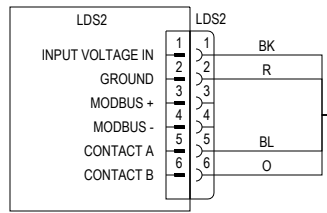
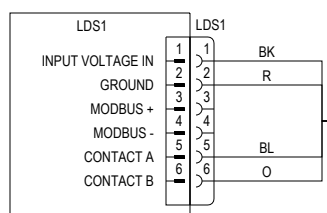
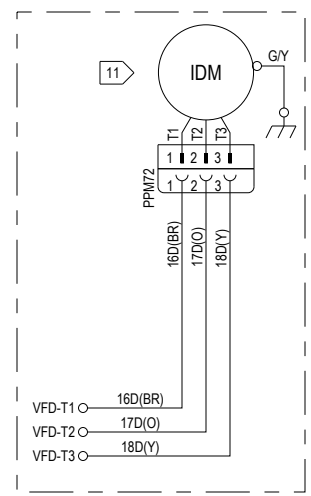
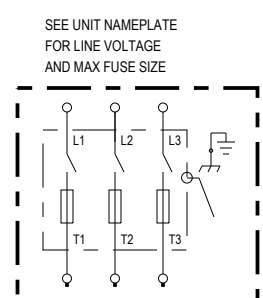
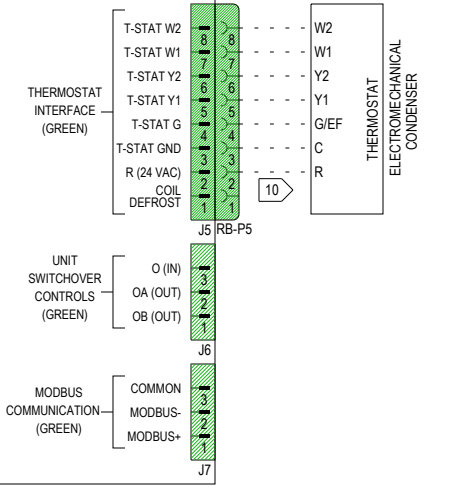


DEVICE DESIGNATION	DEVICE LOCATION	DESCRIPTION
EDC	42	SWITCH-DEFROST CONTROL
FU3,FU4,FU5	27,29,31	FUSE
IDM	8,30	MOTOR-INDOOR FAN
RB	20	RELAY BOARD
LDS1	10	LEAK DETECTION SENSOR 1
LDS2	19	LEAK DETECTION SENSOR 2
TNS3	42	TRANSFORMER 24VAC
VFD	28	VARIABLE FREQUENCY DRIVE



RELAY BOARD (RB)



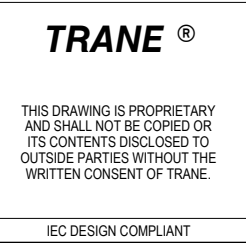
CONDUCTOR NUMBER	BASE COLOR	TRACER COLOR
1	BLACK	
2	RED	
3	BLUE	
4	ORANGE	
5	YELLOW	
6	BROWN	
7	RED	BLACK
8	BLUE	BLACK
9	ORANGE	BLACK
10	YELLOW	BLACK

FUSE 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.
- 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 24VAC IS SUPPLIED TO THE AIR HANDLER FROM EM 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.

- 10 RB-P5 PIN 2 CIRCUIT IS LIMITED TO 1A. IF MORE CURRENT IS REQUIRED, UTILIZE POWER FROM RB-P10.
- 11 CONNECTIONS SHOWN FOR 7.5HP - 208/230/460/575V MOTOR
- 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.

DESIGNER: RAM R
 ENGINEER: SANJUNATH S
 TRANE © DATE: 07-AUG-2021
 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-2 SPEED FAN (EM COND)

MASTER NUMBER: DRAWING NUMBER: SHEET: REV

12134778 1 OF 1 B