

Ruud Achiever® Series Upflow/Horizontal Gas Furnaces





RGPN- Series

80% A.F.U.E.† Models with Input Rates from 50-150 kBTU (U.S. & Canadian Models)











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

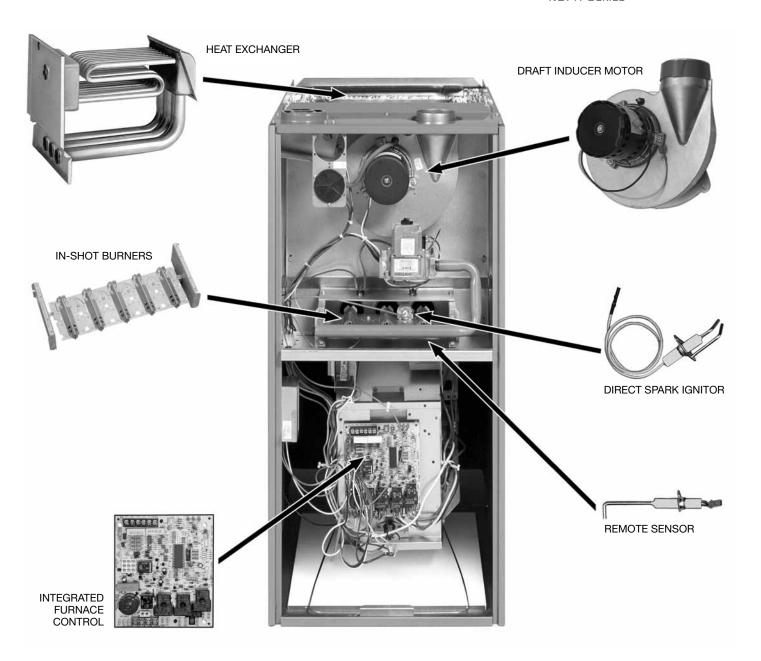
- The Ruud Achiever® Series line of upflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, or attics. Because of the low-profile 34 inch [864 mm] height, the upflow model can also be used to satisfy most applications that traditionally call for a horizontal furnace.
- The design is certified by CSA International.
- Innovative combustion design results in reliable, efficient operation at sound levels which provide distinct competitive advantage.
- Patented heat exchanger, constructed of aluminized steel for the maximum in corrosion resistance and thermal fatigue reliability.
- Low profile "34 inch" design is lighter and easier to handle, and leaves room for optional equipment.
- Convertible from upflow to horizontal left or right without field conversion
- Left or right side gas and electric inlet connections with quick, simple change.

- Robust and reliable direct spark ignition utilizing remote sense and an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment helps to reduce jacket loss and noise
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Grab-holes in doors to aid in easy door removal and replacement.
- A variety of cooling coils and plenums designed to use with Ruud Achiever® Series gas furnaces are available as optional accessories
- These furnaces can be installed in an upflow position or laid on either side in a horizontal position. Field conversion not required.

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STANDARD EQUIPMENT

Completely assembled and wired; induced draft blower; pressure switch; redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; manual shut-off valve, pressure regulator for natural and L.P. (propane) gas; transformer; direct drive multi-speed blower motor. Furnaces are equipped with cooling/heating relay and transformer (40VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; on-board twinning options; fused-protection (secondary), 3rd speed fan option for continuous fan; common heat/cool terminal.

OPTIONAL EQUIPMENT

Side filter frame assembly. Return air cabinet for all sizes. 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 Ruud 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 Ruud 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/Horizontal Models U.S. and Canadian Models

MODEL NUMBERS RGPN- SERIES	05EAUER 05NAUER	07EAMER 07NAMER	07EAMGR 07NAMGR	10EAMER 10NAMER	10EBRJR 10NBRJR	12EARJR 12NARJR	15EARJR 15NARJR
Input-BTU/Hr [kW] ②	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	100,000 [29]	125,000 [37]	150,000 [44]
Heating Capacity BTU/Hr [kW] ①	41,000 [12]	60,000 [18]	60,000 [18]	80,000 [23.4]	81,000 [23.7]	99,000 [29]	119,000 [35]
High Altitude Input [kW]*	45,000 [13]	67,500 [20]	67,500 [20]	90,000 [26]	90,000 [26]	112,500 [33]	135,000 [39.6]
High Altitude Output Capacity [kW]*	36,500 [11]	53,500 [16]	54,000 [16]	72,000 [21]	72,500 [21]	89,000 [26.1]	107,500 [31.5]
Heat Ext. Static Pressure [kPa]	.10 [.025]	.12 [.029]	.12 [.029]	.15 [.037]	.15 [.037]	.20 [.05]	.20 [.05]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.PSpeeds- PSC Type [W]	^{1/2} -4-PSC [373]	^{1/2} -4-PSC [373]	³ /4-4-PSC [559]	¹ /2-4-PSC [373]	³ /4-4-PSC [559]	³ /4-4-PSC [559]	³ /4-4-PSC [559]
Motor Full Load Amps	6.8	7.1	9.5	7.1	9.5	9.5	9.5
Heating Speed	MED-LOW	MED-HIGH	MED-LOW	MED-HIGH	MED-LOW	MED-LOW	MED-LOW
Cooling Speed	HIGH	HIGH	MED-HIGH	HIGH	MED-HIGH	MED-HIGH	MED-HIGH
Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s]	1200 [566]	1200 [566]	1600 [755]	1200 [566]	2000 [944]	2000 [944]	2000 [944]
Rated E.S.P. (In. W.C.) [kPa]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	25-55 [13.9-30.6]	45-75 [25.0-41.7]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	50-80 [27.8-44.4]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	165 [73.8]	155 [68.3]	190 [87.7]	170 [76.6]	180 [82.2]	190 [87.7]
Standard Filter–In. [mm]	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]	19 ¹ / ₄ x 25 [489 x 635]	22 ³ / ₄ x 25 [578 x 635]	22 ³ /4 x 25 [578 x 635]
Approx. Shipping Weight (Lbs.) [kg]	85 [39]	105 [48]	105 [48]	115 [52]	120 [54]	140 [63]	150 [68]
Return Air Cabinets (Opt.) RXGR- Filter Size [mm]	C14B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C21B (2) 20 x 16 [508 x 406]	C24B (2) 24 x 16 [610 x 406]	C24B (2) 24 x 16 [610 x 406]
AFUE-Electric Ignition Models ①	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, $1\emptyset$. Gas connection size for all models is $^{1}/_{2}$ " [12.7 mm] N.P.T.

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

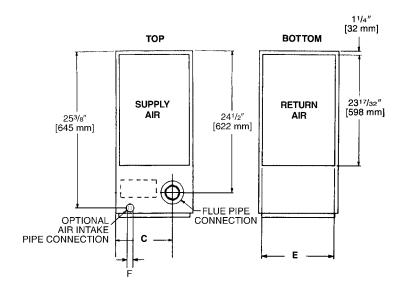
② See Conversion Kit Index Form for high altitude derate in U.S. applications. For Canadian applications, reference the furnace installation instructions.

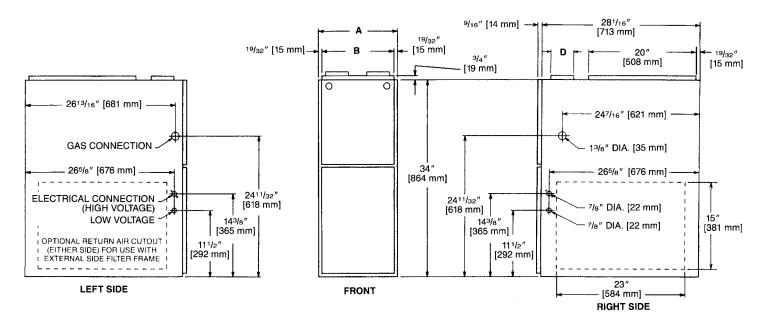
^{*} Data references Canadian applications only.

Model Number Identification—Upflow Models

R	G	P	<u>N</u>		07	<u>'E</u>	A	M	E	R
Ruud	Gas Furnace	Upflow/ Horizontal	Design Series	He Electric Ignition 05E 07E 10E 12E 15E	NO _X NO _X Model 05N 07N 10N 12N 15N	t Designation Input BTU/HR 50,000 [15 kW] 75,000 [22 kW] 100,000 [29 kW] 125,000 [37 kW] 150,000 [44 kW]	Variations A = Std. Cabinet B = Wide Cabinet	Blower Designation U = 11 x 6 [279 x 152 mm] M = 11 x 7 [279 x 178 mm] R = 11 x 10 [279 x 254 mm]	Heating & Cooling Designation E = 1100-1330 CFM [519-628 L/s] G = 1450-1750 CFM [684-826 L/s] J = 1800-2075 CFM [850-979 L/s]	Fuel Type R = Natural Gas, U.S. and Canadian Standard Furnace

Upflow Dimensions





Upflow Dimensions and Clearance to Combustible Material (inches) [mm]

MODEL									REDUCEI	CLEAR/	ANCES (IN	.) [mm]	
RGPN-	A	В	С	D	E	F	LEFT SIDE	RIGHT SIDE	BACK	ТОР	FRONT	VENT	SHIP. WGTS. (LBS.) [kg]
05	14 [356]	1227/32 [326]	105/8 [270]	1	111/2 [292]	17/8 [48]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	171/2 [445]	16 ¹¹ /32 [415]	123/8 [314]	1	15 [381]	21/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10 (A)	171/2 [445]	1611/32 [415]	123/8 [314]	1	15 [381]	21/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	115 [52.2]
10 (B)	21 [533]	19 ²⁷ / ₃₂ [504]	14 ¹ /8 [359]	1	18 ¹ / ₂ [470]	21/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	241/2 [622]	2311/32 [593]	15 ⁷ /8 [403]	1	22 [559]	21/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	241/2 [622]	2311/32 [593]	157/8 [403]	1	22 [559]	21/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

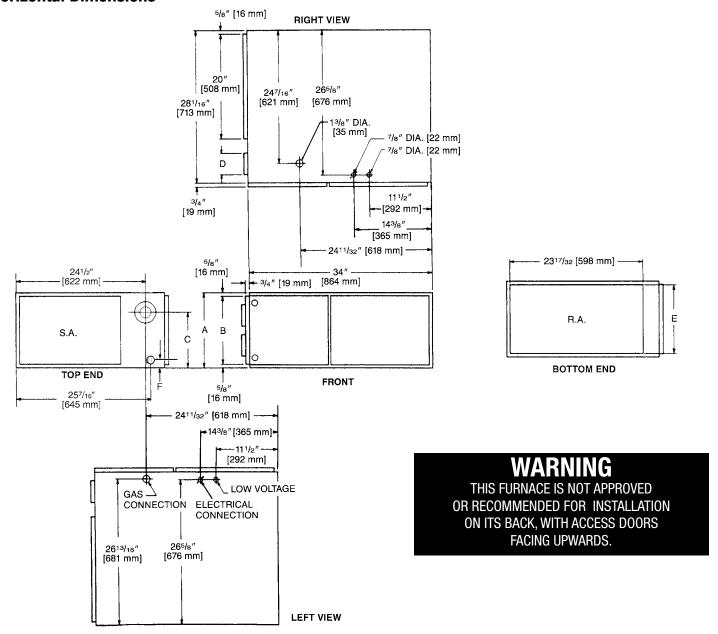
NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

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.

② May be 0" [0 mm] with type B vent.

³ May be 1" [25 mm] with type B vent.

Horizontal Dimensions



Horizontal Dimensions and Clearance to Combustible Material (inches) [mm]

MODEL								ı	REDUCEI	CLEAR/	NCES (IN.	.) [mm]	
RGPN-	A	В	C	D	E	F	LEFT SIDE	RIGHT SIDE	BACK	ТОР	FRONT	VENT	SHIP. WGTS. (LBS.) [kg]
05	14 [356]	12 ²⁷ / ₃₂ [326]	10 ⁵ /8 [270]	1	11 ¹ / ₂ [292]	13/4 [45]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	171/2 [445]	16 ¹¹ /32 [415]	123/8 [314]	1	15 [381]	21/2 [63]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10 (A)	171/2 [445]	16 ¹¹ /32 [415]	123/8 [314]	1	15 [381]	21/2 [63]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	115 [52.2]
10 (B)	21 [533]	1927/32 [504]	141/8 [359]	1	181/2 [470]	21/2 [63]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	241/2 [622]	2311/32 [593]	157/8 [403]	1	22 [559]	21/2 [63]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	241/2 [622]	2311/32 [593]	15 ⁷ /8 [403]	1	22 [559]	21/2 [63]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

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.

Blower Performance Data

MODEL NUMBER RGPN-	BLOWER SIZE	MOTOR H.P.	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES [kPa] WATER COLUMN						
SERIES	[mm]	[W]		.1 [.02]	.2 [.05]	.3 [.07]	.4 [.10]	.5 [.12]	.6 [.15]	.7 [.17]
05EAUER 05NAUER	11 x 6 [279 x 152]	1/2 [373]	LOW MED-LO MED-HI HIGH	675 [319] 950 [448] 1115 [526] 1270 [599]	655 [309] 930 [439] 1090 [514] 1250 [590]	635 [300] 905 [427] 1070 [505] 1225 [578]	610 [288] 880 [415] 1040 [491] 1200 [566]	585 [276] 860 [406] 1015 [479] 1165 [550]	555 [262] 830 [392] 985 [465] 1130 [533]	520 [245] 800 [378] 945 [446] 1085 [512]
07EAMER 07NAMER	11 x 7 [279 x 178]	1/2 [373]	LOW MED-LO MED-HI HIGH	921 [435] 1093 [563] 1241 [586] 1393 [657]	897 [423] 1066 [503] 1212 [572] 1359 [642]	872 [411] 1039 [490] 1183 [558] 1326 [626]	845 [399] 1008 [476] 1150 [543] 1293 [610]	818 [386] 977 [461] 1118 [528] 1259 [594]	795 [375] 941 [444] 1076 [508] 1214 [573]	746 [352] 905 [427] 1033 [487] 1169 [552]
07EAMGR 07NAMGR	11 x 7 [279 x 178]	3/4 [559]	LOW MED-LO MED-HI HIGH	1245 [588] 1555 [734] 1810 [854] 2050 [967]	1220 [576] 1515 [715] 1755 [828] 1985 [937]	1195 [564] 1475 [696] 1705 [805] 1915 [904]	1165 [550] 1435 [677] 1645 [776] 1845 [871]	1135 [536] 1395 [658] 1585 [748] 1785 [842]	1105 [522] 1350 [637] 1530 [722] 1715 [809]	1065 [503] 1300 [614] 1470 [694] 1655 [781]
10EAMER 10NAMR	* 11 x 7 [279 x 178]	* 1/2 [373]	LOW MED-LO MED-HI HIGH	925 [437]* 1050 [496] 1220 [576] 1410 [665]	890 [420]* 1040 [491] 1195 [564] 1380 [651]	865 [408]* 1030 [486] 1160 [547] 1345 [635]	835 [394]* 990 [467] 1140 [538] 1300 [614]	810 [382]* 960 [453] 1105 [522] 1255 [592]	775 [366]* 920 [434] 1065 [503] 1205 [569]	745 [352]* 890 [420] 1020 [481] 1150 [543]
10EBRJR 10NBRJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1295 [611] 1645 [776] 2045 [965] 2320 [1095]	1275 [602] 1615 [762] 2000 [944] 2260 [1067]	1250 [590] 1580 [746] 1955 [923] 2200 [1038]	1225 [578] 1550 [732] 1905 [899] 2130 [1005]	1195 [564] 1510 [713] 1845 [871] 2060 [972]	1165 [550] 1465 [691] 1785 [842] 1985 [937]	1135 [536] 1425 [673] 1720 [812] 1910 [901]
12EARJR 12NARJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1280 [604] 1645 [776] 2050 [967] 2365 [1116]	1275 [602] 1635 [772] 2015 [951] 2310 [1090]	1265 [597] 1615 [762] 1960 [925] 2250 [1062]	1245 [588] 1590 [750] 1935 [913] 2185 [1031]	1215 [573] 1560 [736] 1885 [890] 2115 [998]	1185 [559] 1520 [717] 1835 [866] 2035 [960]	1145 [540] 1470 [694] 1775 [838] 1950 [920]
15EARJR 15NARJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1270 [599] 1620 [765] 2010 [949] 2340 [1104]	1250 [590] 1595 [753] 1985 [937] 2275 [1074]	1220 [576] 1570 [741] 1960 [925] 2215 [1045]	1195 [564] 1545 [729] 1915 [904] 2145 [1012]	1165 [550] 1515 [715] 1850 [873] 2080 [982]	1135 [536] 1480 [698] 1800 [850] 2010 [949]	1105 [522] 1440 [680] 1730 [816] 1940 [916]

NOTES: *Not to be used as a heating speed.

Data compiled with factory filters installed.

Recommended blower speeds are in bold.

ACCESSORIES—UPFLOW

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

FILTER RACK FILTER SIZES† INCHES [mm]						
MODEL RGPN-	RXGF-CA (SIDE)					
05, 07, 10*A	15 ³ / ₄ x 25 [400 x 635]					
10*BRJ	15 ³ / ₄ x 25 [400 x 635]					
12, 15	15 ³ / ₄ x 25 [400 x 635]					

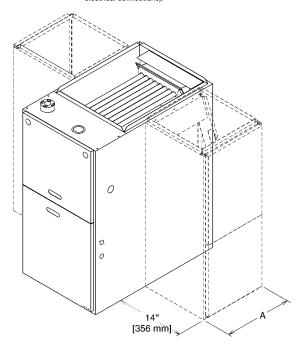
[†] Filter racks are shipped without filters.

RXPF-F01 and F02

FOSSIL FUEL KITS are for use with Ruud Achiever Heat Pumps and warm air furnaces. The RXPF-F02 meets TVA requirements.

ACCESSORY RETURN AIR CABINETS

Return Air Cabinets may be installed on either side application except RXGR-C24B (side application must be on side opposite gas and electrical connections).



THE RXGR-C24B MUST ONLY BE INSTALLED ON THE SIDE OPPOSITE THE GAS AND ELECTRICAL CONNECTIONS.

RETURN AIR CABINETS	A IN. [mm]	FILTER SIZE IN. [mm]
RXGR-C14B	14 [356]	(2) 12 x 16 [305 x 406]
RXGR-C17B	171/2 [445]	(2) 12 x 16 [305 x 406]
RXGR-C21B	21 [533]	(2) 20 x 16 [508 x 406]
RXGR-C24B	24 ¹ / ₂ [622]	(2) 24 x 16 [610 x 406]

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE AIR RETURN DUCTS. FAILURE TO INSTALL A BASE PLATE COULD CAUSE PRODUCTS OF COMBUSTION TO BE CIRCULATED INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS.

FURNACE WIDTH IN. [mm]	SOLID BOTTOM KIT NO.	BASE Plate No.	BASE PLATE SIZE IN. [mm]
14 [356]	RXGB-D14	AE-61874-01	115/8 x 239/16 [295 x 598]
171/2 [445]	RXGB-D17	AE-61874-02	15 ¹ /8 x 23 ⁹ / ₁₆ [384 x 598]
21 [533]	RXGB-D21	AE-61874-03	185/8 x 239/16 [473 x 598]
241/2 [622]	RXGB-D24	AE-61874-04	255/8 x 239/16 [651 x 598]

FOR HIGH ALTITUDES:

OPTION CODE FOR HIGH ALTITUDE: U.S. & Canada

None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S. & Canada

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.

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.

Filters shipped with furnace may be used or a suitable 1" [25.4 mm] filter.

^{*}Designates "E" or "N".

GENERAL TERMS OF LIMITED WARRANTY*

Ruud 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.

Heat ExchangerTwenty (20) Years Conditional Parts* (Registration Required)Ten (10) Years



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

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