

GAS FURNACES



Rheem
Prestige[®]
S E R I E S

RGJF- SERIES
Models with Input Rates
from 60,000 to
120,000 BTU/HR
[17.58 to 35.16 kW]



"Visit www.Rheem.com/taxcredit for complete details."

Comfort Control² System

Equipped with
Comfort Control² System[™]

- Serial communication enabled
- Increased system reliability and efficiency
- 28 on-board diagnostic and operating codes
- *Active Protection*[™] with homeowner "Call for Service" alert
- Dual 7-segment LED display

Modulating Furnace Thermostat



RHC-TST550CMMS
(See Accessory Section)



**90 PLUS COMMUNICATING
MODULATING
HORIZONTAL GAS
FURNACES EQUIPPED
WITH THE COMFORT
CONTROL² SYSTEM AND
CONTOUR COMFORT
CONTROL**[®]

The Rheem *Prestige Series*[™] 90 Plus High Efficiency line of horizontal gas furnaces are designed for utility rooms, closets, or alcoves, attics or crawl spaces.

The design is certified by CSA.

Features

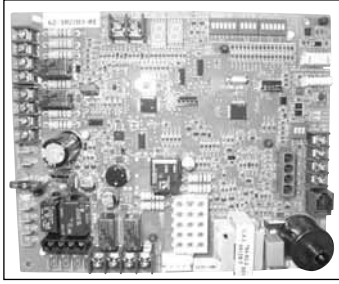
- The *Comfort Control² System*[™] provides over 28 on-board diagnostics and fault history codes by detecting system and electrical problems. "Call for Service" alert notification is sent to the thermostat to alert the homeowner of required service.
- Serial Communication Enhanced – When installed with a Serial Communicating Condensing Unit and user interface control (RHC-TST550CMMS) 500 Series thermostat this unit offers 4 or 2 wire installation, auto-configuration, and diagnostic messaging with full communicating capability.
- Heat exchanger is constructed of all stainless steel for maximum corrosion resistance and thermal fatigue reliability.
- Modulating Function: when used with a modulating thermostat, modulation rate between 40% and 100% of total capacity.
- Two-stage Function: when used with a two-stage thermostat, furnace operates at 40% on first stage, and stages up to 65%, then 100% for second stage.
- Multistage Function: when used with a single-stage thermostat, furnace functions as a three stage furnace operating at 40%, 65% and 100% of total capacity.
- Reduced firing rates, electrically efficient ECM2+ motor, and solid doors provide the ultimate in quiet operation.
- Low speed constant fan.
- Constant temperature rise for superior comfort.
- Dual Seven segment LED for system diagnostics.
- Diagnostic history for troubleshooting.
- Two-speed induced draft motor.
- Direct spark ignition with remote sense.
- Top electrical connections.
- Optional indoor or outdoor combustion air.
- All models comply with Department of Energy test procedures for 2% or less electrical efficiency ratings.

A variety of cooling coils and plenums designed to use with the Rheem *Prestige Series*[™] 90 Plus gas furnaces are available as optional accessories.

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

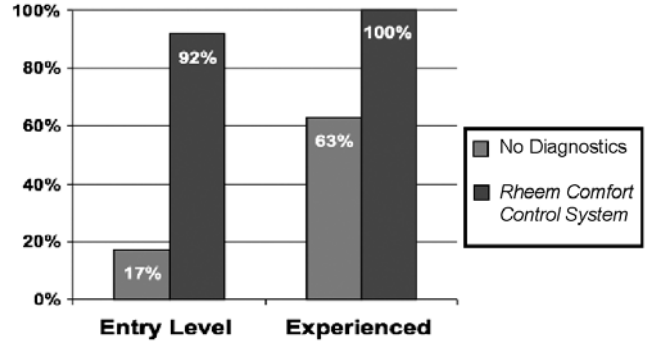
FEATURES & BENEFITS OF THE *COMFORT CONTROL² SYSTEM*TM

- The Rheem Dual 7-Segment LED Display easily shows system operating status codes and diagnostic codes.
- **The Status Indication System Diagnostics feature thermostat communication capability and built-in diagnostics.** The thermostat communication capability and alerts the homeowner to any necessary service requirements. Faster, more accurate service is provided by the built-in diagnostics, by providing the HVAC professional with dependable information.



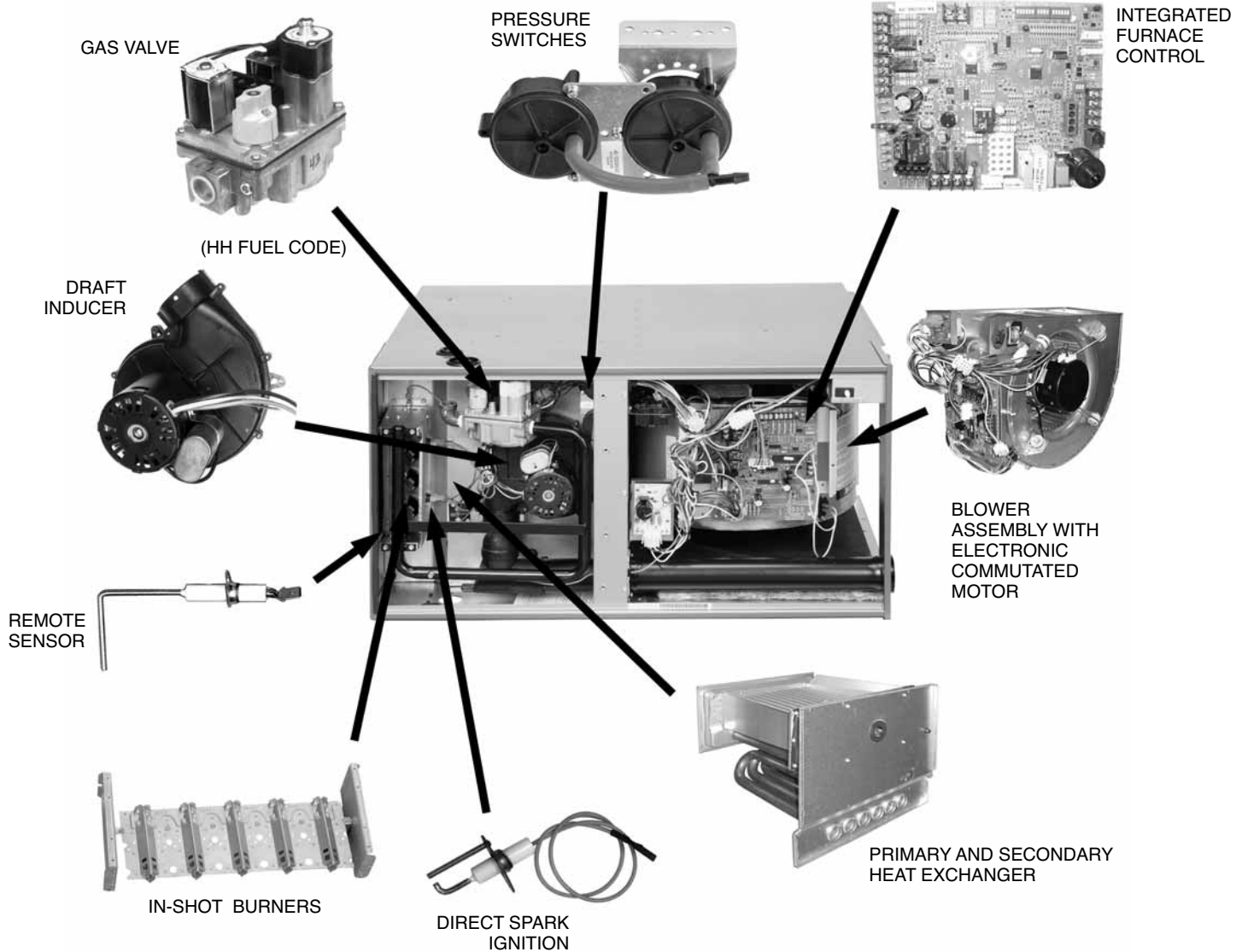
- The fault recall feature will allow for the last six fault-codes to be displayed, and will retain these codes even if power failure occurs.
- In order to save time and money, replacement automotive style fuses can be utilized instead of replacing the entire control board.

Problem-Solving Accuracy





PRESTIGE SERIES™ 90 PLUS HIGH EFFICIENCY MODULATING HORIZONTAL GAS FURNACE



STANDARD EQUIPMENT

Completely assembled and wired; heat exchanger; primary: 409 and aluminized 409 stainless steel, secondary: 29-4C stainless steel; induced draft; pressure switches; redundant modulating 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; one hour automatic retry; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; humidifier connections; humidifier on/off delay, dehumidification connection; low speed continuous fan option; transformer; direct drive, ECM variable speed blower motor. (Please note: a thermostat is not included as standard equipment. See "Accessories").

OPTIONAL EQUIPMENT

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. Fossil Fuel Kits for use with heat pumps.

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

PHYSICAL DATA AND SPECIFICATIONS—HORIZONTAL MODELS

| MODEL NUMBERS | RGJF-06EMCK | RGJF-07EMCK | RGJF-09EZCM | RGJF-10EZCM | RGJF-12ERCM |
|-------------------------------------|---|---|---|---|---|
| INPUT—MAXIMUM (BTU/HR) [kW] | 60,000 [17.58] | 75,000 [21.98] | 90,000 [26.38] | 105,000 [30.77] | 120,000 [35.17] |
| HEATING CAPACITY—MAXIMUM [kW] | 54,720 [16.03] | 69,000 [20.22] | 83,160 [24.37] | 95,865 [28.09] | 110,880 [32.49] |
| INPUT—MINIMUM (BTU/HR) [kW] | 24,000 [7.03] | 30,000 [8.79] | 36,000 [10.55] | 42,000 [12.31] | 48,000 [14.07] |
| HEATING CAPACITY—MINIMUM [kW] | 21,888 [6.41] | 27,600 [8.09] | 33,264 [9.75] | 38,346 [11.24] | 44,352 [12.99] |
| HEATING EXT. STATIC PRESSURE [kPa] | 0.12 [.029] | 0.12 [.029] | 0.15 [.037] | 0.20 [.049] | 0.20 [.049] |
| BLOWER (D X W IN.) [mm] | 11 x 7 [279 x 178] | 11 x 7 [279 x 178] | 12 x 11 [305 x 279] | 12 x 11 [305 x 279] | 11 x 10 [279 x 254] |
| ECM MOTOR HP [W] | 1/2 [373] | 1/2 [373] | 1 [746] | 1 [746] | 1 [746] |
| UNIT AMPS | 8.7 | 8.7 | 12.0 | 12.0 | 12.0 |
| MAXIMUM OVERCURRENT PROTECTION | 15 | 15 | 15 | 15 | 15 |
| HEATING CFM—MAXIMUM [L/s] | 795 [375] | 995 [470] | 1195 [564] | 1395 [658] | 1595 [753] |
| HEATING CFM—MINIMUM [L/s] | 320 [151] | 430 [203] | 515 [243] | 600 [283] | 685 [323] |
| COOLING CFM—RANGE [L/s] | 600-1200 [283-566] | 600-1200 [283-566] | 1200-2000 [566-944] | 1200-2000 [566-944] | 1200-2000 [566-944] |
| MAXIMUM EXT. STATIC PRESSURE [kPa] | 0.80 [0.20] | 0.80 [0.20] | 0.80 [0.20] | 0.80 [0.20] | 0.80 [0.20] |
| TEMPERATURE RISE RANGE °F [°C] | 40-70 [22.2-38.9] | 40-70 [22.2-38.9] | 40-70 [22.2-38.9] | 40-70 [22.2-38.9] | 40-70 [22.2-38.9] |
| MAX OUTLET AIR TEMPERATURE °F [°C] | 180 [82.2] | 180 [82.2] | 180 [82.2] | 190 [87.8] | 195 [90.6] |
| RETURN AIR CABINETS—RXGR- | C17B | C17B | C21B | C21B | C24B |
| FILTER SIZE (IN.) [mm] BOTTOM | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 19 ¹ / ₄ x 25 [489 x 635] | 19 ¹ / ₄ x 25 [489 x 635] | 22 ³ / ₄ x 25 [578 x 635] |
| FILTER SIZE (IN.) [mm] SIDE | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] |
| APPROX. SHIPPING WEIGHT (LBS.) [kg] | 127 [57.6] | 133 [60.3] | 158 [71.7] | 162 [73.5] | 170 [77.1] |
| AFUE | 94.8 | 93.1 | 90.2 | 90.4 | 91.6 |

MODEL IDENTIFICATION

| <u>R</u> | <u>G</u> | <u>J</u> | <u>F</u> | — | <u>07E</u> | <u>M</u> | <u>C</u> | <u>K</u> | <u>S</u> | <u>Option 278</u> |
|----------|-------------|-----------------|---------------|---|---------------|--------------------|--------------------|--------------------------|--------------------|-----------------------|
| Rheem | Gas | Horizontal | Design Series | | Heating Input | Blower Size | Variations | Heat/Cool | Fuel Code | 278 = Factory- |
| | Furnace | Modulating | F = | | Designation | M = 11 x 7 | C = Single/ | Designation | S = U.S. or | Supplied High |
| | | <i>Prestige</i> | Communicating | | Electric | [279 x 178 mm] | Multi | K = 600-1200 CFM | Canadian | Altitude Conversion |
| | | <i>Series™</i> | | | Ignition— | R = 11 x 10 | Zone | [283-566 L/s] | Natural Gas | Kit (Not Required |
| | | 90 Plus | | | NOx | [279 x 254 mm] | | M = 1200-2000 CFM | | on 60K BTU Model) |
| | Gas Furnace | | | | Models | Z = 12 x 11 | | [566-944 L/s] | | |
| | | | | | 06E | [305 x 279 mm] | | | | |
| | | | | | 07E | | | | | |
| | | | | | 09E | | | | | |
| | | | | | 10E | | | | | |
| | | | | | 12E | | | | | |
| | | | | | 12N | | | | | |

[] Designates Metric Conversions

HORIZONTAL MODELS

Illustration A084901.S01B

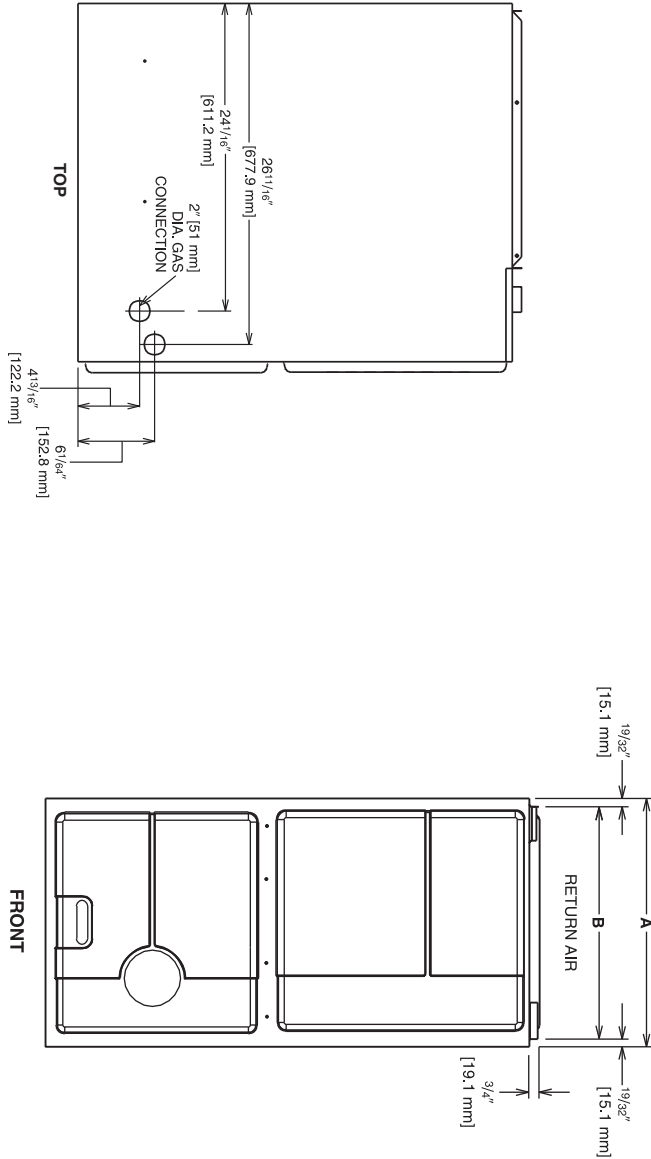


Illustration A084901.S01C

Illustration A084901.S01A

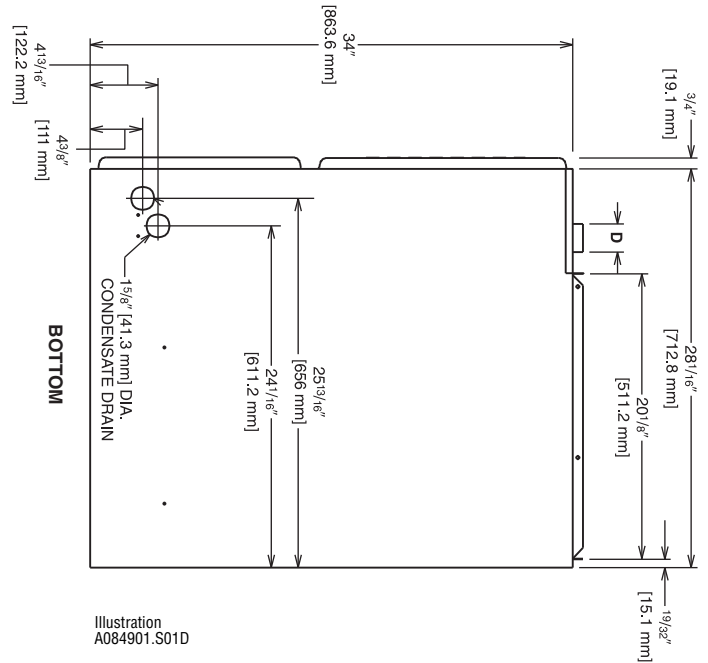
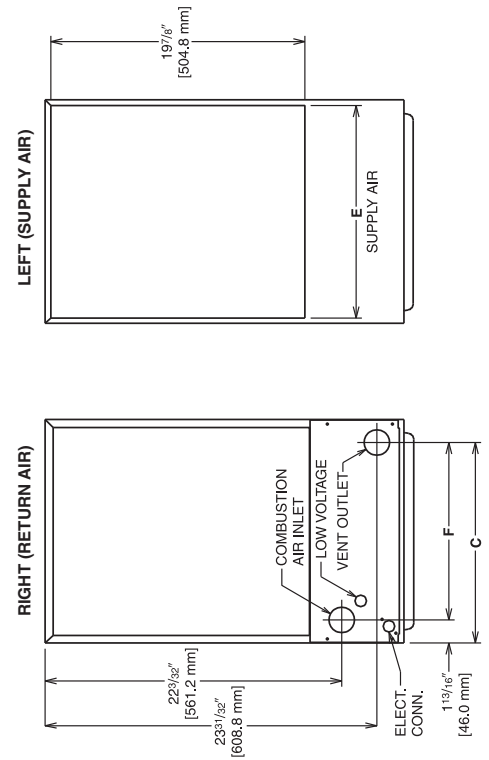


Illustration A084901.S01D

| MODEL RGJF- | A | B | C | D | E | F | LEFT SIDE | MINIMUM CLEARANCE (IN.) [mm] | | | | |
|-------------|--------------|----------------|---------------|--------|--------------|--------------|-----------|------------------------------|------|--------|--------|------|
| | | | | | | | | RIGHT SIDE | BACK | TOP | FRONT | VENT |
| 06 | 17 1/2 [445] | 16 1/32 [415] | 15 5/8 [397] | 2 [51] | 16 5/8 [422] | 13 7/8 [352] | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 |
| 07 | 17 1/2 [445] | 16 1/32 [415] | 15 5/8 [397] | 2 [51] | 16 5/8 [422] | 13 7/8 [352] | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 |
| 09 | 21 [533] | 19 27/32 [504] | 19 3/16 [487] | 2 [51] | 20 1/8 [511] | 17 3/8 [441] | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 |
| 10 | 21 [533] | 19 27/32 [504] | 19 3/16 [487] | 2 [51] | 20 1/8 [511] | 17 3/8 [441] | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 |
| 12 | 24 1/2 [622] | 23 1/32 [593] | 22 5/8 [575] | 2 [51] | 23 5/8 [600] | 20 7/8 [530] | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 |

[] Designates Metric Conversions

BLOWER PERFORMANCE DATA—RGJF MODELS

| MODEL RGJF- | BLOWER SIZE (D x W) IN. [mm] | ICM MOTOR H.P. [W] | BLOWER SPEED | CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa] | |
|----------------|------------------------------------|--------------------------|-----------------|---|-------|
| | | | | 0.1 [.02]-0.8 [.20] | |
| 06 | 11 x 7 [279 x 178] | 1/2 [373] | HIGH | 1200 | [566] |
| | | | MED-HI | 1000 | [472] |
| | | | MED | 800 | [378] |
| | | | LOW | 600 | [283] |
| 07 | 11 x 7 [279 x 178] | 1/2 [373] | HIGH | 1200 | [566] |
| | | | MED-HI | 1000 | [472] |
| | | | MED | 800 | [378] |
| | | | LOW | 600 | [283] |
| 09 | 12 x 11 [305 x 279] | 1 [746] | HIGH | 2000 | [944] |
| | | | MED-HI | 1600 | [755] |
| | | | MED | 1400 | [661] |
| | | | LOW | 1200 | [566] |
| 10 | 12 x 11 [305 x 279] | 1 [746] | HIGH | 2000 | [944] |
| | | | MED-HI | 1600 | [755] |
| | | | MED | 1400 | [661] |
| | | | LOW | 1200 | [566] |
| 12 | 11 x 10 [279 x 254] | 1 [746] | HIGH | 2000 | [944] |
| | | | MED-HI | 1600 | [755] |
| | | | MED | 1400 | [661] |
| | | | LOW | 1200 | [566] |

[] Designates Metric Conversions

ACCESSORIES—HORIZONTAL

VENT TERMINATION KITS CONCENTRIC: HORIZONTAL/ VERTICAL =

RXGY-E03A (US & Canadian Installations)

HORIZONTAL TWO PIPE: RXGY-D02, RXGY-D03, RXGY-D04
(US Installations)

RXGY-D02A, RXGY-D03A, RXGY-D04A (Canadian Installations)

RXGY-G02 (US Only)

FUEL KIT: Use Modulating Programmable Thermostat
(see below) for Dual Fuel/Fossil Fuel Kits.

HORIZONTAL: RXGY-G02

NEUTRALIZER KIT: RXGY-A01

PLENUM DATA FOR “A” COILS

Plenum adapters are required in some instances for use on horizontal applications when plenum and furnace size do not match.

| FURNACE WIDTH IN. [mm] | PLENUM WIDTH IN. [mm] | PLENUM ADAPTER UPFLOW | COIL PLENUM |
|--------------------------------------|--------------------------------------|-----------------------|-------------|
| 17 ¹ / ₂ [445] | 16 ¹ / ₄ [413] | RXAA-C186 | RXAL-B16BU |
| 17 ¹ / ₂ [445] | 20 ¹ / ₄ [514] | RXAA-C173 | RXAL-B20BU |
| 17 ¹ / ₂ [445] | 21 ⁵ / ₈ [549] | RXAA-C187 | RXAL-B21BU |
| 17 ¹ / ₂ [445] | 25 ¹ / ₄ [641] | RXAA-C174 | RXAL-B25BU |
| 21 [533] | 25 ¹ / ₄ [641] | RXAA-C175 | RXAL-B25BU |
| 21 [533] | 22 ¹ / ₄ [565] | RXAA-C176 | RXAL-B22BU |
| 21 [533] | 21 ⁵ / ₈ [549] | RXAA-C188 | RXAL-B21BU |
| 24 ¹ / ₂ [622] | 25 ¹ / ₄ [641] | RXAA-C177 | RXAL-B25BU |
| 24 ¹ / ₂ [622] | 21 ⁵ / ₈ [549] | RXAA-C187 | RXAL-B21BU |

Note: See Form Number C11-206 for MultiFlex® coil data.

LP KIT: (Available through PROSTOCK®)
U.S./Canadian = RXGJ-FP07

THERMOSTATS

RECOMMENDED MODULATING FURNACE THERMOSTAT



RHC-TST550CMMS

- 7 Day 5/1/1 Programmable Modulating/Two Cool Hardwired
- Works in Modulating Furnace and Modulating Furnace Dual Fuel applications (requires optional external sensor)
- Bright, 12 sq. inch touchscreen display
- Keypad lockout option
- Hardwired
- Easy, menu-driven programming
- Audio prompting to ensure program change confirmation
- Intuitive red/blue temperature keys
- Large, easy-to-see characters
- Available only through professional contractors

*PROGRAMMABLE THERMOSTAT ACCESSORIES:

Adapter Plate = F61-2600

Remote F1451328 and F1451378 Sensor

*Available through PROSTOCK®.

FOR HIGH ALTITUDES:

RGJF HIGH ALTITUDE FIELD CONVERSION KITS:

| MODEL | INPUT | HIGH ALTITUDE FIELD CONVERSION KIT NO. |
|----------|---------|--|
| RGJF-06 | 60,000 | None Needed |
| RGJF-07 | 75,000 | RXGY-F38 (8000 ft. and above only) |
| RGJF-09* | 90,000 | RXGY-F39 |
| RGJF-10* | 105,000 | RXGY-F40 |
| RGJF-12* | 120,000 | RXGY-F41 |

*5000 ft. & above only (except where noted).

OPTION CODE FOR HIGH ALTITUDE: None available. Kit must be ordered.

NOTE: High altitude kits do **NOT** include additional burner orifices. If a burner orifice change is necessary, they must be ordered through PROSTOCK®. See Installation Instructions for more information.

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

For all installations above 2000 ft., the burner orifice size must be recalculated and verified. A burner orifice change may still be required. See Installation Instructions for more information.

Manifold gas pressure reduction methods may **NOT** be used on these models. The only method permitted on modulating furnace models is to recalculate the burner orifice size. See Installation Instructions for more information.

[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY

Rheem 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.

Primary and Secondary Heat ExchangerLimited Lifetime
Conditional Unit Replacement Warranty*
(Registration Required)Limited Lifetime

Parts Warranty*Ten (10) Years

***For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy of the Product Warranty Card.**

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.

**Rheem Heating,
Cooling and
Water Heating**

P.O. Box 17010, Fort Smith, AR 72917



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