

⚠ 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 OUVRIR LES SECTIONNEURS À DISTANCE. PUIS SUIVRE LES PROCÉDURES DE VERROUILLAGE ET DES ÉTIQUETTES AVANT TOUTE INTERVENTION. VÉRIFIER QUE TOUTS LES CONDENSATEURS DES MOTEURS SONT DÉCHARGÉS. DANS LE CAS D'UNITÉS COMPORTANT DES ENTRAÎNEMENTS À VITESSE VARIABLE, SE REPORTER AUX INSTRUCTIONS DE L'ENTRAÎNEMENT POUR DÉCHARGER LES CONDENSATEURS.

NE PAS RESPECTER CES MESURES DE PRÉCAUTION PEUT ENTRAÎNER DES BLESSURES GRAVES POUVANT ÊTRE MÔRTELLES.

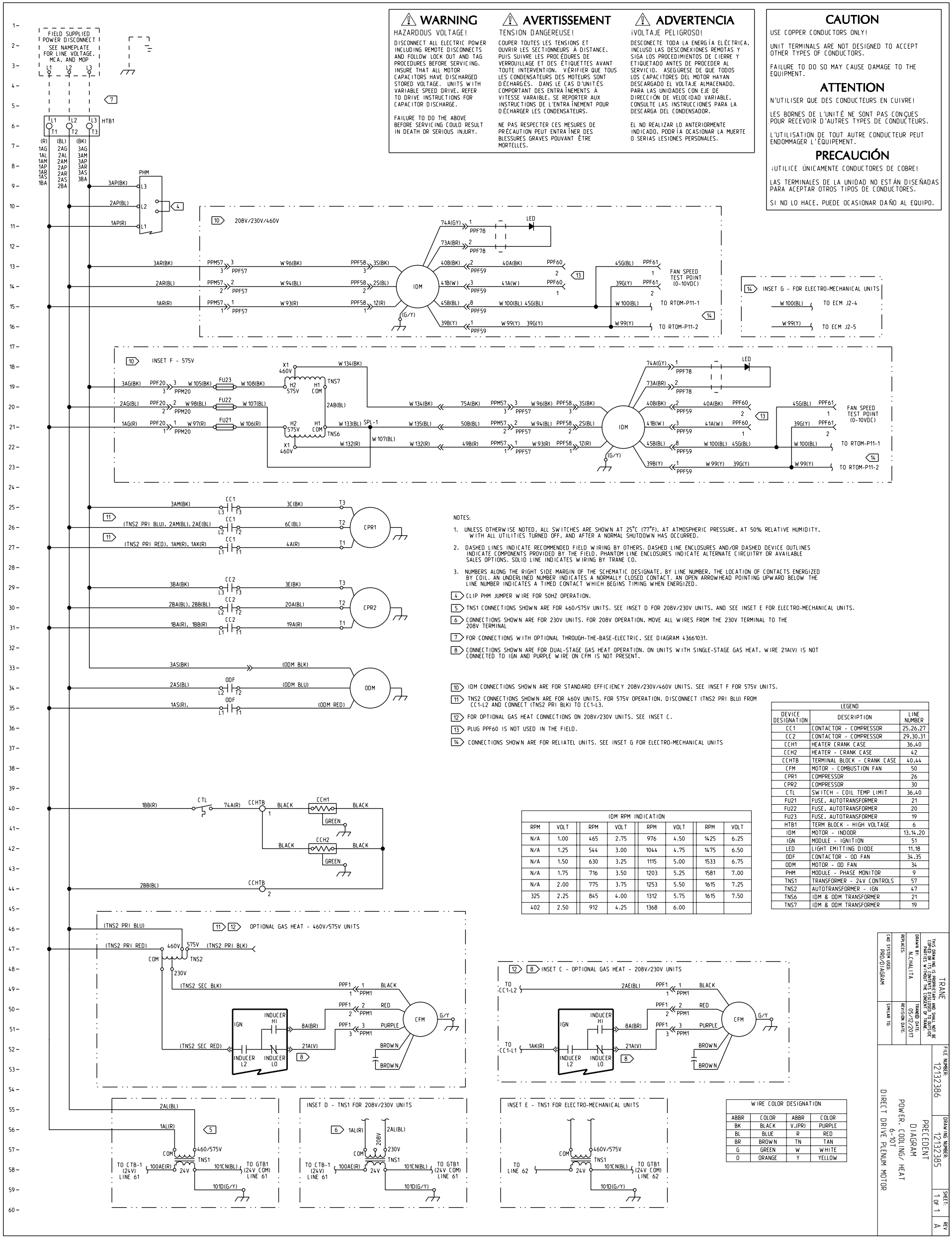
⚠ ADVERTENCIA
¡VOLTAJE PELIGROSO!
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUIDO LAS DESCONECIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CIERRE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGÚRESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON EJE DE DIRECCIÓN DE VELOCIDAD VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.

EL NO REALIZAR LO ANTERIORMENTE INDICADO, PODRÍA OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.

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 CUIVRE!
LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.
L'UTILISATION DE TOUT AUTRE CONDUCTEUR PEUT ENDOMMAGER L'EQUIPEMENT.

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.

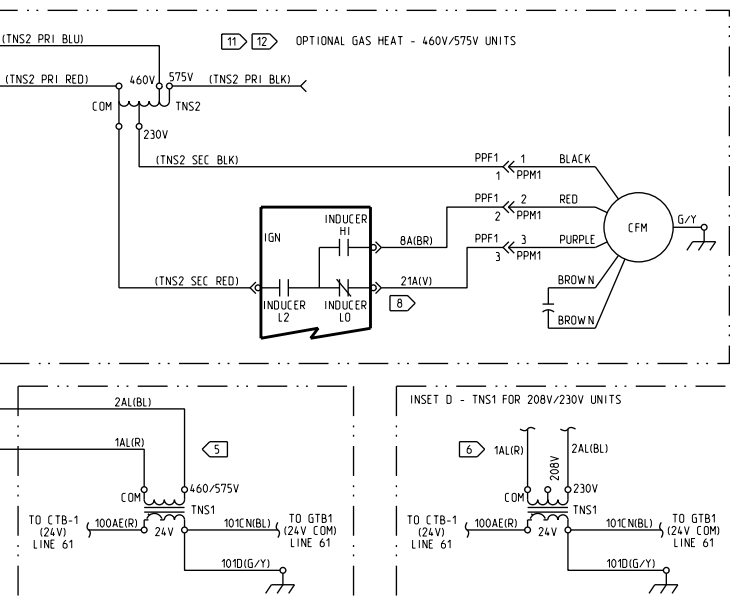
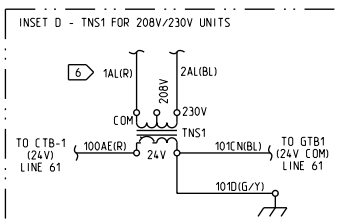
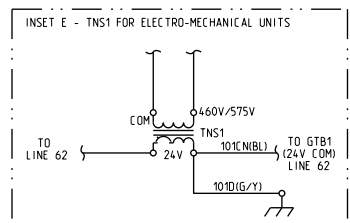
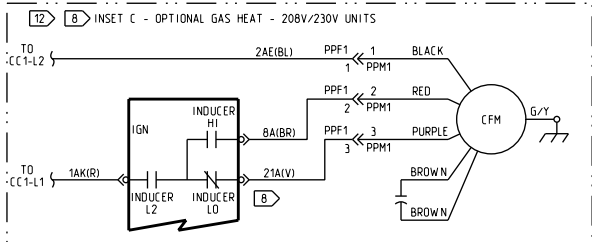


- NOTES:
- UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25°C (77°F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
 - DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS, DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINE INDICATES WIRING BY TRANE CO.
 - NUMBERS ALONG THE RIGHT SIDE MARGIN OF THE SCHEMATIC DESIGNATE, BY LINE NUMBER, THE LOCATION OF CONTACTS ENERGIZED BY COIL. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT. AN OPEN ARROWHEAD POINTING UPWARD BELOW THE LINE NUMBER INDICATES A TIMED CONTACT WHICH BEGINS TIMING WHEN ENERGIZED.
- 4 CLIP PHM JUMPER WIRE FOR 50HZ OPERATION.
- 5 TNS1 CONNECTIONS SHOWN ARE FOR 460V/575V UNITS. SEE INSET D FOR 208V/230V UNITS, AND SEE INSET E FOR ELECTRO-MECHANICAL UNITS.
- 6 CONNECTIONS SHOWN ARE FOR 230V UNITS. FOR 208V OPERATION, MOVE ALL WIRES FROM THE 230V TERMINAL TO THE 208V TERMINAL.
- 7 FOR CONNECTIONS WITH OPTIONAL THROUGH-THE-BASE-ELECTRIC, SEE DIAGRAM 43661031.
- 8 CONNECTIONS SHOWN ARE FOR DUAL-STAGE GAS HEAT OPERATION. ON UNITS WITH SINGLE-STAGE GAS HEAT, WIRE 21A(V) IS NOT CONNECTED TO IGN AND PURPLE WIRE ON CFM IS NOT PRESENT.
- 10 IDM CONNECTIONS SHOWN ARE FOR STANDARD EFFICIENCY 208V/230V/460V UNITS. SEE INSET F FOR 575V UNITS.
- 11 TNS2 CONNECTIONS SHOWN ARE FOR 460V UNITS. FOR 575V OPERATION, DISCONNECT (TNS2 PRI BLU) FROM CC1-L2 AND CONNECT (TNS2 PRI BLK) TO CC1-L3.
- 12 FOR OPTIONAL GAS HEAT CONNECTIONS ON 208V/230V UNITS, SEE INSET C.
- 13 PLUG PPF60 IS NOT USED IN THE FIELD.
- 14 CONNECTIONS SHOWN ARE FOR RELIABLE UNITS. SEE INSET G FOR ELECTRO-MECHANICAL UNITS.

LEGEND		
DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
CC1	CONTACTOR - COMPRESSOR	25,26,27
CC2	CONTACTOR - COMPRESSOR	29,30,31
CCH1	HEATER CRANK CASE	36,40
CCH2	HEATER - CRANK CASE	42
CCHTB	TERMINAL BLOCK - CRANK CASE	40,44
CFM	MOTOR - COMBUSTION FAN	50
CPR1	COMPRESSOR	26
CPR2	COMPRESSOR	30
CTL	SWITCH - COIL TEMP LIMIT	36,40
FU21	FUSE, AUTOTRANSFORMER	21
FU22	FUSE, AUTOTRANSFORMER	20
FU23	FUSE, AUTOTRANSFORMER	19
HTB1	TERM BLOCK - HIGH VOLTAGE	6
IDM	MOTOR - INDOOR	13,14,20
IGN	MODULE - IGNITION	51
LED	LIGHT EMITTING DIODE	11,18
ODF	CONTACTOR - OD FAN	34,35
ODM	MOTOR - OD FAN	34
PHM	MODULE - PHASE MONITOR	9
TNS1	TRANSFORMER - 24V CONTROLS	57
TNS2	AUTOTRANSFORMER - IGN	47
TNS6	IDM & ODM TRANSFORMER	21
TNS7	IDM & ODM TRANSFORMER	19

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

WIRE COLOR DESIGNATION			
ABBR	COLOR	ABBR	COLOR
BK	BLACK	V.(PR)	PURPLE
BL	BLUE	R	RED
BR	BROWN	TN	TAN
G	GREEN	W	WHITE
O	ORANGE	Y	YELLOW



TRANE		FILE NUMBER		DRAWING NUMBER		SHEET	
12132386		12132385		1 OF 1		REV	
THIS DRAWING IS DERIVED FROM THE TRANE SYSTEM DESIGN AND SHALL NOT BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF TRANE.		DRAWN BY: N. CHAITA		TRANE DATE: 05/12/2017		REVISION DATE:	
CNO SYSTEM DESIGN		REVISIONS		REVISION DATE:		REVISION DATE:	
PNO/DIAGRAM		SIMILAR TO:		POWER, COOLING/ HEAT		6-101	
				DIRECT DRIVE PLENUM MOTOR			