

# OIL FURNACES



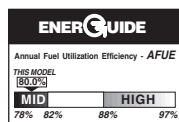
## HIGHBOY & LOWBOY OIL FURNACES WITH ECM/VARIABLE SPEED MOTORS

The Ruud *Achiever Series*® premium upflow oil furnace is for installation in proper ventilated utility rooms, closets or alcoves.

- ECM blower assemblies for heating and air conditioning applications
- ECM Control board located in furnace vestibule
- ECM controls set for 2-stage air conditioning, 2-stage heat pump back up
- 10-gauge primary and 14-gauge secondary heat exchanger
- Front cleanout ports extend through front wall for accessibility
- Efficiencies up to 85.9%
- Front or rear flue Lowboys available
- All furnaces have standard Honeywell controls
- Available with Beckett, Riello Carlin burners
- Extended vestibule on all units

**ROCA-\*\*\*E: Highboy Series**  
**ROLA-\*\*\*E: Lowboy Series**

**Input Ratio from**  
**84,000 to 175,000 BTU/HR**  
**[24.61 to 51.28 kW]**





# ACHIEVER SERIES® HIGHBOY AND LOWBOY OIL FURNACE WITH ECM VARIABLE SPEED MOTOR

## STANDARD EQUIPMENT

The Ruud *Achiever Series*® Oil Furnace is fully assembled and offers the option of 3 separate burner in a box combinations. Highboy and Lowboy configurations available. Standard Honeywell Controls and barometric draft control. The unit has an extended vestibule to conceal burner and operating controls. A 10-gauge primary and 14-gauge secondary heat exchanger include accessible cleanout ports that extend through the front wall of the furnace enclosure for ease of serviceability. Variable speed ECM motor and control board is engineered to accept 2-stage air conditioning and 2-stage heat pump backup. An external filter and filter rack is included ROCA series furnaces.

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

## MODEL IDENTIFICATION—HIGHBOY AND LOWBOY MODELS

<u>R</u>	<u>O</u>	<u>L</u>	<u>A</u>	<u>070</u>	<u>E</u>	<u>04</u>	<u>B</u>	<u>F</u>
Ruud	Oil Furnace	Type C = Highboy L = Lowboy	Design Series	Heating Input Designation (Output BTU/HR) 070 = 70,000 [20.5 kW] 115 = 115,000 [33.8 kW]	Motor Type E = ECM Motor	Heating and Cooling Designation 03 = Up to 3 tons cooling CFM for 070 models 04 = Up to 4 tons cooling CFM for 070 models 05 = Up to 5 tons cooling CFM for 115 models	Burner Type B = Beckett Burners C = Carlin Burners R = Riello Burners	Variations (Applies only to ROLA Models) F = Front Flue R = Rear Flue

[ ] Designates Metric Conversions

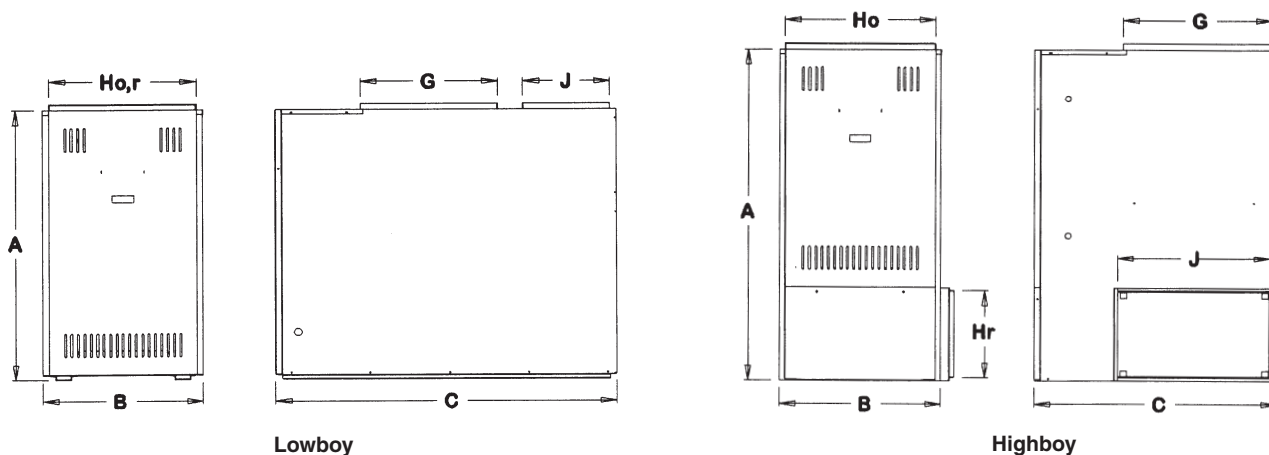
BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

## SPECIFICATIONS AND DIMENSIONS—ECM MOTOR

FURNACE										
Furnace Type	Lowboy*					Highboy				
Model	ROLA-070E			ROLA-115E		ROCA-070E			ROCA-115E	
<b>DIMENSIONS</b>										
Cabinet Height (A)	40"			46"		53-5/8"			56-1/2"	
Cabinet Width (B)	20-1/4"			25-1/8"		22-1/4"			25-1/2"	
Cabinet Depth (C)	47-1/2"			53-5/8"		33-1/8"			38"	
Centerline - Flue to Floor (D)	31-1/4"			38-1/2"		49-1/8"			52-5/8"	
Centerline - Flue to Side (E)	10-1/8"			12-1/2"		11-1/8"			12-3/4"	
Warm Air Supply Depth (G)	17-1/2"			21-1/2"		19-3/4"			23-3/8"	
Warm Air Supply Width (Ho)	18-1/4"			22-7/8"		20-1/2"			23-3/4"	
Return Air Supply Width (Hr)	18-1/4"			22-7/8"		15"			15"	
Return Air Supply Depth (J)	14"			13-5/8"		23-5/8"			23-5/8"	
<b>SPECIFICATIONS</b>										
Flue Size	6"					6"				
Filter Size	16" x 20" (2)					16" x 25"				
Blower Size	100-10T					100-10T				
Shipping Weight	323 lbs.					362 lbs.				
B.T.U.H. Input	84,000	105,000	119,000	140,000	175,000	84,000	105,000	119,000	140,000	175,000
B.T.U.H. Output	71,000	88,000	99,000	116,000	143,000	71,000	88,000	99,000	116,000	143,000
Beckett AFG Nozzle @ 100psi	.60 80°A	.75 80°B	.85 80°B	1.00 80°B	1.25 80°B	.60 80°A	.75 80°B	.85 80°B	1.00 80°B	1.25 80°B
Riello 40 Nozzle @ 150psi	.50 60°A	.60 60°A	.65 60°A	.85 80°B	1.00 80°B	.50 60°A	.60 60°A	.65 60°A	.85 80°B	1.00 80°B
Carlin EZ-1 Nozzle @ 100psi	.60 70°A	.75 70°A	.85 70°A	1.00 60°SS	1.25 60°SS	.60 70°A	.75 70°A	.85 70°A	1.00 60°SS	1.25 60°SS
AFUE Seasonal Efficiency	85.9%	85.4%	85.0%	85.0%	84.2%	85.9%	85.4%	85.0%	85.0%	82.3%
Blower Motor Drive	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM	Direct/ECM
Heating Ext. Static Pressure In. [kPa]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]
Max. Ext. Static Pressure In. [kPa]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]
Temperature Rise Range °F [°C]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]	50-75 [28-42]
Blower Motor Full Load Amps	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
Total Current	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
Minimum Circuit Ampacity	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5

\* Specify front or rear flue on Lowboy models

[ ] Designates Metric Conversions



# BLOWER PERFORMANCE DATA—HIGHBOY AND LOWBOY MODELS

MODEL	LOWBOY								HIGHBOY							
	ROLA-070E03			ROLA-070E04			ROLA-115E05		ROCA-070E03			ROCA-070E04			ROCA-115E05	
Horsepower/Speed	3/4 HP, Variable Speed															
Heating CFM	900	1100	1250	900	1100	1250	1550	1925	900	1100	1250	900	1100	1250	1550	1925
Cooling CFM 1-1/2 Tons	600	600	600	N/A	N/A	N/A	N/A	N/A	600	600	600	N/A	N/A	N/A	N/A	N/A
Cooling CFM 2 Tons	800	800	800	N/A	N/A	N/A	N/A	N/A	800	800	800	N/A	N/A	N/A	N/A	N/A
Cooling CFM 2-1/2 Tons	1000	1000	1000	1000	1000	1000	N/A	N/A	1000	1000	1000	1000	1000	1000	N/A	N/A
Cooling CFM 3 Tons	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Cooling CFM 3-1/2 Tons	N/A	N/A	N/A	1400	1400	1400	1400	1400	N/A	N/A	N/A	1400	1400	1400	1400	1400
Cooling CFM 4 Tons	N/A	N/A	N/A	1600	1600	1600	1600	1600	N/A	N/A	N/A	1600	1600	1600	1600	1600
Cooling CFM 5 Tons	N/A	N/A	N/A	N/A	N/A	N/A	2000	2000	N/A	N/A	N/A	N/A	N/A	N/A	2000	2000
Shipping Weight	323	323	323	323	323	323	362	362	298	298	298	298	298	298	347	347

## GENERAL TERMS OF LIMITED WARRANTY

The Manufacturer will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated here, in accordance with the terms of the limited warranty.

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

Oil Heat Exchanger ..... Limited Lifetime  
 Any Other Part..... Five (5) Years

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.

**Ruud Heating,  
 Cooling and  
 Water Heating**

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



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