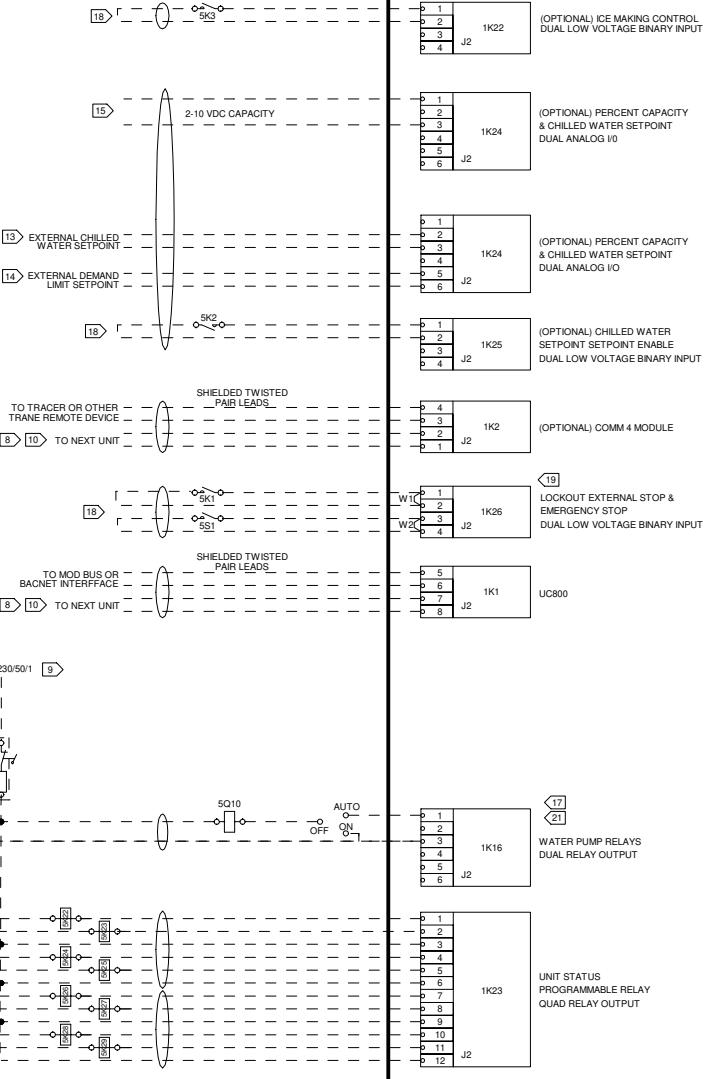
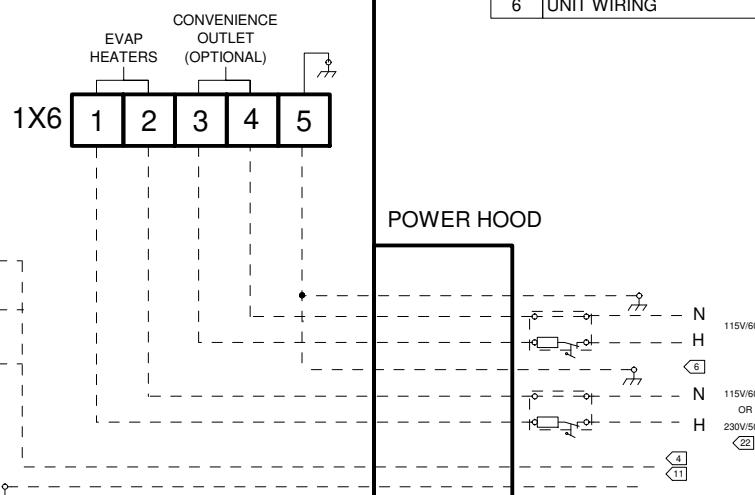


## CONTROLS SECTION



## POWER SECTION

POWER CONNECTION	SELECTOIN CRITERIA	CUSTOMER LUG SIZE
TERMINAL BLOCK	ALL	(2) 500 MCM - #4
CIRCUIT BREAKER	MCA = 300 - 600	(2) 500 MCM - 2/0
	MCA = 700 - 800	(3) 500 MCM - 3/0



SHEET

1

**!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 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.  
VERIFIEZ QUE TOUS LES CONDENSATEURS  
DES MOTEURS SONT DÉCHARGÉS. DANS LE CAS  
D'UNITE COMPORTEANT DES ENTRAINEMENTS  
À VITESSE VARIABLE, SE REPORTER AUX  
INSTRUCTIONS D'ENTRAINEMENT POUR  
DÉCHARGER LES CONDENSATEURS.

BLESSURES GRAVES, VOIRE LA MORT.

**ADVERTENCIA**  
VOLTAJE PELIGROSO  
DESCONECTE TODA LA ENERGIA ELECTRICA, INCLUIDAS LAS DESCONECTACIONES REMOTAS. SIGA LOS PROCEDIMIENTOS DE SEGURIDAD INDICADOS ANTES DE PROCEDER AL SERVICIO. ASSEGURESE DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON TRANSMISION DE VELOCIDADES DEBE CONSULTAR LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR. NO REALIZAR LO ANTES Dicho PUEDE PROVOCAR LA MUERTE O LESIONES GRAVES.

#### DEVICE PREFIX LOCATION CODE

AREA	LOCATION
1	CONTROL PANEL
2	NOT USED
3	CIRCUIT 1
4	CIRCUIT 2
5	CUSTOMER INSTALLED
6	UNIT WIRING

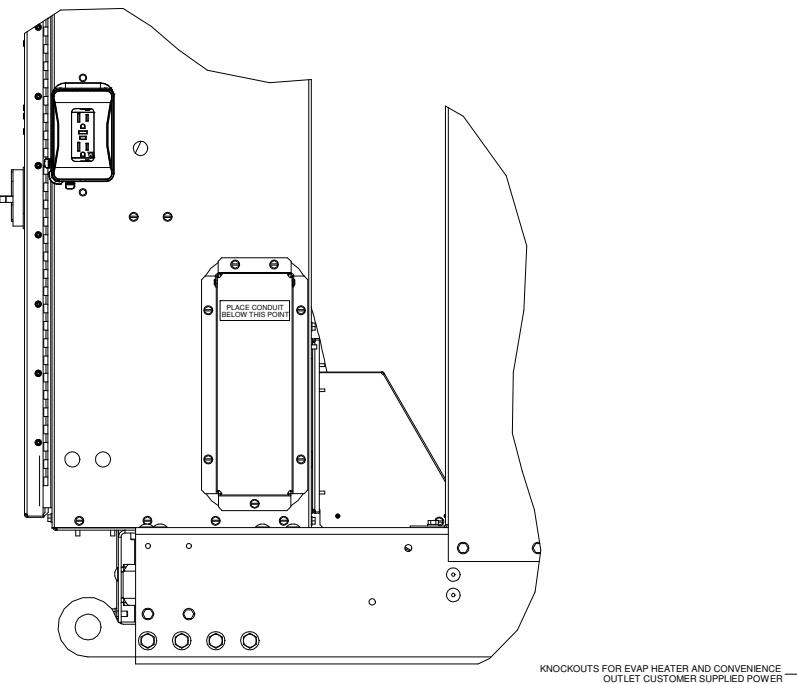
DRAWN BY: R SPENCER	REV: G
© TRANE DATE: 18-FEB-2015	SHEET 2
MASTER FILE:	
REVISION DATE: 20-FEB-2019	
REPLACES:	
SIMILAR TO:	
USED BY:	
THIS DRAWING IS PROPRIETARY AND SHALL NOT BE COPIED OR ITS CONTENTS DISCLOSED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF TRANE	
CAD: CREO SCHEMATICS	

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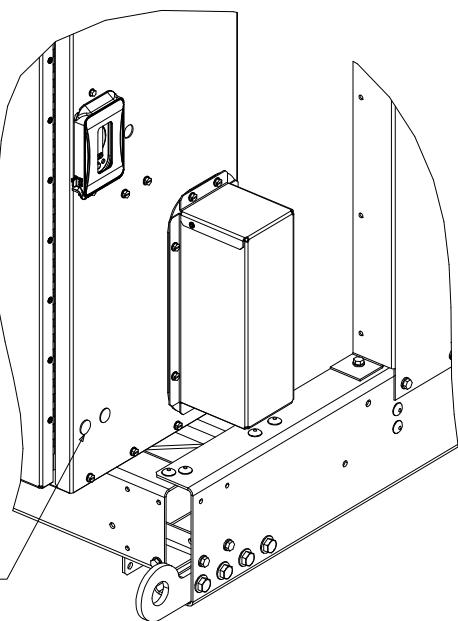
**FIELD WIRING DIAGRAM**  
**RTAF**

## GENERAL NOTES

1. CAUTION-DO NOT ENERGIZE THE UNIT UNTIL CHECK OUT AND STARTUP PROCEDURES HAVE BEEN COMPLETED.
2. ALL MOTORS ARE PROTECTED FROM PRIMARY SINGLE PHASE FAILURES.
3. CAUTION-TRANE PUMP CONTROL MUST BE USED TO PROVIDE PUMP CONTROL. EVAPORATOR CHILLED WATER PUMP MUST BE CONTROLLED BY THE CHILLER OUTPUT. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY RESULT IN DAMAGE TO THE UNIT.
4. SINGLE SOURCE POWER IS PROVIDED AS STANDARD ON THESE PRODUCTS. FIELD CONNECTIONS ARE MADE TO 1Q1 OR 1X2.
5. RECOMMENDED FIELD WIRING CONNECTIONS ARE SHOWN BY DOTTED LINES
6. POWER FOR THE EVAPORATOR HEATER AND/OR OPTIONAL CONVENIENCE OUTLET IS SUPPLIED BY A CUSTOMER PROVIDED POWER SUPPLY.
7. DO NOT RUN LOW VOLTAGE CONTROL WIRING (30 VOLTS OR LESS) IN CONDUIT WITH 110 VOLT OR HIGHER WIRING. DO NOT EXCEED THE FOLLOWING MAXIMUM RUN LENGTHS FOR A GIVEN SIZE: 14 AWG, 5000 FT; 16 AWG, 2000 FT; 18 AWG, 1000FT.
8. SHIELDED TWISTED PAIR LEADS ARE REQUIRED FOR CONNECTIONS TO THE COMMUNICATIONS INTERFACE MODULE (1K1 AND 1K2). THE SHIELD SHOULD BE GROUNDED AT THE RTAF CONTROL PANEL END.
9. CUSTOMER SUPPLIED POWER 115/60/1PH OR 220/50/1PH TO POWER RELAYS. MAX. FUSE SIZE IS 20 AMPS. GROUND ALL CUSTOMER SUPPLIED POWER SUPPLIES AS REQUIRED BY APPLICABLE CODES. GREEN GROUND SCREWS ARE PROVIDED IN UNIT CONTROL PANEL.
10. WIRED TO NEXT UNIT. 22 AWG SHIELDED COMMUNICATION WIRE EQUIVALENT TO HELIX F22R901013 IS RECOMMENDED. THE SUM TOTAL OF ALL INTERCONNECTED CABLE SEGMENTS NOT TO EXCEED 4500 FEET. CONNECTION TOPOLOGY SHOULD BE DASY CHAIN. REFER TO BUILDING AUTOMATION SYSTEM (BAS) COMMUNICATION INSTALLATION LITERATURE FOR END OF LINE TERMINATION RESISTOR REQUIREMENTS.
11. ALL UNIT POWER WIRING MUST BE 100 VOLT COPPER CONDUCTORS ONLY AND HAVE A MINIMUM TEMPERATURE INSULATION RATING OF 90 DEGREE C. REFER TO UNIT NAMEPLATE FOR MINIMUM CIRCUIT AMPLACITY AND MAXIMUM OVERCURRENT PROTECTION DEVICE. PROVIDE AN EQUIPMENT GROUND IN ACCORDANCE WITH APPLICABLE ELECTRIC CODES. REFER TO WIRERANGE TABLE FOR LUG SIZES.
12. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE AND LOCAL REQUIREMENTS.
13. CONTACT RATINGS AND REQUIREMENTS
14. WIRED TO CUSTOMER CHILLED WATER SET POINT 2-10 VDC OR 4-20 mA.
15. WIRED TO CUSTOMER CURRENT LIMIT SET POINT 2-10 VDC.
16. ALL CUSTOMER CONTROL CIRCUIT WIRING MUST BE COPPER CONDUCTORS ONLY AND HAVE A MINIMUM INSULATION RATING OF 300 VOLTS. EXCEPT AS NOTED, ALL CUSTOMER WIRING CONNECTIONS ARE MADE TO CIRCUIT BOARD MOUNTED BOX LUGS WITH A WIRE RANGE OF 14 TO 18 AWG OR DIN RAIL MOUNTED SPRING FORCE TERMINALS.
17. UNIT PROVIDED DRY CONTACTS FOR THE CONDENSER/CHILLED WATER PUMP CONTROL. RELAYS ARE RATED FOR 7.2 AMPS RESISTIVE, 2.88 AMPS PILOT DUTY, OR 1/3 HP, 7.2 FLA AT 120 VOLTS 60 HZ. CONTACTS ARE RATED FOR 5 AMPS GENERAL PURPOSE DUTY 240 VOLTS.
18. CUSTOMER SUPPLIED CONTACTS FOR ALL LOW VOLTAGE CONNECTIONS MUST BE COMPATIBLE WITH DRY CIRCUIT 24 VOLTS DC FOR A 12 mA RESISTIVE LOAD. SILVER OR GOLD PLATED CONTACTS RECOMMENDED.
19. THE CONTACTS FOR AUTO STOP AND EMERGENCY STOP SWITCHES ARE JUMPERED AT THE FACTORY BY JUMPERS 1W1 & 1W2 TO ENABLE UNIT OPERATION. IF REMOTE CONTROL IS DESIRED, REMOVED THE JUMPERS AND CONNECT TO THE DESIRED CONTROL CIRCUIT.
20. SOLID OVALS REPRESENT MAX NUMBER OF CONDUITS AND/OR CABLE GLANDS USED.
21. FIELD WIRING REQUIRED ONLY WITH FIELD INSTALLED PUMP OPTION.
22. 400V, 50Hz UNITS WILL BE FACTORY WIRED TO UTILIZE 230V ACROSS THE HEATERS.



PANEL SIDE VIEW



PANEL ISO VIEW