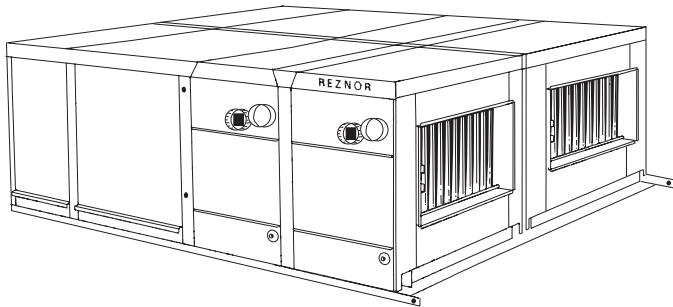




# MODEL SSCDBL

GAS-FIRED,  
SEPARATED-COMBUSTION,  
INDOOR PACKAGED  
FORCED AIR FURNACES/BLOWER  
COMBINATIONS FOR  
COMMERCIAL-INDUSTRIAL USE



ANSI  
Z83.9



CAN/CGA  
2.6



### DESCRIPTION

Reznor Model Series SSCDBL are 80% thermal efficient separated-combustion, packaged heating systems including two or four duct furnaces and large-capacity blower cabinets. Sizes are available with heating capacities from 800,000 through 1,600,000 BTUH gas input. The standard package is a heating-only system, but factory-installed gas and inlet-air control options are available to meet combination heating/makeup air specifications.

Each furnace in a Model SSCDBL package is designed to separate combustion air from the air in the heated space. The furnaces are engineered and manufactured in accordance with the ANSI definition of "separate combustion". While discharging exhaust air, the power venter draws in combustion air from the outside atmosphere. Exclusive outside combustion air prevents dirt, lint, dust or other contaminants in the heated space from entering the combustion zone of the furnace. Installation of a specially designed combustion air inlet/vent terminal assembly is required for each furnace.

SSCDBL models are available for use with either natural or propane gas, as specified. All units are equipped with required limit safety con-

trols. Controls and wiring are accessible through lift-away side panels. The galvalume steel cabinet has interlocking joint construction (U.S. Patent No. 5,373,673). All components are unified on a C-channel base.

Both the duct furnaces and the packaged systems have been design-certified to ANSI and CGA standards by the Canadian Standards Association.

### STANDARD FEATURES

- Orifices for natural gas
- Aluminized steel heat exchanger (When inlet air temperature is below 40°F or temperature rise is less than 40°F, optional stainless steel heat exchanger is recommended.)
- Aluminized steel burners with stainless steel insert
- 120/1/60 supply voltage
- 24-volt control voltage transformer
- Redundant single-stage combination gas valve on each furnace
- Intermittent spark pilot
- Fan and safety controls
- Differential air pressure switch to verify vent flow
- Two twin centrifugal blowers

- Adjustable belt drive
- Terminal block wiring
- Power venter
- Galvalume steel cabinet with interlocking joint (U.S. Patent No. 5,373,673) construction
- Horizontal discharge outlet with duct flange
- Blower cabinet (insulation, filter rack, and filters are optional)
- External access to burner(s) and controls through lift-away panels

### OPTIONAL FEATURES - Factory Installed

- Unit equipped for propane gas
- Orifices for high altitude (2001-9000 ft)
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel heat exchanger
- 321 stainless steel heat exchanger
- E-3 (409) stainless steel drip pan
- Intermittent spark pilot with timed lockout
- Two-stage gas controls (unit mounted or remote temperature selector)
- Electronic modulation
- Mechanical modulation
- Mechanical modulation with full fire bypass
- Makeup air controls/dampers
- 208/1, 230/1, 208/3, 230/3, 460/3, 575/3 supply voltages
- 1 - 20 HP open dripproof, totally enclosed and premium efficiency motors; 1-10 HP 2-speed motors
- Burner air shutters (required for propane gas)
- Firestat(s)
- Freezestat
- Convenience outlet
- 1/2" O.D. BX cable (Chicago Code)
- Motor starter (optional with motors having internal overload protection)
- Filter rack with 1" or 2" disposable, pleated or permanent filters
- Double wall cabinet construction
- Manifold arrangement for Illinois School Code, IRI, and/or FM

- High ambient burner cutoff
- Gas pressure safety switches
- Airflow proving switch
- Downturn plenum cabinets

### ACCESSORIES - Field Installed

- Horizontal or vertical inlet air/vent terminal kit (installation of one per furnace section is **required**)
- Remote console
- Disconnect switch
- Thermostats (1-stage, 2-stage, electronic programmable)
- Thermostat guard with locking cover

### TECHNICAL DATA

Model SSCDBL		800	1000	1200	1400	1600
Heating Input	BTUH	800,000	1,000,000	1,200,000	1,400,000	1,600,000
	kW	234.5	293.1	351.7	410.3	469.0
Thermal Output (80%) <sup>A</sup>	BTUH	640,000	800,000	960,000	1,120,000	1,280,000
	kW	187.6	234.5	281.4	328.3	375.2
Air Volume Range	cfm	6,600 - 22,000	7,400 - 20,000	8,900 - 20,000	10,400 - 22,000	11,800 - 22,000
	m <sup>3</sup> /hr	11,213 - 37,377	12,572 - 33,979	15,121 - 33,979	17,669 - 37,377	20,048 - 37,377
Control Amps (24-volt)		1.9	3.8	3.8	3.8	5.7
Gas Connection** (inches) <sup>B</sup>		1 1/4	1 1/4	1 1/4	2	2
Approximate Net Wt <sup>C</sup>	lbs.	1810	2328	2328	2508	2650
	kg	821	1,056	1,056	1,138	1,202
Approximate Shipping Wt <sup>C</sup>	lbs.	1870	2398	2398	2600	2760
	kg	848	1,088	1,088	1,179	1,252

<sup>A</sup> Derated at altitudes over 2000 feet.

<sup>B</sup> Sizes are for connections only and **not** supply pipe sizing.

<sup>C</sup> Weights shown are for standard units; additional weight must be added for options/accessories. These units are extra wide and require special shipping arrangements.



Dimensions (inches ± 1/8" / mm ± 3)

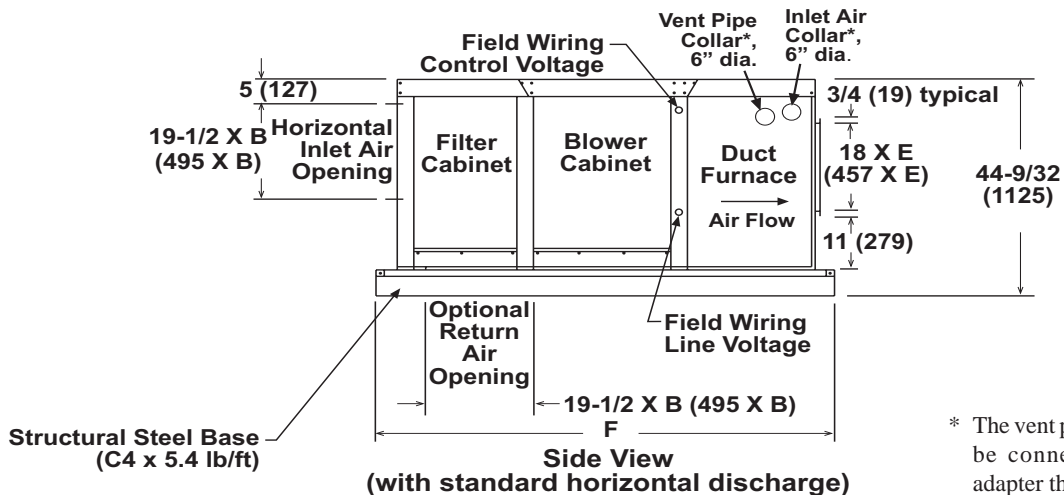
Size	No. of Furnace Sections		A	B	C	E	F	
							horizontal discharge	factory-installed downturn cabinets
800	2 (Size 400)	in.	58-7/8	47-5/8	122-11/16	45-1/2	83-3/4	107-3/4
		mm	1,495	1,210	3,116	1,156	2,127	2,737
1000	4 (Size 250)	in.	47-1/8	36-5/8	100-11/16	34-1/2	109-3/4	133-3/4
		mm	1,197	905	2,557	876	2,788	3,397
1200	4 (Size 300)	in.	47-1/8	36-5/8	100-11/16	34-1/2	109-3/4	133-3/4
		mm	1,197	905	2,557	876	2,788	3,397
1400	4 (Size 350)	in.	53-3/8	42-1/8	111-11/16	40	109-3/4	133-3/4
		mm	1,356	1,070	2,837	1,016	2,788	3,397
1600	4 (Size 400)	in.	58-7/8	47-3/8	122-11/16	45-1/2	109-3/4	133-3/4
		mm	1,495	1,203	3,116	1,156	2,788	3,397

Key to Dimensions:

A	Width of Each Cabinet Section
B	Width of Each Standard Horizontal Air Inlet Opening Width of Each Optional Bottom Discharge Air Opening with Duct Flange Width of Each Optional Return Air Bottom Opening
C	Overall Width of Base
E	Width of Standard Horizontal Discharge Air Opening
F	Overall Length of Base

Clearances

- Bottom - 6" (152mm)
- Sides - 59" (1.5M)
- Flue connections - 6" (152mm)



\* The vent pipe and inlet air pipe *must* be connected to the concentric adapter that is part of the horizontal or vertical combustion air/vent terminal package. A combustion air/vent terminal package is *required* for *each* furnace section.

