

Technical Specifications



9200 SERIES (NBM/NBX)

Napoleon Single Stage, Multi Speed,
Condensing Multi Position Gas Furnace

Up to 94.0% AFUE Certified through AHRI
Input 30,000 - 120,000 Btuh



The 9200 Series High Efficiency Gas Furnace may be installed in three positions, alcove or closet installations that require zero clearance.

Certified by CSA for application in Canada and the United States.

FEATURES and BENEFITS

- Furnace is less than 33" (838 mm) tall!
- Multi Speed Blower Motor; PSC (NBM), Endura Pro (NBX)
- T140 Aluminized Wrinkle Bent Primary Heat Exchanger Tubes
- 29-4C Stainless Steel Heat Recovery Coil
- Aluminized Multi-Port In-Shot Burners
- Self Diagnostic Integrated Furnace Control
- Acoustically, and thermally Insulated Cabinet
- Zero clearance in all positions
- Direct and Single Vent installation approved
- One LP Conversion Kit
- Certified to 4500 ft (1372 m) in Canada
- 100% Units factory fired
- Internal Condensate Trap
- Clear Front Manifold Cover
- Easy Blower removal
- Sealed Vestibule and Blower Compartments for quiet operation
- Concentric Venting Approved

WARRANTY

PRESIDENT'S LIMITED WARRANTY (Registered)

To the original registered owner and his or her spouse ("owner"), the **HEAT EXCHANGER*** is warranted for **20 YEARS in the home** which the unit was originally installed, and **all remaining parts** as warranted for a period of **10 YEARS**, except as provided below. These warranties apply only if:

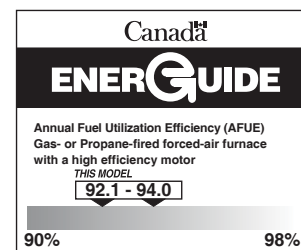
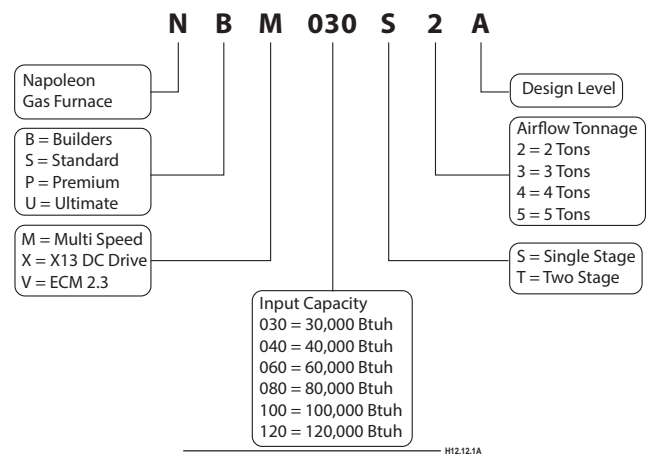
- The unit is installed in an owner-occupied, primary single family residence, and
- The unit is properly registered with Napoleon online within 60 days after the original installation. To register, go to www.napoleonheatingandcooling.com. Some states and provinces do not allow limitations on how long an implied limited warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary by jurisdiction.

OR

LIMITED WARRANTY (Not Registered)

If not registered within 60 days, the **HEAT EXCHANGER** is warranted for a period of **20 YEARS** (pro rated), and **all internal functional parts** are warranted for a period of **5 YEARS**, all other limitations apply.

MODEL BREAKDOWN



MODEL BREAKDOWN continued

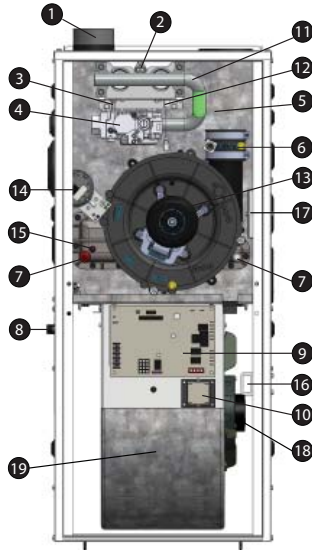
HEATING CAPACITIES

9200 SERIES	NBM/NBX 030S2A	NBM/NBX 040S2A	NBM/NBX 040S3A	NBM/NBX 060S2A	NBM/NBX 060S3A	NBM/NBX 080S3A	NBM/NBX 080S4A	NBM/NBX 100S4A	NBM/NBX 100S5A	NBM/NBX 120S5A
MOTOR	PSC / ENDURA PRO									
EFFICIENCY (AFUE)	94.0%	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%
INPUT BTU/HR 0-4500'	30,000	40,000	40,000	60,000	60,000	80,000	80,000	100,000	100,000	120,000
OUTPUT BTU/HR 0-4500'	28,200	36,800	36,800	55,200	55,200	73,600	73,600	92,000	92,000	110,400

AIRFLOW COOLING

9200 SERIES	NBM/NBX 030S2A	NBM/NBX 040S2A	NBM/NBX 040S3A	NBM/NBX 060S2A	NBM/NBX 060S3A	NBM/NBX 080S3A	NBM/NBX 080S4A	NBM/NBX 100S4A	NBM/NBX 100S5A	NBM/NBX 120S5A
MOTOR	PSC / ENDURA PRO									
BLOWER SIZE	10-6TDD	10-6TDD	10-6TDD	10-6TDD	12-7TDD	12-7TDD	12-10TDD	12-10TDD	12-10TDD	12-10TDD
MOTOR TYPE AND SIZE	1/6HP	1/6HP	1/2HP	1/2HP	1/2HP	1/2HP	1/2HP	3/4HP	3/4HP	3/4HP
MAXIMUM CFM AC	800	800	1200	800	1200	1200	1600	1600	2000	2000
MINIMUM CFM AC	600	600	800	800	800	800	1200	1200	1200	1200
AC TONNAGES	1 1/2, 2	1 1/2, 2	2, 3	2, 3	2, 3	2, 3	3, 4	3, 4	3, 4, 5	3, 4, 5

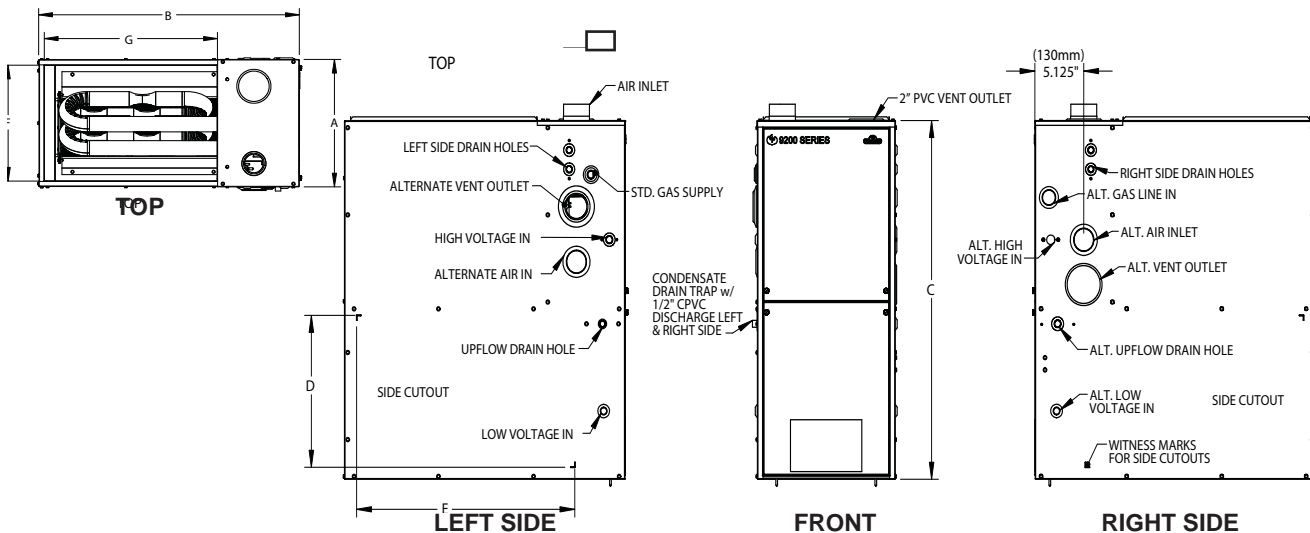
GAS FURNACE COMPONENTS



LEGEND

1. Combustion Air Intake Fitting
2. Flame Roll-Out Switch(s)
3. Flame Sensor (*opposite side of ignitor*)
4. Single Stage Gas Valve
5. High Temperature Limit (*behind gas valve*)
6. Vent Drain Assembly Coupling
7. Drain for Recovery Coil (2)
8. Condensate Trap
9. Single Stage Integrated Furnace Control (IFC)
10. Transformer for 24 VAC / 40VA
11. Burner Assembly
12. Hot Surface Igniter (HSI)
13. Single Speed Exhauster
14. Pressure Switch Assembly
15. Front Manifold Cover Pressure Tap (2)
16. Door Switch
17. Junction Box
18. Blower Motor
19. Circulating Air Blower

CABINET DIMENSIONS



CABINET DIMENSIONS continued

TABLE A - FURNACE DIMENSIONS

MODEL	INPUT K/Btu/hr	OUTPUT K/Btu/hr	Width A	Depth B	Height C	Supply Air (F x G)	Return Air (D x E)	
NB(M)(X)030S2A	30	28	14 1/2" (356 mm)	29 1/2" (737 mm)	32 7/8" (835 mm)	13 1/4" X 19 5/8" (337 mm x 499 mm)	14" x 23" (356 mm x 584 mm)	
NB(M)(X)040S2A	40	37	17 1/2" (445 mm)			16 1/4" X 19 5/8" (413 mm x 499 mm)		
NB(M)(X)040S3A	40		14 1/2" (356 mm)			13 1/4" X 19 5/8" (337 mm x 499 mm)		
NB(M)(X)060S2A	60	55	17 1/2" (445 mm)			16 1/4" X 19 5/8" (413 mm x 499 mm)		
NB(M)(X)060S3A	60	74	21" (533 mm)			19 3/4" X 19 5/8" (502 mm x 499 mm)		
NB(M)(X)080S3A	80		24 1/2" (622 mm)			23 1/4" X 19 5/8" (590 mm x 499 mm)		
NB(M)(X)080S4A	80	92						
NB(M)(X)100S4A	100							
NB(M)(X)100S5A	100	110						
NB(M)(X)120S5A	120							

H12.6.1A

BLOWER PERFORMANCE

TABLE 7 - AIR FLOW

INPUT	ESP 0.1" to 1.0"				ESP 0.1" to 1.0"				
	A/C TONNAGE	PSC TAP COLOUR	X13 TAP #	CFM	INPUT	A/C TONNAGE	PSC TAP COLOUR	X13 TAP #	CFM
NB(M)(X)030S2A	2 TON	BLACK	5	800	NB(M)(X)080S3A	N/A	BLACK	5	1700
		BLUE	4	700			BLUE	4	1400
	1 1/2 TON	YELLOW	3	600		3 TON	YELLOW	3	1200
		RED	*2	500		2 TON	RED	*2	800
NB(M)(X)040S2A	2 TON	BLACK	5	800	NB(M)(X)080S4A	5 TON	BLACK	5	1900
		BLUE	4	700			4 TON	BLUE	4
	1 1/2 TON	YELLOW	3	600		N/A	YELLOW	3	1400
		RED	*2	500		3 TON	RED	*2	1200
NB(M)(X)040S3A	N/A	BLACK	5	1500	NB(M)(X)100S4A	5 TON	BLACK	5	2000
		BLUE	4	1400			BLUE	4	1900
	3 TON	YELLOW	3	1200		4 TON	YELLOW	3	1600
		RED	*2	800		3 TON	RED	*2	1300
NB(M)(X)060S2A	N/A	BLACK	5	1500	NB(M)(X)100S5A	5 TON	BLACK	5	2000
		BLUE	4	1400			BLUE	4	1900
	3 TON	YELLOW	3	1200		4 TON	YELLOW	3	1600
		RED	*2	800		3 TON	RED	*2	1300
NB(M)(X)060S3A	N/A	BLACK	5	1700	NB(M)(X)120S5A	5 TON	BLACK	5	2300
		BLUE	4	1400			BLUE	4	1900
	3 TON	YELLOW	3	1200		4 TON	YELLOW	3	1600
		RED	*2	800		3 TON	RED	*2	1300

* TAP #2 IS CONTINUOUS FAN

H12.1.1A

HIGH ALTITUDE

In Canada, this furnace does not need to be converted for high altitude (2000-4500ft), when the fuel source is natural gas. It has been certified to operate at high altitude as manufactured. If the fuel source is liquid propane, refer to High Altitude Specifications table for appropriate derate above 2000ft based on a 4% reduction of input capacity for every 1000ft above sea level.

In the United States, this furnace does not need to be converted for high altitude from (2000-5400ft), when the fuel source is natural gas. It has been certified to operate at high altitude as manufactured up to 5400ft only. Beyond 5400ft the modifications are based on a 4% reduction of input capacity for every 1000ft above sea level. If the fuel source is liquid propane, refer to High Altitude Specifications table for appropriate derate above 2000ft based on a 4% reduction of input capacity for every 1000ft above sea level. Consult with local fuel suppliers or authorities to determine local regulations or customs.

H18.1B

TABLE 6 - HIGH ALTITUDE SPECIFICATIONS

Input K/Btu/hr	ALTITUDE	ORIFICE SIZE (DMS)	
		NATURAL	LP GAS
40/60/80 100/120	0-2000 (0-610 m)	45	55
	2000-3000 (610-914 m)		56
	3000-4000 (914-1219 m)		57
	4000-5000 (1219-1524 m)		58
	5000-5400 (1524-1646 m)		59
	5400-6000 (1646-1829 m)	51	60
	6000-7000 (1829-2134 m)	52	61
	7000-8000 (2134-2438 m)	53	62
	8000-9000 (2438-2743 m)	54	63
	9000-10000 (2743-3048 m)	55	65

Input K/Btu/hr	ALTITUDE	ORIFICE SIZE (DMS)	
		NATURAL	LP GAS
30	0-2000 (0-610 m)	50	57
	2000-3000 (610-914 m)		58
	3000-4000 (914-1219 m)		59
	4000-5000 (1219-1524 m)		60
	5000-5400 (1524-1646 m)		61
	5400-6000 (1646-1829 m)	56	62
	6000-7000 (1829-2134 m)	57	63
	7000-8000 (2134-2438 m)	58	64
	8000-9000 (2438-2743 m)	59	65
	9000-10000 (2743-3048 m)	60	67

Gas input ratings are certified for elevations to 5400 ft. (1646 m) on natural gas. For elevations above 5400 ft. (1646 m) on natural gas, or LP fuel source above 2000 ft. (610 m), follow orifice derate chart above.

H12.8.1A

VENTING

In Canada:

Furnace must be vented with S636 PVC or PPE

In United States:

- Schedule 40 PVC, ASTM D1785 or CSA B137.3
- PVC-DWV, ASTM D2665 or CSA B181.2
- Schedule 40 CPVC, ASTM F441 or CSA 137.6
- PVC PRIMER AND SOLVENT CEMENT: ASTM D2564
- PPE ULC S636

TABLE 4 - DIRECT AND NON-DIRECT VENT LENGTHS

Maximum Allowable Length Of Exhaust Or Intake. Minimum Vent Length 15ft. (4.6m) or equivalent.

INPUT K/Btu/hr	PIPE SIZE	NUMBER OF 90° ELBOWS							NOTES
		0	1	2	3	4	5	6	
30	1 1/2	75*	70	65	60	55	50	45	1. Count concentric vent fitting as straight pipe. 2. Use medium or long sweep elbows where possible. 3. One 90° elbow is equivalent to two 45° elbows. 4. For direct vent, the listed lengths are allowed for each vent (intake and exhaust). 5. For non-direct vent, the listed lengths are allowed for exhaust. The intake should have a 1½" or 2" snorkel intake fitting. (Figure 7)
	2	100*	95	90	85	80	75	70	
40	1 1/2	75*	70	65	60	55	50	45	
	2	100*	95	90	85	80	75	70	
60	1 1/2	75*	70	65	60	55	50	45	
	2	100*	95	90	85	80	75	70	
	3	125*	120	115	110	105	100	95	
80	2	75*	70	65	60	55	50	45	
	3	125*	120	115	110	105	100	95	
100	2	75*	70	65	60	55	50	45	
	3	125*	120	115	110	105	100	95	
120	3	125*	120	115	110	105	100	95	

NOTE * Maximum allowable vent (intake and exhaust) length. When 1½" or 3" pipe is used, exit the cabinet with 2" pipe. Reduce or increase immediately after exiting the cabinet on both intake and exhaust.

H12.4.1

EQUIVALENTS:

- Short Radius Elbow = 7 ft (2.13m)
- Standard Radius Elbow = 5 ft (1.52m)
- Long Radius Elbow = 3 ft (0.91m)
- 45 Degree Elbow = 2.5 ft (0.76m)
- Tee

Vent lengths that require more than 6-90° elbows, add listed equivalents for every elbow up to the maximum allowable vent length.

ACCESSORIES

PART #	DESCRIPTION	lbs.
NNA-NC1625-A	MEDIA AIR CLEANER (MERV11) (16" X 25")	2
W250-0009	FILTER - 3 PACK (MERV11)	1
W370-0018	CONVERSION KIT - NATURAL TO LP	1
W370-0019	CONCENTRIC VENT KIT - 2"	5
W370-0020	CONCENTRIC VENT KIT - 3"	9
W370-0026	HIGH ALTITUDE CONVERSION KIT	1
W370-0027	HORIZONTAL INSTALLATION KIT	1
W370-0028	BRIDGE INSTALLATION KIT	1
W690-0006	COMBINATION 24V/HEAT/COOL ON/OFF THERMOSTAT	1
W690-0007	COMBINATION 24V/HEAT/COOL PROGRAM. THERMOSTAT	1

REPLACEMENT PARTS

PART #	PART DESCRIPTION
W010-3491	KIT, SMALL FMC W/O CHOKES 20/30/40/60
W010-3492	KIT, MEDIUM FMC W/O CHOKES 80
W010-3493	KIT, LARGE FMC W/O CHOKES 100/120
W010-2990	ASSY, MOTOR KIT 1/6 HP PSC 30-2/40-2
W010-2602	ASSY, MOTOR KIT 1/2 HP PSC 40-3/60-2/60-3/80-3/80-4
W010-2603	ASSY, MOTOR KIT 3/4 HP PSC 100-4/100-5/120-5
W010-3574	ASSY, MOTOR KIT 1/3 HP X13 SS 30
W010-3575	ASSY, MOTOR KIT 1/3 HP X13 SS 40-2
W010-3576	ASSY, MOTOR KIT 1/2 HP X13 SS 40-3
W010-3577	ASSY, MOTOR KIT 1/3 HP X13 SS 60-2
W010-3587	ASSY, MOTOR KIT 1/2 HP X13 SS 60-3
W010-3588	ASSY, MOTOR KIT 1/2 HP X13 SS 80-3
W010-3589	ASSY, MOTOR KIT 3/4 HP X13 SS 80-4
W010-3590	ASSY, MOTOR KIT 3/4 HP X13 SS 100-4
W010-3591	ASSY, MOTOR KIT 1 HP X13 SS 100-5
W010-3592	ASSY, MOTOR KIT 1 HP X13 SS 120-5
W010-2609	EXHAUSTER, SINGLE SPEED C-FRAME
W010-2610	BLOWER, 10-6T HOUSING 30-2/40-2/40-3/60-2
W010-2559	BLOWER, 12-7T HOUSING 60-3/80-3
W010-2560	BLOWER, 12-10T HOUSING 80-4/100-4/100-5/120-5
W010-2611	CONTROL, INTEGRATED PSC SS
W010-2562	SENSOR, FLAME - REPLACEMENT
W010-2613	FUSE, 3 AMP SS
W010-2991	SWITCH, PRESSURE UNIT SINGLE
W010-2768	ASSY, CONDENSATE TRAP
W010-2564	IGNITER, 601 TYPE TB 120V
W010-2568	SWITCH, BURNER ROLLOUTS REPL 350°F
W010-2570	SWITCH, HEAT LIMIT 150°F
W010-2992	SWITCH, HEAT LIMIT 160°F
W010-2993	SWITCH, HEAT LIMIT 170°F
W010-2994	SWITCH, HEAT LIMIT 180°F
W010-2572	TRANSFORMER, 120V / 24V 40VA
W010-2614	VALVE, SINGLE STAGE SS
W020-0647	BAGGIE, REPLACEMENT PARTS



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