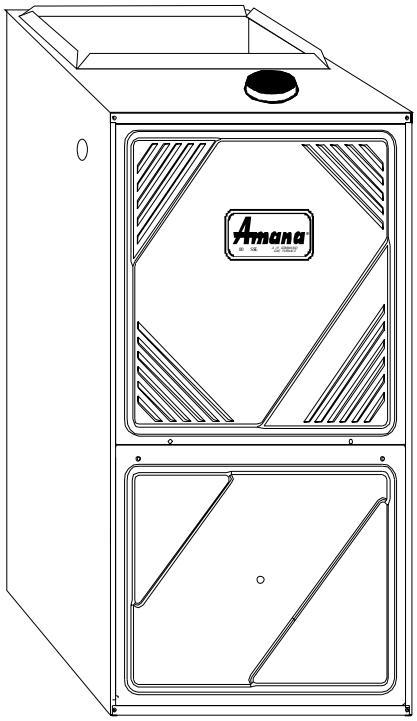
Technical Information

40" 80% Gas Furnaces
GUIC___EA/EX__

- Refer to Service Manual RS6600001 Rev. 2 for installation, operation, and troubleshooting information.
- All safety information must be followed as provided in the Service Manual.
- Refer to the appropriate Parts Catalog for part number information.

Model and Manufacturing numbers listed in this manual.

MODEL	M/N
GUIC045EA30	P1234001F
GUIC070EA30	P1234002F
GUIC070EA40	P1234003F
GUIC090EA30	P1234004F
GUIC090EA50	P1234005F
GUIC115EA40	P1234006F
GUIC115EA50	P1234007F
GUIC140EA50	P1234008F
GUIC045EX30	P1234101F
GUIC070EX30	P1234102F
GUIC070EX40	P1234103F
GUIC090EX30	P1234104F
GUIC090EX50	P1234105F
GUIC115EX40	P1234106F
GUIC115EX50	P1234107F
GUIC140EX50	P1234108F



This manual replaces RT6621006 Rev. 0 November 2001.

REV. 1 - Corrections made to manual.

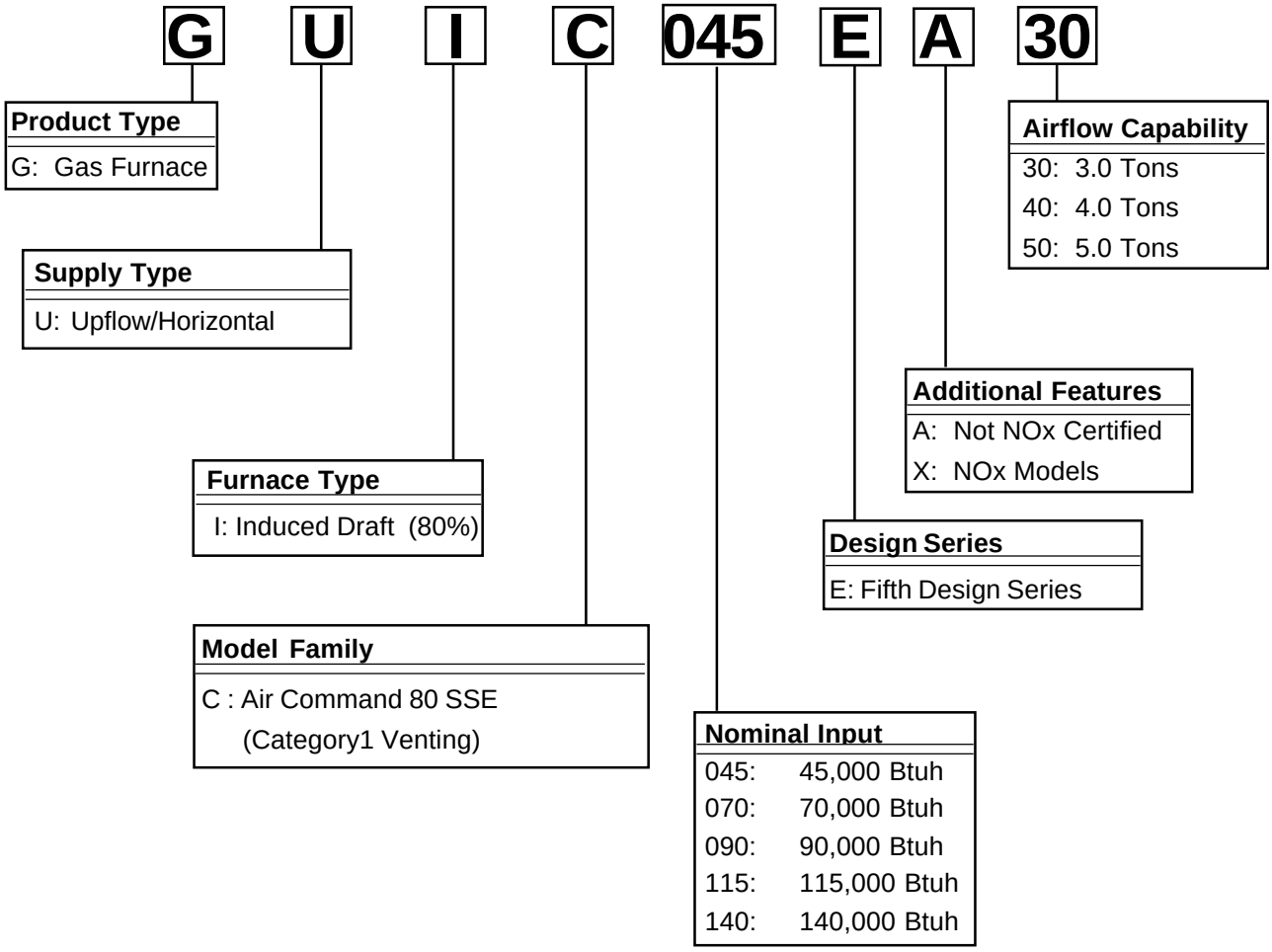
Heating & Air Conditioning
Amana®
Comfort. Quality. Trust.

RT6621006
Revision 1
February 2002

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. When engineering and manufacturing changes take place where interchangeability of components are affected, the manufacturing number will change.

It is very important to use the model and manufacturing numbers at all times when requesting service or parts information.



WARNING

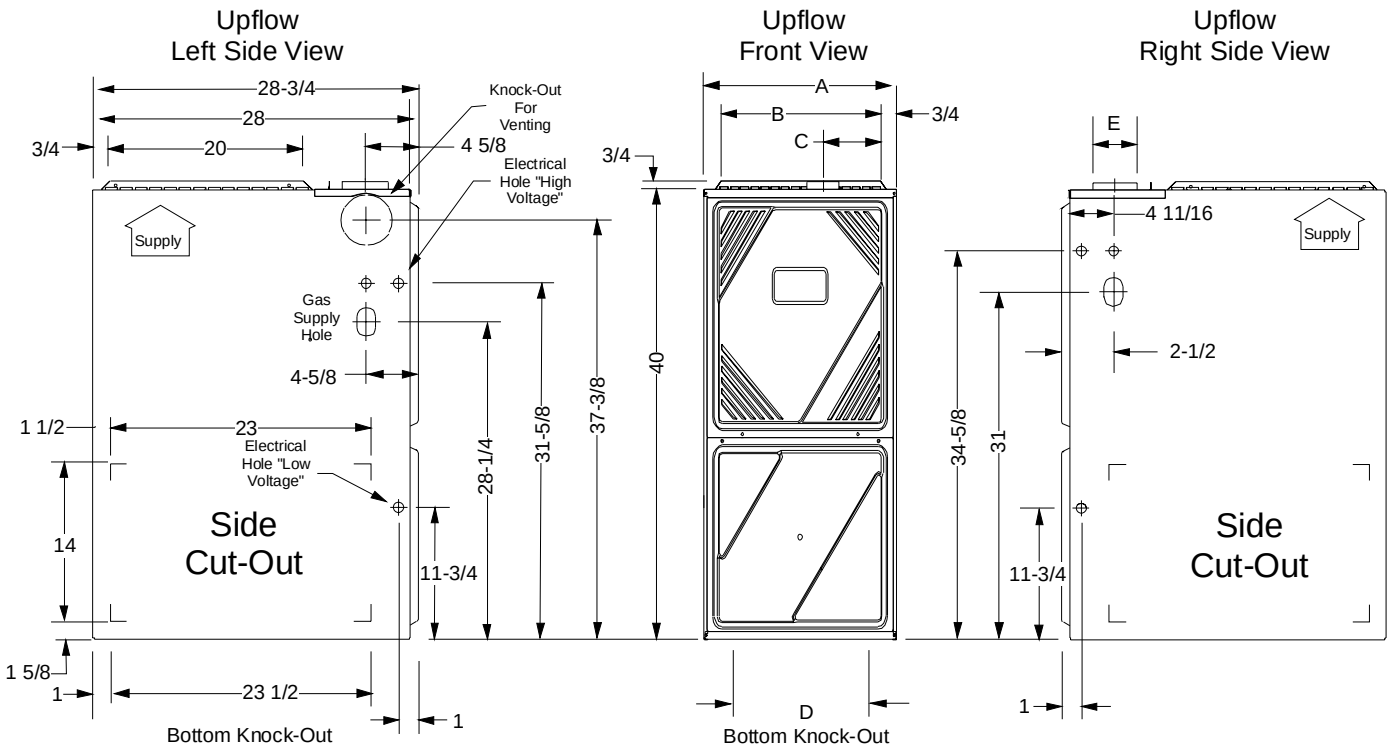
IF REPAIRS ARE ATTEMPTED BY UNQUALIFIED PERSONS, DANGEROUS CONDITIONS (SUCH AS EXPOSURE TO ELECTRICAL SHOCK) MAY RESULT. THIS MAY CAUSE SERIOUS INJURY OR DEATH.

CAUTION

AMANA WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SERVICE OR SERVICE PROCEDURES. IF YOU PERFORM SERVICE ON YOUR OWN PRODUCT, YOU ASSUME RESPONSIBILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE WHICH MAY RESULT.

PRODUCT DIMENSIONS

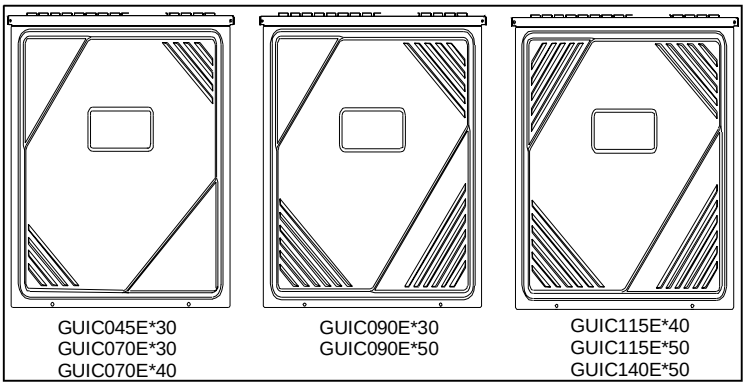
GUIC___EA/EX__



GUIC DIMENSIONS						
FURNACE MODEL	**A**	**B**	**C**	**D**	**E**	**Minimum Vent Diameter**
GUIC045E*30 GUIC070E*30 GUIC070E*40	16-1/2	15	5-1/4	12-5/8	4	4
GUIC090E*30 GUIC090E*50	20-1/2	19	7-1/4	14-5/8	4	4
GUIC115E*40 GUIC115E*50 GUIC140E*50	24-1/2	23	9-1/4	18-5/8	4	5

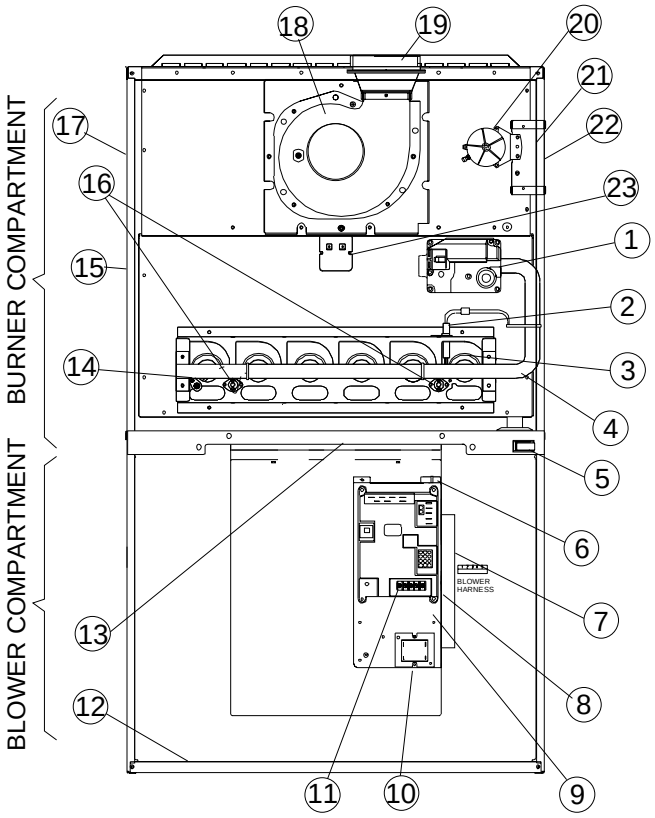
All dimensions are in inches.

Note: Access door inlet louvered vent configuration is dependent upon unit size. See drawings below.



GUIC___EA__ (Manufacturing Numbers P1234001-08F)
GUIC___EX__ (Manufacturing Numbers P1234101-08F)

COMPONENT IDENTIFICATION



Upflow/Horizontal

1 Single Stage Gas Valve
2 Hot Surface Igniter
3 Burners
4 Gas Manifold
5 Blower Door Interlock Switch
6 Capacitor
7 PSC Multi-speed Circulator Blower
8 Single-Stage Integrated Control Module (with diagnostic LED)
9 Control Mounting Bracket
10 Transformer (40 VA)
11 24 Volt Thermostat Connections
12 Bottom Return Filter Retainer
13 Auxiliary Limit
14 Flame Sensor
15 Gas Line Entrance
16 Rollout Limit
17 Electrical Connection Inlets (Alternate)
18 Single-Speed Induced Draft Blower
19 Flue Pipe Connection
20 Pressure Switch
21 Junction Box
22 Electrical Connection Inlets
23 Primary Limit Control

GUIC___EA__ (Manufacturing Numbers P1234001-08F)
GUIC___EX__ (Manufacturing Numbers P1234101-08F)

PRODUCT DESIGN

General Operation

This GUIC furnace is equipped with an electronic ignition device to light the burners and an induced draft blower to exhaust combustion products.

An interlock switch prevents furnace operation if the blower door is not in place. Keep the blower access doors in place except for inspection and maintenance.

This furnace is also equipped with a self-diagnosing electronic control module. In the event a furnace component is not operating properly, the control module LED will flash on and off in a factory-programmed sequence, depending on the problem encountered. This light can be viewed through the observation window in the blower access door. Refer to the *Troubleshooting Chart* for further explanation of the LED codes and *Abnormal Operation - Integrated Ignition Control* section in the Service Instructions for an explanation of the possible problem.

The rated heating capacity of the furnace should be greater than or equal to the total heat loss of the area to be heated. The total heat loss should be calculated by an approved method or in accordance with “ASHRAE Guide” or “Manual J-Load Calculations” published by the Air Conditioning Contractors of America.

*Obtain from: American National Standards Institute 1430 Broadway New York, NY 10018

Location Considerations

- The furnace should be as centralized as is practical with respect to the air distribution system.
- Do not install the furnace directly on carpeting, tile, or combustible material other than wood flooring.
- When suspending the furnace from rafters or joists, use 3/8" threaded rod and 2” x 2” x 3/8” angle as shown in the Installation and Service Instructions. The length of the rod will depend on the application and clearance necessary.
- When installed in a residential garage, the furnace must be positioned so the burners and ignition source are located not less than 18 inches (457 mm) above the floor and protected from physical damage by vehicles.

Accessibility Clearances (Minimum)

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES)							
POSITION*	**FRONT**	**RIGHT**	**LEFT**	**REAR**	**TOP**	**FLUE**	**FLOOR**
Upflow	6[1]	0	0	0	1	6[2]	C
Horizontal Left	Alcove	6	12	0	1	6[2]	C
Horizontal Right	Alcove	12	6	0	1	6[2]	C

* = All positioning is determined as installed unit viewed from the front.

[1] = 1 inch when using Type B-1 vent is used.

[2] = 1 inch when Type B-1 vent is used.

C = If placed on combustible floor, floor MUST be wood ONLY.

36" at front is required for servicing or cleaning.

Note: In all cases accessibility clearance shall take precedence over clearances from the enclosure where accessibility clearances are greater. All dimensions are given in inches.

High Altitude Derate

When this furnace is installed at high altitude, the appropriate High Altitude orifice kit must be installed. This is required due to the natural reduction in the density of both the gas fuel and combustion air as altitude increases. The kit will provide the proper design certified input rate within the specified altitude range.

PROPANE AND HIGH ALTITUDE KITS				
MODEL NUMBER	**0 to 7,500 ft.**	**7,501 to 11,000 ft.**	**7,501 to 11,000 ft.**	**4,501 to 11,000 ft.**
GUIC*EA/EX**	LPTK09 Propane Conversion Kit (#55 Orifice)	HANG15 High Altitude Natural Gas Kit (#45 Orifice)	HALP12 High Altitude Propane Gas Kit (#56 Orifices)	HAC1PS15 High Altitude Pressure Switch Kit (10727920)

High altitude kits are purchased according to the installation altitude and usage of either natural or propane gas. Refer to the chart above for a tabular listing of appropriate altitude ranges and corresponding manufacturer’s high altitude Natural Gas and Propane Gas kits. For a tabular listing of appropriate altitude ranges and corresponding manufacturer's High Altitude Pressure Switch kits, refer to either the *Pressure Switch Trip Points & Usage Chart* in this manual or the *Accessory Charts* in Service Instructions.

PRODUCT DESIGN

PRESSURE SWITCH TRIP POINTS AND USAGE CHART								
MODEL	MINIMUM NEGATIVE PRESSURE WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA	MINIMUM NEGATIVE PRESSURE WITH FLUE FIRING TYPICAL SEA LEVEL DATA	PRESSURE SWITCH TRIP POINTS AND USAGE					
			0 to 4,500 ft.			4,501 to 11,000 ft.		
			TRIP POINT	PRESSURE SWITCH (Prod.)	LABEL COLOR	TRIP POINT	HIGH ALTITUDE KIT	LABEL COLOR
GUIC045E*30	-0.90	-0.80	-0.75	10727921	Green	-0.55	HAC1PS15 10727920	Dark Blue
GUIC070E*30 GUIC070E*40	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC090E*30 GUIC090E*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC115E*40 GUIC115E*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC140E*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue

Note: Replacement pressure switch number is listed below High Altitude Pressure Switch Kit number.

Note: All negative pressure readings are in inches of water column (" w.c.).

T.O.D. PRIMARY LIMIT			
Part Number	10728324	10728330	10728339
Open Setting °F	135	200	190
Style	3	3	3
Sleeve Color	Green	Tan	Red
GUIC045E*30		**1**	
GUIC070E*30 GUIC070E*40			**1**
GUIC090E*30 GUIC090E*50		**1**	
GUIC115E*40 GUIC115E*50			**1**
GUIC140E*50	**1**		

ROLLOUT LIMIT SWITCHES		
Part Number	10123527	10123528
Open Setting °F	260	275
Dot Color	Brown	Pink
GUIC045E*30		**1**
GUIC070E*30 GUIC070E*40		**2**
GUIC090E*30 GUIC090E*50		**2**
GUIC115E*40 GUIC115E*50	**2**	
GUIC140E*50		**2**

AUXILIARY LIMIT SWITCHES	
Part Number	10123519
Open Setting °F	160
Dot Color	Pink
GUIC045E*30	**1**
GUIC070E*30 GUIC070E*40	**1**
GUIC090E*30 GUIC090E*50	**1**
GUIC115E*40 GUIC115E*50	**1**
GUIC140E*50	**1**

PRODUCT DESIGN

Coil Matches:

A large array of Amana coils are available for use with the GUIC furnace, in either upflow, counterflow, or horizontal applications. These coils are available in both cased and uncased models, with or without a TXV expansion device. These 80% furnaces match up with the existing Amana coils as shown in the chart below.

Btuh Input	Cabinet Width	Air Flow (tons)	CAA_F*C Cased A-Coils	CCA_FSC Uncased A-Coils	CHA_TCC Cased TXV A-Coils	CHA_TSC Uncased TXV A-Coils	CCF_F*C Horiz. A-Coils	CHF_TCC Horiz. A-Coils
GUIC045E*30	16 1/2"	1 1/2 - 3	CCA18FCC CCA24FCC CCA30FCC CCA36FCC CCA42FCC	CCA18FSC CCA24FSC CCA30FSC CCA36FSC CCA42FSC	CHA18TCC CHA24TCC CHA30TCC CHA36TCC	CHA18TSC CHA24TSC CHA30TSC CHA36TSC	CCF24FCC CCF30FCC CCF36FCC	CHF18TCC CHF24TCC CHF30TCC
GUIC070E*30 GUIC070E*40	16 1/2"	1 1/2 - 3 2 1/2 - 4						
GUIC090E*30 GUIC090E*50	20 1/2"	1 1/2 - 3 3 - 5	CCA30FDC CCA36FDC CCA42FDC CCA48FCC	CCA48FSC	CHA42TCC	CHA42TSC	CCF24FDC CCF36FDC CCF42FCC CCF48FCC	CHF36TCC CHF42TCC
GUIC115E*40 GUIC115E*50	24 1/2"	2 1/2 - 4 3 - 5	CCA36FKC CCA48FDC CCA54FCC CCA57FCC CCA60FCC	CCA54FSC CCA57FSC CCA60FSC	CHA48TCC CHA54TCC CHA57TCC CHA60TCC	CHA48TSC CHA54TSC CHA57TSC CHA60TSC	CCF48FDC CCF60FCC	CHF48TCC
GUIC140E*50	24 1/2"	3 - 5						

Coil Matches (for the Amana RSD units using R-410A):

Btuh Input	Cabinet Width	Air Flow (tons)	CA_FCA Cased A-Coils	CF_FCA Horizontal A-Coils
GUIC045E*30	16 1/2"	1 1/2 - 3	CA36FCA	CF30FCA
GUIC070E*30 GUIC070E*40	16 1/2"	1 1/2 - 3 2 1/2 - 4		
GUIC090E*30 GUIC090E*50	20-1/2"	1 1/2 - 3 3 - 5	CA42FCA	CF36FCA
GUIC115E*40 GUIC115E*50	24-1/2"	2 1/2 - 4 3 - 5	CA48FCA CA57FCA	CF48FCA CF60FCA
GUIC140E*50	24-1/2"	3 - 5		

PRODUCT DESIGN

Thermostats:

The following Amana Thermostats are suggested for use with the GUIC Furnace Models:

Thermostats								
Thermostat	**Man/Auto**	**Programmable**	**Cool**	**Heat**	**Batt. Powered**	**Batt. Bkup***	**Shape**	**Color**
1213401	Man. Changeover	Yes	1	1	Yes	No	Rectangular	White
1213402	Man. Changeover	No	1	1	Yes	No	Rectangular	White
1213408	Man. or Auto Changeover	Yes	1	1	No	Yes	Rectangular	White

Filters:

Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

This furnace has provisions for the installation of return air filters at the side and/or bottom return. The furnace will accommodate the following filter sizes depending on cabinet size:

Side Return(s)		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
All	16 x 25 x 1	400

Bottom Return		
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in^2)
16-1/2	14 x 25 x 1	350
20-1/2	16 x 25 x 1	400
24-1/2	20 x 25 x 1	500

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

		Cooling Airflow Requirement (CFM)						
		600	**800**	**1000**	**1200**	**1400**	**1600**	**2000**
GUIC___E*__ Model (Input__Airflow)	045__30	335*	384	480	576	---	---	---
	070__30	503*	503*	503*	576	---	---	---
	070__40	---	---	503*	576*	672	768	---
	090__30	610*	610*	610*	610*	---	---	---
	090__50	---	---	---	610*	672	768	960
	115__40	---	---	838*	838*	838*	838*	---
	115__50	---	---	---	838*	838*	838*	960
	140__50	---	---	---	1006*	1006*	1006*	1006*

*Minimum filter area dictated by heating airflow requirement.

Disposable Minimum Filter Area (in^2)

[Based on a 300 ft/min filter face velocity]

		Cooling Airflow Requirement (CFM)						
		600	**800**	**1000**	**1200**	**1400**	**1600**	**2000**
GUIC___E*__ Model (Input__Airflow)	045__30	168*	192	240	288	---	---	---
	070__30	251*	251*	251*	288	---	---	---
	070__40	---	---	251*	288	336	384	---
	090__30	305*	305*	305*	305*	---	---	---
	090__50	---	---	---	305*	336	384	480
	115__40	---	---	419*	419*	419*	419*	---
	115__50	---	---	---	419*	419*	419*	480
	140__50	---	---	---	503*	503*	503*	503*

*Minimum filter area dictated by heating airflow requirement.

Permanent Minimum Filter Area (in^2)

[Based on 600 ft/min filter face velocity]

FURNACE SPECIFICATIONS

MODEL	GUIC045E*30	GUIC070E*30	GUIC070E*40	GUIC090E*30	GUIC090E*50	GUIC115E*40	GUIC115E*50	GUIC140E*50
Btuh Input (US)	46,000	69,000	69,000	92,000	92,000	115,000	115,000	140,000
Output (US)	36,800	55,200	55,200	73,600	73,600	92,000	92,000	110,400
A.F.U.E.	80%	80%	80%	80%	80%	80%	80%	80%
Rated External Static (" w.c.)	.10 - .50	.12 - .50	.12 - .50	.15 - .50	.15 - .50	.20 - .50	.20 - .50	.20 - .50
Temperature Rise (°F)	35 - 65	35 - 65	35 - 65	40 - 70	40 - 70	35 - 65	35 - 65	35 - 65
Pressure Switch Trip Point (" w.c.)	-0.75	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70	-0.70
Blower Wheel (D" x W")	10 x 7	10 x 7	10 x 7	10 x 9	10 x 9	10 x 10	10 x 10	10 x 10
Blower Horsepower	1/3	1/2	1/2	1/2	3/4	1/2	3/4	3/4
Blower Speeds	4	4	4	4	4	4	4	4
Max CFM @ 0.5 E.S.P.	1215	1154	1500	1258	1998	1596	2007	2181
Power Supply	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1
Minimum Circuit Ampacity (MCA)	6.4	6.4	13.4	6.4	11.2	10.4	11.9	14.3
Maximum Overcurrent Device	15	15	15	15	15	15	15	15
Transformer (VA)	40	40	40	40	40	40	40	40
Heat Anticipator	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Primary Limit Setting (°F)	200	190	190	200	200	190	190	135
Auxiliary Limit Setting (°F)	160	160	160	160	160	160	160	160
Rollout Limit Setting (°F)	275	275	275	275	275	260	260	275
Fan Delay On	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.
Off Heating *	90 secs.	90 secs.	90 secs.	90 secs.	90 secs.	90 secs.	90 secs.	90 secs.
Off Cooling	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.	45 secs.
Gas Supply Pressure (Natural/Propane) ("w.c.)	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11	7 / 11
Manifold Pressure (Natural/Propane) ("w.c.)	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10	3.5 / 10
Orifice Size (Natural/Propane)	#43 / #55	#43 / #55	#43 / #55	#43 / #55	#43 / #55	#43 / #55	#43 / #55	#43 / #55
Number of Burners	2	3	3	4	4	5	5	6
Vent Connector Diameter (inches)	4	4	4	4	4	4	4	4
Shipping Weight (lbs.)	140	151	152	169	178	190	194	198

* Off Heating - This fan delay timing is adjustable (60, 90, 120 or 180 seconds), 90 seconds as shipped.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane gas operation.
2. For elevations above 2000 feet the rating should be reduced by 4% for each 1000 feet above sea level. The furnace must not be derated, orifice changes should only be made if necessary for altitude.
3. The total heat loss from the structure as expressed in TOTAL BTU/HR must be calculated by the manufacturers method in accordance with the "A.S.H.R.A.E. GUIDE" or "MANUAL J-LOAD CALCULATIONS" published by the AIR CONDITIONING CONTRACTORS OF AMERICA. The total heat loss calculated should be equal to or less than the heating capacity. Output based on D.O.E. test procedures, steady state efficiency times output.
4. Minimum Circuit Ampacity calculated as: (1.25 x Circulator Blower Amps) + I.D. Blower Amps.

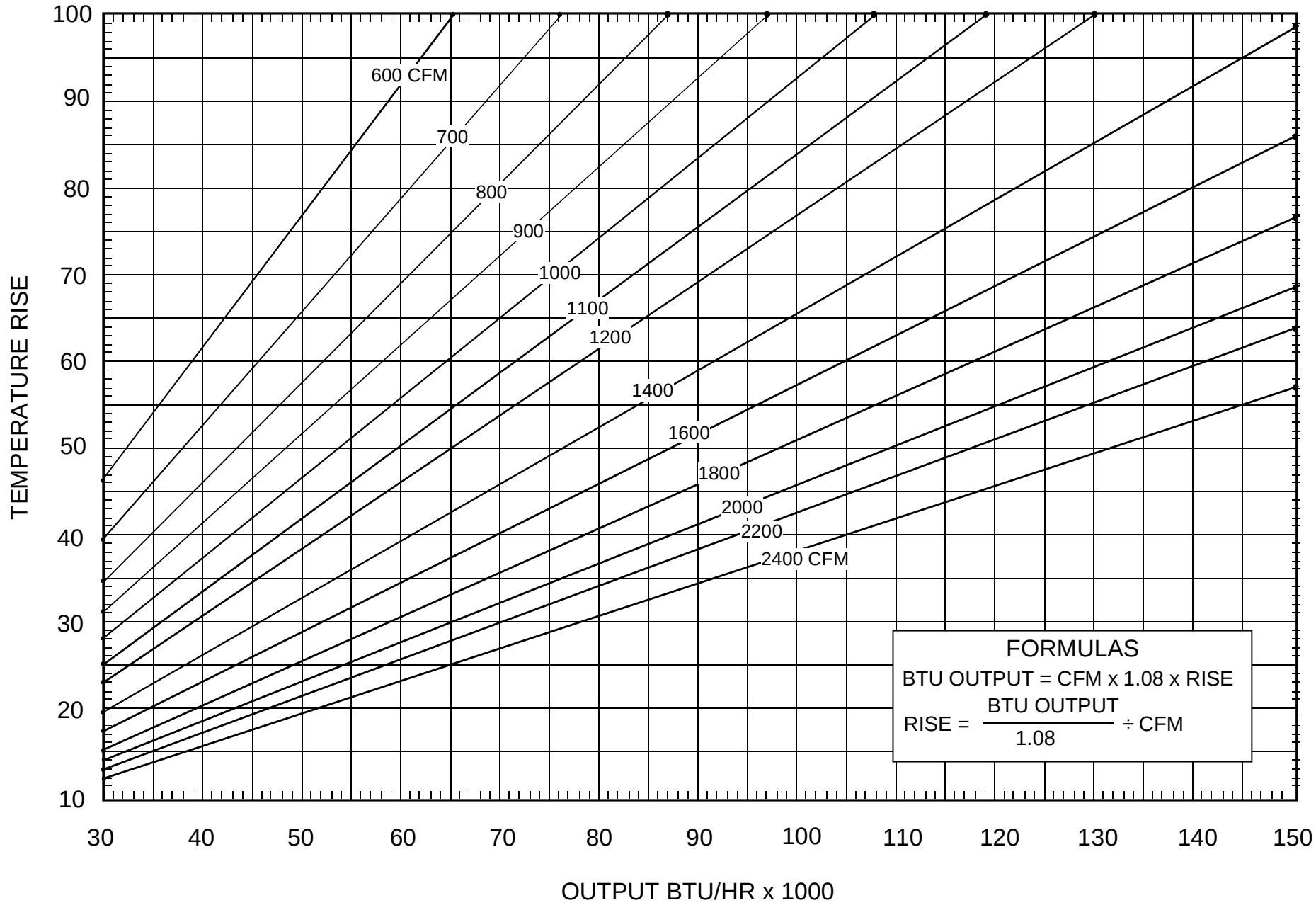
BLOWER PERFORMANCE SPECIFICATIONS

GUIC***EA/EX** Blower Performance (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
GUIC045E*30 (LOW)	HIGH	3.0	1296	----	1306	----	1286	----	1256	----	1215	----	1151	1082	1009
	MED	2.5	1058	----	1070	----	1052	----	1034	----	1015	----	971	917	859
	MED-LO	2.0	835	41	842	40	838	41	827	41	805	42	774	733	717
	LOW	1.5	635	54	620	55	616	55	611	56	590	58	564	530	462
GUIC070E*30 (MED)	HIGH	3.0	1328	38	1298	39	1260	41	1204	42	1154	44	1084	1009	918
	MED	2.5	1146	45	1120	46	1084	47	1047	49	990	52	928	863	766
	MED-LO	2.0	938	54	919	56	889	57	854	60	811	63	761	694	616
	LOW	1.5	788	65	761	----	732	----	699	----	650	----	601	543	466
GUIC070E*40 (LOW)	HIGH	4.0	1853	----	1777	----	1674	----	1608	----	1500	----	1411	1325	1200
	MED	3.5	1595	----	1551	----	1500	----	1439	36	1376	37	1295	1216	1123
	MED-LO	3.0	1325	39	1310	39	1295	39	1264	40	1216	42	1167	1088	1003
	LOW	2.5	1060	48	1057	48	1055	48	1051	49	1022	50	983	921	854
GUIC090E*30 (HIGH)	HIGH	3.0	1413	48	1420	48	1413	48	1392	49	1258	54	1250	1107	974
	MED	2.5	1143	60	1151	59	1151	59	1125	61	1107	62	1033	943	795
	MED-LO	2.0	911	----	922	----	911	----	900	----	864	----	783	703	580
	LOW	1.5	703	----	689	----	644	----	629	----	596	----	526	447	397
GUIC090E*50 (MED-LO)	HIGH	5.0	2244	----	2180	----	2113	----	2033	----	1998	----	1875	1716	1587
	MED	4.0	1771	38	1744	39	1716	40	1688	40	1617	42	1572	1462	1379
	MED-LO	3.5	1471	46	1461	47	1440	47	1419	48	1386	49	1318	1247	1158
	LOW	3.0	1235	55	1222	56	1210	56	1184	58	1145	60	1104	1048	924
GUIC115E*40 (HIGH)	HIGH	4.0	1824	47	1765	48	1722	49	1669	51	1596	53	1499	1385	1283
	MED	3.5	1605	53	1577	54	1548	55	1489	57	1448	59	1363	1224	1094
	MED-LO	3.0	1368	62	1333	64	1303	65	1258	----	1211	----	1129	1040	921
	LOW	2.5	1143	----	1120	----	1101	----	1068	----	1014	----	950	872	747
GUIC115E*50 (MED)	HIGH	5.0	2284	37	2231	38	2167	39	2100	41	2007	42	1898	1782	1672
	MED	4.0	1796	47	1787	48	1753	49	1709	50	1655	51	1580	1501	1384
	MED-LO	3.5	1541	55	1531	56	1501	57	1480	58	1438	59	1373	1294	1208
	LOW	3.0	1321	64	1298	----	1291	----	1260	----	1213	----	1171	1102	1010
GUIC140E*50 (HIGH)	HIGH	5.0	2458	42	2458	42	2378	43	2268	45	2181	47	2060	1931	1811
	MED	4.0	1775	58	1757	58	1720	59	1682	61	1634	63	1583	1500	1389
	MED-LO	3.5	1488	----	1478	----	1457	----	1446	----	1425	----	1347	1289	1176
	LOW	3.0	1289	----	1277	----	1252	----	1215	----	1189	----	1137	1052	992

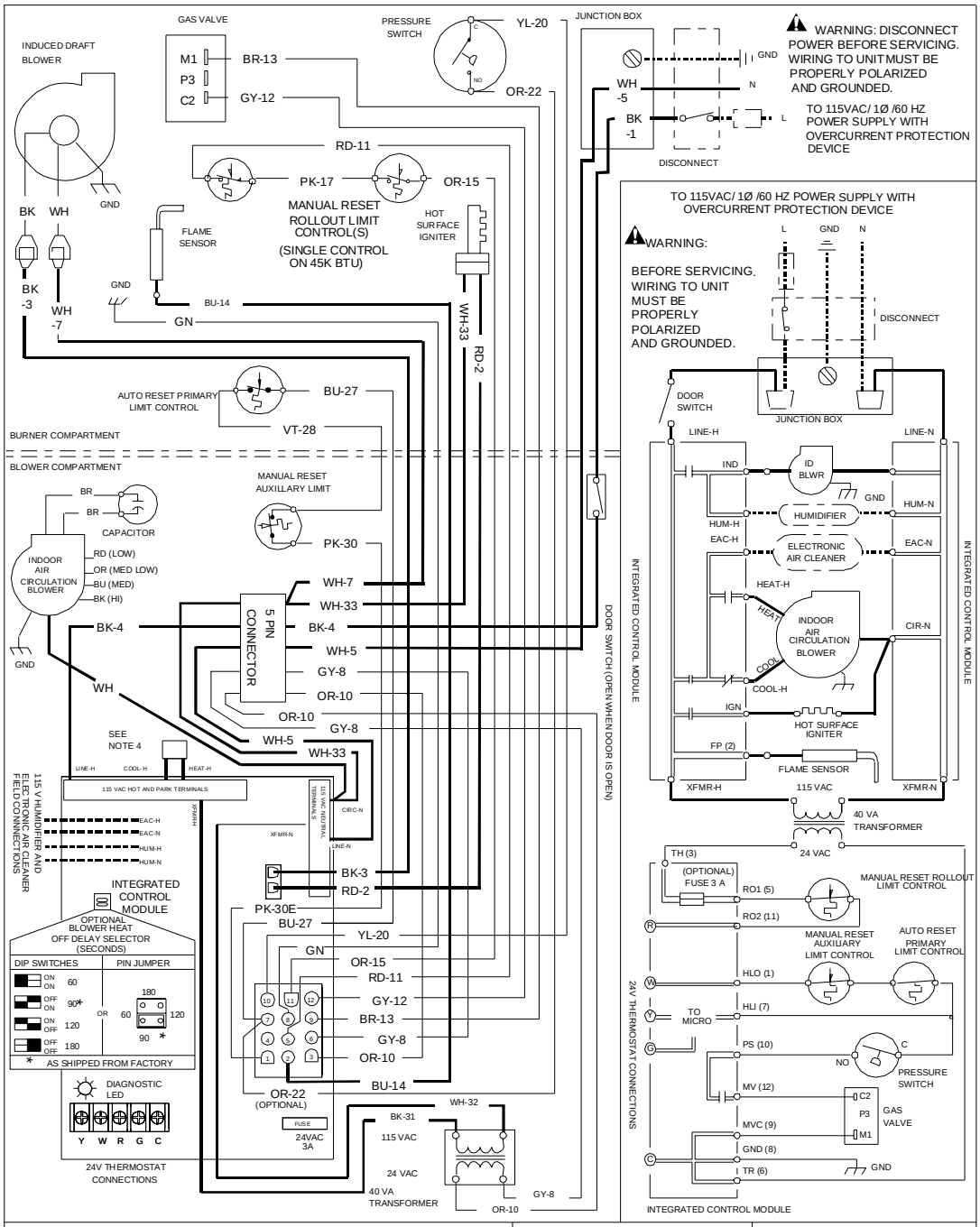
1. CFM in chart is without filters(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
2. All furnaces ship as high speed cooling. Installer must adjust blower cooling speed as needed.
3. For most jobs, about 400 CFM per ton when cooling is desirable.
4. INSTALLATION IS TO BE ADJUSTED TO OBTAIN TEMPERATURE RISE WITHIN THE RANGE SPECIFIED ON THE RATING PLATE.
5. The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate. The shaded area indicates ranges in excess of maximum external static pressure allowed when heating. The data for 0.6" w.c. to 0.8" w.c. is shown for air conditioning purposes only.
6 The dashed (---) areas indicate a temperature rise not recommended for this model.
7. The above chart is for U.S. furnaces installed at 0-4000 feet. At higher altitudes, a properly derated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

BLOWER PERFORMANCE SPECIFICATIONS

BTU OUTPUT vs TEMPERATURE RISE CHART



WIRING DIAGRAMS



- STEADY ON = REPLACE CONTROL
- 1 FLASH = SYSTEM LOCKOUT (RETRIES/RECYCLES EXCEEDED)
- 2 FLASHES = PRESSURE SWITCH STUCK CLOSED
- 3 FLASHES = PRESSURE SWITCH STUCK OPEN
- 4 FLASHES = OPEN PRIMARY OR AUXILIARY LIMIT
- 5 FLASHES = OPEN ROLLOUT LIMIT
- 6 FLASHES = 115V AC POWER REVERSED OR POOR UNIT GROUND
- 7 FLASHES = LOW FLAME SENSE SIGNAL
- CONTINUOUS FLASHES = UNANTICIPATED FLAME PRESENT

LOW VOLTAGE (24V)
LOW VOLTAGE FIELD
HI VOLTAGE (115V)
HI VOLTAGE FIELD
JUNCTION
TERMINAL
INTERNAL TO INTEGRATED CONTROL
PLUG CONNECTION

EQUIPMENT GND
FIELD GND
FIELD SPLICE
SWITCH (TEMP.)
IGNITER
SWITCH (PRESS.)
OVERCURRENT PROT. DEVICE

COLOR CODES:	
YL YELLOW	PK PINK
OR ORANGE	BR BROWN
VT VIOLET	WH WHITE
GN GREEN	BU BLUE
BK BLACK	GY GRAY
	RD RED

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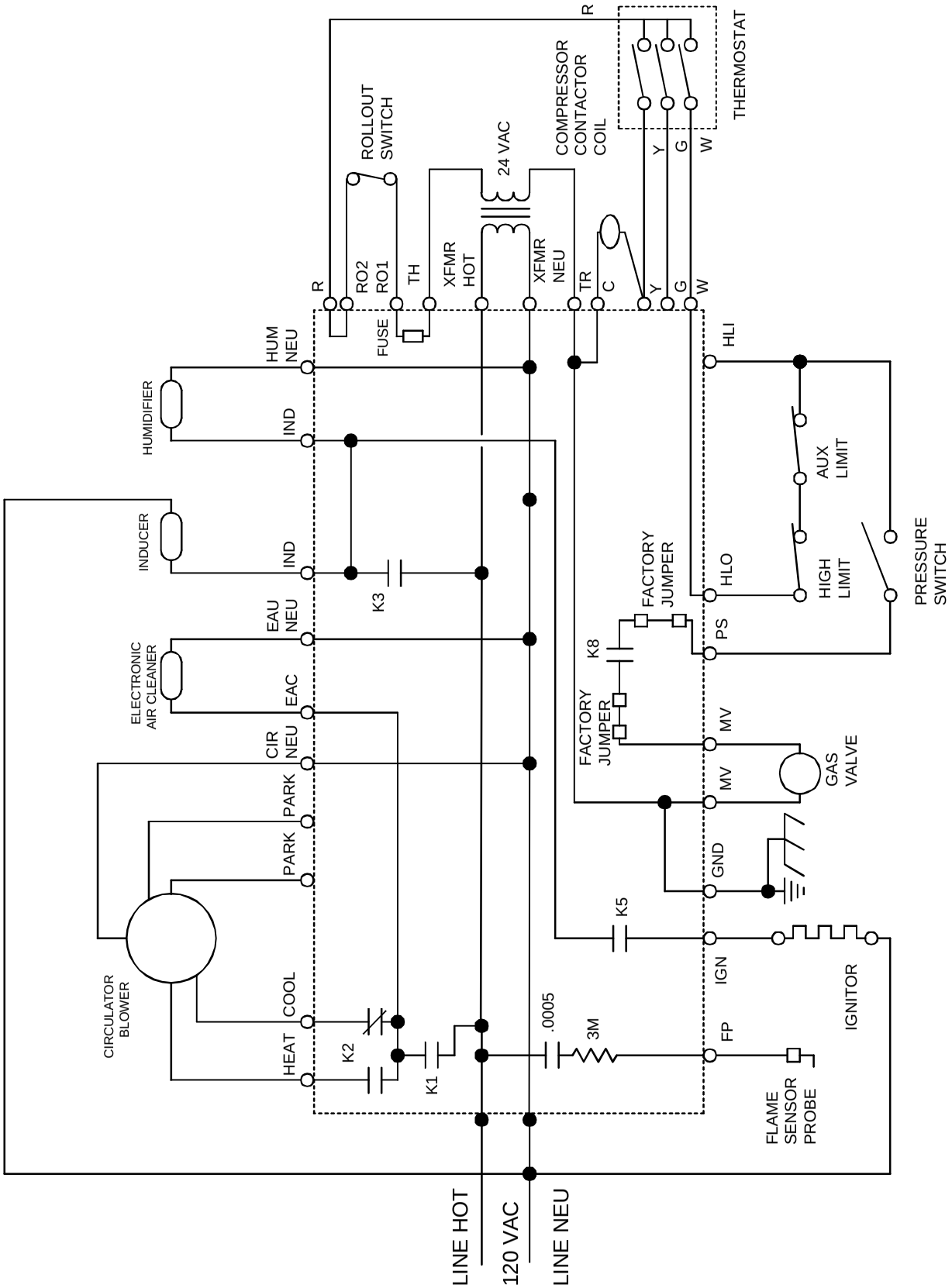
NOTES:
1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105
4. IF HEATING AND COOLING BLOWER SPEEDS ARE NOT THE SAME DISCARD JUMPER BEFORE CONNECTING BLOWER LEADS. UNUSED BLOWER LEADS MUST BE PLACED ON "PARK" TERMINALS OF INTEGRATED CONTROL OR TAPED.
5. UNIT MUST BE PERMANENTLY GROUNDED AND CONFORM TO N.E.C. AND LOCAL CODES.
6. BLOWER HEAT OFF DELAY IS FIXED AT 90 SECONDS WITHOUT OPTIONAL BLOWER HEAT OFF DELAY SELECTOR.

WARNING

TO AVOID POSSIBLE ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT THE POWER BEFORE SERVICING.

GUIC___EA__ (Manufacturing Numbers P1234001-08F)
GUIC___EX__ (Manufacturing Numbers P1234101-08F)

SCHEMATICS



TYPICAL SCHEMATIC

GUIC___EA/EX__ MODEL FURNACES

WR 50A55 INTEGRATED IGNITION CONTROL

This schematic is for reference only. Not all wiring is as shown above, refer to the appropriate wiring diagram for the unit being serviced.

WARNING

TO AVOID POSSIBLE ELECTRICAL SHOCK, PERSONAL INJURY, OR DEATH, DISCONNECT THE POWER BEFORE SERVICING.