FUJITSU



FF***LT80 Downflow

80% A.F.U.E.† Input Rates from 75-125 kBTU [22 to 37 kW]

Manufactured for

Fujitsu General America, Inc. Fairfield, NJ







COMMUNICATING TWO-STAGE VARIABLE SPEED DOWNFLOW GAS FURNACE

Features

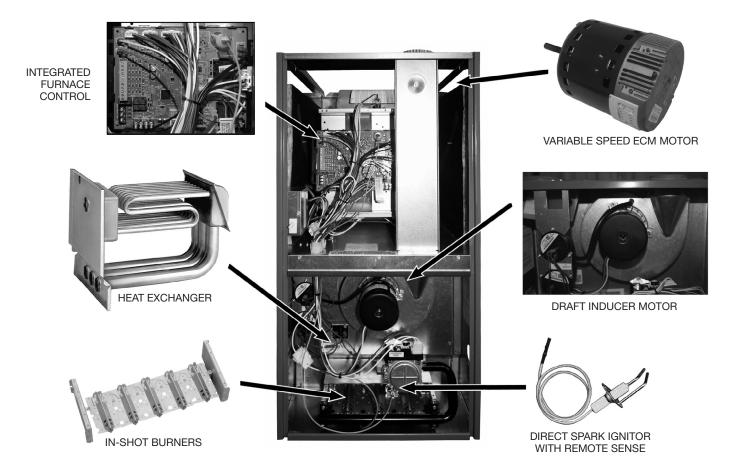
- 80% residential Gas Furnace CSA certified
- Two stages of operation to save energy and maintain optimal comfort level.
- Variable speed blower motor technology provides ultimate humidity control, quieter sound levels, and year round energy savings
- EcoNet enabled HVAC product
- Diagnostics 7 Segment 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
- Insulated blower compartment
- QR code for quick access to product information from your smart phone or tablet
- Compatible with single or two stage thermostats.
 For optimal performance a two stage thermostat is recommended.

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



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STANDARD EQUIPMENT

Completely assembled and wired; 2 speed induced draft blower; high and low pressure switches; 2 stage redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; transformer; ECM blower motor. Furnaces are equipped with cooling/heating relay and transformer (50VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; fused-protection (secondary), **3rd speed option for continuous fan.**

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.



Model Features

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Physical Data and Specifications—Downflow Models

| MODEL NUMBERS FF***LT80 (DF) SERIES | | FF75173LT80D | FF75214LT80D | FF100215LT80D | FF125245LT80D |
|---|-------------------|-------------------------|--------------------------|--------------------------|--------------------------|
| 100% High Input-BTU/ | Hr [kW] ② | 75,000 [22] | 75,000 [22] | 100,000 [29] | 125,000 [37] |
| High Heating Capacity- | BTU/Hr [kW] ① | 60,000 [18] | 60,000 [18] | 80,000 [24] | 100,000 [29] |
| 70% Low Input-BTU/H | ⁻ [kW] | 52,500 [15] | 52,500 [15] | 70,000 [20] | 87,500 [25] |
| Low Heating Capacity-E | 3TU/Hr [kW] | 42,000 [12] | 42,000 [12] | 56,000 [16] | 70,000 [20] |
| Heating-Ext. Static Pres | sure [kPa] | .12 [.029] | .12 [.029] | .15 [.037] | .20 [.05] |
| Blower (D x W) [mm] | | 11 x 7 [279 x 178] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] |
| ECM Motor H.P. [W] | | 1/2 [373] | ³ /4 [559] | 1 [746] | 1 [746] |
| Min. Circuit Ampacity | | 9 | 11 | 15 | 15 |
| Min. Overload Protectio | n Device | 15 | 15 | 20 | 20 |
| Max. Overload Protection | on Device | 15 | 15 | 20 | 20 |
| Factory Heating CFM [L | /s] | 1254 [592] | 1305 [616] | 1651 [779] | 1830 [864] |
| Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s] (Range) | | 600-1200 [283]-[566] | 1000-1600 [472]-[755] | 1200-2000 [566]-[944] | 1200-2000 [566]-[944] |
| Max. E.S.P. (In. W.C.) [4 | (Pa] | 0.8 [0.2] | 0.8 [0.2] | 0.8 [0.2] | 0.8 [0.2] |
| Temperature Rise | High Fire | High Fire 30-60 [17-33] | | 30-60 [17-33] | 35-65 [19.4-36.0] |
| Range °F [°C] | Low Fire | 20-50 [11-28] | 20-50 [11-28] | 25-55 [14-31] | 30-60 [17-33] |
| Max. Outlet Air Temp. ° | F [°C] | 165 [73.9] | 165 [73.9] | 165 [73.9] | 185 [85] |
| Approx. Shipping Weight (Lbs.) [kg] | | [kg] 115 [52] 115 [52] | | 120 [54] | 140 [63] |
| AFUE ① | | 80% | 80% | 80% | 80% |

Notes: All models are 115V, 60 Hz, 1 Ph. Gas connection size for all models is 1/2" [12 mm] N.P.T.

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

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

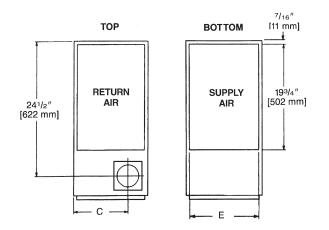
This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

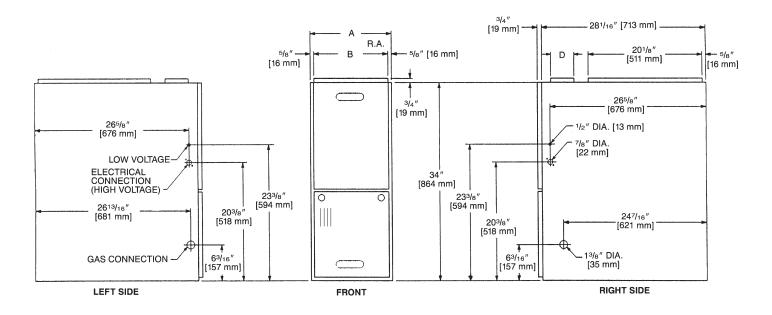
This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

Model Number Identification—Downflow Models

| <u>FF</u> | 060 | <u>17</u> | <u>3</u> | Ē | Ţ | <u>80</u> | M |
|-----------|---|-------------------|-------------------------------------|---------|---------------|------------|--|
| Product | Capacity | Width | Airflow | Motor | Speed | Efficiency | Orientation |
| Furnace | 75 = 75,000 100 = 100,000 125 = 125,000 | 17" 21" 24" | 3 = 3 Ton 4 = 4 Ton 5 = 5 Ton | L = ECM | T = Two-Stage | 80 = 80% | M = Multipoise D = Downflow X = Multipoise (Low NOx) Y = Downflow (Low NOx) |

Downflow Dimensions





Dimensions and Clearance to Combustible Material (Inches) [mm]

| MODEL | | | | | | REDUCED CLEARANCES (IN.) [mm] | | | | | | |
|---------------------|--------------------------|--|--------------------------|---|--------------------------|-------------------------------|---------------|------|--------|--------|-----------|----------------------------|
| FF***LT80 Series | A | В | C | D | E | LEFT Side | RIGHT SIDE | BACK | ТОР | 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 | 110 [49.9] |
| 075421 | 21 [533] | 19 ²⁷ /32 [504] | 137/8 [352] | 1 | 201/8 [511] | 0 | 0 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 115 [52.2] |
| 100 | 21 [533] | 19 ²⁷ /32 [504] | 137/8 [352] | 1 | 201/8 [511] | 0 | 0 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 120 [54.4] |
| 125 | 241/2 [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/or Can/CGA-B149 Installation Codes and in accordance with local codes.

| | MODEL NUMBER | | | FF75173LT80D | FF75214LT80D | FF100215LT80D | FF125245LT80D | | | |
|----------------------------------|---------------------|------------|------------|--------------|--------------|---------------|---------------|--|--|--|
| | | SW15 = 0FF | SW16 = 0FF | 1254 | 1305 | 1651 | 1830 | | | |
| | HIGH | SW15 = 0N | SW16 = 0FF | 1054 | 1173 | 1398 | 1600 | | | |
| | HEATING CFM | SW15 = 0FF | SW16 = 0N | DO NOT USE | | | | | | |
| TARGET GAS | | SW15 = 0N | SW16 = 0N | 953 | 1001 | 1251 | 1550 | | | |
| HEATING AIRFLOW | | SW13 = 0FF | SW14 = 0FF | 980 | 1125 | 1300 | 1300 | | | |
| | LOW HEATING CFM | SW13 = 0N | SW14 = 0FF | 850 | 850 | 1075 | 1250 | | | |
| | | SW13 = 0FF | SW14 = 0N | DO NOT USE | | | | | | |
| | | SW13 = 0N | SW14 = 0N | 750 | 700 | 875 | 1100 | | | |
| | HIGH Cooling CFM | SW4 = OFF | SW5 = 0FF | 1200 | 1600 | 2000 | 2000 | | | |
| | | SW4 = 0N | SW5 = 0FF | 1000 | 1400 | 1600 | 1600 | | | |
| TARGET | | SW4 = OFF | SW5 = 0N | 800 | 1200 | 1400 | 1400 | | | |
| COOLING/ HEAT-PUMP AIRFLOW | | SW4 = 0N | SW5 = 0N | 600 | 1000 | 1200 | 1200 | | | |
| | | SW4 = OFF | SW5 = 0FF | 900 | 1200 | 1500 | 1500 | | | |
| | LOW | SW4 = 0N | SW5 = 0FF | 750 | 1050 | 1200 | 1200 | | | |
| | COOLING CFM | SW4 = OFF | SW5 = 0N | 600 | 900 | 1050 | 1050 | | | |
| | | SW4 = 0N | SW5 = 0N | 450 | 750 | 900 | 900 | | | |

Blower Performance Data—Downflow Models

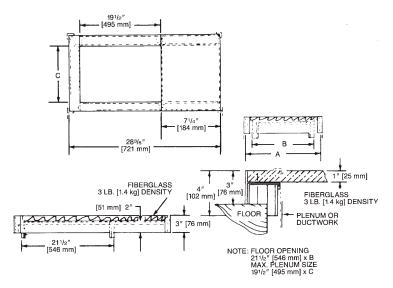
DOWNFLOW ACCESSORIES

DOWNFLOW WARNING: Unit design is certified for installation on noncombustible floor. A special factory supplied combustible floor subbase 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 | FF75173LT80D | 18 [457] | 163/4 [425] | 143/4 [451] |
| BX1-11-B21 | FF75214LT80D FF100215LT80D | 21 ¹ /2 [546] | 20 ¹ /4 [514] | 18 ¹ /4 [464] |
| RXGC-B24 | FF125245LT80D | 25 [635] | 233/4 [603] | 213/4 [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. None required for high altitudes. HIGH ALTITUDE CONVERSION KITS: U.S. 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.

ECONET CONTROL

RECOMMENDED COMMUNICATING FURNACE CONTROL



FETST601SYS

CONTRACTOR BENEFITS:

- Auto/Self Configuration
- · Day-at-a-glance scheduling, with programmable fan
- Intuitive wiring connections
- Dual fuel ready
- Automatically optimizes airflow
- System status & mode information
- · Complete diagnostic information on display

HOMEOWNER BENEFITS:

- · Large, easy to read icons and characters
- Auto-mode control
- Smart recovery
- · Continuous Fan Mode (5 speeds)
- Humidity Control
- Water heater, pool heater integration* (check model compatibility)

***ECONET CONTROL ACCESSORIES:**

Wall Plate = RCPN-AMC08

*Available through PROSTOCK®.

Limited Warranty FF***LT80 (DF) Series

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.

| PartsTen (10) Years | |
|--------------------------------|--|
| Heat ExchangerLimited Lifetime | |

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." PRINTED IN U.S.A. 8-19 QG FORM NO. GFJ-551 REV. 2