

# FUJITSU



## FF\*\*\*TS92 Series

92% A.F.U.E.†

Input Rates from 40 to 115 kBTU  
[11.72 to 33.71 kW]

Manufactured for

**Fujitsu General America, Inc.**

Fairfield, NJ

## MULTI-POSITION GAS FURNACE

### Features

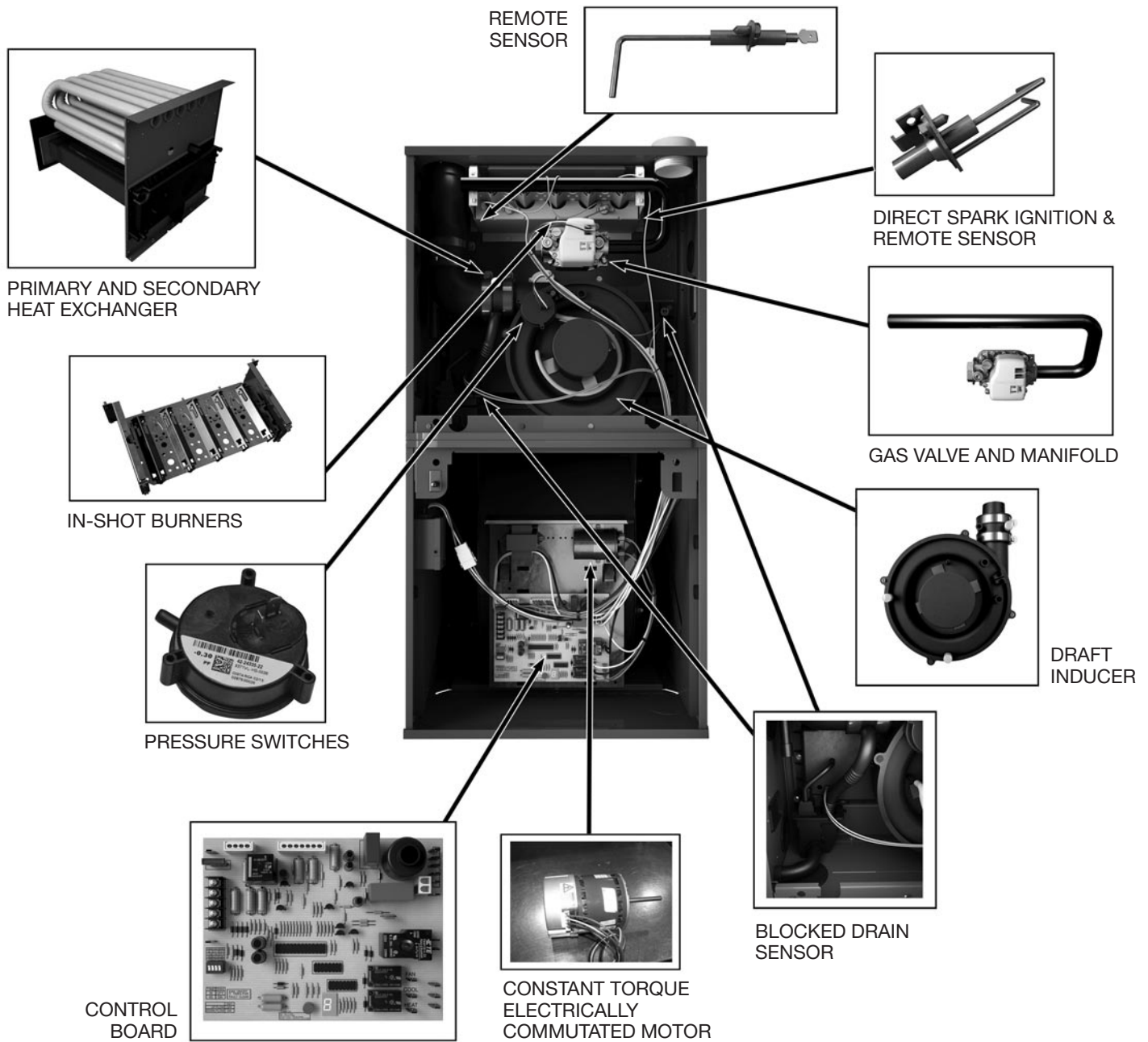
- 92% residential gas furnace CSA certified
- 4 way multi-posure design
- 7-Segment LED all units
- Direct Spark Ignition for reliability and longevity
- Water Management System with patented Blocked Drain Sensor
- Heat exchanger is removable for improved serviceability. Aluminized steel primary and stainless steel secondary construction provide maximum corrosion resistance and thermal fatigue reliability.
- Low profile "34 inch" cabinet ideal for space constrained installations.
- Blower Shelf design – serviceable in all furnace orientations
- Pre marked hoses – insures proper system drainage
- Vent with 2" or 3" PVC
- Replaceable Collector box
- Hemmed edges on cabinet and doors
- Quarter turn fasteners for tool less access
- Integrated control boards feature dip switches for easy system set up
- Self priming condensate trap
- Solid bottom included
- Cabinet air leakage less than 2% at 1 inch H<sub>2</sub>O when tested in accordance with ASHRAE standard 193

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



## TABLE OF CONTENTS

Standard & Optional Equipment .....	3
Physical Data & Specifications .....	4
Model Number Identification .....	5
Dimensional Data.....	6
Blower Performance Data.....	7
Accessories.....	8
Limited Warranty .....	9



## STANDARD EQUIPMENT

Completely assembled and wired; blocked drain sensor, 7 segment LED and marked hoses; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; solid bottom; induced draft; pressure switches; redundant main gas control; blower compartment door safety switch; solid state time on/off blower control; limit controls; manual shut-off valve; 100% safety lock out; cool fan off delay; field selectable heat fan off delay; one hour automatic retry; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; twinning (built-in) features; humidifier connections; humidifier on/off delay; low speed continuous fan option; single speed option for heating and cooling applications; transformer; direct drive, multi-speed Constant Torque electrically commutated motor. (Please note: a thermostat is not included as standard equipment.)

## OPTIONAL EQUIPMENT

Side and bottom filter racks; return air cabinet for all sizes.

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

All models can be converted by a qualified 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 parts distributor.

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

## WARNING

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

## Physical Data and Specifications—Upflow Models U.S. and Canadian Models

MODEL NUMBERS	FF40173TS92M	FF60173TS92M	FF70173TS92M	FF85215TS92M	FF100215TS92M	FF115245TS92M
HIGH FIRE INPUT BTU/HR [kW] ①	42,000 [12.31]	56,000 [16.41]	70,000 [20.50]	84,000 [24.61]	98,000 [38.71]	112,000 [32.82]
HEATING CAPACITY BTU/HR [kW]	40,320 [11.82]	53,760 [15.75]	67,200 [19.68]	80,640 [23.63]	94,080 [37.16]	107,520 [31.51]
HIGH ALTITUDE OUTPUT 10% DERATE [kW] ②	36,288 [10.64]	48,384 [14.18]	60,480 [17.72]	72,576 [21.28]	84,672 [24.81]	96,768 [28.36]
BLOWER (D x W) [mm]	11 x 7 [279 x 178]	11 x 8 [279 x 203]	11 x 8 [279 x 203]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 11 [279 x 279]
MOTOR H.P. [W]— TYPE	1/2 [373]-5-Constant Torque ECM	1/2 [373]-5-Constant Torque ECM	1/2 [373]-5-Constant Torque ECM	1 [746]-5-Constant Torque ECM	1 [746]-5-Constant Torque ECM	1 [746]-5-Constant Torque ECM
MIN. CIRCUIT AMPACITY	8.00	10.00	10.00	13.00	15.00	14.00
MIN. OVERLOAD PROTECTION DEVICE	15.00	15.00	15.00	20.00	20.00	20.00
MAX. OVERLOAD PROTECTION DEVICE	15.00	15.00	15.00	20.00	20.00	20.00
MOTOR FULL LOAD AMPS	4.0	6.8	6.8	8.3	8.3	8.3
HEATING SPEED	MED-HIGH	MED-HIGH	MED-HIGH	MED-HIGH	MED-HIGH	MED-HIGH
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
MINIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.18 [.045]	.20 [.050]	.23 [.057]	.28 [.070]	.28 [.070]	.28 [.070]
MAXIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]
HEATING CFM @ .2" [.049 kPa] W.C. E.S.P. [L/s]	982 [463]	913 [431]	1113 [525]	1574 [743]	1651 [779]	1524 [719]
COOLING CFM @ .5" [.124 kPa] W.C. E.S.P. [L/s]	1239 [585]	1227 [579]	1198 [565]	1833 [865]	1975 [932]	1748 [825]
TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C]	25 - 55 [14 - 31]	35 - 65 [19 - 36]	40 - 70 [22 - 39]	35 - 65 [19 - 36]	35 - 65 [19 - 36]	45 - 75 [25 - 42]
APPROX. SHIPPING WEIGHT (LBS.) [kg]	123.5 [56]	128 [58]	132 [60]	147.5 [67]	152 [69]	165 [75]
AFUE ③	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%

NOTES: All models are 115V, 60HZ, 1 phase Gas connection size for all models is 1/2" [13 mm] N.P.T.

① Installation instructions for high altitude derate.

② Canadian installations only.

③ In accordance with D.O.E. test procedures.

\*S=Standard Models

NOTE: Standard model complies with California low NOx requirements.

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](http://www.CleanAirFurnaceRebate.com).

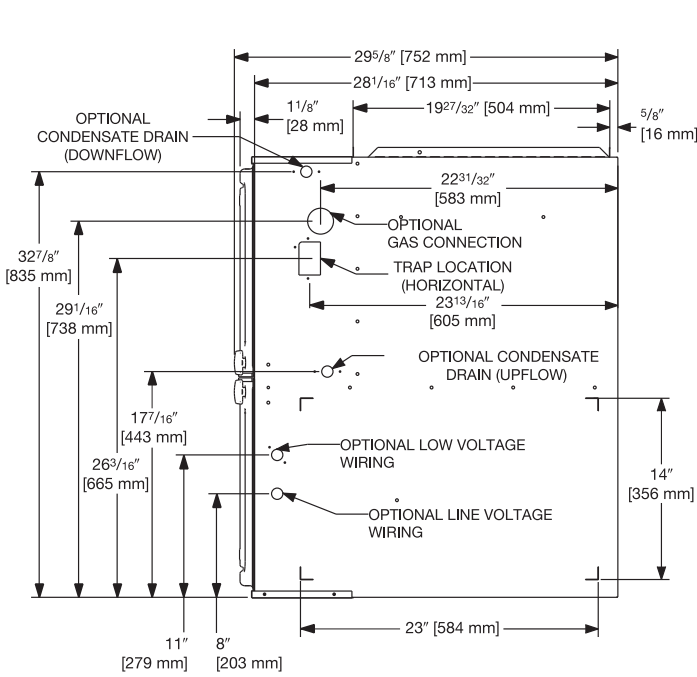
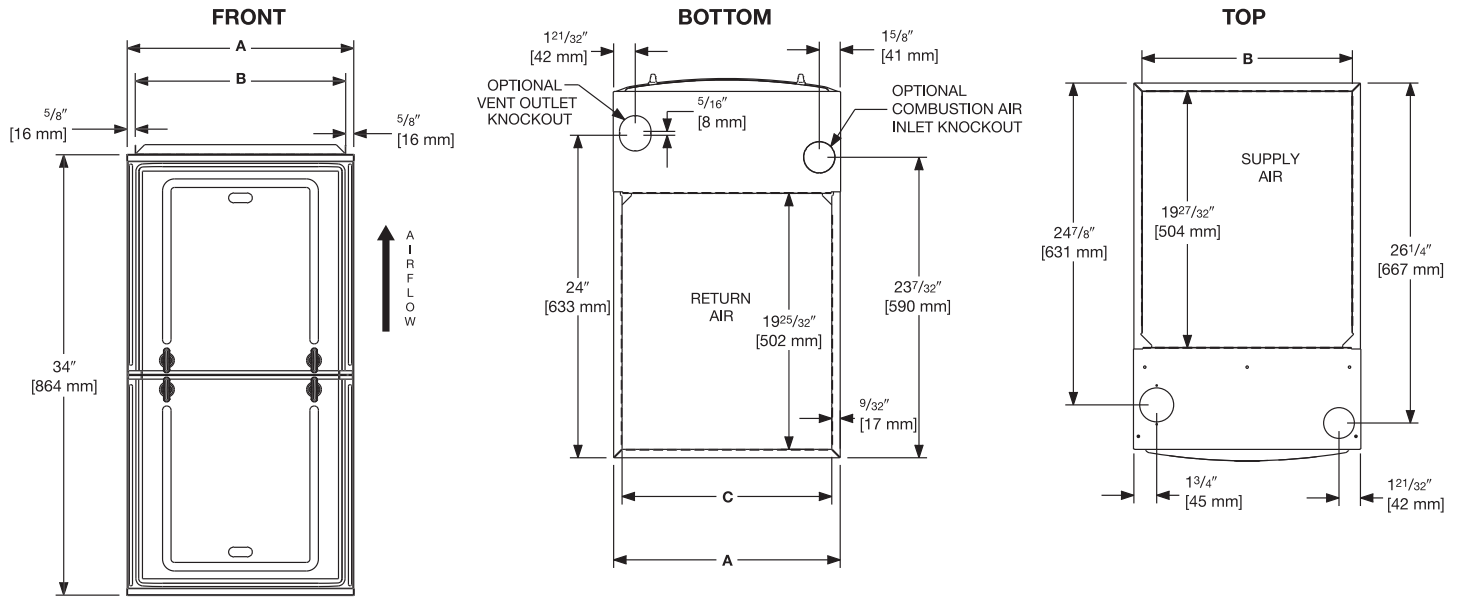
This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

[ ] Designates Metric Conversions

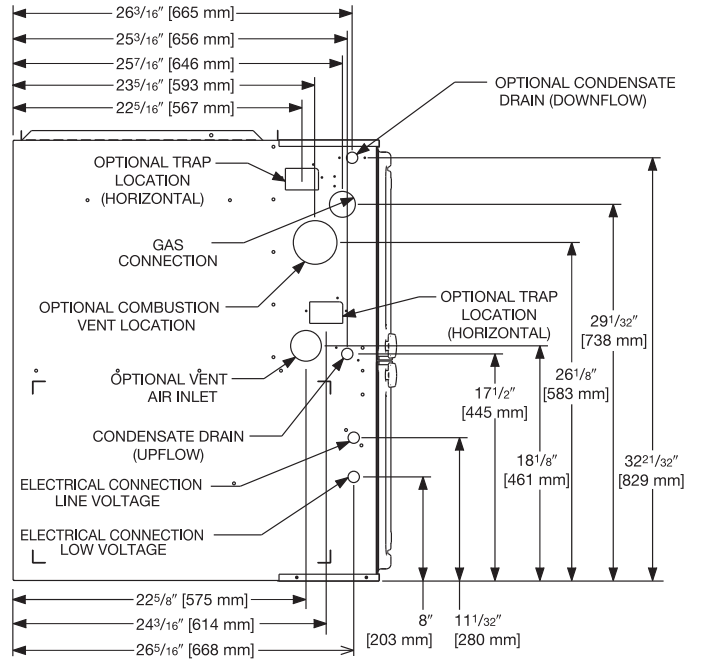
## Model Number Identification

<u>FF</u>	<u>40</u>	<u>17</u>	<u>3</u>	<u>T</u>	<u>S</u>	<u>92</u>	<u>M</u>
Product	Capacity	Width	Airflow	Motor	Speed	Efficiency	Orientation
Furnace	40 - 42,000 [12.31 kW] 60 - 56,000 [16.41 kW] 70 - 70,000 [20.51 kW] 85 - 84,000 [24.62 kW] 100 - 98,000 [28.72 kW] 115 - 112,000 [32.82 kW]	17" 21" 24"	3 = 3 Ton 5 = 5 Ton	T = Constant Torque	S = Single Stage	92 = 92%	M = Multipoise

[ ] Designates Metric Conversions



RIGHT SIDE



LEFT SIDE

**UNIT DIMENSIONS  
(CLEARANCE TO COMBUSTIBLES)**

MODEL FF***TS92	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS.	FLANGE DIMENSIONS		
		RIGHT SIDE	BACK	TOP	FRONT	VENT		A	B	C
040	0	0	0	1 [25]	2 [51]	0	123.5 [56]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
060	0	0	0	1 [25]	2 [51]	0	128 [58]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
070	0	0	0	1 [25]	2 [51]	0	132 [60]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
085	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 49/64 [502]	19 45/64 [500]
100	0	0	0	1 [25]	2 [51]	0	152 [69]	21 [533]	19 49/64 [502]	19 45/64 [500]
115	0	0	0	1 [25]	2 [51]	0	165 [75]	24 1/2 [662]	23 17/64 [591]	23 13/64 [589]

\*A service clearance of at least 24" is recommended in front of all furnaces  
Supply and return depicted as upflow configuration.  
Flange configuration will vary depending on installation orientation.

[ ] Designates Metric Conversions

FURNACE MODEL	BLOWER SIZE [mm]	MOTOR H.P. [W]	MOTOR TAP	MOTOR LEAD WIRE COLOR	SPEED	CFM [L/s] AIR DELIVERY									
						EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]									
						0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.19]	0.9 [0.22]	
FF40173 TS92M	11 x 7 [279 x 178]	1/2 [373]	1	Red	Low	874 [413]	820 [387]	765 [361]	710 [335]	658 [311]	575 [271]	523 [247]	482 [228]	448 [211]	
			2	Yellow	Medium Low*	1029 [486]	982 [463]	930 [439]	881 [416]	833 [393]	780 [368]	716 [338]	665 [314]	621 [299]	
			3	Purple	Medium	1098 [518]	1055 [498]	1008 [476]	962 [454]	920 [434]	870 [411]	822 [388]	755 [356]	705 [332]	
			4	Blue	Medium High**	1253.6 [592]	1209.1 [571]	1164.4 [550]	1128.1 [532]	1082.2 [511]	1043.7 [493]	1000 [472]	960 [453]	907.2 [428]	
			5	Black	High	1380.6 [652]	1345.5 [635]	1313.1 [620]	1276 [602]	1239.2 [585]	1202.3 [567]	1166 [550]	1132.7 [535]	1098.9 [519]	416 [196]
FF60173 TS92M	11 x 8 [279 x 203]	1/2 [373]	1	Red	Low	818 [386]	766 [362]	720 [340]	668 [315]	594 [280]	548 [259]	494 [233]	444 [210]		
			2	Yellow	Medium Low*	968 [457]	913 [431]	885 [418]	841 [397]	796 [376]	739 [349]	685 [323]	641 [303]		
			3	Purple	Medium	1018 [480]	981 [463]	931 [439]	903 [426]	860 [406]	815 [385]	756 [357]	703 [332]		
			4	Blue	Medium High**	1173 [554]	1142 [539]	1108 [523]	1059 [500]	1025 [484]	989 [467]	951 [449]	912 [430]		
			5	Black	High	1338 [631]	1327 [626]	1288 [608]	1245 [588]	1227 [579]	1193 [563]	1165 [550]	1134 [535]	1099 [519]	
FF70173 TS92M	11 x 8 [279 x 203]	1/2 [373]	1	Red	Low	947 [447]	908 [429]	871 [411]	834 [394]	796 [376]	755 [356]	716 [338]	681 [321]		
			2	Yellow	Medium Low	1044 [493]	997 [471]	968 [457]	934 [441]	902 [426]	862 [407]	828 [391]	795 [375]		
			3	Purple	Medium**	1148 [542]	1113 [525]	1092 [515]	1056 [498]	1029 [486]	995 [470]	962 [454]	928 [438]		
			4	Blue	Medium High**	1213 [572]	1180 [557]	1155 [545]	1126 [531]	1096 [517]	1062 [501]	1032 [487]	993 [469]		
			5	Black	High	1324 [625]	1283 [606]	1254 [592]	1221 [576]	1198 [565]	1169 [552]	1141 [538]	1107 [522]		
FF85215 TS92M	11 x 10 [279 x 254]	1 [746]	1	Red	Low	1459 [689]	1407 [664]	1359 [642]	1297 [612]	1248 [589]	1200 [567]	1152 [544]	1102 [520]		
			2	Yellow	Medium Low*	1656 [782]	1621 [765]	1574 [743]	1533 [723]	1485 [701]	1434 [677]	1375 [649]	1328 [627]		
			3	Purple	Medium	1692 [799]	1653 [780]	1606 [758]	1557 [735]	1508 [712]	1459 [689]	1409 [665]	1363 [643]		
			4	Blue	Medium High**	1881 [888]	1831 [864]	1804 [851]	1757 [829]	1713 [808]	1668 [787]	1628 [768]	1588 [740]		
			5	Black	High	1978 [934]	1942 [917]	1906 [900]	1862 [879]	1833 [865]	1793 [846]	1751 [826]	1702 [803]		
FF100215 TS92M	11 x 10 [279 x 254]	1 [746]	1	Red	Low	1637 [773]	1593 [752]	1545 [729]	1494 [705]	1441 [680]	1382 [652]	1329 [627]	1274 [601]		
			2	Yellow	Medium Low*	1745 [824]	1697 [801]	1651 [779]	1600 [755]	1560 [736]	1500 [708]	1443 [681]	1394 [658]		
			3	Purple	Medium	1766 [833]	1723 [813]	1686 [796]	1633 [771]	1585 [748]	1537 [725]	1482 [699]	1428 [674]		
			4	Blue	Medium High**	1967 [928]	1929 [910]	1895 [894]	1852 [874]	1805 [852]	1754 [828]	1708 [806]	1668 [787]		
			5	Black	High	2137 [1009]	2102 [992]	2062 [973]	2020 [953]	1975 [932]	1946 [918]	1908 [900]	1817 [858]		
FF115245 TS92M	11 x 11 [279 x 279]	1 [746]	1	Red	Low	1476 [697]	1432 [676]	1406 [664]	1332 [629]	1291 [609]	1247 [589]	1207 [570]	1163 [549]		
			2	Yellow	Medium Low*	1615 [762]	1568 [740]	1524 [719]	1487 [702]	1452 [685]	1401 [661]	1356 [640]	1325 [625]		
			3	Purple	Medium**	1709 [807]	1674 [790]	1633 [771]	1591 [751]	1551 [732]	1519 [717]	1477 [697]	1436 [678]		
			4	Blue	Medium High	1772 [836]	1746 [824]	1706 [805]	1667 [787]	1627 [768]	1593 [752]	1553 [733]	1521 [718]		
			5	Black	High	1887 [891]	1852 [874]	1828 [863]	1784 [842]	1748 [825]	1713 [808]	1678 [792]	1648 [778]		

\*Low Static Heating Speed  
\*\*High Static Heating Speed

Shaded cells indicate static pressures at which that motor tap can be used for heating speed. If static pressure is not within the limits noted here, the higher heating speed tap MUST be used. Do NOT use the speed taps and/or static pressures which do not fall into the shaded cells on this table. This table is for reference. The technician/installer must verify furnace is operating within the published rise range before completing the installation.

[ ] Designates Metric Conversions.

## VENT TERMINATION KITS: =

**RXGY-E02:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US Only)

**RXGY-E02A:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US & Canadian)

**RXGY-E03:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US Only)

**RXGY-E03A:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US & Canadian)

**RXGY-G02:** Direct Vent Furnace Side Wall Vent 2" or 3" (US Only)

**RXGY-D05:** Combustion Air Drain Kit 2"

**RXGY-D06:** Combustion Air Drain Kit 3"

**NEUTRALIZER KIT:** RXGY-A01  
(Replacement Cartridge 54-22120-01)

**EXTERNAL BOTTOM FILTER (UPFLOW/HORIZONTAL) RACK:**  
RXGF-CB

**EXTERNAL SIDE (UPFLOW) FILTER RACK:** RXGF-CD

**EXTERNAL (DOWNFLOW) FILTER RACK:** RXGF-CC

## FOR HIGH ALTITUDES:

**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. See installation instructions as appropriate orifice change is required.

**L.P. CONVERSION KIT:** RXGJ-FP33

**CONDENSATE PUMP KIT:** PROSTOCK & 1PCB151TUL

**DOWNFLOW/HORIZONTAL CONVERSION KIT:** RXGY-CK

**DOWNFLOW/HORIZONTAL LEFT ZERO CLEARANCE CONVERSION KIT:** RXGY-ZK

**COMBUSTIBLE FLOOR BASE:** RXGC-B17  
RXGC-B21  
RXGC-B24

[ ] Designates Metric Conversions

FILTER RACK FILTER SIZES* INCHES [mm]			
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW)	RXGF-CC (DOWNFLOW)
FF4017	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]
FF6017	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]
FF7017	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]
FF8521	19 <sup>1</sup> / <sub>4</sub> x 25 [489 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]
FF10021	19 <sup>1</sup> / <sub>4</sub> x 25 [489 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]
FF11524	22 <sup>3</sup> / <sub>4</sub> x 25 [578 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	14 x 20 [356 x 508]

## INDOOR COIL CASINGS

MODEL NUMBER
RXBC-D17A1
RXBC-D21A1
RXBC-D21B1
RXBC-D24A1



**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.

Conditional Parts  
(Registration Required) .....Ten (10) Years  
Heat Exchanger .....Limited Lifetime

**\*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.**





---

**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."*