

THIS DRAWING IS PROPRIETARY AND SHALL NOT BE COPIED OR ITS CONTENTS DISCLOSED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF TRANE.

DRAWN BY: © TRANE DATE: DO NOT SCALE PRINT THIRD ANGLE PROJECTION

DIAGRAM CONNECTION PRINT - GAS HEAT. 3-5 TON, 230V-3PH PWR. EM CNTL. STD-DD IDM

- 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.
- IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THIS UNIT, MUST BE REPLACED. REPLACE 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 UNITS. WHEN 208V/60HZ/3PH OPERATION IS REQUIRED, MOVE WIRE W4 FROM THE 230V TERMINAL ON TNS1 TO THE 208V TERMINAL.
- WHEN INSTALLING ECONOMIZER, REMOVE PPM2 FROM PPF2. CONNECT PPM2A TO PPF2. AND CONNECT MAS TO WIRES 180A AND 181A.
- CONNECTIONS SHOWN INCLUDE FOS AND HPC1. IF NEITHER OPTION IS INSTALLED, CONNECT WIRE LPC1-BLU TO WIRES W24/188A. IF ONLY FOS IS INSTALLED, CONNECT WIRE 189A TO WIRE LPC1-BLU. IF ONLY HPC1 IS INSTALLED, CONNECT HPC1-BLK TO WIRES W24/188A.
- FOR MOTORIZED OUTSIDE AIR DAMPER, OPTIONAL MAS AND OTS (AND ASSOCIATED WIRING) ARE NOT USED, AND R4 IS REMOVED BETWEEN SO AND + ON ECA.
- (FUTURE OPTION) CONNECTIONS SHOWN ARE FOR 2-STAGE GAS HEAT OPERATION. WHEN 1-STAGE OPERATION IS REQUIRED, WIRE 102B IS REMOVED. WIRES 21A, 101NN, AND 174A ARE NOT CONNECTED TO IGN, AND WIRE 123A IS NOT CONNECTED TO GV.
- (FUTURE) PHASE MONITOR (PHM) CONNECTIONS SHOWN. IF PHM IS NOT INSTALLED; WIRE 100A IS CONNECTED TO TNS1 24V PWR; WIRES 100AF, 100AG, 1T, 2L, 3N, AND 101AR ARE NOT PRESENT.
- IF OPTIONAL SMOKE DETECTOR (SD) IS INSTALLED, CONNECT SASD PLUG PPM4 TO PPF4 AND RASD PLUG PPM5 TO PPF5. REMOVE 100AF OR 100A AS REQUIRED FROM TNS1 24V PWR AND CONNECT TO 511A. CONNECT 514A /512A TO TNS1 24V PWR. CONNECT 507A TO TNS1 SECONDARY COM.
- CONNECTIONS SHOWN INCLUDE RASD AND SASD. IF RASD IS NOT INSTALLED, CONNECT 515A TO 515B. IF SASD IS NOT INSTALLED, CONNECT 509A TO 509B.
- HPC SHOWN IS FOR 410A REFRIGERANT. FOR R22 REFRIGERANT (DIGIT SEVEN IN THE MODEL NUMBER EQUALS "A" OR "B") HPC1 HAS BLACK LEADS AND HPC2 HAS RED LEADS.

**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.

**AVERTISSEMENT**  
TENSION DANGEREUSE!  
COUPER TOUTES LES TENSIONS ET OUVRIER LES SECTIONNEURS A DISTANCE. PLUS SUIVRE LES PROCEDURES DE VERROUILLAGE ET DES ETIQUETTES AVANT TOUTE INTERVENTION. VERIFIER QUE TOUTS LES CONDENSATEURS DES MOTEURS SONT D'ÉCHARGÉS. DANS LE CAS D'UNITÉS À VITESSE VARIABLE. SE REPORTER AUX INSTRUCTIONS DE L'ENTRAÎNEMENT POUR DÉCHARGER LES CONDENSATEURS.

**ADVERTENCIA**  
¡VOLTAJE PELIGROSO!  
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUIDO LAS DESCONECCIONES 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 E.E. DE DIRECCIÓN DE VELOCIDAD VARIABLE. CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.

FAILURE TO DO THE ABOVE BEFORE SERVICING COULD RESULT IN DEATH OR SERIOUS INJURY.  
NE PAS RESPECTER CES MESURES DE PRÉCAUTION PEUT ENTRAÎNER DES BLESSURES GRAVES POUVANT ÊTRE MORTELLES.  
EL NO REALIZAR LO ANTERIORMENTE INDICADO, PODRÍA OCASIONAR LA MUERTE O SERIAS LESIONES PERSONALES.

**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 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.

