FORM NO. G11-468 REV. 11
Supersedes Form No. G11-468 Rev. 10

GAS FURNACES

RGFD- SERIES

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

(All Models 92% A.F.U.E.† or Above)

Modulating Furnace Thermostat

RHC-TST401MDMS

Accredited by the RvA

ISO 9001:2000

Certificate Number: 30164

member gama

The BEST BUY SEAL is a registered trademark of *Consumers Digest Communications LLC,* used under license.

Rheem® *Prestige*® SERIES

90 PLUS® MODULATING UPFLOW GAS FURNACES WITH *CONTOUR COMFORT CONTROL*®

The Rheem *Prestige Series*® 90 Plus High Efficiency line of upflow gas furnaces are designed for utility rooms, closets, or alcoves. **Because of the low-profile 34 inch height, the RGFD- model can be used vertically to satisfy most applications that traditionally call for a horizontal furnace.**

The design is certified by CSA.

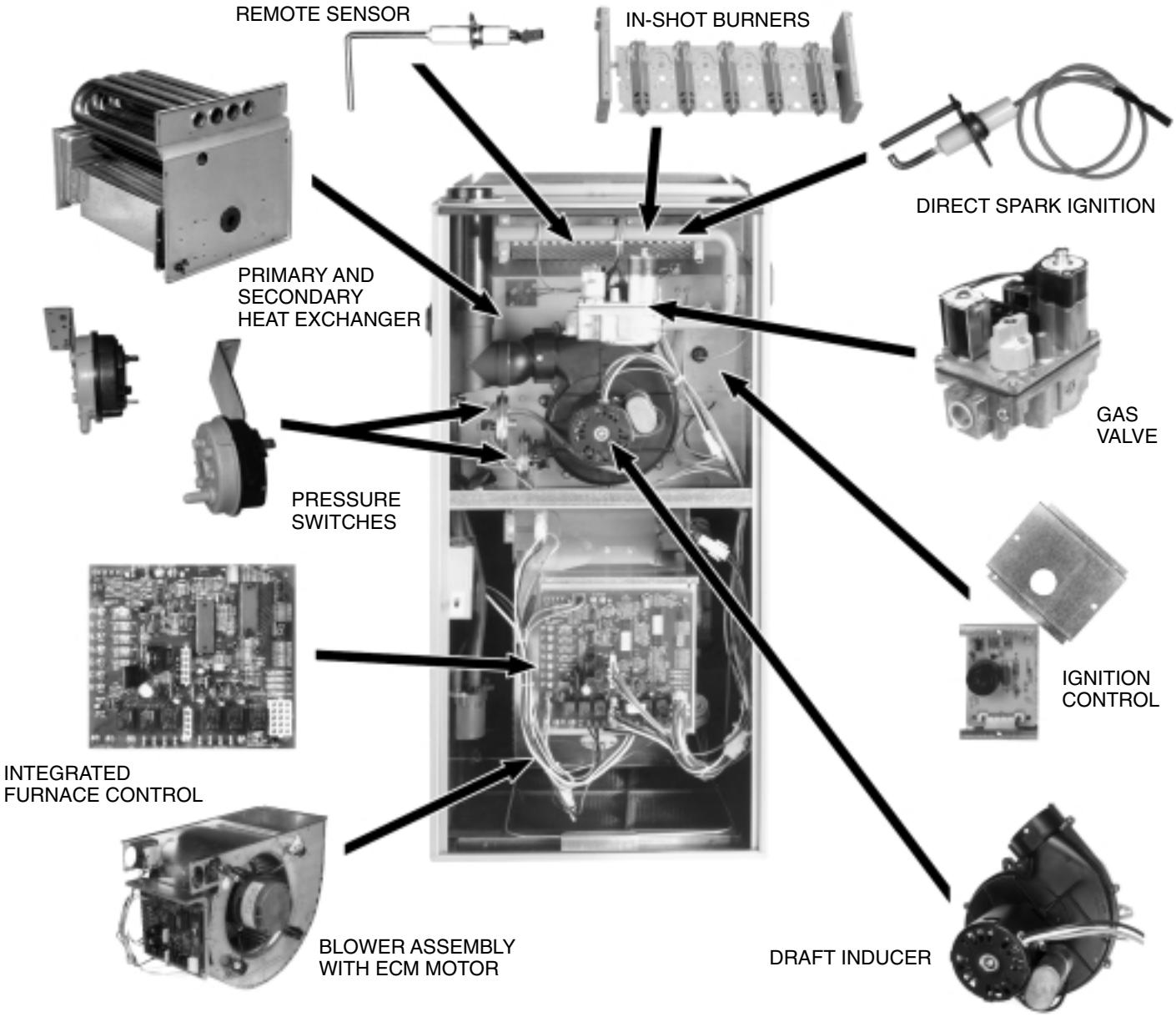
Features

- 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.
- Seven segment LED for system diagnostics.
- Diagnostic history for troubleshooting.
- Two-speed induced draft motor.
- Direct spark ignition with remote sense.
- Top electrical connections, left or right gas and condensate drainage connections on downflow models.
- Optional indoor or outdoor combustion air.

A variety of cooling coils and plenums designed to use with the *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.

PRESTIGE SERIES® 90 PLUS HIGH EFFICIENCY MODULATING UPFLOW 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; dehumidifier 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

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.

Fossil Fuel Kits for use with Heat Pumps.

WARNING

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

BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

PHYSICAL DATA AND SPECIFICATIONS—UPFLOW MODELS

U.S. and Canadian Models

MODEL NUMBERS	RGFD-06EMCK	RGFD-07EMCK	RGFD-09EZCM	RGFD-10EZCM	RGFD-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]	55,800 [16.35]	72,000 [21.10]	86,000 [25.20]	100,000 [29.31]	115,000 [33.70]
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]	22,560 [6.61]	28,200 [8.26]	33,840 [9.92]	39,000 [11.57]	45,120 [13.22]
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]	170 [76.7]	180 [82.2]	180 [82.2]	180 [82.2]	180 [82.2]
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	93.4%	92.8%	94.1%	92.4%	93.2%

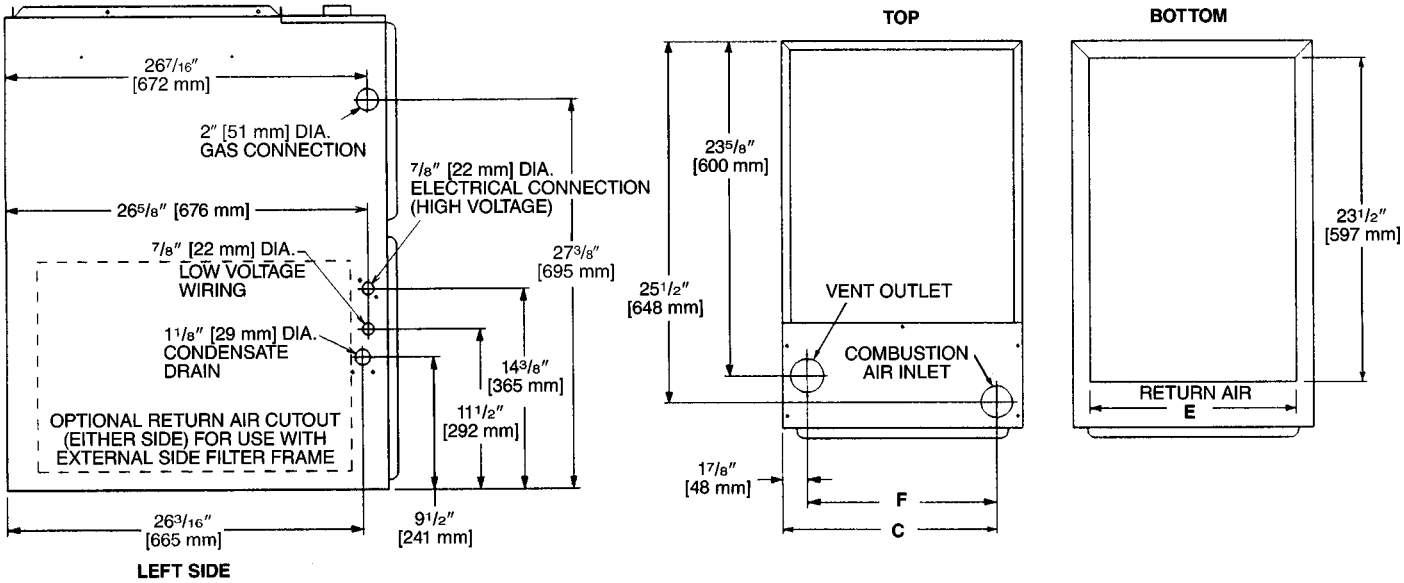
MODEL IDENTIFICATION

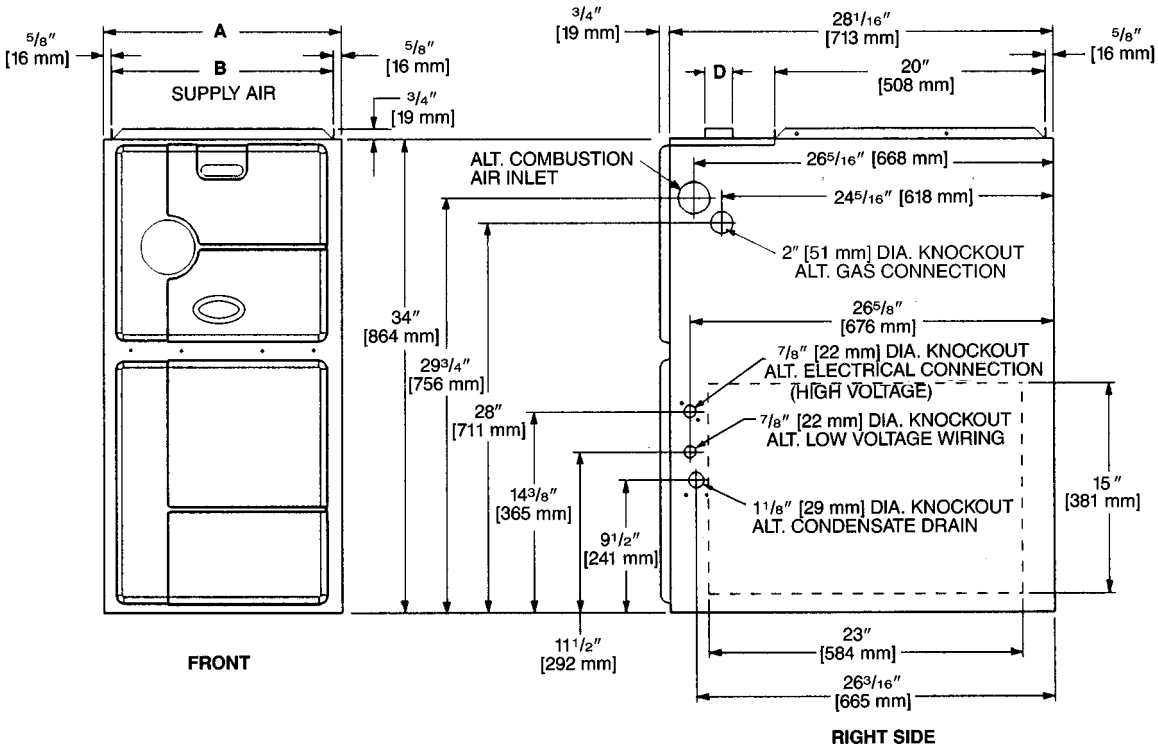
R	G	F	D	—	07E	M	C	K	S
Rheem	Gas Furnace	Modulating *Prestige Series®* 90 Plus Gas Furnace	Design Series		Heating Input Designation	Blower Size	Variations	Heat/Cool Designation	Fuel Code
						M = 11 x 7 [279 x 178 mm] **R** = 11 x 10 [279 x 254 mm] **Z** = 12 x 11 [305 x 279 mm]	**C** = Single/ Multi Zone	**K** = 600-1200 CFM [283-566 L/s] **M** = 1200-2000 CFM [566-944 L/s]	**S** = U.S. and Canadian Natural Gas

Electric Ignition	Electric Ignition—Nox Models	Input BTU/HR
06E	06N	60,000 [17.6 kW]
07E	07N	75,000 [20.5 kW]
09E	09N	90,000 [26.4 kW]
10E	10N	105,000 [30.7 kW]
12E	—	120,000 [35.2 kW]

[ ] Designates Metric Conversions

UPFLOW MODELS





MODEL RGFD-	A	B	C	D	E	F	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]				
								RIGHT SIDE	BACK	TOP	FRONT	VENT
06	17 1/2 [445]	16 3/8 [416]	15 5/8 [397]	2 [51]	15 [422]	13 13/16 [351]	0	0	0	1 [25]	2 [51]	0
07	17 1/2 [445]	16 3/8 [416]	15 5/8 [397]	2 [51]	15 [422]	13 13/16 [351]	0	0	0	1 [25]	2 [51]	0
09	21 [533]	19 7/8 [505]	19 1/8 [487]	2 [51]	18 1/2 [511]	17 5/16 [440]	0	0	0	1 [25]	2 [51]	0
10	21 [533]	19 7/8 [505]	19 1/8 [487]	2 [51]	18 1/2 [511]	17 5/16 [440]	0	0	0	1 [25]	2 [51]	0
12	24 1/2 [622]	23 3/8 [594]	22 5/8 [575]	2 [51]	22 [600]	20 13/16 [529]	0	0	0	1 [25]	2 [51]	0

[ ] Designates Metric Conversions

BLOWER PERFORMANCE DATA—RGFD MODELS

MODEL RGFD-	BLOWER SIZE (D x W) IN. [mm]	ECM 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 MED-HI MED LOW	1200 [566] 1000 [472] 800 [378] 600 [283]
07	11 x 7 [279 x 178]	1/2 [373]	HIGH MED-HI MED LOW	1200 [566] 1000 [472] 800 [378] 600 [283]
09	12 x 11 [305 x 279]	1 [746]	HIGH MED-HI MED LOW	2000 [944] 1600 [755] 1400 [661] 1200 [566]
10	12 x 11 [305 x 279]	1 [746]	HIGH MED-HI MED LOW	2000 [944] 1600 [755] 1400 [661] 1200 [566]
12	11 x 10 [279 x 254]	1 [746]	HIGH MED-HI MED LOW	2000 [944] 1600 [755] 1400 [661] 1200 [566]

[ ] 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 Exchanger .....Limited Lifetime

Rheem will provide a replacement RGFD Gas Furnace to the original purchaser if the Heat Exchanger fails AND if the following additional conditions are satisfied:

a) Unit is still owned by the original purchaser; in the original installation location; AND

b) Warranty is registered with Rheem Manufacturing Company, Air Conditioning Division within 60 Days of original installation or closing of your home. Product registration is available online at www.RheemAC.com/register or by filling out the Warranty Registration card and returning it to the address listed on the reverse side of the card.

All Other Parts .....Five (5) Years

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

ACCESSORIES—UPFLOW

VENT TERMINATION KITS

CONCENTRIC: Vertical/Horizontal = RXGY-E03

HORIZONTAL TWO PIPE: RXGY-D02, RXGY-D03, RXGY-D04, RXGY-G02

CONDENSATE PUMP KIT: RXGY-B01
NEUTRALIZER KIT: RXGY-A01

RETURN AIR PLENUM: RXGR-C17B
RXGR-C21B
RXGR-C24B

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

EXTERNAL SIDE FILTER RACK: RXGF-CA

FILTER RACK FILTER SIZES* INCHES [mm]		
MODEL RGFD-	RXGF-CB (BOTTOM)	RXGF-CA (SIDE)
06	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
07	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
09	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
10	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
12	22 3/4 x 25 [578 x 635]	15 3/4 x 25 [400 x 635]

*Filter racks are shipped without filters.
Filters shipped with furnace may be used or a suitable 1" [25.4 mm] filter.

PLENUM DATA FOR "A" COILS

Plenum adapters are required in some instances for use on upflow 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-C185	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. = RXGJ-FP07
Canadian = RXGJ-FP08

THERMOSTATS

RECOMMENDED MODULATING FURNACE THERMOSTAT

RHC-TST401MDMS

- 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

FOSSIL FUEL KIT
RXPF-F02

***PROGRAMMABLE THERMOSTAT ACCESSORIES:**
Adapter Plate = F61-2600
Remote F1451328 and F1451378 Sensor

*Available through PROSTOCK®.

[ ] Designates Metric Conversions

ACCESSORIES—UPFLOW (cont.)

FOR HIGH ALTITUDES:

RGFD HIGH ALTITUDE CONVERSION KITS		
MODEL -GFD	INPUT (BTU)	KIT NO.
06	60,000 [17.58]	RXGY-F06
07	75,000 [21.98]	RXGY-F07
09	90,000 [26.37]	RXGY-F06
10	105,000 [30.77]	RXGY-F05
12	120,000 [35.16]	RXGY-F05

***For installations over 5000 ft.**

OPTION CODE FOR HIGH ALTITUDE: US & Canada – 278

NOTE: High altitude kits and options 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.

Option – 278 furnaces are shipped with #51 DMS orifices installed. This is one drill size smaller than standard furnaces to account for expected average elevations and heating values typically seen in these areas.

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

For all installations above 2000 ft. (including all option – 278 models), the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. A burner orifice change may still be required. See Installation Instructions for more information.

Manifold gas pressure reduction methods to adjust for altitude 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

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
AIR CONDITIONING
DIVISION

5600 Old Greenwood Road, Fort Smith, Arkansas 72908

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

PRINTED IN U.S.A. 3-07 DC

FORM NO. G11-468 REV. 11
Supersedes Form No. G11-468 Rev. 10