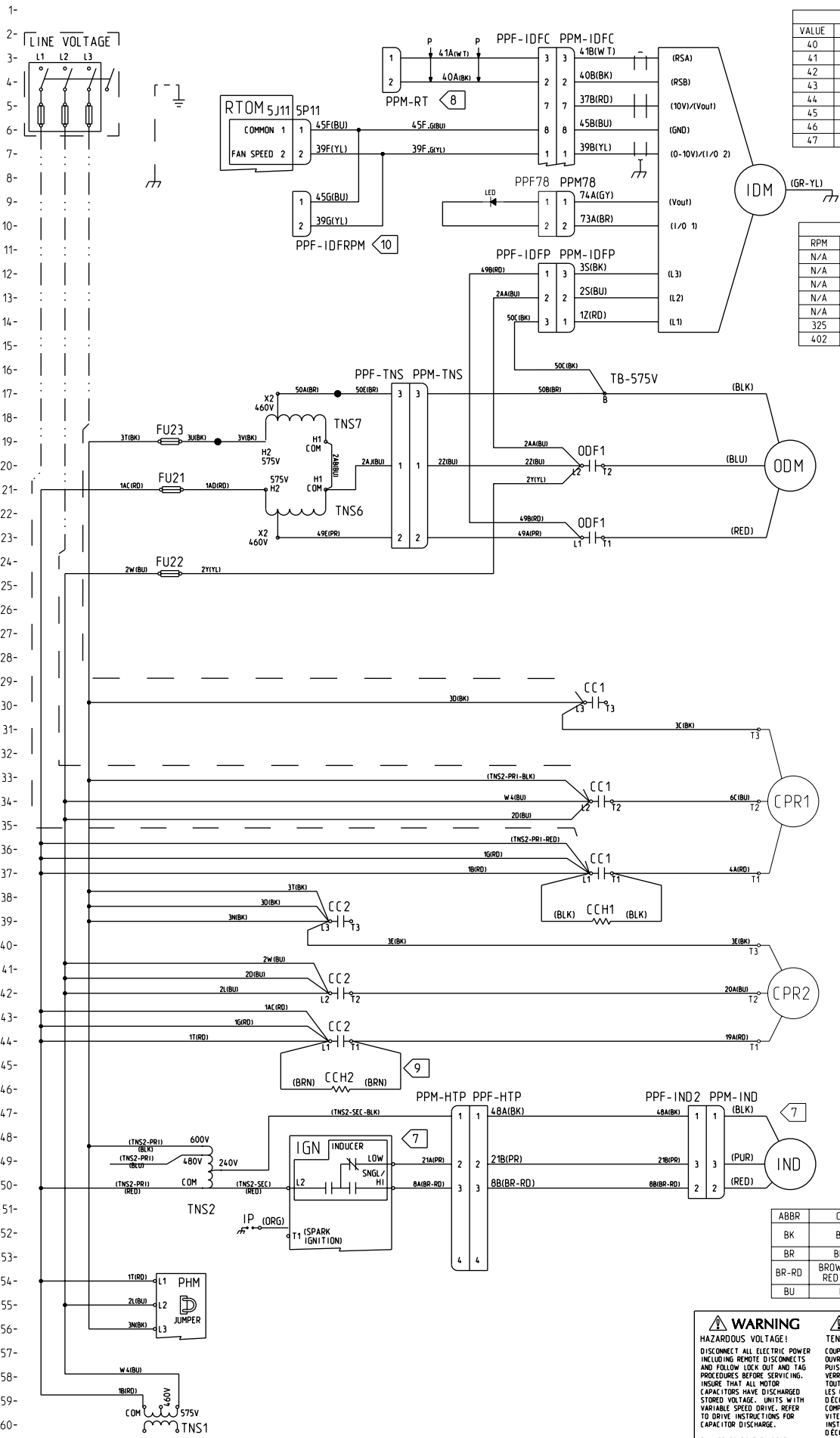




DISCHARGE AIR COOL SETPOINT							
VALUE	VOLT	VALUE	VOLT	VALUE	VOLT	VALUE	VOLT
40	-0.10	48	1.05	56	1.70	64	2.13
41	0.20	49	1.15	57	1.75	65	2.17
42	0.30	50	1.25	58	1.83	66	2.21
43	0.45	51	1.30	59	1.90	67	2.27
44	0.55	52	1.35	60	1.95	68	2.30
45	0.70	53	1.45	61	2.00	69	2.35
46	0.80	54	1.55	62	2.05	70	+2.40
47	0.95	55	1.65	63	2.10		

IDM RPM INDICATION							
RPM	VOLT	RPM	VOLT	RPM	VOLT	RPM	VOLT
N/A	1.00	465	2.75	976	4.50	1425	6.25
N/A	1.25	544	3.00	1044	4.75	1475	6.50
N/A	1.50	630	3.25	1115	5.00	1533	6.75
N/A	1.75	716	3.50	1203	5.25	1581	7.00
N/A	2.00	775	3.75	1253	5.50	1615	7.25
325	2.25	845	4.00	1312	5.75	1615	7.50
402	2.50	912	4.25	1368	6.00		

REF	DESCRIPTION	LINE
CC1	COMPRESSOR CONT 1	29,34,37,88
CC2	COMPRESSOR CONT 2	39,42,44,100
CCH1	CRANKCASE HTR 1	39
CCH2	CRANKCASE HTR 2	46
CFS	CLOGGED FILTER SWITCH	114
COF	CONDENSATE OVERFLOW	91
COMM	COMMUNICATIONS MODULE	106
CPR1	COMPRESSOR 1	34
CPR2	COMPRESSOR 2	42
DACR	DA COOL VAR RESISTOR	136
DTS	DISCHARGE AIR SENSOR	103
ECA	ECONOMIZER ACTUATOR	127
FD	FLAME DETECT	121
FFS	FAN FAIL SWITCH	117
FOS	FROSTAT	111
FR	FLAME ROLLOUT SWITCH	123
FU21	TNS6 & TNS7 FUSE	21
FU22	TNS6 & TNS7 FUSE	24
FU23	TNS6 & TNS7 FUSE	19
GV	GAS VALVE	118
HPC1	HIGH-PRESS CUTOUT 1	87
HPC2	HIGH-PRESS CUTOUT 2	99
IDM	ID FAN MOTOR	8
IGN	IGNITION MODULE	49,114
IND	INDUCER MOTOR	49
IP	IGNITOR	51
LED	LIGHT EMITTING DIODE	9
LPC1	LOW-PRESS CUTOUT 1	90
LPC2	LOW-PRESS CUTOUT 2	102
LTB1	LOW-VOLT TERM BOARD	80,82
LTB2	LOW-VOLT TERM BOARD 2	99
MAS	MIXED AIR SENSOR	136
NLTB	NOVAR TERM BOARD	94
OAS	OD AIR SENSOR	111
ODF1	OD FAN CONTACTOR 1	20,23,96
ODM	OD FAN MOTOR	20
OHS	OD AIR HUMIDITY SENSOR	133
PHM	PHASE MONITOR	55,83
PLSD	PLENUM SMOKE DETECTOR	115
PS	PRESSURE SWITCH	124
RAS	RTN AIR SENSOR	136
RASD	RTN AIR SMOKE DETECT	115
RHS	RTN AIR HUMIDITY SENSOR	133
RHV	REHEAT VALVE	95
RTOM	AIR HANDLING MODULE	130
RTOM	OPTIONS MODULE	6,90
RTRM	REFRIGERATION MODULE	81
SASD	SUPPLY AIR SMOKE DETECT	120
SPT	SPACE PRESSURE TRANSDUCER	135
TB-575V	575V TERM BLOCK	16
TB-COM	COMMON TERM BLOCK	80
TC01	TEMP LIMIT SWITCH 1	120,125
TC02	TEMP LIMIT SWITCH 2	127
TDL1	THERMO DISCHARGE LINE 1	87
TDL2	THERMO DISCHARGE LINE 2	99
TNS1	LOW-VOLT TRANSFORMER	59,79
TNS2	INDUCER TRANSFORMER	50
TNS6	IDM & ODM TRANSFORMER	21
TNS7	IDM & ODM TRANSFORMER	19
VHR	VAV BOX RELAY	135,138

ABBR	COLOR	ABBR	COLOR	ABBR	COLOR
BK	BLACK	GR-YL	GREEN WITH YELLOW STRIPE	WT	WHITE
BR	BROWN	OR	ORANGE	YL	YELLOW
BR-RD	BROWN WITH RED STRIPE	PR	PURPLE		
BU	BLUE	RD	RED		

WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS AND FOLLOW LOCK OUT AND TAG PROCEDURES BEFORE SERVICING. INSURE THAT ALL MOTOR CAPACITORS HAVE DISCHARGED STORED VOLTAGE. UNITS WITH VARIABLE SPEED DRIVE, REFER TO DRIVE INSTRUCTIONS FOR CAPACITOR DISCHARGE.
FAILURE TO DO THE ABOVE BEFORE SERVICING COULD RESULT IN DEATH OR SERIOUS INJURY.

AVERTISSEMENT
TENSION DANGEREUSE!
COUPER TOUTES LES TENSIONS ET OUVRIRE LES SECTIONNEURS A DISTANCE. PUIS SUIVRE LES PROCEDURES DE VERROUILLAGE ET DES ETIQUETTES AVANT TOUTE INTERVENTION. VERIFIER QUE TOUTS LES CAPACITEURS DES MOTEURS SONT DECHARGES. DANS LE CAS D'UNITES COMPORTANT DES ENTRAINEMENTS A VITESSE VARIABLE, SE REPORTER AUX INSTRUCTIONS DE L'ENTRAINEMENT POUR DECHARGER LES CONDENSATEURS.
NE PAS RESPECTER CES MESURES DE PRECAUTION PEUT ENTRAINER DES BLESSURES GRAVES POUVANT ETRE MORTELLES.

ADVERTENCIA
¡VOLTAJE PELIGROSO!
DESCONECTE TODA LA ENERGIA ELECTRICA, INCLUIDO LAS DESCONECIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CERRJE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGURESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON E.E. DE DIRECCION DE VELOCIDAD VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.
EL NO REALIZAR LO ANTERIORMENTE INDICADO, PODRIA OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.

NOTES:

- 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 OCCURED.
- 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.
- THREE-PHASE MOTORS ARE PROTECTED UNDER PRIMARY SINGLE PHASING CONDITIONS. ALL MOTORS HAVE INTERNAL OVERLOAD PROTECTION AND COMPRESSORS HAVE INTERNAL THERMAL PROTECTION.
- CONNECTIONS SHOWN ARE FOR DUAL-STAGE GAS HEAT OPERATION. WHEN SINGLE-STAGE GAS HEAT OPERATION IS REQUIRED, WIRE 21A IS NOT CONNECTED TO IGN. WIRE IND-PUR IS NOT PRESENT ON A SINGLE-STAGE GAS HEAT UNIT.
- PLUG PPM-RT IS NOT CONNECTED TO ANYTHING. IT IS ONLY USED FOR FACTORY RUNTEST HOOKUP.
- CCH2 LEADS ARE BLACK WITH BROWN TAPE WRAPPED AROUND THE END OF EACH LEAD.
- IDM RPM INDICATION 0-7.5VDC. SEE RPM TABLE.

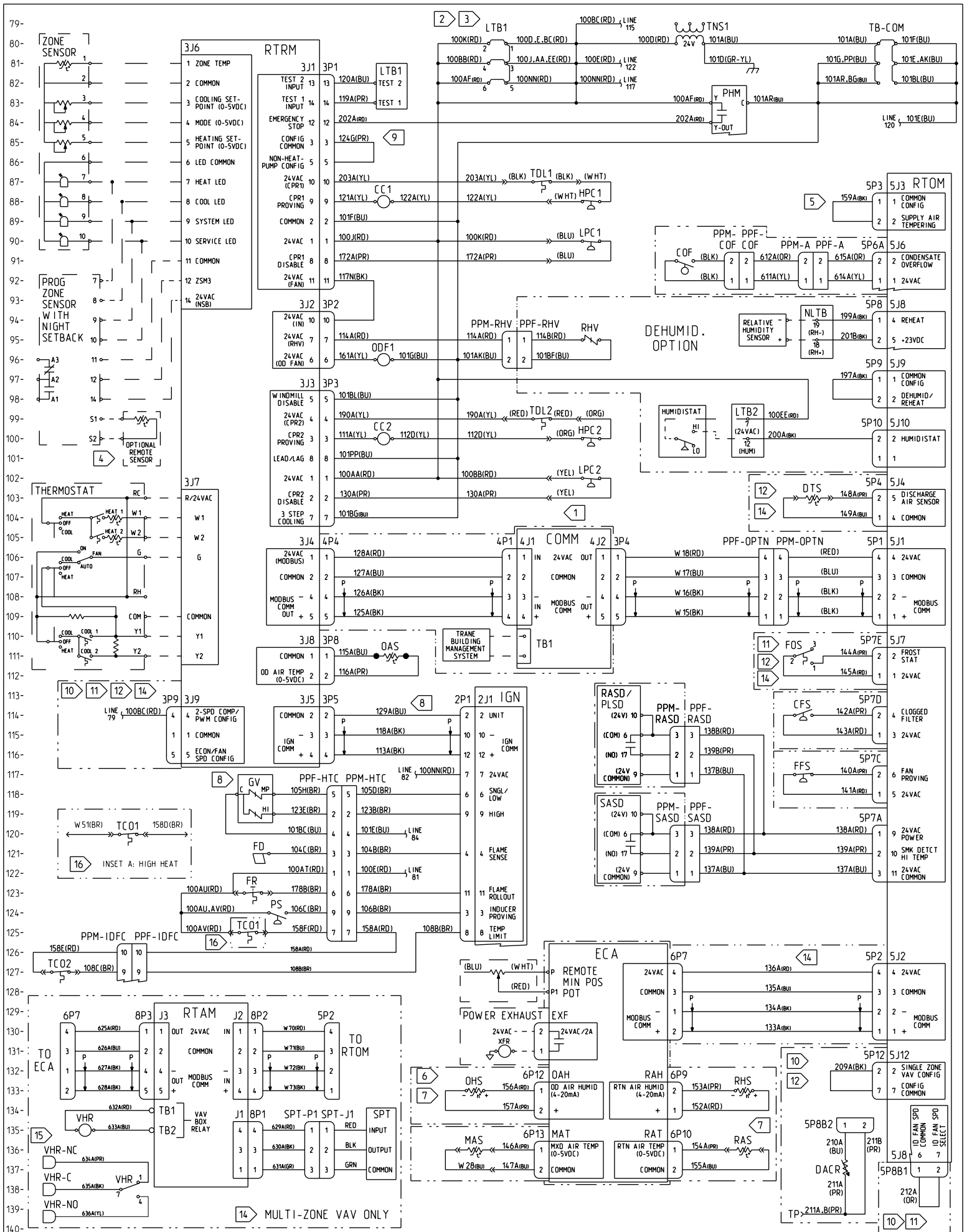
IMPORTANT
DO NOT ENERGIZE UNIT UNTIL CHECK-OUT AND START-UP PROCEDURE HAS BEEN COMPLETED.

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.
ATTENTION
N'UTILISER QUE DES CONDUCTEURS EN COBRE!
LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.
PRECAUCIÓN
¡UTILICE ÚNICAMENTE CONDUCTORES DE COBRE!
LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.
SI NO LO HACE, PUEDE OCASIONAR DAÑO AL EQUIPO.

THIS DRAWING IS APPROVED AND AUTHORIZED FOR RELEASE BY THE MANUFACTURER.
DATE: 03/01/2017
DRAWN BY: N.CHALITA
CHECKED BY: N.CHALITA
DO NOT SCALE PRINT
THIRD ANGLE PROJECTION
RELAYE CONTROLS

12/324-12
POWER DIAGRAM
YHC-120FW
RELAYE CONTROLS

12/324-12
PAGE 2
A



- NOTES:**
- CONNECTIONS SHOWN INCLUDE OPTIONAL COMM. IF COMM IS NOT INSTALLED, CONNECT PLUG 3P4 TO RTRM-3J4. REFER TO ACCOMPANYING LITERATURE FOR PROPER CONNECTION/COMBINATION OF OPTIONAL COMPONENTS.
 - TO DISABLE THE COMPRESSORS, REMOVE THE JUMPER ON LTB1 BETWEEN PINS 1 & 2 AND PINS 3 & 4 AND CONNECT FIELD SUPPLIED CONTROL DEVICE.
 - TO SHUT DOWN THE UNIT FOR EMERGENCY STOP, REMOVE THE JUMPERS ON LTB1 BETWEEN PINS 5 & 6 AND CONNECT FIELD SUPPLIED CONTROL DEVICE OR INSTALL OPTIONAL FIRESTAT.
 - INSTALL OPTIONAL REMOTE SENSOR TO PINS S1 & S2 WHEN REQUIRED. SEE PROGRAMMABLE ZONE SENSOR/REMOTE PANEL WITH NIGHT SETBACK LITERATURE FOR CORRECT SETTINGS.
 - TO ENABLE SUPPLY AIR TEMPERING, REMOVE PLUG 5P3.
 - REQUIRED FOR OPTIONAL REFERENCE ENTHALPY CONTROL.
 - REQUIRED FOR OPTIONAL COMPARATIVE ENTHALPY CONTROL.
 - CONNECTIONS SHOWN ARE FOR DUAL-STAGE GAS HEAT OPERATION. WHEN SINGLE-STAGE GAS HEAT OPERATION IS REQUIRED, REMOVE WIRE 123E FROM GV. ALSO, CUT AND ISOLATE WIRE 129A.
 - IF DEHUMIDIFICATION OPTION IS INSTALLED, CUT AND ISOLATE WIRE 124G. FOR ADDITIONAL WIRING, SEE CO2 SENSOR & VENTILATION OVERRIDE ACCESSORY DIAGRAM.
 - FOR STANDARD ID FAN OPERATION ENSURE RTRM 3J9, RTOM 5J2, AND RTOM 5J8 PINS 6-7 ARE OPEN (NO CONNECTIONS).
 - FOR OPTIONAL MULTI-SPEED ID FAN CONNECT RTRM 3J9 WITH 3P9, RTOM 5J8 PINS 6-7 WITH 5P8B1. INSTALL FOS.
 - FOR OPTIONAL SZVAV INSTALL DACR, DTS AND FOS, CONNECT RTRM 3J9 WITH 3P9, RTOM 5J8 PINS 6-7 WITH 5P8B2, RTOM 5J2 WITH 5P12, AND RTOM 5J4 PINS 4-5 WITH 5P4. DISCHARGE AIR COOL SETPOINT MEASURED ACROSS TP-GROUND. SEE POWER DIAGRAM FOR TABLE.
 - FOR MULTI-ZONE VAV OPERATION, REPLACE WIRES 133A, 134A, 135A AND 136A WITH THE RTAM AND ASSOCIATED WIRING. CONNECT RTRM 3J9 WITH 3P9. INSTALL DTS AND FOS.
 - CONNECT TO VHR-C AND VHR-NO FOR NORMALLY OPEN OPERATION. CONNECT TO VHR-C AND VHR-NC FOR NORMALLY CLOSED OPERATION.
 - CONNECTIONS SHOWN FOR UNITS WITH LOW/MEDIUM HEAT. SEE INSET A FOR WIRING ON UNITS WITH HIGH HEAT.