

REZTOR**DESCRIPTION**

Reznor Model SCE is a packaged assembly of a separated-combustion duct furnace and blower cabinet. Sizes are available with heating capacities from 125,000 through 400,000 BTUH gas input. The standard package is a heating-only system, but factory-installed gas and inlet-air control options are available to meet makeup air or combination heating/makeup air specifications. This system is designed for use in building areas with negative pressure and/or extremely dirty or mildly corrosive atmospheres.

Model SCE is available for use with either natural or propane gas, as specified. All units are equipped with required limit and safety controls.

The duct furnace in this packaged system is designed to separate combustion air from the air in the heated space. The furnace is 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. A specially designed combustion-air inlet/vent terminal assembly is required. This specially designed concentric terminal assembly requires only one building penetration.

Model SCE units are design-certified by the Canadian Standards Association for installation in the U.S. and Canada.

STANDARD FEATURES

- Orifices for natural gas
- Aluminized steel heat exchanger (see note 2)
- Aluminized steel burners with a stainless steel insert
- 115-volt power supply
- Open drip-proof blower motor with internal overloads
- Motor contactor
- 115-volt venter motor with stainless steel shaft
- 24-volt control transformer
- Redundant single-stage combination gas valve (see note 1)
- Intermittent spark safety pilot
- Fan and limit safety controls
- Differential air pressure switch to verify vent flow
- Adjustable belt drive
- Terminal block wiring
- Left side controls (left when facing air discharge)
- Horizontal discharge air opening with duct flanges

NOTES:

- 1 Regulated combination redundant gas valve consists of combination pilot solenoid valve, electric gas valve, pilot filter, pressure regulator, pilot shutoff, and manual shutoff, all in one body. Gas supply pressure must not exceed 0.5 PSI (8 oz. - 14" W.C.). Minimum inlet pressure for natural gas is 5" W.C. Minimum inlet pressure for propane gas is 11" W.C.
- 2 For air inlet temperatures below 40°F or temperature rise less than 40°F, optional stainless steel heat exchanger is recommended.
- 3 Not certified for residential use.

Model SCE**Series 6**

**INDOOR, SEPARATED COMBUSTION,
GAS-FIRED, PACKAGED DUCT FURNACE/
BLOWER UNIT FOR COMMERCIAL/
INDUSTRIAL HEATING AND MAKEUP AIR**



ANSI Z83.8a



CGA 2.6a

- Blower cabinet (less optional filter rack and filters) with horizontal inlet-air opening (without duct flange)
- Threaded suspension couplings (4 - 1" IPS)

OPTIONAL FEATURES - FACTORY INSTALLED

- Unit equipped for propane gas
- E-3 (409) stainless steel heat exchanger
- 321 stainless steel heat exchanger
- E-3 (409) stainless steel burners
- E-3 (409) stainless steel drip pan
- Intermittent spark safety pilot with timed lockout - must be used with units burning propane
- 1/4 HP through 5 HP open drip-proof motors
- 1/4 HP through 3 HP totally enclosed blower motor
- 208/1, 230/1, 208/3, 230/3, 460/3, 575/3 voltage alternates
- Motor starter
- Burner air shutters (required for units equipped for propane gas)
- Two-stage gas control (unit-mounted or remote temperature selector)
- Electronic modulation, 50%-100% turndown or 20%-100% turndown
- Makeup air controls/dampers
- 1/2" O.D. BX cable (Chicago code)
- Expanded metal safety screen for inlet air opening
- Firestat(s)
- Freezestat(s)
- Manual summer/winter switch
- Filter rack with disposable, pleated or permanent filters (1 or 2 inch)
- Louver frame with horizontal discharge louvers
- Louver frame with horizontal and vertical discharge louvers
- Summer/winter relay (thermostat with fan switch shipped separately)
- Insulated blower cabinet
- Bottom return air inlet
- Blower cabinet horizontal inlet w/duct flange
- Right side controls (facing airstream)
- Manifold arrangement to comply with Illinois school code

ACCESSORIES - FIELD INSTALLED

- Horizontal or vertical vent terminal/combustion air inlet assembly (installation requirement)
- Condensate drain flange kit
- Disconnect switch (fusible/non-fusible) - UL Listed
- Single-stage thermostat
- Two-stage thermostat
- Electronic 7-day programmable thermostat
- Remote control center
- Manual shutoff valve and union

Model SCE Series 6

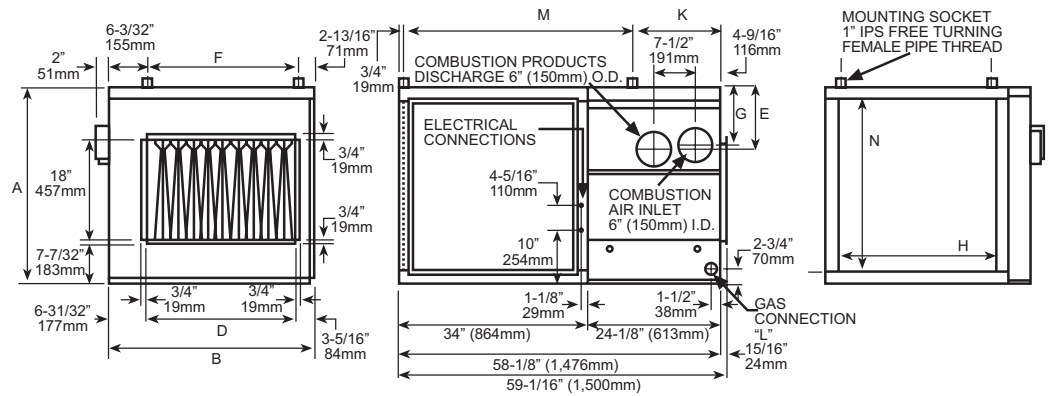
INDOOR, SEPARATED COMBUSTION, GAS-FIRED, PACKAGED DUCT FURNACE/BLOWER UNIT FOR COMMERCIAL/INDUSTRIAL HEATING AND MAKEUP AIR

MODEL SCE SERIES 6 TECHNICAL DATA

SIZE		125	150	175	200	225	250	300	350	400
Heating Input	BTUH	125,000	150,000	175,000	200,000	225,000	250,000	300,000	350,000	400,000
	kW	36.6	44.0	51.3	58.6	65.9	73.3	87.9	102.6	117.2
Thermal Output Capacity ^A	BTUH	97,500	120,000	136,500	160,000	175,500	200,000	234,000	273,000	312,000
	kW	28.6	35.2	40.0	46.9	51.4	58.6	68.6	80.0	91.4
Unit Amps – 115V (Less Motor)		1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Control Amps (24V)		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Air Volume	CFM	1,000-3,000	1,230-3,700	1,400-4,210	1,640-4,935	1,800-5,150	2,050-5,800	2,400-6,300	2,800-6,800	3,200-7,100
	m ³ /hr	1,699-5,097	2,090-6,286	2,379-7,153	2,786-8,384	3,058-8,750	3,483-9,854	4,077-10,703	4,757-11,553	5,437-12,063
Net Weight	lbs.	313	358	358	382	382	482	482	498	560
	kg	142	162	162	173	173	219	219	226	254
Ship Weight	lbs.	375	440	440	520	520	645	645	695	716
	kg	170	200	200	236	236	293	293	315	325
Gas Connection—Natural ^B		1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"
Maximum ^C Vent Length	6" Pipe	50'	50'	50'	50'	50'	50'	50'	30'	30'
	7" Pipe	N/A	N/A	N/A	70'	70'	70'	70'	70'	70'
Filter Size ^D (Filters Optional)		(2) 20 x 20	(2) 20 x 25	(2) 20 x 25	(2) 16 x 20 (2) 16 x 25	(2) 16 x 20 (2) 16 x 25	(2) 20 x 20 (2) 20 x 25	(2) 20 x 20 (2) 20 x 25	(1) 20 x 20 (3) 20 x 25	(3) 16 x 25 (2) 20 x 25

- ^A In U.S. ratings are for altitudes to 2,000 feet. Above 2,000 feet, derated by orifice change, 4% for each 1,000 feet above sea level. In Canada ratings are for altitudes to 2,000 feet. High altitude units (2,000 - 4,500 feet) derate by 10% of maximum input.
- ^B Sizes shown are for natural gas connections, NOT supply line size. Gas connection for propane is 1/2 inch for all sizes.
- ^C Minimum vent length is 5 feet. Seven inch pipe requires four field-supplied tapered reducers.
- ^D Optional filter rack will accommodate 1" or 2" filters.

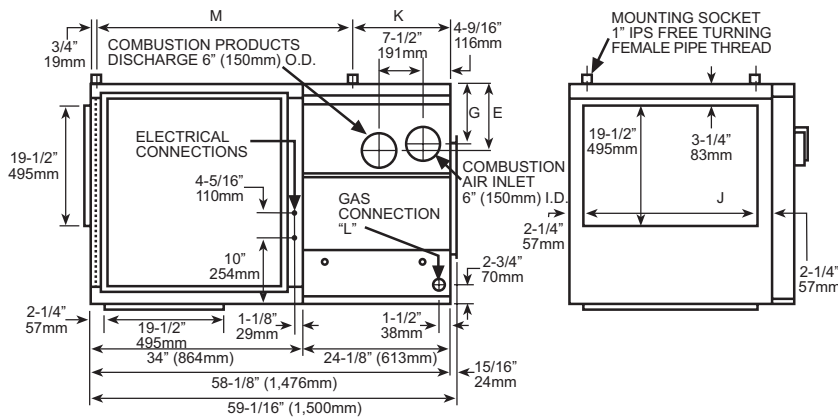
DIMENSIONS - STANDARD SCE SERIES 6



CLEARANCE FROM COMBUSTIBLES

1. Top, flue, side opposite controls - 6"
2. Control side - width of unit plus 6"
3. Bottom - 6"

DIMENSIONS - WITH OPTIONAL HORIZONTAL INLET WITH DUCT FLANGES AND RETURN AIR OPENING



Air Openings	Dimensions
Standard Horizontal Air Inlet	H x N
Optional Horizontal Air Inlet with Duct Flange	J x 19-1/2"
Optional Return Air Opening (bottom)	J x 19-1/2"
Standard Horizontal Discharge-Air Opening	D x 18"

Notes:

1. Burner and control access shown left side (left when facing air discharge). Specify right side for opposite access and connections (Option AJ).
2. See vent arrangement information.
3. Standard SCE Blower Cabinet will not accommodate dampers. For dampers, select from AR Options.

DIMENSIONS (+ or - 1/8" or 3mm)

SIZE	A		B		D		E		F		G		H		J		K		L		M		N		
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
125	32	813	25	641	15	387	8	206	16	413	7	178	17	441	17	441	17	441	1/2	13	40	1/4	1022	27	705
150, 175	32	813	30	781	20	527	8	206	21	552	7	178	23	591	22	581	18	467	1/2	13	39	991	27	705	
200, 225	35	895	36	921	26	667	10	273	27	692	10	254	28	730	28	721	17	432	1/2	13	40	1/4	1022	30	781
250	34	870	43	1105	33	851	9	248	34	876	9	229	36	914	35	905	16	406	1/2	13	39	1/4	997	29	756
300	35	895	44	1130	34	876	10	273	35	902	10	254	37	940	36	930	17	432	3/4	19	40	1/4	1022	30	781
350	35	895	50	1270	40	1016	10	273	41	1041	10	254	42	1080	42	1070	18	467	3/4	19	39	991	30	781	
400	35	895	55	1410	45	1156	10	273	46	1181	10	254	48	1219	47	1210	17	432	3/4	19	40	1/4	1022	30	781