



AMH8

MULTI-POSITION, MULTI-SPEED GAS FURNACE

80% AFUE

HEATING INPUT:
45,000 – 140,000 BTU/h

Standard Features

- MillionAir® stainless-steel, dual-diameter tubular heat exchanger with Lifetime Limited Unit Replacement Warranty* for as long as the original registered home-owner owns their home.
- Two-stage gas valve with convertible technology that allows installer to activate the two-stage valve with the flip of a dipswitch
- Silicon Nitride igniter for long igniter life
- Furnace control board with self-diagnostics, color-coded low-voltage terminals and provisions for electronic air cleaner and 24-volt humidifiers
- Control board stores the last five diagnostic codes in memory; simple push-button activation outputs the fault history to a flashing red LED
- Low constant fan allows homeowner to activate the low heat speed to efficiently circulate air throughout the home
- Self-adjusting feature automatically adjusts to high- or low-stage operation based on outside temperature without an outdoor temperature sensor
- Quiet, single-speed induced-draft blower
- All models comply with California NOx emissions standards

MILLION-AIR®
STAINLESS-STEEL
HEAT EXCHANGER



TwinComfort
PREMIUM HEATING PERFORMANCE

Cabinet Features

- Fully insulated, heavy-gauge steel cabinet with durable baked-enamel finish
- Foil-faced insulation lines the heat exchanger compartment
- Designed for multi-position installation: upflow, horizontal left or right
- Removable bottom for side or bottom return applications
- Convenient left/right connection for gas/electric service
- Coil and furnace fit flush for most installations

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* Complete warranty details available from your local dealer or at www.amana-hac.com. To receive the Lifetime Unit Replacement Limited Warranty and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec.

NOMENCLATURE

	A	M	H	8	060	3	B	*	*
	1	2	3	4	5,6,7	8	9	10	11
Brand					Revisions				
A	Amana® Brand				A Initial Release B 1st Revision C 2nd Revision				
Airflow Direction					NOx				
C	Downflow/Horizontal				N Natural Gas X Low NOx				
D	Dedicated Downflow								
H	High Airflow								
K	Dedicated Upflow								
M	Upflow/Horizontal								
Description					Cabinet Width				
V	Two-Stage/Variable-speed				A 14" B 17½" C 21" D 24½"				
H	Two-Stage/Multi-speed								
S	Single-Stage/Multi-speed								
AFUE					Maximum CFM @ 0.5" ESP				
95	95%				3 1,200				
9	90%+				4 1,600				
8	80%				5 2,000				
					MBTU/h				
					040: 45,000		100: 115,000		
					060: 70,000		120: 140,000		
					080: 90,000				



SPECIFICATIONS

	AMH8 0403A**	AMH8 0603A**	AMH8 0604B**	AMH8 0803B**	AMH8 0804B**	AMH8 0805C**	AMH8 1005C**	AMH8 1205D**
HEATING CAPACITY								
Input ¹	45,000	70,000	70,000	90,000	90,000	90,000	115,000	140,000
Natural Gas Output ¹	36,000	56,000	56,000	72,000	72,000	72,000	92,000	112,000
LP Gas Output ¹	32,000	48,000	48,000	64,000	64,000	64,000	80,000	96,000
AFUE ²	80	80	80	80	80	80	80	80
Available AC @ 0.5" ESP	3	3	4	3	4	5	5	5
Temperature Rise Range (°F)	25 - 55	25 - 55	20 - 50	30 - 60	35 - 65	35 - 65	35 - 65	40 - 70
CIRCULATOR BLOWER								
Size (D x W)	10" x 6"	10" x 6"	10" x 8"	10" x 8"	10" x 8"	10" x 10"	10" x 10"	11" x 10"
Horsepower @1075 RPM	⅓	⅓	½	½	½	½	½	¾
Speed	4	4	4	4	4	4	4	4
Vent Diameter ³	4"	4"	4"	4"	4"	4"	4"	4"
No. of Burners	2	3	3	4	4	4	5	6
Disposable Filter (in ²)	320	483	483	640	640	640	800	738
ELECTRICAL DATA								
Min. Circuit Ampacity ⁴	8.1	8.1	12.5	8.1	12.5	12.5	12.5	14.7
Max. Overcurrent Device (amps) ⁵	15	15	15	15	15	15	15	15
SHIP WEIGHT (LBS)	120	130	143	153	153	163	163	163

¹ Natural Gas BTU/h; for altitudes above 2,000', reduce input rating 4% for each 1,000' above sea level. Low-fire rate is 75% of high-fire rate

² DOE AFUE based upon Isolated Combustion System (ICS)

³ Vent diameter may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

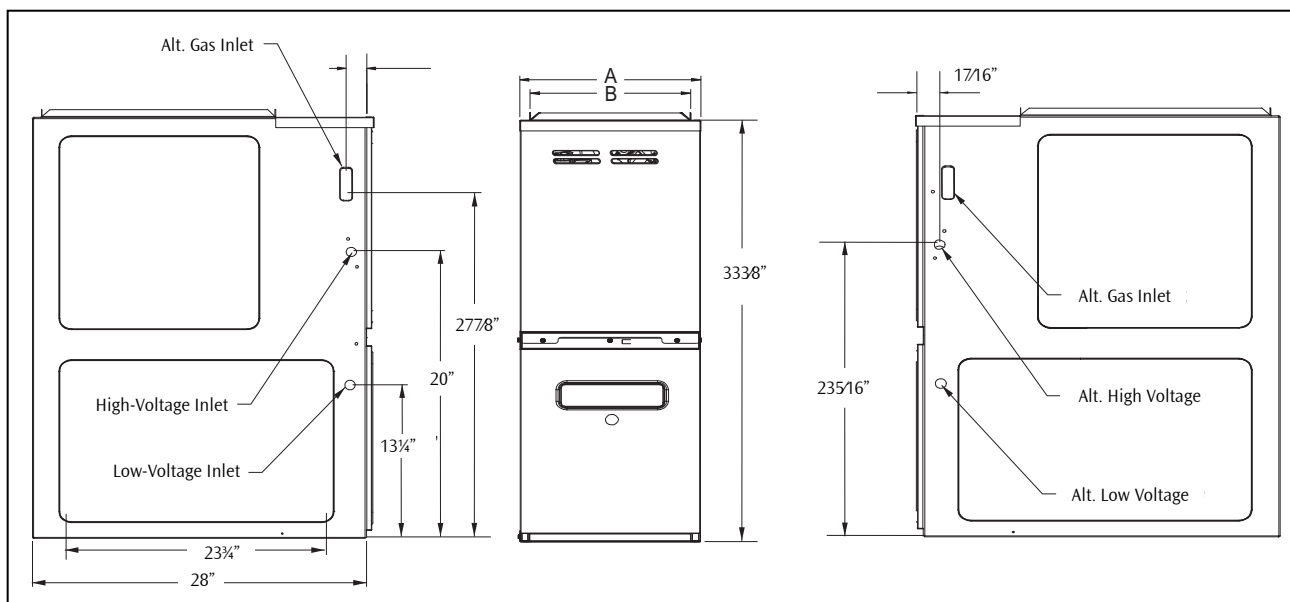
⁴ Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

⁵ Refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

NOTES

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.

DIMENSIONS



MODEL	A	B
AMH80403A**	14"	12 1/2"
AMH80603A**	14"	12 1/2"
AMH80604B**	17 1/2"	16"
AMH80803B**	17 1/2"	16"

MODEL	A	B
AMH80804B**	17 1/2"	16"
AMH80805C**	21"	19 1/2"
AMH81005C**	21"	19 1/2"
AMH81205D**	24 1/2"	23"

Notes

- Line voltage wiring can enter through the right or left side of furnace.
- Low-voltage wiring can enter through the right or left side of furnace.
- Conversion kits for high-altitude natural gas operation are available. Contact your Goodman distributor or dealer for details.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

SIDES	REAR	FRONT ¹	VENT ²		TOP
			SW	B	
1"	0"	3"	6"	1"	1"

¹ 24" clearance for serviceability recommended.

² Single Wall Vent (SW) to be used only as a connector. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

Note: AMH8 approved for line contact in the horizontal position.

AIRFLOW DATA

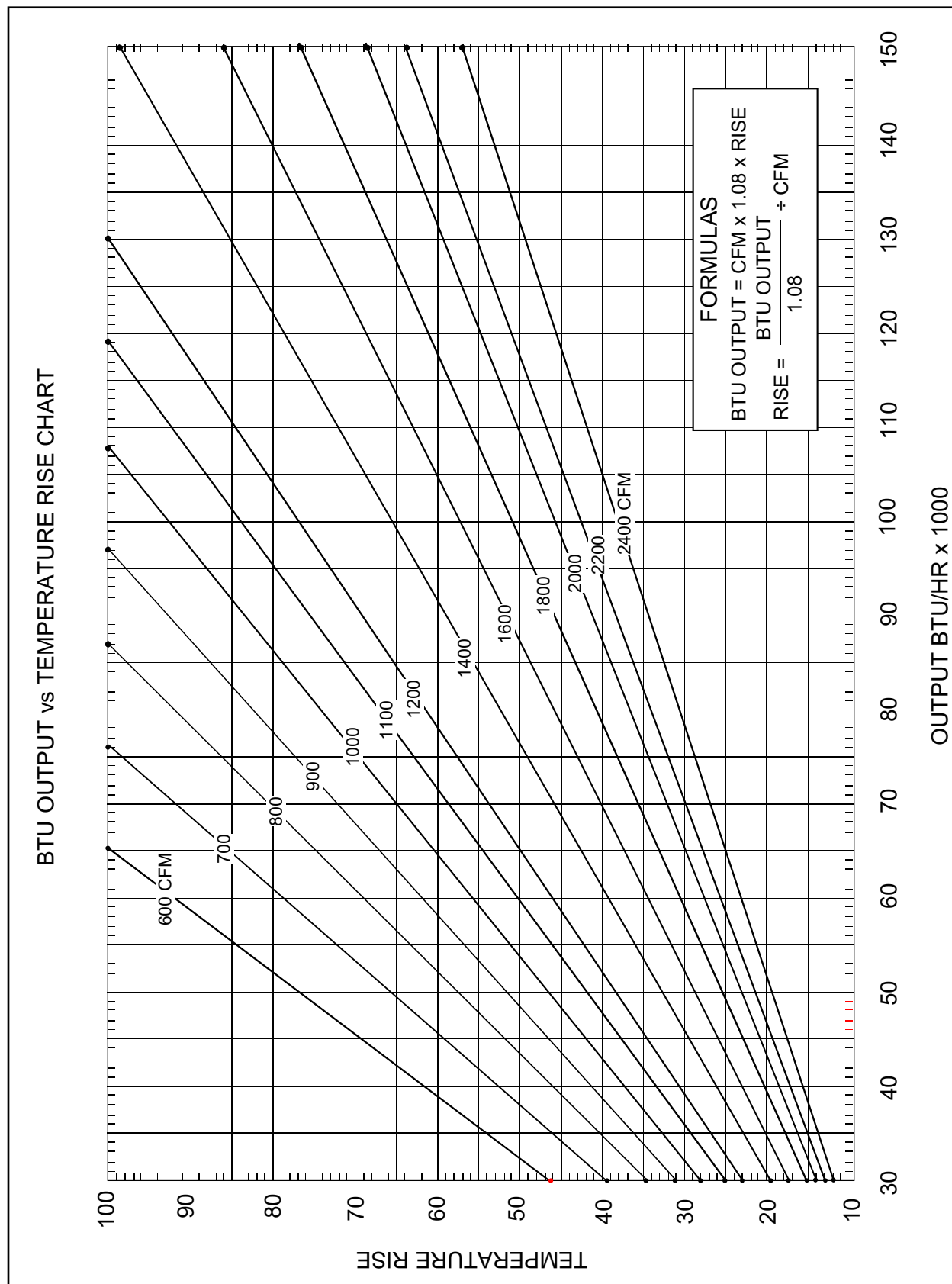
(CFM & TEMPERATURE RISE VS. EXTERNAL STATIC PRESSURE)

MODEL (HEATING SPEED AS SHIPPED)	MOTOR SPEED	TONS AC @ 0.5" ESP	EXTERNAL STATIC PRESSURE, (INCHES WATER COLUMN)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
AMH8 0403A** (Medium)	High	3	1,521	22	1,466	23	1,414	24	1,373	24	1,298	26	1,243	1,164	1,075
	Med	2.5	1,160	29	1,160	29	1,132	29	1,121	30	1,082	31	1,042	997	925
	Med-Lo	2	961	35	955	35	948	35	932	36	913	37	882	821	803
	Low	1.5	781	43	785	42	781	43	773	43	761	44	745	716	668
AMH8 0603A** (Medium)	High	3	1,422	36	1,352	38	1,307	40	1,197	43	1,157	45	1,092	1,075	983
	Med	2.5	1,098	47	1,081	48	1,051	49	1,039	50	1,021	51	983	924	868
	Med-Lo	2	919	56	913	57	892	58	847	----	829	----	818	792	728
	Low	1.5	758	----	741	----	741	----	733	----	699	----	677	649	626
AMH8 0604B** (Medium)	High	4	2,134	----	2,100	25	2,042	25	1,975	26	1,883	28	1,786	1,700	1,601
	Med	3.5	1,668	31	1,663	31	1,656	31	1,645	32	1,616	32	1,549	1,492	1,391
	Med-Lo	3	1,419	37	1,426	36	1,426	36	1,432	36	1,419	37	1,378	1,328	1,261
	Low	2.5	1,134	46	1,145	45	1,166	44	1,171	44	1,160	45	1,144	1111	1071
AMH8 0803B** (Medium)	High	3	1,607	41	1,572	42	1,547	43	1,498	45	1,448	46	1,390	1,302	1,222
	Med	2.5	1,159	58	1,156	58	1,145	58	1,127	59	1,108	60	1,075	1,033	957
	Med-Lo	2	938	----	916	----	916	----	900	----	889	----	865	829	785
	Low	1.5	785	----	766	----	743	----	730	----	709	----	683	666	604
AMH8 0804B** (Medium)	High	4	2,051	----	1,983	----	1,895	35	1,812	37	1,725	39	1,627	1,530	1,439
	Med	3.5	1,736	38	1,708	39	1,652	40	1,611	41	1,540	43	1,475	1,394	1,307
	Med-Lo	3	1,493	45	1,668	40	1,459	46	1,429	47	1,389	48	1,339	1,274	1,204
	Low	2.5	1,200	56	1,185	56	1,180	56	1,173	57	1,158	58	1,125	1,125	1080
AMH8 0805C** (Medium)	High	5	2,290	----	2,229	----	2,155	----	2,047	----	1,960	----	1,837	1,712	1,584
	Med	4	1,852	36	1,820	37	1,777	38	1,719	39	1,641	41	1,567	1,469	1,382
	Med-Lo	3.5	1,615	41	1,592	42	1,556	43	1,516	44	1,470	45	1,405	1,346	1,235
	Low	3	1,290	52	1,285	52	1,265	53	1,235	54	1,214	55	1,174	1044	904
AMH8 1005C** (Medium)	High	5	2,323	37	2,225	38	2,120	40	2,040	42	1,974	43	1,801	1,688	1,577
	Med	4	1,858	46	1,847	46	1,799	47	1,744	49	1,674	51	1,577	1,493	1,399
	Med-Lo	3.5	1,596	53	1,587	54	1,571	54	1,552	55	1,493	57	1,397	1,326	1,217
	Low	3	1,291	----	1,272	----	1,261	----	1,257	----	1,205	----	1,168	1118	1060
AMH8 1205D** (Medium)	High	5	2,469	42	2,389	43	2,300	45	2,223	47	2,131	49	2,027	1,902	1,786
	Med	4	1,575	66	1,558	67	1,545	67	1,513	69	1,500	69	1,419	1,354	1,271
	Med-Lo	3.5	1,402	----	1,380	----	1,343	----	1,319	----	1,296	----	1,245	1,183	1,106
	Low	3	1,200	----	1,186	----	1,161	----	1,127	----	1,082	----	1,042	995	926

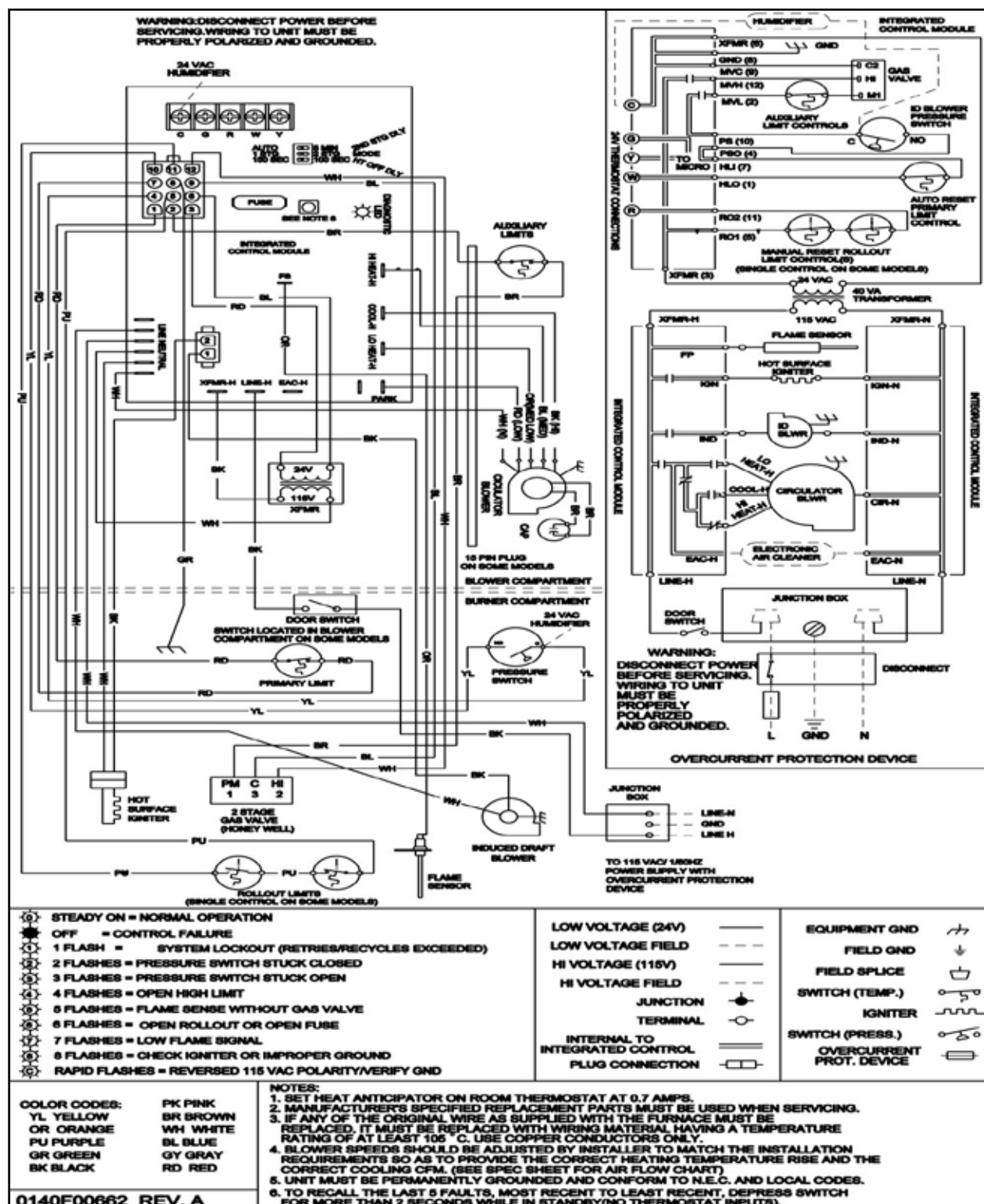
Notes

- CFM in chart is without filter(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
- All furnaces ship as high-speed cooling and medium-speed heating. Installer must adjust blower cooling and heating speed as needed.
- For most jobs, 400 CFM per ton for cooling is desirable.
- INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
- This chart is for information only. For satisfactory operation, external static pressure should not exceed value shown on the rating plate.
- The dashed (----) areas indicate a temperature rise not recommended for this model.
- The above chart is for U.S. furnaces installed at 0-2000 feet. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while ESP at the CFM will be lower.

TEMPERATURE RISE RANGE CHART



WIRING DIAGRAM



Wiring is subject to change. Always refer to the wiring diagram or the unit for the most up-to-date wiring.



WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.



ACCESSORIES

MODEL	DESCRIPTION
LPM-06 ¹	LP Conversion Kit (Springs & Orifice)
HA02	High-Altitude Natural Gas Kit (+7,000')
MVK-01 ²	Masonry Vent Kit
MVK-02 ²	Masonry Vent Kit (for AMH81205D* only)
AFE18-60A	Fossil Fuel Kit
FSRKA-14/17/21/24	Noise Reduction Kits
FTK04	Twinning Kit

¹ White-Rodgers and Honeywell valves

² Upflow applications only



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