PACKAGED
GAS HEAT ELECTRIC COOL

Start-Up Checklist

START-UP CHECKLIST
(Remove and Store in Job File)

I. PRELIMINARY INFORMATION

MODEL NO.: 48TC EM06A2A5A6AAA0 SERIAL NO.: 3222P35665

DATE: 12-20-22 TECHNICIAN: _____

II. PRE-START-UP (insert checkmark in box as each item is completed)

- [x] VERIFY THAT JOBSITE VOLTAGE AGREES WITH VOLTAGE LISTED ON RATING PLATE
- [x] VERIFY THAT ALL PACKAGING MATERIALS HAVE BEEN REMOVED FROM UNIT
- [x] VERIFY INSTALLATION OF OUTDOOR AIR HOOD
- [x] REMOVE ALL SHIPPING HOLD DOWN BOLTS AND BRACKETS PER INSTALLATION INSTRUCTIONS
- [x] VERIFY THAT CONDENSATE CONNECTION IS INSTALLED PER INSTALLATION INSTRUCTIONS
- [x] VERIFY THAT FLUE HOOD IS INSTALLED
- [x] CHECK REFRIGERANT PIPING FOR INDICATIONS OF LEAKS; INVESTIGATE AND REPAIR IF NECESSARY
- [x] CHECK GAS PIPING FOR LEAKS
- [x] CHECK ALL ELECTRICAL CONNECTIONS AND TERMINALS FOR TIGHTNESS
- [x] VERIFY GAS PRESSURE TO UNIT GAS VALVE IS WITHIN SPECIFIED RANGE
- [x] CHECK THAT INDOOR AIR RETURN AIR FILTERS ARE CLEAN AND IN PLACE
- [x] CHECK THAT OUTDOOR AIR INLET SCREENS ARE IN PLACE
- [x] VERIFY THAT UNIT INSTALLATION IS LEVEL
- [x] CHECK FAN WHEELS AND PROPELLER FOR LOCATION IN HOUSING/ORIFICE AND SETSCREW TIGHTNESS
- [x] CHECK TO ENSURE THAT ELECTRICAL WIRING IS NOT IN CONTACT WITH REFRIGERANT LINES OR SHARP METAL EDGES
- [x] CHECK PULLEY ALIGNMENT AND BELT TENSION PER INSTALLATION INSTRUCTIONS
- [x] VERIFY THAT SCROLL COMPESSORS ARE ROTATING IN THE CORRECT DIRECTION
- [x] VERIFY INSTALLATION OF THERMOSTAT
- [x] VERIFY THAT CRANKCASE HEATERS HAVE BEEN ENERGIZED FOR AT LEAST 24 HOURS

III. START-UP (insert value as each item is completed)

ELECTRICAL

SUPPLY VOLTAGE	L1-L2	208	L2-L3	208	L3-L1	208
CIRCUIT 1 COMPRESSOR AMPS	L1	9	L2	9	L3	9
CIRCUIT 2 COMPRESSOR AMPS	L1		L2		L3	
INDOOR-FAN AMPS		8				
OUTDOOR-FAN AMPS	NO. 1	1.6	NO. 2	1.6		

BLOWER EXTERNAL STATIC PRESSURE

RETURN AIR STATIC PRESSURE	.5	IN. W.C.
SUPPLY AIR STATIC PRESSURE	.35	IN. W.C.
BLOWER WHEEL RPM		RPM

TEMPERATURES

OUTDOOR-AIR TEMPERATURE	44.4	DB		WB
RETURN-AIR TEMPERATURE	64	DB		WB
COOLING SUPPLY AIR	43	DB		WB
GAS HEAT SUPPLY AIR	106	DB		

PRESSURES (Cooling Mode)

GAS INLET PRESSURE	6.8	IN. WG		
GAS MANIFOLD PRESSURE	2	IN. WG (LOW FIRE)	3.5	IN. WG (HI FIRE)
REFRIGERANT SUCTION, CIRCUIT 1	118	PSIG		F
REFRIGERANT SUCTION, CIRCUIT 2		PSIG		F
REFRIGERANT DISCHARGE, CIRCUIT 1	288	PSIG		F
REFRIGERANT DISCHARGE, CIRCUIT 2		PSIG		F

☑ VERIFY THAT 3-PHASE FAN MOTOR AND BLOWER ARE ROTATING IN CORRECT DIRECTION.
☐ VERIFY THAT 3-PHASE SCROLL COMPRESSOR IS ROTATING IN THE CORRECT DIRECTION
☑ VERIFY REFRIGERANT CHARGE USING CHARGING CHARTS

PRESSURES HEATING (HEAT PUMP ONLY)

REFRIGERANT SUCTION	CIRCUIT A	PSIG
	CIRCUIT B	PSIG
REFRIGERANT DISCHARGE	CIRCUIT A	PSIG
	CIRCUIT B	PSIG

☐ VERIFY REFRIGERANT CHARGE USING HEAT PUMP CHARGING CHARTS
☐ VERIFY SMOKE DETECTOR UNIT SHUTDOWN BY UTILIZING MAGNET TEST

GENERAL

☐ SET ECONOMIZER MINIMUM VENT AND CHANGEOVER SETTINGS TO MATCH JOB REQUIREMENTS (IF EQUIPPED)

IV. HUMIDIMIZER START-UP

STEP

☐ 1. CHECK CTB FOR JUMPER 5, 6, 7
JUMPERS 5, 6, 7 MUST BE CUT AND OPEN
☐ 2. OPEN HUMIDISTAT CONTACTS
☐ 3. START UNIT IN COOLING (CLOSE Y1)

OBSERVE AND RECORD

A	SUCTION PRESSURE	_____ PSIG
B	DISCHARGE PRESSURE	_____ PSIG
C	ENTERING AIR TEMPERATURE	_____ °F
D	LIQUID LINE TEMPERATURE AT OUTLET OF REHEAT COIL	_____ °F
E	CONFIRM CORRECT ROTATIN FOR COMPRESSOR	
F	CHECK FOR CORRECT RAMP-UP OF OUTDOOR FAN MOTOR AS CONDENSER COIL WARMS	

☐ 4. CHECK UNIT CHARGE PER CHARGING CHART

JUMPER 32LT MOTOR MASTER TEMPERATURE SENSOR DURING THIS CHECK.

REMOVE JUMPER WHEN COMPLETE

☐ 5. SWITCH UNIT TO HIGH-LATENT MODE (SUBCOOLER) BY CLOSING HUMIDISTAT WITH Y1 CLOSED

OBSERVE

- ☐ A. REDUCTION IN SUCTION PRESSURE (5 TO 7 PSI EXPECTED)
- ☐ B. DISCHARGE PRESSURE UNCHANGED
- ☐ C. LIQUID TEMPERATURE DROPS TO 50 TO 55° RANGE
- ☐ D. LSV SOLENOID ENERGIZED (VALVE CLOSES)

☐ 6. SWITCH UNIT TO DEHUMID (REHEAT) BY OPENING Y1

OBSERVE

- ☐ A. SUCTION PRESSURE INCREASES TO NORMAL COOLING LEVEL
- ☐ B. DISCHARGE PRESSURE DECREASES (35 TO 50 PSI) (LIMITED BY MOTORMASTER)
- ☐ C. LIQUID TEMPERATURE RETURNS TO NORMAL COOLING LEVEL
- ☐ D. LSV SOLENOID ENERGIZED (VALVE CLOSES)
- ☐ E. DSV SOLENOID ENERGIZED, (VALVE OPENS)

☐ 7. WITH UNIT IN DEHUMID MODE CLOSE W1

COMPRESSOR AND OUTDOOR FAN STOP LSV AND DSV SOLENOIDS DE-ENERGIZED

☐ 8. OPEN W1 RESTORE UNIT TO DEHUMID MODE

☐ 9. OPEN HUMIDISTAT INPUT

COMPRESSOR AND OUTDOOR FAN STOP LSV AND DSV SOLENOIDS DE-ENERGIZED

☐ 10. RESTORE SETPOINTS FOR THERMOSTAT AND HUMIDISTAT

REPEAT PROCESS FOR 2 COMPESSOR SYSTEMS

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