



TRANE™

Date:04-03-96

HERMETIC CENTRIFUGAL LIQUID CHILLER

CENTRAVAC®
UCP2 FIELD WIRING LAY-OUT DIAGRAM
CVHE,CVHF,CVHG

DRAWING NUMBER
2307-5217

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PURPOSE: THIS DRAWING IS TO BE USED FOR ESTIMATING FIELD WIRING REQUIREMENTS.

NOTES:

1. DASHED LINES INDICATE FIELD WIRING BY OTHERS. CHECK SALES ORDER TO DETERMINE WHICH OPTIONS ARE SPECIFIED.
2. DO NOT ROUTE LOW VOLTAGE (30V MAX) WITH CONTROL VOLTAGE (115V) AND DO NOT POWER UNIT UNTIL CHECK-OUT AND START-UP PROCEDURES HAVE BEEN COMPLETED.
3. THE FOLLOWING OPTIONS ARE AVAILABLE, REFER TO MECHANICAL SPECIFICATION FOR DESCRIPTION:
 - (A) OPTIONS MODULE: REQUIRED W/FLAGGED FEATURES (REFER TO CONTROL SCHEMATICS)
 - (B) COMMUNICATIONS INTERFACE - COMM3 OR COMM4 (CONSULT SALES OFFICE FOR SELECTION)
 - (C) UNIT DISCONNECT, NON FUSED (STARTER OPTION)
 - (D) CHILLED WATER RESET-OUTDOOR AIR

4. EVAPORATOR AND CONDENSER FLOW SWITCHES ARE REQUIRED. THEY MUST BE INSTALLED AND WIRED TO THE TRANE PANEL BY THE INSTALLING CONTRACTOR. PURCHASE OF SWITCHES FROM TRANE IS OPTIONAL.

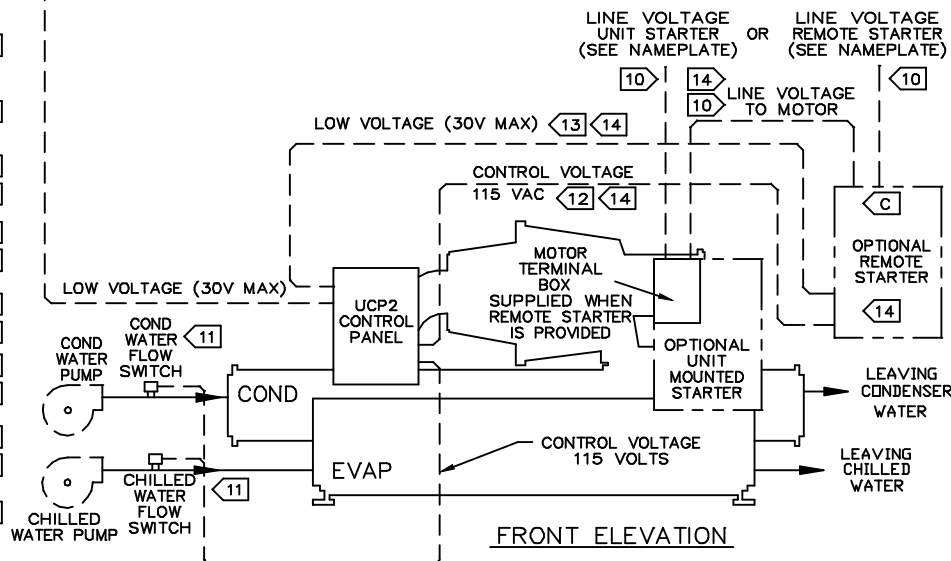
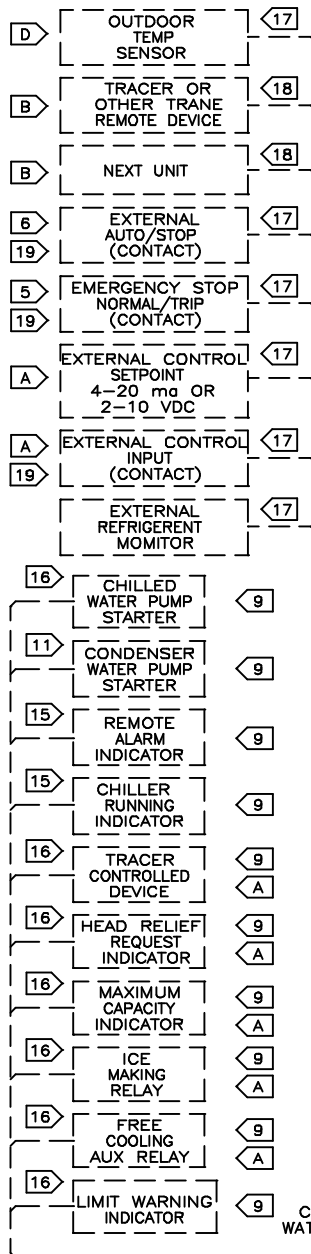
5. AUXILIARY CONTROLS FOR A CUSTOMER SPECIFIED OR INSTALLED LATCHING TRIP-OUT. THE CHILLER WILL RUN NORMALLY WHEN THE CONTACT IS CLOSED AND TRIP THE CHILLER OFF WITH A MANUALLY RESETTABLE DIAGNOSTIC WHEN THE CONTACT OPENS. MANUAL RESET IS ACCOMPLISHED AT THE DIAGNOSTIC KEY ON THE FRONT OF THE UNIT CONTROL PANEL (UCP2).
6. AUXILIARY CONTROLS FOR A CUSTOMER SPECIFIED OR INSTALLED REMOTE AUTO/STOP FUNCTION. THE CHILLER WILL RUN NORMALLY WHEN THE CONTACT IS CLOSED AND STOP THE CHILLER WHEN THE CONTACT IS OPEN. RE-CLOSURE OF THE CONTACT WILL PERMIT THE CHILLER TO AUTOMATICALLY RETURN TO NORMAL OPERATION.

REQUIRED WIRING:

7. ALL CUSTOMER CONTROL CIRCUIT WIRING MUST HAVE A MINIMUM RATING OF 150 VOLTS.
8. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC), STATE AND LOCAL REQUIREMENTS. OUTSIDE THE UNITED STATES, OTHER COUNTRIES APPLICABLE NATIONAL AND/OR LOCAL REQUIREMENTS SHALL APPLY.
9. THE UNIT CONTROL PANEL (UCP2) SUPPLIES A CONTACT OUTPUT TO CONTROL THIS CUSTOMER SUPPLIED DEVICE. MAXIMUM FUSE SIZE - 15 AMPS.
10. COPPER WIRE ONLY - SIZED PER N.E.C. - BASED ON NAMEPLATE RATING.
11. 2 WIRES, 115 VAC CIRCUIT. MINIMUM CONTACT RATING AT 115 VAC - 2.88 INDUCTIVE 1/3 H.P.
12. 7 WIRES 2 - #10 AWG 600V, 4 - #16 AWG 600V, 1 - #8 GRN FOR GROUND
13. 2 WIRES, 30 VOLT OR LESS CIRCUIT. DO NOT RUN WITH HIGHER VOLTAGE CIRCUITS.
14. IF UNIT IS SUPPLIED WITH UNIT MOUNTED STARTER, FIELD WIRING BETWEEN UNIT AND STARTER IS NOT REQUIRED.

OPTIONAL WIRING:

15. 3 WIRES, 115 VAC CIRCUIT. SEPARATE 115 VAC POWER SUPPLY IS REQUIRED. CONTACTS ARE NO/NC RATINGS - 2.88 INDUCTIVE 1/3 H.P. AT 115 VAC.
16. 2 WIRES, 115 VAC CIRCUIT. SEPARATE POWER SUPPLY IS REQUIRED. CONTACTS ARE N.O. CONTACT RATING - 2.88 INDUCTIVE 1/3 H.P. AT 115 VAC.
17. 2 WIRES, 30 VOLT OR LESS CIRCUIT. DO NOT RUN IN CONDUIT WITH HIGHER VOLTAGE CIRCUITS.
18. SHIELDED PAIR, 30 VOLT OR LESS CIRCUIT. MAX LENGTH 5000 FT. BELDON TYPE 8760 RECOMMENDED.
19. CUSTOMER SUPPLIED SILVER CONTACTS MUST BE COMPATIBLE WITH DRY CIRCUIT 24 VDC, 12mA RESISTIVE LOAD.



WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER
INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
FAILURE TO DISCONNECT POWER
BEFORE SERVICING CAN CAUSE
SEVERE PERSONAL INJURY OR DEATH.

AVERTISSEMENT
VOLTAGE HASARDEUX!
DECONNECTEZ TOUTES LES SOURCES
ELECTRIQUES INCLUANT LES
DISCONNECTS SITUES A DISTANCE
AVANT D'ENTREPRENDRE L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE
ELECTRIQUE AVANT D'ENTREPRENDRE
L'ENTRETIEN PEUT ENTRAINER DES
BLESSES CORPORELLES SEVERES
OU LA MORT.

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.

LEGEND