

M2 Series Startup Form

Job Name: _____	Date: _____
Address: _____	
Model Number: _____	
Serial Number: _____	Tag: _____
Startup Contractor: _____	
Address: _____	
Phone: _____	

Pre Startup Checklist

Installing contractor should verify the following items.	
1. Is there any visible shipping damage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Is the unit level?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Are the unit clearances adequate for service and operation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Do all access doors open freely and are the handles operational?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Have all shipping braces been removed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Have all electrical connections been tested for tightness?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Does the electrical service correspond to the unit nameplate?	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. On 208/230V units, has transformer tap been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Has overcurrent protection been installed to match the unit nameplate requirement?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Have all set screws on the fans been tightened?	<input type="checkbox"/> Yes <input type="checkbox"/> No
11. Do all fans rotate freely?	<input type="checkbox"/> Yes <input type="checkbox"/> No
12. Does the field water piping to the unit appear to be correct per design parameters?	<input type="checkbox"/> Yes <input type="checkbox"/> No
13. Is all copper tubing isolated so that it does not rub?	<input type="checkbox"/> Yes <input type="checkbox"/> No
14. Have the damper assemblies been inspected?	<input type="checkbox"/> Yes <input type="checkbox"/> No
15. Are air filters installed with proper orientation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
16. Have condensate drain and p-trap been connected?	<input type="checkbox"/> Yes <input type="checkbox"/> No
17. Is the TXV sensing bulb in the correct location?	<input type="checkbox"/> Yes <input type="checkbox"/> No
18. Does the TXV sensing bulb have proper thermal contact and is properly insulated?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Ambient Temperature

Ambient Dry Bulb Temperature _____°F	Ambient Wet Bulb Temperature _____°F
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Supply Fan Assembly

Alignment <input type="checkbox"/>		Check Rotation <input type="checkbox"/>		Nameplate Amps _____	
Number	hp	L1	L2	L3	
1					
2					
Band Size _____			VAV Controls _____		
VFD Frequency _____			Springs Operating Correctly <input type="checkbox"/>		

Energy Recovery Wheel Assembly

Wheels Spin Freely <input type="checkbox"/>		Check Rotation <input type="checkbox"/>		FLA _____	
Number	hp	L1	L2	L3	
1					
2					

Power Exhaust Fan Assembly

Alignment <input type="checkbox"/>		Check Rotation <input type="checkbox"/>		Nameplate Amps _____	
Number	hp	L1	L2	L3	
1					
2					
Band Size _____					
VFD Frequency _____			Springs Operating Correctly <input type="checkbox"/>		

Power Return Fan Assembly

Alignment <input type="checkbox"/>		Check Rotation <input type="checkbox"/>		Nameplate Amps _____	
Number	hp	L1	L2	L3	
1					
2					
Band Size _____					
VFD Frequency _____			Springs Operating Correctly <input type="checkbox"/>		

Outside Air/Economizer Dampers

OA Operation Check <input type="checkbox"/>	Damper Wiring Check <input type="checkbox"/>	Gears Check <input type="checkbox"/>
RA Operation Check <input type="checkbox"/>	Damper Wiring Check <input type="checkbox"/>	Gears Check <input type="checkbox"/>
EA Operation Check <input type="checkbox"/>	Damper Wiring Check <input type="checkbox"/>	Gears Check <input type="checkbox"/>
Damper Actuator Type: _____		
Economizer Changeover Type and Operation: _____		

Unit Configuration

Water-Cooled Condenser <input type="checkbox"/>	Air-Cooled Condenser <input type="checkbox"/>
No Water Leaks <input type="checkbox"/>	Condenser Safety Check <input type="checkbox"/>
Water Flow _____ gpm	
Water Inlet Temperature _____ °F	Water Outlet Temperature _____ °F

Compressors/DX Cooling

Check Rotation <input type="checkbox"/>						
Number	L1	L2	L3	Head Pressure PSIG	Suction Pressure PSIG	Crankcase Heater Amps
1						
2						
3						
4						

Refrigeration System 1 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 2 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 3 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 4 - Cooling Mode

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 1 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 2 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 3 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 4 - Heating Mode (Heat Pump Only)

	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Air-Cooled Condenser

Alignment <input type="checkbox"/>		Check Rotation <input type="checkbox"/>		Nameplate Amps _____
Number	hp	L1	L2	L3
1				
2				
3				
4				
5				
6				

Water/Glycol System

1. Has the entire system been flushed and pressure checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Has the entire system been filled with fluid?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Has air been bled from the heat exchangers and piping?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Is the glycol the proper type and concentration (N/A if water)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Is there a minimum load of 50% of the design load?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Has the water piping been insulated?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. What is the freeze point of the glycol (N/A if water)? _____	

Electric Heating

Stages _____		Limit Lockout <input type="checkbox"/>		Aux. Limit Lockout <input type="checkbox"/>	
Stage	Amps	Stage	Amps	Stage	Amps
1		5			
2		6			
3		7			
4		8			

Electric Preheating

Limit Lockout <input type="checkbox"/>		Aux. Limit Lockout <input type="checkbox"/>	
Outside Air Temperature Setpoint _____ °F			
Preheat Leaving Air Temperature Setpoint _____ °F			
Stage	Amps	Stage	Amps
1		3	
2		4	

Gas Heating

1. Have all gas lines & connections been checked for leaks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Is there adequate combustion air?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Have condensate drain lines been installed if needed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Has air been purged from the lines?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Has pilot spark been verified?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Staged Gas Heat

Type of Gas	Natural Gas <input type="checkbox"/>	Propane <input type="checkbox"/>	
Stage	Manifold Pressure ("w.c.)	Stage	Manifold Pressure ("w.c.)
1		3	
2		4	

Modulating Gas Heat

Type of Gas		Natural Gas (5:1) <input type="checkbox"/>	Propane (3:1) <input type="checkbox"/>
Analog Input	VDC	Low Fire @ 0 VDC	High Fire @ 10 VDC
Gas Pressure @ Train Inlet	"w.c.		
Gas Pressure @ Burner Manifold	"w.c.		
CO2 in Flue Gas %	%		
CO2 in Flue Gas ppm	ppm		
Flue Gas Temp @ Discharge	°F		
Temperature Rise	°F		

