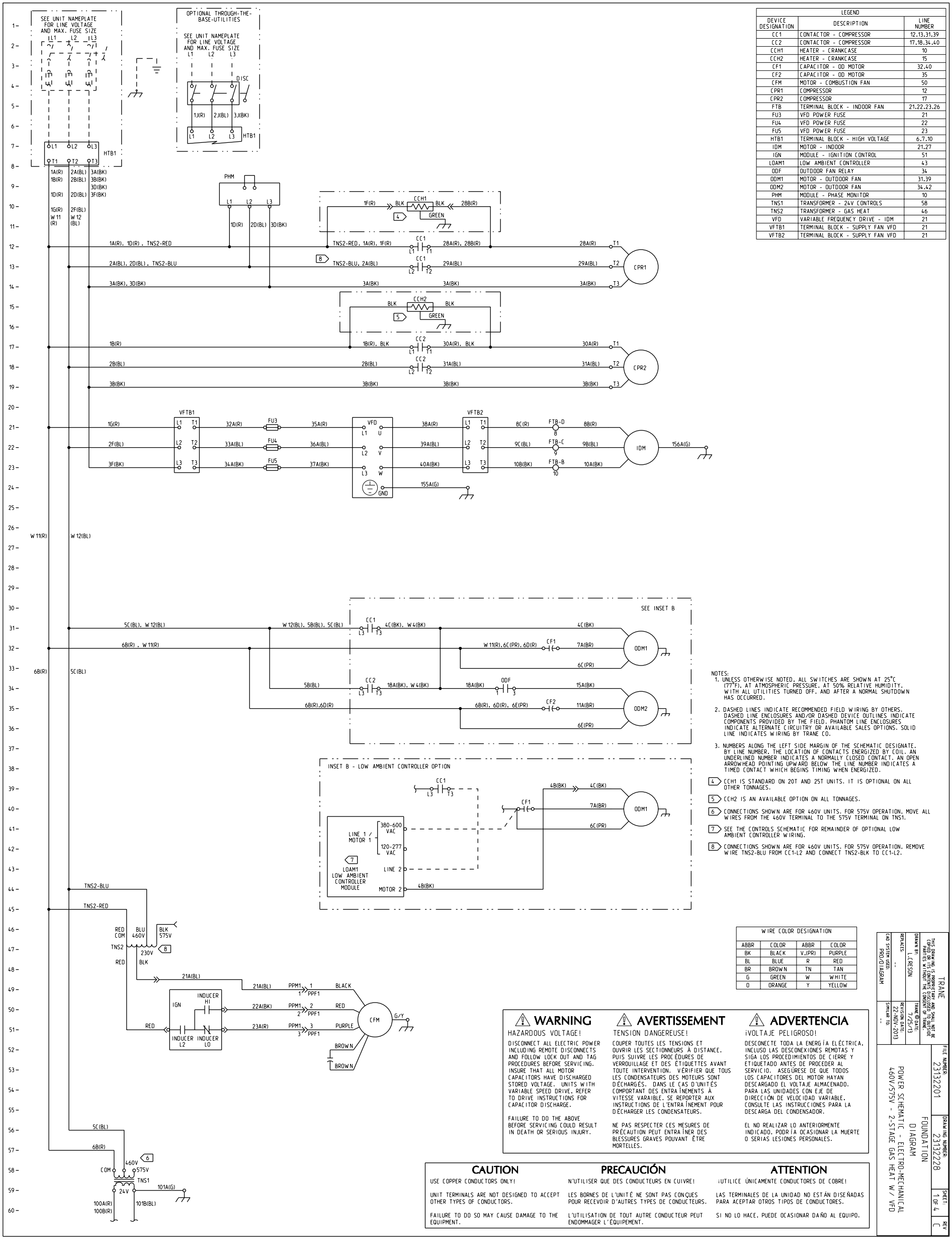

LEGEND		
DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
CC1	CONTACTOR - COMPRESSOR	12,13,31,39
CC2	CONTACTOR - COMPRESSOR	17,18,34,40
CCH1	HEATER - CRANKCASE	10
CCH2	HEATER - CRANKCASE	15
CF1	CAPACITOR - OD MOTOR	32,40
CF2	CAPACITOR - OD MOTOR	35
CFM	MOTOR - COMBUSTION FAN	50
CPR1	COMPRESSOR	12
CPR2	COMPRESSOR	17
FTB	TERMINAL BLOCK - INDOOR FAN	21,22,23,26
FU3	VFD POWER FUSE	21
FU4	VFD POWER FUSE	22
FU5	VFD POWER FUSE	23
HTB1	TERMINAL BLOCK - HIGH VOLTAGE	6,7,10
IDM	MOTOR - INDOOR	21,27
IGN	MODULE - IGNITION CONTROL	51
LOAM1	LOW AMBIENT CONTROLLER	43
ODF	OUTDOOR FAN RELAY	34
ODM1	MOTOR - OUTDOOR FAN	31,39
ODM2	MOTOR - OUTDOOR FAN	34,42
PHM	MODULE - PHASE MONITOR	10
TNS1	TRANSFORMER - 24V CONTROLS	58
TNS2	TRANSFORMER - GAS HEAT	46
VFD	VARIABLE FREQUENCY DRIVE - IDM	21
VFTB1	TERMINAL BLOCK - SUPPLY FAN VFD	21
VFTB2	TERMINAL BLOCK - SUPPLY FAN VFD	21

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. SOLID LINE INDICATES WIRING BY TRANE CO.
3. NUMBERS ALONG THE LEFT 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 CCH1 IS STANDARD ON 20T AND 25T UNITS. IT IS OPTIONAL ON ALL OTHER TONNAGES.

5 CCH2 IS AN AVAILABLE OPTION ON ALL TONNAGES.

6 CONNECTIONS SHOWN ARE FOR 460V UNITS. FOR 575V OPERATION, MOVE ALL WIRES FROM THE 460V TERMINAL TO THE 575V TERMINAL ON TNS1.

7 SEE THE CONTROLS SCHEMATIC FOR REMAINDER OF OPTIONAL LOW AMBIENT CONTROLLER WIRING.

8 CONNECTIONS SHOWN ARE FOR 460V UNITS. FOR 575V OPERATION, REMOVE WIRE TNS2-BLU FROM CC1-L2 AND CONNECT TNS2-BLK TO CC1-L2.

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

⚠ 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 TOUS 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 MORTELLES.

⚠ ADVERTENCIA
¡VOLTAJE PELIGROSO!
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUSO LAS DESCONEXIONES 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.

PRECAUCIÓN
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'ÉQUIPEMENT.

ATTENTION
¡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.

TRANE
DRAWN BY: L.CARLSON
TRANE@TRANE.COM
7/25/13
REVISION DATE: 22-NOV-2013
REPLACES: --
CAD SYSTEM USED: PRO/D IAGRAM
SIMILAR TO: --

POWER SCHEMATIC - ELECTRO-MECHANICAL
460V/575V - 2-STAGE GAS HEAT W/ VFD
FOUNDATION DIAGRAM

FILE NUMBER: 23132201
DRAWING NUMBER: 23132228
SHEET: 1 OF 4
REV: C