

DOWNFLOW GAS FURNACE

Features

- 80% residential Gas Furnace CSA certified
- Diagnostics — 7 Segment LED all units
- Ignition System — DSI for reliability and longevity
- Heat exchanger is removable for improved serviceability. Aluminized steel construction provides maximum corrosion resistance and thermal fatigue reliability.
- Low profile 34" cabinet ideal for space constrained installations
- Integrated Control board features dip switches for easy system set up
- QR code for quick access to product information from your smart phone or tablet
- Insulated blower compartment
- Constant Torque electrically commutated motor



FF***TS80 SERIES

80% A.F.U.E.†

Input Rates 75-125 kBTU

†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

Manufactured for

Fujitsu General America, Inc.

Fairfield, NJ



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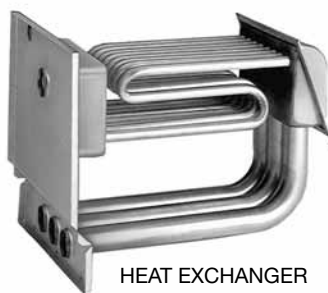
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CONSTANT TORQUE ECM MOTOR



INTEGRATED
FURNACE
CONTROL

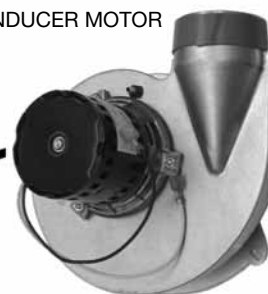


HEAT EXCHANGER

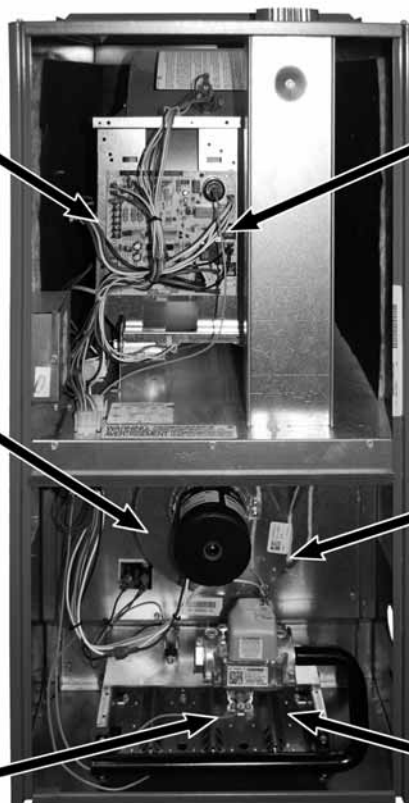
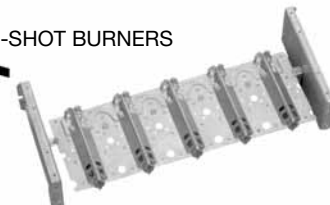
DIRECT SPARK IGNITOR
WITH REMOTE SENSE



DRAFT INDUCER MOTOR



IN-SHOT BURNERS



STANDARD EQUIPMENT

Completely assembled and wired; induced draft; pressure switch; redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; manual shut-off valve, pressure regulator for natural and L.P. (propane) gas; transformer; direct drive multi-speed blower motor. Furnaces are equipped with cooling/heating relay and transformer (40VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; on-board twinning; fused-protection (secondary), **3rd speed option for continuous fan; common heat/cool terminal.**

OPTIONAL EQUIPMENT

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

The complete terms of limited and other warranties are available at our sales office, or through local installer.

All models can be converted by a qualified Fujitsu distributor or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a Fujitsu parts distributor.

For L.P. (propane) operation, refer to Conversion Kit Index Form.

NOTE: For natural and L.P. (propane) gas models, direct spark ignition is 100% lockout type.

WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

Model Features

- 80% residential Gas Furnace CSA certified
- Diagnostics — 7 Segment LED all units
- Ignition System – DSI for reliability and longevity
- Heat exchanger is removable for improved serviceability. Aluminized steel construction provides maximum corrosion resistance and thermal fatigue reliability.
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Physical Data and Specifications U.S. and Canadian Models

MODEL NUMBERS FF***TS80 (DF) SERIES	FF75173TS80D	FF100215TS80D	FF125245TS80D
Input in BTU's/Hr [kW] ②	75,000 [22]	100,000 [29]	125,000 [37]
Heating Capacity in BTU's/Hr [kW] ①	61,000 [18]	82,000 [24]	103,000 [30]
High Altitude Input in BTU's/Hr [kW]*	67,500 [20]	90,000 [26]	112,500 [33]
High Altitude Output Capacity in BTU's/Hr [kW]*	53,500 [16]	72,500 [21]	89,000 [26.1]
Heat Ext. Static Pressure in "wc [kPa]	0.12 [0.029]	0.15 [0.037]	0.2 [0.05]
Blower (D x W) in inches [mm]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P.-Speeds - Type [W]	1/2hp, 5spd, X-13 [373]	1hp, 5spd, X-13 [746]	1hp, 5spd, X-13 [746]
Min. Circuit Ampacity	9	12	15
Min. Overload Protection Device	15	15	20
Max. Overload Protection Device	15	15	25
Heating Speed (factory setting)	MED-HIGH	MED-HIGH	MED-HIGH
Cooling Speed (factory setting)	HIGH	HIGH	HIGH
Cooling in CFM [L/s] @ 0.5"wc [0.12 kPa] E.S.P. (nominal)	1200 [566]	2000 [944]	2000 [944]
Rated E.S.P. in "wc [kPa]	0.5 [0.12]	0.5 [0.12]	0.5 [0.12]
Temperature Rise Range in °F [°C]	30-60 [17-33]	30-60 [17-33]	35-65 [19.4-36.1]
Max Outlet Air in °F [°C]	165 [73.8]	190 [87.7]	185 [85.0]
Approx. Shipping Weight in Lbs. [kg]	105 [48]	120 [54]	140 [63]
AFUE - Electronic Ignition Modules ①	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, 1Ø. Gas connection size for all models is 1/2" N.P.T.

① In accordance with D.O.E. test procedures.

② See Conversion Kit Index Form for high altitude derate in U.S. applications.

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

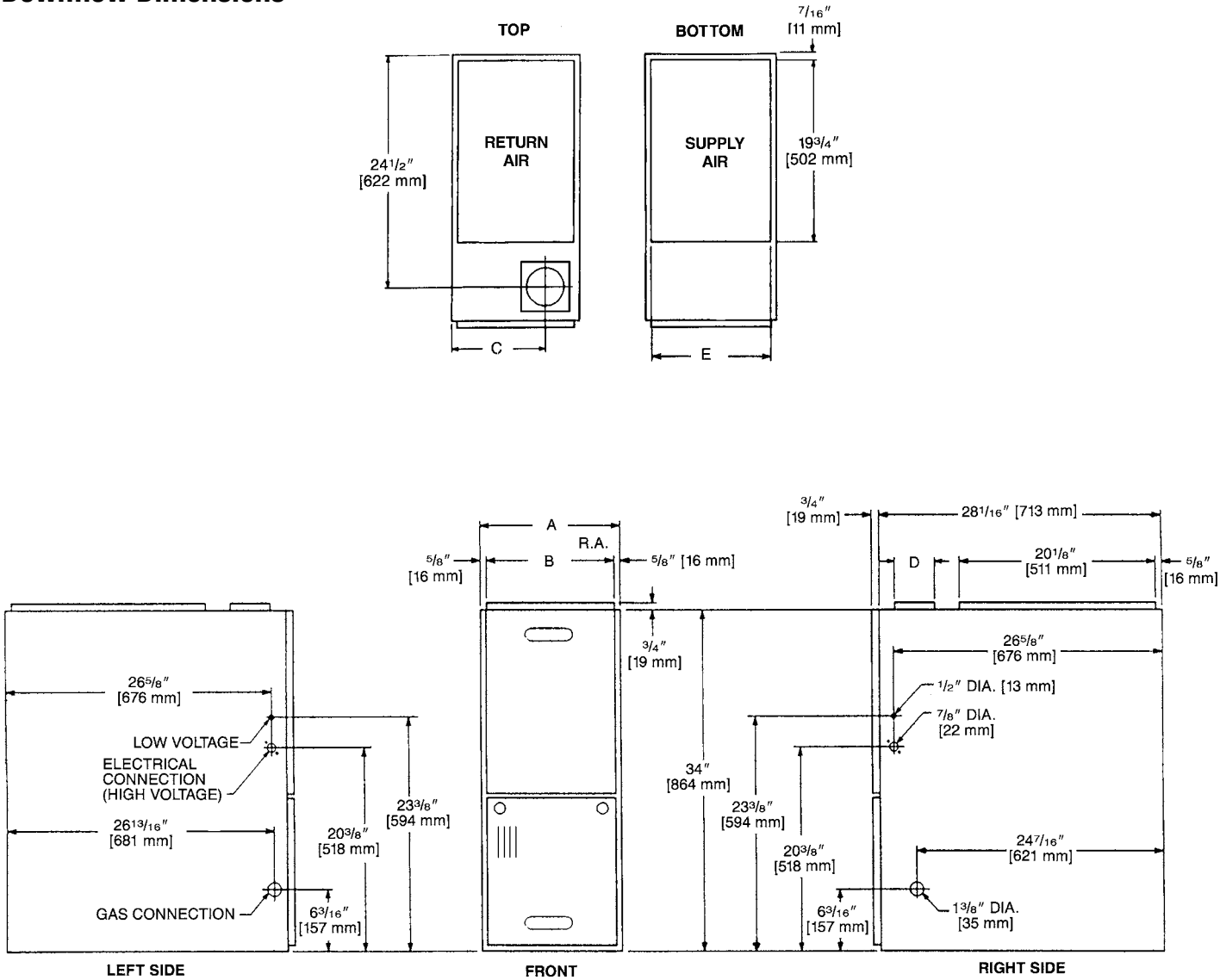
[] Designates Metric Conversions

Model Number Identification—Downflow Models

<u>FF</u>	<u>50</u>	<u>14</u>	<u>3</u>	<u>T</u>	<u>S</u>	<u>80</u>	<u>M</u>
Product	Capacity	Width	Airflow	Motor	Speed	Efficiency	Orientation
Fujitsu	075 = 75,000 100 = 100,000 125 = 125,000	17" 21" 24"	3 = 3 Ton 5 = 5 Ton	T = Constant Torque	S = Single Stage	80 = 80%	D = Downflow

[] Designates Metric Conversions

Downflow Dimensions



Dimensional Data

MODEL FF***TS80 (DOWNFLOW) SERIES	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTs. (LBS.) [kg]
075317	17 1/2 [445]	16 11/32 [415]	12 1/8 [308]	①	16 5/8 [422]	0	3 ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
100	21 [533]	19 27/32 [504]	13 7/8 [352]	①	20 1/8 [511]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
125	24 1/2 [622]	23 11/32 [593]	15 5/8 [397]	①	23 5/8 [600]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.
② May be 0" [0 mm] with type B vent.
③ May be 1" [25 mm] with type B vent.
Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[] Designates Metric Conversions

Blower Performance Data—Downflow Models

AIR FLOW PERFORMANCE - FF***TS80 SERIES (Downflow) MODELS								
MODEL	MOTOR H.P. [W] BLOWER SIZE IN [mm]	SPEED TAP	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]					
			0.1 [.02]	0.2 [.05]	0.3 [.07]	0.5 [.12]	0.6 [.15]	0.8 [.19]
FF75173TS80D	1/2 [373] 11 x 7 [279 x 178]	Low	916	803	669	561	504	421
		Med. Lo	993	952	910	827	793	706
		Med	1205	1158	1124	1056	1024	950
		Med. Hi	1367	1333	1300	1236	1203	1140
		High	1475	1444	1416	1354	1329	1264
FF100215TS80D	1 [748] 11 x 10 [279 x 254]	Low	1240	1120	1073	974	917	799
		Med. Lo	1405	1364	1317	1232	1181	1083
		Med	1600	1561	1526	1445	1403	1325
		Med. Hi	1903	1877	1833	1766	1711	1631
		High	2072	2028	2006	1940	1908	1840
FF125245TS80D	1 [748] 11 x 10 [279 x 254]	Low	1225	1073	988	864	795	697
		Med. Lo	1302	1240	1191	1074	1027	932
		Med	1553	1503	1455	1370	1313	1237
		Med. Hi	1902	1859	1822	1722	1686	1602
		High	2403	2369	2332	2246	2190	2059

NOTE: Bold data is factory heating tap

[] Designates Metric Conversions

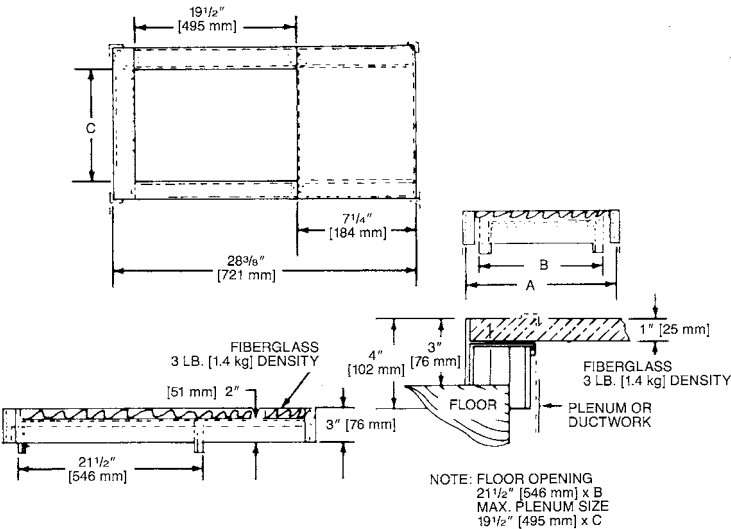
DOWNFLOW ACCESSORIES

DOWNFLOW WARNING: Unit design is certified for installation on non-combustible floor. A special factory supplied combustible floor sub-base is required when installing on a combustible floor. Failure to install the sub-base may result in fire, property damage and personal injury.

COMBUSTIBLE FLOOR BASE DIMENSIONS

COMBUSTIBLE FLOOR BASE	USE WITH FURNACE SIZES	A IN. [mm]	B IN. [mm]	C IN. [mm]
RXGC-B17	R801T075317	18 [457]	16 ³ / ₄ [425]	14 ³ / ₄ [451]
RXGC-B21	R801T100521, R801T075521	21 ¹ / ₂ [546]	20 ¹ / ₄ [514]	18 ¹ / ₄ [464]
RXGC-B24	R801T125	25 [635]	23 ³ / ₄ [603]	21 ³ / ₄ [552]

[] Designates Metric Conversions



RXGF-CC*

FILTER RACK—Downflow top return mount. Requires (2) 14 x 20 Filters.

NOTE: Filter racks are shipped without filters.

*Filters available through PROSTOCK ®.

FOR HIGH ALTITUDES:

HIGH ALTITUDE OPTION CODE: U.S. & Canada – None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S. & Canada – None required for high altitudes.

80+ HIGH ALTITUDE INSTRUCTIONS

Caution: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

High altitude option codes are not required for these models. However, the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. See Installation Instructions for more information.

NOTE: For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations.

GENERAL TERMS OF LIMITED WARRANTY*

Fujitsu General America, Inc. will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Heat Exchanger.....Twenty (20) Years
Conditional Parts (Registration Required)Ten (10) Years

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

"In keeping with its policy of continuous progress and product improvement, the right is reserved to make changes without notice."