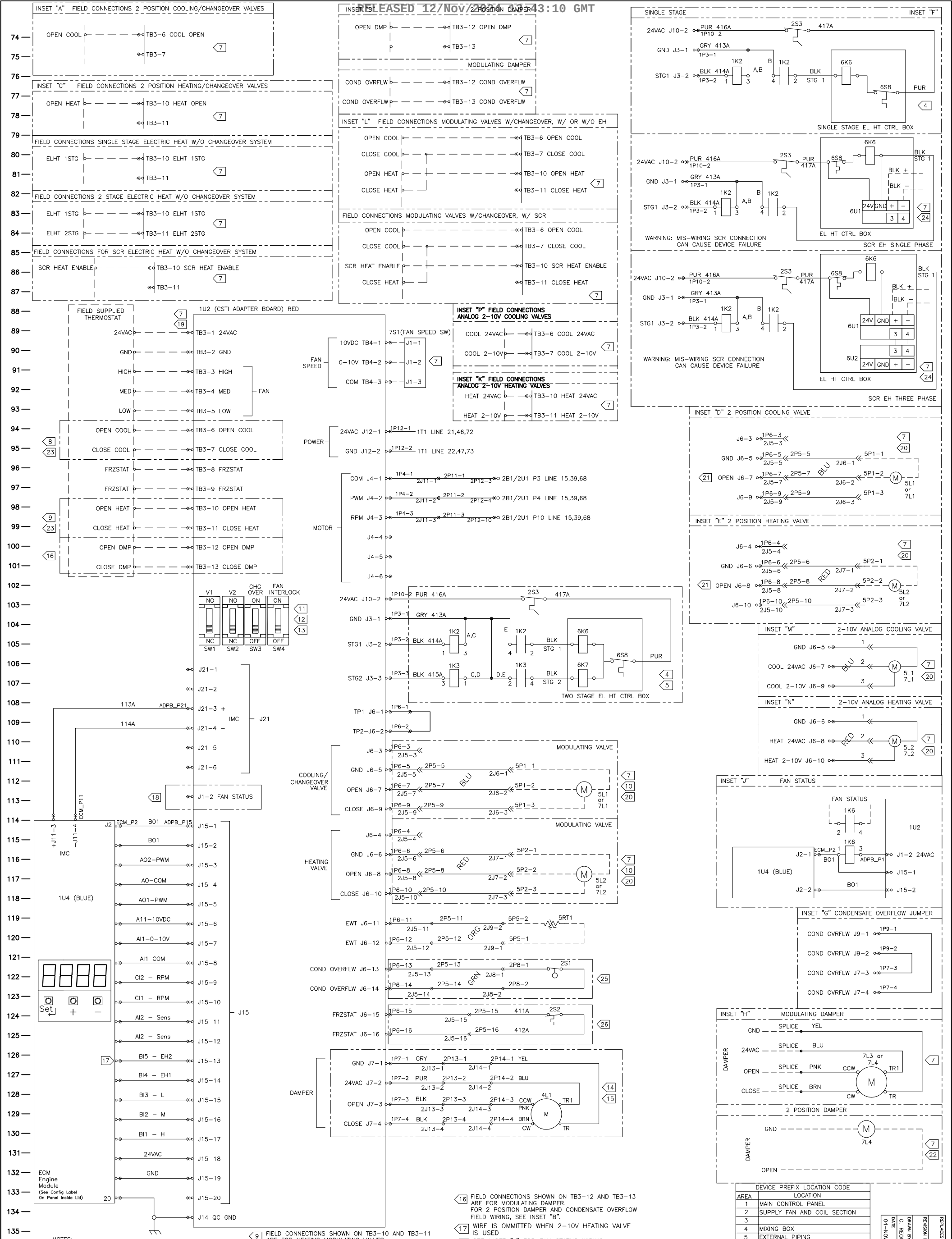
RELEASED 12/Nov/2024 11:43:10 GMT



NOTES:

1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25° C (77° F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL UTILITIES TURNED OFF, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
2. DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. DASHED LINED ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE COMPONENTS PROVIDED BY THE FIELD. PHANTOM LINE ENCLOSURES INDICATE ALTERNATE CIRCUITRY OR AVAILABLE SALES OPTIONS. SOLID LINES INDICATE WIRING BY TRANE.
3. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC). STATE AND LOCAL REQUIREMENTS. ALL FIELD WIRING MUST HAVE INSULATION VOLTAGE RATING THAT EQUALS OR EXCEEDS UNIT RATED VOLTAGE.

4 ELECTRIC HEAT SCHEMATIC IS LOCATED IN THE ELECTRIC HEAT CONTROL BOX PANEL.

5 WIRING SHOWN IS FOR TWO STAGE ELECTRIC HEAT. FOR SINGLE STAGE ELECTRIC HEAT OR SCR ELECTRIC HEAT SEE INSET "F"

7 USE CLASS 2 WIRING.

8 FIELD CONNECTIONS SHOWN ON TB3-6 AND TB3-7 ARE FOR COOLING MODULATING VALVES. FOR FIELD CONNECTIONS TO COOLING TWO POSITION VALVES OR CHANGEOVER VALVES, SEE INSET "A".

9 FIELD CONNECTIONS SHOWN ON TB3-10 AND TB3-11 ARE FOR HEATING MODULATING VALVES. FOR FIELD CONNECTIONS TO HEATING TWO POSITION VALVES OR CHANGEOVER VALVES, AND SINGLE STAGE ELECTRIC HEAT, TWO STAGE ELECTRIC HEAT AND SCR ELECTRIC HEAT, W/O CHANGEOVER SYSTEM, SEE INSET "C".

10 WIRING SHOWN IS FOR MODULATING VALVES. FOR COOLING 2 POSITION VALVE, SEE INSET "D". FOR HEATING 2 POSITION VALVE, SEE INSET "E". FOR COOLING ANALOG 2-10V VALVE, SEE INSET "M". FOR HEATING ANALOG 2-10V VALVE, SEE INSET "N".

11 SW1 AND SW2 ARE SHOWN IN THE OFF POSITION. SW1 AND OR SW2 ARE TURNED OFF WHEN VALVES ARE NORMALLY CLOSED OR MODULATING (CVT1 OR CVT2 = A,C,E,F,G,J). SW1 AND/OR SW2 ARE TURNED ON WHEN VALVES ARE NORMALLY OPEN. (CVT1 OR CVT2 = B,D,H).

12 SW3 IS SHOWN IN THE OFF POSITION. SW3 IS TURNED ON WHEN CHANGEOVER COILS ARE SELECTED (COL1 OR COL2 = J,K).

13 SW4 IS SHOWN IN THE OFF POSITION. SW4 IS TURNED ON WHEN UNIT HAS ELECTRIC HEAT (STGE = 1,2,3).

14 WIRING SHOWN IS FOR FACTORY INSTALLED MODULATING DAMPER. FOR CONDENSATE OVERFLOW JUMPER, SEE INSET "G". FOR 2 POSITION DAMPER AND MODULATING FIELD SUPPLIED/ SHIP LOOSE DAMPER WIRING, SEE INSET "H".

15 REMOVE TEST JUMPER PRIOR TO CONNECTING MIXING BOX TO MAIN UNIT.

16 FIELD CONNECTIONS SHOWN ON TB3-12 AND TB3-13 ARE FOR MODULATING DAMPER. FOR 2 POSITION DAMPER AND CONDENSATE OVERFLOW FIELD WIRING, SEE INSET "B".

17 WIRE IS OMMITTED WHEN 2-10V HEATING VALVE IS USED

18 SEE INSET "J" FOR FAN STATUS WIRING. (CTRL = N).

19 24V OUTPUT IS RATED 15VA

20 FIELD SUPPLIED ACTUATOR WIRING UTILIZES THE SAME CONNECTION POINTS AS FACTORY ACTUATOR WIRING.

21 VALVES SHOWN IN NORMALLY CLOSED POSITION, FOR NORMALLY OPEN POSITION, THE VALVE SIGNAL BECOMES CLOSE.

22 DAMPER SHOWN IN NORMALLY CLOSED POSITION, FOR NORMALLY OPEN POSITION, THE DAMPER SIGNAL BECOMES CLOSE.

23 FIELD CONNECTIONS SHOWN ON TB3-6, TB3-7, TB3-10, TB3-11 ARE FOR MODULATING VALVES W/O CHANGEOVER AND ELECTRIC HEAT SYSTEM. FOR FIELD CONNECTIONS OF MODULATING VALVES W/CHANGEOVER, W/ OR W/O ELECTRIC HEAT SYSTEM, SCR ELECTRIC HEAT, SEE INSET "L".

24 FIELD CONNECTIONS FOR SCR EH ARE IN THE HEATER BOX.

25 WIRING IS SHOWN WITH CONDENSATE OVERFLOW SWITCH. SEE INSET G FOR REQUIRED CONDENSATE OVERFLOW JUMPER. FOR UNITS WITHOUT COILS OR UNITS WITHOUT CONDENSATE OVERFLOW, THERE IS NO FACTORY WIRED CONDENSATE OVERFLOW SWITCH

26 WIRING SHOWN IS FOR BCHE/BCVE WITH LOW LIMIT/FREEZE STAT. FOR UNITS WITHOUT LOW LIMT/FREEZESTAT OR WITHOUT COILS, THERE IS NO FACTORY WIRED LOW LIMIT/FREEZESTAT SWITCH.

DEVICE PREFIX LOCATION CODE

AREA	LOCATION
1	MAIN CONTROL PANEL
2	SUPPLY FAN AND COIL SECTION
3	
4	MIXING BOX
5	EXTERNAL PIPING
6	ELECTRIC HEAT CONTROL BOX
7	FIELD INSTALLED DEVICE

LEGEND

DEVICE DESIGNATION	DESCRIPTION	LINE NUMBER
1U2	ADAPTER BOARD	88,98
1U4	ENGINE BOARD	98,118
2S3	EL HT LOCKOUT SWITCH	75,105
6K6	CONTACTOR; EL HT STG 1	107,77
6S8	EL HT HIGH TEMP	108,77
6K7	CONTACTOR; EL HT STG 2	109
1K2	CONTACTOR; EL HT	107,77
1K3	CONTACTOR; EL HT	109
1K6	RELAY; FAN STATUS	94,96
5L1	COOLING COIL VALVE MOTOR	84,115
5L2	HEATING COIL VALVE MOTOR	89,119
7L1	COOLING COIL VALVE MOTOR	115,84
7L2	HEATING COIL VALVE MOTOR	89,119
2S1	CONDENSATE OVERFLOW SWTCH	126
2S2	FREEZESTAT	128
7L3	MIXING BOX DAMPER ACTUATOR	125
7L4	OUTSIDE AIR DAMPER ACTUATOR	125,128
4L1	MIXING BOX DAMPER ACTUATOR	133
5RT1	ENTERING WATER TEMP SENSOR	124
7S1	FAN SPEED SW	89

REPLACES
REVISION DATE
DRAWN BY G. REQUENA
DATE 04-NOV-2024
SIMILAR TO

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SCHEMATIC
CSTI--STANDARD COILS
BLOWER COIL -- BOXE
REV E