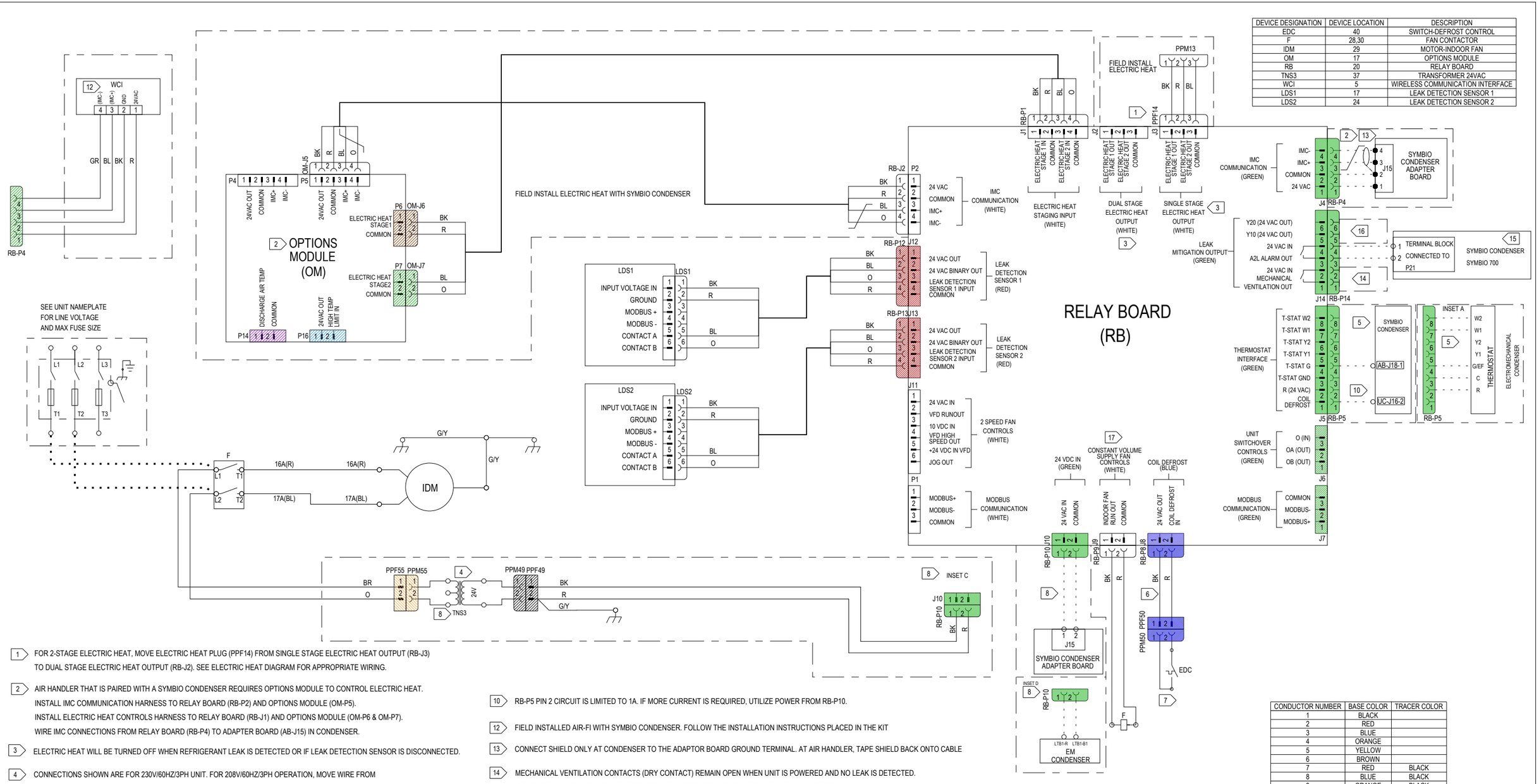
DEVICE DESIGNATION	DEVICE LOCATION	DESCRIPTION
EDC	40	SWITCH-DEFROST CONTROL
F	28,30	FAN CONTACTOR
IDM	29	MOTOR-INDOOR FAN
OM	17	OPTIONS MODULE
RB	20	RELAY BOARD
TNS3	37	TRANSFORMER 24VAC
WCI	5	WIRELESS COMMUNICATION INTERFACE
LDS1	17	LEAK DETECTION SENSOR 1
LDS2	24	LEAK DETECTION SENSOR 2



1. FOR 2-STAGE ELECTRIC HEAT, MOVE ELECTRIC HEAT PLUG (PPF14) FROM SINGLE STAGE ELECTRIC HEAT OUTPUT (RB-J3) TO DUAL STAGE ELECTRIC HEAT OUTPUT (RB-J2). SEE ELECTRIC HEAT DIAGRAM FOR APPROPRIATE WIRING.
2. AIR HANDLER THAT IS PAIRED WITH A SYMBIO CONDENSER REQUIRES OPTIONS MODULE TO CONTROL ELECTRIC HEAT.
   INSTALL IMC COMMUNICATION HARNESS TO RELAY BOARD (RB-P2) AND OPTIONS MODULE (OM-P5).
   INSTALL ELECTRIC HEAT CONTROLS HARNESS TO RELAY BOARD (RB-J1) AND OPTIONS MODULE (OM-P6 & OM-P7).
   WIRE IMC CONNECTIONS FROM RELAY BOARD (RB-P4) TO ADAPTER BOARD (AB-J15) IN CONDENSER.
3. ELECTRIC HEAT WILL BE TURNED OFF WHEN REFRIGERANT LEAK IS DETECTED OR IF LEAK DETECTION SENSOR IS DISCONNECTED.
4. CONNECTIONS SHOWN ARE FOR 230V/60HZ/3PH UNIT. FOR 208V/60HZ/3PH OPERATION, MOVE WIRE FROM 230V TERMINAL TO 208V TERMINAL ON UNIT TRANSFORMER. FOR ALL OTHER VOLTAGES, TRANSFORMERS ARE SINGLE TAP PRIMARY AND WILL BE SHIPPED FROM THE FACTORY WITH THE APPROPRIATE WIRING.
5. WIRING SHOWN IS APPLICABLE TO UNITS THAT ARE PAIRED WITH SYMBIO CONDENSER. SEE INSET A FOR STANDARD THERMOSTAT WIRING.
6. FOR PAIRING WITH ELECTROMECHANICAL CONDENSER, CUT WIRES AT RB-P8 AND SPLICE WITH WIRES THAT CONNECT TO EDC TERMINALS IN CONDENSER
7. SWITCH IS SHIPPED IN THE NORMALLY OPEN CONFIGURATION. FOR PAIRING WITH ELECTROMECHANICAL CONDENSER, MOVE WIRE FROM TERMINAL"H" TO TERMINAL "L" ON EDC SWITCH ENABLING NORMALLY CLOSED SWITCH OPERATION.
8. 24 VAC IS SUPPLIED TO THE AIR HANDLER FROM A SYMBIO CONDENSER AS SHOWN, CONNECTIONS FOR ELECTROMECHANICAL CONDENSER ARE SHOWN IN INSET D. ALTERNATIVELY, 24VAC CAN BE SUPPLIED FROM A SEPARATE TRANSFORMER TNS3, WHICH IS STANDARD ON 5 TON AIR HANDLERS OR AVAILABLE AS A FIELD INSTALLED ACCESSORY (SEE INSET C).
10. RB-P5 PIN 2 CIRCUIT IS LIMITED TO 1A. IF MORE CURRENT IS REQUIRED, UTILIZE POWER FROM RB-P10.
12. FIELD INSTALLED AIR-FI WITH SYMBIO CONDENSER. FOLLOW THE INSTALLATION INSTRUCTIONS PLACED IN THE KIT
13. CONNECT SHIELD ONLY AT CONDENSER TO THE ADAPTOR BOARD GROUND TERMINAL. AT AIR HANDLER, TAPE SHIELD BACK ONTO CABLE
14. MECHANICAL VENTILATION CONTACTS (DRY CONTACT) REMAIN OPEN WHEN UNIT IS POWERED AND NO LEAK IS DETECTED. CONTACTS CLOSE WHEN LEAK IS DETECTED OR IF REFRIGERANT LEAK SENSOR IS DISCONNECTED. CONTACT RATING : 24VAC/DC, 12mA TO 2 Amps.
15. ALARM OUTPUT CONTACTS (DRY CONTACT) REMAIN CLOSED WHEN UNIT IS POWERED AND NO LEAK IS DETECTED. CONTACTS OPEN WHEN REFRIGERANT LEAK IS DETECTED OR IF REFRIGERANT LEAK SENSOR IS DISCONNECTED. CONTACT RATING : 24VAC/DC, 12mA TO 2 Amps.
16. RB-P14 PIN 5 AND 6 TO BE UTILIZED AS COMPRESSOR DISABLING SIGNAL TO ELECTROMECHANICAL CONDENSER UNITS WHEN AIR HANDLER LEAK DETECTION SENSOR IS ACTIVATED. THESE OUTPUTS ARE INTENDED TO DRIVE ISOLATION RELAY COILS TO MINIMIZE VA CONSUMPTION.
17. SUPPLY FAN WILL BE TURNED ON WHEN REFRIGERANT LEAK IS DETECTED OR IF LEAK DETECTION SENSOR IS DISCONNECTED.

CONDUCTOR NUMBER	BASE COLOR	TRACER COLOR
1	BLACK	
2	RED	
3	BLUE	
4	ORANGE	
5	YELLOW	
6	BROWN	
7	RED	BLACK
8	BLUE	BLACK
9	ORANGE	BLACK
10	YELLOW	BLACK

DESIGNER:	RAM R
ENGINEER:	SANJUNATH.S
TRANE © DATE:	02-AUG-2023
REPLACES:	
SIMILAR TO:	
REVISION DATE:	16-JAN-2024
REVISED BY:	SUDHEER KUMAR
APPROVED BY:	SANJUNATH.S
CAD SYSTEM USED:	CREO SCHEMATICS

TRANE ®

IEC DESIGN COMPLIANT

ODYSSEY
SCHEMATICS
AIR HANDLER
TWE-CONSTANT VOLUME
(1-PHASE)

MASTER NUMBER:	DRAWING NUMBER:	SHEET:	REV
	12134776	1 OF 1	B