CN SC5677 29-DEC-08 KEN DANIELS	L	**TRANE** THIS DRAWING IS PROPRIETARY AND SHALL NOT BE COPIED OR ITS CONTENTS DISCLOSED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF TRANE	2307-8264
		DRAWN BY: M. PETERS ©TRANE DATE: 01-JAN-99	SHEET 1 OF 1
		DO NOT SCALE PRINT / THIRD ANGLE PROJECTION	REV L

FIELD WIRING DIAGRAM

COMMERCIAL SELF-CONTAINED

W/VFD

200V, 460, 575V/60HZ/3PH

S*WG 20-35 TON & S*RG 20-32 TON

⚠ 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.

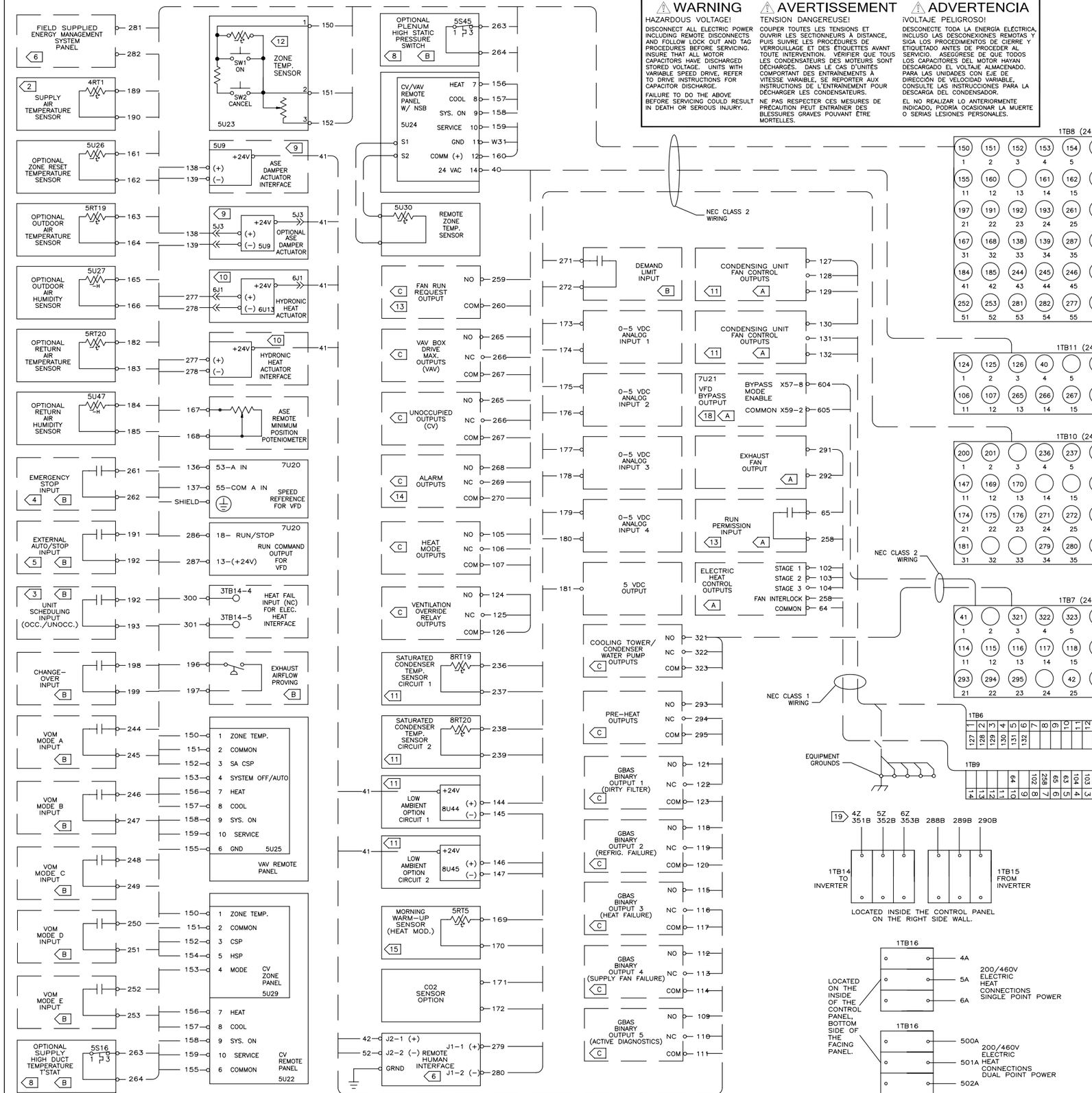
NE PAS RESPECTER CES MESURES DE PRÉCAUTION PEUT ENTRAÎNER DES BLESSURES GRAVES POUVANT ÊTRE MORTELLES.

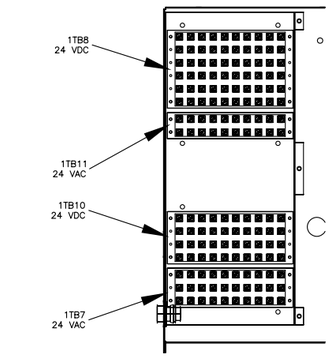
⚠ ADVERTENCIA

¡VOLTAJE PELIGROSO!

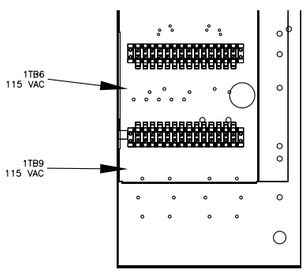
DESCONECTE TODA LA ENERGÍA ELÉCTRICA, INCLUSO LAS DESCONEXIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CIERRE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEGÚRESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON EJE DE DIRECCIÓN DE VELOCIDAD VARIABLE,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

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





LEFT SIDE OF UPPER CONTROL BOX



LEFT SIDE OF UNIT LOWER CONTROL BOX CUSTOMER CONNECTIONS

NOTICE

USE COPPER CONDUCTORS ONLY!

UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS.

FAILURE TO DO THE ABOVE COULD RESULT IN EQUIPMENT DAMAGE.

AVIS

N'UTILISER QUE DES CONDUCTEURS EN CUIVRE!

LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS.

FAIRE DÉFAUT À LA PROCÉDURE CI-DESSUS PEUT ENTRAÎNER DES DOMMAGES À L'ÉQUIPEMENT.

AVISO

¡UTILICE ÚNICAMENTE CONDUCTORES DE COBRE!

LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.

NO SEGUIR LAS INSTRUCCIONES ANTERIORES PUEDE PROVOCAR DAÑOS EN EL EQUIPO.

NOTES:

1. ALL WIRING AND COMPONENTS SHOWN DASHED ARE TO BE SUPPLIED AND INSTALLED BY THE CUSTOMER IN ACCORDANCE WITH LOCAL AND NATIONAL ELECTRICAL CODES.
2. IF THE ELECTRIC HEAT OPTION IS DESIRED, REMOVE THE SUPPLY AIR TEMPERATURE SENSOR FROM THE FAN HOUSING AND RE-INSTALL DOWNSTREAM OF THE ELECTRIC HEATER.
3. UNOCCUPIED INPUT IS USED WITH FIELD INSTALLED TIME CLOCK. OPTIONAL FACTORY INSTALLED TIME CLOCK OR PROGRAMMABLE NIGHT SETBACK REQUIRES NO FIELD WIRING. UNIT WILL BE UNOCCUPIED WHEN CONTACT IS CLOSED.
4. IF EMERGENCY STOP INPUT IS DESIRED, REMOVE JUMPER W12 FROM 1TB8-25 AND 1TB8-26.
5. WHEN CUSTOMER SUPPLIED EXTERNAL AUTO/STOP IS USED, REMOVE WIRE JUMPER MARKED W12 LOCATED ON TERMINAL BLOCK 1TB8 BETWEEN TERMINALS 25 & 26.
6. SINGLE SHIELDED TWISTED PAIR, 16 TO 20 AWG, 600V - MAXIMUM 5000 FOOT AGGREGATE RUN. THE SHIELD SHOULD BE TAPED TO PREVENT ANY CONTACT BETWEEN THE SHIELD AND GROUND AT THE UNIT. WHEN DAISY-CHAINED, THE SHIELD ENDS SHOULD BE SPLICED AND TAPED TO PREVENT CONTACT WITH GROUND. DO NOT RUN AC WIRING IN THE SAME CONDUIT OR WIRE BUNDLE WITH COMMUNICATION LINK WIRING.
7. ALL THREE PHASE MOTORS SUPPLIED WITH THE UNIT ARE PROTECTED UNDER PRIMARY SINGLE PHASE FAILURE CONDITIONS.
8. TO INSTALL THE SUPPLY HIGH DUCT TEMP. T'STAT AND/OR THE PLENUM HIGH STATIC PRESSURE SWITCH, REMOVE JUMPER WIRE W13 AND INSTALL THE DEVICE(S) IN SERIES BETWEEN 1TB8-27 AND 1TB8-28.
9. TO INSTALL A FACTORY PROVIDED AIR-SIDE ECONOMIZER, CONNECT THE TWO ENDS OF 5J3. IF THE AIR-SIDE ECONOMIZER ACTUATOR IS FIELD PROVIDED, WIRE THE 0-10 VDC CONTROL SIGNAL TO 1TB8-33 AND 1TB8-34. THE 24 VAC POWER CONNECTION SHOULD BE MADE TO 1TB7-1.
10. TO INSTALL A FACTORY PROVIDED HYDRONIC HEAT COIL ACTUATOR, CONNECT THE TWO ENDS OF 6J1. IF THE HEAT COIL ACTUATOR IS FIELD PROVIDED, WIRE THE 0-10 VDC CONTROL SIGNAL TO 1TB8-55 AND 1TB8-56. THE 24 VAC POWER CONNECTION SHOULD BE MADE TO 1TB7-1.
11. FIELD INSTALLED FOR SCRF & SIRF UNITS MATCHED WITH CCRB OR CIRB. SEE THE CONNECTIONS ILLUSTRATED IN THE CCRB IOM.
12. OPTIONAL 5U23 REMOTE ZONE TEMP. SENSOR IS USED FOR REMOTE ZONE SENSING. THE ZONE SENSOR MAY BE ORDERED 3 DIFFERENT WAYS: 1) TEMP. THERMISTOR ONLY 2) TEMP. THERMISTOR WITH OVERRIDE AND CANCEL BUTTONS 3) TEMP. THERMISTOR WITH OVERRIDE/CANCEL BUTTONS AND VARIABLE SETPOINT POTENTIOMETER. SEE IOM FOR DETAILS.
13. IF RUN PERMISSION INPUT IS DESIRED, REMOVE JUMPER W11 FROM TERMINALS 1TB9-6 AND 1TB9-7.
14. ALARM OUTPUT SWITCHES ON ANY MANUAL RESET DIAGNOSTIC.
15. OPTIONAL MORNING WARM-UP TEMP. SENSOR (5RT5) IS USED FOR MORNING WARM-UP CONTROL ON UNITS WITH THE HEATING OPTION.
16. ELECTRIC HEAT INTERFACE LINE VOLTAGE CONNECTIONS ARE AS FOLLOWS: (460V ALL TONNAGES) - 1TB16, (200V ALL TONNAGES) - 1TB16 AND 1TB17. SEE ELECTRICAL SCHEMATIC SHEET 1 OF 5 FOR MORE INFORMATION.
17. DISCONNECT SWITCH, 1S1, IS OPTIONAL WITH SINGLE POINT POWER, NOT WITH DUAL POINT POWER CONNECTIONS. 1TB13 (CIRCUIT 2) IS FOR DUAL POINT POWER CONNECTIONS.
18. BYPASS OUTPUTS ARE SPECIFICALLY FOR UNITS WITH TR200 INVERTER WITH BYPASS. FOR BETTER UNDERSTANDING OF THE CONTROL CIRCUIT SEE SCHEMATIC SHEET 2 OF 5.
19. 1TB14 VFD ONLY WIRES 351B, 352B, 353B. 1TB14 VFD W/ BYPASS WIRES 4Z, 5Z, 6Z.

CUSTOMER SUPPLIED CONTROL RATINGS

A	OUTPUT CONTACT RATING AVAILABLE 1 AMP AT 115 VAC.
B	INPUT CONTACT RATING AVAILABLE 12 mA AT 24 VDC.
C	OUTPUT CONTACT RATING AVAILABLE 2 AMPS AT 24 VAC.

LINE VOLTAGE CUSTOMER CONNECTION LUG SIZE

UNIT TONNAGE SIZE		UNIT VOLTAGE	SUPPLY FAN MOTOR HORSEPOWER	CUSTOMER TERM BLOCK WIRE RANGE	CUSTOMER DISC SWITCH WIRE RANGE	EQUIPMENT GROUND WIRE RANGE
SCRG & SIRG	SCWG & SIWG					
20,25,32	20,25,30,35	200	5-25	6-350MCM	4-350MCM	14-2
20,25,32	20,25,30,35	460/575	5-25	14-2/0	14-1/0	14-2