



**REZNOR<sup>®</sup>**

THE RIGHT SPEC.  
RIGHT NOW.



6, 7.5, 10 & 12.5 TONS  
R7DA Gas/Electric Packaged DOAS System

# MADE FOR THOSE WHO RESPECT THE SPEC.

Reznor® light commercial packaged rooftops are highly configurable at the factory, so consultant engineers, building owners, facility managers or design-build contractors can get the configured unit they need delivered to the job site. It's the right choice for those who respect the spec.

## THE RIGHT EFFICIENCY

At up to 12.9 IEER, Reznor light commercial packaged units meet federal minimum efficiency standards for 2018 and beyond. The R7DA DOAS product exceeds the minimum efficiency of 4.1 ISMRE per AHSRAE standard 90.1-2016, which puts the product ahead of many units on the market.

## THE RIGHT FEATURES

Foam panel construction and hinged panel doors are standard for the unit. This type of construction increases the overall unit longevity while drastically improving indoor air quality over fiber glass insulated units. Panel walls are easy to clean and provide a super high R-value. High-quality hinges eliminate screws on the roof and keep the access doors in place, even in high wind conditions. In addition, foam panel construction reduces radiated noise into the space from the compressors and condenser fans.

## THE RIGHT QUALITY

Reznor light commercial packaged units are manufactured using Demand Flow Technology (DFT), the most advanced and flexible quality-control manufacturing process in the industry. To ensure accuracy, each unit is bar-code verified to the bill-of-material components. And, our personnel test each unit for function & form as it rolls down the line.

## THE RIGHT SPEC

With over 35 options per tonnage size, there are over 750,000 unit configurations available. Having the units built to spec at the factory increases product quality while lowering installation labor costs. Have a fast-track job? No problem. A 15-day, quick-ship option is available out of our factory in Dyersburg, Tennessee.

R7DA Model - front



R7DA Model - back



# REZNOR®

# MODEL R7DA DEDICATED OUTDOOR AIR UNIT AND HIGH OUTSIDE AIR APPLICATION

Reznor® light commercial packaged rooftops are configurable for makeup air and ventilation air applications. In addition, the units can properly handle space temperature & humidity control application with up to 50% outside air. The unique option set allows the units to be used in application beyond the capability of standard package equipment.

## Features & Benefits

### CONSTRUCTION

- 1" Foam Panel Construction: Roof, Walls & Base
  - R-6.4 Insulation
- Base Unit Fits on Existing Carrier Curb
- Heavy Duty Latches, Hinges & Gasketed Doors
- Fork Lift Access from 3 Sides

#### Options

- Full Unit crating available
- Flatbed and LTL crating available
- 18" Roof Curb – Vertical Discharge
- Hurricane Hold Down Clips

### DX SYSTEM

- High Efficiency 4.1 ISMRE, meets ASHRAE 90.1-2016
- 10-100% Capacity Control – Modulating Digital Scroll
- 4 Row Coil (> 40°F  $\Delta T$  capability, High Latent Performance)
- Rust Proof Drain Pan
- Lightweight All-Aluminum Condenser Coil
- R410-A Refrigerant
- High & Low Pressure Cutout Safety Switches
- Driers & TXV
- Low Noise Condenser Fans

#### Options

- Hot Gas Reheat with Dehumidification Control (patented)
- Low Ambient Operation (32°F)
- Coil Coating 6000 > Salt Spray Hours
- Mesh Hail Guard
- Hood Hail Guard
- Condensate Overflow Float Switch
- Evaporator Coil Frost Protection

### BLOWER SECTION

- Backward Incline Plenum Fan
- Direct Drive High Efficiency ECM
- High External Static Capability (> 2.0" w.c.)
- Field Convertible Horizontal Supply & Return
- Auto & Manual Control from Unit Mounted Display

#### Fan Speed Controls Options

- Supply Fan Constant CFM (Direct Measurement)
- Duct Static Pressure Control (0-2.5" w.c.)
- Building Static Pressure Control ( $\pm 0.5$ " w.c.)
- 2 Speed CO<sub>2</sub> Control (High/Low)
- 0-10V Input Signal for Fan Control
- "BMS Control through BacNet point"
- 2 Speed Summer/Winter
- High-Low Volume Control
- Occupied/Unoccupied Speed
- Constant Volume (User Adjustment)



# MODEL R7DA DEDICATED OUTDOOR AIR UNIT AND HIGH OUTSIDE AIR APPLICATION continued

## R7DA Features & Benefits continued

### HEAT SECTION

- Natural Gas (80% Efficiency)
- 16-100% Modulated Control (6:1)
- 20-100°F temperature rise at full fire
- 1" Bottom & Side Connection
- 304 Stainless Steel

#### Options

- Gas Flue Hood
- High Altitude & Propane Conversion Kits
- Smoke Detector available

### AIR MANAGEMENT

- 100% Outside Air Intake Damper & Control
- Outside & Return Air Intake Damper & Control
- Field Convertible Horizontal Supply & Return - Panels replace vertical holes
- Intake Damper Control
  - Economizer Title 24 Compliant
  - CO<sub>2</sub> Demand Control for outside air intake
  - Building Static Pressure Control ( $\pm 0.5"$  w.c.)
  - External 0-10V input signal control
  - BMS control through BacNet point
  - 2 Position Control
  - 4 Position Control based upon 2 input switches
- 4" MERV 8 Filters (low pressure drop)

#### Options

- 4" MERV 13 Filters
- Enhance Security Burglar Bars (Return & Supply Access)
- Filter Outside Air Hood with rain baffles (MERV 5/Washable)
- Dirty Filter Indicator
- Extra Set of MERV 8 or 13 Filters

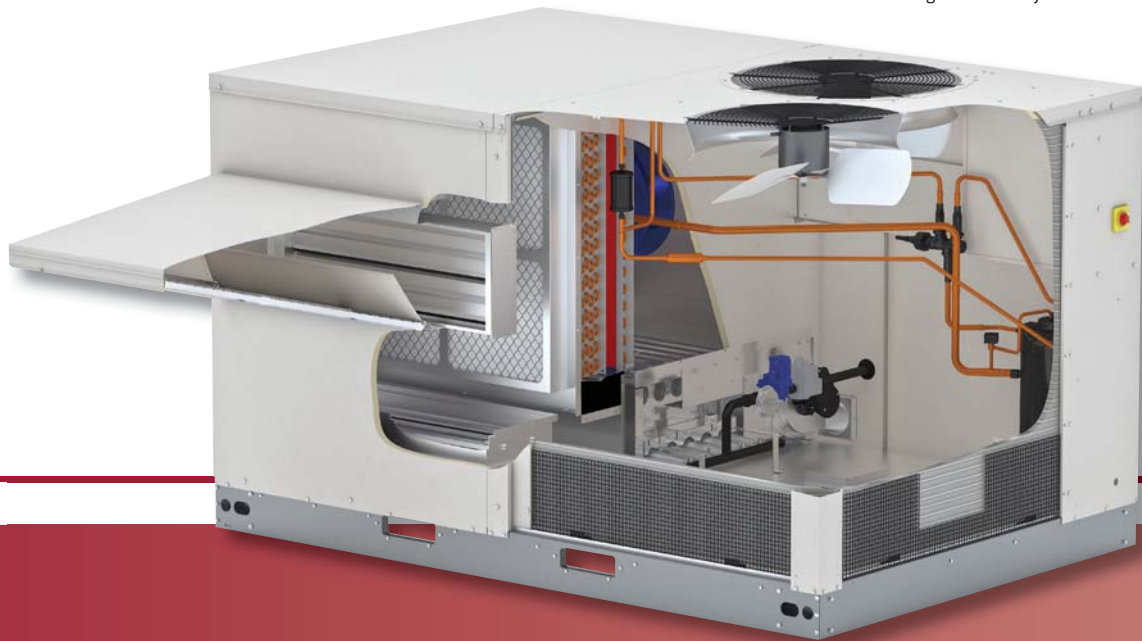
### ELECTRICAL & CONTROLS

- 208/230V & 460V Single Power Connection
- Terminal Wiring Connections
- Bottom or Side Electrical Power Connections
- Standard Thermostat Connection
- Replaceable Cube Relays
- Direct Digital Control Sequence
  - Make-up Air
  - Space Temperature & Humidity Control
  - Variable Air Volume Control

#### Options

- Factory Install Disconnect
- Field Installed Disconnect
- Phase Loss Monitor
- Air Flow CFM Monitoring
- Convenience Outlet (Field Powered)

R7DA Packaged DOAS System



## Our Safety Mission Delivers Quality & Reliability to You!



Made in Dyersburg, TN

Type	Base Model	Nominal Tons	Cooling Efficiency	Heating Capacity	Weight*	Inside Dimensions
				Gas - MBH		inches (LxWxH)
Gas/Electric DOAS	R7DA072	6	4.1 ISMRE	100, 166	1,145	89 x 59 x 54
	R7DA090	7.5	4.1 ISMRE	166, 200, 225	1,182	89 x 59 x 54
	R7DA120	10	4.1 ISMRE	166, 200, 225	TBD	89 x 59 x 54
	R7DA150	12.5	4.1 ISMRE	166, 200, 225	TBD	89 x 59 x 64
	R7DA180	15	TBD	TBD	TBD	TBD
	R7DA240	20	TBD	TBD	TBD	TBD

Note: All units are arranged for 208-230/3, 460/3 and 575/3 voltage

\*Weight of unit will change depending on options selected

# REZNOR®

**FOG...**

Nice to look at – when it's outside.

**Patented Hot Gas Reheat System**

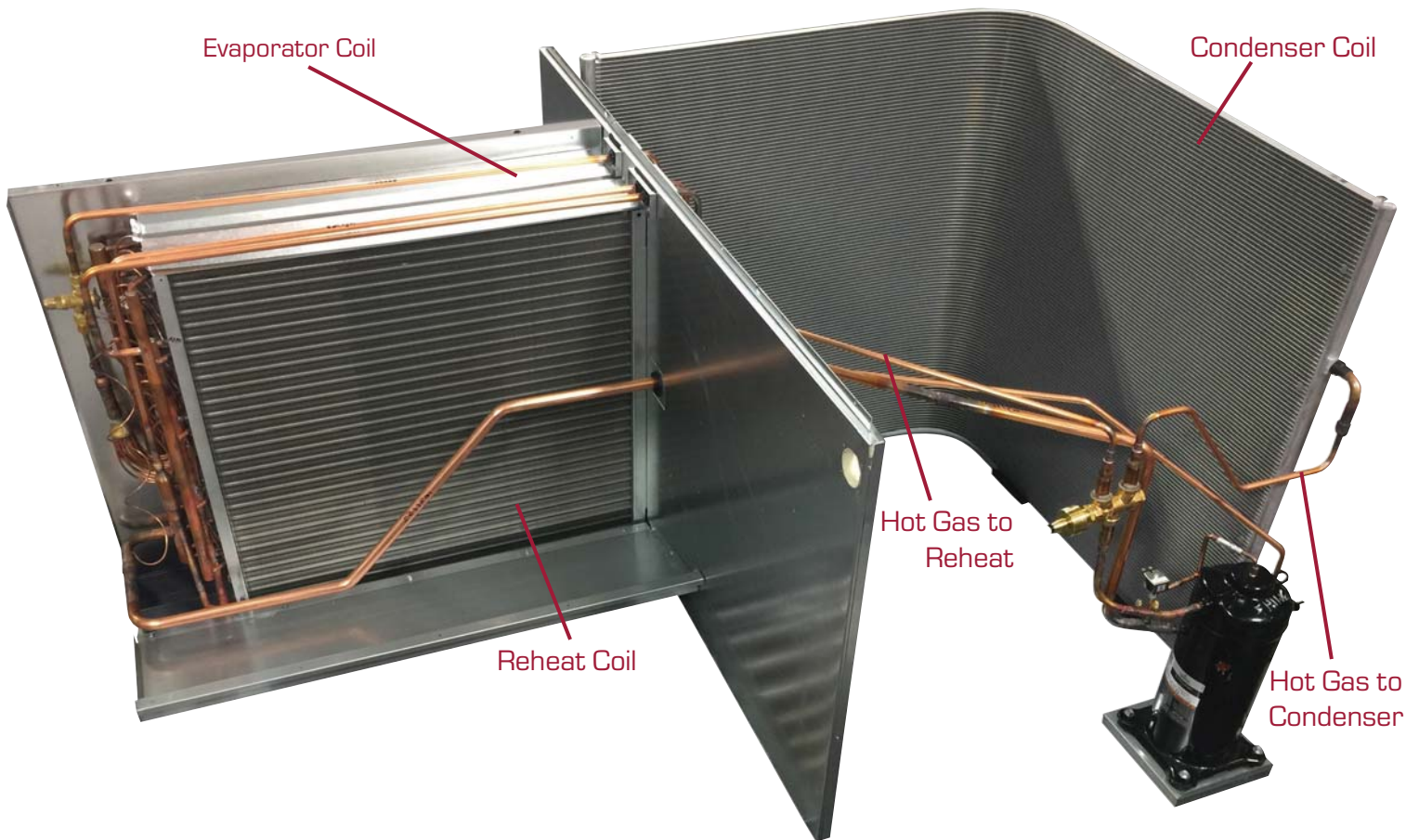
... avoid the fog.



**REZNOR®**

# PATENTED HOT GAS REHEAT SYSTEM

HGRH option



Most HGRH system performances are shown at design conditions when the demand for reheat is needed the least. It's part load condition that matters the most. The Reznor Patent HGRH avoids freezing and low capacity with smart controls and a robust mechanical design.

The chart shows a common, yet hard-to-manage control issue. In mild weather, the amount of reheat available from 100% valve control may not be enough to reach the discharge temperature setpoint. The Reznor reheat algorithm modulates the compressor to provide additional reheat capacity while maintaining proper evaporator coil control to avoid freezing.

Evaporator Coil Entering Air Condition		Leaving Air Condition from Reheat Coil		Compressor Capacity	Reheat Valve Position
db	wb	db	Dewpoint	0-100%	Open to Reheating
95°F	78°F	75.0°F	55.3°F	100%	8.8%
80°F	73°F	75.0°F	54.9°F	76.7%	17.6%
70°F	66°F	75.0°F	54.9°F	46.6%	75%
63°F	59°F	68.5°F	54.8°F	10.0%	100%
63°F	59°F	75.0°F	52.1°F	18.2%	100%

Table depicts unit function at AHRI 920 standard test conditions

# REZNOR®



We Encourage Professionalism



Through Technician Certification by NATE



For complete catalog information including submittals, energy calculations, dimension drawings, and more go to [ReznorHVAC.com](http://ReznorHVAC.com) or call 800-695-1901.

*Note: In keeping with our policy of continuous product improvement, we reserve the right to alter, at any time, the design, construction, dimensions, weights, etc., of equipment information shown here.*

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