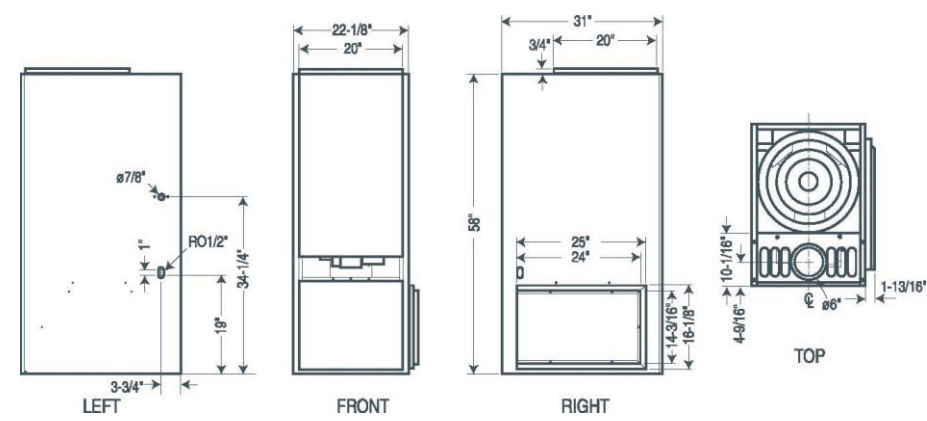
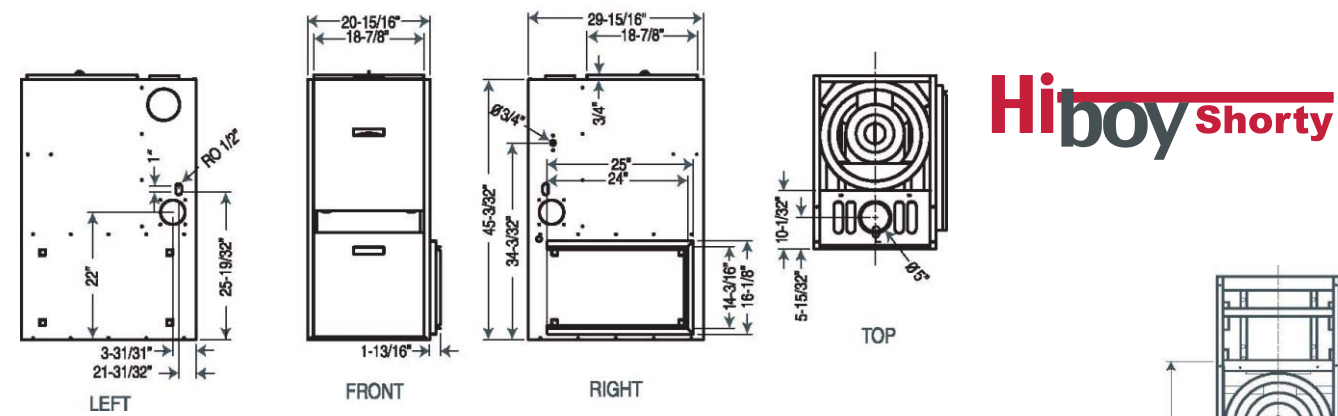


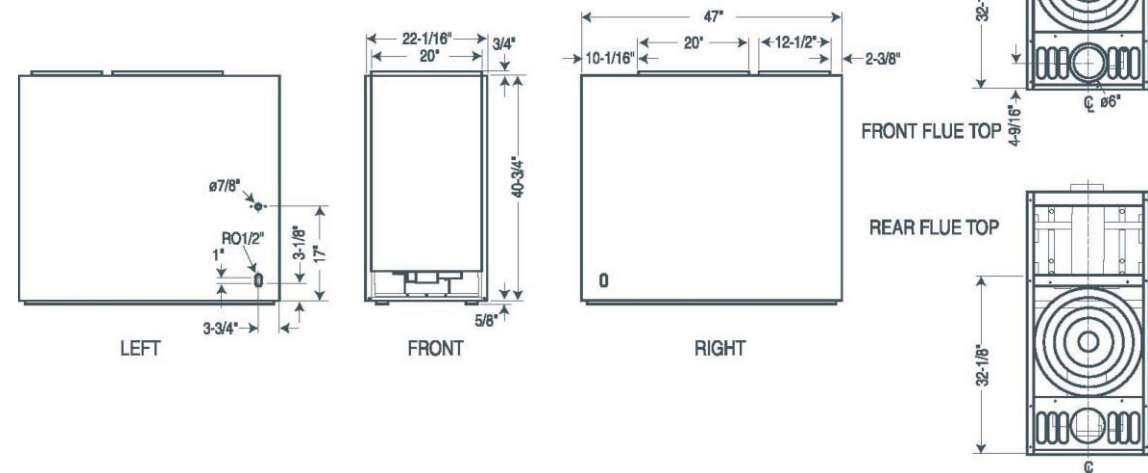
**Hi**boy



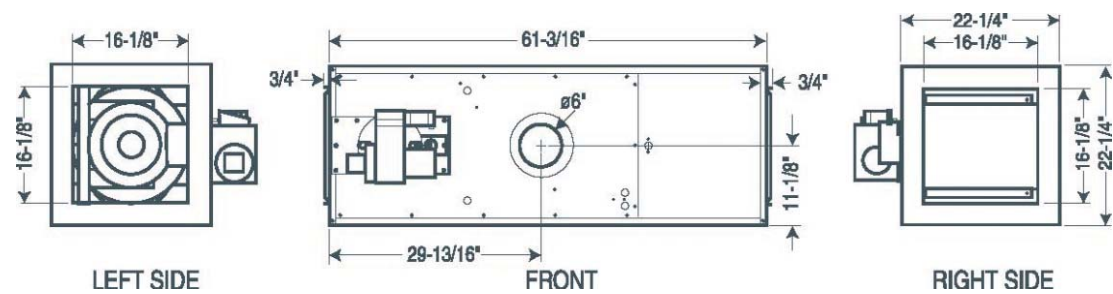
**Hi**boy Shorty



**Lo**boy



**Horizontal Counterflow**



# OIL - WARM AIR FURNACE



- IMPROVED EFFICIENCY - NOW 85.6%
- 5 MODELS - INCLUDING THE "HI-BOY SHORTY" SAVING 13" IN HEIGHT
- FAN CONTROL CENTER READY FOR AIR CONDITIONING
- OPTIONAL - DIRECT SIDEWALL VENT KIT AVAILABLE
- LIFETIME LIMITED WARRANTY



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8/12 - R3  
PN 980016

# Oil - Warm Air Furnace

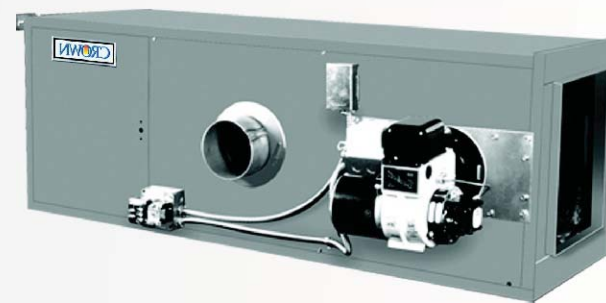
For more than 56 years Crown has been meeting the demands of its customers with quality, dependable and efficient residential air conditioning and heating equipment, and we back it up with the best warranty in the business. But it does not end there. Crown maintains a full staff of sales, training and technical support personnel to provide you with the highest level of customer support available in the industry. That's what we call the "Crown Tradition".

That tradition continues with our complete line of oil-fired warm air furnaces, utilizing the latest in control and burner technology combined with the highest grade material, finishes and craftsmanship to manufacture residential furnaces built to last. That's "peace of mind".

So become part of the Crown family and insist your oil dealer install a Crown warm air furnace. You'll be glad you did. **We guarantee it.**

**LIFETIME LIMITED Heat Exchanger WARRANTY**

**3 YEAR PARTS WARRANTY**



- Insulated cabinet, constructed with Seal-Tite design scratch resistant powder coat finish. Lined with foil-faced high-density insulation to reduce heat loss and noise.
- Heavy duty heat exchanger, manufactured from precision-made thick gauge sheet steel, 100% welded and quality tested to last a lifetime.
- Ceramic combustion chamber increases efficiency and provides for quiet operation.
- Oil burner options include individually boxed Beckett, Carlin or Riello flame retention burner with interrupted primary safety, cad cell and PSC motors, pre-wired with a Molex connector to make installation a snap.
- Air conditioning ready fan control center, with conveniently located, color-coded wiring.
- High limit temperature switch located to protect the heat exchanger from potential overheating and excessive stress.
- Blower assembly includes a multi speed direct drive motor designed to be easily removed for servicing. Optional ECM motor available on the "SHORTY".
- Dual clean-out ports easily accessible from inside the vestibule, making service and cleaning quick and easy.
- Washable air filter included on all models except the Horizontal/Counterflow.
- Add-ons such as a humidifier or air cleaner are easily installed.

## Optional Direct Sidewall Vent Kit Available

A Crown direct sidewall kit is available for use with the new "SHORTY" model furnace (CSHB 60-90). Direct sidewall venting is a cost effective means of venting combustion products through an outside wall of a house, particularly when a traditional chimney requires extensive repair.



- Since outside air is drawn in to support combustion, a direct vent system will increase the efficiency of the "SHORTY", especially in new, tightly sealed houses.
- The burner provides the necessary pressure for the adequate venting of flue products meaning no additional motors or controls are required.
- Only one wall opening is required.

# SPECIFICATIONS

Type	Hiboy - Upflow				Hiboy - Upflow - Shorty			Upflow - Loboy (F/ R Flue)				Horizontal / Counterflow			
Model Number	CHB 68-112				CSHB 60-90			CLBF 68-112 / CLBR 68-112				CHC 68-96			
Heat Input Rate (BTUH)	84,000	105,000	119,000	140,000	70,000	85,000	106,250	84,000	105,000	119,000	140,000	84,000	105,000	119,000	
AFUE Seasonal Efficiency (%) with Beckett NX Burner	85.6	85.4	85.2	85.0	85.4	85.2	85.0	85.6/86.0	85.4/85.8	85.2/85.6	85.0/85.4	85.6/85.8	85.4/85.6	85.2/85.4	
Heat Output Rate (BTUH) with Beckett NX Burner	72,000	89,500	101,250	119,000	59,750	72,500	90,250	72,000	89,500	101,250	119,000	72,000	89,500	101,250	
AFUE Seasonal Efficiency (%) with Standard Burner	83.0	82.9	82.8	82.4	81.2	81.4	81.0	82.0/84.7	82.9/85.0	82.8/84.9	82.0/84.9	82.0/84.6	82.6/84.8	82.3/84.5	
Heat Output Rate (BTUH) with Standard Burner	70,000	87,000	98,500	115,000	57,000	69,000	86,000	70,000	87,000	98,500	115,000	70,000	86,500	98,000	
Nominal Temperature Rise (°F)	85°				60° <sup>3</sup>			85°				85°			
Burner Model	Premium Beckett	NX w/ Quick Connect				NX w/ Quick Connect			NX w/ Quick Connect				NX w/ Quick Connect		
	Standard Beckett	AF w/ Quick Connect				AFG w/ Quick Connect			AF w/ Quick Connect				AF w/ Quick Connect		
	Carlin	EZ-1 w/ Quick Connect				EZ-1 w/ Quick Connect			EZ-1 w/ Quick Connect				EZ-1 w/ Quick Connect		
	Riello	F3 w/ Quick Connect				BF3 w/ Quick Connect			F3 w/ Quick Connect				F3 w/ Quick Connect		
Nozzle Rating (gpm)	Beckett NX	0.50	0.60 <sup>4</sup>	0.65	0.85	0.40	0.50 <sup>4</sup>	0.60	0.50	0.60 <sup>4</sup>	0.65	0.85	0.50	0.60 <sup>4</sup>	0.65
	Beckett AF*	0.60	0.75 <sup>4</sup>	0.85	1.00	0.50	0.60 <sup>4</sup>	0.75	0.60	0.75 <sup>4</sup>	0.85	1.00	0.60	0.75 <sup>4</sup>	0.85
	Carlin EZ-1	0.50	0.65 <sup>4</sup>	0.75	0.85	0.50	0.60 <sup>4</sup>	0.75	0.50	0.65 <sup>4</sup>	0.75	0.85	0.50	0.65 <sup>4</sup>	0.75
	Riello F3	0.55	0.70 <sup>4</sup>	0.80	0.90	0.50	0.60 <sup>4</sup>	0.70	0.55	0.70 <sup>4</sup>	0.80	0.90	0.55	0.70 <sup>4</sup>	0.80
Spray Angle & Pattern	NX / B / C / R	60°W / 80°A / 60°A / 60°A				70°A / 80°A / 70°A / 80°A			60°W / 80°A / 60°A / 60°A				60°W / 80°A / 60°A / 60°A		
Pump Pressure (psig)	Beckett NX	150 <sup>8</sup>				150			150 <sup>8</sup>				150		
	Beckett AF*	130				120			130				130		
	Carlin EZ-1	140				150			140				140		
	Riello F3	150				145			150				150		
Nominal Flue Size (in)	6"				5"			6" Front Flue		6" Rear Flue		6"			
Combustion Chamber Type	Preformed Ceramic Fiber				Preformed Ceramic Fiber			Preformed Ceramic Fiber				Preformed Ceramic Fiber			
Blower Type	Direct Drive - 10" Wheel				Direct Drive - 10" Wheel			Direct Drive - 10" Wheel				Direct Drive - 10" Wheel			
Motor Horsepower-Type	1/2 PSC				1/2 PSC		3/4 ECM	1/2 PSC				1/2 PSC			
Speed(s)	4				4		Variable	4				4			
CFM Output Range @ 0.4" w.c.	990 - 1360				846 - 1553		799 - 1622 <sup>5</sup>	930 - 1420		990 - 1420		990 - 1360			
Maximum Recommended A/C	3-1/2 Tons <sup>6</sup>				4 Tons		4 Tons	3-1/2 Tons <sup>6</sup>				3-1/2 Tons <sup>6</sup>			
Filter Type	Washable				Washable			Washable				Not Supplied			
Filter (Quantity) Size	(1) 16 x 25				(1) 15 x 24-1/2			(2) 10 x 20				Not Supplied			
Voltage / Hertz / Phase	120 / 60 / 1				120 / 60 / 1			120 / 60 / 1				120 / 60 / 1			
Maximum Fuse Size (amps)	15				15			15				15			
Heat Exchanger Material Thickness	13 Ga				16 Ga			13 Ga				13 Ga			
Supply Air Outlet Size (in)	20 x 20				19 x 19			20 x 20				16-1/8 x 16-1/8			
Return Air Inlet Size (in)	14-3/16 x 24				15 x 24-1/2			20 x 12-1/2				16-1/8 x 16-1/8			
Casing Height x Width x Depth	58 x 22-1/8 x 31				45 x 21 x 30			41-3/8 x 22-1/16 x 47				22-1/4 x 61-3/16 x 22-1/4			
Shipping Weight (lbs)	290				225			315				280			

1. AFUE (Annual Fuel Utilization Efficiency) ratings are based on U.S. Department of Energy test procedures.
2. Output BTUH based on AFUE rated by manufacturer.
3. A 70° temperature rise can be achieved by changing the blower settings.
4. Factory installed nozzle. All other sizes require a nozzle change in the field.
5. CFM ratings for units equipped with ECM variable speed motor are independent of static pressure rating.
6. 4.0 ton capacity available on special order.
7. Horizontal left hand warm air supply standard. Horizontal right hand warm air supply field reversible.
8. The pump pressure for the NX Burner must be field adjusted to 175 psi when converting the furnace to 140,000 BTU input rate.

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