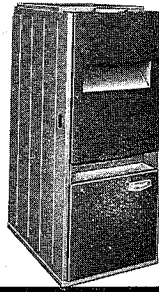


# bryant

## GAS FIRED UPFLOW FURNACE



**Product Data Sheet** **393U**  
Size 100 Series D  
PDS 393U.100.1 Rev. 6/30/65

### CLEARANCES FROM COMBUSTIBLES

In "large" rooms

- 6" from casing & vent hood
- 1" from sides & top of supply plenum

In confined spaces

- 0" from casing sides, rear & bottom
- 6" from casing front & type C vent connector
- 3" from top & sides of uninsulated supply plenum

### SHIPPING WEIGHT

180 lbs.

### HEATING RATINGS AND CAPACITIES

Rating <sup>1</sup>	Input <sup>2</sup>	BTUH	100,000
	Output	BTUH	80,000
Air Delivery @ 85° Rise		CFM	870

<sup>1</sup>Ratings are for elevations up to 2000 ft.; for higher altitudes, reduce ratings 4% for each 1000 ft. above sea level.

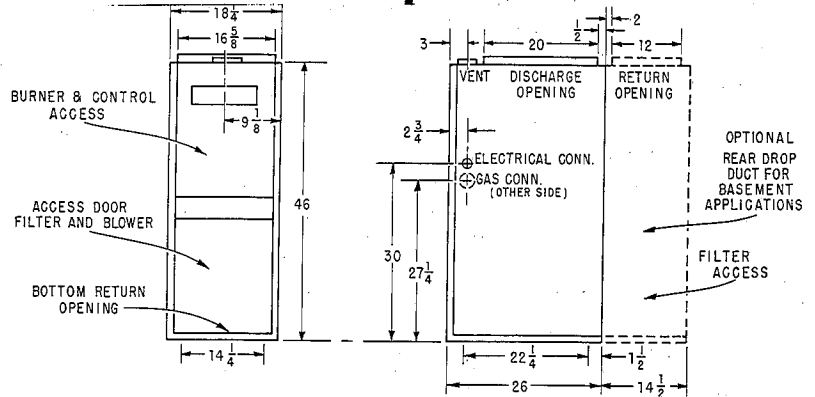
<sup>2</sup>20% reduction in input allowed.

### COMPONENT INFORMATION

Motor—Type L—4 Speed	1/2 HP (Sh. Pole)
Power Supply	115-60-1
Full Load Amps	6.7
Speed & Rotation	1050 CCW*
Motor—Type E—4 Speed	1/2 HP (PSC)
Power Supply	115-60-1
Full Load Amps	6.4
Speed & Rotation	1075 CCW*
Motor—Type B—1 Speed	1/4 HP (Split Ph.)
Power Supply	115-60-1
Full Load Amps	4.1
Speed & Rotation	1725 CW*
Motor Pulley Dia. & Bore	2.4-1.6" x 1/2"
Blower Pulley Dia. & Bore	5" x 3/4"
Belt	3/8" x 34"
Motor—Type C—1 Speed	1/2 HP (Split Ph.)
Power Supply	115-60-1
Full Load Amps	5.0
Speed & Rotation	1725 CW*
Motor Pulley Dia. & Bore	2.9-1.9" x 1/2"
Blower Pulley Dia. & Bore	5" x 3/4"
Belt Width & Length	3/8" x 34"
Blower Wheel Dia. & Width	10 x 8
Bore—Direct Drive	1/2"
Bore—Belt Drive	3/4"
Filter—Fiberglass**	
Inlet At Bottom	16" x 25" x 1"
External Filter Rack	16" x 25" x 1"
Rear Drop Duct	16" x 25" x 1"

\*Rotation viewed from end opposite shaft

\*\*Use multi-velocity filters above 1000 CFM



### STANDARD GAS CONTROL OPTIONS

Control Type	Gas	Description
D2	LPG	100% shut-off automatic pilot; Bryant diaphragm valve; transformer.
D4	City	Bryant diaphragm valve; Bryant automatic pilot; gas pressure regulator; transformer; pilot gas filter (for manufactured gas only).

Special Control Option: 100% shut-off for natural gas same as D4 except uses thermocouple pilot & pilot relay.

### CONNECTIONS

Gas Supply NPT—Natural	1/2"
—Manufactured	1/2"
—Propane	1/2"
Electric Supply—B Motor	115-60-1
—C Motor	115-60-1
—E Motor	115-60-1
—L Motor	115-60-1
Branch Circuit Wire Size	14
Fuse Size	AMPS 15
Control Circuit Power Avail.	20
Flue Size	Inches 5 (Oval)
Duct—Inlet at bottom	D x W 22 1/2 x 14 1/4
Inlet ext. filter rack	D x W 14 x 23
Inlet drop duct	D x W 12 x 16 5/8
Discharge	D x W 20 x 16 5/8

### CONTROL INFORMATION

Burners (Steel Slotted Port)	4
Orifice Drill Size Prop.	54
Nat.	41
Mfd.	29
D2 Control (Prop.) Regulator	Not Included
Valve	1/2 A641
Escapement Orifice Drill Size	80
Pilot—MH 314A	.011 Orifice
D4 Control (Nat.) Regulator	Comb. Thermac 1/2 VR-1
Valve	1/2 A641
Escapement Orifice Drill Size	80
Pilot—732	.016 Orifice
D4 Control (Mfd.) Regulator	Thermac 1/2 T11L or Rehrig 1/2 E15-1
Valve	1/2 A641
Escapement Orifice Drill Size	80
Pilot—2H	.024 Orifice

Manual Shut-off Cock and Pilot Cock are standard equipment. Supplied as separate parts except where included as integral part of the combination regulator.

File: Application PDS 300-399

Specifications Subject To Change Without Notice

**AIR FLOW FOR INDICATED AIR TEMPERATURE RISE\***

TEMP. RISE °F	70	75	80	85	90	95	100	105
AIR FLOW CFM	1060	989	927	870	823	780	741	705

\* At Rated Input

**AIR DELIVERY PERFORMANCE**

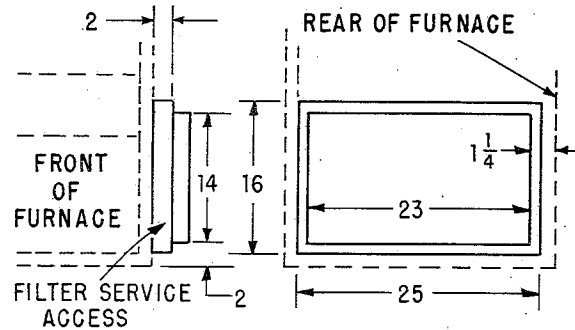
Air Delivery CFM	EXTERNAL STATIC PRESSURE AVAILABLE							
	Type L Motor				Type E Motor			
	Hi	Med	Med-Lo	Lo	Hi	Med	Med-Lo	Lo
700	0.56	0.34			0.91	0.77	0.69	0.30
800	0.41	0.00			0.78	0.64	0.55	0.00
900	0.23				0.68	0.55	0.40	
1000	0.06				0.61	0.45	0.00	
1100					0.54	0.00		
1200					0.44			
1300					0.29			
1400					0.08			

Air Delivery CFM	EXTERNAL STATIC PRESSURE AVAILABLE				
	Type B Motor				
	0-T.O.	1-T.O.	2-T.O.	3-T.O.	4-T.O.
700	0.55	0.45	0.32	0.23	0.13
800	0.49	0.37	0.24	0.14	0.03
900	0.41	0.28	0.14	0.02	
1000	0.31	0.18	0.01		
1100	0.20	0.07			
1200	0.07				

Drive Range 575-863 RPM. 72 RPM change per T.O.

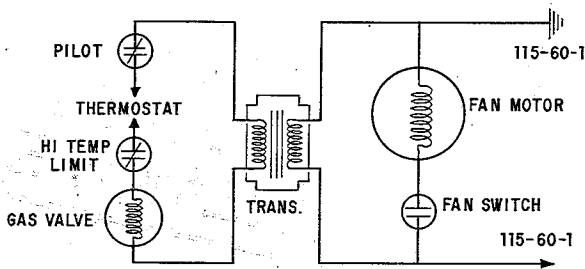
Air Delivery CFM	EXTERNAL STATIC PRESSURE AVAILABLE					
	Type C Motor					
	0-T.O.	1-T.O.	2-T.O.	3-T.O.	4-T.O.	5-T.O.
700	0.85	0.69	0.59	0.51	0.38	0.28
800	0.80	0.69	0.55	0.43	0.30	0.20
900	0.75	0.60	0.49	0.34	0.21	0.09
1000	0.68	0.51	0.38	0.24	0.11	
1100	0.59	0.40	0.27	0.13	0.00	
1200	0.49	0.28	0.13	0.00		
1300		0.13				

Drive Range 683-1043 RPM. 72 RPM change per T.O.

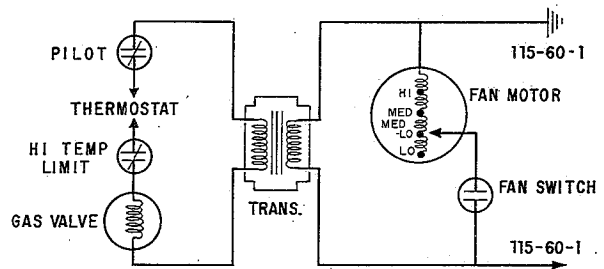


**Optional External Filter Rack  
Mounts on Either Side**

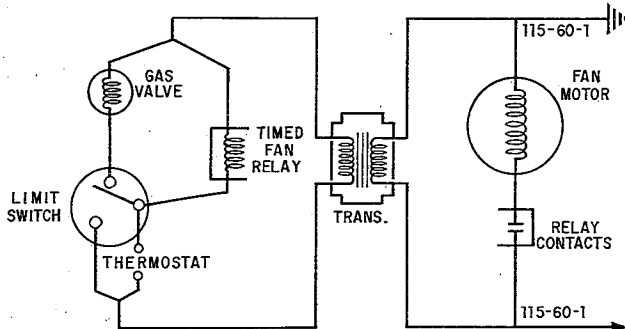
**LINE-TO-LINE SCHEMATIC UNIT WIRING DIAGRAMS**



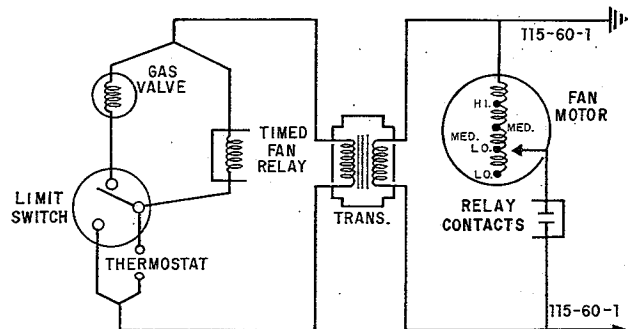
**Belt Drive (except LPG)**



**Direct Drive (except LPG)**



**Belt Drive (LPG only)**



**Direct Drive (LPG only)**