

DEVICE DESIGNATION	DEVICE LOCATION	DESCRIPTION
EDC	40	SWITCH-DEFROST CONTROL
DTS	30	SENSOR-DISCHARGE AIR TEMP
IDM	6.31	MOTOR-INDOOR FAN
RB	20	RELAY BOARD
OM	10	OPTIONS MODULE
VFD	30	VARIABLE FREQUENCY DRIVE
HTL	21	HIGH TEMP LIMIT SWITCH
FU3, FU4, FU5	29.31, 33	FUSE
WCI	12	WIRELESS COMMUNICATION INTERFACE
LDS1	14	LEAK DETECTION SENSOR 1
LDS2	21	LEAK DETECTION SENSOR 2

RELAY BOARD (RB)

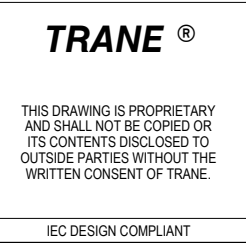
CONDUCTOR NUMBER	BASE COLOR	TRACER COLOR
1	BLACK	
2	RED	
3	BLUE	
4	ORANGE	
5	YELLOW	
6	BROWN	
7	RED	BLACK
8	BLUE	BLACK
9	ORANGE	BLACK
10	YELLOW	BLACK

FUSE REPLACEMENT TABLE

FUSE DESIGNATION	FUSE CLASS	UNIT VOLTAGE	FUSE RATING	2HP MOTOR	3HP MOTOR	5HP MOTOR	7.5HP MOTOR	10HP MOTOR
FU3-FU5	J	208V/60/3	600V	15A	25A	50A	50A	50A
FU3-FU5	J	230V/60/3	600V	15A	25A	50A	50A	50A
FU3-FU5	J	460V/60/3	600V	15A	15A	15A	25A	25A
FU3-FU5	J	575V/60/3	600V	20A	20A	20A	20A	20A

- 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.
- 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.
- 8 24VAC IS SUPPLIED TO THE AIR HANDLER FROM A SYMBIO CONDENSER AS SHOWN. ALTERNATIVELY, 24VAC CAN BE SUPPLIED FROM A SEPARATE TRANSFORMER TNS3, AVAILABLE AS A FIELD INSTALLED ACCESSORY (SEE INSET A).
- 9 RB-J11 PIN 6 WILL BE ACTIVE WHEN REFRIGERANT LEAK IS DETECTED OR IF LEAK DETECTION SENSOR IS DISCONNECTED TO ENABLE SUPPLY FAN OPERATION AT QMIN SPEED.
- 11 CONNECTIONS SHOWN FOR 7.5HP - 208/230/460/575V MOTOR
- 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.
- 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.
- 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.

DESIGNER: RAM R
 ENGINEER: SANJUNATH S
 TRANE © DATE: 07-AUG-2023
 REPLACES:
 SIMILAR TO:
 REVISION DATE: 16-JAN-2024
 REVISED BY: SUDHEER KUMAR
 APPROVED BY: SANJUNATH S
 CAD SYSTEM USED: CREO SCHEMATICS



ODYSSEY SCHEMATICS
 AIR HANDLER
 TWE-SZVAV /
 2-SPEED FAN (SYMBIO COND)

MASTER NUMBER: DRAWING NUMBER: SHEET: REV
 12134779 1 OF 1 B

IEC DESIGN COMPLIANT