

80% Oil Furnace Upflow

Oil Furnace LUF



Limited lifetime heat exchanger
5 year limited on all parts
Extended warranty available

HEAT EXCHANGER

- Heavy duty 14 gauge steel with a long lasting ceramic fiber combustion chamber
- Easy access large diameter clean out ports

CABINET

- Foil-faced high density fiberglass insulation reduces heat loss and noise
- Pre-painted steel for maximum durability
- External filter and filter rack included

BLOWER

- Direct drive has slide-out design with quick plug-in wiring
- 4 speed PSC direct drive motor has dynamically balanced blower with resilient motor mounts for smooth and quiet operation
- Belt drive models have split phase permanently lubricated motor, adjustable pulley and sheave

BURNER

- High quality Beckett Flame Retention burner for efficient combustion
- High efficiency air flow system to provide consistent operation through all operating conditions

CONTROLS

- Honeywell 7184B primary control with 15 second pre-purge, interrupted ignition, limited reset, and LED diagnostics
- Solid state igniter with 20kV output voltage
- PSC motor with low amp draw and ball bearings for long life
- Clean-cut solenoid pump with positive shut-off
- Readily available trade components
- 40 VA transformer (Direct drive only)
- Color coded wiring for easy service
- Transformer and cooling fan relay are factory wired for easy add-on cooling installation (Direct drive only)

VENTING

- Includes standard barometric damper
- Optional sidewall vent kit

INSTALLATION

- Factory wired

ACCESSORIES

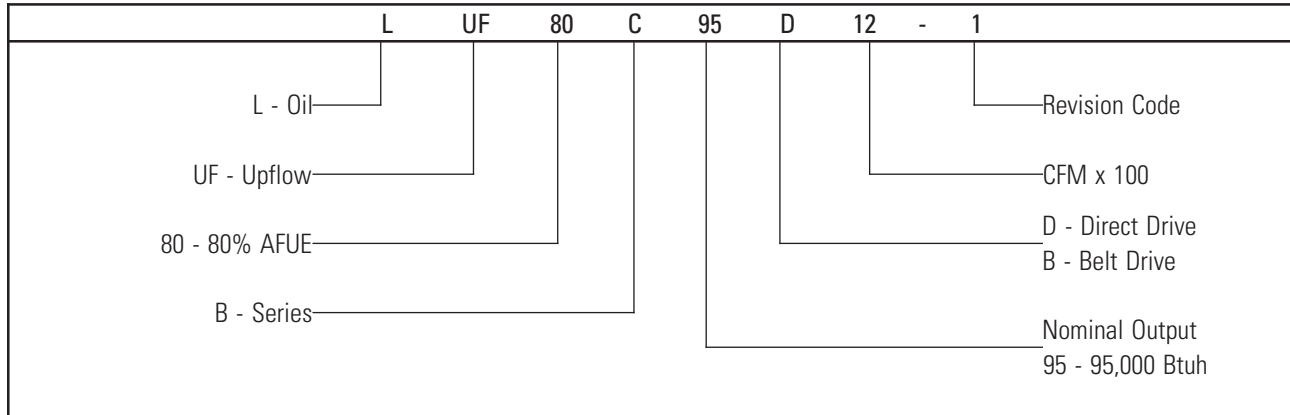
- Coil cabinet
- Cleanout brush kit
- Side return air cabinet
- External filter kit for single side entry and over 1600 CFM
- Combustion air boot



AIREASE

Built for life. Yours.SM

Model Number Guide



Physical and Electrical

Model	Nozzle Size	Input (Btuh)	Output (Btuh)	AFUE (ICS)	Nom. Cooling Capacity	Flue Dia. (in.)	Filter Size (in.)	Volts/Hz/Phase	Max. Time Delay Breaker or Fuse (amp)	Trans. (V.A.)	Weight (lb.)
LUF80C57/72D12	.50GPH-80°A	70,000	58,000	83	2.0 - 3.0	6	16 x 25	120/60/1	15	40	225
	.65GPH-80°B	90,000	74,000								
LUF80C84/95D16	.65GPH-80°B	105,000	85,000	81	2.5 - 4.0	6	16 x 25	120/60/1	15	40	225
	.75GPH-80°B	119,000	97,000								
LUF80C112/125D20	.85GPH-80°B	140,000	113,000	81	3.0 - 5.0	6	(2) 16 X 25 ²	120/60/1	15	40	275
	1.00GPH-80°B	154,000	125,000								
LUF80C57B08	.50GPH-80°A	70,000	57,000	82	2.0 - 2.5 ¹	6	16 x 25	120/60/1	15	12 ³	230
LUF80C84/95B10	.65GPH-80°B	105,000	85,000	81	2.0 - 3.5 ¹	6	16 x 25	120/60/1	15	12 ³	230
	.75GPH-80°B	119,000	97,000								
LUF80C112/125B16	.85GPH-80°B	140,000	113,000	81	4.0 - 5.0 ¹	6	(2) 16 x 25 ²	120/60/1	20	12 ³	280
	1.00GPH-80°B	154,000	125,000								

¹ See Table for Alternate Motors for Cooling Combinations

² Requires return air be brought to both side above 1600 CFM

³ Heating only. Additional transformer required for cooling applications.

Note: Units shipped with filter(s) for side return.

Note: All models are rated at 140 psi pump pressure except the LUF80C57/72 which is rated at 100 psi

Alternate Motors for Cooling Combinations - Belt Drive

Model	Nominal Cooling Capacity (tons)	Motor Size (hp)	Blower Size	Motor Pulley (in.)	Motor Pulley Adjustment	Blower Pulley (in.)	Belt Size (in.)	CFM @ ext. static pressure - in. W.C.			
								.20	.30	.40	.50
LUF80C57B08	2.0 - 2.5	1/4	10 x 8	4	Closed	7	41	1,170	1,154	1,070	975
LUF80C84/95B10	2.0 - 3.5	1/2	10 x 8	4	Closed	6	39	1,550	1,495	1,430	1,370
LUF80C112/125B16	4.0 - 5.0	3/4	12 x 9	3 1/4	Closed	5	36	1,990	1,925	1,850	1,820

Note: Field converted with different size motor for cooling applications.

Blower Performance - Belt Drive

Model	Motor Size (hp)	Blower Size	Motor Pulley (in.)	Motor Pulley Adjustment	Blower Pulley (in.)	Belt Size (in.)	Temp. Rise (°F)	CFM @ .20 ext. static pressure in. W.C.
LUF80C57B08	1/6	10 x 8	3 1/4	1 Turn	7	40	55-85	820
LUF80C84/95B10	1/4	10 x 8	4	Closed	7	41	55-85 ¹ 60-90 ²	1,170
LUF80C112/125B16	3/4	12 x 9	4	Closed	7	41	50-80 ¹ 60-90 ²	1,550

¹ Low Fire Nozzle

² High Fire Nozzle

Blower Performance - Direct Drive

Model	Motor Size (hp)	Blower Size	Temp. Rise (°F)	Blower Speed	CFM @ ext. static pressure in. W.C.							
					.20	.30	.40	.50	.60	.70	.80	.90
LUF80C57/72D12	1/3	10 x 8	50-80	High	1,412	1,356	1,299	1,222	1,154	1,075	988	890
				Med High	1,260	1,217	1,172	1,120	1,060	988	914	797
				Med	1,040	1,025	991	960	910	860	790	680
				Low	887	878	850	830	787	742	680	605
LUF80C84/95D16	1/2	10 x 10	50-80	High	1,756	1,693	1,940	1,590	1,495	1,361	1,250	1,095
				Med High	1,445	1,425	1,400	1,335	1,287	1,200	1,065	965
				Med	1,191	1,181	1,147	1,110	1,054	985	894	827
				Low	989	979	961	926	880	835	775	690
LUF80C112/125D20	3/4	12 x 11	45-75	High	2,204	2,140	2,058	2,000	1,900	1,850	1,680	1,560
				Med High	1,760	1,725	1,670	1,615	1,560	1,480	1,390	1,313
				Med	1,520	1,496	1,450	1,400	1,360	1,315	1,250	1,165
				Low	1,366*	1,329*	1,304*	1,250*	1,210*	1,180*	1,120*	1,040*

*Not recommended for heating. Temperature rise may be outside acceptable range.

Accessories

Description	Used with	Kit Number
Clean Out Kit	All models	ABRSH380-3
Tjerlund Side Wall Vent Kit ¹	All models	ASVNT522
Field Controls Side Wall Vent Kit ²	All models	ASVNT523
Evaporator Coil Cabinet	LUF57/72/84/95 with 15 1/2" - 17 1/2" wide coil	AAOILKDCC19
Evaporator Coil Cabinet	LUF84/95 with 21" wide coil	AAOILKDCC22
Evaporator Coil Cabinet	LUF112/125 with 21"-23" wide coil	AAOILKDCC27
External Filter Rack	All LUF models.	AFILTHA7-2
Side Return Air Cabinet	LUF57/84/95	ARCABHA-8
Side Return Air Cabinet	LUF112/125	ARCABHA-9
Combustion Air Kit	All models	ABOOT571
Clean Out Cap Kit	All models	ACAP570

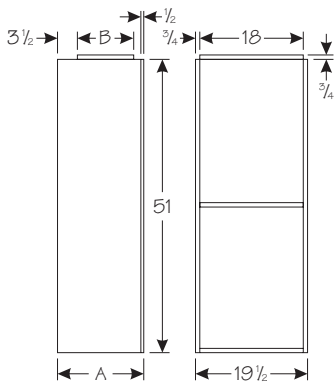
¹ This can be ordered from Tjerlund, part number SSII.

² This can be ordered from Field Controls, part number SWG-5-CK61.

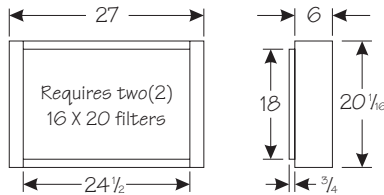
Accessories Dimensions (in.)

Side Return Air Cabinet

Model	A	B
ARCABHA-8	15	10
ARCABHA-9	21	16



External Filter Rack



Requires two(2)
16 X 20 filters

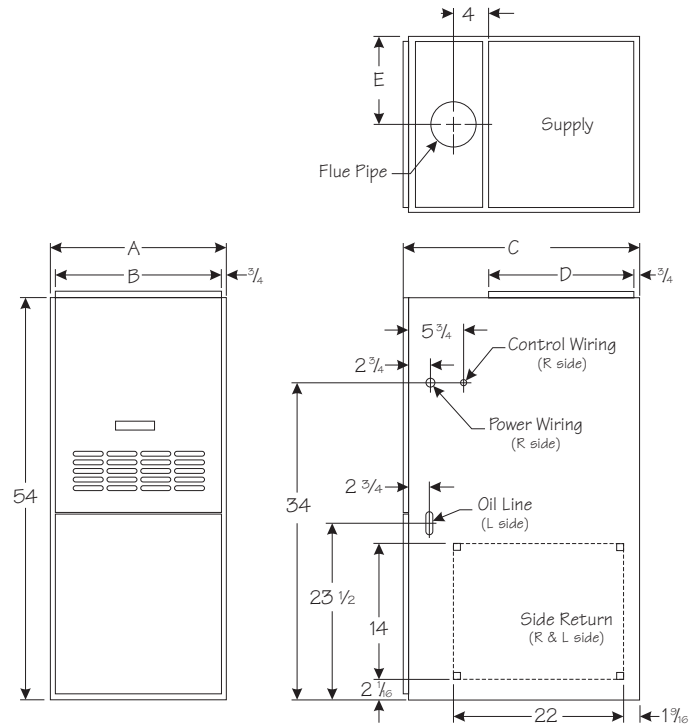
Dimensions (in.)

Model	A	B	C	D	E
LUF80C57/72	19 1/2	18	30 5/8	19 5/8	9 3/4
LUF80C84/95					
LUF80C112/125	22 1/2	21	33 1/8	22 1/8	11 1/4

Clearances (in.)

Model Number	Front*	Sides	Rear
LUF80C57/72	4	0	0
LUF80C84/95			
LUF80C112/125			

*For service requirements normally 24".



*Clearances to combustibles. Service access to the front of the appliance to remove the blower assembly is 18".



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