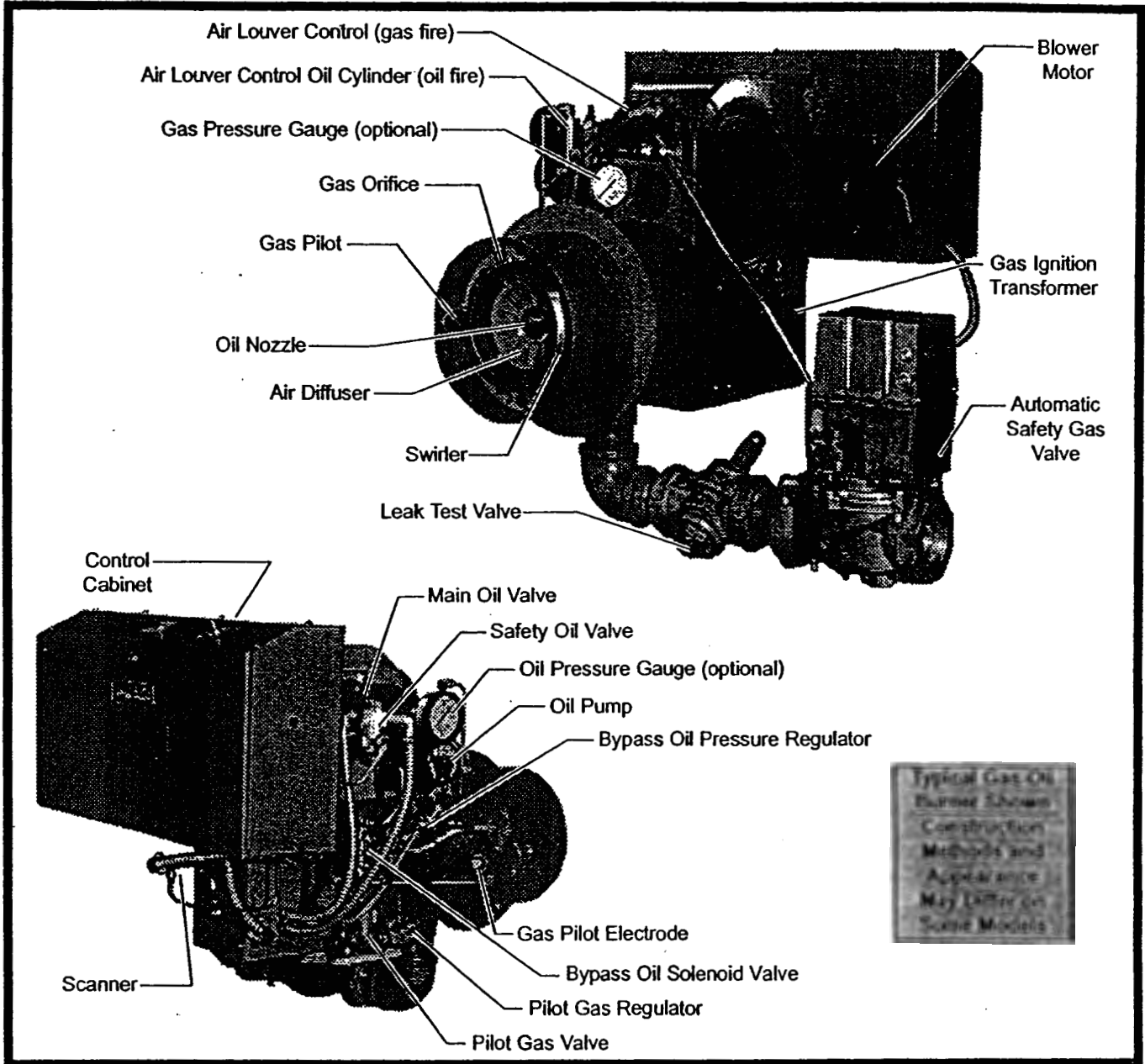


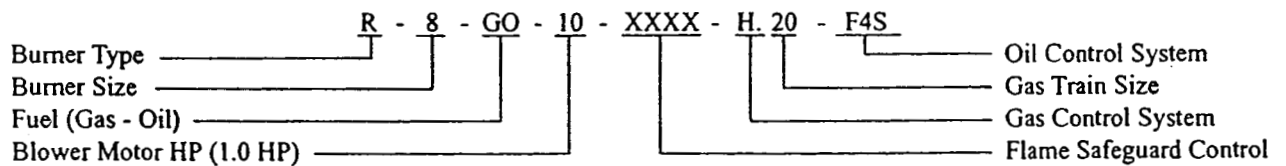
Specification Data

1	R	15.1	Rev. 21
5-01	Replaces	7-00	

TYPE **R** TURBO-RING FORCED DRAFT BURNERS
USING GAS AND LIGHT OIL-MECHANICAL PRESSURE ATOMIZATION



Burner Numbering System



1 See Catalog Sheet 1-gen-10.1 for burner numbering.

2 Use Order Entry and Equipment Pricing Form 1196 when placing order.

Specifications and Capacities

BASIC BURNER MODEL NO.	MAXIMUM FIRING RATE COMBUSTION CHAMBER PRESSURE									BURNER BLOWER MOTOR		
	DRAFT-.05" W.C.		LOW PRESSURE			HIGH PRESSURE						
	BTU/HR 1000s	GPH	PRESS. INCHES W.C.	BTU/HR 1000s	GPH	PRESS. INCHES W.C.	NATURAL GAS	NO. 2 OIL	BTU/HR 1000s	GPH	3450 RPM	
											VOLTAGE	HP
R6.9 03	630	4.5	0.2	560	4.0	—	—	—	—	120/60/1	1/3	
R6 03	910	6.5		840	6.0							
R6.1 03	1120	8.0		990	7.0							
R6.2 03	1190	8.5	0.3	1120	8.0							
R6.3 05	—	—	0.4	1190	8.5						1/2	
R8 05	2100	15.0	0.2	1960	14.0						3/4	
R8.1 07	2250	16.0		2100	15.0							
R8.2 10	2380	17.0	0.3	2100	15.0	—				240/60/1	1	
R8.3 15	2800	20.0		2520	18.0			2030	14.5	240/60/3	1½	
R8.4 20	—	—		2800	20.0	1.0		2520	18.0		2	
R10.9 10	2800	20.0	—	—	—	—		—	—	240/60/1	1	
R10 15	3650	26.0		3200	22.8			2800	20.0		1½	
R10 20	4200	30.0	0.2	3800	27.1	1.0		3080	22.0		2	
R10.1 30	4500	32.0		4200	30.0			3920	28.0		3	
R10.2 50	6300	45.0	0.6	5700	41.0			5600	40.0	240/60/3	5	
R12.9 30	6000	43.0		5700	41.0			5450	39.0		3	
R12.9 50	6000	43.0		5700	41.0			5450	39.0		5	
R12 30	6400	46.0		6300	45.0	.75		6000	43.0		3	
R12 50	7100	51.0	0.3	6900	49.0			6700	48.0		5	
R12.1 50	8100	58.0		7800	55.7			7550	54.0			
	[1]	[2]		[1]	[2]			[1]	[2]			

Fuel

Gas = G
 Oil = O
 Gas/Oil = GO

- [1] Capacity based on an elevation of 2,000 feet. Capacity will be reduced 4% for each additional 1,000 feet of elevation.
- [2] Oil burners - No. 2 oil, GPH based upon 140,000 BTU/U.S. gallon. Maximum viscosity 38 SSU at 100°F average 31 Redwood seconds. Mechanical pressure atomization.
- [3] Oil burners supplied with burner mounted oil pump as standard except for R12-50 and R12.1-50. Modulating burners with burner mounted pumps limited to 35.0 GPH with 3.0 HP blower motor and 45.0 GPH with 5.0 HP blower motor. See catalog Sheet 6-10-2.2 for further data on burner high pressure pump sets.

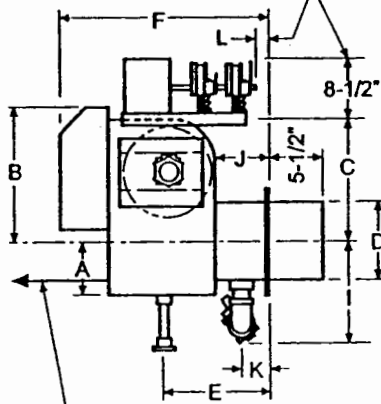
Dimensions

BASIC BURNER MODEL NO.	SHIPPING WEIGHT LBS. APPROX.	OVERALL BURNER DIMENSIONS (INCHES)											
		A	B	C	D	E	F	G	H	I	J	K	L
		R6.9 03	160	6	19	12-1/8	6	14-1/4	26	11-5/8	11-7/8	9	8-1/8
R6 03	165	6	19	12-1/8	6	14-1/4	26	11-5/8	11-7/8	9	8-1/8	6	—
R6.1 03													
R6.2 03													
R6.3 05													
R8 05													
R8.1 07	230	6-1/2	19-3/4	13-3/4	8	13-7/16	28-1/2	13-1/2	14-1/2	12	6-5/16	3	—
R8.2 10	250												
R8.3 15	270												
R8.4 20	280												
R10.9 10	300												
R10 15	320	8-1/2	21-1/8	15-3/8	10	14-9/16	30-1/4	16	16	14	6-1/2	5-1/4	—
R10 20	360												
R10.1 30	410												
R10.2 50	430												
R12.9 30	650												
R12.9 50													
R12 30													
R12 50		700											
R12.1 50	700	16	SEE NOTE	—	—	—	—	—	—	—	—	—	—
		4	5										

Fuel

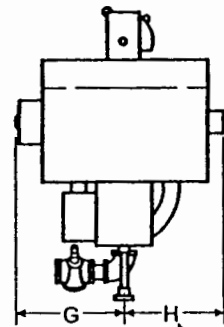
Gas = G
 Oil = O
 Gas/Oil = GO

If Characterized Linkage is used



NOTE

Dimension F plus burner nose length (5-1/2" standard) is required behind the burner to remove the drawer assembly.



NOTE

If remote oil pump set is used, dimension will be 1/2 width of control cabinet.

4 Weight will vary by burner depending on size and type of gas train, type of fuel control system, etc. The figures shown represent a burner with standard controls including gas train and burner oil pump set where applicable.

5 The dimensions shown are typical and subject to change without notice. For specific dimensions, request a certified print.

Standard Equipment

SINGLE OR COMBINATION FUEL BURNERS		FUEL CONTROL SYSTEMS														
		ON - OFF FIXED AIR & FUEL			ON-OFF OR HI-LOW LOW FIRE START			MODULATING PROVEN LOW FIRE START			MODULATING PROVEN LOW FIRE START					
		GAS	OIL	GAS/OIL	GAS	OIL	GAS/OIL	GAS	OIL	GAS/OIL	GAS	OIL	GAS/OIL			
		B	F	B-F	N	FO	N-FO	E	FE	E-FE	E	FE	E-FE			
DESCRIPTION																
GENERAL	Blower Motor and Fan Air Inlet Register and Air Inlet Guard Flame Detector (UV Scanner)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Air Flow Safety Switch (also on Oil Burners when required)	X		X	X		X		X	X		X		X		
CONTROL CABINET	Combustion Flame Safeguard Control On - Off Switch Motor Contactor or Starter (1/2 HP and larger)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Fuel Transfer Switch			X			X			X				X		
	Modulating Sub-Panel with Manual-Auto Switch and Manual Potentiometer								X	X	X	X	X	X	X	
	Two Indicator Lights	X	X	X	X	X	X									
	Four Indicator Lights								X	X	X	X	X	X	X	
AIR-FUEL CONTROL	Fixed Air and Fuel	X	X	X												
	Low Fire Start, Motorized Gas Valve Air-Fuel Control				X		X									
	Low Fire Start, Oil Valving and Oil Cylinder Air-Fuel Control					X	X									
	Proven Low Fire Start, Modulating Motor Air-Fuel Control								X	X	X	X	X	X	X	
GAS CONTROL	Safety Pilot Burner Ignition Transformer, 6000 Volt Pilot Solenoid Valve Pilot Shut-Off Cock Safety Test Cock Gas Orifices	X		X	X		X	X	X		X	X		X		
	OIL CONTROL	Oil Drawer Assembly with Air Diffuser Main Oil Solenoid Valve Safety Oil Solenoid Valve Low Oil Pressure Switch (When Required) Ignition Transformer, 10,000 Volts [2] Gas Pilot Ignition [3] Oil Pump		X	X		X	X		X	X			X	X	
		Simplex Oil Nozzle(s)		X	X		X	X		X	X					
		By-Passing Oil Nozzle(s) Strainer													X	X
		Spring Loaded Check Valve														
By-Pass Oil Solenoid Valve By-Pass and 3-Way Solenoid Valve By-Pass Pressure Regulating Valve Oil Cylinder Assembly						X	X									
Oil Metering Valve										X	X			X	X	

[1] Natural gas and/or No. 2 oil.

[2] Spark ignition of oil standard on STRAIGHT OIL burners under 34 GPH.

[3] Proven gas pilot ignition is standard on all GAS and COMBINATION GAS/OIL burners and also for all sizes 12 OIL Burners.

Optional Equipment

■ Characterized Linkage available on sizes 10 and 12 Burners with Modulating Systems.
