

REZNOR®**MODEL
F****GAS-FIRED, GRAVITY-VENTED,
FAN-TYPE UNIT HEATER FOR
COMMERCIAL/INDUSTRIAL USE****ANSI Z83.8****CAN/CGA 2.6****DESCRIPTION**

Reznor® Series 100, Model F 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 F unit heaters are designed for ceiling suspension with a propeller fan for air delivery.

Standard features 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).

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

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.

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 (field adjustable for high altitude operation)
- 115/1/60 supply voltage
- 115 volt fan motor with internal overload protection
- Fan and limit safety controls
- Energy cutoff (ECO) device
- Blocked vent shutoff system
- 24-volt control voltage transformer
- Individually adjustable horizontal louvers
- Full safety fan guard
- Terminal strip connector for 24-volt field wiring
- Convenient bottom burner access
- 2-point 3/8"-16 threaded hanger connections
- Horizontal/vertical vent outlet

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 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
- 220/240 volt/50 Hertz electrical operation
- Totally enclosed 115V motor
- Low ambient fan control relay

ACCESSORIES - Field Installed

- Power venter
- Vertical louvers
- Downturn air nozzle, 25-65° or 50-90° variable air deflector range (includes 4-point suspension kit) - See page 37
- Thermostat and relay kits
- Air recirculation kits - See page 35
- Manual summer/winter switch
- Multiple heater control
- 4-point suspension kit
- Unit-mounted thermostat bracket
- Step down transformer 230/115 or 460/115 - See page 35
- Burner air shutters
- Low ambient fan control relay kit
- Hanger kit to suspend from 1" pipe (2 or 4 point suspension)
- 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.

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 F

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)	0.8	1.3	1.9	2.8	2.9	4.0	4.0	2.5	4.0	7.0
Normal Consumption (watts)	60	95	135	195	205	275	300	280	375	565
Throw at 8' Mounting Height***	35'	39'	48'	60'	73'	78'	85'	96'	108'	120'
Motor HP**** Standard	1/50	1/35	1/15	1/30	1/30	1/20	1/20	1/6	1/4	1/2
Optional Enclosed	--	1/15	1/15	1/8	1/8	1/8	1/6	1/6	1/2	1/2
Motor RPM	1550	1550	1550	1050	1050	1050	1050	850	850	850
Fan Diameter	10"	10"	12"	14"	16"	16"	20"	22"	22"	24"
CFM	380	650	980	1250	1600	2200	2800	3360	3800	4940
Outlet Velocity (FPM)	423	853	1166	1358	1330	1100	1217	1182	1426	1420
Approximate Net Wt (lbs)	72	79	88	97	127	149	170	204	221	276
Approximate Shipping Wt (lbs)	89	96	107	118	150	172	196	232	249	311

*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.

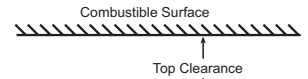
***For additional mounting heights, see page 30.

****All other information in this table is based on a heater equipped with a standard 115v motor. (The standard motor for a Model 25 is an enclosed motor; all other standard motors are open motors. Optional enclosed motors are available in 115v only.)

Required Clearances (inches)

Sizes	Top *	Flue Connector	Sides	Bottom **	Rear ***
25-125	2	6	18	12	24
165-400	6	6	18	12	24

*Measure top clearance as illustrated →



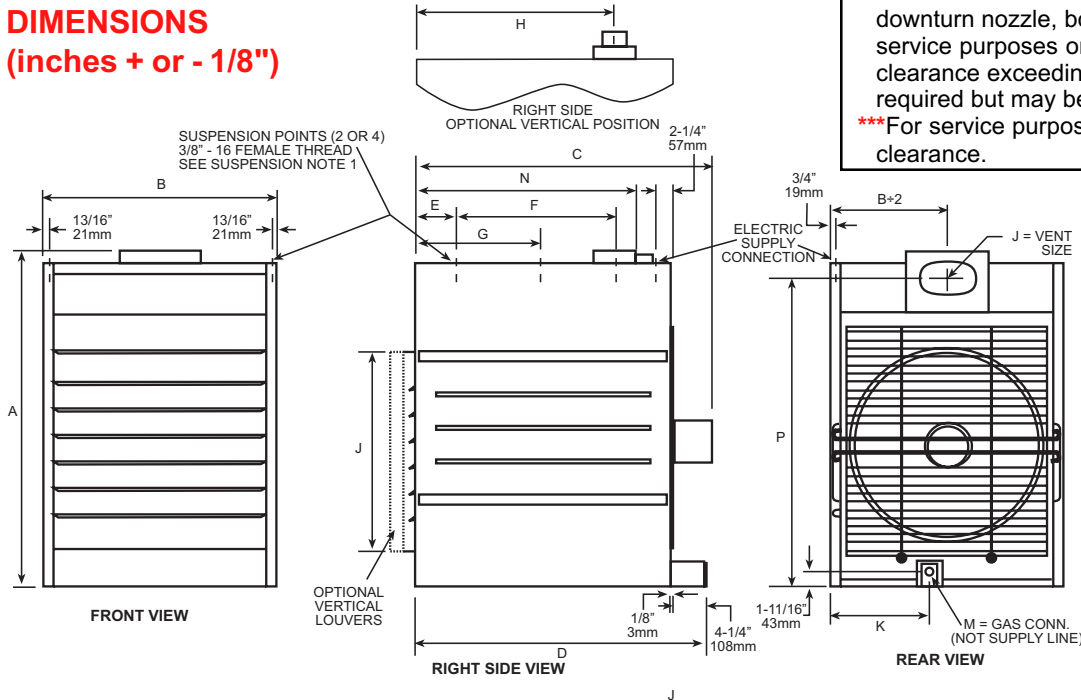
**When supplied with optional



downturn nozzle, bottom clearance is 42". For service purposes on standard units, bottom clearance exceeding 12" minimum is not required but may be desirable.

***For service purposes only, rear must have 24" clearance.

DIMENSIONS (inches + or - 1/8")



Size	A	B	C	D	E	F	G	H	J	K	L	M		N	P
												Nat	Pro		
25,50	30-1/8	13-1/2	27	31-1/2	5-7/8	14-1/2	14	19	4 Round	10-1/4	16	1/2	1/2	21-1/2	27-5/8
75	30-1/8	15-1/2	27	31-1/2	5-7/8	14-1/2	14	19	5 Oval	10-1/2	16	1/2	1/2	21-1/2	27-5/8
100	30-1/8	17-1/2	30-1/2	31-1/2	5-7/8	14-1/2	14	19	6 Oval	12-7/8	16	1/2	1/2	21-1/2	27-5/8
125	32	23-1/4	30-1/2	31-1/2	5-7/8	14-1/2	14	18	7 Oval	14-1/2	16	1/2	1/2	21-1/2	28-1/2
165	40-1/8	20-1/4	35-1/2	36	4-7/8	19-1/2	15-3/4	23-3/8	8 Oval	14-1/4	24	1/2	1/2	27	36-3/4
200	40-1/8	23-1/4	36-1/4	36	4-7/8	19-1/2	15-3/4	23-3/8	8 Oval	14-3/8	24	1/2	1/2	27	36-3/4
250	43-1/2	28-3/4	36-1/4	36	4-7/8	19-1/2	15-3/4	21-3/4	10 Oval	12-3/8	24	1/2	1/2	27	38-3/8
300	43-1/2	28-3/4	36-3/4	36	4-7/8	19-1/2	15-3/4	21-3/4	10 Oval	12-3/8	24	3/4	1/2	27	38-3/8
400	43-1/2	37	37-1/4	36	4-7/8	19-1/2	15-3/4	21-3/4	12 Oval	13	24	3/4	1/2	27	38-3/8

SUSPENSION NOTES:

- Use dimension "G" for 2-point suspension and "E" and "F" for 4-point suspension.
- Factory equipped with 2-point suspension; 4-point is optional.