



RN Series



PACKAGED ROOFTOP UNITS & OUTDOOR AIR HANDLERS



Features:

- Air-cooled or water-cooled condenser, with unit capacities from 16-70 Tons
- Available as a chilled water or non-compressorized DX outdoor air handler, from 3,200-28,500 CFM
- R-410A or R-22 scroll compressors, two or four stage cooling
- 10-100% modulating capacity compressors available for modulating cooling
- Electric, gas, steam, or hot water heating
- Direct drive backward curved plenum supply blowers
- Power exhaust and power return options
- Factory installed AAONAIRE® total and sensible energy recovery wheels
- Double wall high performance composite panel construction (R-13)
- Service access doors with full length stainless steel piano hinges and zinc cast lockable handles
- Sloped stainless steel drain pans

Application Flexibility
Minimizes Installation Time and Reduces Cost

○ *Make-up Air Applications
Up to 100% Outside Air*

○ *Dehumidification and
Filtration Capabilities*

○ *Large Tonnage Rooftops
with Small Footprints*

○ *Factory Installed or Customer
Specific Controls Options*

RN Series

Rooftop / Air Handler

The AAON RN Series continues to lead the industry in packaged rooftop equipment performance and serviceability. Double wall foam insulated cabinet construction and direct drive backward curved plenum blowers allow the units to have quiet, energy efficient airflow with high static pressure capabilities. RN Series units also feature lockable hinged doors which provide service access to all sections of the unit.

Superior Features

- Cabinet construction consists of high performance composite panels constructed of G90 galvanized steel on both sides with a closed cell polyurethane foam interior core. The inner wall protects the insulation from moisture damage, prevents microbial growth, and is easy to clean.
- 2 inch high performance foam insulated panels have at least an R-value of 13, which exceeds the R-value of a cabinet with 4 inch thick fiberglass construction. They also make the cabinet more rigid and resistant to damage and provide increased sound dampening.
- Access doors with full length stainless steel piano hinges and quarter turn, zinc cast, lockable handles provide improved reliability over single point hinges and plastic or sheet metal handles, and make the unit easily serviceable.
- Corrosion resistant polyurethane paint exceeds a 2500 hour salt spray test – over 5 times the industry standard of 500 hours.
- Compressors and unit controls are contained within a compartment isolated from the air stream for ease of service and increased sound dampening.
- Direct drive backward curved plenum blowers with rubber isolation mounts provide improved energy efficiency and reduced maintenance versus belt driven blowers.
- Sloped stainless steel drain pans eliminate standing water which can support microbial growth and stainless steel construction prevents corrosion that could lead to water leaks and contaminants in the air stream.
- Run test report, wiring diagram, and Installation, Operation, and Maintenance manual with startup form provided in control access compartment of every unit.
- 5 year non-prorated compressor warranty, 15 year non-prorated aluminized steel gas heat exchanger warranty, and 25 year non-prorated stainless steel gas heat exchanger warranty.

C Cabinet

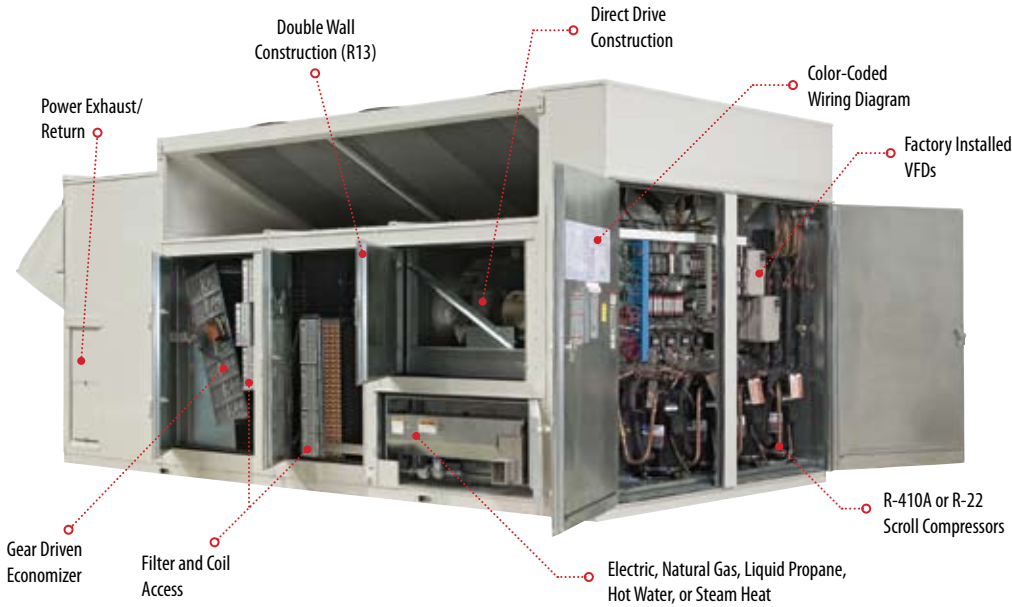


Premier Options

- R-410A environmentally friendly refrigerant.
- 10-100% modulating capacity compressors are available for load matching cooling.
- Factory installed total or sensible AAONAIRE® energy recovery wheels.
- Humidity control options including: High Capacity Coils, Modulating Humidity Control, Return Air Bypass, and Mixed Air Bypass.
- Chilled water cooling coils allow unit to tie into existing chilled water system.
- Hot water or steam heating coils allows unit to tie into existing boiler system.
- Polymer e-coated coils, copper finned coils, and stainless steel coil casings are available to extend the life of the coils and protect them in corrosive environments.
- Power exhaust and power return blowers with economizer for application flexibility.
- VFD controlled supply, exhaust, and return blowers for precise airflow control, building pressure control, and reduced power consumption.
- Modulating gas heat with stainless steel heat exchanger provides greater fuel efficiency, longer heater life, and improved occupant comfort.
- SCR (Silicon Controlled Rectifier) electric heat control for reduced power consumption, longer heater life, and improved occupant comfort.
- Multiple high efficiency air filtration options.
- Water-cooled condenser for improved unit efficiency.
- Unit controls options including factory installed controls by others.

Air-Cooled or Water-Cooled Condensers

D Cabinet



High Performance Composite Panel Construction

AAON is again setting a new standard for performance with double wall construction using closed cell polyurethane foam insulation. Not only does it have more than twice the insulating R-value, it creates a far more rigid and stronger assembly with less leakage than fiberglass insulated panels.

Dehumidification

AAON offers many humidity control options. High capacity cooling coils are available which allow for more dehumidification versus standard cooling coils. Return air bypass and mixed air bypass are available on RN Series units for single coil humidity control. Modulating humidity control is available to provide energy efficient dehumidification, even with low sensible heat loads, without the temperature swings common with On/Off reheat systems.

Make Up Air Capability

AAON RN Series units have make up air capability and can be specified with up to 100% outside air. AAONAIRE® energy recovery wheels are available on make up air units to increase the unit's energy efficiency. High capacity cooling coils are available to handle the higher latent load of outside air. Modulating gas heat and SCR electric heat are available to provide energy efficient, consistent supply air temperature heating. Modulating humidity control is available to provide dehumidification without overcooling when the outside air humidity is above setpoint. Modulating capacity compressors are available to provide energy efficient, consistent supply air temperature cooling.

Air Handler Option

AAON® RN Series outdoor air handlers provide a hydronic cooling and heating option in the RN Series unit size. Gas, electric, steam, and hot water heating are available on an RN Series outdoor air handler. Cabinet construction is similar to the RN Series packaged rooftop units with easily accessible coil connections.

RN Model	Cabinet	Air-Cooled EER	Water-Cooled EER	Nominal CFM	Width	Length*	Height*
016	C	Up to 13.0	Up to 16.5	6,400	101	110	59
018				6,800			
020				7,000			
025				9,000			
030				10,500			
026	D	Up to 12.3	Up to 16.5	10,000	100	155	97
031				12,400			
040				16,000			
050				20,000			
060				23,000			
070				25,000			

*Length and height may vary depending on options selected
All dimensions are in inches

RN Series
Rooftop / Air Handler

AAON Environmentally Friendly HVAC Product Family

Customer Commitment – AAON encourages environmentally responsible design by incorporating many energy saving features into our superior heating and cooling products. In addition to energy efficiency, AAON also offers environmentally friendly R-410A refrigerant capability in all our cooling and heat pump equipment. As countries throughout the world phase out CFC and HCFC refrigerants, R-410A is becoming the global standard and AAON is leading the way!



Rooftop Units



Condensing Units



Air-Cooled or Evaporative-Cooled Chiller



Boiler



Outdoor Air Handling Units



Indoor Air Handling Units



Custom Indoor or Outdoor Air Handling Units



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