

80% AFUE ULTRA LOW NO_x GAS FURNACE

Multipoise Design

EcoTemp

WFEU



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ISO 9001
GMI-SAI Global



UPFLOW/DOWNFLOW/HORIZONTAL (NATURAL GAS)

Model Number	Heat Exchangers	Input (MBTUH)	Efficiency AFUE	Cooling Capacity @ .5 in wc
WFEU060B048A	20 year	60,000	80.0	4.0
WFEU080C060A	20 year	80,000	80.0	5.0

STANDARD FEATURES

- 80% AFUE
- Ultra-low NO_x emissions – 14 nanograms/joule for use in California Air Quality Management Districts requiring 14 nanograms/joule or less emissions.
- Four-position furnace: Upflow, Horizontal Right, Horizontal Left, Downflow (6 different vent options)
- Versatile venting for tight-fit applications
- ECM blower motor included
- Category I venting
- Self diagnostics
- Pilot free, hot surface ignition
- 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

LIMITED WARRANTY*

- 1 year unit replacement limited warranty
 - 20 year heat exchanger limited warranty
 - 10 year parts limited warranty with timely registration
 - 5 years parts limited warranty if not registered within 90 days of original installation
- * For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

Product Specifications

NOMENCLATURE IDENTIFICATION GUIDE

DIGIT POSITION	1, 2	3	4	5, 6, 7	8	9, 10, 11	12	13
	WF	E	U	045	A	024	A	1
WF = Gas Furnace								
A = 92% AFUE								
E = Tapped ECM (80% Models Only)								
H = High Efficiency								
M = Mid Efficiency								
S = 95% AFUE		EFFICIENCY						
L = Low NOx								
R = Regular								
U = Ultra Low NOx								
X = Tapped ECM (90%+ Models Only)				FEATURE				
026 = 26,000								
040 = 40,000								
045 = 45,000								

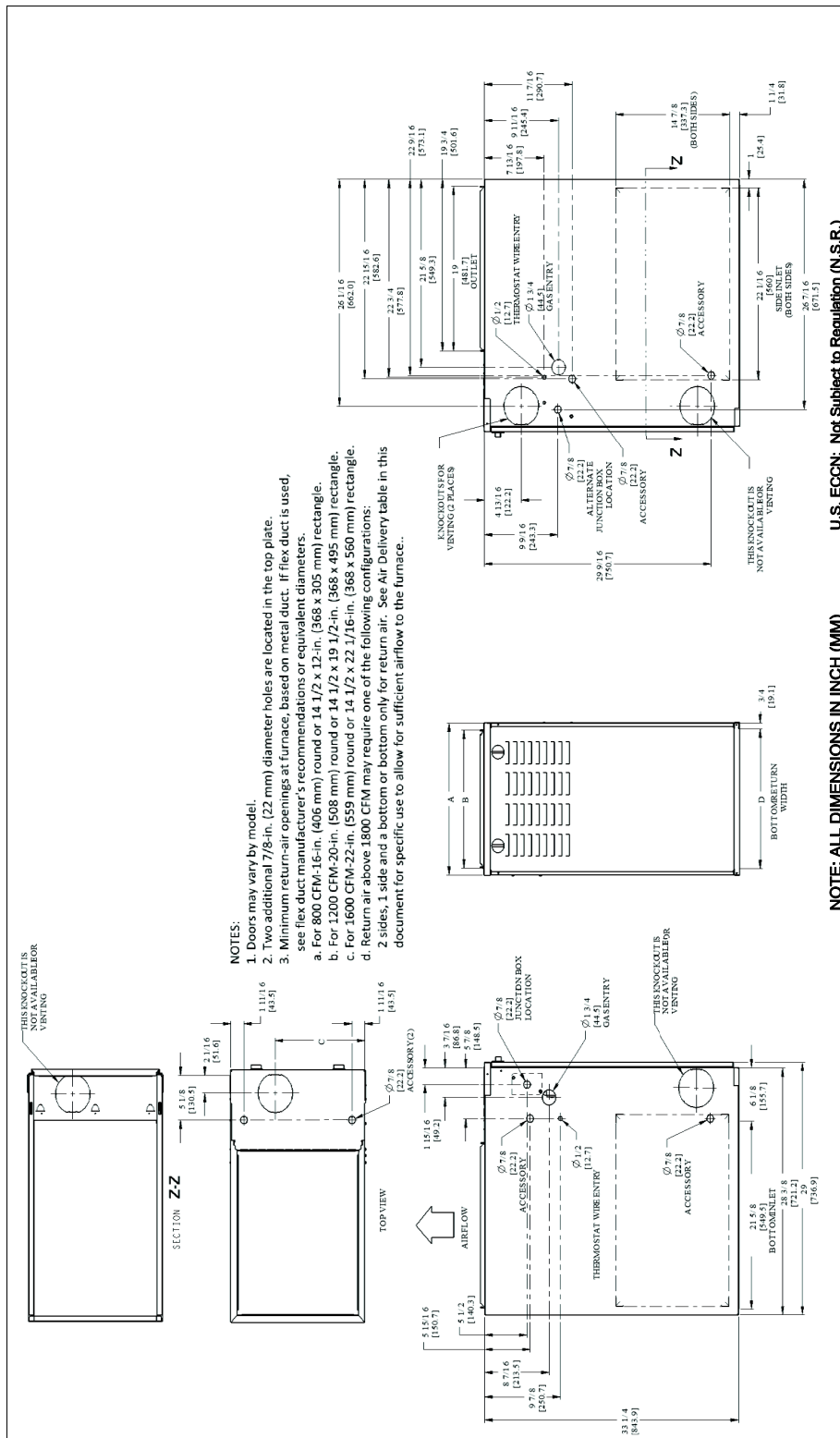
155 = 155,000				HEATING INPUT, MBTUH				
A = 14½"								
B = 17½"								
C = 21"								
D = 24½"						CABINET WIDTH, Inches		
24 = 26,000 BTU/hr, 2 Ton								
30 = 30,000 BTU/hr, 2½ Ton								
36 = 36,000 BTU/hr, 3 Ton								
48 = 48,000 BTU/hr, 4 Ton								
60 = 60,000 BTU/hr, 5 Ton								
66 = 66,000 BTU/hr, 5.5 Ton						COOLING SIZE		
SALES DIGIT								
EXTRA DIGIT								

NOTE: Standard input rate for 80% is approximately 22.5K per heat exchanger.
 Standard input rate for 90%+ is approximately 30K per heat exchanger.
 Units can developed with slight under rate or over rate to fine tune heating capacity.

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)							

UNIT DIMENSIONS



- NOTES:**
1. Doors may vary by model.
 2. Two additional 7/8-in. (22 mm) diameter holes are located in the top plate see flex duct manufacturer's recommendations or equivalent diameters.
 3. Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations or equivalent diameters.
 - a. For 800 CFM-16-in. (406 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
 - b. For 1200 CFM-20-in. (508 mm) 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. Return air above 1800 CFM may require one of the following configurations:
 - 2 sides, 1 side and a bottom or bottom only for return air. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.

NOTE: ALL DIMENSIONS IN INCH (MM)
U.S. ECCN: Not Subject to Regulation (N.S.R.)

A180207

	A CABINET WIDTH IN (MM)	B OUTLET WIDTH IN (MM)	C TOP OUTLET IN (MM)	D BOTTOM INLET WIDTH IN (MM)	VENT CONNECTION SIZE IN. (MM)	SHIP WT LB (KG)
060B048	17-1/2 (445)	15-7/8 (403)	11-9/16 (294)	16 (406)	4 (102)	126 (57)
080C060	21 (533)	19-3/8 (492)	13-5/16 (338)	19-1/2 (495)	4 (102)	140 (64)

See installation instructions for complete installation requirements.

SPECIFICATIONS

UNIT SIZE		060B048	080C060
RATINGS AND PERFORMANCE			
Input Btuh*		60,000	80,000
Output Capacity (Btuh)†		48,000	64,000
AFUE‡		80.0	80.0
Certified Temperature Rise Range – °F (°C)		30 (16) – 60 (33)	25 (14)– 55 (30)
External Static Pressure	Heating	.15	.12
	Cooling	.5	.5
Airflow CFM‡	Heating	1020	1330
	Cooling	1545	1990
ELECTRICAL			
Unit Volts–Hertz–Phase		115-60-1	
Operating Voltage Range	Min- Max	104-127	
Maximum Unit Amps		10.6	13.3
Unit Ampacity		13.9	17.3
Maximum Wire Length – Measure one way in Ft (M)		26 (8)	33 (10)
Minimum Wire Size		14	12
Maximum Fuse or Ckt Bkr Size (Amps)**		15	20
Transformer (24v)		40 VA	
External Control	Heating	12 VA	
Power Available	Cooling	35 VA	
Air Conditioning Blower Relay		Standard	
CONTROLS			
Limit Control		SPST	
Heating Blower Control		Solid–State Time Operation	
Gas Connection Size		1/2-in. NPT	
GAS CONTROLS			
Gas Valve (Redundant)	Mfr.	White Rodgers	
	Min. inlet pressure (In. W.C.)	3.5 Natural Gas	
	Max. inlet pressure (In. W.C.)	13.6 Natural Gas	
Ignition Device		Hot Surface Igniter	
Factory-installed orifice		#18	#10
BLOWER DATA			
Direct-Drive Motor HP (DTCT)		3/4	1
Motor Full Load Amps		8.8	11.5
RPM (Nominal)-Speeds		1050	1050
Blower Wheel Diameter x Width – In. (mm)		11 (279) x 8 (203)	11 (279) x 11 (279)

* Gas input ratings are certified for elevations to 2000 ft. (609.6 m).Refer to National Fuel Gas Code NFPA 54/ANSI Z223.1 Table F.4 or furnace installation instructions.

† Capacity in accordance with U.S. Government DOE test procedures.

‡ Airflow shown is for bottom only return–air supply for the as–shipped speed tap. For air delivery above 1800 CFM, see Air Delivery table for other options. A filter is required for each return air supply. An airflow reduction of up to 7% may occur when using the factory specified 4–5/16 inch (109.5 mm) wide, high efficiency media filter.

** Time delay type is recommended.

ICS Isolated Combustion System

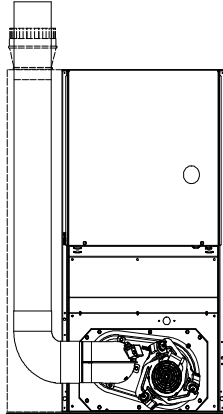
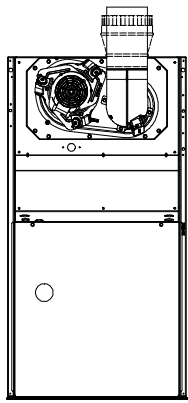
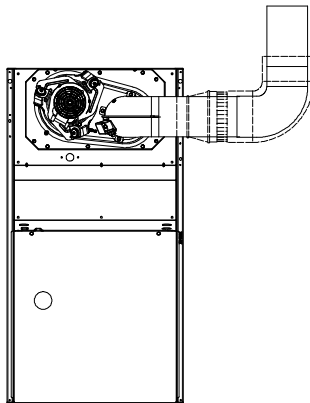
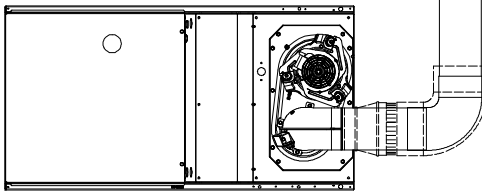
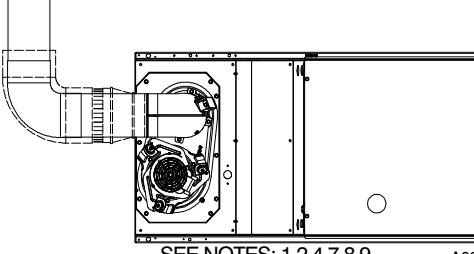
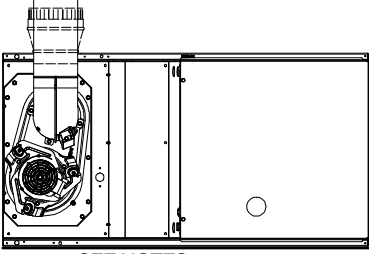
AIR DELIVERY-CFM (WITH FILTER)*

Furnace	Wire Lead Color ²	Function	Test Airflow Delivery @ Various External Static Pressures									
			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
060B048	Gray	Cooling. Do not use for heating.	1720	1680	1635	1585	1545	1505	1455	1405	1355	1305
	Yellow	Alt Cooling or alt Heating	1470	1425	1385	1335	1290	1245	1200	1160	1110	1060
	Orange	Alt Cooling or alt Heating	1305	1255	1215	1160	1115	1070	1025	975	925	870
	Blue	Heating or alt cooling	1040	940	890	835	790	740	675	620	565	525
	Red	Alt Cooling or alt Heating	1135	1090	1035	985	940	895	845	790	730	675
080C060	Gray	Cooling. Do not use for heating.	2185	2135	2085	2035	1990	1935	1880	1825	1770	1715
	Yellow	Alt Cooling or alt Heating	1885	1830	1780	1730	1675	1625	1575	1520	1470	1420
	Orange	Alt Cooling or alt Heating	1565	1500	1440	1385	1330	1275	1220	1170	1115	1055
	Blue	Heating or alt cooling	1365	1295	1230	1165	1100	1045	985	925	845	780
	Red	Alt Heating or alt cooling	1205	1045	965	895	815	745	650	595	540	480

NOTES:

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. **ADJUST THE BLOWER SPEED TAPS AS NECESSARY FOR THE PROPER AIR TEMPERATURE RISE FOR EACH INSTALLATION.**
3. Highlighted areas indicate airflow range is beyond the range allowed for heating. THESE AIRFLOW RANGES MAY ONLY BE USED FOR COOLING.

-- Indicates unstable operating conditions.

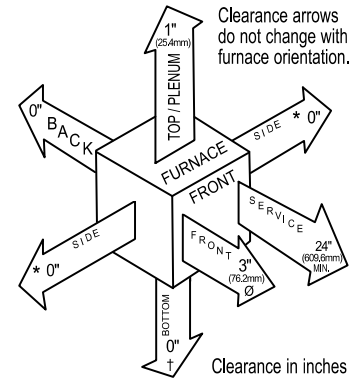
DOWNFLOW VENT CONFIGURATIONS	UPFLOW VENT CONFIGURATIONS	
 <p>SEE NOTES: 1,2,4,5,6,7,8,9 A02062</p>	 <p>SEE NOTES: 1,2,4,7,8,9 A02058</p>	 <p>SEE NOTES: 1,2,3,4,7,8,9 A02059</p>
HORIZONTAL RIGHT VENT CONFIGURATIONS	HORIZONTAL LEFT VENT CONFIGURATIONS	
 <p>SEE NOTES: 1,2,4,7,8,9 A02069</p>	 <p>SEE NOTES: 1,2,4,7,8,9 A02068</p>	 <p>SEE NOTES: 1,2,4,5,7,8,9 A02066</p>

Venting Notes

1. For common vent, vent connector sizing and vent material: United States-use the NFGC.
2. Immediately increase to 5 inch (127 mm) or 6-inch (152 mm) vent connector outside furnace casing when 5 inch (127 mm) vent connector is required, refer to Note 1 above.
3. Side outlet vent for upflow and downflow installations must use Type B vent immediately after exiting the furnace, except when Downflow Vent Guard Kit, is used in the downflow position.
4. Type-B vent where required, refer to Note 1 above.
5. 4 inch single-wall (26 ga. min.) vent must be used inside furnace casing and when the Downflow Vent Guard Kit is used external to the furnace.
6. Accessory Downflow Vent Guard Kit, required in downflow installations with lower vent configuration.
7. Secure vent connector to furnace elbow with (2) corrosion-resistant sheet metal screws, spaced approximately 180° apart.
8. Secure all other single wall vent connector joints with (3) corrosion resistant screws spaced approximately 120° apart. Secure Type-B vent connectors per vent connector manufacturer's recommendations.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR ALL UNITS

This forced air furnace is equipped for use with natural gas at altitudes 0 – 2,000 ft (0 – 610m). Refer to furnace installation manual for suitability and operation above 2,000 ft. (610m). If furnace is convertible, see rating plate for manufacturer supplied accessory kits that shall be used to convert to propane gas use. This furnace is for indoor installation in a building constructed on site. The furnace may be installed on combustible flooring in alcove or closet at minimum clearance as indicated by the diagram from combustible material. This furnace may be used with a Type B-1 Vent and may be vented in common with other gas fired appliances.



Vent Clearance to combustibles:
 For Single Wall vents 6 inches (6 po).
 For Type B-1 vent type 1 inch (1 po).

ACCESSORIES

PART NUMBER	DESCRIPTION	060B048	080C060
NAHB00601FF	External Bottom Filter Rack, 17 inch (16 x 25 inch washable filter included)	X	
NAHB00701FF	External Bottom Filter Rack, 21 inch (20 x 25 inch washable filter included)		X
NAHA00506FB	Washable filter, 1 inch 16 x 25 (6 pack)	X	
NAHA00706FB	Washable filter, 1 inch 24 x 25 (6 pack)		X
NAHA01101SB	Combustible Floor Base (Not required when evaporator coil case is used for downflow)	X	X
NAHB00301VC	Downflow Vent Guard (Not required when vent is routed through cabinet)	X	X

X Accessory available