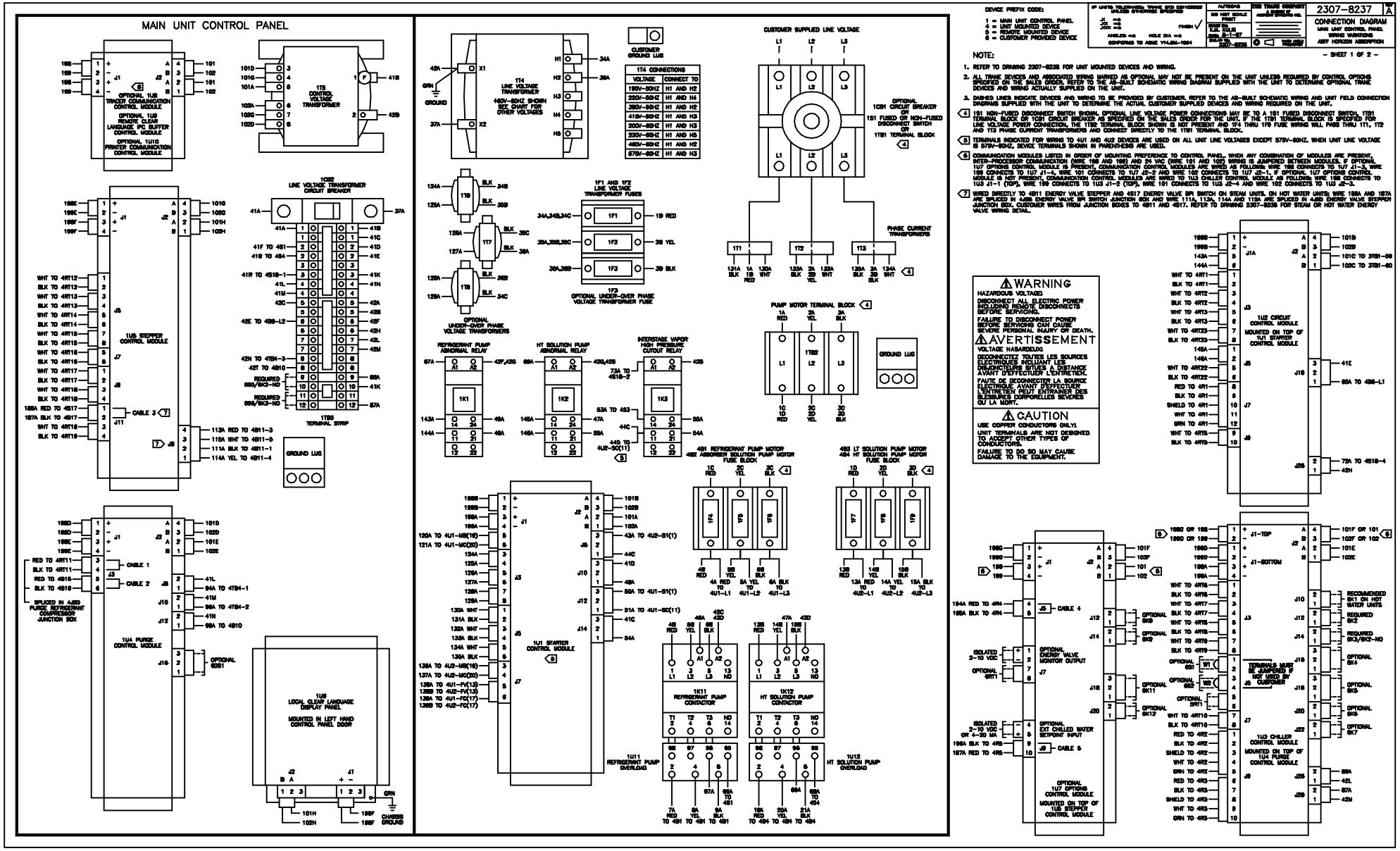
MAIN UNIT CONTROL PANEL
1U8 OPTIONAL TRACER COMMUNICATION CONTROL MODULE
1U9 OPTIONAL REMOTE CLEAR LANGUAGE IPC BUFFER CONTROL MODULE
1U10 OPTIONAL PRINTER COMMUNICATION CONTROL MODULE
1T5 CONTROL VOLTAGE TRANSFORMER
1U5 STEPPER CONTROL MODULE
1C22 LINE VOLTAGE TRANSFORMER CIRCUIT BREAKER
1TB5 TERMINAL STRIP
GROUND LUG
1U4 PURGE CONTROL MODULE
SPLICED IN 4J63 PURGE REFRIGERANT COMPRESSOR JUNCTION BOX
1U6 LOCAL CLEAR LANGUAGE DISPLAY PANEL
MOUNTED IN LEFT HAND CONTROL PANEL DOOR
CHASSIS GROUND
1T4 LINE VOLTAGE TRANSFORMER
460V-60HZ SHOWN SEE CHART FOR OTHER VOLTAGES
CUSTOMER GROUND LUG
1T4 CONNECTIONS
OPTIONAL UNDER-OVER PHASE VOLTAGE TRANSFORMERS
1F1 AND 1F2 LINE VOLTAGE TRANSFORMER FUSES
1F3 OPTIONAL UNDER-OVER PHASE VOLTAGE TRANSFORMER FUSE
CUSTOMER SUPPLIED LINE VOLTAGE
OPTIONAL 1C91 CIRCUIT BREAKER OR 1S1 FUSED OR NON-FUSED DISCONNECT SWITCH OR 1TB1 TERMINAL BLOCK
PHASE CURRENT TRANSFORMERS
PUMP MOTOR TERMINAL BLOCK
REFRIGERANT PUMP ABNORMAL RELAY
HT SOLUTION PUMP ABNORMAL RELAY
INTERSTAGE VAPOR HIGH PRESSURE CUTOUT RELAY
4B1 REFRIGERANT PUMP MOTOR 4B2 ABSORBER SOLUTION PUMP MOTOR FUSE BLOCK
4B3 LT SOLUTION PUMP MOTOR 4B4 HT SOLUTION PUMP MOTOR FUSE BLOCK
1U1 STARTER CONTROL MODULE
1K11 REFRIGERANT PUMP CONTACTOR
1K12 HT SOLUTION PUMP CONTACTOR
1U11 REFRIGERANT PUMP OVERLOAD
1U12 HT SOLUTION PUMP OVERLOAD
1U2 CIRCUIT CONTROL MODULE
MOUNTED ON TOP OF 1U1 STARTER CONTROL MODULE
OPTIONAL ENERGY VALVE MONITOR OUTPUT
OPTIONAL EXT CHILLED WATER SETPOINT INPUT
OPTIONAL 1U7 OPTIONS CONTROL MODULE
MOUNTED ON TOP OF 1U5 STEPPER CONTROL MODULE
TERMINALS MUST BE JUMPERED IF NOT USED BY CUSTOMER
1U3 CHILLER CONTROL MODULE
MOUNTED ON TOP OF 1U4 PURGE CONTROL MODULE
DEVICE PREFIX CODE:
1 = MAIN UNIT CONTROL PANEL
4 = UNIT MOUNTED DEVICE
5 = REMOTE MOUNTED DEVICE
6 = CUSTOMER PROVIDED DEVICE
CONFORMS TO ASME Y14.5M-1994
AUTODAD
DO NOT SCALE PRINT
THE TRANE COMPANY
LA CROSSE, WISCONSIN
2307-8237
A
CONNECTION DIAGRAM
MAIN UNIT CONTROL PANEL WIRING VARIATIONS
ABT HORIZON ABSORPTION
- SHEET 1 OF 2 -
NOTE:
1. REFER TO DRAWING 2307-8238 FOR UNIT MOUNTED DEVICES AND WIRING.
2. ALL TRANE DEVICES AND ASSOCIATED WIRING MARKED AS OPTIONAL MAY NOT BE PRESENT ON THE UNIT UNLESS REQUIRED BY CONTROL OPTIONS SPECIFIED ON THE SALES ORDER. REFER TO THE AS-BUILT SCHEMATIC WIRING DIAGRAM SUPPLIED WITH THE UNIT TO DETERMINE OPTIONAL TRANE DEVICES AND WIRING ACTUALLY SUPPLIED ON THE UNIT.
3. DASHED LINES INDICATE DEVICES AND WIRING TO BE PROVIDED BY CUSTOMER. REFER TO THE AS-BUILT SCHEMATIC WIRING AND UNIT FIELD CONNECTION DIAGRAMS SUPPLIED WITH THE UNIT TO DETERMINE THE ACTUAL CUSTOMER SUPPLIED DEVICES AND WIRING REQUIRED ON THE UNIT.
4 191 NON-FUSED DISCONNECT SWITCH SHOWN. OPTIONAL LINE VOLTAGE POWER CONNECTIONS MAY BE TO A 1S1 FUSED DISCONNECT SWITCH, 1TB1 TERMINAL BLOCK OR 1C91 CIRCUIT BREAKER AS SPECIFIED ON THE SALES ORDER FOR THE UNIT. IF THE 1TB1 TERMINAL BLOCK IS SPECIFIED FOR LINE VOLTAGE POWER CONNECTION, THE 1TB2 TERMINAL BLOCK SHOWN IS NOT PRESENT AND 1F4 THRU 1F9 FUSE WIRING WILL PASS THRU 1T1, 1T2 AND 1T3 PHASE CURRENT TRANSFORMERS AND CONNECT DIRECTLY TO THE 1TB1 TERMINAL BLOCK.
5 TERMINALS INDICATED FOR WIRING TO 4U1 AND 4U2 DEVICES ARE USED ON ALL UNIT LINE VOLTAGES EXCEPT 575V-60HZ. WHEN UNIT LINE VOLTAGE IS 575V-60HZ, DEVICE TERMINALS SHOWN IN PARENTHESIS ARE USED.
6 COMMUNICATION MODULES LISTED IN ORDER OF MOUNTING PREFERENCE TO CONTROL PANEL. WHEN ANY COMBINATION OF MODULES ARE PRESENT, INTER-PROCESSOR COMMUNICATION (WIRE 199 AND 199) AND 24 VAC (WIRE 101 AND 102) WIRING IS JUMPERED BETWEEN MODULES. IF OPTIONAL 1U7 OPTIONS CONTROL MODULE IS PRESENT, COMMUNICATION CONTROL MODULES ARE WIRED AS FOLLOWS: WIRE 198 CONNECTS TO 1U7 J1-3, WIRE 199 CONNECTS TO 1U7 J1-4, WIRE 101 CONNECTS TO 1U7 J2-2 AND WIRE 102 CONNECTS TO 1U7 J2-1. IF OPTIONAL 1U7 OPTIONS CONTROL MODULE IS NOT PRESENT, COMMUNICATION CONTROL MODULES ARE WIRED TO 1U3 CHILLER CONTROL MODULE AS FOLLOWS: WIRE 198 CONNECTS TO 1U3 J1-1 (TOP), WIRE 199 CONNECTS TO 1U3 J1-2 (TOP), WIRE 101 CONNECTS TO 1U3 J2-4 AND WIRE 102 CONNECTS TO 1U3 J2-3.
7 WIRED DIRECTLY TO 4B11 ENERGY VALVE STEPPER AND 4S17 ENERGY VALVE BPI SWITCH ON STEAM UNITS. ON HOT WATER UNITS, WIRE 198A AND 187A ARE SPLICED IN 4J68 ENERGY VALVE BPI SWITCH JUNCTION BOX AND WIRE 111A, 113A, 114A AND 118A ARE SPLICED IN 4J69 ENERGY VALVE STEPPER JUNCTION BOX. CUSTOMER WIRES FROM JUNCTION BOXES TO 4B11 AND 4S17. REFER TO DRAWING 2307-8238 FOR STEAM OR HOT WATER ENERGY VALVE WIRING DETAIL.
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!
DÉCONNECTEZ TOUTES LES SOURCES ÉLECTRIQUES INCLUANT LES DISJONCTEURS SITUÉS À DISTANCE AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DÉCONNECTER LA SOURCE ÉLECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN PEUT ENTRAÎNER DES BLESSURES CORPORELLES SÉVÈRES 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.