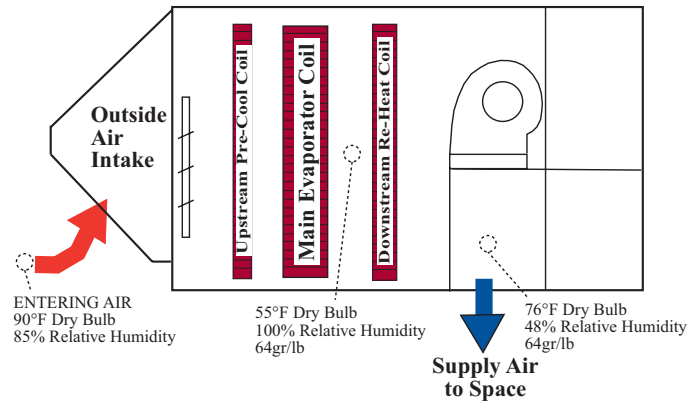
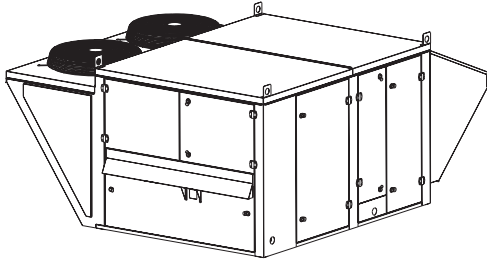


**REZNOR®**

## Model RDA COOLING AND DEHUMIDIFYING MAKEUP AIR PACKAGED SYSTEMS



### Description

Reznor® packaged cooling and cooling/reheat pump™ makeup air systems are available in the Modular Air Processing System (MAPS®).

Model RDA packaged direct expansion rooftop systems are designed to cool and dehumidify high amounts of outside air for makeup air and ventilation applications.

Model RDA also offers the additional feature of a dedicated Re-Heat Pump™. Reheating of the air by this method maintains dehumidification even when the demand for cooling is minimal. And, more importantly, it complies with ASHRAE Standard 90.1, Paragraph 3.3.

### Unit Features

#### Capacity Steps

- Standard 3-stage cooling/dehumidification in 1/3 incremental steps to minimize temperature swing and improve operating reliability

#### Cabinet

- Double-wall insulated cabinet resists weather
- Outer casing of G90 galvanized steel substrate with 60 gloss painted finish coat
- Hinged service panels (double wall construction and gasketed) (door pulls included for easy access/service - door handles included)
- Mechanical door stay to hold door open during service
- Optional weatherproof convenience outlet accessible from outside the unit
- Dedicated downflow configuration for rooftop application (reduced size and weight)
- Dedicated 100% outside air intake and filter transition (provides uniform filter and cooling coil loading) OR dedicated mixed air intake cabinet (both outside air intake and upflow return air opening)
- Outside air intake hood with 1" permanent pre-filters to keep water and debris outside
- "Z" channel base rail design (reduces unit weight and provides structural integrity)

#### Filters

- 2" or 4" pleated (25-40% average efficiency) or 2" permanent (Filter rack is field convertible for both sizes.)

#### Cooling Section

- Removable stainless steel condensate drain with slope for positive drainage
- Coil designs for various climate applications

#### Reheat Section

- Cooling coil air transition to minimize re-evaporation of condensate into dehumidified air
- Dedicated reheat pump™ system for premium dehumidification

#### Blowers

- Slide-out, forward curve fan system - adjustable sheave
- Class I blowers

#### Condensers

- Single-phase fan motors (three-phase motors on Cabinet C sizes) – open drip with slinger
- Internal overload protection

#### Refrigerant

- Factory charged - R22 (Optional R407c)

**Unit Features (cont'd)**

**Compressors**

- Scroll compressor design with internal motor overload
- Optional phase loss protection monitor
- Optional phase loss low voltage monitor

**Refrigerant Controls**

- External low and high pressure cutouts; Liquid line filter dryers; TXV's; Cooling coil frost protection; Hot gas bypass options on two lead circuits

**Low Ambient Cooling**

- Down to 55°F dewpoint with 100% outside air and 60°F operating condenser ambient

**Blower Motors**

- Open dripproof

**Inlet Air Damper Options**

- 100% outside air opening located and sized to provide optimum air distribution across filters and coils, equipped with damper with 2-position motor (open/closed)
- Motorized outside air and return air dampers with multi-position options and remote selectors
- Motorized outside and return air dampers to maintain building pressure in return air applications
- Special control configurations for emergency sequences

**Full-Perimeter Roof Curbs**

- Insulated, 16-gauge, downflow or horizontal air flow, full perimeter roof curb
- Integral supply and return air ducts with duct connections

**Disconnect Switch**

- Through-the-panel, lockable, non-fusible, indoor/outdoor disconnect switch option

**Convenience Outlet Opt.**

- 115 volt (20 amp, field-wired)

**Power Exhaust**

- Optional power exhaust for building air factory wired and mounted

**Controls**

- DDC control package for enhanced system operation and performance (See Controls Section for a complete description of options and capabilities)
- Hinged electrical panel opens 180 degrees, with permanently mounted and protected wiring diagrams and control instructions
- Control transformers with integral, resettable circuit breakers
- Electrical Components identified with 1/2" diameter self adhesive labels to match unit specific wiring diagram

**Warranty**

- One-year parts warranty - standard
- Optional four-year extended warranty on the compressors

**Technical Data**

Cabinet Size		A				B			C					
Model RDA		102	114	126	144	188	220	234	230	280	346	428	446	
Cooling Capacity	Tons	8.5	9.5	11	12.5	16.5	18	21	17.5	23.1	28.9	34.5	36.2	
	Max Motor HP	208/3, 230/3 460/3, 575/3	5	5	5	5	5	5	10	10	10	5 10	3 10	
Cooling Capacity Stages		30/70/100	40/60/100	33/66/100	42/58/100	33/66/100	30/70/100	31/69/100	36/64/100	33/66/100	25/50/100	33/66/100	33/66/100	
Cooling Compressors	Nominal Tons	2.0/4.5	3.0/4.5	3.0/6.0	4.5/6.0	4.5/3.0/6.0	4.5/4.5/6.0	4.5/6.0/6.0	4.5/10.0	6.2/6.2/6.2	6.2/6.2/12	10/10/10	10/10/10	
	Qty	2	2	2	2	3	3	3	3	3	3	3	3	
Cooling Condensers	Fans	Qty	1	1	1	2	2	2	2	2	3	3	3	
		CFM	4300	4300	5000	6400	8200	9300	9700	10000	10000	13500	15000	15000
		HP	3/4	3/4	3/4	3/4	3/4	3/4	3/4	1	1	1	1	1
Re-Heat Pump Compressors														
Nominal Tons		2	2	2	2	2	3	4.5	3	4.5	4.5	4.5	6.2	
Re-Heat Pump Coil	Face Area	7.3	7.3	7.3	7.3	7.3	10.9	10.9	18.3	18.3	18.3	18.3	18.3	
	Rows	1	1	1	1	1	1	1	1	1	1	1	1	
Re-Heating Pump Condenser	Face Area	7.5	7.5	7.5	7.5	7.5	11.25	11.25	16.9	16.9	16.9	16.9	16.9	
	Rows	1	1	1	1	1	1	1	1	1	1	1	1	
Net Weight	lbs	982	993	972	1,097	1,372	1,440	1,508	1,968	1,968	2,353	2,677	2,706	
	kg	(445)	(450)	(441)	(498)	(622)	(653)	(684)	(893)	(893)	(1,067)	(1,214)	(1,227)	
Filter (Qty) and Size (Factory-installed filters are optional.)		(4) 20x20				(4) 20x25			(6) 20x25					