

N96VSN

Up to 96% AFUE, Single-Stage, Variable Speed
Non-Communicating, 4-Way Multipoise
35-in. (889 mm) Tall Condensing Gas Furnace



Product Data



A200105

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, manufactured (mobile) homes or outdoors.

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.



ISO 9001
Quality

A200326

EASIER TO SELL

- Up to 96.0% AFUE in upflow and horizontal positions 95% AFUE in downflow position

- Variable-speed, Constant -Torque ECM blower motor for extra SEER boost with select cooling equipment
- Supports single- and two-stage cooling units
- Dehumidification feature in cooling
- All size can be installed in California air quality management districts with a 40 ng/J NOx emission limit.
- Cabinet air leakage less than 2.0% at 1.0 in. W.C. and cabinet air leakage less than 1.4% at 0.5 in. W.C. when tested in accordance with ASHRAE standard 193

TOUGHER

- Flame roll-out sensor standard
- Adjustable heating blower OFF delay
- Factory set blower ON delay
- RPJ® primary heat exchanger
- Stainless steel secondary heat exchanger
- High temperature limit control designed to prevent overheating
- Direct ignition with Silicon Nitride ignitor

QUIETER

- Variable speed, constant airflow ECM blower motor
- Fully insulated 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
- Quarter turn 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
- Twelve different venting configurations
- Twinning capable with accessory kit on select models
- Through the casing flue pipe for counterflow or horizontal applications with accessory (order separately)
- Concentric vent available
- Slide out heat exchanger assembly and blower assembly

LIMITED WARRANTY*

- Lifetime heat exchanger limited warranty with timely registration
 - 5 year parts limited warranty
 - With timely registration, an additional 5 year parts limited warranty
- * For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

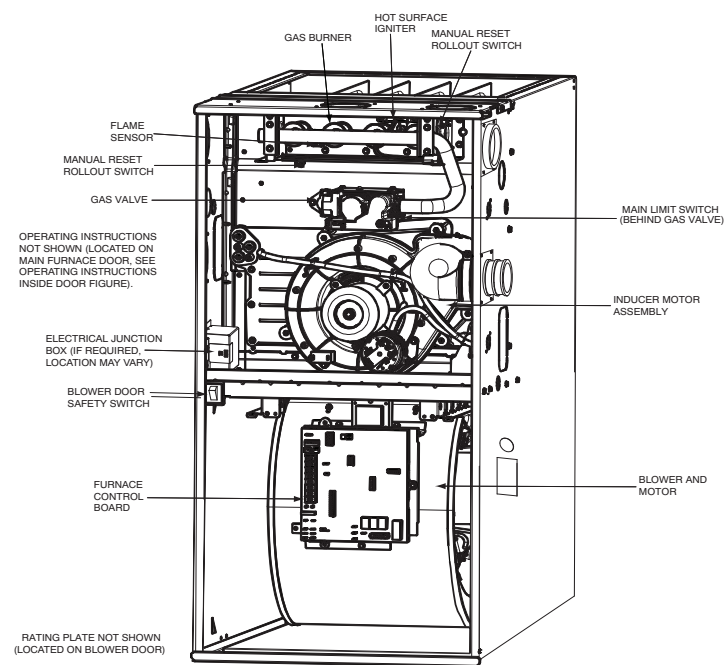
FURNACE SIZE	CASING DIMENSIONS (IN.)			RATED HEATING OUTPUT (BTUH)*	AFUE		ENERGY STAR	HEATING AIRFLOW		COOLING CFM @ 0.5 ESP (in. W.C.)	MOTOR HP
	H	D	W		UPFLOW/ HZ	DOWN-FLOW		CFM Heating	Heating ESP (in. W.C.)		
N96VSN0401410	35	29.50	14.20	39,000	96.0%	95.0%	YES	785	0.10	1030	1/2
N96VSN0401712	35	29.50	17.50	39,000	96.0%	95.0%	YES	740	0.10	1105	1/2
N96VSN0601412	35	29.50	14.20	58,000	95.0%	95.0%	YES	970	0.12	1115	1/2
N96VSN0601714	35	29.50	17.50	58,000	96.0%	95.0%	YES	1080	0.12	1555	3/4
N96VSN0801716	35	29.50	17.50	78,000	96.0%	95.0%	YES	1355	0.12	1655	3/4
N96VSN0802120	35	29.50	21.00	78,000	96.0%	95.0%	YES	1485	0.12	2090	1
N96VSN1002120	35	29.50	21.00	97,000	96.0%	95.0%	YES	1810	0.15	2160	1
N96VSN1202422	35	29.50	24.00	116,000	96.0%	95.0%	YES	2035	0.20	2250	1

* Capacity in accordance with DOE test procedures. Ratings are position dependent. See rating plate.
ESP - External Static Pressure

MODEL NUMBER NOMENCLATURE

DIGIT POSITION	1	2,3	4	5	6	7-9	10,11	12,13	14	15
F, G, N, R	F, G, N, R									
80 - 80% AFUE	80 - 80% AFUE 92 - 92% AFUE 95 - 95% AFUE 96 - 96% AFUE 97 - 97% AFUE									
92 - 92% AFUE										
95 - 95% AFUE										
96 - 96% AFUE										
97 - 97% AFUE										
C = Constant Airflow Variable-Speed ECM										
E = Fixed-Speeds, Constant Torque (FCT) ECM										
P = PSC										
V = Variable Speed, Constant Torque (VCT) ECM										
M - Modulating										
S - Single Stage										
T - Two Stage										
L = Low NOx										
M = Mobile/Manufactured Home										
N = Standard NOx										
U = Ultra Low NOx										
026 = 26,000 BTU/h										
040 = 40,000 BTU/h										
045 = 45,000 BTU/h										
.....										
155 = 155,000 BTU/h										
14 = 14.2"										
17 = 17.5"										
21 = 21.0"										
24 = 24.5"										
08 = 800 CFM										
10 = 1000 CFM										
12 = 1200 CFM										
14 = 1400 CFM										
16 = 1600 CFM										
20 = 2000 CFM										
22 = 2200 CFM										
A, B, C...										
1, 2, 3...										

FURNACE COMPONENTS



SPECIFICATIONS

Heating Capacity and Efficiency		0401410	0401712	0601412	0601714	0801716	0802120	1002120	1202422
Input	Heat (BTUH)	40,000	40,000	60,000	60,000	80,000	80,000	100,000	120,000
Output	Heat (BTUH)	39,000	39,000	58,000	58,000	78,000	78,000	97,000	117,000
Certified Temperature Rise Range °F (°C)	Heating	40 - 70 (22 - 39)	40 - 70 (22 - 39)	45 - 75 (25 - 42)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)	40 - 70 (22 - 39)
Airflow Capacity and Blower Data									
Rated External Static Pressure (in. w.c.)	Heating	0.10	0.10	0.12	0.12	0.12	0.12	0.15	0.20
	Cooling	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Airflow Delivery @ Rated ESP (CFM)	Heating	785	740	970	1080	1355	1485	1810	2035
	Cooling	1030	1105	1115	1555	1655	2090	2160	2250
Cooling Capacity (tons) @ 400, 350 CFM/ton	400 CFM/ton	2	2.5	2.5	3.5	4	5	5	5
	350 CFM/ton	2.5	3	3	4	4.5	5.5	5.5	6
Direct-Drive Motor Type		Electronically Commutated Motor (ECM)							
Direct-Drive Motor HP		1/2	1/2	1/2	3/4	3/4	1	1	1
Motor Full Load Amps Default		6.3	6.5	6.3	9.6	9.2	12.0	11.7	11.7
RPM Range		600 - 2000	400 - 1200	600 - 2000	400 - 1200	400 - 1200	400 - 1300	400 - 1200	400 - 1200
Blower Wheel Dia x Width	in.	11 x 7	11 x 8	11 x 7	11 x 8	11 x 8	11 x 10	11 x 10	11 x 11
Air Filtration System		Field Supplied Filter							
Filter Used for Certified Watt Data		325531-40*							
Electrical Data									
Input Voltage	Volts-Hertz-Phase	115-60-1							
Operating Voltage Range	Min-Max	104-127							
Maximum Input Amps Default	Amps	7.0	7.2	7.1	10.4	10.0	12.8	12.6	12.6
Unit Ampacity Default	Amps	9.7	10	9.8	13.9	13.4	16.9	16.7	16.7
Minimum Wire Size Default	AWG	14	14	14	14	14	12	12	12
Maximum Wire Length @ Minimum Wire Size Default	Feet	38	37	38	26	27	34	34	34
	(M)	(11.7)	(11.4)	(11.5)	(8.1)	(8.4)	(10.3)	(10.5)	(10.5)
Maximum Fuse/Ckt Bkr (Time-Delay Type Recommended)Default	Amps	15	15	15	15	15	20	20	20
Transformer Capacity (24vac output)		VA							
External Control	Heating	24.3 VA							
Power Available	Cooling	34.6 VA							
Controls									
Gas Connection Size		1/2" - NPT							
Burners (Monoport)		2	2	3	3	4	4	5	6
Gas Valve (Redundant)	Manufacturer	White Rodgers							
Minimum Inlet Gas pressure (in. wc)		4.50							
Maximum Inlet Gas pressure (in. wc)		13.60							
Manufactured (Mobile) Home Kit		Not approved for MH use							
Ignition Device		Silicon Nitride							
Heating Blower Control (Heating Off-Delay)		Adjustable: 90, 120, 150, 180 seconds							
Cooling Blower Control (Time Delay Relay)		90 seconds							
Communication System		None							
Thermostat Connections		R, W, Y/Y2, Y1, G, Com 24V, DHUM							
Accessory Connections		EAC (115vac); HUM (24vac); 1 and 2-stg. AC (via Y/Y2 and Y1)							

*. See Accessory List for Part numbers available

ACCESSORIES

PARTNUMBER	COMPONENT NAME	DESCRIPTION	0401410	0401712	0601412	0601714	0801716	0802120	1002120	1202422
NAHB001101CT	EXTERNAL TRAP KIT	CONDENSATE TRAP	X	X	X	X	X	X	X	X
NAHA00110DA	DRAIN ACCESSORY	1/2" CPVC TO 3/4" PVC (10PACK)	X	X	X	X	X	X	X	X
NAHA002CV	VENT TERMINATION KIT	2" CONCENTRIC VENT	X	X	X	X	X	X	X	
NAHA001CV		3" CONCENTRIC VENT	X	X	X	X	X	X	X	X
NAHA00101VC	INTERNAL VENT KIT	THROUGH THE CABINET	X	X	X	X	X	X	X	X
NAHA00301VT	DIRECT VENT	2" BRACKET	X	X	X	X	X	X	X	
NAHA00401VT	TERMINATION KIT	3" BRACKET	X	X	X	X	X	X	X	X
NAHA00101CK	INLET AIR PIPE COUPLING	COUPLING FOR POLYPROPYLENE VENT SYSTEMS	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
NAHA00101HH	FREEZE PROTECT KIT	CONDENSATE DRAINLINE-TAPE	X	X	X	X	X	X	X	X
NAHA00201HH	CONDENSATE FREEZE PROTECTKIT	CONDENSATE TRAP WITH HEATPAD	X	X	X	X	X	X	X	X
NAHA01101SB	FLOOR BASE KIT	COMBUSTIBLE FLOOR	X	X	X	X	X	X	X	X
AGAGC9NPS01B	GAS CONVERSION KIT	NATURAL TO PROPANE	X	X	X	X	X	X	X	X
AGAGC9PNS01B		PROPANE TO NATURAL	X	X	X	X	X	X	X	X
1188594*	GAS VALVE TOWER PORT ADAPTER KIT	ADAPTER FOR GAS VALVE	X	X	X	X	X	X	X	X
325531-402*	WASHABLE FILTER PACK	3/4"X16"X25" WASHABLE FILTER	X	X	X	X	X			
325531-403*		3/4"X20"X25" WASHABLE FILTER						X	X	
325531-404*		3/4"X24"X25" WASHABLE FILTER								X
FHG1425-2*	EXTERNAL BOTTOM FILTER RACK	14-1/2"X25" RACK W/O FILTER	X		X					
FHG1625-2*		16"X25" RACK W/O FILTER		X		X	X			
FHG2025-2*		20"X25" RACK W/O FILTER						X	X	
FHG2424-2*		24-1/2"X24" RACK W/O FILTER								X
NAHB00101CA	COIL ADAPTER KIT	WITH NO OFF SET	X	X	X	X	X	X	X	X
NAHB00201CA		WITH SINGLE OFFSET	X	X	X	X	X	X	X	X
NAHB00301CA		WITH DOUBLE OFFSET	X	X	X	X	X	X	X	X
NAHA01701RA	RETURN AIR KIT	17-1/2" WIDE	X	X	X	X	X			
NAHA02101RA		21" WIDE						X	X	
NAHA02401RA		24-1/2" WIDE								X
AGATWNPME01B	TWINNING KIT	OPERATION OF TWO IDENTICAL SIZE MODEL FURNACES				X	X	X	X	X
NAHA00101HV	HORIZONTAL INSTALLATION KIT	TRAP GROMMET (DIRECT VENT APPLICATION ONLY)	X	X	X	X	X	X	X	X
NAHA001NK	CONDENSATE NEUTRALIZER KIT	NEUTRALIZES CONDENSATE	X	X	X	X	X	X	X	X

*. Purchased through FAST Parts

DESCRIPTION	
Gas Orifice Kit - #42 (Nat Gas)	1185612
Gas Orifice Kit - #43 (Nat Gas)	1176928
Gas Orifice Kit - #44 (Nat Gas)	1185574
Gas Orifice Kit - #45 (Nat Gas)	1177213
Gas Orifice Kit - #46 (Nat Gas)	1183809
Gas Orifice Kit - #47 (Nat Gas)	1185613
Gas Orifice Kit - #48 (Nat Gas)	1185614
Gas Orifice Kit - #54 (LP)	1184256
Gas Orifice Kit - #55 (LP)	1185615
Gas Orifice Kit - #56 (LP)	1185616
Gas Orifice Kit - 1.25mm (LP)	1185617
Gas Orifice Kit - 1.30mm (LP)	1185618

See Installation Instructions for model, altitude, and heat value usages.

AIR DELIVERY

Air Delivery - CFM (With Filter)

COOLING ⁴ AND HEATING AIR DELIVERY - CFM (Bottom Return ⁵ with Filter)													
(SW1-5 and SW4-3 set to OFF, except as indicated. See Notes 1 and 2.)													
Unit Size: 0401410	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
Cooling (SW2-8,7,6)	OFF	OFF	ON	605	565	525	485	445	See Note 4				
	OFF	ON	OFF	760	730	695	655	625	590	555	525	490	455
	OFF	ON	ON	950	925	900	870	840	810	785	760	730	705
	ON	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
	ON	OFF	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	OFF	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	Maximum Clg Airflow ²			1130	1105	1080	1055	1030	1005	980	955	930	905
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	605	565	525	485	445	See Note 4				
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	605	565	525	485	445	See Note 4				
	OFF	ON	OFF	760	730	695	655	625	590	555	525	490	455
	OFF	ON	ON	950	925	900	870	840	810	785	760	730	705
	ON	OFF	OFF	1125	1105	1080	1055	1030	1005	975	955	930	905
	ON	OFF	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	OFF	1130	1105	1080	1055	1030	1005	980	955	930	905
	ON	ON	ON	1130	1105	1080	1055	1030	1005	980	955	930	905
Cont. Fan Default:	OFF	OFF	OFF	385	335	See Note 4							
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	245	180	See Note 4							
	OFF	ON	OFF	310	245	See Note 4							
	OFF	ON	ON	385	335	See Note 4							
	ON	OFF	OFF	385	335	See Note 4							
	ON	OFF	ON	385	335	See Note 4							
	ON	ON	OFF	385	335	See Note 4							
	ON	ON	ON	385	335	See Note 4							
Heating (SW1)	Heat Airflow ³			785	750	715	685	655	625	595	560	535	505
Unit Size: 0401712	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
Cooling (SW2-8,7,6)	OFF	OFF	ON	585	540	490	445	400	See Note 4				
	OFF	ON	OFF	780	740	695	655	620	580	545	510	480	445
	OFF	ON	ON	975	945	910	870	835	805	775	740	710	680
	ON	OFF	OFF	1170	1140	1115	1085	1050	1020	985	945	890	835
	ON	OFF	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	Maximum Clg Airflow ²			1240	1210	1180	1145	1105	1060	1005	950	895	835
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	585	540	490	445	400	See Note 4				
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	585	540	490	445	400	See Note 4				
	OFF	ON	OFF	780	740	695	655	620	580	545	510	480	445
	OFF	ON	ON	975	945	910	870	835	805	775	740	710	680
	ON	OFF	OFF	1170	1140	1115	1085	1050	1020	985	945	890	835
	ON	OFF	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	OFF	1240	1210	1180	1145	1105	1060	1005	950	895	835
	ON	ON	ON	1240	1210	1180	1145	1105	1060	1005	950	895	835
Cont. Fan Default:	OFF	OFF	OFF	585	540	490	445	400	See Note 4				
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	305	235	See Note 4							
	OFF	ON	OFF	470	410	350	See Note 4						
	OFF	ON	ON	585	540	490	445	400	See Note 4				
	ON	OFF	OFF	585	540	490	445	400	See Note 4				
	ON	OFF	ON	585	540	490	445	400	See Note 4				
	ON	ON	OFF	585	540	490	445	400	See Note 4				
	ON	ON	ON	585	540	490	445	400	See Note 4				
Heating (SW1)	Heat Airflow ³			740	695	650	610	575	540	500	465	430	395

Air Delivery - CFM (With Filter) (Continued)

COOLING ⁴ AND HEATING AIR DELIVERY - CFM (Bottom Return ⁵ with Filter)														
(SW1-5 and SW4-3 set to OFF, except as indicated. See Notes 1 and 2.)														
Unit Size: 0601412		Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
Clg Default:	OFF	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935	
Cooling (SW2-8,7,6)	OFF	OFF	ON	625	585	540	See Note 4							
	OFF	ON	OFF	820	785	745	710	670	635	595	560	525	490	
	OFF	ON	ON	1000	970	935	905	875	845	815	785	755	725	
	ON	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935	
	ON	OFF	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
	ON	ON	OFF	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
	ON	ON	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
	Maximum Clg Airflow ²			1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
CF Switches	SW2-5	SW2-4	SW2-3											
Low-Clg Default:	OFF	OFF	OFF	625	585	540	See Note 4							
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	625	585	540	495	445	See Note 4					
	OFF	ON	OFF	820	785	745	710	670	635	595	560	525	490	
	OFF	ON	ON	1000	970	935	905	875	845	815	785	755	725	
	ON	OFF	OFF	1180	1150	1130	1100	1075	1045	1020	995	965	935	
	ON	OFF	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
	ON	ON	OFF	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
	ON	ON	ON	1220	1195	1170	1140	1115	1090	1065	1035	1010	985	
Cont. Fan Default:	OFF	OFF	OFF	375	315	See Note 4								
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	200	125	See Note 4								
	OFF	ON	OFF	285	215	See Note 4								
	OFF	ON	ON	375	315	See Note 4								
	ON	OFF	OFF	375	315	See Note 4								
	ON	OFF	ON	375	315	See Note 4								
	ON	ON	OFF	375	315	See Note 4								
	ON	ON	ON	375	315	See Note 4								
Heating (SW1)	Heat Airflow ³			980	950	920	890	860	825	795	765	735	705	
Unit Size: 0601714		Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
Clg Default:	OFF	OFF	OFF	1350	1315	1285	1250	1215	1180	1150	1115	1085	1050	
Cooling (SW2-8,7,6)	OFF	OFF	ON	635	575	515	See Note 4							
	OFF	ON	OFF	825	775	725	675	630	575	See Note 4				
	OFF	ON	ON	1015	975	930	890	845	805	765	720	See Note 4		
	ON	OFF	OFF	1190	1150	1115	1075	1040	1005	965	930	895	855	
	ON	OFF	ON	1350	1315	1285	1250	1215	1180	1150	1115	1085	1050	
	ON	ON	OFF	1540	1510	1480	1450	1420	1390	1360	1330	1300	1270	
	ON	ON	ON	1715	1675	1635	1595	1555	1515	1475	1435	1390	1350	
	Maximum Clg Airflow ²			1715	1675	1635	1595	1555	1515	1475	1435	1390	1350	
CF Switches	SW2-5	SW2-4	SW2-3											
Low-Clg Default:	OFF	OFF	OFF	635	575	515	See Note 4							
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	635	575	515	See Note 4							
	OFF	ON	OFF	825	775	725	675	630	575	See Note 4				
	OFF	ON	ON	1015	975	930	890	845	805	765	720	See Note 4		
	ON	OFF	OFF	1190	1150	1115	1075	1040	1005	965	930	895	855	
	ON	OFF	ON	1350	1315	1285	1250	1215	1180	1150	1115	1085	1050	
	ON	ON	OFF	1540	1510	1480	1450	1420	1390	1360	1330	1300	1270	
	ON	ON	ON	1715	1675	1635	1595	1555	1515	1475	1435	1390	1350	
Cont. Fan Default:	OFF	OFF	OFF	635	575	515	See Note 4							
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	635	575	515	See Note 4							
	OFF	ON	OFF	825	775	725	675	630	575	See Note 4				
	OFF	ON	ON	1015	975	930	890	845	805	765	720	See Note 4		
	ON	OFF	OFF	1015	975	930	890	845	805	765	720	See Note 4		
	ON	OFF	ON	1015	975	930	890	845	805	765	720	See Note 4		
	ON	ON	OFF	1015	975	930	890	845	805	765	720	See Note 4		
	ON	ON	ON	1015	975	930	890	845	805	765	720	See Note 4		
Heating (SW1)	Heat Airflow ³			1090	1050	1010	970	925	885	850	815	775	735	

Air Delivery - CFM (With Filter) (Continued)

COOLING ⁴ AND HEATING AIR DELIVERY - CFM (Bottom Return ⁵ with Filter)													
(SW1-5 and SW4-3 set to OFF, except as indicated. See Notes 1 and 2.)													
Unit Size: 0801716		Clg/CF Switch settings			External Static Pressure (ESP)								
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
Cooling (SW2-8,7,6)	OFF	OFF	ON	625	555	495	See Note 4						
	OFF	ON	OFF	810	755	700	645	595	540	480	425	380	330
	OFF	ON	ON	1040	995	950	900	860	815	770	725	680	630
	ON	OFF	OFF	1215	1175	1135	1095	1055	1015	975	935	900	860
	ON	OFF	ON	1390	1355	1320	1285	1245	1210	1175	1140	1105	1070
	ON	ON	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
	ON	ON	ON	1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
	Maximum Clg Airflow ²			1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	625	555	495	See Note 4						
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	625	555	495	See Note 4						
	OFF	ON	OFF	810	755	700	645	595	540	480	425	380	330
	OFF	ON	ON	1040	995	950	900	860	815	770	725	680	630
	ON	OFF	OFF	1215	1175	1135	1095	1055	1015	975	935	900	860
	ON	OFF	ON	1390	1355	1320	1285	1245	1210	1175	1140	1105	1070
	ON	ON	OFF	1595	1560	1530	1500	1470	1440	1405	1370	1340	1290
	ON	ON	ON	1790	1760	1735	1700	1655	1610	1570	1485	1395	1295
Cont. Fan Default:	OFF	OFF	OFF	625	555	495	See Note 4						
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	465	390	300	See Note 4						
	OFF	ON	OFF	625	555	495	See Note 4						
	OFF	ON	ON	690	630	570	510	445	See Note 4				
	ON	OFF	OFF	690	630	570	510	445	See Note 4				
	ON	OFF	ON	690	630	570	510	445	See Note 4				
	ON	ON	OFF	690	630	570	510	445	See Note 4				
	ON	ON	ON	690	630	570	510	445	See Note 4				
Heating (SW1)	Heat Airflow ³			1375	1340	1300	1265	1230	1195	1155	1120	1090	1050
Unit Size: 0802120		Clg/CF Switch settings			External Static Pressure (ESP)								
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	1950	1910	1870	1835	1795	1760	1720	1680	1645	1605
Cooling (SW2-8,7,6)	OFF	OFF	ON	835	760	685	620	See Note 4					
	OFF	ON	OFF	1055	995	930	865	810	750	See Note 4			
	OFF	ON	ON	1225	1170	1115	1060	1000	945	895	840	See Note 4	
	ON	OFF	OFF	1405	1355	1305	1255	1205	1155	1105	1060	1015	965
	ON	OFF	ON	1605	1560	1515	1470	1425	1380	1335	1290	1245	1205
	ON	ON	OFF	1950	1910	1870	1835	1795	1760	1720	1680	1645	1605
	ON	ON	ON	2215	2180	2145	2110	2080	2040	1995	1945	1895	1840
	Maximum Clg Airflow ²			2295	2245	2195	2145	2090	2040	1995	1945	1895	1840
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	835	760	685	620	See Note 4					
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	690	605	See Note 4							
	OFF	ON	OFF	835	760	685	620	See Note 4					
	OFF	ON	ON	1055	995	930	865	810	750	See Note 4			
	ON	OFF	OFF	1225	1170	1115	1060	1000	945	895	840	See Note 4	
	ON	OFF	ON	1405	1355	1305	1255	1205	1155	1105	1060	1015	965
	ON	ON	OFF	1605	1560	1515	1470	1425	1380	1335	1290	1245	1205
	ON	ON	ON	1950	1910	1870	1835	1795	1760	1720	1680	1645	1605
Cont. Fan Default:	OFF	OFF	OFF	835	760	685	620	See Note 4					
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	690	605	See Note 4							
	OFF	ON	OFF	835	760	685	620	See Note 4					
	OFF	ON	ON	1055	995	930	865	810	750	See Note 4			
	ON	OFF	OFF	1225	1170	1115	1060	1000	945	895	840	See Note 4	
	ON	OFF	ON	1405	1355	1305	1255	1205	1155	1105	1060	1015	965
	ON	ON	OFF	1405	1355	1305	1255	1205	1155	1105	1060	1015	965
	ON	ON	ON	1405	1355	1305	1255	1205	1155	1105	1060	1015	965
Heating (SW1)	Heat Airflow ³			1510	1460	1415	1365	1315	1270	1220	1170	1140	1090

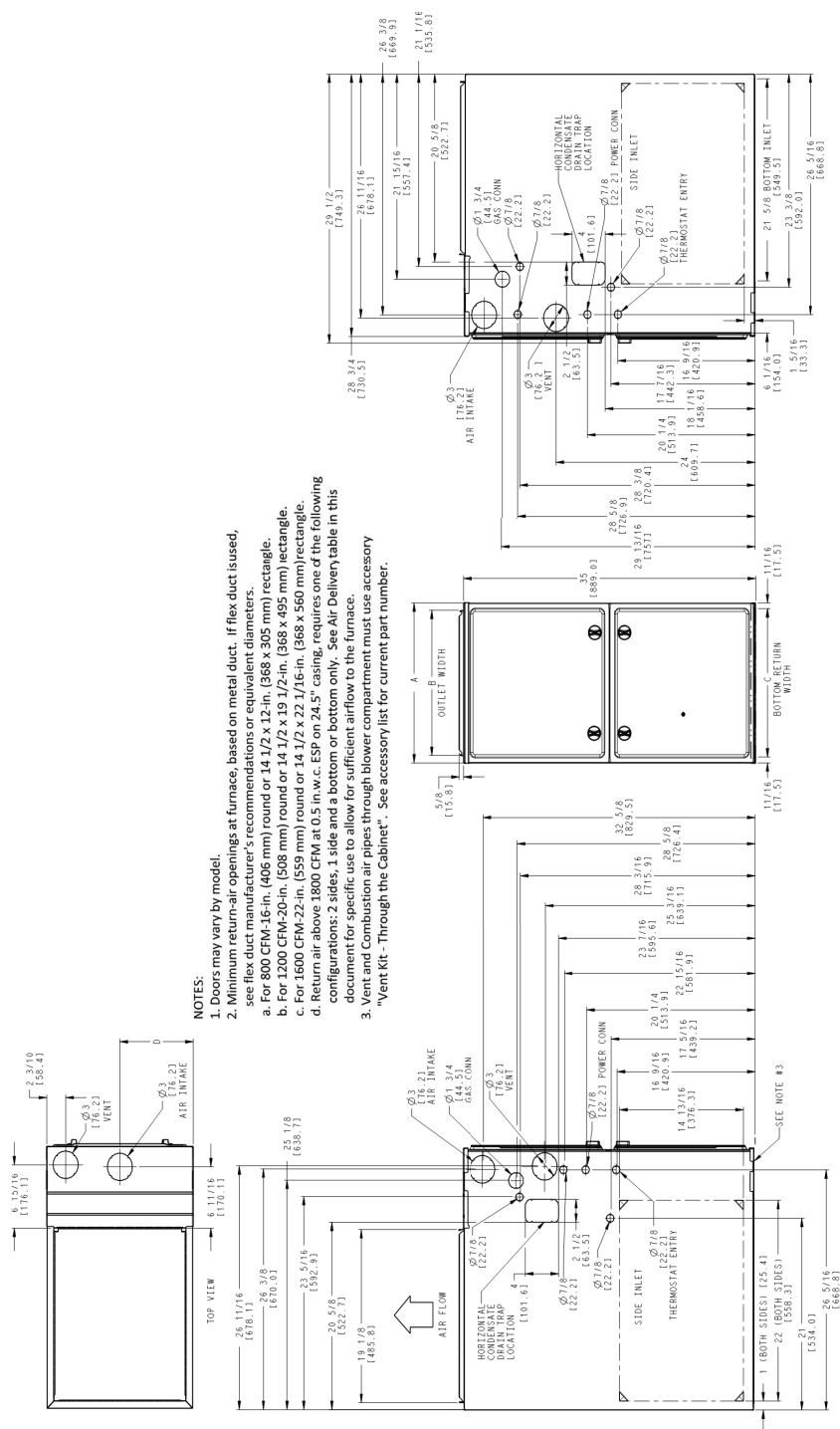
Air Delivery - CFM (With Filter) (Continued)

COOLING ⁴ AND HEATING AIR DELIVERY - CFM (Bottom Return ⁵ with Filter)													
(SW1-5 and SW4-3 set to OFF, except as indicated. See Notes 1 and 2.)													
Unit Size: 1002120	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	2015	1975	1935	1895	1855	1820	1785	1745	1705	1655
Cooling (SW2-8,7,6)	OFF	OFF	ON	840	760	675	See Note 4						
	OFF	ON	OFF	1065	1000	935	865	See Note 4					
	OFF	ON	ON	1250	1190	1135	1075	1015	See Note 4				
	ON	OFF	OFF	1435	1380	1330	1280	1230	1175	See Note 4			
	ON	OFF	ON	1640	1590	1545	1500	1455	1410	1365	1320	See Note 4	
	ON	ON	OFF	2015	1975	1935	1895	1855	1820	1785	1745	1705	1655
	ON	ON	ON	2220	2180	2145	2105	2070	2035	1995	1900	1790	1665
	Maximum Clg Airflow ²			2360	2320	2265	2215	2160	2100	2005	1905	1790	1665
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	840	760	675	See Note 4						
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	700	605	See Note 4							
	OFF	ON	OFF	840	760	675	See Note 4						
	OFF	ON	ON	1065	1000	935	865	See Note 4					
	ON	OFF	OFF	1250	1190	1135	1075	1015	See Note 4				
	ON	OFF	ON	1435	1380	1330	1280	1230	1175	See Note 4			
	ON	ON	OFF	1640	1590	1545	1500	1455	1410	1365	1320	See Note 4	
	ON	ON	ON	2015	1975	1935	1895	1855	1820	1785	1745	1705	1655
Cont. Fan Default:	OFF	OFF	OFF	840	760	675	See Note 4						
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	700	605	See Note 4							
	OFF	ON	OFF	840	760	675	See Note 4						
	OFF	ON	ON	1065	1000	935	865	See Note 4					
	ON	OFF	OFF	1065	1000	935	865	See Note 4					
	ON	OFF	ON	1065	1000	935	865	See Note 4					
	ON	ON	OFF	1065	1000	935	865	See Note 4					
	ON	ON	ON	1065	1000	935	865	See Note 4					
Heating (SW1)	Heat Airflow ³			1855	1810	1765	1720	1680	1640	1595	1555	1515	1470
Unit Size: 1202422	Clg/CF Switch settings			External Static Pressure (ESP)									
Clg Switches:	SW2-8	SW2-7	SW2-6	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Clg Default:	OFF	OFF	OFF	2025	1975	1925	1875	1830	1780	1730	1675	1630	1585
Cooling (SW2-8,7,6)	OFF	OFF	ON	920	830	See Note 4							
	OFF	ON	OFF	1125	1050	970	890	See Note 4					
	OFF	ON	ON	1275	1205	1130	1060	995	See Note 4				
	ON	OFF	OFF	1470	1410	1345	1280	1220	1160	See Note 4			
	ON	OFF	ON	1670	1610	1555	1500	1440	1380	1330	See Note 4		
	ON	ON	OFF	2025	1975	1925	1875	1830	1780	1730	1675	See Note 4	
	ON	ON	ON	2255	2210	2160	2120	2075	2030	1985	1940	1825	1685
	Maximum Clg Airflow ²			2455	2410	2370	2315	2250	2190	2115	1985	1830	1685
CF Switches	SW2-5	SW2-4	SW2-3										
Low-Clg Default:	OFF	OFF	OFF	920	830	See Note 4							
Low-Cooling (SW2-5,4,3)	OFF	OFF	ON	770	665	See Note 4							
	OFF	ON	OFF	920	830	See Note 4							
	OFF	ON	ON	1125	1050	970	890	See Note 4					
	ON	OFF	OFF	1275	1205	1130	1060	995	See Note 4				
	ON	OFF	ON	1470	1410	1345	1280	1220	1160	See Note 4			
	ON	ON	OFF	1670	1610	1555	1500	1440	1380	1330	See Note 4		
	ON	ON	ON	2025	1975	1925	1875	1830	1780	1730	1675	See Note 4	
Cont. Fan Default:	OFF	OFF	OFF	920	830	See Note 4							
Continuous Fan (SW2-5,4,3)	OFF	OFF	ON	770	665	See Note 4							
	OFF	ON	OFF	920	830	See Note 4							
	OFF	ON	ON	1125	1050	970	890	See Note 4					
	ON	OFF	OFF	1125	1050	970	890	See Note 4					
	ON	OFF	ON	1125	1050	970	890	See Note 4					
	ON	ON	OFF	1125	1050	970	890	See Note 4					
	ON	ON	ON	1125	1050	970	890	See Note 4					
Heating (SW1)	Heat Airflow ³			2085	2035	1985	1940	1890	1845	1795	1750	1700	1660

NOTES for Cooling and Heating Air Delivery - CFM (Bottom Return with Filter)

- Nominal 350 CFM/ton cooling airflow is delivered with SW1-5 and SW4-3 set to OFF.
Set both SW1-5 ON for nominal 400 CFM/ton (+15% airflow).
Set SW4-3 to ON for nominal 325 CFM/ton (-7%).
Set SW1-5 to OFF and SW4-3 to ON for nominal 370 CFM/ton (+7% airflow)
The above adjustments in airflow are subject to motor horsepower range/capacity
This applies to Cooling and Low-Cooling airflow, but does not affect continuous fan airflow.
- Maximum cooling airflow is achieved when switches SW2-6, SW2-7, SW2-8 and SW1-5 are set to ON, and SW4-3 is set to OFF.
- All heating CFM's are when comfort/efficiency adjustment switch SW1-4 is set to OFF.
- Ductwork must be sized for high-heating CFM within the operational range of ESP. Operation within the blank areas of the chart is not recommended because high-heat operation will be above 1.0 ESP.
- All airflows on 21" (533 mm) casing size furnaces are 5% less on side-return only installations.
- Side returns for 24.5" (622 mm) casing sizes require two sides, or a side and bottom to allow sufficient airflow at the return of the furnace.
- Airflows over 1800 CFM require bottom return, two-side return, or bottom and side return or excessive watt draw may result. A minimum filter size of 20x25" (508 x 635 mm) is required.

DIMENSIONAL DRAWING



NOTES:

- Doors may vary by model.
- Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations or equivalent diameters.
 - For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
 - For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
 - For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560 mm) rectangle.
- Return air above 1800 CFM at 0.5 in.w.c. ESP on 24.5" casing, requires one of the following configurations: 2 sides, 1 side and a bottom or bottom only. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.
- Vent and Combustion air pipes through blower compartment must use accessory "Vent Kit - Through the Cabinet". See accessory list for current part number.

U.S. ECCN: Not Subject to Regulation (N.S.R.)

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 (55.8)
0401712	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	136 (61.7)
0601412	14-3/16 (361)	12-1/2 (319)	12-9/16 (322)	7-1/8 (181)	132 (59.9)
0601714	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	146 (66.2)
0801716	17-1/2 (445)	15-7/8 (403)	16 (406)	8-3/4 (222)	150 (68.0)
0802120	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	161 (73.0)
1002120	21 (533)	19-3/8 (492)	19-1/2 (495)	10-1/2 (267)	170 (77.1)
1202422	24-1/2 (622)	22-7/8 (581)	23 (584)	12-1/4 (311)	189 (85.7)

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