26 Connection Electrical - 400 - 575v (TC241 With Dehumidification Option)

2309-3374



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.

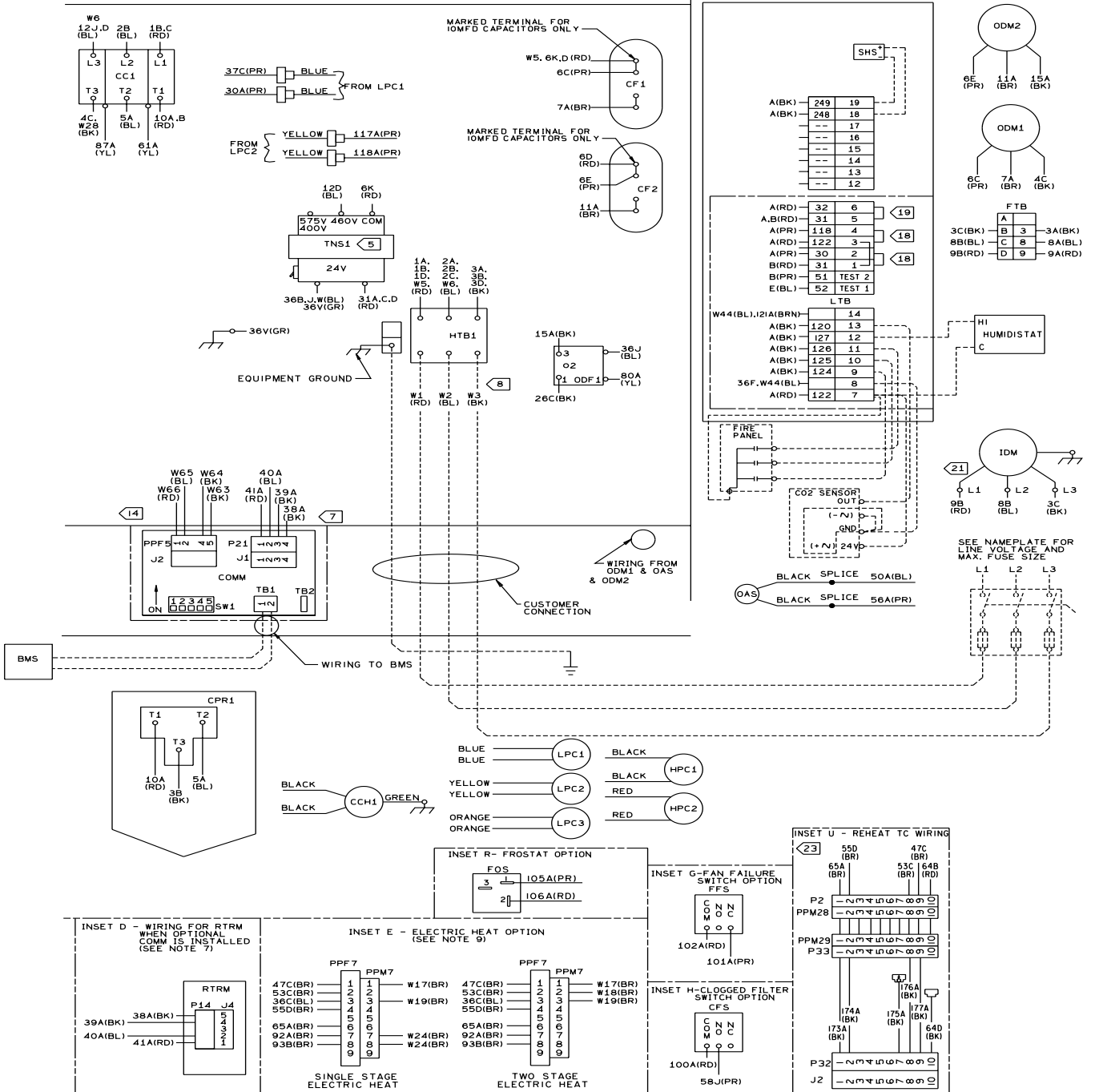
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE ELECTRIQUE AVANT D'EXECUTER 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

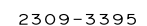


2309-3395



⚠ Avertissement
Voltage Hasardeux!
 Déconnectez toutes les sources électriques incluant les disjoncteurs situés à distance avant d'effectuer l'entretien.
 Faute de déconnecter la source électrique avant d'effectuer l'entretien peut entraîner des blessures corporelles sévères 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.



2309-3147



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.



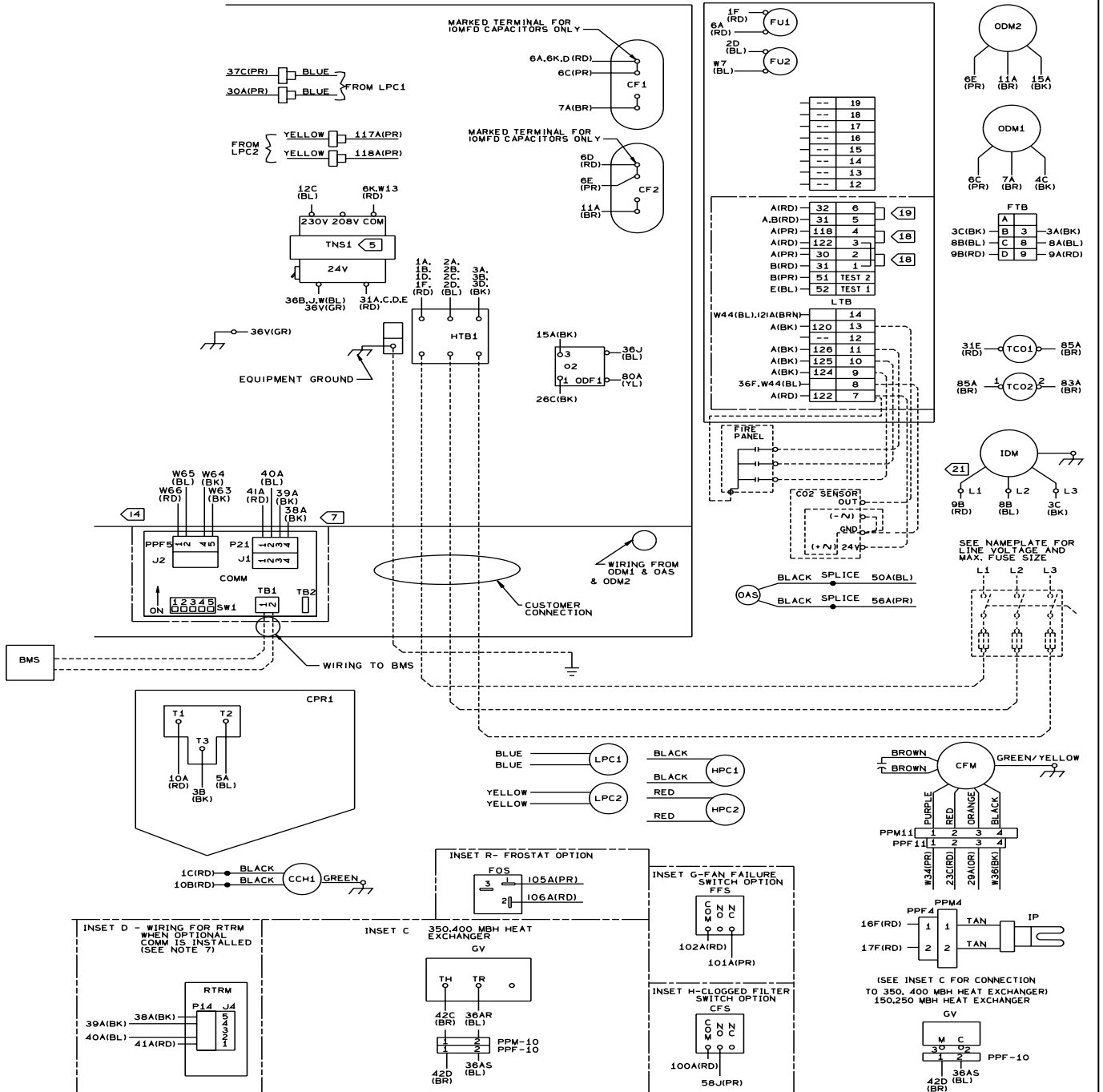
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAENER 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.



2309-3147 E

2309-3177



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.

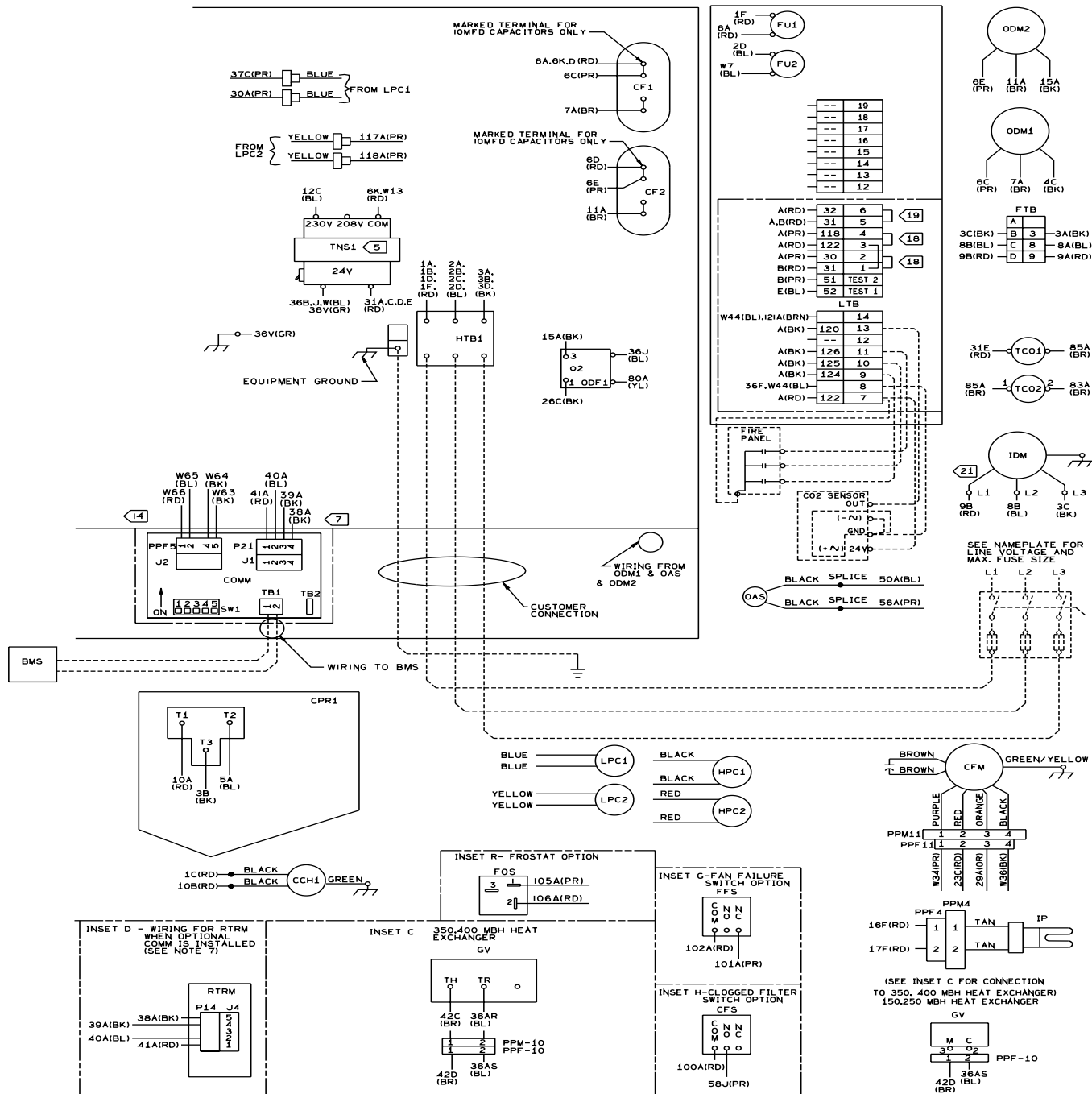
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUÉS A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.

FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.



Connection Electrical - 208 - 230v - Cooling / Gas Heat (YC 240, 241, 300, 301)

2309-3181



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 DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.

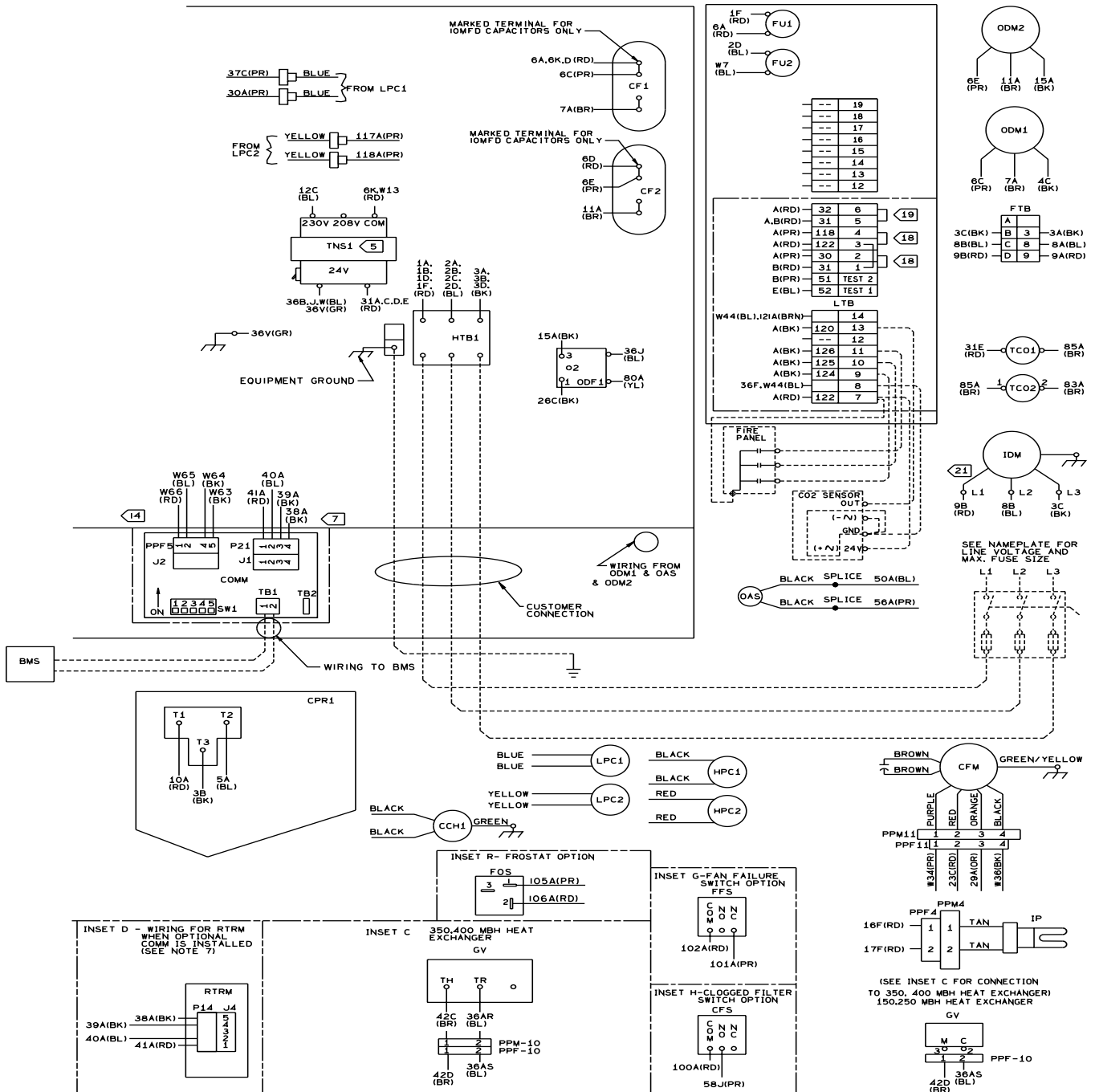
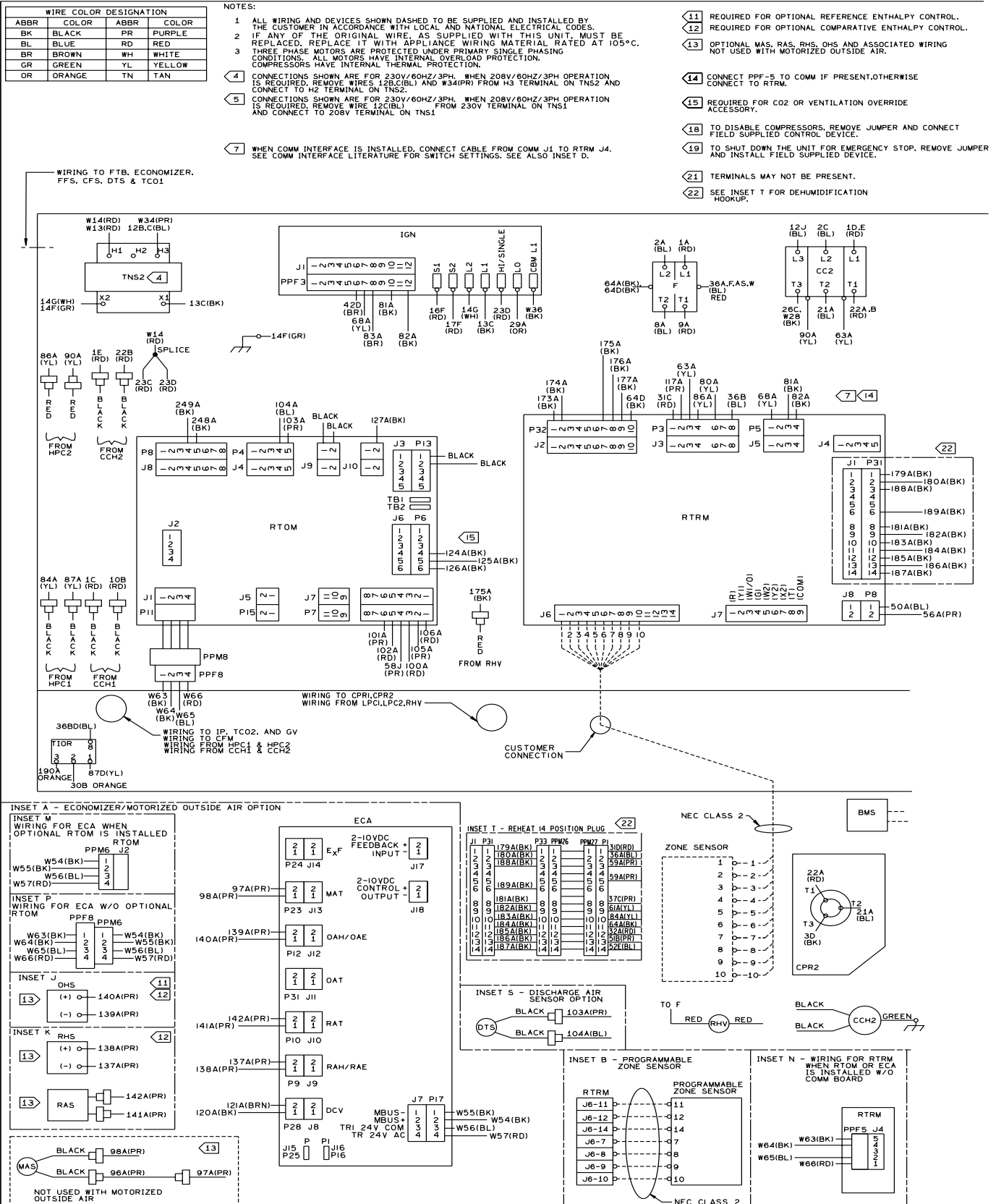


Diagram 31 Connection Electrical - 208 - 230v - Cooling / Gas Heat (YC151 With Dehumidification Option)

2309-3367



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'EXECUTER L'ENTRETIEN.
 FAUTE DE DECONNECTER LA SOURCE
 ELECTRIQUE AVANT D'EXECUTER
 L'ENTRETIEN PEUT ENTRAENER 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

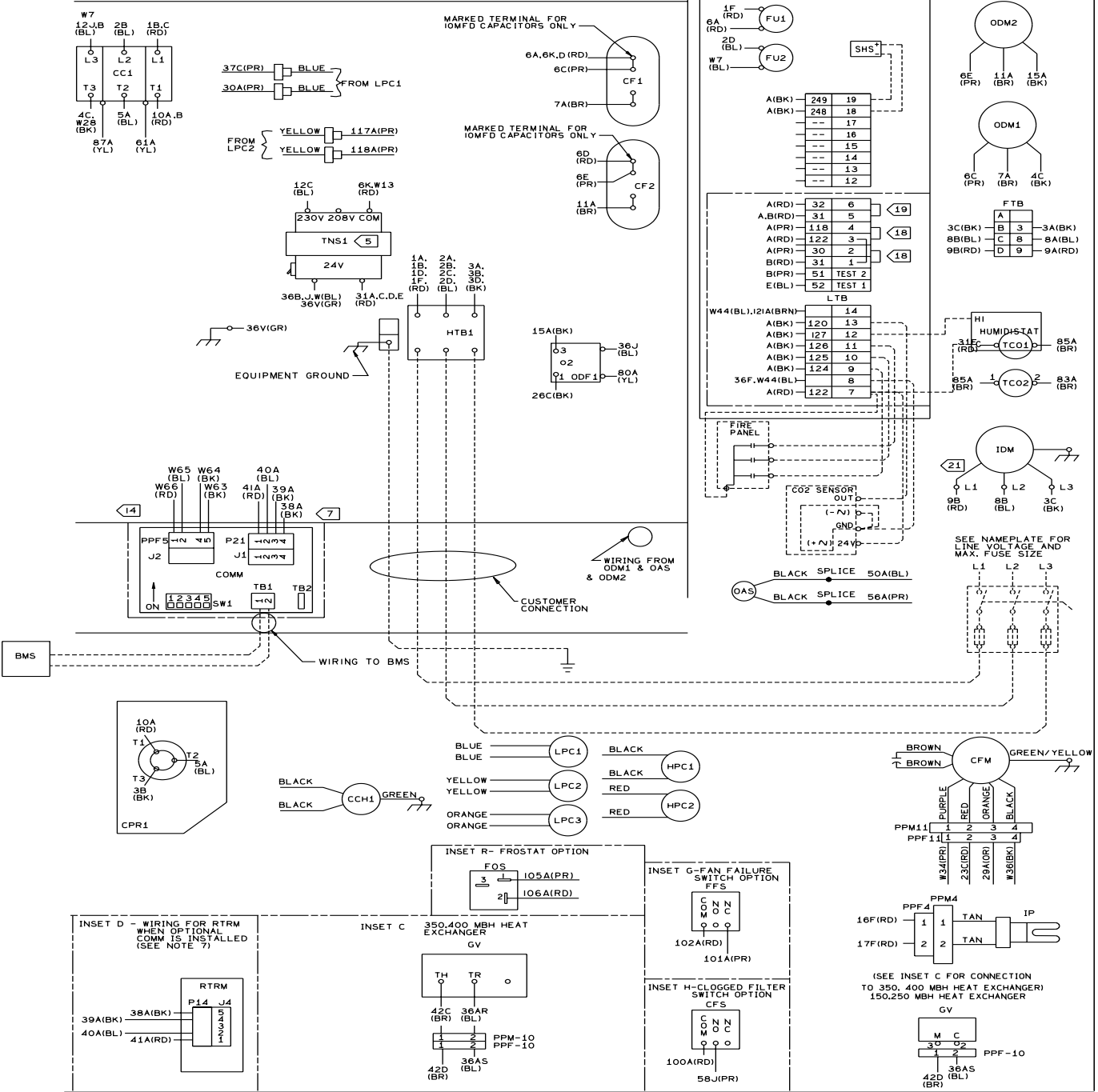
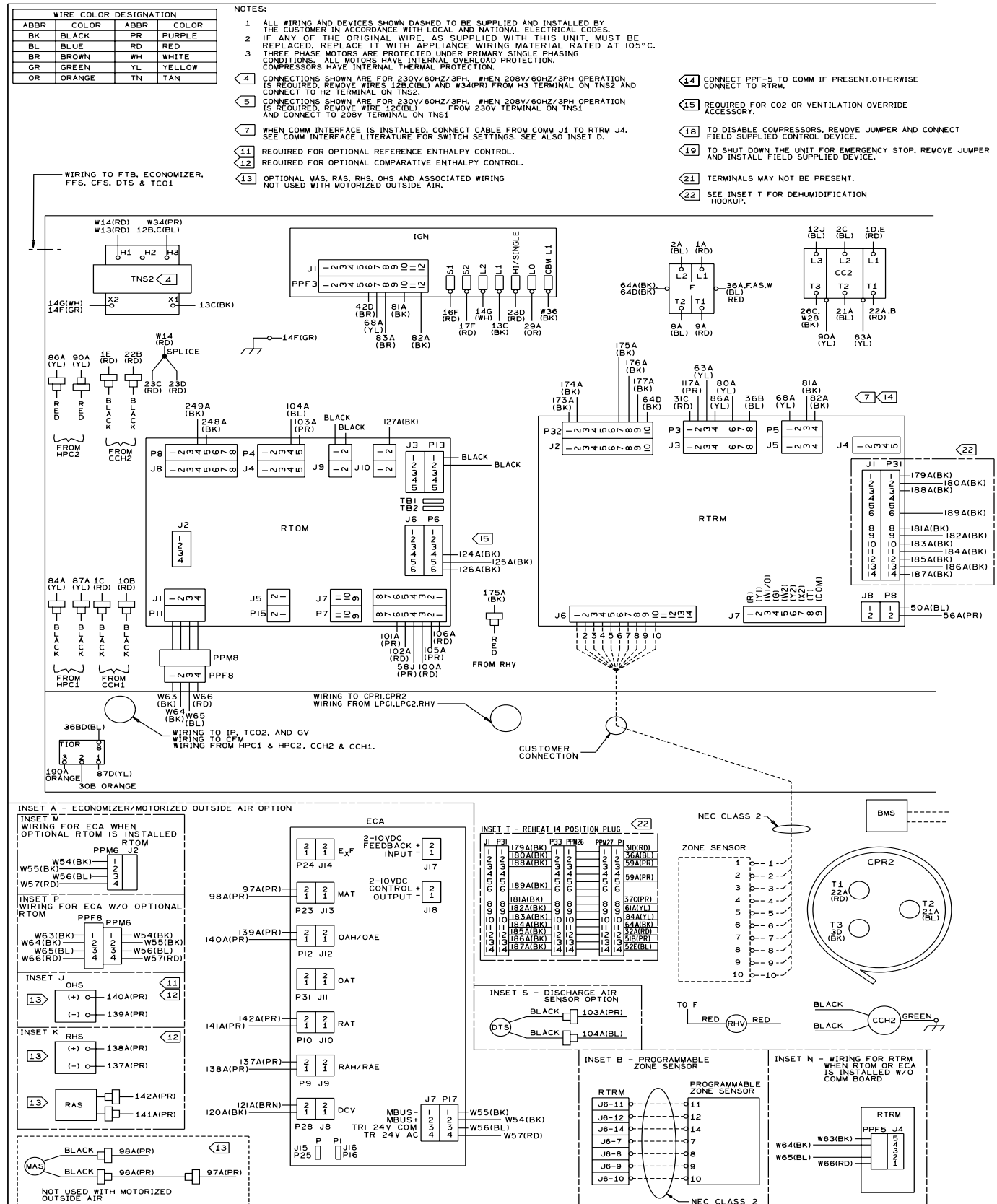


Diagram 32 Connection Electrical - 208 - 230v - Cooling / Gas Heat (YC 181 With Dehumidification Option)

2309-3371



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
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

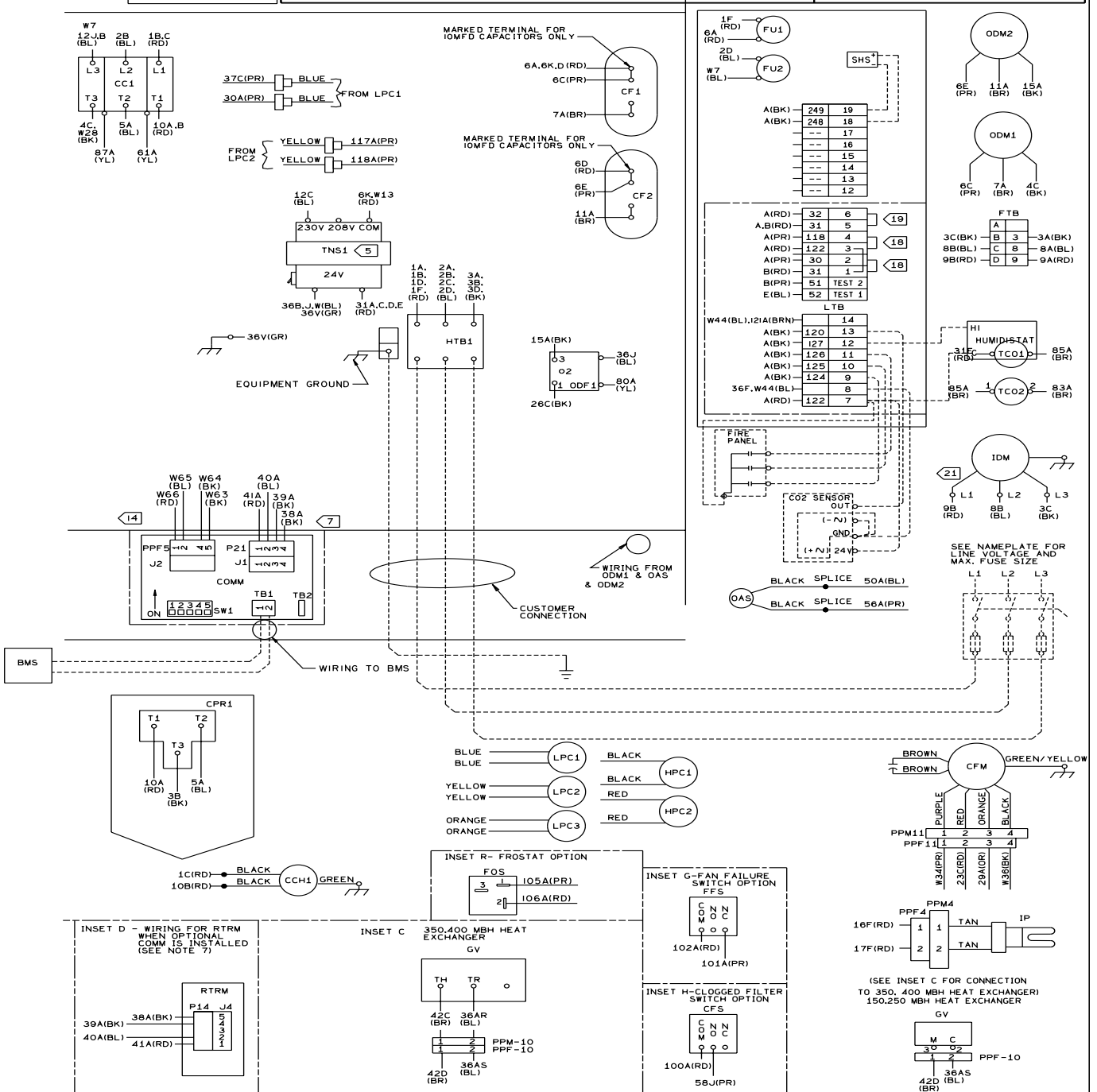


Diagram 33 Connection Electrical - 208 - 230v - Cooling / Gas Heat (YC 241 With Dehumidification Option)

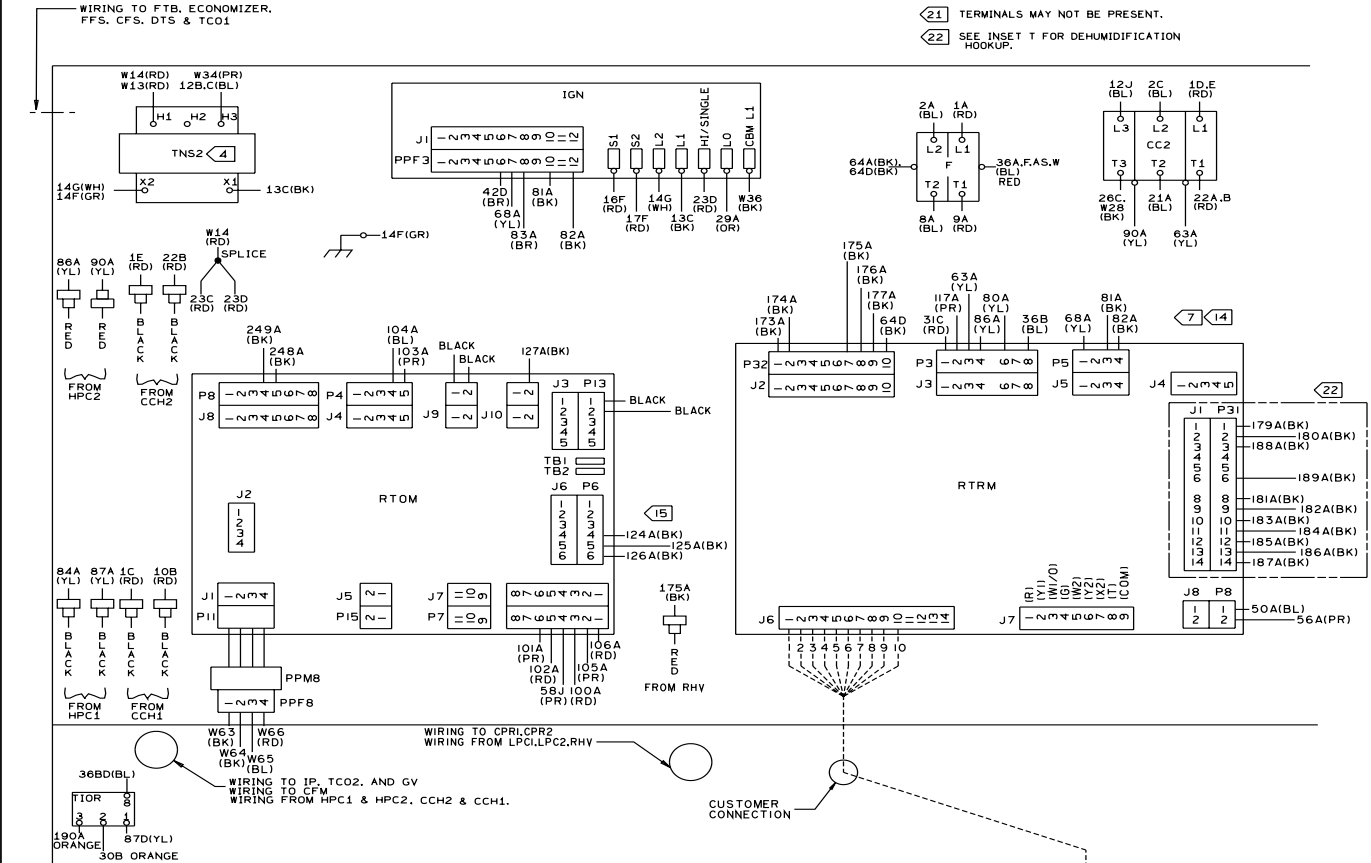
2309-3375

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE	TN	TAN

NOTES:

- ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
- THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION.
- CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 12B,C(BL) AND W34(PR) FROM H3 TERMINAL ON TNS2 AND CONNECT TO H2 TERMINAL ON TNS2.
- CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 12C(BL) FROM 230V TERMINAL ON TNS1 AND CONNECT TO 208V TERMINAL ON TNS1.

- REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- OPTIONAL WAS, RAS, RHS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- REQUIRED FOR CO2 OR VENTILATION OVERRIDE ACCESSORY.
- TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- TERMINALS MAY NOT BE PRESENT.
- SEE INSET T FOR DEHUMIDIFICATION HOOKUP.



WARNING

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

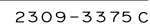
AVERTISSEMENT

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

FAUTE DE DECONNECTER 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.



2309-3402



WARNING

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

AVERTISSEMENT

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

CAUTION

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

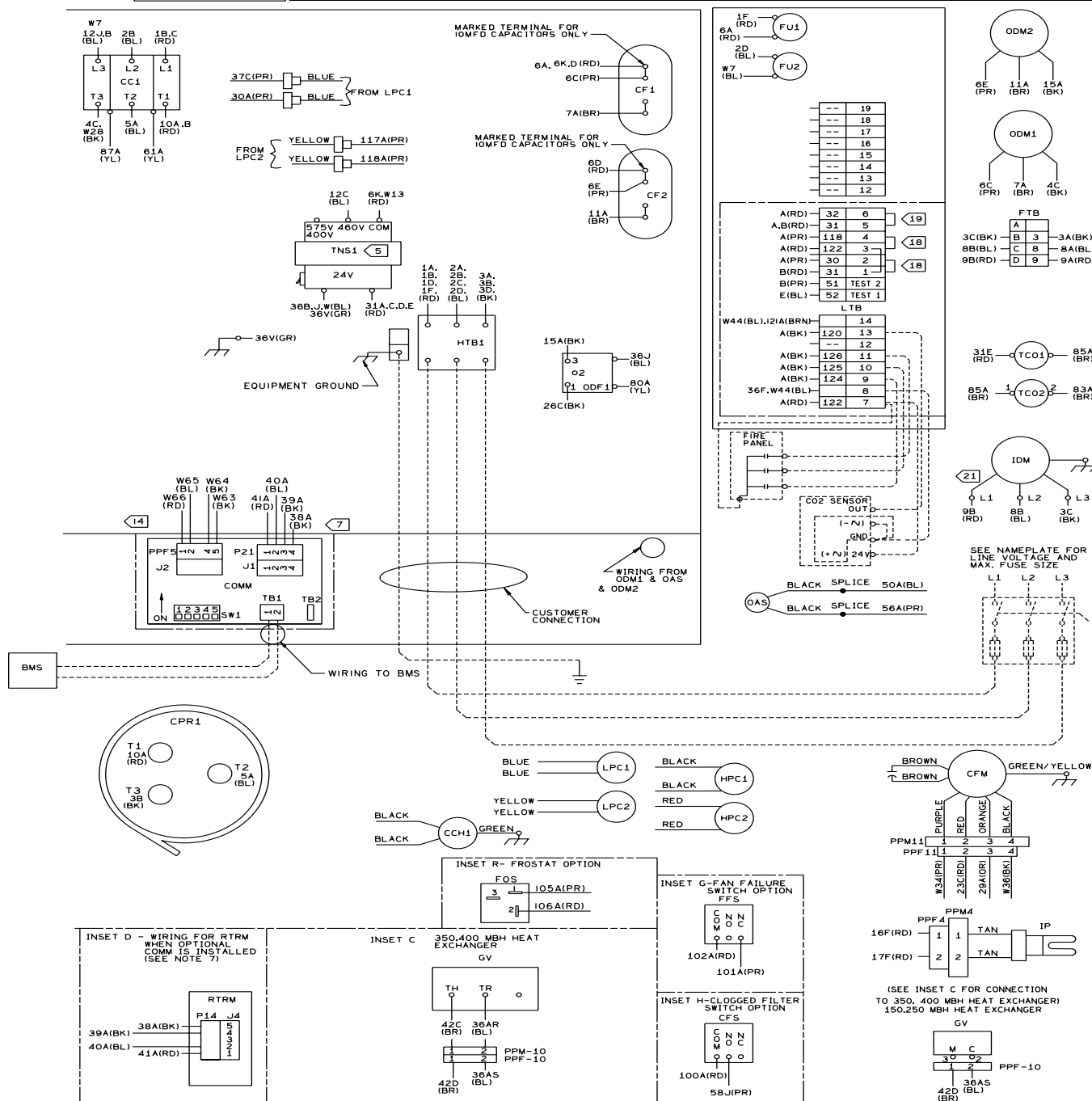


Diagram 35

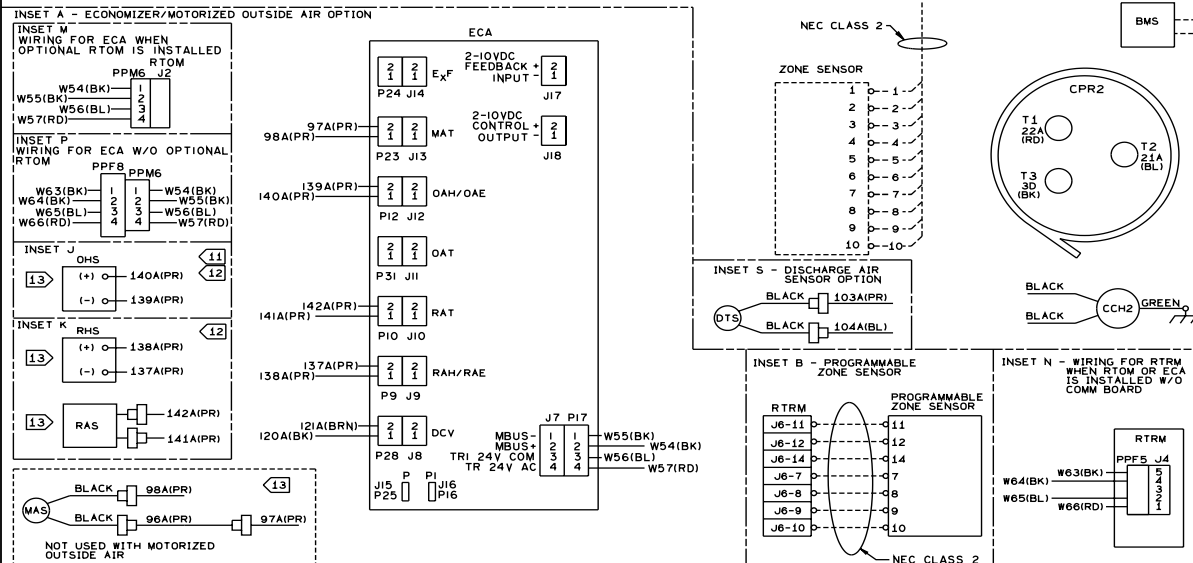
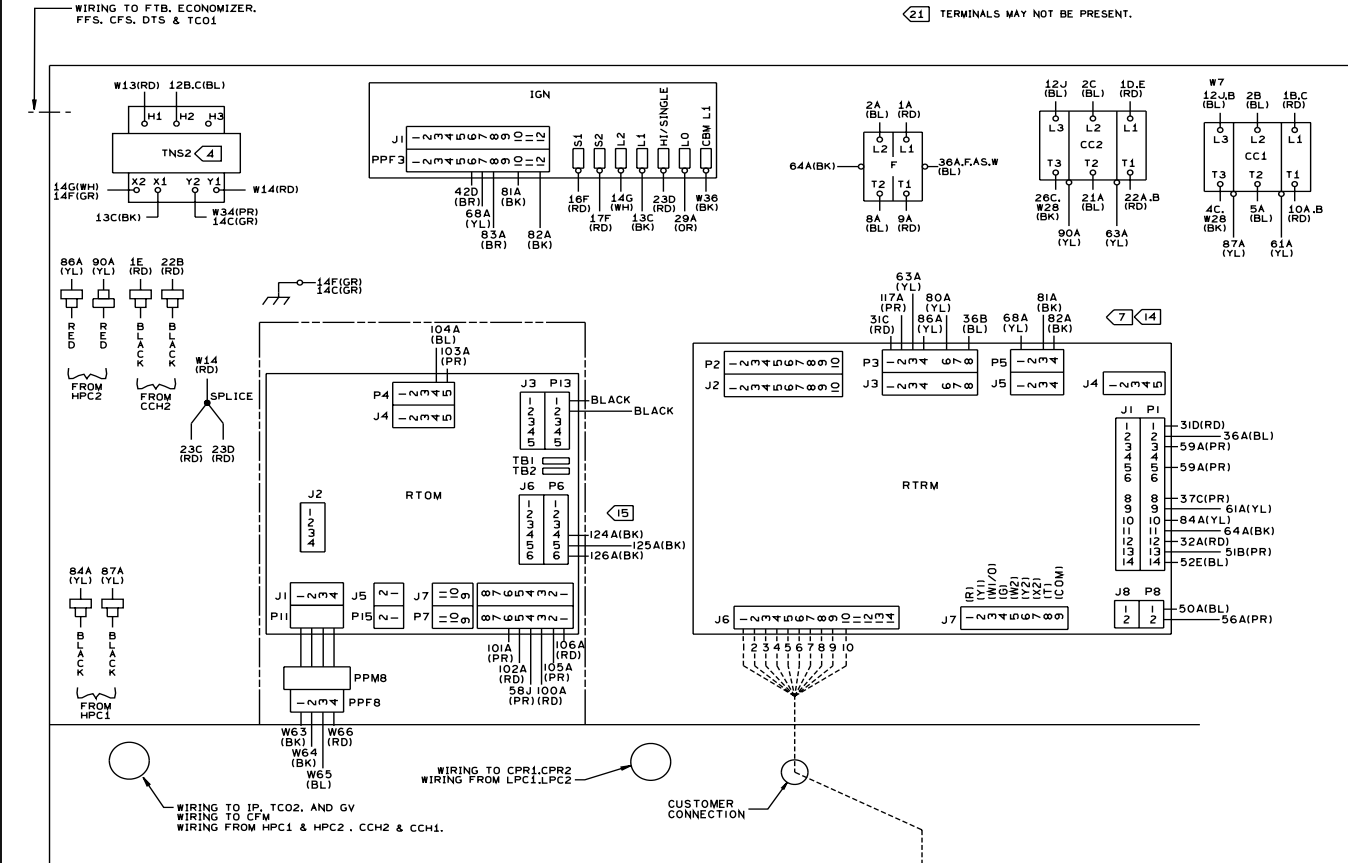
Connection Electrical - 380v - Cooling / Gas Heat (YC 180, 210)

2309-3164

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE	TN	TAN

NOTES:

- 1 ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- 2 IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT 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.
- 4 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH OR 380V/50-60HZ/3PH. WHEN 575V/60HZ/3PH OR 415V/50HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 12B(CBL) FROM H2 TERMINAL ON TNS2 AND CONNECT TO H3 TERMINAL ON TNS2.
- 5 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH. WHEN 575V/60HZ/3PH OR 380-415/50-60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 12C(BL) FROM 380V TERMINAL ON TNS1 AND CONNECT TO 400V/575V TERMINAL ON TNS1.
- 7 WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4. SEE COMM INTERFACE LITERATURE FOR SWITCH SETTINGS. SEE ALSO INSET D.
- 11 REQUIRED FOR OPTIONAL REFERENCE ENTHALPHY CONTROL.
- 12 REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPHY CONTROL.
- 13 OPTIONAL WAS, RAS, RWS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- 14 CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- 15 REQUIRED FOR CO2 OR VENTILATION OVERRIDE
- 18 TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- 19 TO SHUT DOWN THE UNIT FOR EMERGENCY STOP. REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- 21 TERMINALS MAY NOT BE PRESENT.



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
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.

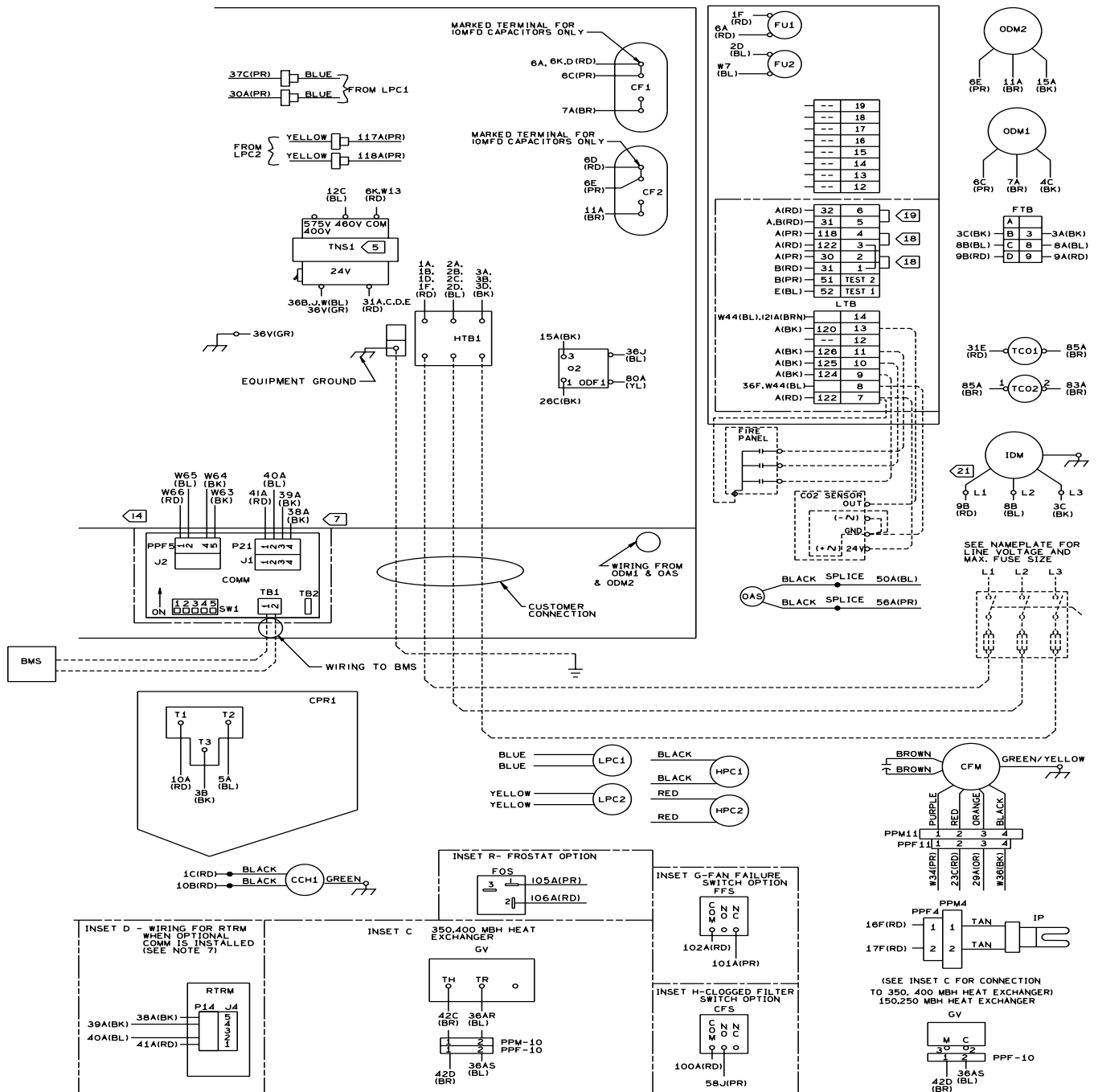


Diagram 36 Connection Electrical - 380v - Cooling / Gas Heat (YC 240, 300)

2309-3354

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE	TN	TAN

NOTES:

- 1 ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- 2 IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT 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.
- 4 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH OR 380V/50-60HZ/3PH. WHEN 575V/60HZ/3PH OR 415V/50HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 12B(CBL) FROM H2 TERMINAL ON TNS2 AND CONNECT TO H3 TERMINAL ON TNS2.
- 5 CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH. WHEN 575V/60HZ/3PH OR 380-415/50-60HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 12C(BL) FROM 460V TERMINAL ON TNS1 AND CONNECT TO 400V/575V TERMINAL ON TNS1.

- 7 WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4. SEE COMM INTERFACE LITERATURE FOR SWITCH SETTINGS. SEE ALSO INSET D.

- 11 REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- 12 REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- 13 OPTIONAL WAS, RAS, RHS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.

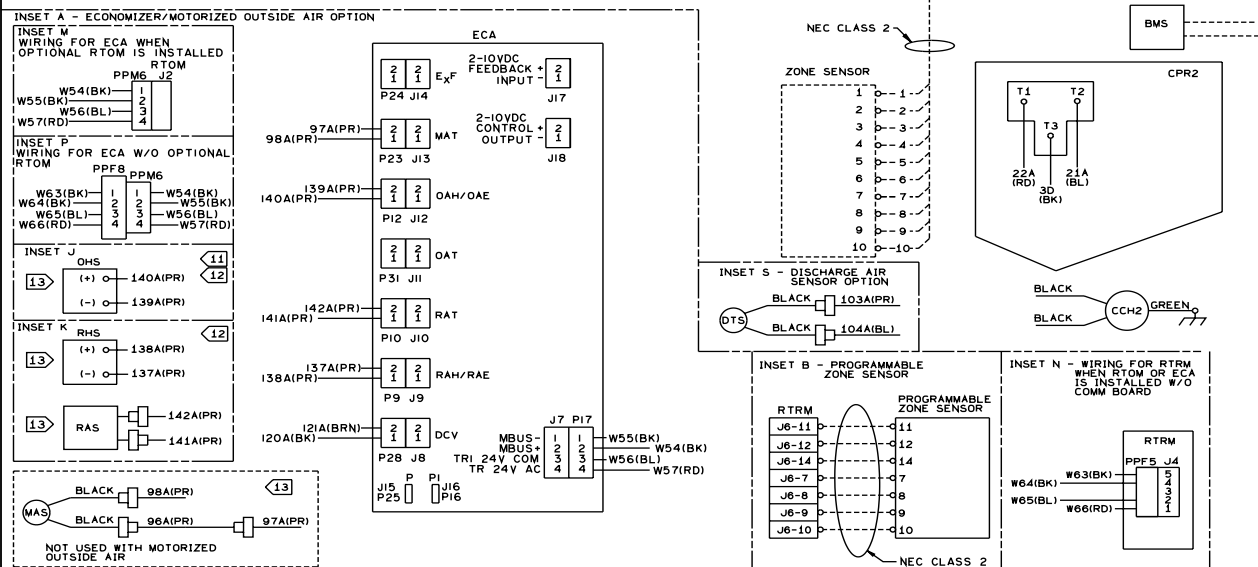
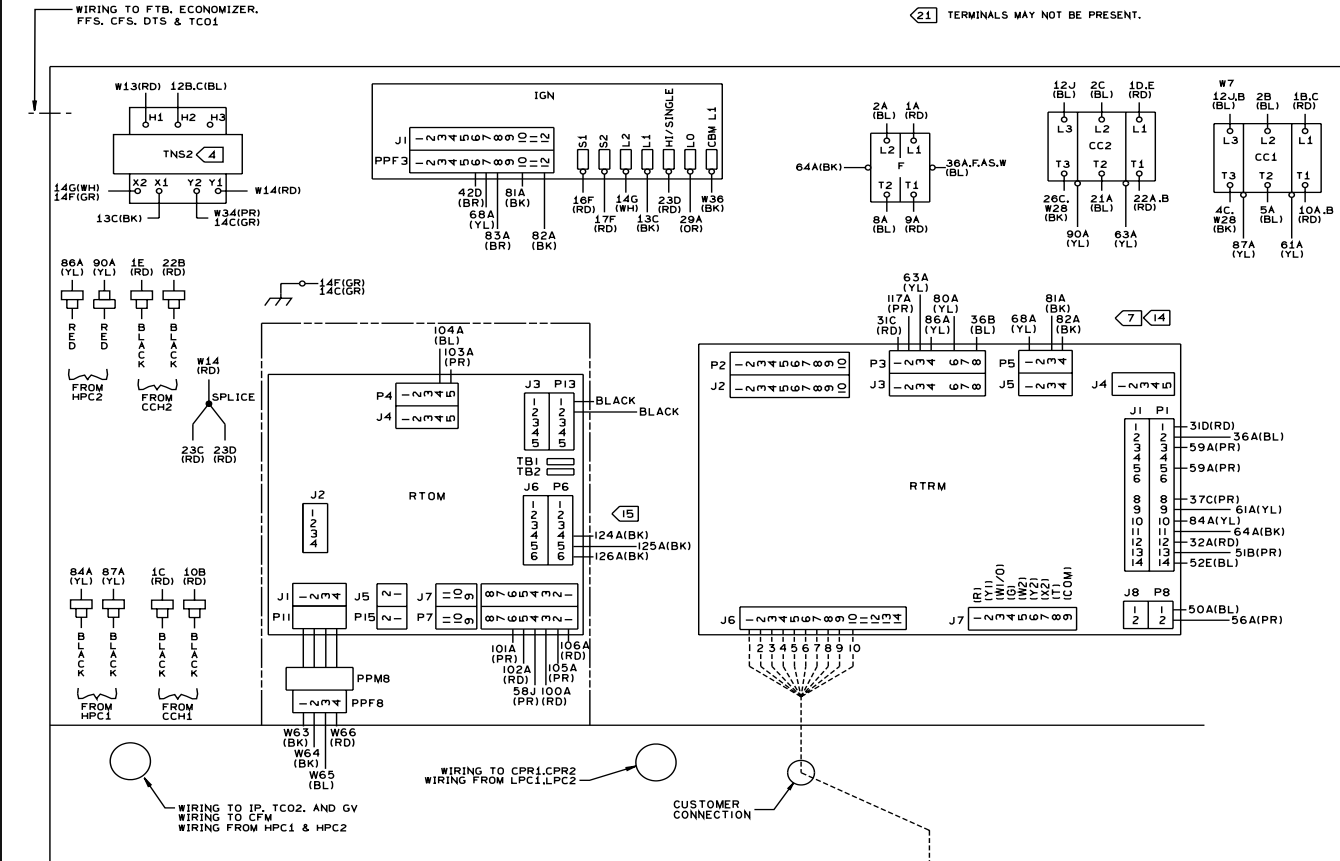
- 14 CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.

- 15 REQUIRED FOR CO2 OR VENTILATION OVERRIDE ACCESSORY.

- 18 TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.

- 19 TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.

- 21 TERMINALS MAY NOT BE PRESENT.



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 SITUÉS A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.

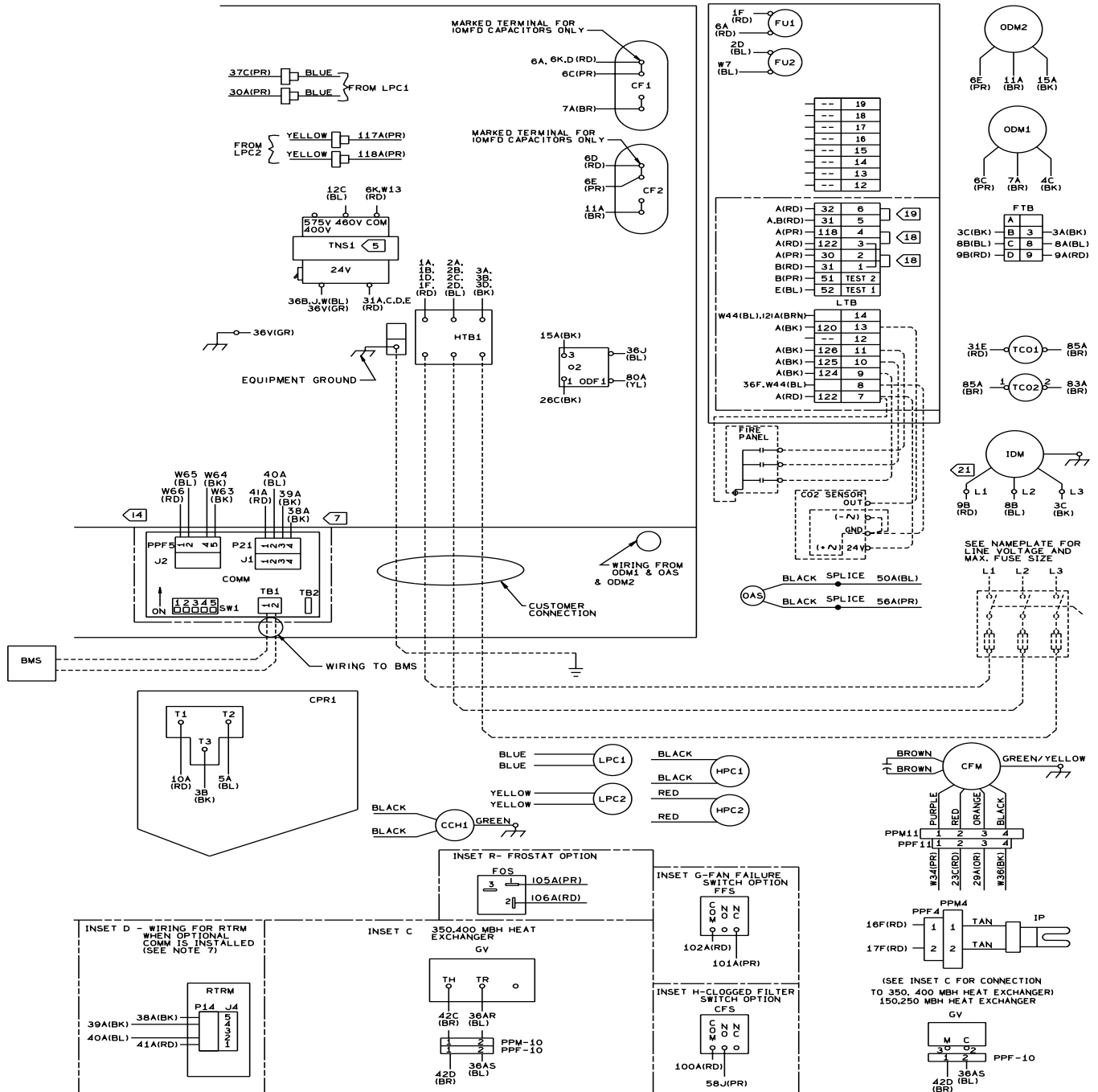
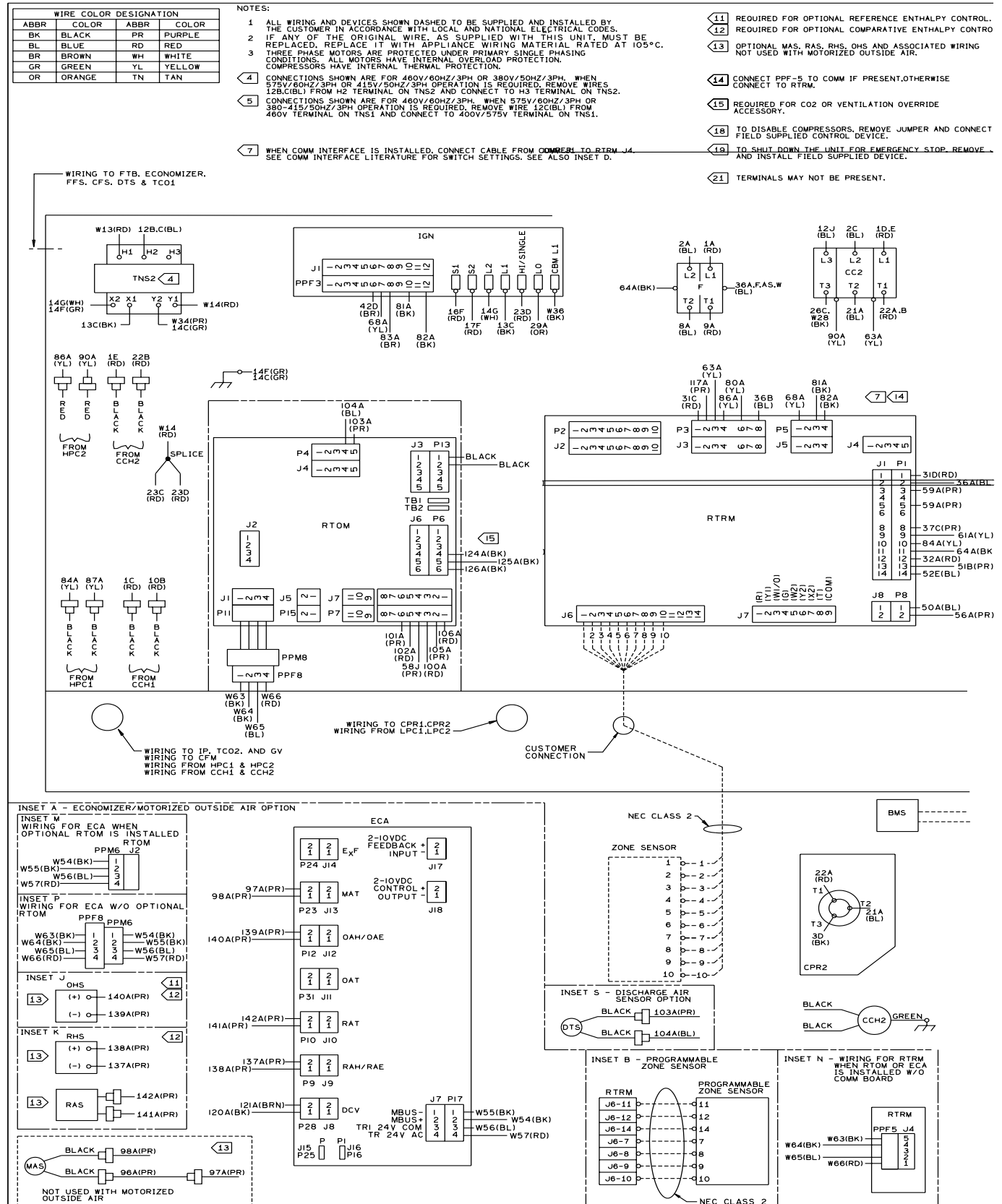


Diagram 37

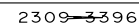
Connection Electrical - 400-575v - Cooling / Gas Heat (YC 151)

2309-3396



⚠ Avertissement
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER DES
BLESURES 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.



2309-3148



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
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.

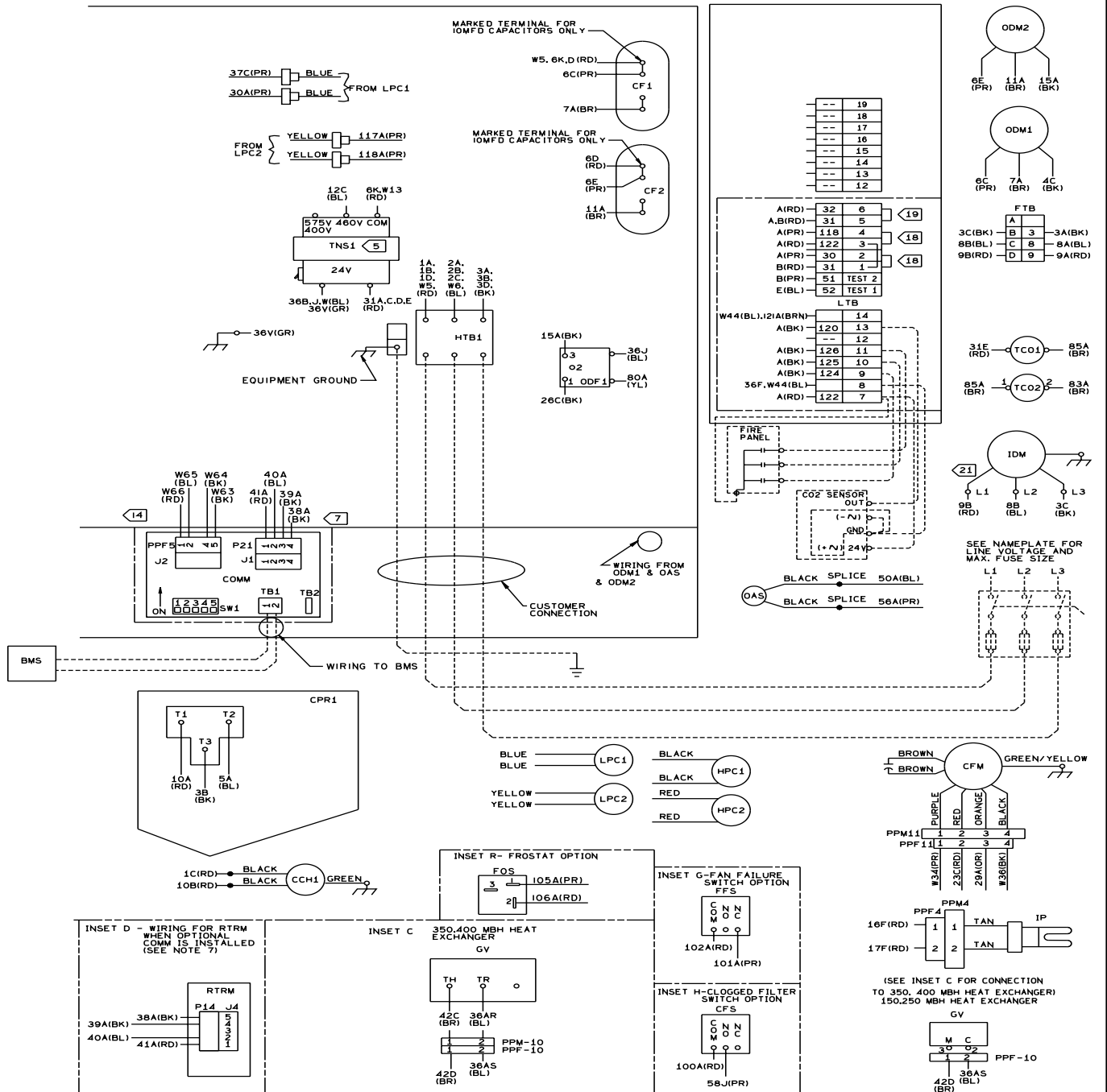
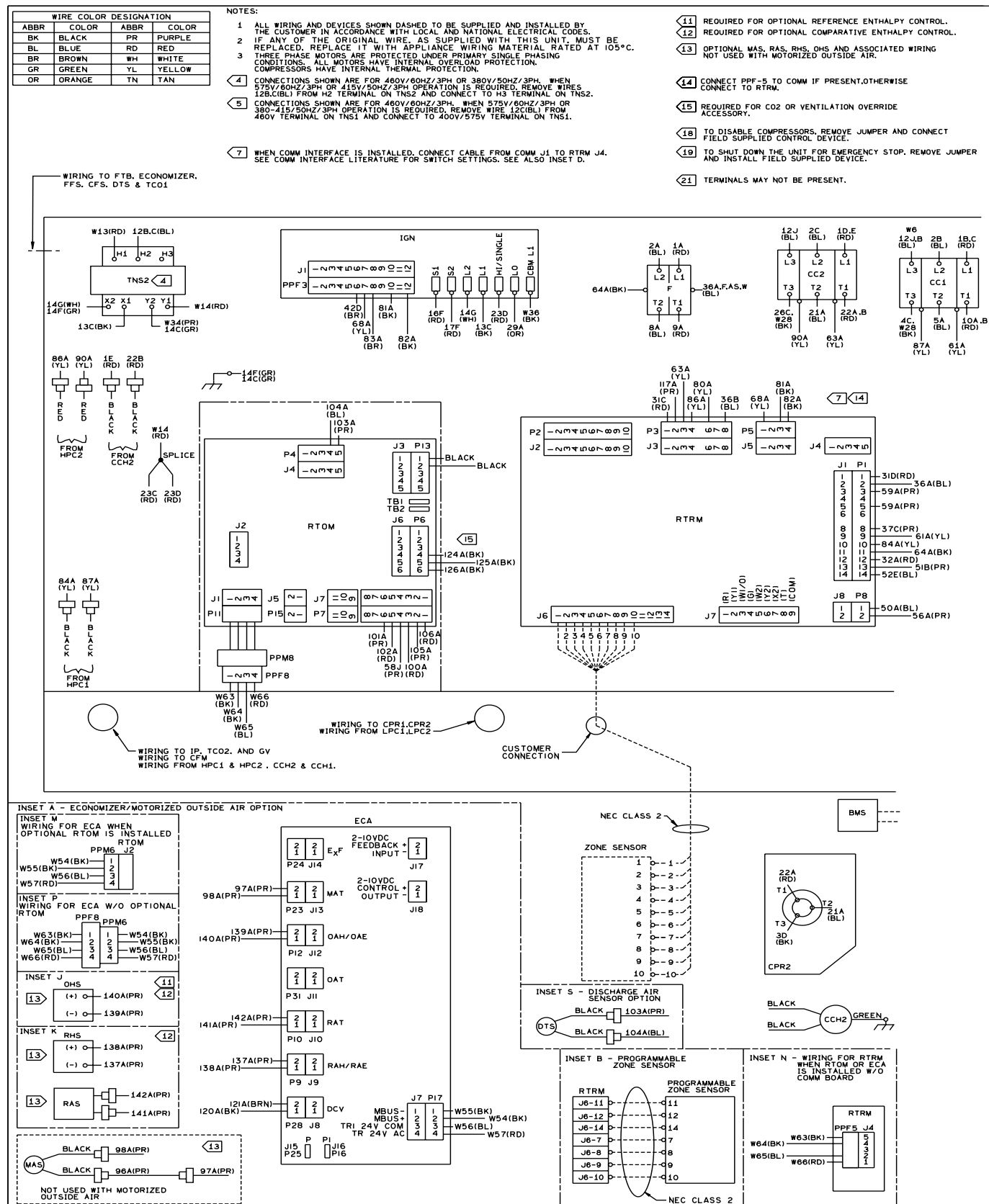


Diagram 39 Connection Electrical - 400 - 575v - Cooling / Gas Heat (YC 211)

2309-3178



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 DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.

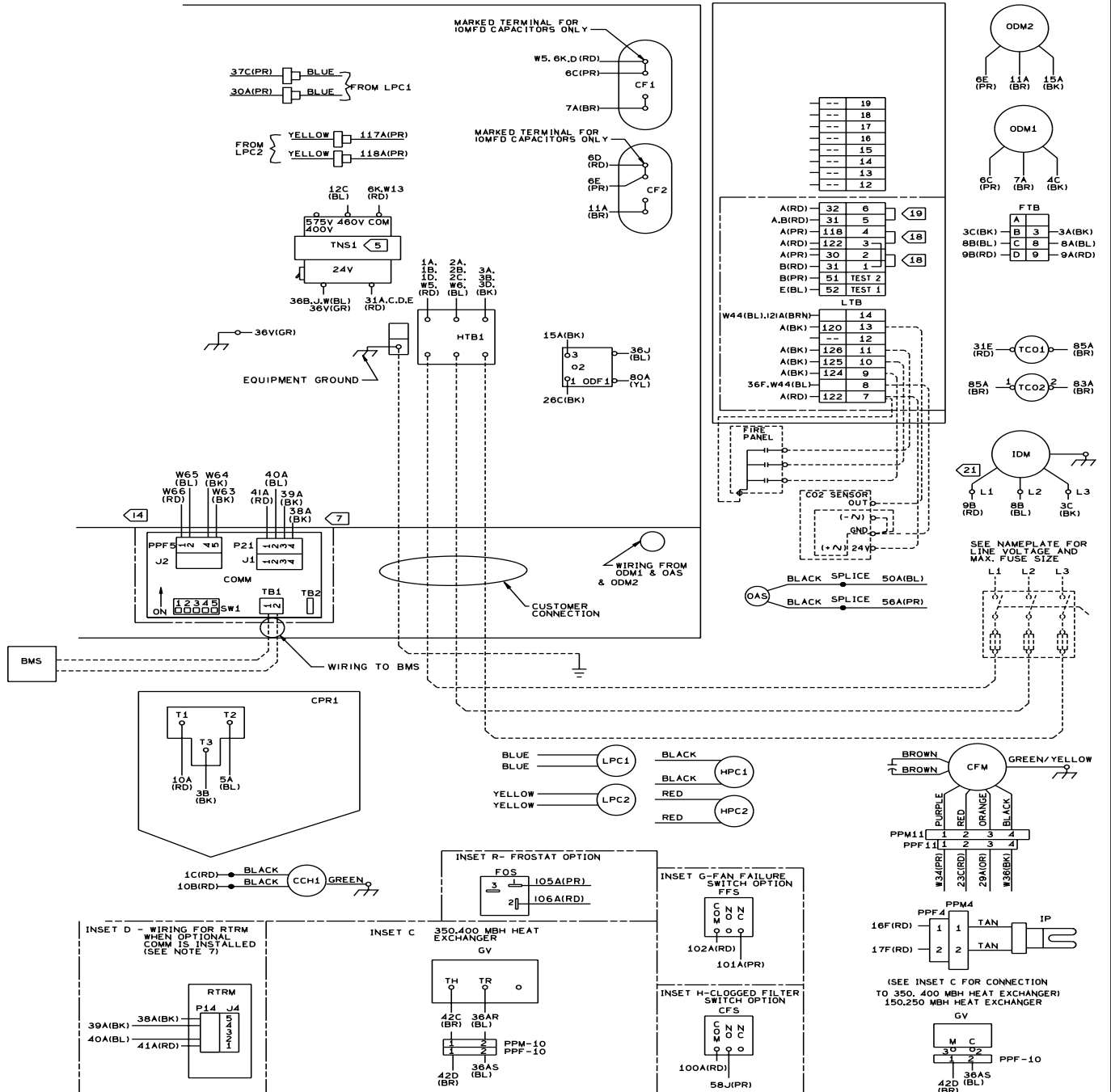
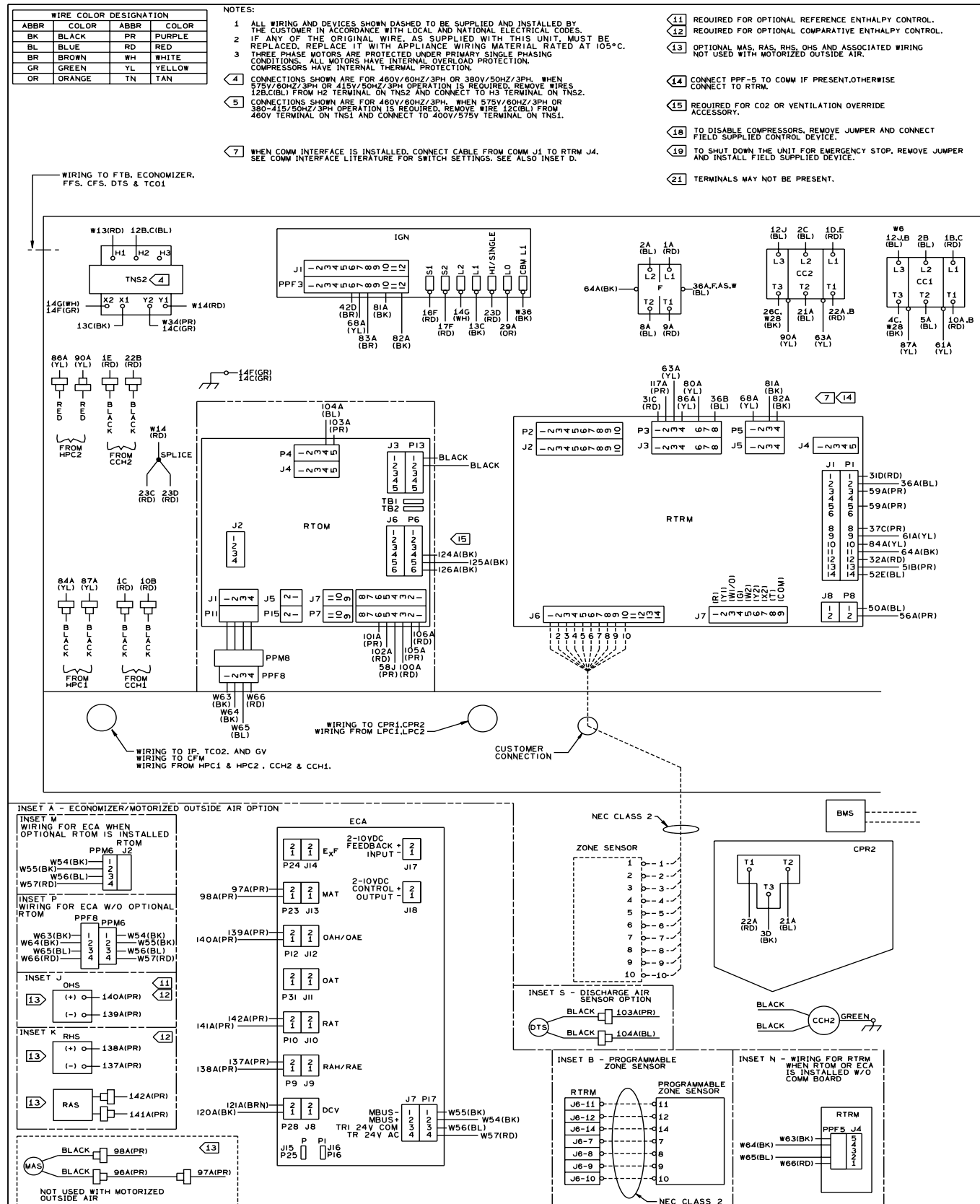


Diagram 40 Connection Electrical - 400 - 575v - Cooling / Gas Heat (YC 200, 240, 250, 300, 301)

2309-3182



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.

2309-3368



WARNING

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

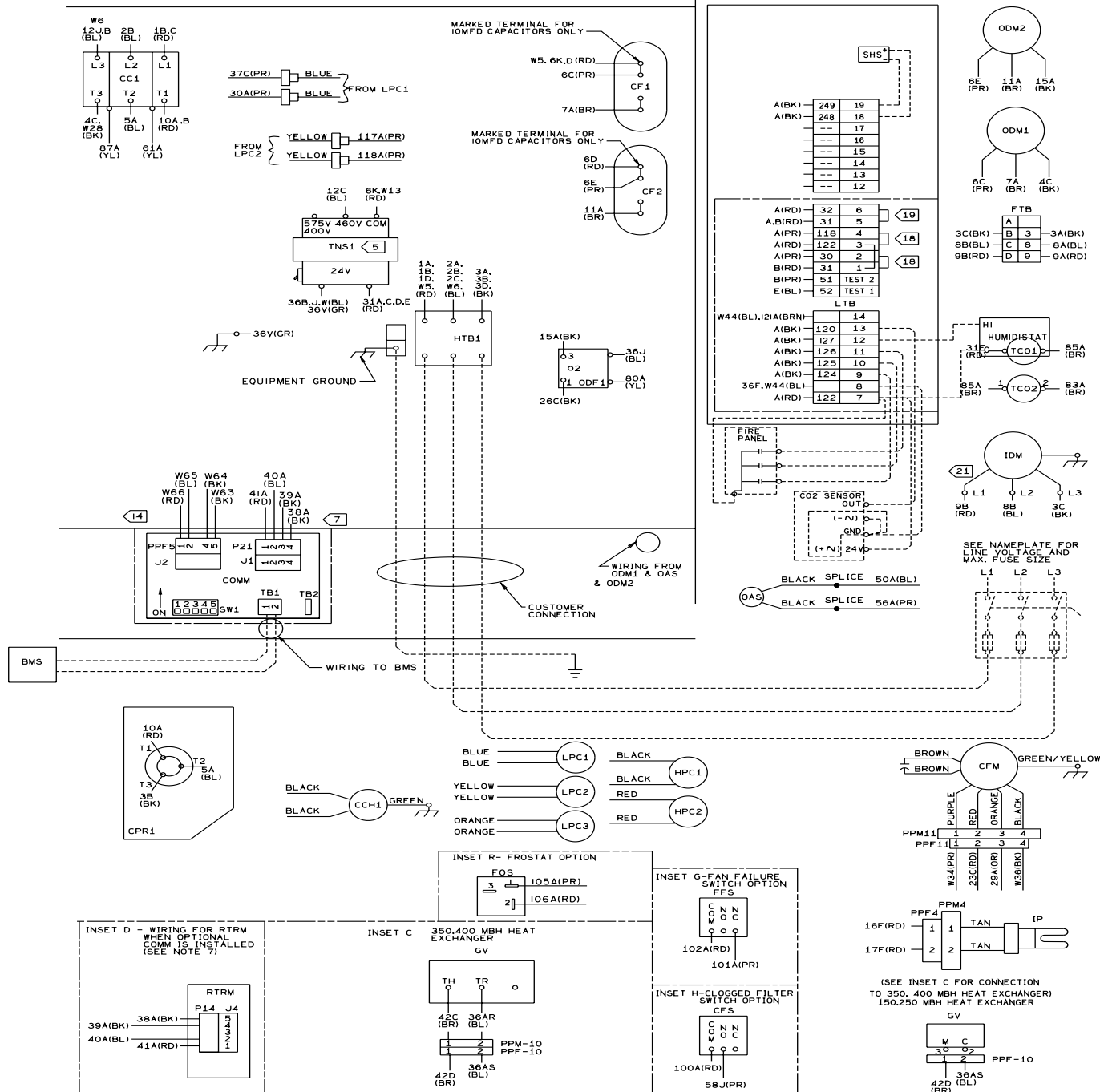
AVERTISSEMENT

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

CAUTION

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



2309-3372



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.



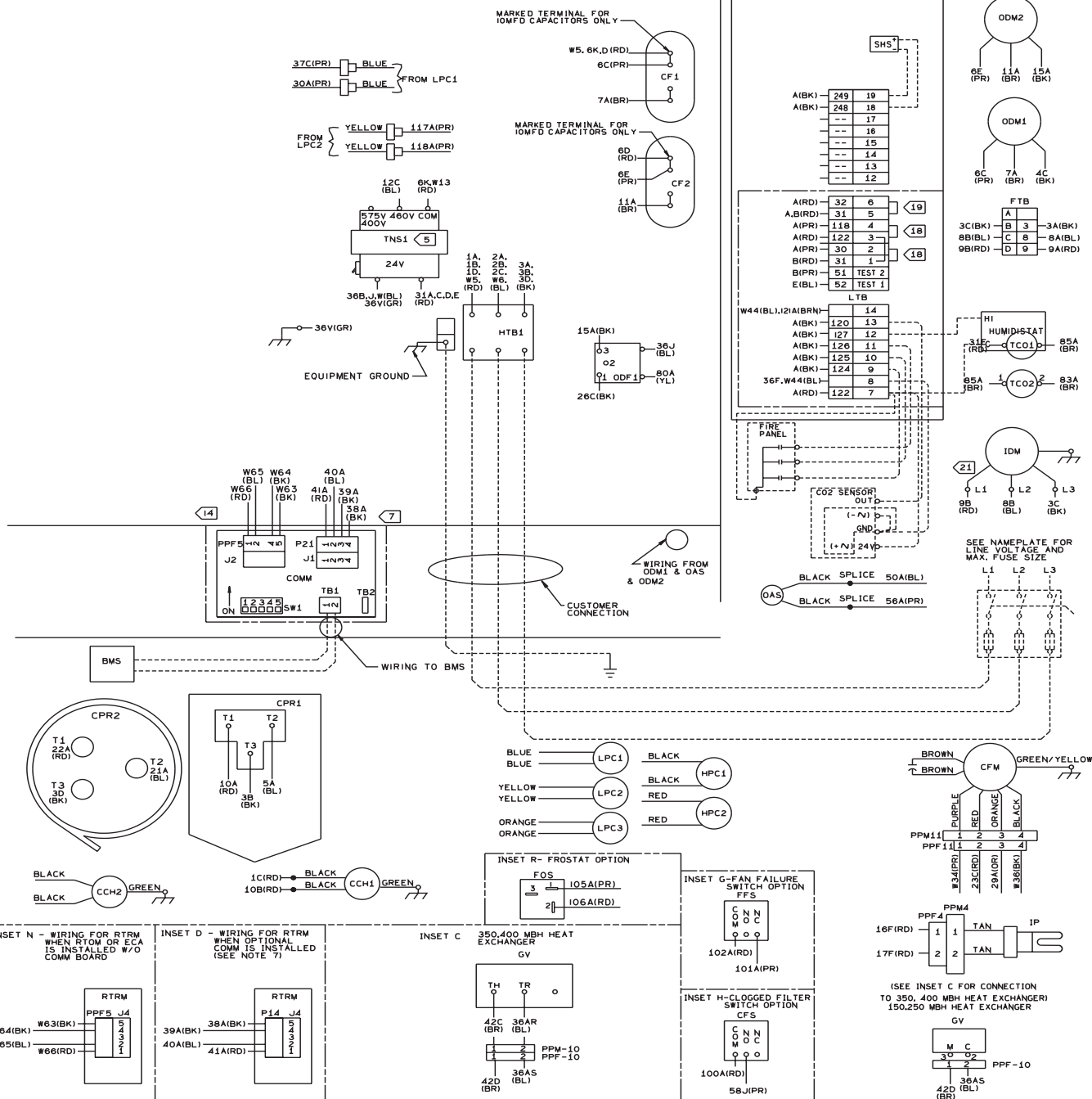
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER DES
BLESSURES CORPORELLES SEVERES
OU LA MORT.



CAUTION

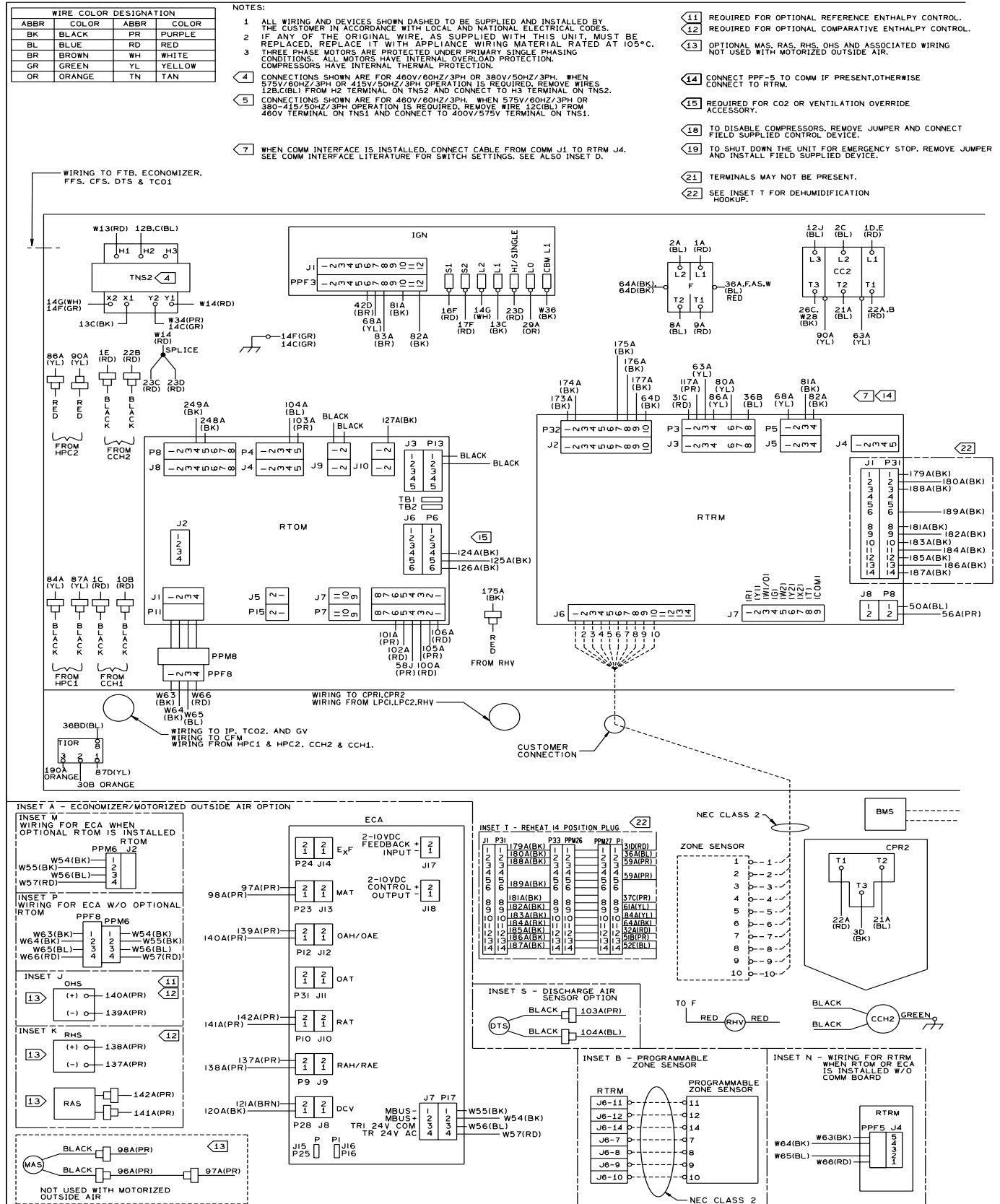
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF
CONDUCTORS.
FAILURE TO DO SO MAY CAUSE
DAMAGE TO THE EQUIPMENT.



2309-3372 C

Diagram 43 Connection Electrical - 400 - 575v -Cooling / Gas Heat (YC 241- With Dehumidification Option)

2309-3376



2309-3393



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 DECONNECTER LA SOURCE
 ELECTRIQUE AVANT D'EFFECTUER
 L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3360



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.



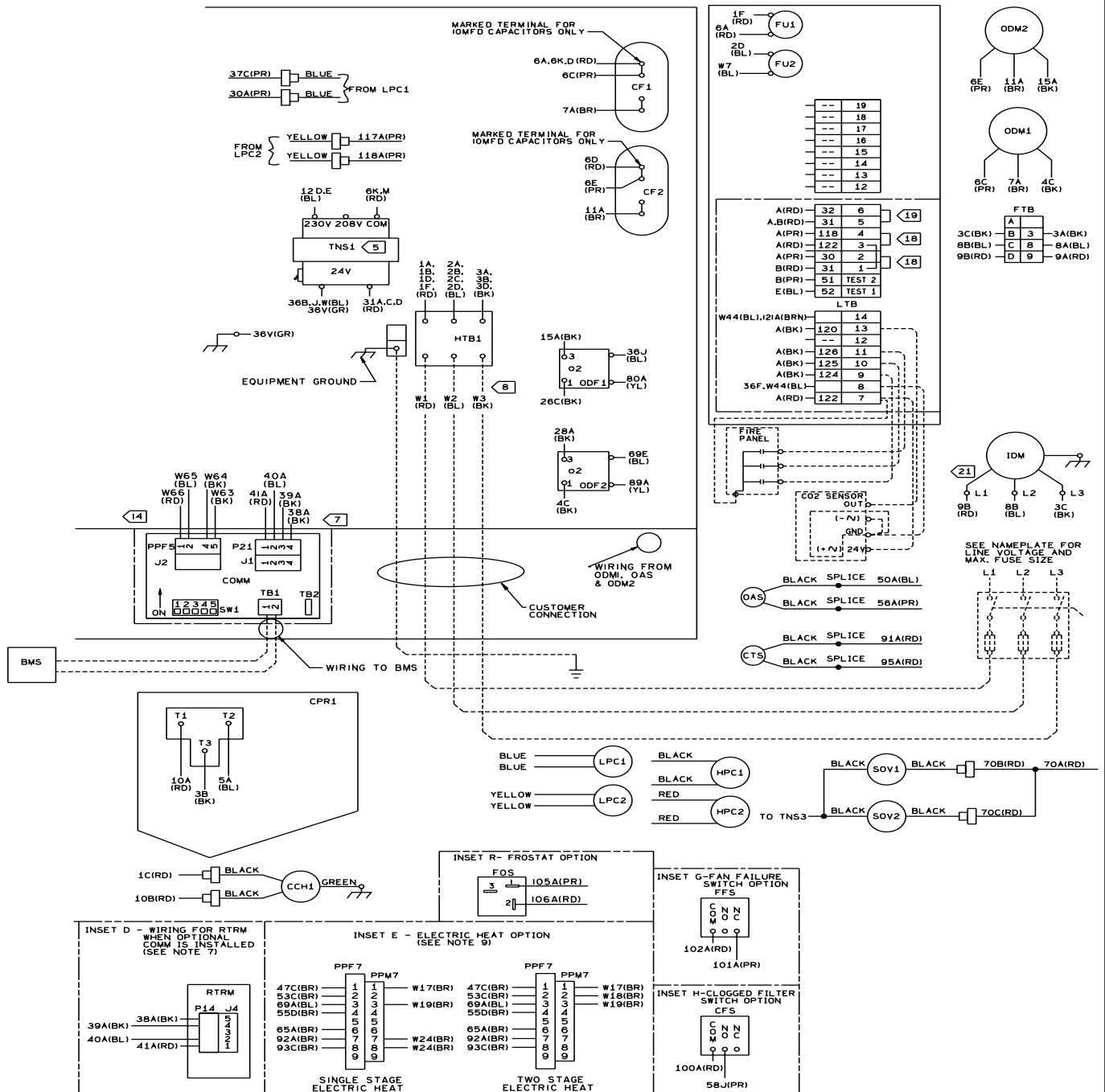
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUÉS A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3149



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.



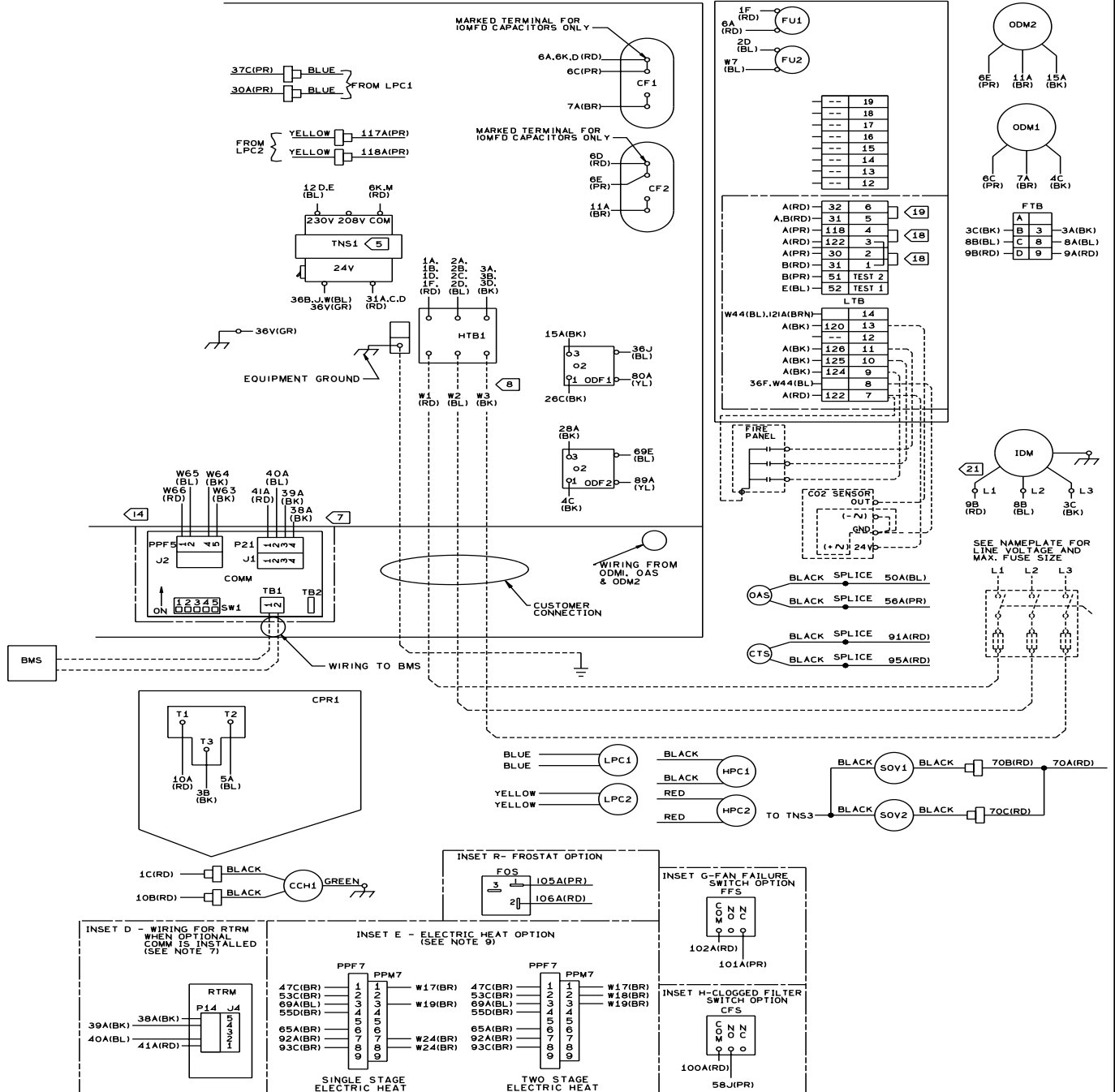
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EFFECTUER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3171



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'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
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.

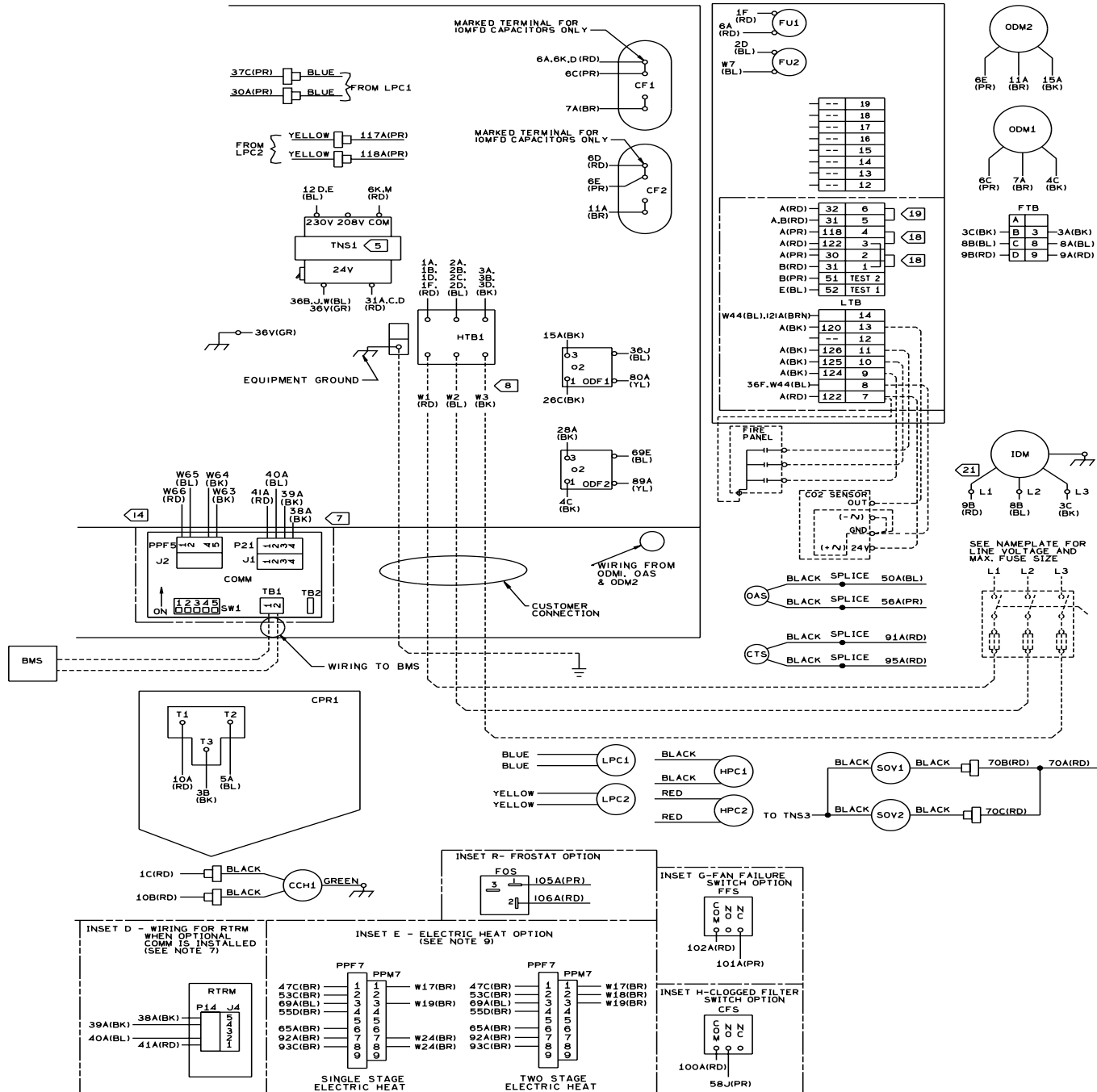


Diagram 48 Connection Electrical - 208 - 230v (WC 150)

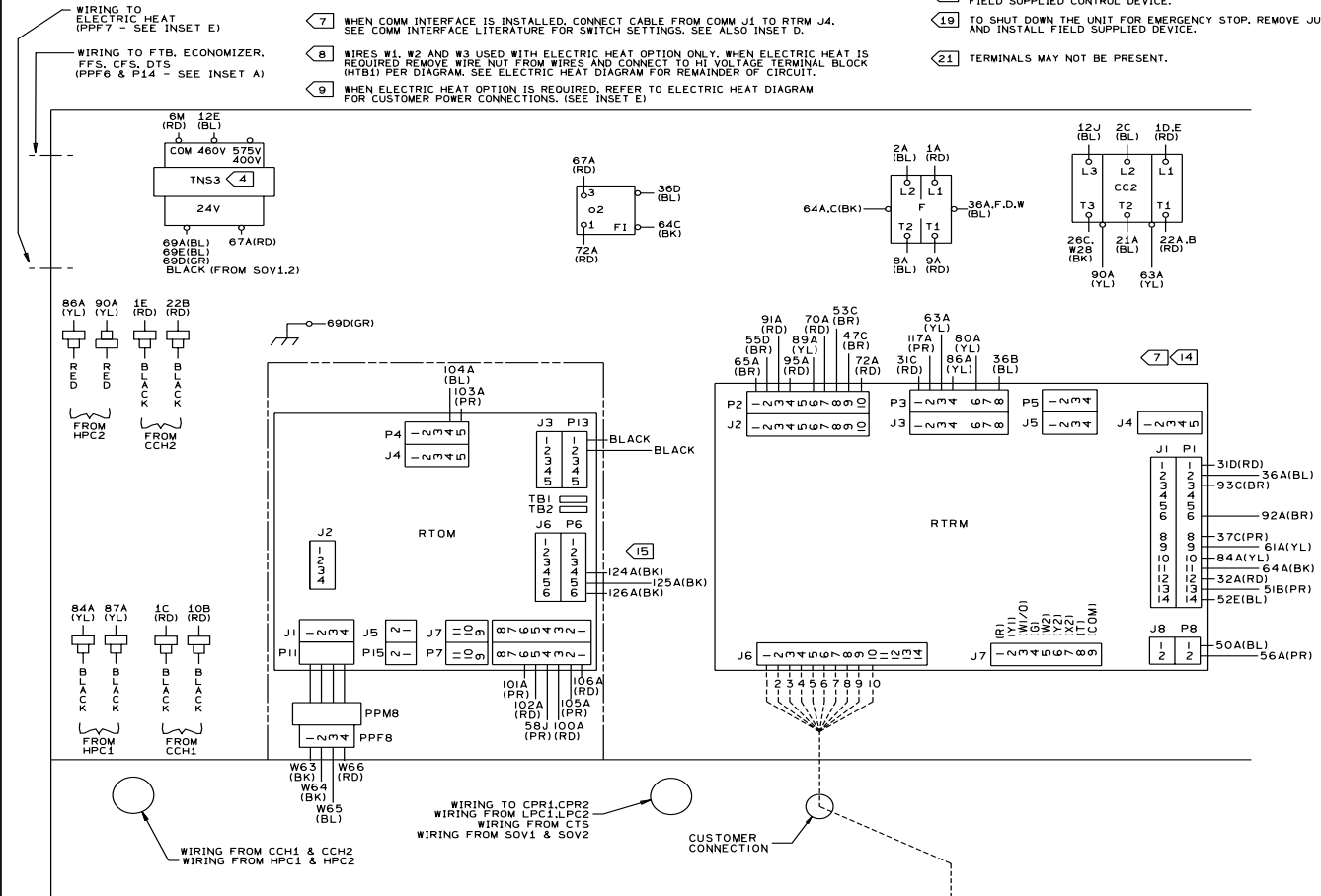
2309-3394

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	PR	PURPLE
BL	BLUE	RD	RED
BR	BROWN	WH	WHITE
GR	GREEN	YL	YELLOW
OR	ORANGE		

NOTES:

- ALL WIRING AND DEVICES SHOWN DASHED TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
- IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105°C.
- THREE PHASE MOTORS ARE PROTECTED UNDER PRIMARY PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION.
- CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH. WHEN 575V/60HZ/3PH OR 380-415V/50HZ/3PH OPERATION IS REQUIRED, REMOVE WIRE 12E(BL) FROM 460V TERMINAL ON TNS3 AND CONNECT TO 400V/575V TERMINAL ON TNS3.
- CONNECTIONS SHOWN ARE FOR 460V/60HZ/3PH. WHEN 575V/60HZ/3PH OR 380-415V/50HZ/3PH OPERATION IS REQUIRED, REMOVE WIRES 12D(BL) FROM 460V TERMINAL ON TNS1 AND CONNECT TO 400V/575V TERMINAL ON TNS1.
- WHEN COMM INTERFACE IS INSTALLED, CONNECT CABLE FROM COMM J1 TO RTRM J4.
- WIRES W1, W2 AND W3 USED WITH ELECTRIC HEAT OPTION ONLY. WHEN ELECTRIC HEAT IS REQUIRED REMOVE WIRE NUT FROM WIRES AND CONNECT TO HI VOLTAGE TERMINAL BLOCK (HTB1) PER DIAGRAM. SEE ELECTRIC HEAT DIAGRAM FOR REMAINDER OF CIRCUIT.
- WHEN ELECTRIC HEAT OPTION IS REQUIRED, REFER TO ELECTRIC HEAT DIAGRAM FOR CUSTOMER POWER CONNECTIONS. (SEE INSET E)

- REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
- REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
- OPTIONAL WAS, RAS, RNS, OHS AND ASSOCIATED WIRING NOT USED WITH MOTORIZED OUTSIDE AIR.
- CONNECT PPF-5 TO COMM IF PRESENT, OTHERWISE CONNECT TO RTRM.
- REQUIRED FOR CO2 OR VENTILATION OVERRIDE ACCESSORY.
- TO DISABLE COMPRESSORS, REMOVE JUMPER AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
- TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND INSTALL FIELD SUPPLIED DEVICE.
- TERMINALS MAY NOT BE PRESENT.



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.



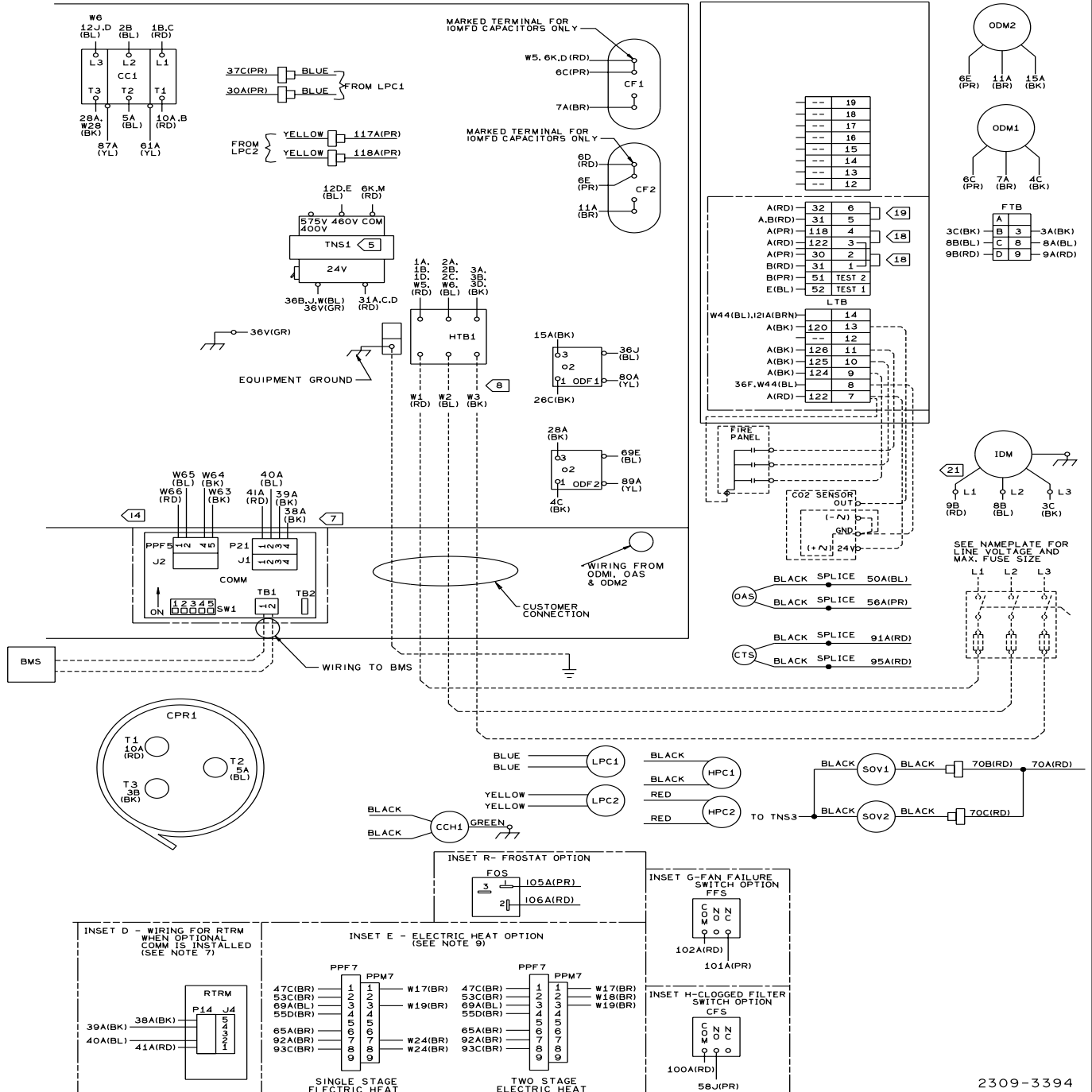
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
L'ENTRETIEN PEUT ENTRAÎNER 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.



2309-3394

2309-3174



HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER
INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
FAILURE TO DISCONNECT POWER
BEFORE SERVICING CAN CAUSE SEVERE
PERSONAL INJURY OR DEATH.

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

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

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.

2309-3361



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.



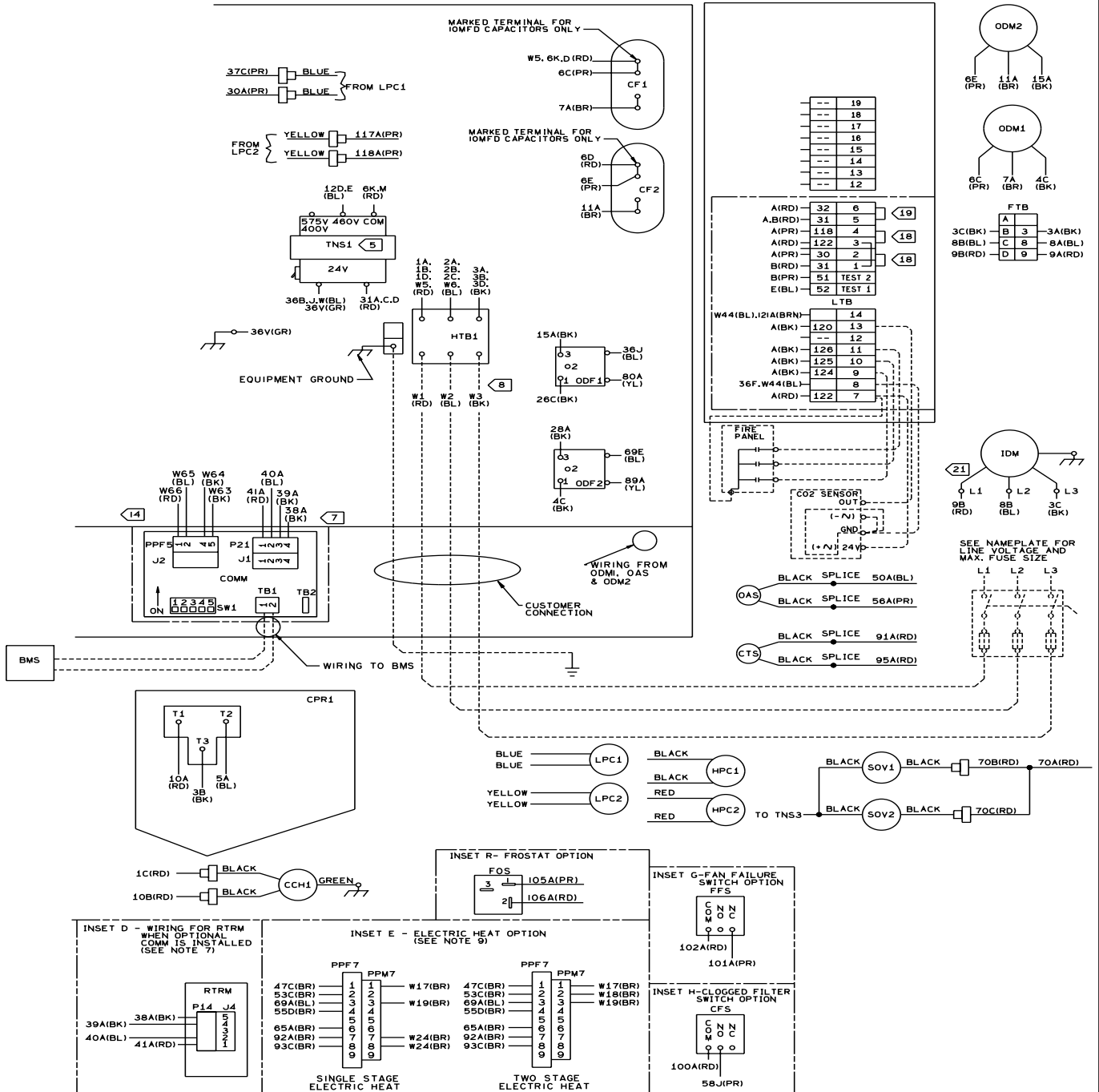
AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISJONCTEURS SITUES A DISTANCE
AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'EXECUTER
L'ENTRETIEN PEUT ENTRAINER DES
BLESSURES CORPORELLES SEVERES
OU LA MORT.



CAUTION

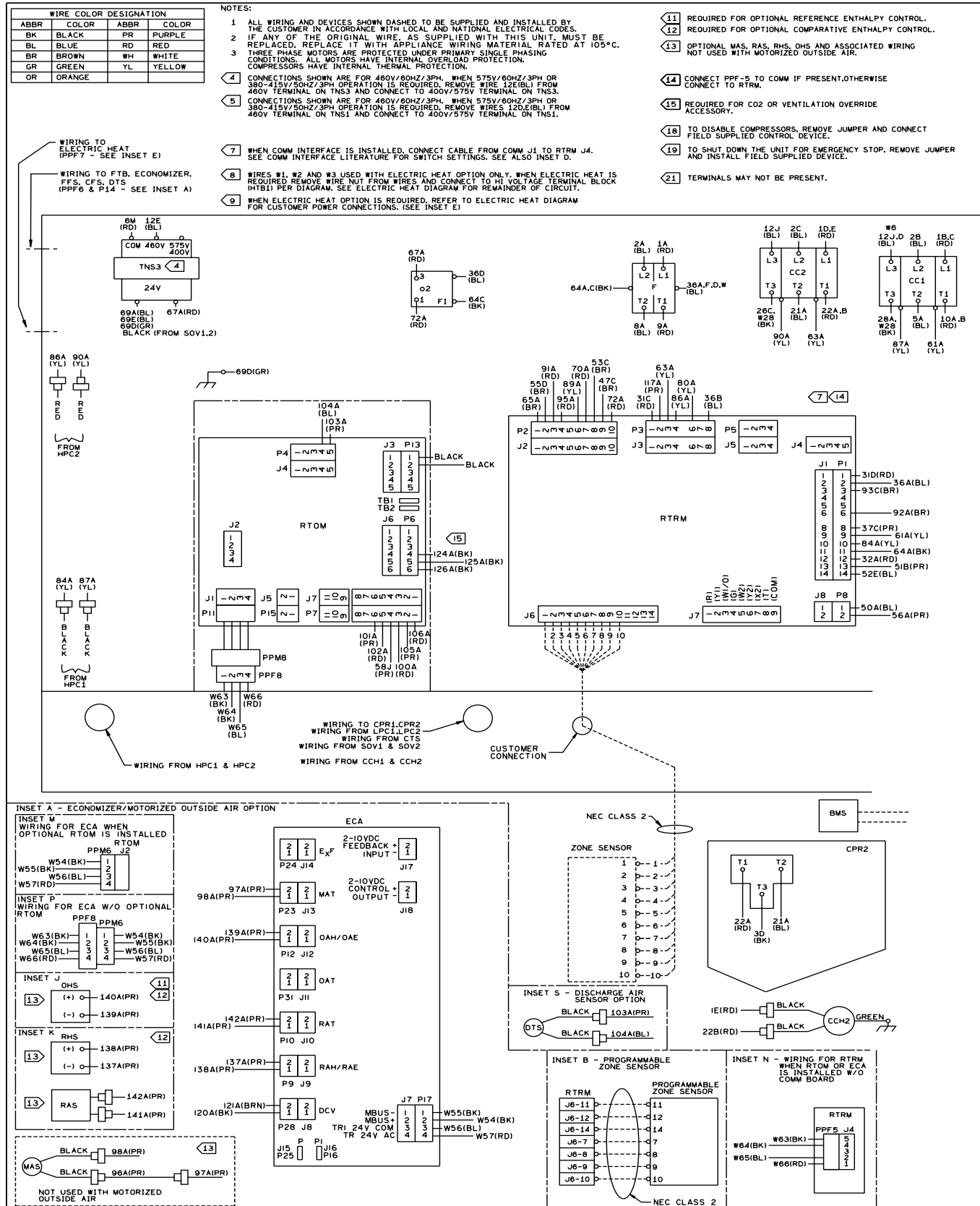
USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF
CONDUCTORS.
FAILURE TO DO SO MAY CAUSE
DAMAGE TO THE EQUIPMENT.



2309-3361 B

Diagram 51 Connection Electrical - 400 - 575v (WC 120, 240)

2309-3170



WARNING

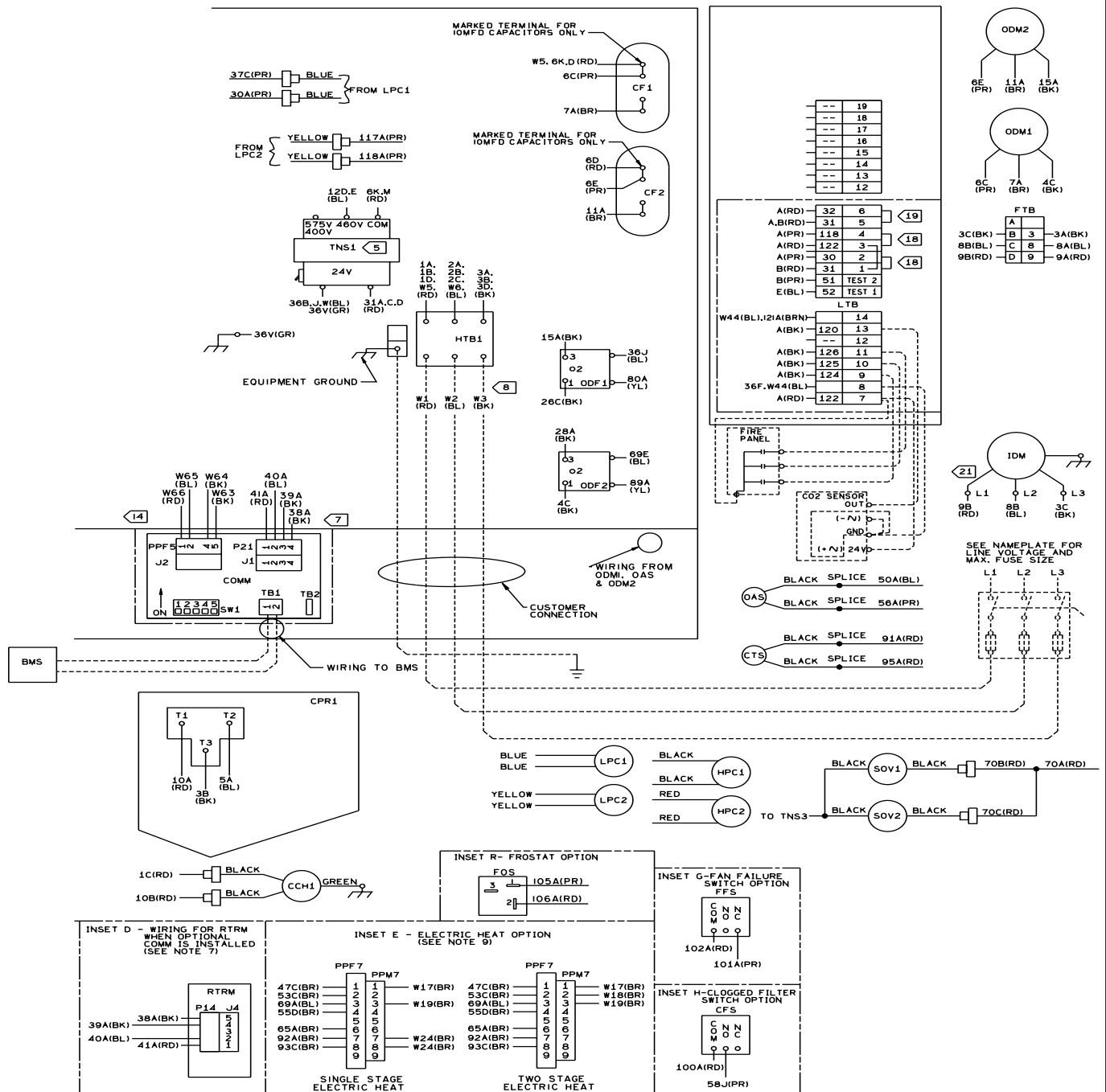
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING.
FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.

AVERTISSEMENT

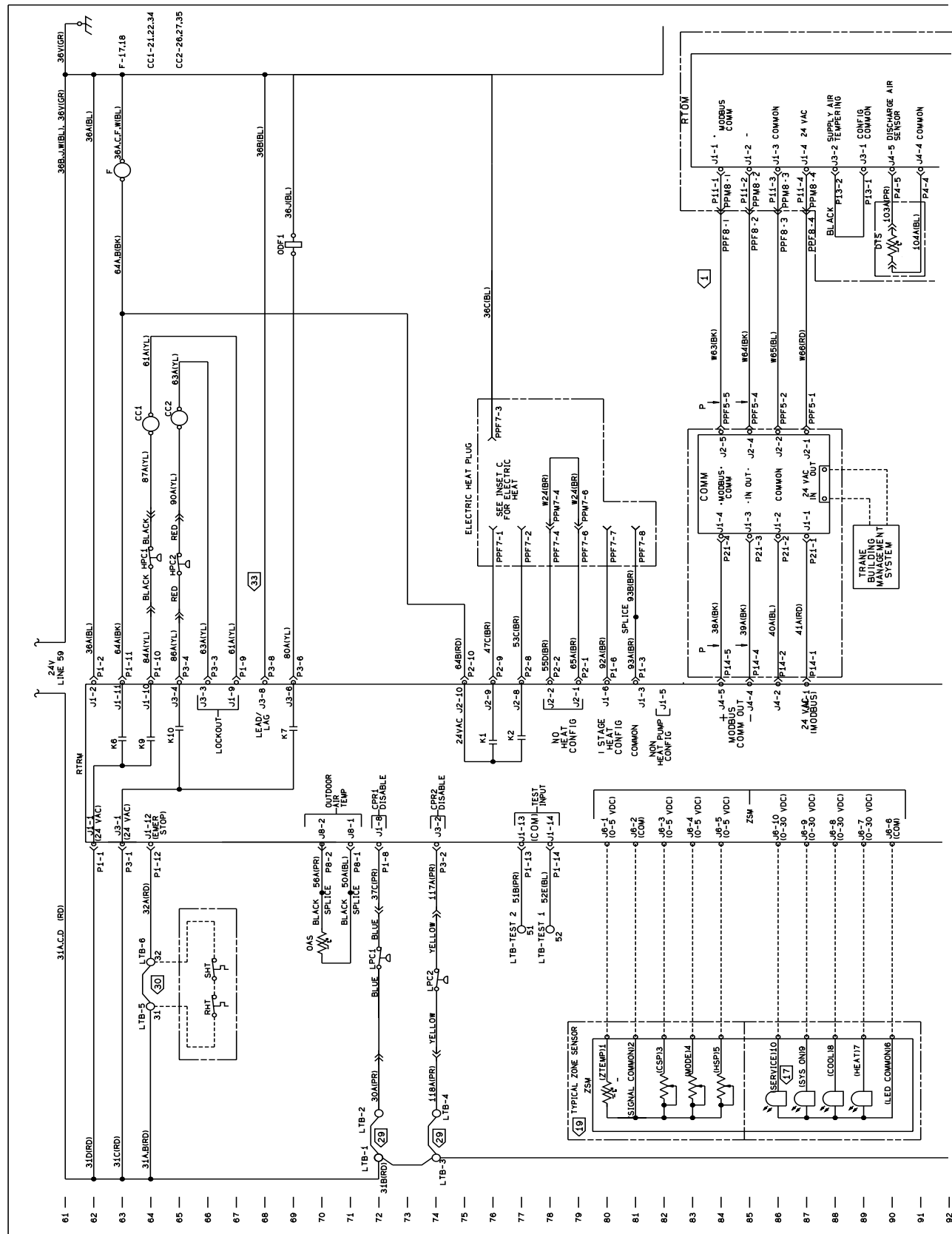
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES ELECTRIQUES INCLUANT LES DISJONCTEURS SITUES A DISTANCE AVANT D'EXECUTER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE ELECTRIQUE AVANT D'EXECUTER L'ENTRETIEN PEUT ENTRAÎNER DES BLESSURES CORPORELLES SEVERES OU LA MORT.

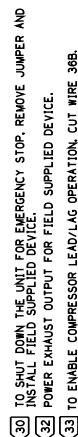
CAUTION

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.



2309-3391





126



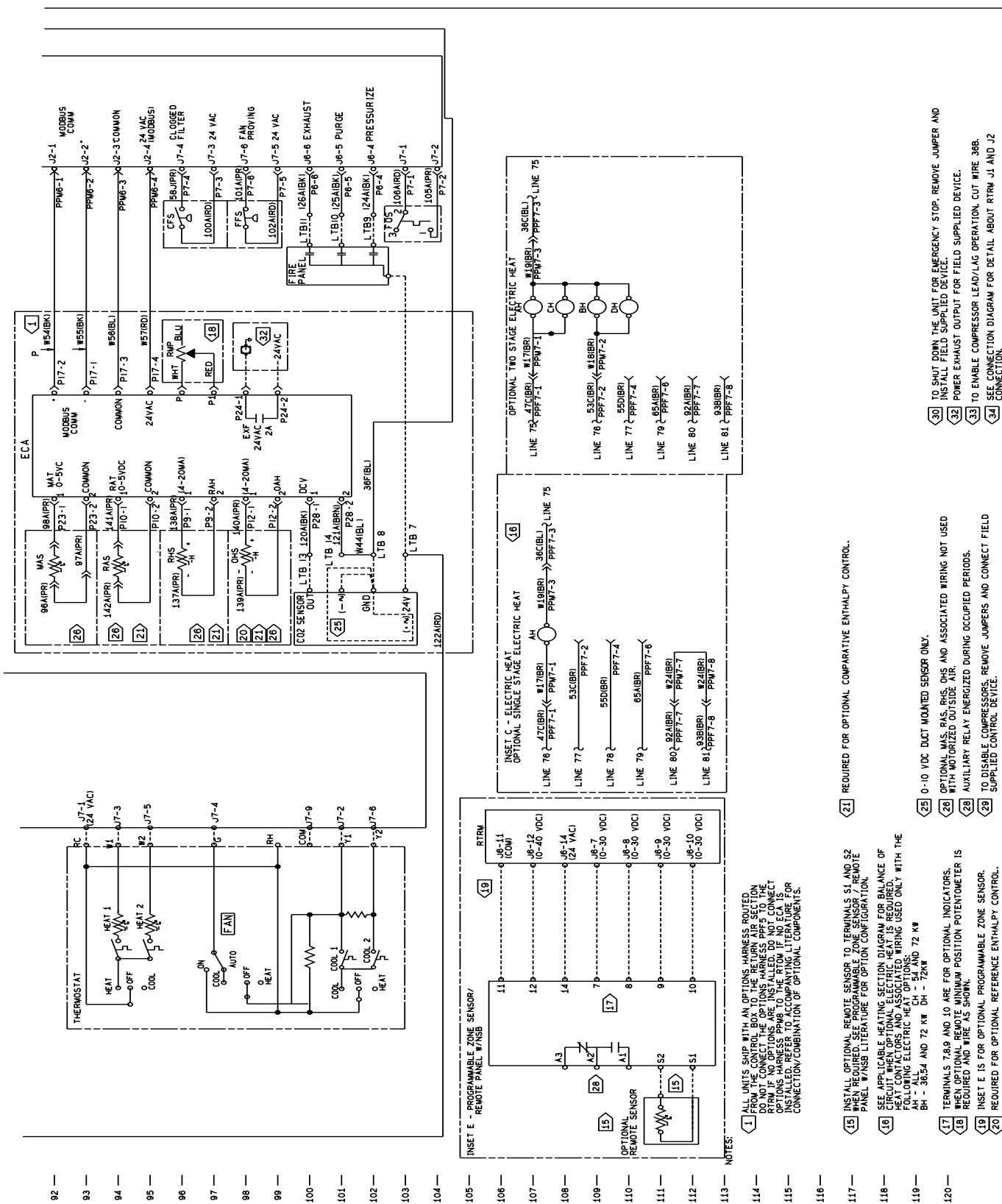
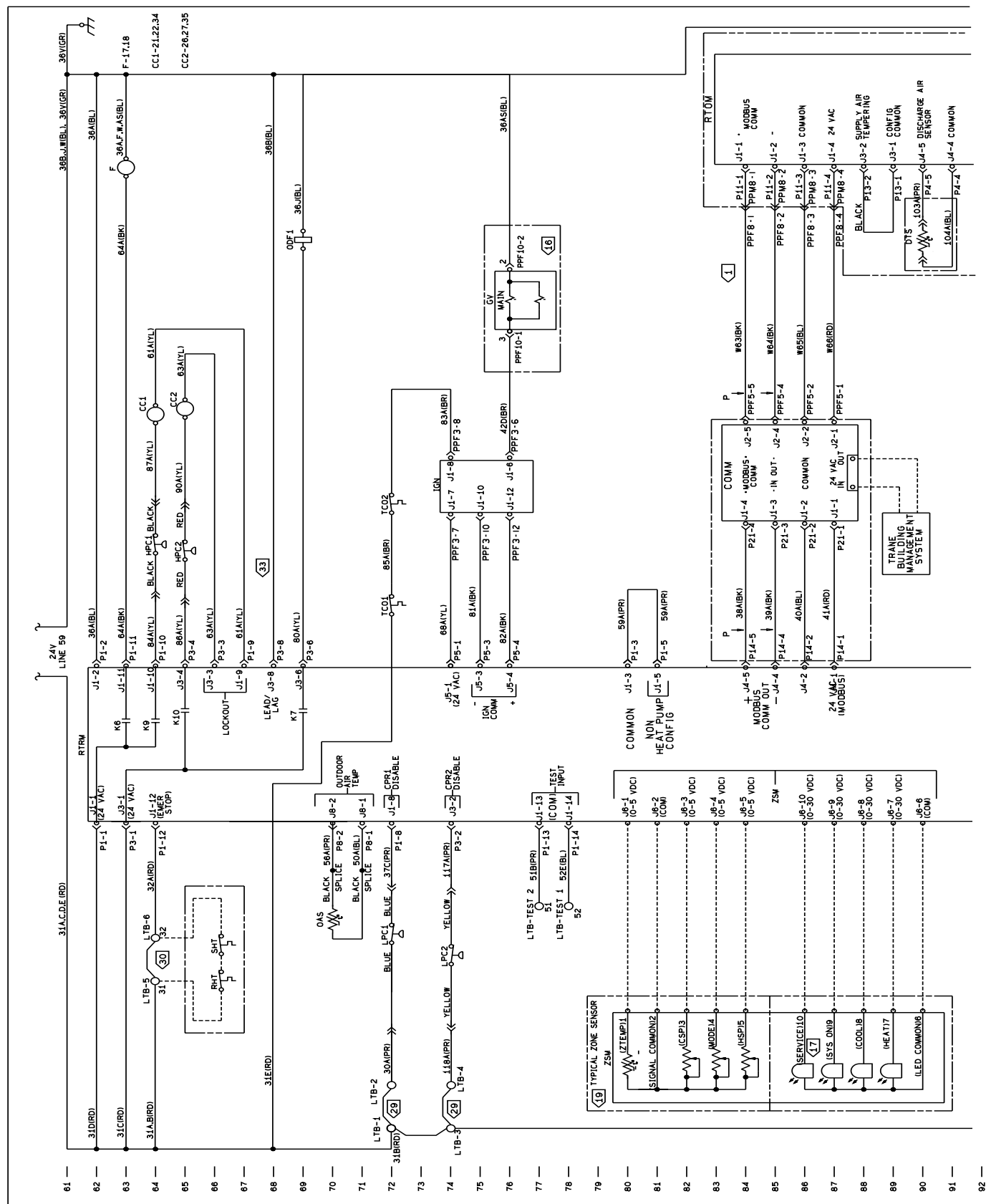
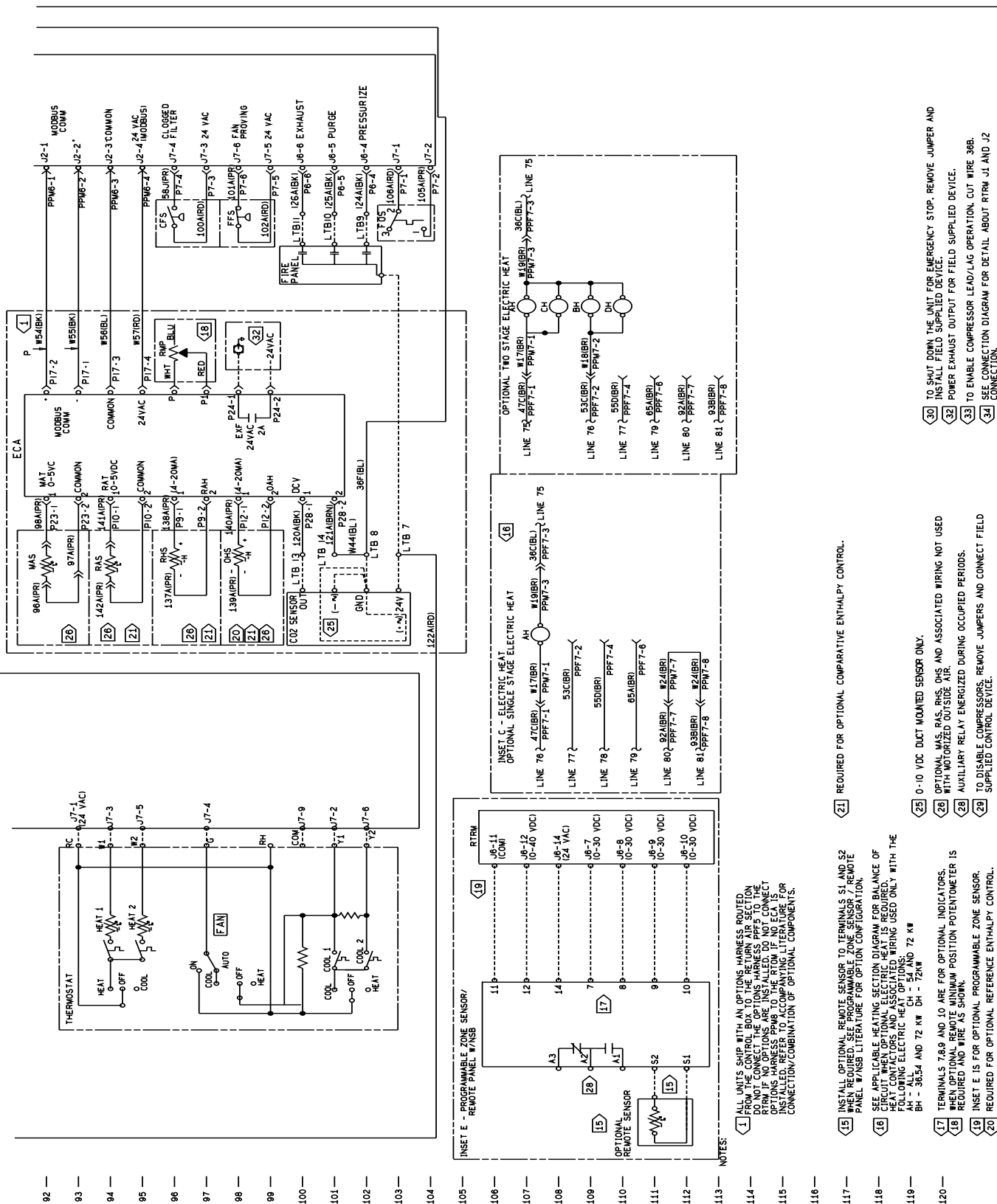


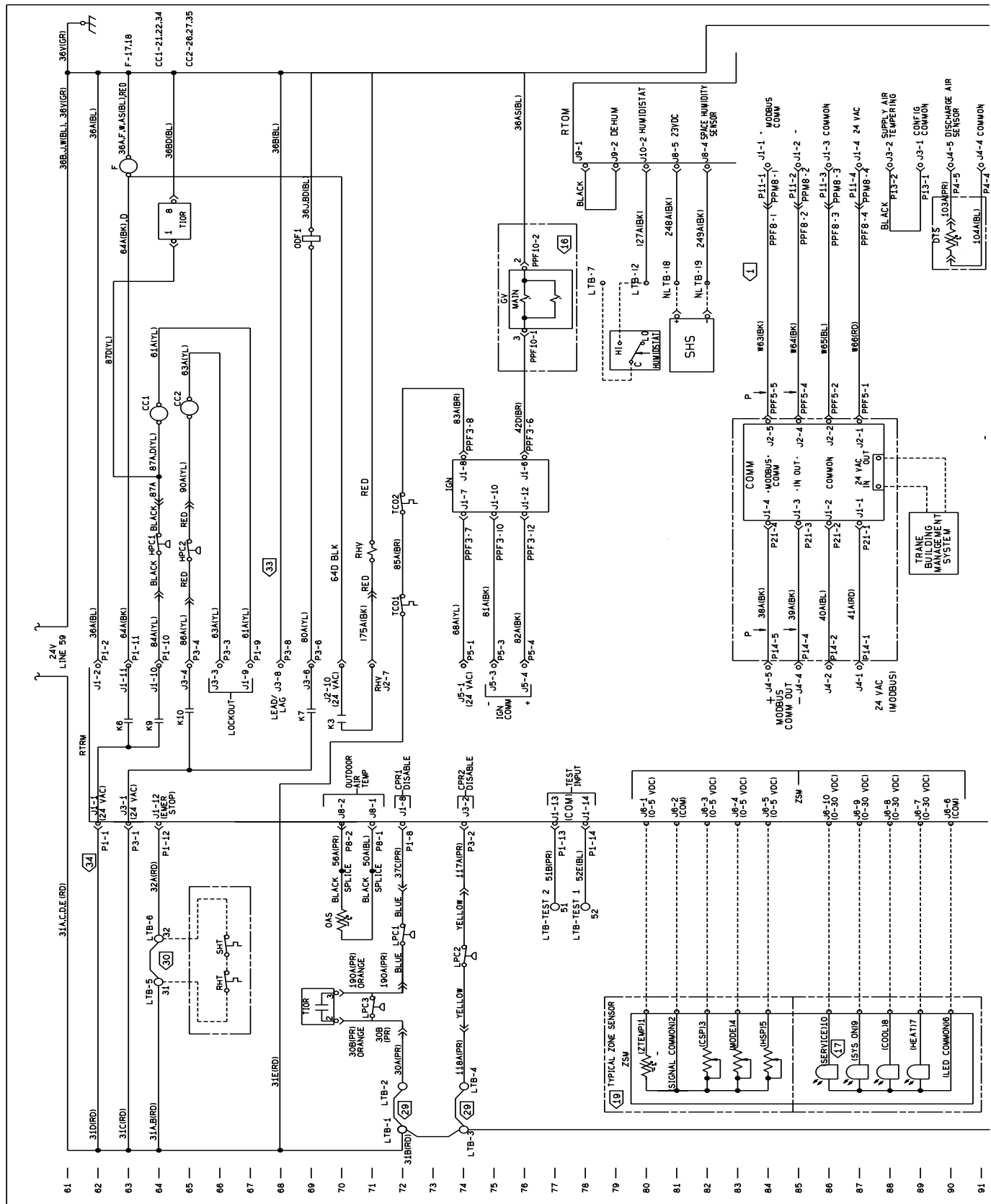
Diagram 54
Schematic Electrical - 200, 208 - 575v - Control - Micro Processor (YC150 - 301)

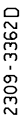
2309-3390



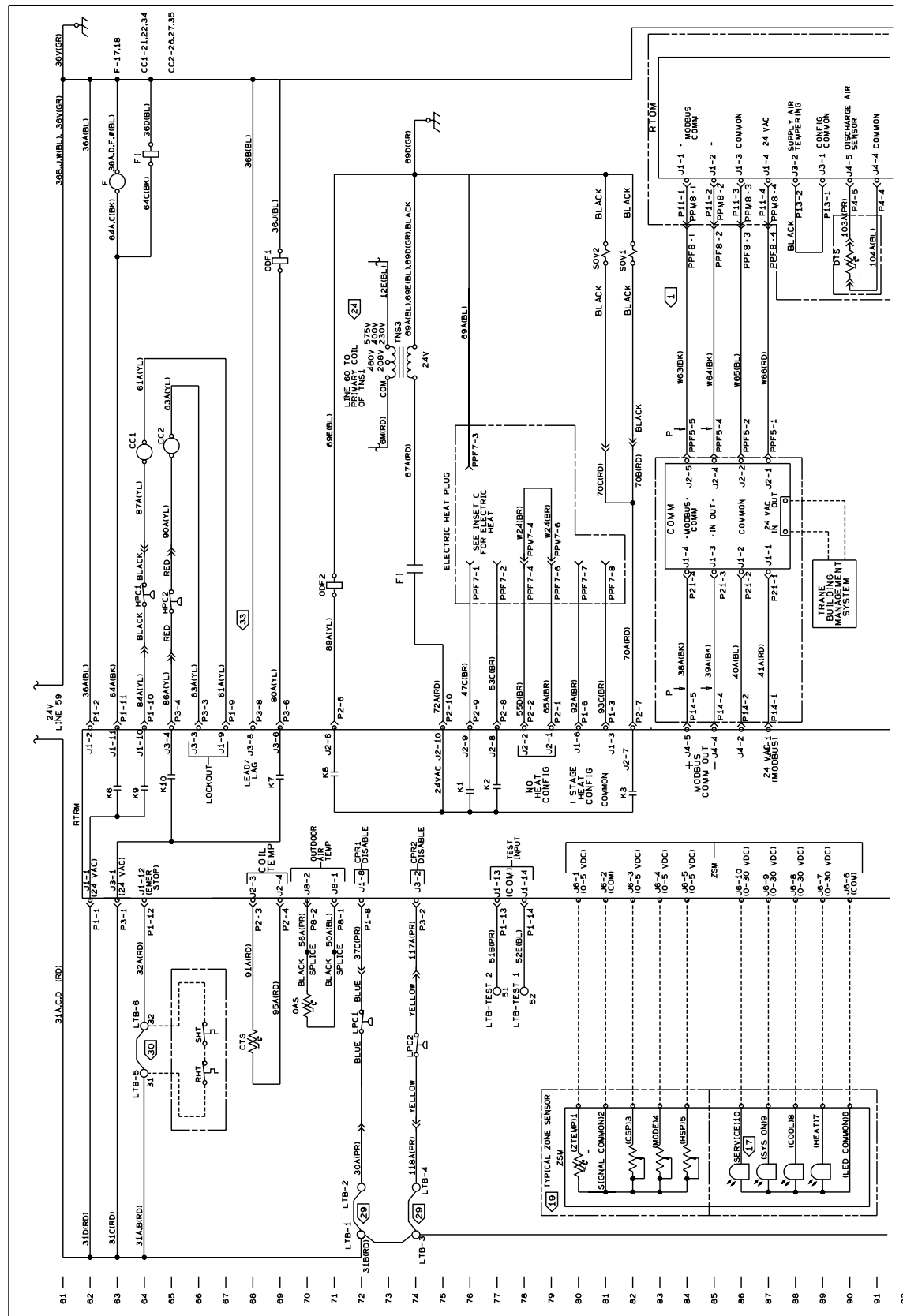


2309-3362





2309-3392



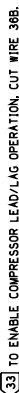
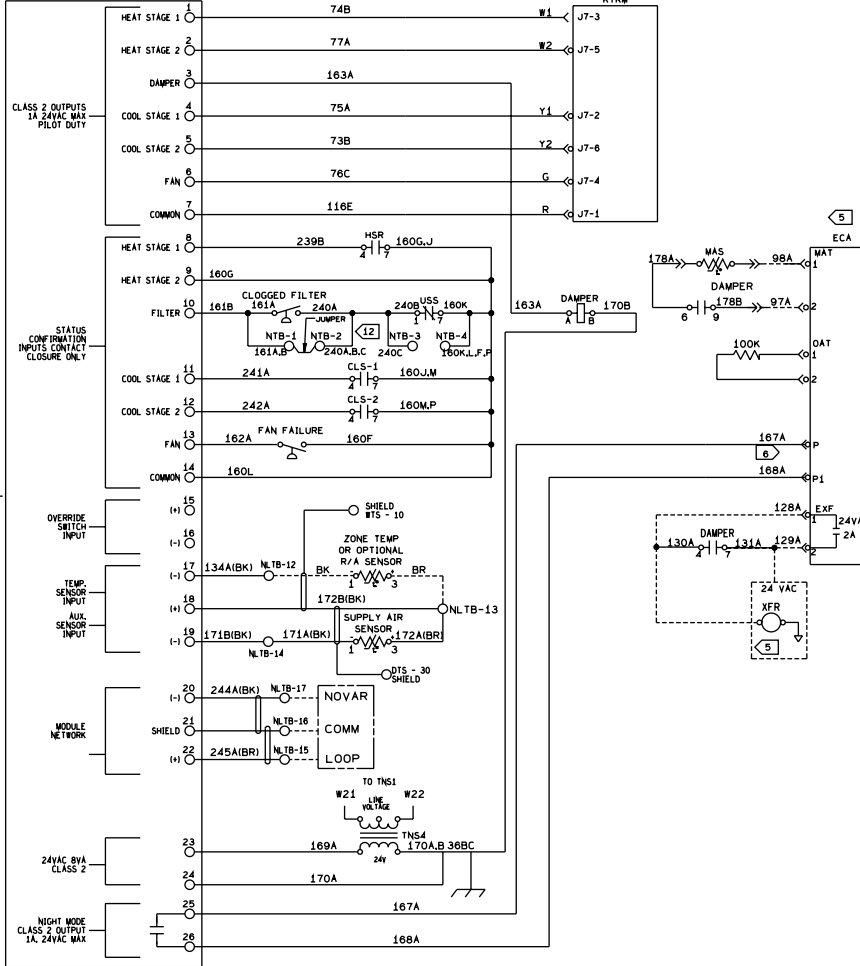


Diagram 57 Novar 2024 with Conventional Thermostat Interface

2309-3194

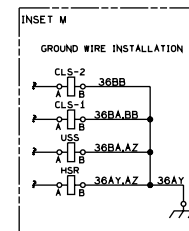
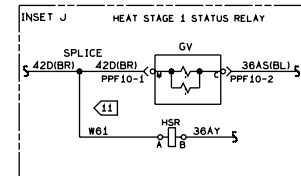
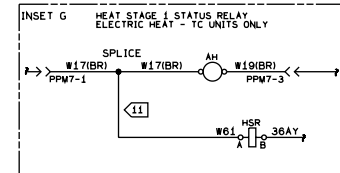
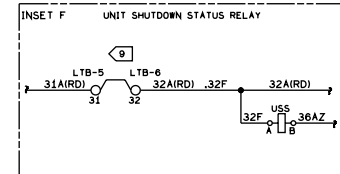
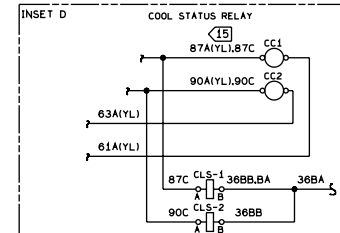
NOVAR-ETM 2024



LEGEND	
CLS-1	COOL STATUS RELAY STAGE 1
CLS-2	COOL STATUS RELAY STAGE 2
ECA	ECONOMIZER ACTUATOR
HSR	HEAT STATUS RELAY
LTB	LOW VOLTAGE TERMINAL BLOCK
MAS	MIXED AIR SENSOR
NTB	NOVAR TERMINAL BLOCK
RTRM	RELATEL REFRIGERATION MODULE
USS	UNIT SHUTDOWN STATUS RELAY
XFR	EXHAUST FAN RELAY
ZSM	ZONE SENSOR MODULE

WIRE COLOR CHART

ABBR	COLOR
BL	BLUE
BK	BLACK
PR	PURPLE
RD	RED
BR	BROWN



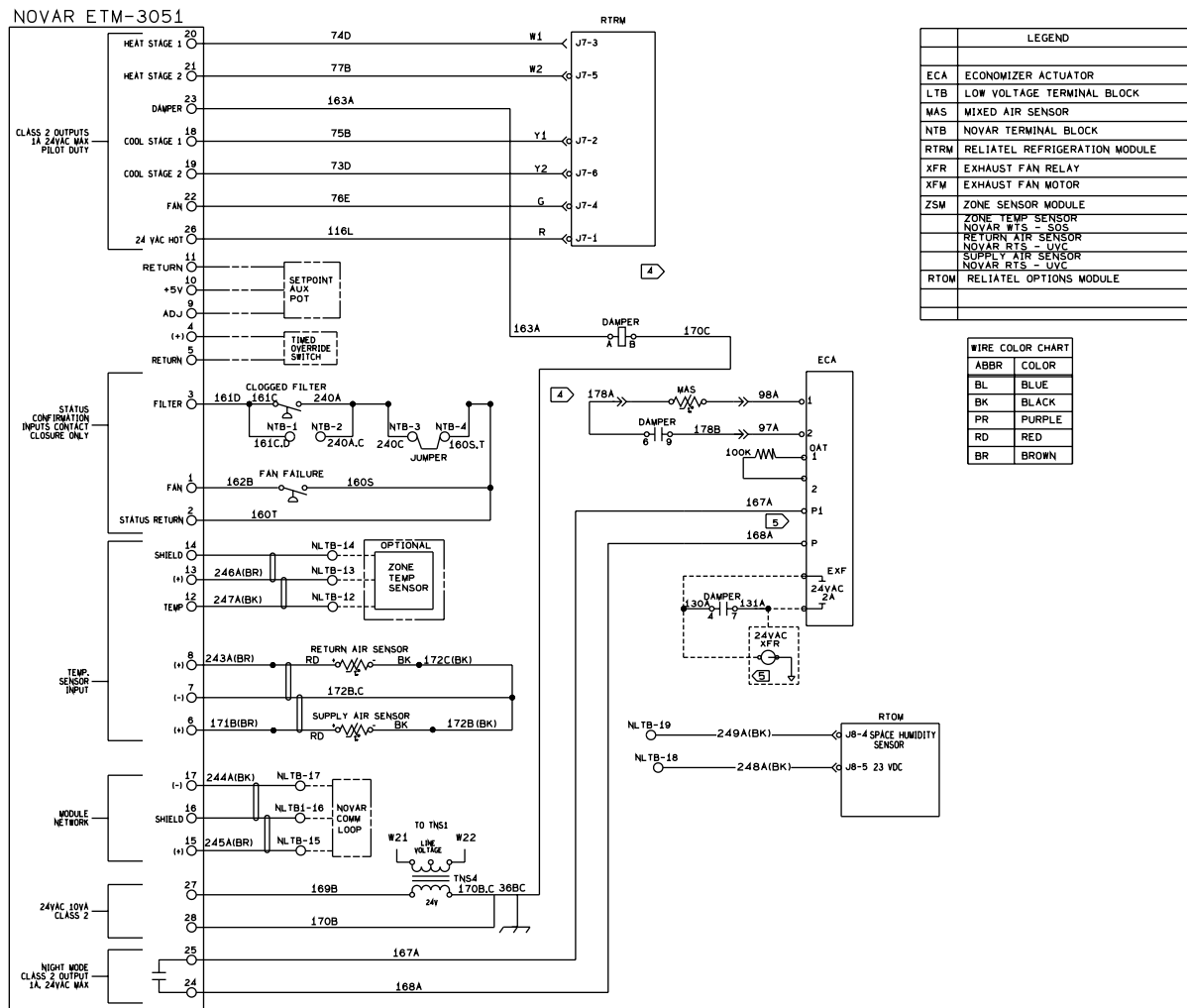
NOTES:

- THIS UNIT HAS FACTORY INSTALLED NOVAR CONTROLS. REFER TO THIS DRAWING FOR NOVAR INTERFACE TO UNIT. SEE UNIT DIAGRAMS FOR BALANCE OF WIRING.
- PLACE WIRING DIAGRAM LABEL ON INSIDE OF ACCESS PANEL.
- 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.
- ECONOMIZER MIN. POS. IS OVERRIDDEN TO FULL CLOSED DURING UNOCCUPIED PERIODS. PLACE JUMPER BETWEEN P AND P1 TO DISABLE THIS FUNCTION.
- TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE JUMPER AND WIRE SMOKE DETECTOR BETWEEN THE TERMINALS. RELABEL/REASSIGN NOVAR "FILTER STATUS" INPUT AS "SMOKE DETECTOR STATUS."
- FOR STATUS RELAY GROUND WIRE CONNECTIONS SEE INSET M.
- CONNECT WIRE W61 IN THE HEAT SECTION OF THE UNIT AT THE GAS VALVE OR ELECTRIC HEAT RELAY.
- TO USE NOVAR STATUS INPUT AS CLOGGED FILTER, REMOVE THE JUMPER FROM NTB-1,2 AND INSTALL ON NTB-3,4.
- CONNECT WIRE 87C WITH WIRE 87A(YL) AT CC1 AND WIRE 90C WITH WIRE 90A(YL) AT CC2.

FORM NO. 2309-3194A

Diagram 58
Novar 3051 with Conventional Thermostat Interface

2309-3195



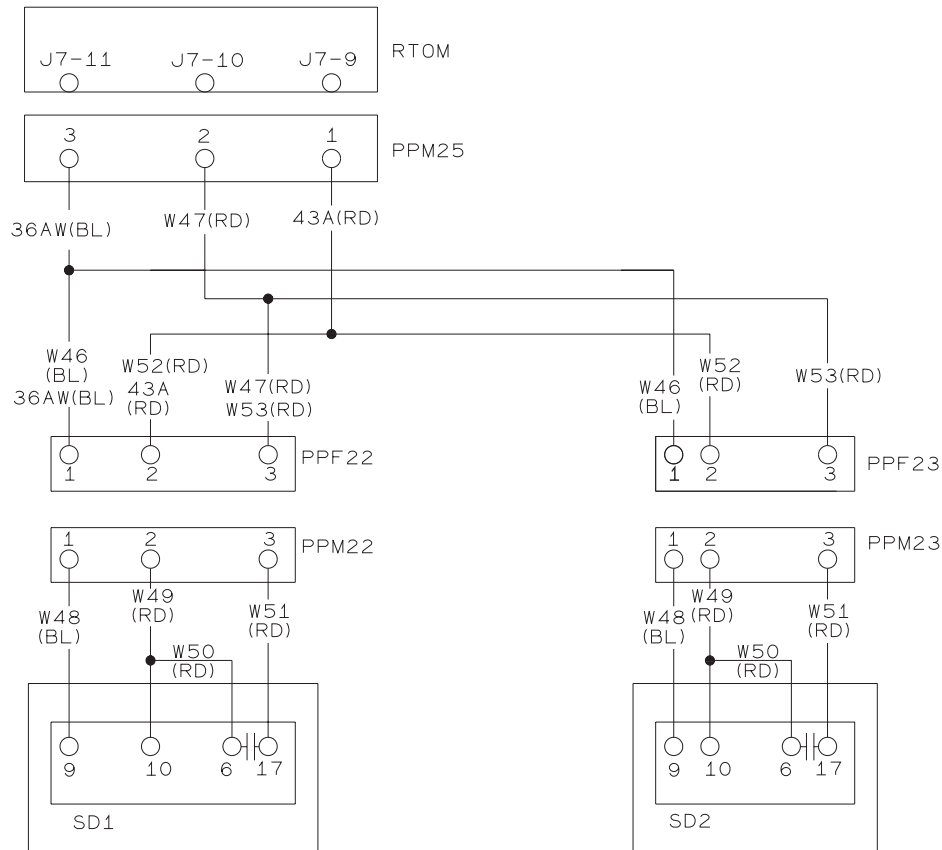
NOTES:

- 1 REFER TO THIS DRAWING FOR NOVAR INTERFACE TO UNIT. SEE UNIT DIAGRAMS FOR BALANCE OF WIRING.
- 2 PLACE WIRING DIAGRAM LABEL ON INSIDE OF ACCESS PANEL.
- 3 PLUG PPMBA TO PPF6, ALSO PLUG WIRES 128A(BK) AND 129A(BK) INTO UNIT WIRES WHEN OPTIONAL X-FAN IS INSTALLED.
- 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 WAS 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.

2309-3195B

Diagram 59
Smoke Detector Schematic

WIRING SCHEME FOR UNIT WITH BOTH RETURN AIR AND SUPPLY AIR SMOKE DETECTORS



WIRING INSTRUCTIONS:

1. CONNECT PLUGS TOGETHER AS SHOWN.

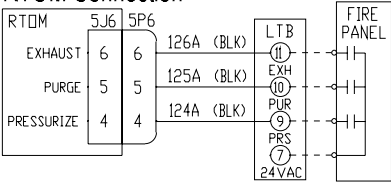
NOTES: 1. REFER TO THIS DRAWING FOR SMOKE DETECTOR INTERFACE TO UNIT. SEE UNIT DIAGRAMS FOR BALANCE OF WIRING.

LEGEND:

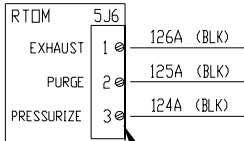
PPF22,PPM22.....RETURN AIR SMOKE DETECTOR PLUG
PPF23,PPM23..... SUPPLY AIR SMOKE DETECTOR PLUG
SD1..... RETURN AIR SMOKE DETECTOR
SD2..... SUPPLY AIR SMOKE DETECTOR
RTOM.....RELIA TEL OPTIONS MODULE
PPM25.....SMOKE DETECTOR TO RTOM BOARD

Diagram 60
CO₂ Sensing Schematic

RTOM Connection



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.

CO2 Sensor Connection

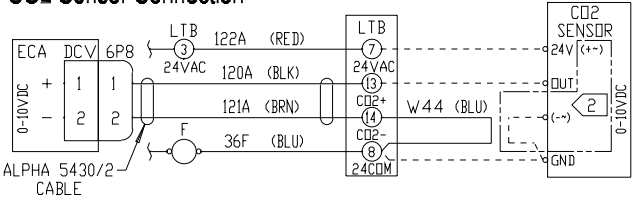
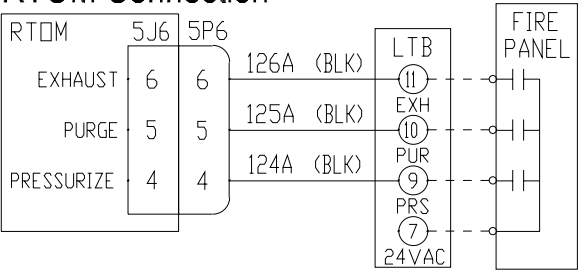
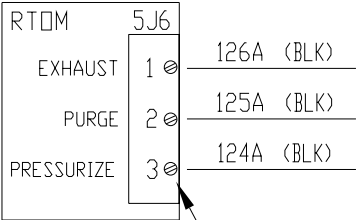


Diagram 61
Ventilation Override Schematic

RTOM Connection

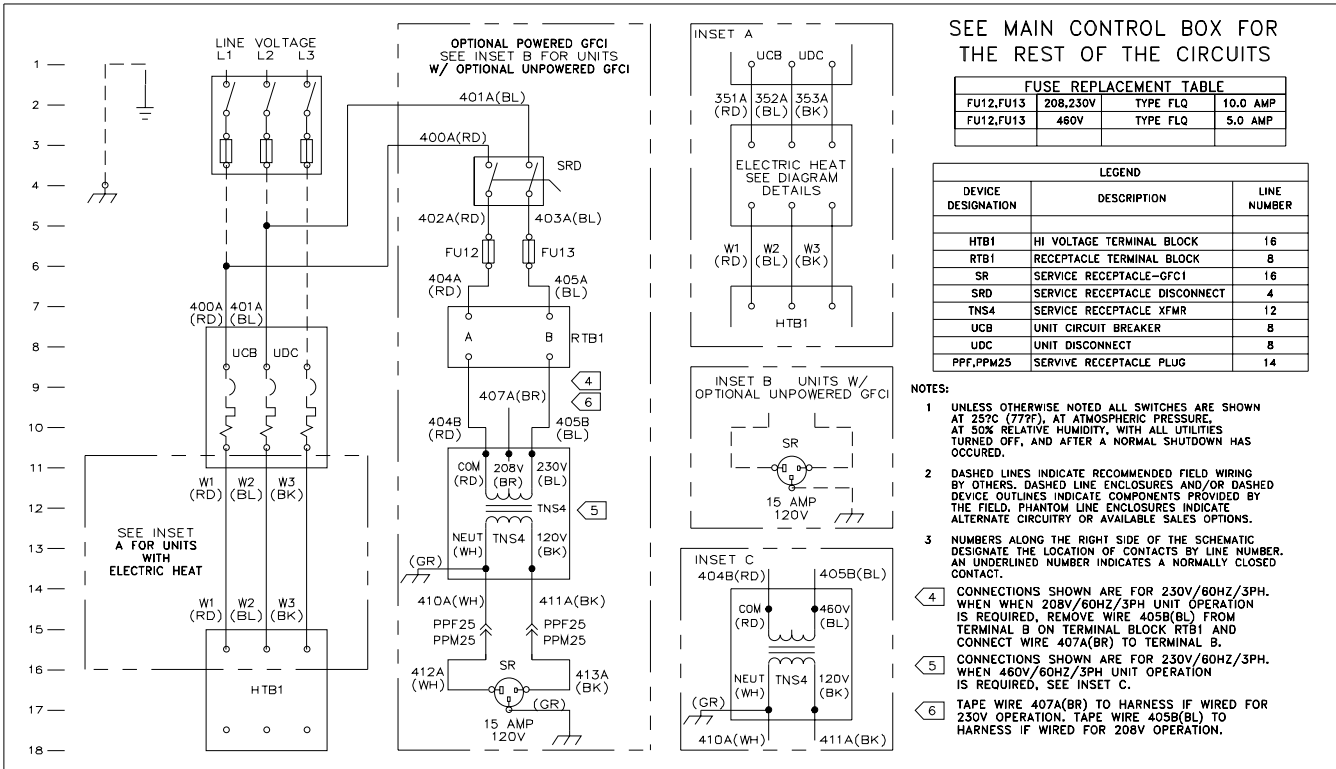


Alternate RTOM Connection



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 62
Convenience Outlet Schematic





Literature Order Number	RT-SVE06A-EN
File Number	SV-UN-RT-SVE06A-EN
Supersedes	NEW
Stocking Location	Electronic Only

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