Installation, Operation, and Maintenance Manual

2026

RQ Series (2-5 ton) Startup Forms

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

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1. RQ SERIES START-UP FORMS

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

1.1. Pre-Startup Checklist

The 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 of the shipping braces been removed?	☐ Yes
6. Have all of the 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. Has the transformer tap been checked for the 208/230V units?	☐ Yes
10. Has adequate overcurrent protection been installed to match the requirements listed on the unit nameplate?	☐ Yes
11. Have all set screws on the fans been tightened?	☐ Yes
12. Do all of the fans rotate freely?	☐ Yes
13. Does the field water piping to the unit appear to be correct per design parameters?	☐ Yes
14. Is all of the copper tubing isolated so it does not rub?	☐ Yes
15. Have the damper assemblies been inspected?	☐ Yes
16. Are the air filters installed with proper orientation?	☐ Yes
17. Have the 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 the ventilation and exhaust openings unobstructed?	☐ Yes
20. Are the markings, decals, and warnings on the unit clearly visible?	☐ Yes
21. Have all of the damaged or illegible markings and warnings been replaced?	☐ Yes

1.2. A2l Refrigerant Detection System (RDS) Pre-Start Checklist

1. Does each port (sensors 1-3) have a male connector plugged into both the Cabinet and Airstream connections on the mitigation board?	☐ Yes
2. Do the compressor and gas heat operation shut off when the cabinet board sensor trips?	☐ Yes
3. Does normal unit operation commence, except for the compressor and gas heater, after the cabinet board sensor trips?	☐ Yes
4. Does the compressor shut off and the fan stay on when the Airstream board sensor trips?	☐ Yes
5. Does the non-compressor or gas heating/cooling stay on when both boards trip? (electric heater stays on)	☐ Yes
6. When the A2L airstream alarm is activated, do the supply fans start, VAV boxes open, and compressors stop?	☐ Yes

1.3. Ambient Temperature

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

1.4. Supply Fan Assembly

Alignment ☐		Check Rotation ☐		Nameplate Amps _____
Number	**Hp**	**L1 Volts/Amps**	**L2 Volts/Amps**	**L3 Volts/Amps**
1				
Band Size_____		VAV Controls _____		
VFD Frequency _____				

1.5. Energy Recovery Wheel Assembly

Wheel(s) Sprin Freely ☐		Check Rotation ☐		FLA _____
Number	**Hp**	**L1 Volts/Amps**	**L2 Volts/Amps**	**L3 Volts/Amps**
1				

1.6. Power Exhaust Fan Assembly

Alignment ☐		Check Rotation ☐		Nameplate Amps _____
Number	**Hp**	**L1 Volts/Amps**	**L2 Volts/Amps**	**L3 Volts/Amps**
1				
Band Size_____				
VFD Frequency _____				

1.7. Outside Air/Economizer Dampers

Operation Check ☐
Damper Actuator Type:
Economizer Changeover Type and Operations: _____
Damper Wiring Check ☐
Gears Check ☐

1.8. Unit Configuration

Water- Cooled Condenser ☐	Air Cooled Condenser ☐
No Water Leaks ☐	Evaporative Condenser ☐
Condenser Safety Check ☐	
Water Flow _____GPM	
Water Inlet Temperature _____°F	
Water Outlet Temperature _____°F	

1.9. Compressors/DX Cooling

Number	L1 Volts/Amps	L2 Volts/Amps	L3 Volts/Amps	Head Pressure PSIG	Suction Pressure PSIG
1 - Full Capacity					
2 - Reduced Capacity					

1.10. Refrigeration Systems

Refrigeration System 1 Full Capacity - Cooling Mode					
	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 1 Reduced Capacity - Cooling Mode					
	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

Refrigeration System 1 Full Capacity - 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 1 Reduced Capacity - Heating Mode (Heat Pump Only)					
	Pressure	Saturated Temperature	Line Temperature	Sub-cooling	Superheat
Discharge				N/A	N/A
Suction				N/A	
Liquid					N/A

1.11. Air-Cooled Condenser Fans

Alignment ☐	Check Rotation ☐	Nameplate Amps _____

Number	Hp	L1 Volts/Amps	L2 Volts/Amps	L3 Volts/Amps
1				

1.12. Water/Glycol System

1. Has the entire system been flushed and pressure checked?	☐ Yes
2. Has the entire system been filled with fluid?	☐ Yes
3. Has air been bled from the heat exchangers and piping?	☐ Yes
4. If glycol is used, is it the proper type and concentration (N/A if water)?	☐ Yes
5. Is there a minimum load of 50% of the design load?	☐ Yes
6. Has the water piping been insulated?	☐ Yes
7. What is the freezing point of the glycol (N/A if water)? _____	☐ Yes

1.13. Gas Heating

Natural Gas ☐	Propane ☐	Purge Air from Lines ☐	Verify Pilot Spark ☐

Stage	Manifold Pressure (w.c.) inlet	Manifold Pressure (w.c.) outlet
1		
2		
3		
4		

1.14. Electric Heating

Stages _____	
Limit Lockout ☐	Aux. Limit Lockout ☐

Stage	Volts/Amps
1	
2	
3	
4	

1.15. Electric Preheating

Stages _____	
Limit Lockout ☐	Aux. Limit Lockout ☐

Stage	Volts/Amps
1	
2	
3	
4	

1.16. Additional Findings

1.17. Signature

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

Name:		
Title:		
Rep/Contractor:		
Signature:_____		**Date/Time**:_____

2. APPENDIX C - MAINTENANCE LOGS

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 a qualified licensed technician.

Entry Date	Action Taken	Name/Tel.

2.1. 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

2425 South Yukon Ave.

Tulsa, OK 74107-2728

Phone: 918-583-2266

Fax: 918-583-6094

www.AAON.com

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