

REZNOR®**MODEL
B****GAS-FIRED, GRAVITY-VENTED,
BLOWER-TYPE UNIT HEATER FOR
COMMERCIAL/INDUSTRIAL USE****DESCRIPTION****CAN/CGA 2.6**

Reznor® Series 100, Model B gas-fired gravity-vented unit heaters are designed for 80% thermal efficiency and are designed for use with natural or propane gas, as specified, in sizes from 25,000 to 400,000 BTUH gas Input.

Model B unit heaters are designed for ceiling suspension with a centrifugal blower for air delivery. Sizes 25-100 are equipped with a direct drive blower motor with multi-speed taps capable of handling up to .50" w.c. of external static pressure. Sizes 125-400 are standardly equipped with a blower using an adjustable belt drive and motor capable of handling external static pressure up to .25" w.c. Optional motors and drives are available to increase the blower capability to handle up to .50" w.c. of external static pressure.

Standard features on the Model B Series units include a manual match-lit pilot with 100% shutoff and a single-stage, 24-volt gas valve. A terminal strip connector facilitates field connection to a remote 24-volt thermostat for automatic operation. Each unit is provided with a fan control and all required limit safety controls, including an energy cutoff (ECO) device and a blocked vent switch.

These units are approved for installation in The United States and Canada by the Canadian Standards Association (CSA). Canadian units require the selection of a totally enclosed motor. (An open motor may be selected for a C.G.A. approved heater only when the heater will be equipped with a Reznor® field-installed blower cabinet.)

NOTE: Model B units for California require the addition of spark pilot Option AH2 or AH3.

STANDARD FEATURES

- Orifices for natural gas
- Aluminized steel heat exchanger
- Aluminized steel burner rack with stainless steel insert
- Manual match-lit pilot with 100% shutoff
- Single-stage combination gas valve
- 115/1/60 supply voltage - Sizes 25-300
- 230/1/60 supply voltage - Size 400
- A.G.A. Models - ODP motor with internal overload
- C.G.A. Models - Totally enclosed blower motor
- Motor contactor - Sizes 300 and 400
- Direct drive blower with multi-speed taps - Sizes 25-100
- Adjustable belt drive blower - Sizes 125 - 400
- Fan and limit safety controls

- Blocked vent shutoff system
- Energy cutoff (ECO) device
- 24-volt control voltage transformer
- Horizontal/Vertical vent outlet
- Horizontal louvers or Duct adapter
- Terminal strip connector for 24-volt field wiring
- Convenient bottom burner access
- 4-point 3/8"-16 threaded hanger connections

OPTIONAL FEATURES - Factory Installed

- Equipped for propane gas
- Equipped for high altitude (2001-9000 ft)
- E-3 (409) stainless steel heat exchanger and burner
- Two-stage gas control (50% low fire) - Sizes 75-400
- Spark ignited, intermittent safety pilot with electronic flame supervision and with or without timed lockout (timed lockout is required for propane gas)
- Manual summer/winter switch
- Burner air shutters
- 208/230 single phase supply voltage
- 208/230 three phase supply voltage
- 460 three phase supply voltage - Sizes 75-400
- 575 three phase supply voltage - Sizes 125-400
- Belt guard and/or blower inlet guard
- Alternate motor HP and drive - Sizes 50-400 (See page 24)
- Burner air shutters
- Totally enclosed blower motor
- Low ambient fan control relay

OPTIONS/ACCESSORIES - Field Installed

- Power venter
- Vertical louvers
- Downturn air nozzle, 25-65° or 50-90° variable air deflector range - See page 37
- Thermostat and relay kits
- Air recirculation kits - See page 35
- Manual summer/winter switch
- Filter cabinet with 1" or 2" filters (see pressure drops, page 24)
- Polytube adapter - Models 75-400 (See page 36)
- Multiple heater control
- Hanger kits to suspend from 1" pipe or to use with vibration isolation suspension
- Unit-mounted thermostat bracket
- Step down transformer 230/115 or 460/115 - Sizes 25-100
- Burner air shutters
- Low ambient fan control relay kit
- Belt guard and/or blower inlet guard
- Single-stage and two-stage thermostats
- Thermostat guard with locking cover
- Manual shutoff valve and union
- Gas conversion kit

NOTE: Not certified for residential use.

WARNING: Gas-fired appliances are not designed for use in hazardous atmospheres containing flammable vapors or combustible dust, or atmospheres containing chlorinated or halogenated hydrocarbons.

Installations in public garages or airplane hangars are permitted when in accordance with ANSI Z223.1 and NFPA 54 Codes or CAN1-B149 Codes and enforcing authorities.

NOTE: 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 or 14" w.c.). Minimum inlet pressure for natural gas is 5" w.c.; minimum inlet pressure for propane gas is 11" w.c.

TECHNICAL DATA - Model B

Size	25	50	75	100	125	165	200	250	300	400
BTUH Input	25,000	50,000	75,000	100,000	125,000	165,000	200,000	250,000	300,000	400,000
BTUH Thermal Output (80%)*	20,000	40,000	60,000	80,000	100,000	132,000	160,000	200,000	240,000	320,000
Vent Outlet (diameter)	4" Rd	4" Rd	5" Oval	6" Oval	7" Oval	8" Oval	8" Oval	10" Oval	10" Oval	12" Oval
Gas Connection - Natural Gas**	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Control Amps (24-volt)	0.33	0.33	0.33	0.33	0.33	0.23	0.23	0.23	0.20	0.20
Full-Load Amps (115 volt)	2.9	2.9	5.3	5.3	6.0	9.0	9.0	11.0	13.0	230V-9.1
Normal Consumption (watts) (60°F rise and .25" w.c. ESP)	140	175	340	430	500	710	750	1000	1320	1650
Maximum CFM***	410	820	1230	1645	2055	2715	3290	4115	4935	6500
Minimum CFM ***	245	490	740	985	1235	1625	1975	2465	2960	3900
Standard Motor Horsepower	1/6	1/6	1/3	1/3	1/3	1/2	1/2	3/4	1	1-1/2
Blower Size (inches)	9x6	9x6	9x6	9x9	10x10	12x9	15x11	15x11	15x11	15x15
Approximate Net Wt (lbs)	93	100	114	126	176	201	235	273	296	390
Approximate Shipping Wt (lbs)	193	206	229	241	318	343	385	431	454	561

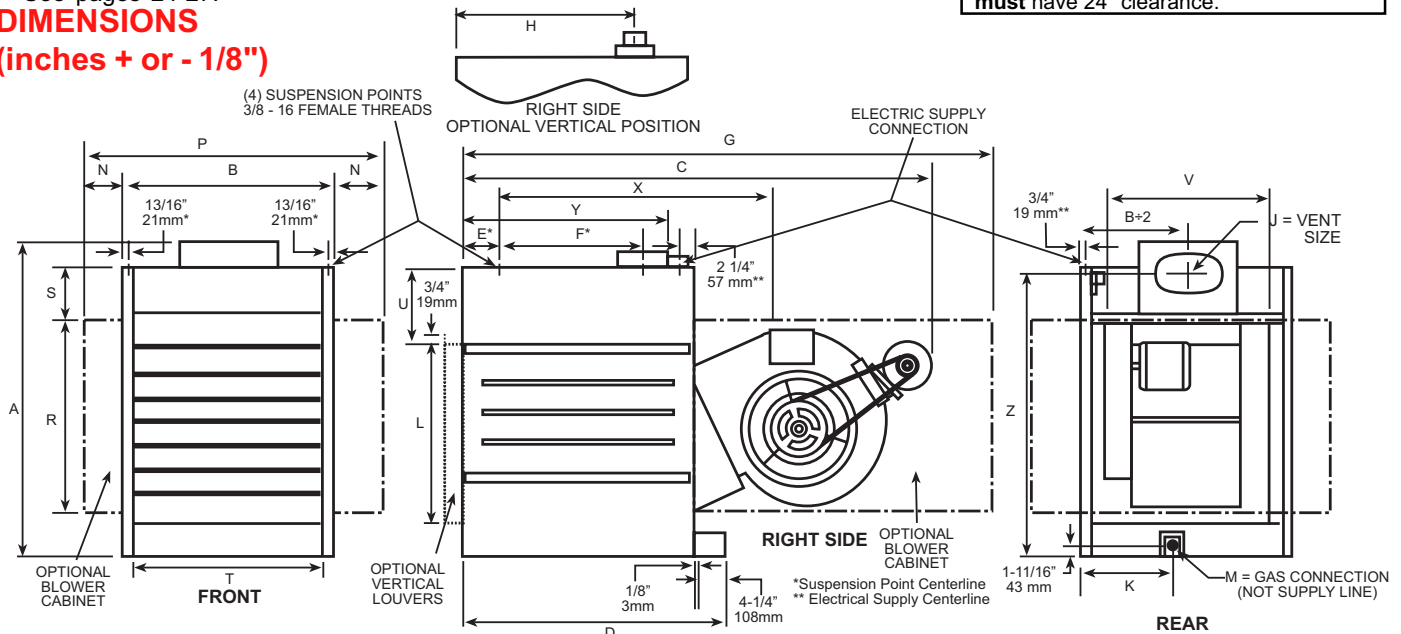
*A.G.A. ratings for altitudes to 2000 ft. Above 2000 ft, de-rate by orifice change, 4% for each 1000 ft above sea level.

*C.G.A. ratings for altitudes to 2000 ft. High altitude units (2001-4500 ft) are de-rated by 10% of maximum input.

**Gas connection for propane is 1/2" for all sizes. Sizes shown are for gas connection to a single-stage gas valve; NOT gas supply line size.

***See pages 24-27.

DIMENSIONS (inches + or - 1/8")



Filters for Optional Blower Cabinet

Model	Qty	*Filter Size
25-125	1	20x20
165-200	1	16x25
	1	20x25
250-300	2	16x20
	2	20x20
400	2	16x25
	2	20x25

*1" or 2" permanent filters

Required Clearances

Top & Flue Connector	6"
Sides	18"
Bottom	12"
(when supplied with optional downturn nozzle, bottom clearance is 42"). For service purposes, in standard units, bottom clearance exceeding 12" minimum is not required, but may be desirable.	
Rear	24"
For service purposes the back of the unit must have 24" clearance.	

Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	Y	Z
			Ⓢ			Ⓢ	Ⓢ				Ⓢ	Nat Pro	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	
25	30-1/8	13-1/2	43-1/2	31-1/2	5-7/8	14-1/2	61-1/2	19	4 Rnd	10-1/4	15-7/8	1/2 1/2	3-3/4	21	17-3/4	5-1/4	10-3/4	8-1/2	14-3/4	6-1/4	31-1/4	21-1/2	27-5/8
50	30-1/8	13-1/2	50	31-1/2	5-7/8	14-1/2	61-1/2	19	4 Rnd	10-1/4	15-7/8	1/2 1/2	3-3/4	21	17-3/4	5-1/4	10-3/4	8-1/2	14-3/4	6-1/4	31-1/4	21-1/2	27-5/8
75	30-1/8	15-1/2	50	31-1/2	5-7/8	14-1/2	61-1/2	19	5 Oval	10-1/2	15-7/8	1/2 1/2	2-3/4	21	17-3/4	5-1/4	12-3/4	8-1/2	14-3/4	6-1/4	31-1/4	21-1/2	27-5/8
100	30-1/8	17-1/2	50	31-1/2	5-7/8	14-1/2	61-1/2	19	6 Oval	12-7/8	15-7/8	1/2 1/2	1-3/4	21	17-3/4	5-1/4	14-3/4	8-1/2	14-3/4	6-1/4	31-1/4	21-1/2	27-5/8
125	32	23-1/4	47-1/2	31-1/2	5-7/8	14-1/2	66	18	7 Oval	14-1/2	15-7/8	1/2 1/2	1-3/8	21	17-3/4	5-1/4	20-1/2	8-1/2	20-1/2	6-1/4	35-3/4	21-1/2	28-1/2
165	40-1/8	20-1/4	61	36	4-7/8	19-1/2	76-1/8	23-3/8	8 Oval	14-1/4	23-7/8	1/2 1/2	2-7/8	26	25-1/4	7-1/4	17-1/2	11-1/2	20-1/2	8	36-3/4	27	36-3/4
200	40-1/8	23-1/4	66-1/2	36	4-7/8	19-1/2	76-1/8	23-3/8	8 Oval	14-3/8	23-7/8	1/2 1/2	1-3/8	26	25-1/4	7-1/4	20-1/2	11-1/2	20-1/2	8	36-3/4	27	36-3/4
250	43-1/2	28-3/4	66-1/2	36	4-7/8	19-1/2	76-1/8	21-7/8	10 Oval	12-3/8	23-7/8	1/2 1/2	5-7/8	40-1/2	25-1/4	7-1/4	26	11-1/2	26	8	36-3/4	27	38-3/8
300	43-1/2	28-3/4	66-1/2	36	4-7/8	19-1/2	76-1/8	21-7/8	10 Oval	12-3/8	23-7/8	3/4 1/2	5-7/8	40-1/2	25-1/4	7-1/4	26	11-1/2	26	8	36-3/4	27	38-3/8
400	43-1/2	37	66-1/2	36	4-7/8	19-1/2	76-1/8	21-7/8	12 Oval	13	23-7/8	3/4 1/2	6-3/4	50-1/2	25-1/4	7-1/4	34-1/4	11-1/2	34-1/4	8	36-3/4	27	38-3/8

NOTES: ⓈWhen equipped with optional blower cabinet. ⓈWhen equipped with optional duct flange. ⓈDimension includes a 3/4" flange on rear of blower cabinet. ⓈUse with 4-point suspension without blower cabinet. ⓈUse with 4-point suspension with blower cabinet. ⓈContactor is standard on Models 300 & 400. ⓈContactor location with optional 3 phase motors on Models 50, 75, 100 & 125. ⓈDeduct 6-5/8" on Models 50, 75 & 100 when equipped with direct drive motor.