The new degree of comfort.™

Rheem *Prestige*® Series EcoNet Enabled Modulating Upflow Gas Furnaces

R97V- Series

97% A.F.U.E.†
Input Rates from 60 to 115 kBTU
[11.57 to 33.71 kW]

Most Efficient 2017 ENERGY STAR www.energystar.gov

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

EcoNet™

- 97% residential gas furnace CSA certified
- Upflow
- Modulating 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
- PlusOne™ Diagnostics 7-Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
- PlusOne™ 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 door fasteners for tool less access
- Integrated control boards feature dip switches for easy system set up
- Self priming condensate trap
- Solid bottom included
- For optimal performance an EcoNet Control Center is recommended; must be paired with an EcoNet enabled heat pump or air conditioner, for a fully communicating HVAC system.
- Modulating Function: when used with an EcoNet Control Center 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.

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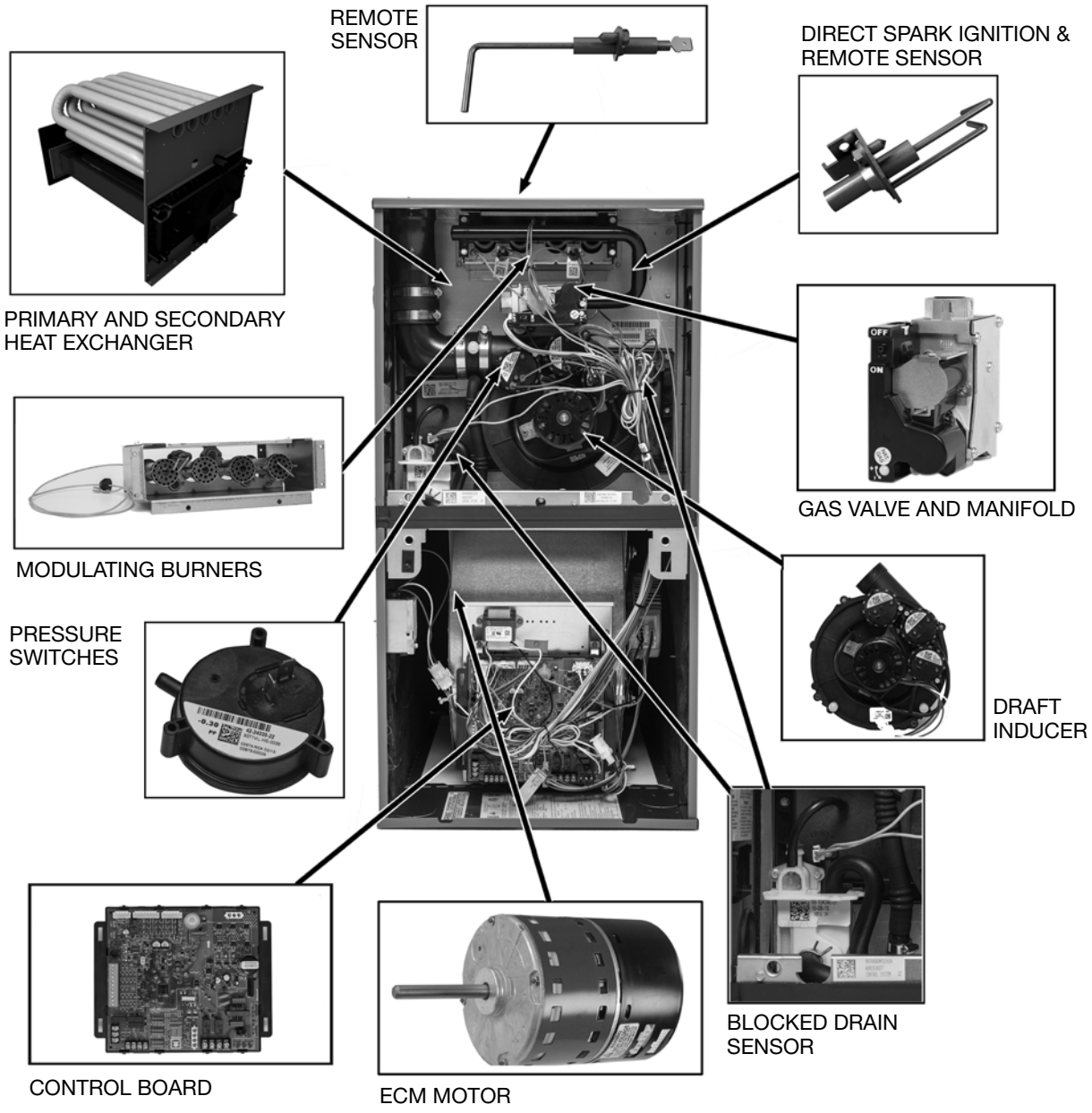


STANDARD EQUIPMENT

Completely assembled and wired; blocked drain sensor, 7 segment LED and marked hoses; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; variable speed 3 phase induced draft motor; pressure switches; digitally controlled modulating gas valve with internal redundancy and manual shut off; blower compartment door safety switch; solid state time on/off blower control; limit controls; 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; humidifier connections; humidifier on/off delay; low CFM continuous fan option; transformer; direct drive, variable speed electrically commutated blower motor (ECM). Solid bottom. (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 Gas Conversion Kit Index Natural to LP Gas. The L.P. Conversion kit contains components unique to Modulating furnaces, the correct kit must be used.

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 NUMBER	(-)97V(-)060M317U(--)	(-)97V(-)070M317U(--)	(-)97V(-)085M521U(-)	(-)97V(-)100M521U(--)	(-)97V(-)115M524U(--)
HIGH FIRE INPUT BTU/HR [kW]	56,000 [16.41]	70,000 [20.50]	84,000 [24.61]	98,000 [28.72]	112,000 [32.82]
LOW FIRE INPUT	22,400 [6.56]	28,000 [8.21]	33,600 [9.85]	39,000 [11.49]	44,800 [13.13]
HEATING CAPACITY BTU/HR [kW]	55,000 [16.12]	69,000 [20.22]	83,000 [24.32]	97,000 [28.43]	110,000 [32.24]
BLOWER (D x W) [mm]	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] E. C. M.	1/2 [373] E. C. M.	3/4 [559] E. C. M.	3/4 [559] E. C. M.	3/4 [559] E. C. M.
MIN. CIRCUIT AMPACITY	8.00	9.00	12.00	13.00	12.00
MIN. OVERLOAD PROTECTION DEVICE	15.00	15.00	15.00	15.00	15.00
MAX. OVERLOAD PROTECTION DEVICE	15.00	15.00	20.00	20.00	20.00
MINIMUM EXT. STATIC PRESSURE IN. W.C. [kPa]	.20 [.050]	.23 [.057]	.28 [.070]	.28 [.070]	.28 [.070]
MAXIMUM EXT. STATIC PRESSURE IN. W.C. [kPa]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]	1.0 [0.249]
MAXIMUM HEATING CFM [L/s]	954 [450]	1109 [524]	1294 [611]	1645 [776]	1767 [834]
COOLING CFM @ .50" W.C. [.124 kPa] E.S.P. [L/s]	1050 [496]	1050 [496]	1750 [825]	1750 [825]	1750 [825]
TEMPERATURE RISE- HIGH FIRE °F [°C]	40 - 70 [22 -39]	40 - 70 [22 -39]	40 - 70 [22 -39]	40 - 70 [22 -39]	40 - 70 [22 -39]
TEMPERATURE RISE- LOW FIRE °F [°C]	20 - 50 [11 - 28]	20 - 50 [11 - 28]	20 - 50 [11 - 28]	20 - 50 [11 - 28]	20 - 50 [11 - 28]
APPROX. SHIPPING WEIGHT (LBS) [kg]	128 [58]	132 [60]	147.5 [67]	152 [69]	165 [75]
AFUE ①	97.00%	97.00%	97.00%	97.00%	97.00%

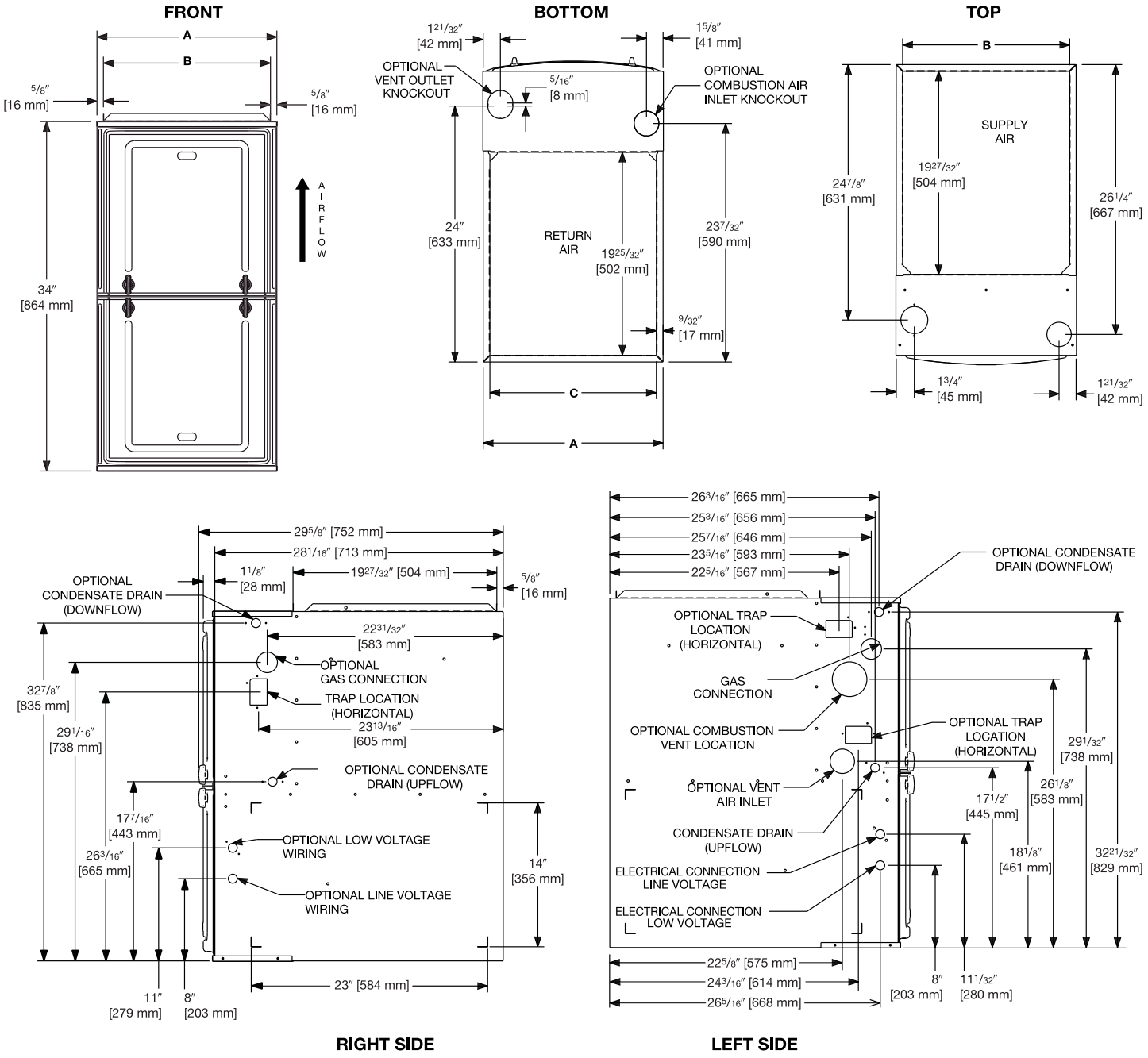
NOTES: All models are 115V, 60HZ, 1 phase Gas connection size for all models is 1/2" [13 mm] N.P.T.
① In accordance with D.O.E. test procedures.
*S=Standard Models
NOTE: Standard model complies with California low nox requirements.

[ ] Designates Metric Conversions

Model Number Identification

R	97	V	B	—	060	M	3	17	U	S	A
Rheem	97% Efficient	Motor - ECM	Design Series B = 2nd Design		Input BTU/HR 060 = 56,000 [16.41 kW] 070 = 70,000 [20.51 kW] 085 = 84,000 [24.62 kW] 100 = 98,000 [28.72 kW] 115 = 112,000 [32.82 kW]	Modulating	Airflow 3 - Up to 3 Tons 5 - Up to 5 Tons	Cabinet Width 17 = 17.5" 21 = 21.0" 24 = 24.5"	Configuration - Upflow	S = Standard N = NO_x	Revision - Marketing (A - First Time Release) (B - First Revision)

[ ] Designates Metric Conversions



UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

MODEL R97V	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS.	FLANGE DIMENSIONS		
		RIGHT SIDE	BACK	TOP	FRONT	VENT		A	B	C
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

Comfort Select – CFM Options (factory setting)						
Model Number		**(-)97V(-)060M317U(--)**	**(-)97V(-)070M317U(--)**	**(-)97V(-)085M521U(-)**	**(-)97V(-)100M521U(--)**	**(-)97V(-)115M524U(--)**
HEATING CFM [L/s]	LOW HEAT (40%)	428 [202]	466 [220]	568 [268]	548 [259]	788 [372]
	MEDIUM HEAT (65%)	562 [265]	635 [300]	754 [356]	742 [350]	1035 [488]
	HIGH HEAT (100%)	749 [353]	871 [411]	1015 [479]	1015 [479]	1396 [659]
Efficiency Select – CFM Options						
HEATING CFM [L/s]	LOW HEAT (40%)	550 [260]	599 [283]	730 [345]	860 [406]	1000 [472]
	MEDIUM HEAT (65%)	690 [325]	778 [367]	926 [437]	926 [437]	1271 [600]
	HIGH HEAT (100%)	885 [418]	1029 [485]	1200 [566]	1525 [720]	1650 [779]
	MAX HEAT (-4°F)	954 [450]	1109 [524]	1294 [611]	1645 [776]	1769 [834]

*S = Standard Models
NOTES Standard model complies with California low NOx requirements.
Refer to Installation Manual for complete heating dip switch options.

COOLING CFM								
Model Number				**(-)97V(-)060M317U(--)**	**(-)97V(-)070M317U(--)**	**(-)97V(-)085M521U(-)**	**(-)97V(-)100M521U(--)**	**(-)97V(-)115M524U(--)**
TARGET COOLING/ HEAT PUMP AIRFLOW	HIGH COOLING CFM [L/s]	SW 4 = OFF	SW 5 = OFF	1050 [496]	1050 [496]	1750 [825]	1750 [825]	1750 [825]
		SW 4 = ON	SW 5 = OFF	875 [413]	875 [413]	1400 [661]	1400 [661]	1400 [661]
		SW 4 = OFF	SW 5 = ON	700 [330]	700 [330]	1225 [578]	1225 [578]	1225 [578]
		SW 4 = ON	SW 5 = ON	525 [248]	525 [248]	1050 [496]	1050 [496]	1050 [496]
	LOW COOLING CFM [L/s]	SW 4 = OFF	SW 5 = OFF	788 [372]	788 [372]	1313 [619]	1313 [619]	1313 [619]
		SW 4 = ON	SW 5 = OFF	656 [310]	656 [310]	1050 [496]	1050 [496]	1050 [496]
		SW 4 = OFF	SW 5 = ON	525 [248]	525 [248]	919 [434]	919 [434]	919 [434]
		SW 4 = ON	SW 5 = ON	394 [185]	394 [185]	788 [372]	788 [372]	788 [372]

[ ] 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

FILTER RACK FILTER SIZES* INCHES [mm]	
MODEL	**RXGF-CD (UPFLOW)**
(-)97V(-)060	15¾ x 25 [400 x 635]
(-)97V(-)070	15¾ x 25 [400 x 635]
(-)97V(-)085	15¾ x 25 [400 x 635]
(-)97V(-)100	15¾ x 25 [400 x 635]
(-)97V(-)115	15¾ x 25 [400 x 635]

*Filter racks are shipped without filters.
A suitable 1" [25.4 mm] filter may be used

INDOOR COIL CASINGS

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

FOR HIGH ALTITUDES:

NOTE: Modulating furnaces require a unique 2% derate at altitudes above 2,000 feet. See Installation Instructions for details.

HIGH ALTITUDE KITS

(-)97V(-)060M317U(--) RXGY-F43
(-)97V(-)070M317U(--) RXGY-F44
(-)97V(-)085M521U(--) RXGY-F45
(-)97V(-)100M521U(--) RXGY-F46
(-)97V(-)115M524U(--) RXGY-F47

[ ] Designates Metric Conversions

L.P. CONVERSION KIT: RXGJ-FP37

CONDENSATE PUMP KIT: PROSTOCK & 1PCB151TUL

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

ECONET CONTROL

RECOMMENDED COMMUNICATING FURNACE CONTROL

RETST601SYS

The EcoNet Control Center serves as the hub of communication for a home's Heating, Cooling and Water Heating systems, and is required to operate an EcoNet Enabled Heating & Cooling system in a fully communicating mode.

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)

WIFI KIT FOR HEATING & COOLING SYSTEMS

The WiFi kit is required to remotely operate EcoNet Enabled Heating and Cooling Systems from the EcoNet Web portal and mobile apps.

REWRA630SYS

***ECONET CONTROL ACCESSORIES:**
Wall Plate = RCPN-AMC08
Face Plate = RETSTFPL

IMPORTANT: *Existing Comfort Control² System Condensing Units & Heat Pumps are compatible with EcoNet when matched with a R97V Gas Furnace and with an EcoNet Translator (RETRN620CC2) installed on the Comfort Control² System control board.*

*Available through PROSTOCK®.

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.

***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.**

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

The new degree of comfort.™

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

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INTEGRATED HOME COMFORT

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DISPLAY CODES

Fault Level	Priority	Fault Codes	Description
2	0	30	Open Fuse
2	1	93	Internal Control Fault Detected
2	2	d1	No Model Data
2	3	68	No Blower Communications
2	4	61	Blower Fault -Motor Can NOT Run
2	5	71	Inducer Fault
2	6	26	Line and Neutral Reversed or Poor Ground
2	7	34	IDM Overcurrent
2	8	58	Water Circuit Open
2	9	14	Flame Present With Gas Valve Off
2	10	33	Over Temperature Switch (RollOut) Open
2	11	23	Auxiliary Limit Switch Open
1,2	12	22	Main Limit Switch Open
2	13	77	No Gas Valve Feedback Signal
1,2	14	59	Water Sensed
2	15	10	One - Hour Lockout
2	16	44	Low Pressure Switch Closed, Should be Open
1,2	17	45	Low Pressure Switch Open, Inducer On High Speed
1,2	18	46	Low Pressure Switch Open, Inducer On Low Speed
2	19	55	High Pressure Switch Closed, Should Be Open
1,2	20	57	High Pressure Switch Open, Inducer on High Speed
1	21	11	Failed Ignition
1	22	13	Flame Lost after Established
1	23	65	Mid Pressure Switch Closed, Should be Open
1	24	67	Mid Pressure Switch Open, Should be Closed
1	25	66	Blower Cutback
1	26	60	Blower Fault -Blower Can Still Run
1	27	12	Low Flame Sense Current
0	28	CL	Calibration Sequence Active (cold/warm/postpurge)
0	29	H	Call for High Heat
0	30	h	Call for Low Heat
0	31	C	Call for High Cooling Present
0	32	c	Call for Low Cooling Present
0	33	cd	Low Cooling with Dehumidification Active
0	34	Cd	High Cooling with Dehumidification Active
0	35	hP	Low Heat Pump Operation
0	36	HP	High Heat Pump Heating Operation
0	37	dF	Defrost Operation
0	38	F	Call for Fan Present
1	39	82	Supply Air Sensor Fault
1	40	84	Outdoor Air Sensor Fault
1	41	81	Return Air Sensor Fault
1	42	d4	No valid Model Data On Memory Card
1	43	d6	Horsepower Conflict On Memory Card
0	44	0	System Off, Standby Mode No Thermostat Call Or Errors
1	45	99	Remote Faults Resets Performed

Note 1: Fault level 0 = Status (No Fault), 1 = Warning, 2 = Critical Fault
Note 2: Multiple fault scenarios are displayed by priority. A lower number indicates a more critical fault. Most critical fault has priority=0.