

95.5% AFUE, Single Stage, PSC Gas Furnace

EASIER TO SELL

- 95.5% AFUE, all models all positions, California NOx approved
- Certified to leak 2% or less of nominal air conditioning CFM delivered when pressurized to 1-inch water column with all present air inlets, air outlets, and condensate drain port(s) sealed
- Approved for Twinning applications (0601714 through 1202420) with accessory (order separately)
- Approved for Manufactured Housing/Mobile Home applications (0401410 through 1202420) with accessory (order separately)

TOUGHER

- Flame roll-out sensors standard
- Adjustable heating blower OFF delay
- Factory set blower ON delay
- RPJ aluminized steel primary heat exchanger
- Stainless steel secondary heat exchanger
- High temperature limit control prevents overheating
- Direct ignition with Silicon Nitride ignitor
- High quality, corrosion-resistant, prepainted steel cabinet

EASIER TO INSTALL AND SERVICE

- Direct vent (2-pipe), single-pipe venting or ventilated combustion air
- 24 VAC humidifier terminal & electronic air cleaner terminal
- 35" (889mm) high, for ease of installation
- Simplified, factory installed internal condensate drain system
- Innovative knobs for easy door removal and secure attachment
- Factory shipped for natural gas, with propane gas conversion kits available
- Four position – upflow/downflow/horizontal (left/right) installation
- At least twelve different venting configurations
- Through the casing flue pipe for counterflow or horizontal applications with accessory (order separately)
- Concentric vent available
- Self diagnostics with super bright LED
- Slide out heat exchanger and blower assembly

WARRANTY *

- 20 heat exchanger limited warranty
- 5 year parts limited warranty
 - With timely registration, an additional 5 year parts limited warranty

* Applies to original purchaser/homeowner, some limitations may apply. See warranty certificate for complete details.



Illustrations and photographs are only representative. Some product models may vary.

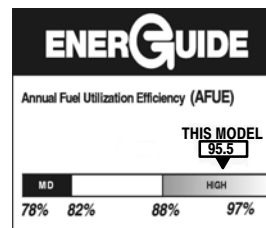
WARNING

CARBON MONOXIDE POISONING AND FIRE HAZARD

Failure to follow this warning could result in personal injury, death, and/or property damage.

This furnace is not designed for use in recreation vehicles or outdoors. This furnace is designed for use in manufactured (Mobile) homes when an optional Mobile Home accessory kit is installed.

Failure to follow this warning could result in personal injury, death, and/or property damage.



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.

Model Number	Input (MBTUH)	Efficiency AFUE	Cooling Capacity CFM range @ .5 in. w.c. (125 Pa)	Dimensions H x W x D Inches (Millimeters)	Shipping Wt. Lbs (Kg)
N9MSE0401410A	40,000	95.5%	625-905	35 x 14-3/16 x 29-1/2 (889 x 361 x 750)	123 (55)
N9MSE0601410A	60,000	95.5%	675-1130	35 x 14-3/16 x 29-1/2 (889 x 361 x 750)	127 (57)
N9MSE0601714A	60,000	95.5%	650-1420	35 x 17-1/2 x 29-1/2 (889 x 445 x 750)	144 (65)
N9MSE0801716A	80,000	95.5%	810-1600	35 x 17-1/2 x 29-1/2 (889 x 445 x 750)	154 (69)
N9MSE0802120A	80,000	95.5%	1225-2025	35 x 21 x 29-1/2 (889 x 533 x 750)	162 (73)
N9MSE1002114A	100,000	95.5%	695-1565	35 x 21 x 29-1/2 (889 x 533 x 750)	169 (76)
N9MSE1002120A	100,000	95.5%	1225-2145	35 x 21 x 29-1/2 (889 x 533 x 750)	169 (76)
N9MSE1202420A	120,000	95.5%	1245-2065	35 x 24-1/2 x 29-1/2 (889 x 622 x 750)	186 (84)
N9MSE1402420A	140,000	95.5%	1230-2100	35 x 24-1/2 x 29-1/2 (889 x 622 x 750)	190 (86)

MODEL NUMBER IDENTIFICATION GUIDE										
DIGIT POSITION	1	2	3	4	5	6,7,8	9,10	11,12	13	14
F/G = Mainline	N	9	M	S	E	060	17	14	A	1
N = Entry	EFFICIENCY		POSITION							
9 = 90+% AFUE										
M = Multiposition										
A = Modulating ECM Variable Speed Blower										
V = ECM Variable Speed										
X = ECM Blower										
S = Single-stage										
T = Two-stage					TYPE					
B= Base AFUE Efficiency										
C = Communicating										
E = Extra AFUE Efficiency										
T = Two-Stage					FEATURE					
040 = 40,000 BTU/hr										
060 = 60,000 BTU/hr										
080 = 80,000 BTU/hr										
100 = 100,000 BTU/hr										
120 = 120,000 BTU/hr										
140 = 140,000 BTU/hr					HEAT INPUT					
14 = 14-3/16"										
17 = 17-1/2"										
21 = 21"										
24 = 24-1/2"					CABINET WIDTH					
08 = 800 CFM										
10 = 1000 CFM										
12 = 1200 CFM										
14 = 1400 CFM										
16 = 1600 CFM										
20 = 2000 CFM										
22 = 2200 CFM					NOMINAL MAXIMUM COOLING AIRFLOW @ .5 IN. W.C.					
SALES (MAJOR) REVISION DIGIT										
ENGINEERING (MINOR) REVISION DIGIT										

ECM—Electronically Commutated Motor

ACCESSORIES PART NUMBER IDENTIFICATION GUIDE							
DIGIT POSITION	1	2	3	4	5, 6, 7	8, 9	10, 11
	N	A	H	A	001	01	DH
N = Non-Branded	BRANDING						
A = Accessory			PRODUCT GROUP				
H = Heating					KIT USAGE		
A = Original							
B = 2nd Generation					MAJOR SERIES		
Product Identifier Number							
Package Quantity							
Type of Kit (Example: DH = Draft Hood – Chimney Adapter)							

PHYSICAL DATA							
UNIT SIZE (NATURAL GAS Ratings)			0401410A	0601410A	0601714A	0801716A	0802120A
Input	Heat	(BTUH)	40,000	60,000	60,000	80,000	80,000
Output	Heat	(BTUH)	39,000	58,000	58,000	78,000	78,000
Efficiency	AFUE % (ICS)		95.5				
Certified Temperature Rise Range °F (°C)			40-70(22-39)				
UNIT SIZE (NATURAL GAS Ratings)			1002114A	1002120A	1202420A	1402420A	
Input	Heat	(BTUH)	100,000	100,000	120,000	140,000	
Output	Heat	(BTUH)	97,000	97,000	117,000	135,000	
Efficiency	AFUE % (ICS)		95.5				
Certified Temperature Rise Range °F (°C)			40-70(22-39)				

ICS — Isolated Combustion System

AIRFLOW CAPACITY AND BLOWER DATA							
UNIT SIZE			0401410A	0601410A	0601714A	0801716A	0802120A
Certified External Static Pressure in.w.c.(kPa)	Heating		0.10(.025)	0.12(.05)	0.12(.05)	0.15(.38)	0.15(.38)
	Cooling		.5 (.125)				
Airflow Delivery @ Rated ESP (CFM)	Heating		820	840	980	1040	1500
	Cooling		905	1130	1420	1600	2025
Cooling Capacity (tons) @ 400, 350 CFM/ton	400 CFM/ton		2	2.5	3.5	4	5
	350 CFM/ton		2.5	3	4	4.5	5.5
Direct-Drive Motor Type			PSC - Permanent Split Capacitor				
Direct-Drive Motor HP			0.5	0.5	0.5	0.75	0.75
Motor Full Load Amps			6.2	6.2	6.8	7.9	13.8
RPM Range			500-1150				
Speed Selections			4	4	5	5	5
Blower Wheel Dia x Width	inches		11 x 7	11 x 7	11 x 8	11 x 8	11 x 10
Air Filtration System			Field Supplied				
Filter Used for Certified Watt Data			NAHA00806FB		NAHA00506FB		NAHA00606FB
UNIT SIZE			1002114A	1002120A	1202420A	1402420A	
Certified External Static Pressure in.w.c.(kPa)	Heating		0.20(.050)	0.20(.050)	0.20(.050)	0.20(.050)	
	Cooling		.5 (.125)				
Airflow Delivery @ Rated ESP (CFM)	Heating		1565	1520	2210	2190	
	Cooling		1565	2145	2065	2100	
Cooling Capacity (tons) @ 400, 350 CFM/ton	400 CFM/ton		4	5	5	5	
	350 CFM/ton		4.5	6	6	6	
Direct-Drive Motor Type			PSC - Permanent Split Capacitor				
Direct-Drive Motor HP			0.75	0.75	0.75	0.75	
Motor Full Load Amps			6.5	13.8	14.1	14.1	
RPM Range			500-1150				
Speed Selections			5	5	5	5	
Blower Wheel Dia x Width	inches		11 x 10	11 x 10	11 x 11	11 x 11	
Air Filtration System			Field Supplied				
Filter Used for Certified Watt Data			NAHA00606FB		NAHA00706FB		

CONTROLS					
UNIT SIZE	0401410A	0601410A	0601714A	0801716A	0802120A
Gas Connection Size	1/2" – NPT				
Burners (Monoport)	2	3	3	4	4
Gas Valve (Redundant)	Manufacturer White Rogers™				
Minimum Inlet Gas pressure in. w.c. (kPa)	4.5 (1.1)				
Maximum Inlet Gas pressure in. w.c. (kPa)	13.6 (3.4)				
Gas Conversion Kit – Natural to Propane	NAHA00901LP				
Gas Conversion Kit – Propane to Natural	NAHA00901NG				
Manufactured (Mobile) Home Kit	NAHA00101MH				
Ignition Device	Silicon Nitride				
Limit Control	165	165	180	170	200
Heating Blower Control (Heating Off–Delay)	Adjustable: 90, 120, 150, 180 seconds				
Cooling Blower Control (Time Delay Relay)	90 seconds				
Thermostat Connections	R, W, Y, G, C				
Accessory Connections	EAC (115vac); HUM (24vac)				

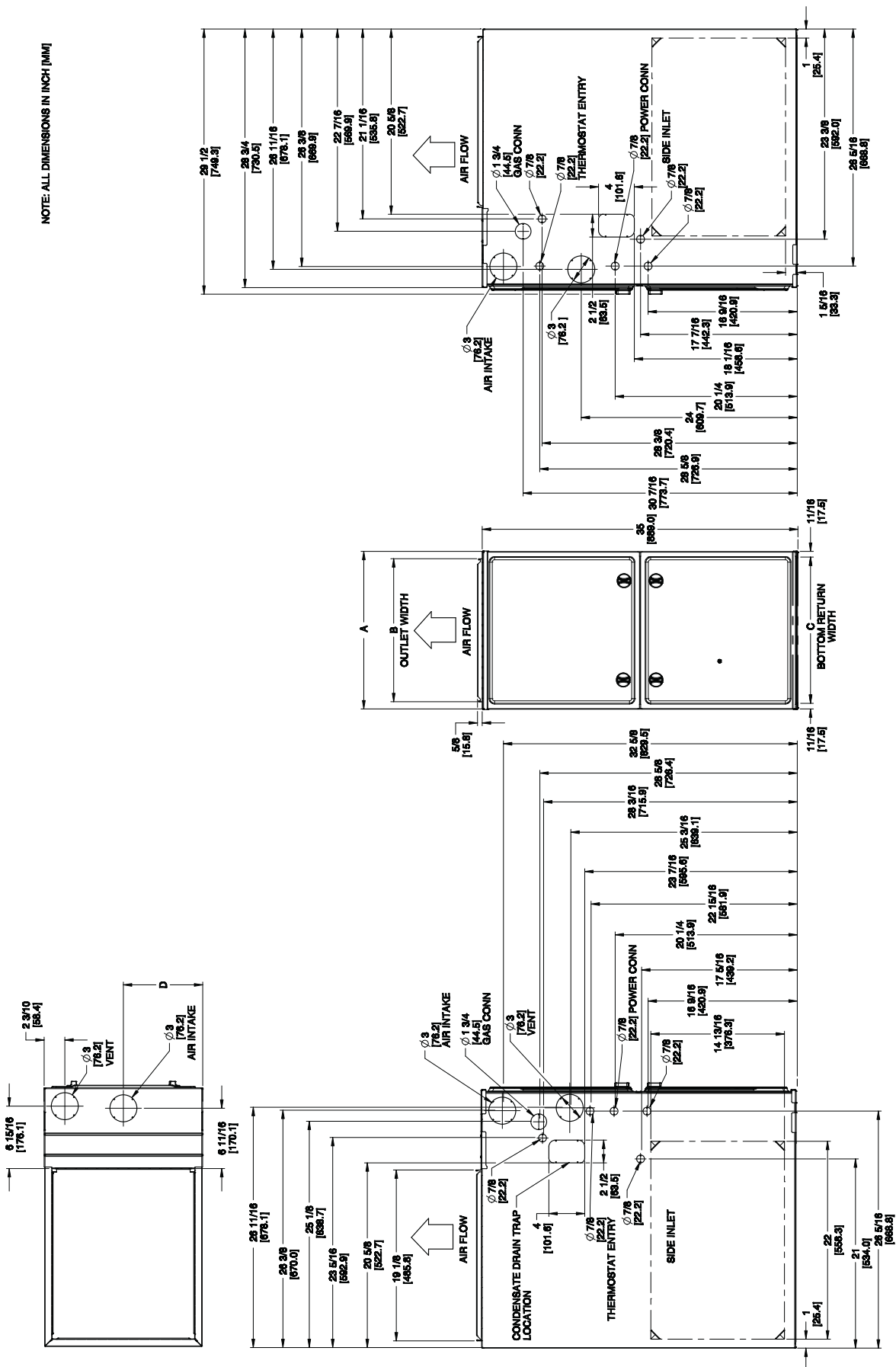
UNIT SIZE	1002114A	1002120A	1202420A	1402420A
Gas Connection Size	1/2" – NPT			
Burners (Monoport)	5	5	6	7
Gas Valve (Redundant)	Manufacturer White Rogers™			
Minimum Inlet Gas pressure in. w.c. (kPa)	4.5 (1.1)			
Maximum Inlet Gas pressure in. w.c. (kPa)	13.6 (3.4)			
Gas Conversion Kit – Natural to Propane	NAHA00901LP			
Gas Conversion Kit – Propane to Natural	NAHA00901NG			
Manufactured (Mobile) Home Kit	NAHA00101MH			N/A
Ignition Device	Silicon Nitride			
Limit Control	180	180	160	155
Heating Blower Control (Heating Off–Delay)	Adjustable: 90, 120, 150, 180 seconds			
Cooling Blower Control (Time Delay Relay)	90 seconds			
Thermostat Connections	R, W, Y, G, C			
Accessory Connections	EAC (115vac); HUM (24vac)			

ELECTRICAL DATA						
UNIT SIZE	0401410A	0601410A	0601714A	0801716A	0802120A	
Input Voltage (Volts–Hertz–Phase)	115 – 60 – 1					
Operating Voltage Range	Min–Max	104 – 127				
Maximum Input Amps	Amps	6.8	7.0	8.4	9.6	14.5
Unit Ampacity	Amps	9.5	9.7	11.5	13.0	19.1
Minimum Wire Size	AWG	14	14	14	14	12
Maximum Wire Length @ Min Wire Size	Feet (M)	39(11.9)	38(11.6)	32(9.8)	28(8.5)	30(9.1)
Maximum Fuse/Circuit Breaker (Time–Delay Type Recommended)	Amps	15	15	15	15	20
Transformer Capacity (24 vac Output)	40 VA					
External Control Power Available	Heating	27.9 VA				
	Cooling	34.6 VA				

UNIT SIZE	1002114A	1002120A	1202420A	1402420A
Input Voltage (Volts–Hertz–Phase)	115 – 60 – 1			
Operating Voltage Range	Min–Max	104 – 127		
Maximum Input Amps	Amps	7.6	14.6	14.9
Unit Ampacity	Amps	10.4	19.2	19.6
Minimum Wire Size	AWG	14	12	12
Maximum Wire Length @ Min Wire Size	Feet (M)	35(10.7)	29(8.8)	29(8.8)
Maximum Fuse/Circuit Breaker (Time–Delay Type Recommended)	Amps	15	20	20
Transformer Capacity	24 vac Output / 40 VA			
External Control Power Available	Heating	27.9 VA		
	Cooling	34.6 VA		

UNIT DIMENSIONS

NOTE: ALL DIMENSIONS IN INCH [MM]



FURNACE SIZE	A	B	C	D	SHIP WT. LB (KG)
	CABINET WIDTH	OUTLET WIDTH	BOTTOM INLET WIDTH	AIR INTAKE	
0401410	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	123 (55)
0601410	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	127 (57)
0601714	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	144 (65)
0801716	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	154 (69)
0802120	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	162 (73)
1002114	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	169 (76)
1002120	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	169 (76)
1202420	24-1/2 (622)	22-7/8 (581)	23 (584)	12-1/4 (311)	186 (84)
1402420	24-1/2 (622)	22-7/8 (581)	23 (584)	12-1/4 (311)	190 (86)

NOTE:

1. Doors may vary by model.
2. Recommended air duct dimensions and configurations:
 - a. For 800 CFM 16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
 - b. For 1200 CFM 20-in. (508mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
 - c. For 1600 CFM 22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560 mm) rectangle.
 - d. For airflow requirements above 1800 CFM, see Air Delivery table in Installation Instructions for specific use of single side inlets. The use of both side inlets, a combination of 1 side and the bottom, or the bottom only return air openings may be required for airflow requirements above 1800 CFM at 0.5 in. w.c. ESP

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR ALL UNITS	
POSITION	CLEARANCE In(mm)
REAR	0
FRONT (Combustion air openings in furnace and in structure)	1 (25)
Required for service	24 (610)
All Sides of Supply Plenum	1 (25)
Sides	0
Vent	0
Top of Furnace	1 (25)

AIR DELIVERY – CFM (with filter)												
UNIT SIZE	RETURN-AIR CONNECTION	SPEED TAPS ²	EXTERNAL STATIC PRESSURE (IN.W.C.)									
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0401410	SIDE/BOTTOM	Black	1100	1055	1010	960	905	850	795	740	685	620
		Yellow	955	915	875	830	790	740	695	645	590	530
		Blue	820	795	765	730	695	655	615	570	515	460
		Red	730	710	680	655	625	595	555	515	465	400
0601410	SIDE/BOTTOM	Black	1340	1295	1245	1190	1130	1065	1005	895	815	725
		Yellow	1035	1010	980	945	910	865	795	730	665	605
		Blue	845	825	810	785	755	710	670	625	570	515
		Red ⁵	770	750	730	710	675	640	600	560	510	455
0601714	SIDE/BOTTOM	Black	1665	1615	1550	1485	1420	1345	1270	1190	1105	985
		Yellow	1340	1320	1295	1260	1215	1165	1110	1045	925	850
		Orange	1050	1045	1035	1015	995	960	915	845	785	725
		Blue	985	980	975	950	930	900	845	795	740	690
		Red ⁵	735	720	700	675	650	620	595	560	520	480
0801716	SIDE/BOTTOM	Black	1870	1810	1740	1670	1600	1525	1440	1355	1270	1180
		Yellow	1525	1495	1460	1415	1365	1305	1240	1170	1090	990
		Orange	1375	1355	1330	1300	1260	1210	1155	1090	1025	940
		Blue	1045	1040	1030	1010	985	960	920	875	825	745
		Red ⁵	880	865	850	835	810	785	750	715	665	605
0802120	BOTTOM or TWO-SIDES ^{3,4}	Black	2390	2320	2230	2125	2025	1920	1825	1720	1600	1475
		Yellow	2010	1970	1925	1875	1805	1730	1655	1560	1460	1350
		Orange	1670	1660	1650	1620	1585	1550	1485	1410	1330	1225
		Blue	1500	1500	1495	1485	1460	1425	1380	1320	1255	1165
		Red	1270	1260	1255	1245	1225	1195	1160	1125	1065	1000
1002114	SIDE/BOTTOM	Black	1780	1735	1685	1625	1565	1495	1415	1325	1240	1145
		Blue	1605	1565	1520	1465	1410	1340	1265	1190	1110	1020
		Yellow	1345	1310	1270	1225	1175	1120	1060	995	920	835
		Orange ⁵	1130	1090	1045	1000	945	895	840	775	715	635
		Red ⁵	900	855	800	750	695	640	590	525	470	405
1002120	BOTTOM or TWO-SIDES ^{3,4}	Black	2510	2420	2330	2240	2145	2040	1920	1805	1675	1520
		Yellow	2030	2010	1970	1925	1870	1805	1725	1630	1525	1400
		Orange	1655	1660	1650	1635	1615	1575	1520	1450	1360	1270
		Blue	1520	1520	1520	1520	1500	1475	1430	1360	1290	1200
		Red	1265	1255	1250	1240	1225	1205	1175	1135	1085	1025
1202420	BOTTOM or TWO-SIDES ^{3,4}	Black	2470	2375	2280	2175	2065	1940	1820	1695	1580	1475
		Blue	2275	2210	2125	2045	1945	1835	1715	1605	1500	1395
		Yellow	1690	1685	1670	1640	1590	1525	1455	1385	1295	1210
		Orange ⁵	1460	1465	1450	1430	1400	1355	1315	1255	1185	1105
		Red ⁵	1310	1300	1290	1265	1245	1210	1165	1120	1060	985
1402420	BOTTOM or TWO-SIDES ^{3,4}	Black	2485	2395	2300	2200	2100	1985	1865	1750	1635	1520
		Blue	2260	2190	2110	2020	1925	1825	1700	1600	1495	1385
		Yellow ⁵	1660	1650	1635	1615	1580	1530	1475	1410	1320	1230
		Orange ⁵	1430	1445	1440	1420	1390	1355	1310	1245	1175	1085
		Red ⁵	1285	1285	1260	1255	1230	1205	1165	1115	1055	975

NOTE:

1. A filter is required for each return-air inlet. Airflow performance includes a 3/4 in. (19 mm) washable filter media such as contained in factory-authorized accessory filter rack. See accessory list. To determine airflow performance without this filter, assume an additional 0.1 in. W.C. available external static pressure.
2. Blower speed taps are not always in the same order. Factory Default blower connections are as follows:
 Heating airflow – BLUE (also used for Continuous Fan)
 Cooling airflow – BLACK (enabled when the Y terminal is energized)
ADJUST THE BLOWER SPEED TAPS AS NECESSARY FOR THE PROPER AIR TEMPERATURE RISE FOR EACH INSTALLATION.
3. Airflows over 1800 CFM require bottom return, two-side return, or bottom and side return. A minimum filter size of 20" x 25" is required.
4. For upflow applications, air entering from one side into both the side of the furnace and a return air base counts as a side and bottom return.
5. Highlighted areas indicate that this airflow range is beyond the range allowed for heating. **THESE AIRFLOW RANGES MAY ONLY BE USED FOR COOLING.**

ACCESSORIES

PART NUMBER	COMPONENT NAME	DESCRIPTION	0401410	0601410	0601714	0801716	0802120	1002114	1002120	1202420	1402420
NAHA00101VC	VENT KIT	THROUGH CABINET	X	X	X	X	X	X	X	X	X
NAHA002CV	VENT TERM KIT	CONCENTRIC VENT 2"	X	X	X	X	X	X	X		
NAHA001CV		CONCENTRIC VENT 3"			X	X	X	X	X	X	X
NAHA00110DA	DRAIN ACCESSORY	1/2 INCH CPVC TO 3/4 INCH PVC (10 PACK)	X	X	X	X	X	X	X	X	X
NAHA00101HV	HORIZONTAL INSTALLATION KIT	TRAP GROMMET (DIRECT VENT APPLICATION ONLY)	X	X	X	X	X	X	X	X	X
NAHA00101HH	FREEZE PROTECT KIT	CONDENSATE DRAIN LINE - TAPE	X	X	X	X	X	X	X	X	X
NAHA01101SB	FLOOR BASE KIT	COMBUSTIBLE FLOOR	X	X	X	X	X	X	X	X	X
NAHA00901LP*	GAS CONVERSION KIT	NATURAL TO PROPANE	X	X	X	X	X	X	X	X	X
NAHA00901NG*		PROPANE TO NATURAL	X	X	X	X	X	X	X	X	X
NAHA00101MH*	MANUFACTURED HOME KIT	GAS CONVERSION KIT	X	X	X	X	X	X	X	X	
NAHA00701WK	TWINNING KIT	OPERATION OF TWO IDENTICAL SIZE MODEL FURNACES		X	X	X	X	X	X	X	
NAHA00506FB†	WASHABLE FILTER PACK	WASHABLE FILTER, 1 INCH 16 X 25 (6 PACK)	X	X	X	X					
NAHA00706FB		WASHABLE FILTER, 1 INCH 24 X 25 (6 PACK)					X	X	X	X	X
NAHB00501FF	EXTERNAL BOTTOM FILTER RACK	14 X 25 INCH WASHABLE FILTER INCLUDED	X	X							
NAHB00601FF		17.5 X 25 INCH WASHABLE FILTER INCLUDED			X	X					
NAHB00701FF		21 X 25 INCH WASHABLE FILTER INCLUDED					X	X	X		
NAHB00801FF		24.5 X 25 INCH WASHABLE FILTER INCLUDED								X	X
NAHA00901FF		ADJUSTABLE SIDE OR BOTTOM FILTER RACK	1 INCH WASHABLE FILTER INCLUDED	X	X	X	X	X	X	X	X

COMING IN 2Q2012

NAHA00201HH	FREEZE PROTECT KIT	HEAT PATCH FOR DRAIN TRAP	X	X	X	X	X	X	X	X	X
NAHB00101CA	COIL ADAPTER KIT	WITH NO OFFSET	X	X	X	X	X	X	X	X	X
NAHB00201CA		WITH SINGLE OFFSET	X	X	X	X	X	X	X	X	X
NAHB00301CA		WITH DOUBLE OFFSET	X	X	X	X	X	X	X	X	X
NAHA01401RA	RETURN AIR KIT	14-3/16" WIDE	X	X							
NAHA01701RA		17-1/2" WIDE			X	X					
NAHA02101RA		21" WIDE					X	X	X		
NAHA02401RA		24-1/2" WIDE								X	X

X Accessory available
 † Suitable for side return filter rack and 17 inch external bottom filter rack.
 * Factory authorized and field installed. Gas conversion kits are CSA recognized.

Part Number	Gas Type	Orifice Size
1185612	Natural	42
1176928	Natural	43
1185574	Natural	44
1177213	Natural	45

Part Number	Gas Type	Orifice Size
1183809	Natural	46
1185613	Natural	47
1185614	Natural	48

Part Number	Gas Type	Orifice Size
1184256	Propane	54
1185615	Propane	55
1185616	Propane	56
1185617	Propane	1.25 mm
1185618	Propane	1.30 mm