Installation, Operation, and Maintenance Manual

2026

RN Series Startup Forms

6-70 ton

Packaged Rooftop Units, Heat Pumps, & Outdoor Air Handling Units

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RN Series Startup Form

Job Name:_____ Date:_____

Address:_____

_____

Model Number:_____

Serial Number:_____ Tag:_____

Startup Contractor:_____

Address:_____

_____ Phone:_____

PRE STARTUP CHECKLIST

Installing contractor must verify the following items.

1. Is there any visible shipping damage?	Yes
2. Is the unit level?	Yes
3. Are the unit clearances adequate for service and operation?	Yes
4. Do all access doors open freely and are the handles operational?	Yes
5. Have all shipping braces been removed?	Yes
6. Have all electrical connections been tested for tightness?	Yes
7. Has all gas heat piping been checked for leaks?	Yes
8. Does the electrical service correspond to the unit nameplate?	Yes
9. On 208/230V units, has transformer tap been checked?	Yes
10. Has overcurrent protection been installed to match the unit nameplate requirement?	Yes
11. Have all set screws on the fans been tightened?	Yes
12. Do all fans rotate freely?	Yes
13. Does the field water piping to the unit appear to be correct per design parameters?	Yes
14. Is all copper tubing isolated so that it does not rub?	Yes
15. Have the damper assemblies been inspected?	Yes
16. Are air filters installed with proper orientation?	Yes
17. Have condensate drain and p-trap been connected?	Yes
18. Is the actual refrigerant charge of the largest circuit in accordance with the required conditioned floor area according to Table 16?	Yes
19. Are ventilation and exhaust openings unobstructed?	Yes
20. Are markings, decals, and warnings on unit clearly visible?	Yes
21. Are all damaged or illegible markings and warnings replaced?	Yes

A2L REFRIGERANT DETECTION SYSTEM (RDS) PRE-START CHECKLIST

1. Does each port (sensor 1-3) have a male connector plugged into both Cabinet and Airstream connection on mitigation board?	Yes	No
2. Do compressor and gas heat operation shut off when the cabinet board sensor trips.	Yes	No
3. Normal unit operation commences except the compressor and gas heater after the cabinet board sensor trips?	Yes	No
4. Does compressor shut off and fan stay on when the Airstream board sensor trips?	Yes	No
5. Non-compressor or gas heating/cooling stay on when both boards trip? (electric heater stays on)	Yes	No
6. When A2L airstream alarm is activated do supply fans start, VAV boxes open, and compressors stop?	Yes	No

Supply Fan Assembly				
Alignment		Check Rotation		Nameplate Amps _____
Number	hp	L1	L2	L3
1				
2				
Band Size _____		VAV Control _____		
VFD Frequency _____				

Energy Recovery Wheel Assembly				
Wheel(s) Spins Freely		Check Rotation		FLA _____
Number	hp	L1	L2	L3
1				
2				

Power Exhaust Fan Assembly				
Alignment		Check Rotation		Nameplate Amps _____
Number	hp	L1	L2	L3
1				
2				

Outside Air/Economizer Dampers			
Operation Check		Damper Wiring Check	
Damper Actuator Type:	SR	0-10	Floating
Economizer Changeover Type and Operation _____			

Ambient Temperature	
Ambient Dry Bulb Temperature _____ °C/°F	Ambient Wet Bulb Temperature _____ °C/°F

Unit Configuration	
Water-Cooled Condenser	Air-Cooled Condenser

Compressor/DX Cooling						
Number	L1	L2	L3	Head Pressure KPA/PSIG	Suction Pressure KPA/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 Fans				
VFD X		EC X		
Alignment		Check Rotation		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?	Yes	No
2. Has the entire system been filled with fluid?	Yes	No
3. Has air been bled from the heat exchangers and piping?	Yes	No
4. Is the glycol the proper type and concentration (N/A if water)?	Yes	No
5. Is there a minimum load of 50% of the design load?	Yes	No
6. Has the water piping been insulated?	Yes	No
7. What is the freeze point of the glycol (N/A if water)? _____		
8. What is the glycol concentration? _____		

No Water Leaks	**Condenser Safety Check**
Water Flow _____ GPM	
Water Inlet Temperature _____ °C/°F	**Water Outlet Temperature _____ °C/°F**

Gas Heating			
Verify there are no leaks in the gas piping.			
Natural Gas	**Propane**	**Purge Air from Lines**	**Verify Pilot Spark**
Stage	**Manifold Pressure (w.c.) inlet**	**Manifold Pressure (w.c.) inlet**	
1			
2			
3			
4			

Electric Heating		
Stages _____	**Limit Lockout**	**Aux. Limit Lockout**
Stage	**Amps**	
1		
2		
3		
4		
5		
6		
7		
8		

Electric Preheating	
Limit Lockout	**Aux. Limit Lockout**
Outside Air Temperature Setpoint _____ °C/°F	
Preheat Leaving Air Temperature Setpoint _____ °C/°F	
Stage	**Amps**
1	
2	
3	
4	

ADDITIONAL FINDINGS

SIGNATURE

By signing this form, you verify all of the contained information is correct and filled out to the best of your ability.

Name:

Title:

Rep/Contractor:

Signature Date/Time

Maintenance Log

This log must be kept with the unit. It is the responsibility of the owner and/or maintenance/service contractor to document any service, repair or adjustments. AAON Service and Warranty Departments are available to advise and provide phone help for proper operation and replacement parts. The responsibility for proper start-up, maintenance and servicing of the equipment falls to the owner and qualified licensed technician.

Entry Date	Action Taken	Name/Tel.

Maintenance Log (E-Coated Coil)

AAON E-COATED COIL MAINTENANCE RECORD

Installation Site _____ Installation Date _____

Unit Model # _____ Unit Location _____

Unit Serial # _____ Customer _____

Year 20____	Ambient Temp (°F)	Surface Debris Removed	Coil Cleaned	Approved Cleaner Used	Potable Water Backwash Rinse	Potable Water Frontwash Rinse	Chlorides Removed	Comments
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Jul								
Aug								
Sep								
Oct								
Nov								
Dec								

The following cleaning agents have been approved for use on AAON E-Coated Coils to remove mold, mildew, dust, soot, greasy residue, lint and similar particulate without harming the coated surfaces.

CLEANING AGENT	RESELLER	PART NUMBER
GulfClean ™ Coil Cleaner or Enviro-Coil Cleaner	Rectorseal 2601 Spenwick Drive, Houston, Texas 77055 (P): 713-263-8001	G074480 / 80406 or V82540
GulfClean Salt Reducer™	" "	G074490 / 80408

RECOMMENDED CHLORIDE REMOVER
Rectorseal 2601 Spenwick Drive, Houston, Texas 77055 (P): 713-263-8001

AAON

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Tulsa, OK 74107-2728

www.AAON.com

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Factory Technical Support: 918-382-6450

Note: Before calling Technical Support, please have the model and serial number of the unit available.

Parts: For replacement parts, please contact your local AAON Representative.

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