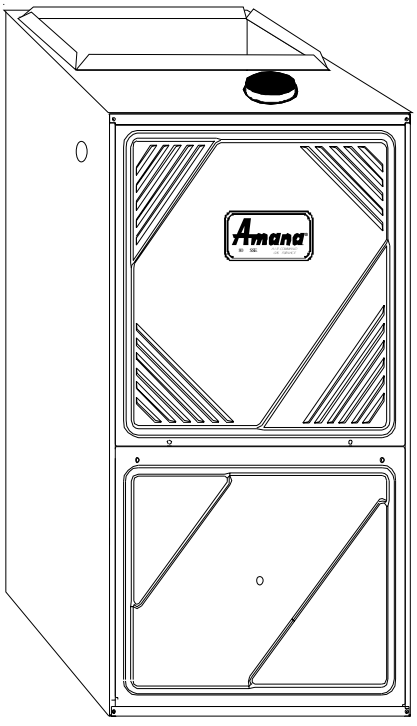
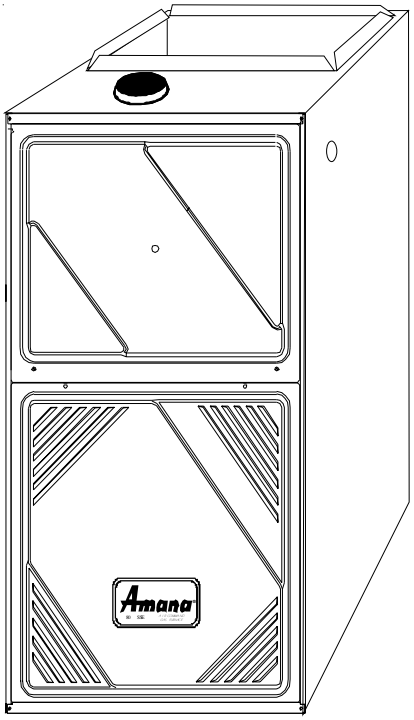
Model and Manufacturing numbers listed on page 3.

Technical Information

40" 80% Gas Furnaces
GUIC***FA/FX** & GCIC***FX**

- 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.





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

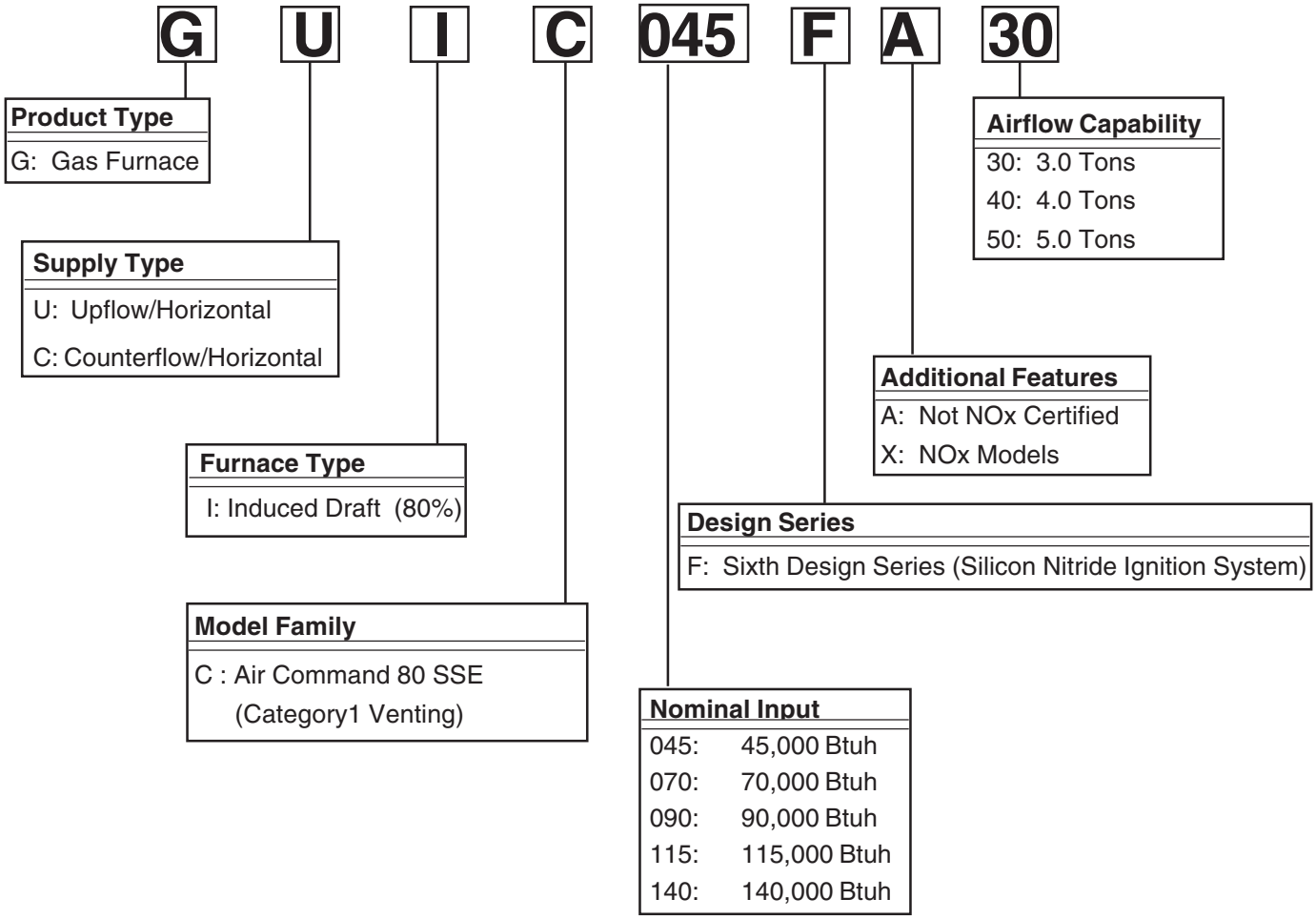
This manual is to be used by qualified HVAC technicians only. Amana does not assume any responsibility for property damage or personal injury due to improper service procedures performed by an unqualified person.

RT6621009
Revision 0
June 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 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.

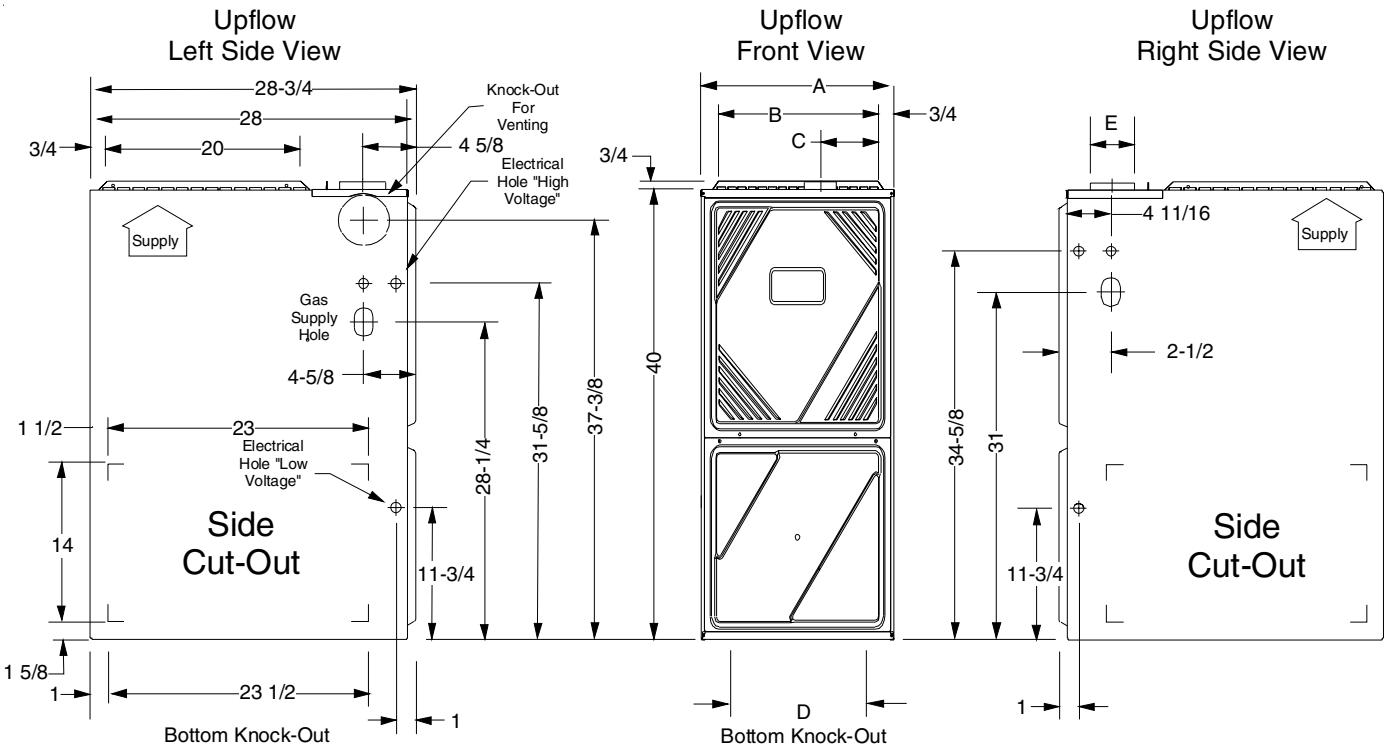
MODEL	M/N
GUIC045FA30	P1241801F
GUIC070FA30	P1241802F
GUIC070FA40	P1241803F
GUIC090FA30	P1241804F
GUIC090FA50	P1241805F
GUIC115FA40	P1241806F
GUIC115FA50	P1241807F
GUIC140FA50	P1241808F

MODEL	M/N
GUIC045FX30	P1241901F
GUIC070FX30	P1241902F
GUIC070FX40	P1241903F
GUIC090FX30	P1241904F
GUIC090FX50	P1241905F
GUIC115FX40	P1241906F
GUIC115FX50	P1241907F
GUIC140FX50	P1241908F

MODEL	M/N
GCIC045FX30	P1234401F
GCIC070FX30	P1234402F
GCIC070FX40	P1234403F
GCIC090FX30	P1234404F
GCIC090FX50	P1234405F
GCIC115FX40	P1234406F
GCIC115FX50	P1234407F
GCIC140FX50	P1234408F

PRODUCT DIMENSIONS

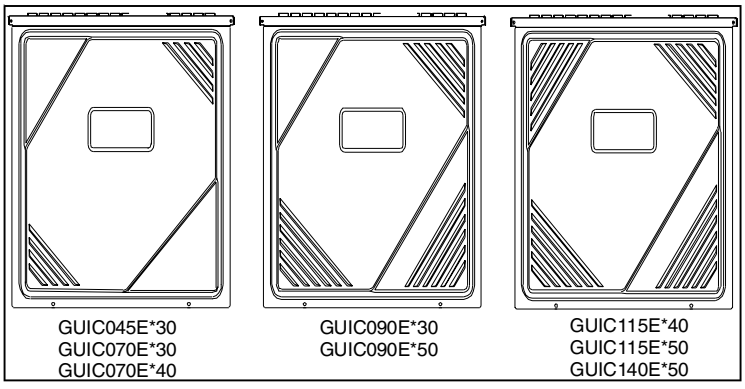
GUIC***FA/FX**



GUIC DIMENSIONS						
FURNACE MODEL	**A**	**B**	**C**	**D**	**E**	**Minimum Vent Diameter**
GUIC045F*30 GUIC070F*30 GUIC070F*40	16-1/2	15	5-1/4	12-5/8	4	4
GUIC090F*30 GUIC090F*50	20-1/2	19	7-1/4	14-5/8	4	4
GUIC115F*40 GUIC115F*50 GUIC140F*50	24-1/2	23	9-1/4	18-5/8	4	5

All dimensions are in inches.

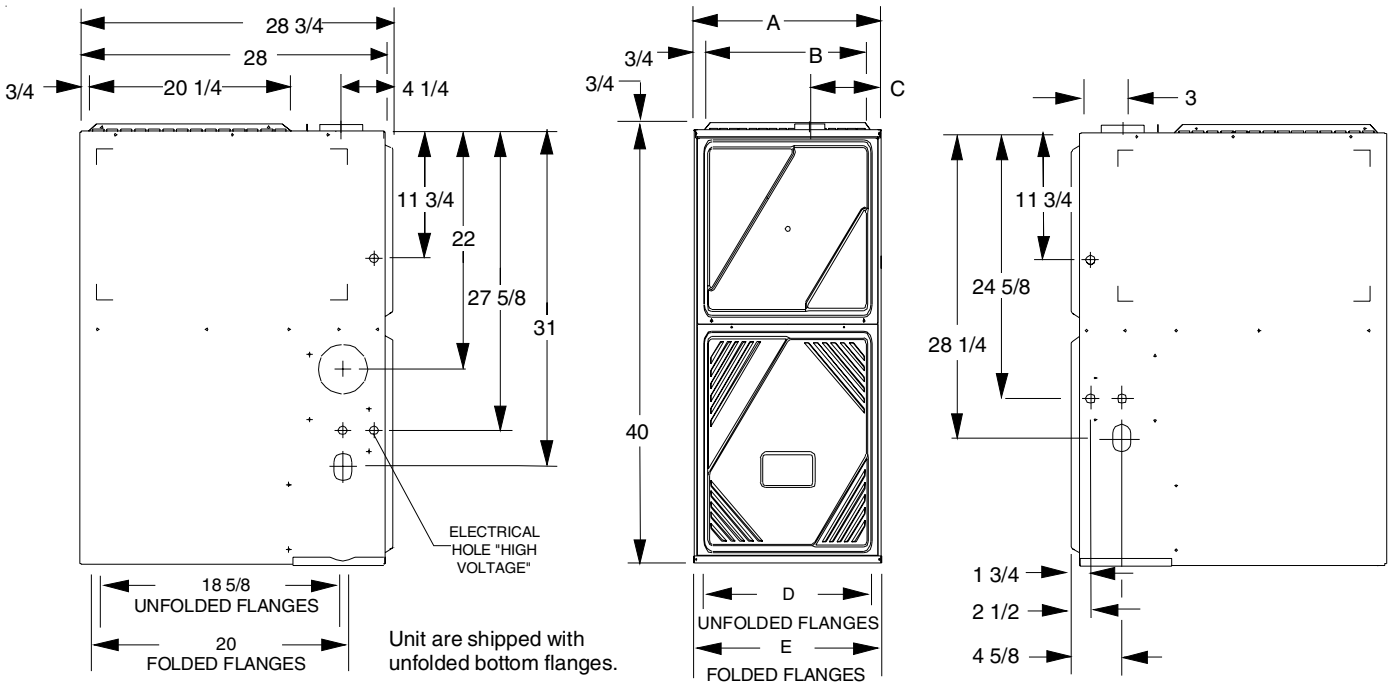
Note: Access door inlet louvered vent configuration is dependent upon unit size. See drawings below.



GUIC***FA** (Manufacturing Numbers P1241801-08F)
GUIC***FX** (Manufacturing Numbers P1241901-08F)

PRODUCT DIMENSIONS

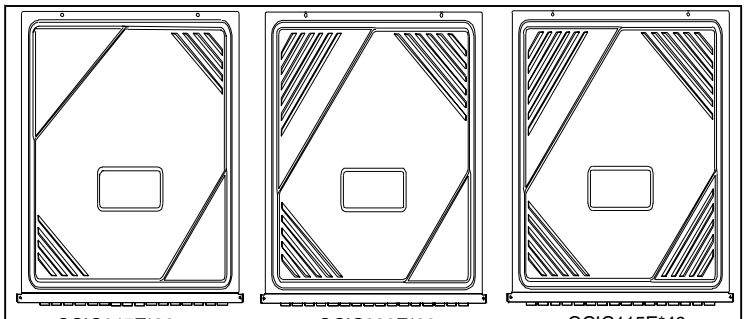
GCIC***FX**



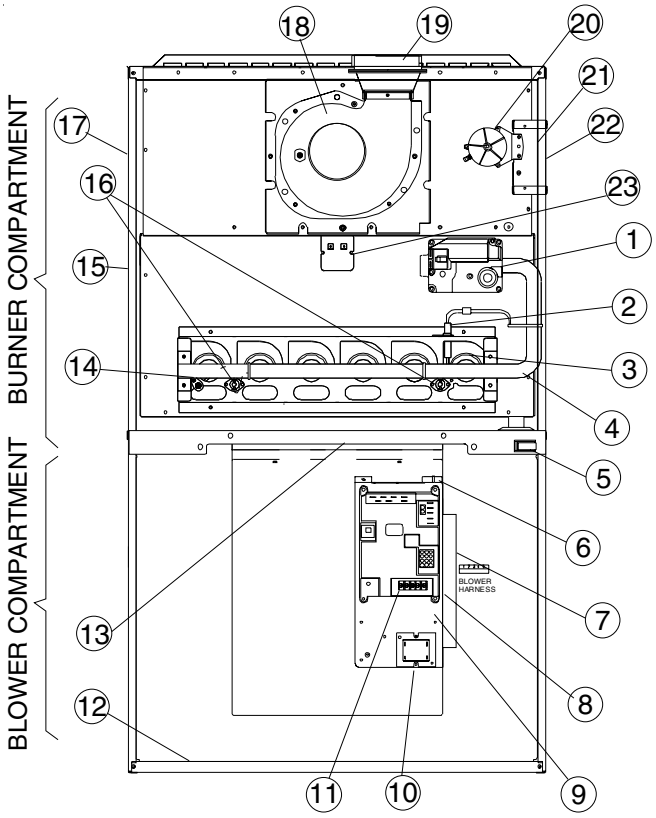
GCIC DIMENSIONS						
FURNACE MODEL	**A**	**B**	**C**	**D Unfolded**	**E Folded**	**Minimum Vent Diameter**
GCIC045FX30 GCIC070FX30 GCIC070FX40	16-1/2	15	5/3/8	13-1/2	15	4
GCIC090FX30 GCIC090FX50	20-1/2	19	7-3/8	17-1/2	19	4
GCIC115FX40 GCIC115FX50 GCIC140FX50	24-1/2	23	9-3/8	21-1/2	23	5

All dimensions are in inches.

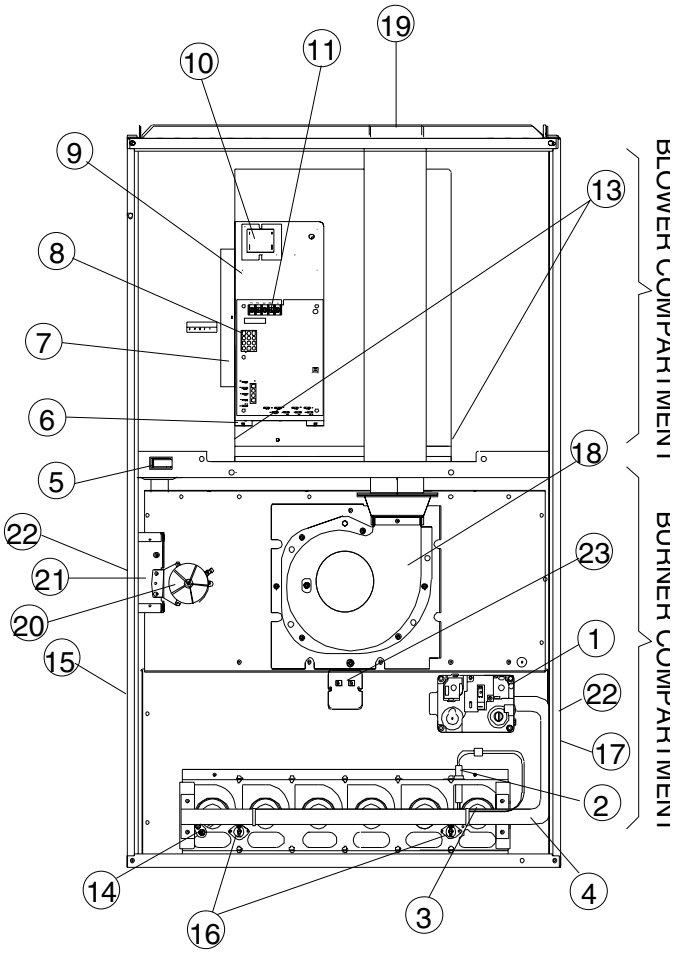
Note: Access door inlet louvered vent configuration is dependent upon unit size. See drawings below.



COMPONENT IDENTIFICATION



Upflow/Horizontal



Counterflow/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***FA** (Manufacturing Numbers P1241801-08F)
GUIC***FX** (Manufacturing Numbers P1241901-08F)
GCIC***FX** (Manufacturing Numbers P1234401-08F)

PRODUCT DESIGN

General Operation

The GUIC and GCIC furnaces are 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 door 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	5[1]	0	0	0	1	6[2]	C
Counterflow	5[1]	0	0	0	1	6[2]	NC
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.

NC = For installation on non-combustible floors only. A combustible floor subbase must be used for installations on combustible flooring.

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*FA/FX** **GCIC***FX**	LPTK09 Propane Conversion Kit (#55 Orifice)	HANG15 High Altitude Natural Gas Kit (#45 Orifice) **Note: GUIC Only**	HALP12 High Altitude Propane Gas Kit (#56 Orifices) **Note: GUIC Only**	HAC1PS15 High Altitude Pressure Switch Kit (10727920) **Note: GUIC Only**

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
GUIC045F*30	-0.90	-0.80	-0.75	10727921	Green	-0.55	HAC1PS15 10727920	Dark Blue
GUIC070F*30 GUIC070F*40	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC090F*30 GUIC090F*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC115F*40 GUIC115F*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GUIC140F*50	-0.85	-0.75	-0.70	10727923	Orange	-0.55	HAC1PS15 10727920	Dark Blue
GCIC045FX30	-0.77	-.067	-0.62	10727924	Light Blue	NA	NA	NA
GCIC070FX30 GCIC070FX40	-0.77	-0.67	-0.62	10727924	Light Blue	NA	NA	NA
GCIC090FX30 GCIC090FX50	-0.77	-0.67	-0.62	10727924	Light Blue	NA	NA	NA
GCIC115FX40 GCIC115FX50	-0.77	-0.67	-0.62	10727924	Light Blue	NA	NA	NA
GCIC140FX50	-0.77	-0.67	-0.62	10727924	Light Blue	NA	NA	NA

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	10728304	10728312	10728314	10728324	10728330	10728339	10728340	10728341
Open Setting °F	190	160	180	135	200	190	220	260
Style	1	2	2	3	3	3	2	2
Sleeve Color	Green	Red	Blue	Green	Tan	Red	Black	Tan
GUIC045F*30					1			
GUIC070F*30						1		
GUIC070F*40						1		
GUIC090F*30					1			
GUIC090F*50					1			
GUIC115F*40						1		
GUIC115F*50						1		
GUIC140F*50				1				
GCIC045FX30								1
GCIC070FX30	1							
GCIC070FX40	1							
GCIC090FX30							1	
GCIC090FX50							1	
GCIC115FX40			1					
GCIC115FX50			1					
GCIC140FX50		1						

AUXILIARY LIMIT SWITCHES		
Part Number	10123519	10123536
Open Setting °F	160	180
Dot Color	Pink	Light Blue
GUIC045F*30	1	
GUIC070F*30	1	
GUIC070F*40	1	
GUIC090F*30	1	
GUIC090F*50	1	
GUIC115F*40	1	
GUIC115F*50	1	
GUIC140F*50	1	
GCIC045FX30		2
GCIC070FX30		2
GCIC070FX40		2
GCIC090FX30		2
GCIC090FX50		2
GCIC115FX40		2
GCIC115FX50		2
GCIC140FX50		2

ROLLOUT LIMIT SWITCHES						
Part Number	10123527	10123528	10123530	10123534	10123538	10123539
Open Setting °F	260	275	250	220	230	240
Dot Color	Brown	Pink	Light Blue	Orange	Tan	Orange (2 PLS)
GUIC045F*30		1				
GUIC070F*30		2				
GUIC070F*40		2				
GUIC090F*30						
GUIC090F*50		2				
GUIC115F*40	2					
GUIC115F*50	2					
GUIC140F*50		2				
GCIC045FX30				1		
GCIC070FX30					2	
GCIC070FX40					2	
GCIC090FX30			2			
GCIC090FX50			2			
GCIC115FX40				2		
GCIC115FX50				2		
GCIC140FX50						2

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
GUIC045F*30 GCIC045FX30	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
GUIC070F*30 GUIC070F*40 GCIC070FX30 GCIC070FX40	16 1/2"	1 1/2 - 3 2 1/2 - 4						
GUIC090F*30 GUIC090F*50 GCIC090FX30 GCIC090FX50	20 1/2"	1 1/2 - 3 3 - 5	CCA30FDC CCA36FDC CCA42FDC CCA48FCC	CCA48FSC	CHA42TCC	CHA42TSC	CCF24FDC CCF36FDC CCF42FCC CCF48FCC	CHF36TCC CHF42TCC
GUIC115F*40 GUIC115F*50 GCIC115FX40 GCIC115FX50	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
GUIC140F*50 GCIC140FX50	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
GUIC045F*30 GCIC045FX30	16 1/2"	1 1/2 - 3	CA36FCA	CF30FCA
GUIC070F*30 GUIC070F*40 GCIC070FX30 GCIC070FX40	16 1/2"	1 1/2 - 3 2 1/2 - 4		
GUIC090F*30 GUIC090F*50 GCIC090FX30 GCIC090FX50	20-1/2"	1 1/2 - 3 3 - 5	CA42FCA	CF36FCA
GUIC115F*40 GUIC115F*50 GCIC115FX40 GCIC115FX50	24-1/2"	2 1/2 - 4 3 - 5	CA48FCA CA57FCA	CF48FCA CF60FCA
GUIC140F*50 GCIC140FX50	24-1/2"	3 - 5		

PRODUCT DESIGN

Thermostats:

The following Amana Thermostats are suggested for use with the GUIC AND GCIC 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.

Upflow Filters

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___F*__ 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___F*__ 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.

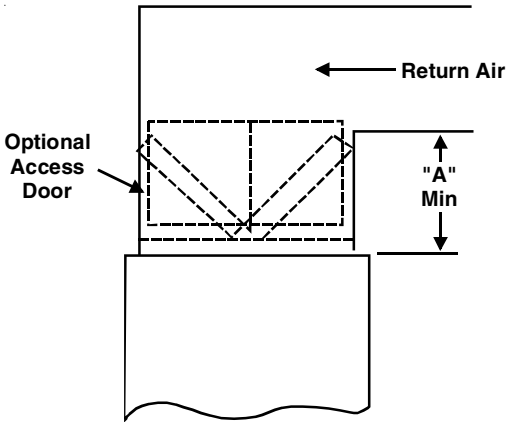
Permanent Minimum Filter Area (in^2)

[Based on 600 ft/min filter face velocity]

PRODUCT DESIGN

Counterflow Filters

This furnace has provisions for the installation of return air filters at the counterflow top return. The furnace will accommodate the following filter sizes depending on cabinet size:



Counterflow Top Return				
Cabinet Width	**Filter Area (in^2)**	**Qty**	**Filter Size (in)**	**Dimension "A" (in)**
16 1/2	600	2	15 X 20 X 1	14.2
20 1/2				13.0
24 1/2				11.3
16 1/2	800	2	20 X 20 X 1	19.7
20 1/2				18.8
24 1/2				17.7
16 1/2	1000	2	25 X 20 X 1	25.0
20 1/2				24.3
24 1/2				23.4

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**
GCIC___FX__ Model (Input__Airflow)	045__30	335*	384	480	576	---	---	---
	070__30	419*	419*	480	576	---	---	---
	070__40	---	---	480	576	672	768	---
	090__30	559*	559*	559*	576	---	---	---
	090__50	---	---	---	576	672	768	960
	115__40	---	---	699*	699*	699*	768	---
	115__50	---	---	---	699*	699*	768	960
	140__50	---	---	---	838*	838*	838*	960

*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**
GCIC___FX__ Model (Input__Airflow)	045__30	168*	192	240	288	---	---	---
	070__30	210*	210*	240	288	---	---	---
	070__40	---	---	240	288	336	384	---
	090__30	279*	279*	279*	288	---	---	---
	090__50	---	---	---	288	336*	384	480
	115__40	---	---	349*	349*	349*	384	---
	115__50	---	---	---	349*	349*	384	480
	140__50	---	---	---	419*	419*	419*	480

*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	GUIC045F*30	GUIC070F*30	GUIC070F*40	GUIC090F*30	GUIC090F*50	GUIC115F*40	GUIC115F*50	GUIC140F*50
Btuh Input (US)	46,000	69,000	69,000	92,000	92,000	115,000	115,000	138,000
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	1/3	1/2	1/3	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.

FURNACE SPECIFICATIONS

MODEL	GCIC045CX30	GCIC070CX30	GCIC070CX40	GCIC090CX30	GCIC090CX50	GCIC115CX40	GCIC115CX50	GCIC140CX50
Btuh Input (US)	46,000	69,000	69,000	92,000	92,000	115,000	115,000	138,000
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	45 - 75	45 - 75	45 - 75	45 - 75	45 - 75	45 - 75	45 - 75
Pressure Switch Trip Point (" w.c.)	-0.62	-0.62	-0.62	-0.62	-0.62	-0.62	-0.62	-0.62
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	1/3	1/2	1/3	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.	1259	1255	1553	1356	1751	1638	1894	1894
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)	260	190	190	220	220	180	180	160
Auxiliary Limit Setting (°F)	180	180	180	180	180	180	180	180
Rollout Limit Setting (°F)	220	230	230	250	250	220	220	240
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)	3	3	3	3	3	3	3	3
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*FA/FX** 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
GUIC045F*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-LOW	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
GUIC070F*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-LOW	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
GUIC070F*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-LOW	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
GUIC090F*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-LOW	2.0	911	----	922	----	911	----	900	----	864	----	783	703	580
	LOW	1.5	703	----	689	----	644	----	629	----	596	----	526	447	397
GUIC090F*50 (MED-LOW)	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-LOW	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
GUIC115F*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-LOW	3.0	1368	62	1333	64	1303	65	1258	----	1211	----	1129	1040	921
	LOW	2.5	1143	----	1120	----	1101	----	1068	----	1014	----	950	872	747
GUIC115F*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-LOW	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
GUIC140F*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-LOW	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.

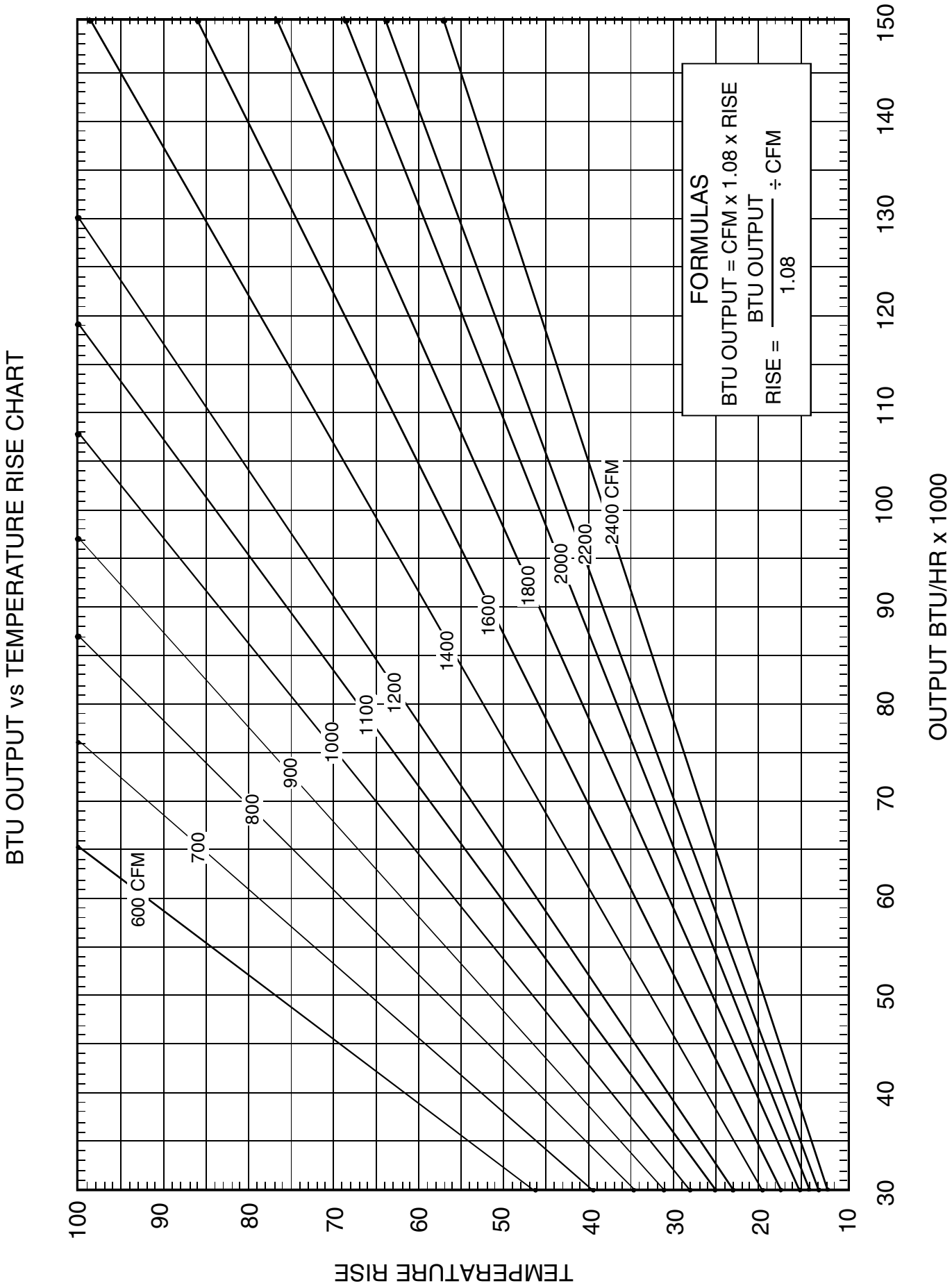
BLOWER PERFORMANCE SPECIFICATIONS

GCIC*FX** Blower Performance**
(CFM & Temperature Rise vs. External Static Pressure)

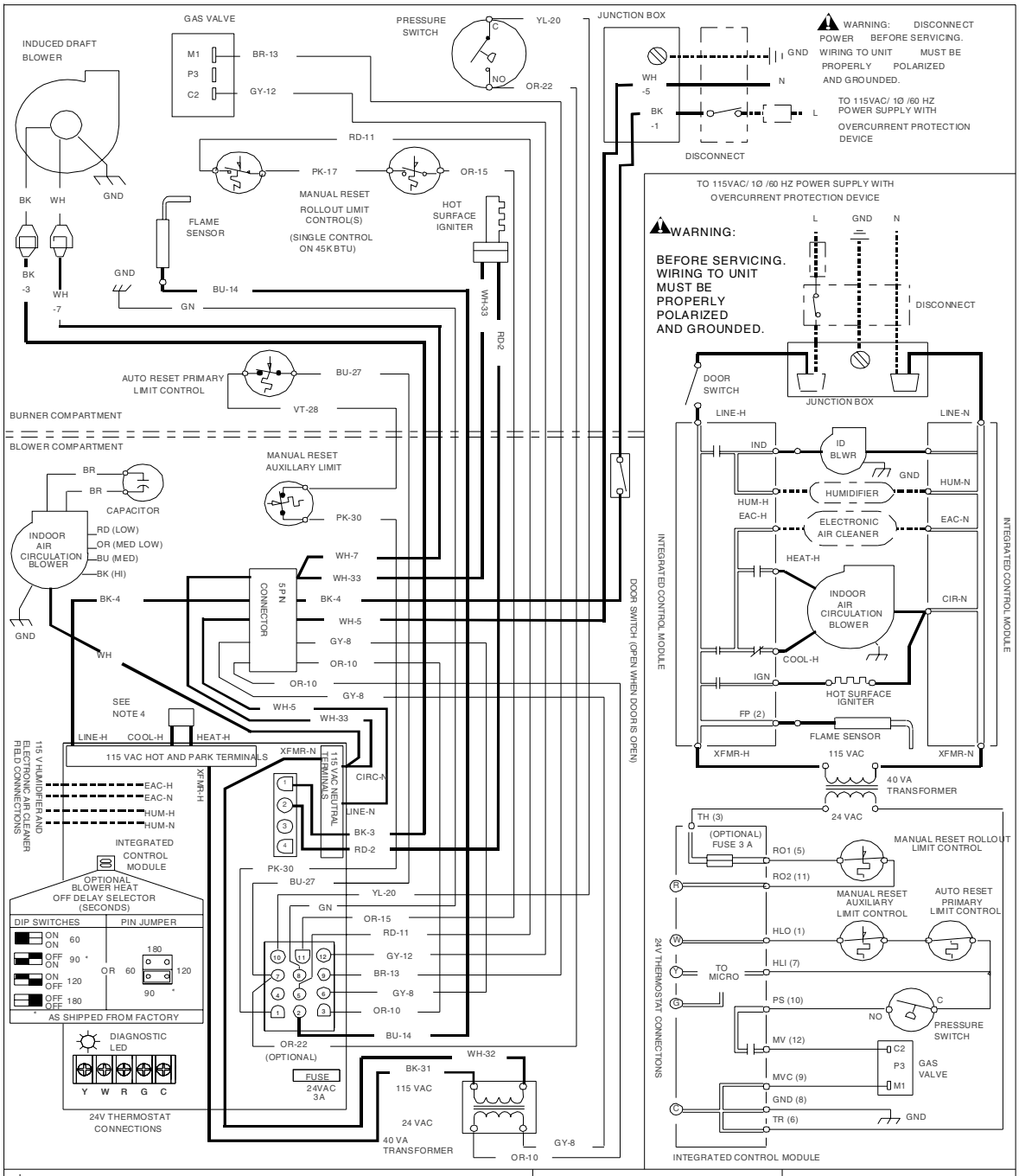
Model (Heating Speed As Shipped)	MOTOR SPEED	TONS AC @ 0.5" ESP	External Static Pressure, (Inches Water Column)												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
GCIC045FX30 (LOW)	HIGH	3.0	1401	---	1380	---	1350	---	1306	---	1259	---	1186	1126	1054
	MED	2.5	1109	---	1109	---	1091	---	1072	---	1044	---	1005	955	890
	MED-LOW	2.0	884	39	884	39	880	39	863	39	852	40	815	777	724
	LOW	1.5	676	50	672	51	667	51	644	53	620	55	600	563	494
GCIC070FX30 (MED-LOW)	HIGH	3.0	1390	---	1361	---	1339	---	1301	---	1255	---	1198	1129	1037
	MED	2.5	1111	46	1102	46	1093	47	1066	48	1037	49	1008	947	893
	MED-LOW	2.0	868	59	865	59	865	59	851	60	832	61	806	767	691
	LOW	1.5	669	---	655	---	646	---	631	---	601	---	575	542	482
GCIC070FX40 (LOW)	HIGH	4.0	1869	---	1776	---	1705	---	1650	---	1553	---	1471	1385	1268
	MED	3.5	1631	---	1612	---	1553	---	1482	---	1396	---	1339	1268	1166
	MED-LOW	3.0	1397	---	1376	---	1354	---	1317	---	1270	---	1198	1147	1056
	LOW	2.5	1147	45	1147	45	1138	45	1111	46	1093	47	1047	998	925
GCIC090FX30 (HIGH)	HIGH	3.0	1422	48	1422	48	1411	48	1389	49	1356	50	1286	1200	1107
	MED	2.5	1175	58	1167	58	1133	60	1106	62	1079	63	1032	973	877
	MED-LOW	2.0	910	75	910	75	899	---	866	---	831	---	795	730	628
	LOW	1.5	697	---	666	---	628	---	613	---	567	---	499	447	382
GCIC090FX50 (LOW)	HIGH	5.0	2156	---	2089	---	1995	---	1832	---	1751	---	1653	1517	1385
	MED	4.0	1805	---	1779	---	1724	---	1638	---	1548	---	1469	1349	1238
	MED-LOW	3.5	1569	---	1549	---	1509	45	1446	47	1370	50	1301	1202	1109
	LOW	3.0	1312	52	1312	52	1277	53	1228	55	1189	57	1123	1052	928
GCIC115FX40 (MED)	HIGH	4.0	1907	45	1850	46	1782	48	1720	50	1638	52	1551	1448	1337
	MED	3.5	1675	51	1638	52	1590	54	1541	55	1469	58	1394	1314	1191
	MED-LOW	3.0	1352	63	1352	63	1330	64	1284	66	1253	68	1196	1119	1016
	LOW	2.5	1136	75	1128	---	1110	---	1073	---	1036	---	976	913	810
GCIC115FX50 (MED-LOW)	HIGH	5.0	2252	---	2154	---	2086	---	1980	---	1894	45	1763	1651	1515
	MED	4.0	1830	47	1790	48	1750	49	1694	50	1622	53	1546	1417	1294
	MED-LOW	3.5	1587	54	1567	54	1547	55	1507	57	1466	58	1391	1299	1214
	LOW	3.0	1368	62	1357	63	1346	63	1323	64	1263	67	1201	1149	1021
GCIC140FX50 (MED)	HIGH	5.0	2086	49	2086	49	2086	49	1956	52	1894	54	1803	1651	1531
	MED	4.0	1881	54	1830	56	1750	58	1708	60	1622	63	1583	1500	1389
	MED-LOW	3.5	1596	64	1577	65	1547	66	1497	68	1423	72	1357	1287	1135
	LOW	3.0	1357	---	1357	---	1334	---	1287	---	1239	---	1188	1108	991

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



WIRING DIAGRAMS



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

LOW VOLTAGE (24V)	EQUIPMENT GND
LOW VOLTAGE FIELD	FIELD GND
HI VOLTAGE (115V)	FIELD SPLICE
HI VOLTAGE FIELD	SWITCH (TEMP.)
JUNCTION	IGNITER
TERMINAL	SWITCH (PRESS.)
INTERNAL TO INTEGRATED CONTROL	OVERCURRENT PROT. DEVICE
PLUG CONNECTION	

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

20368501 REV. 01

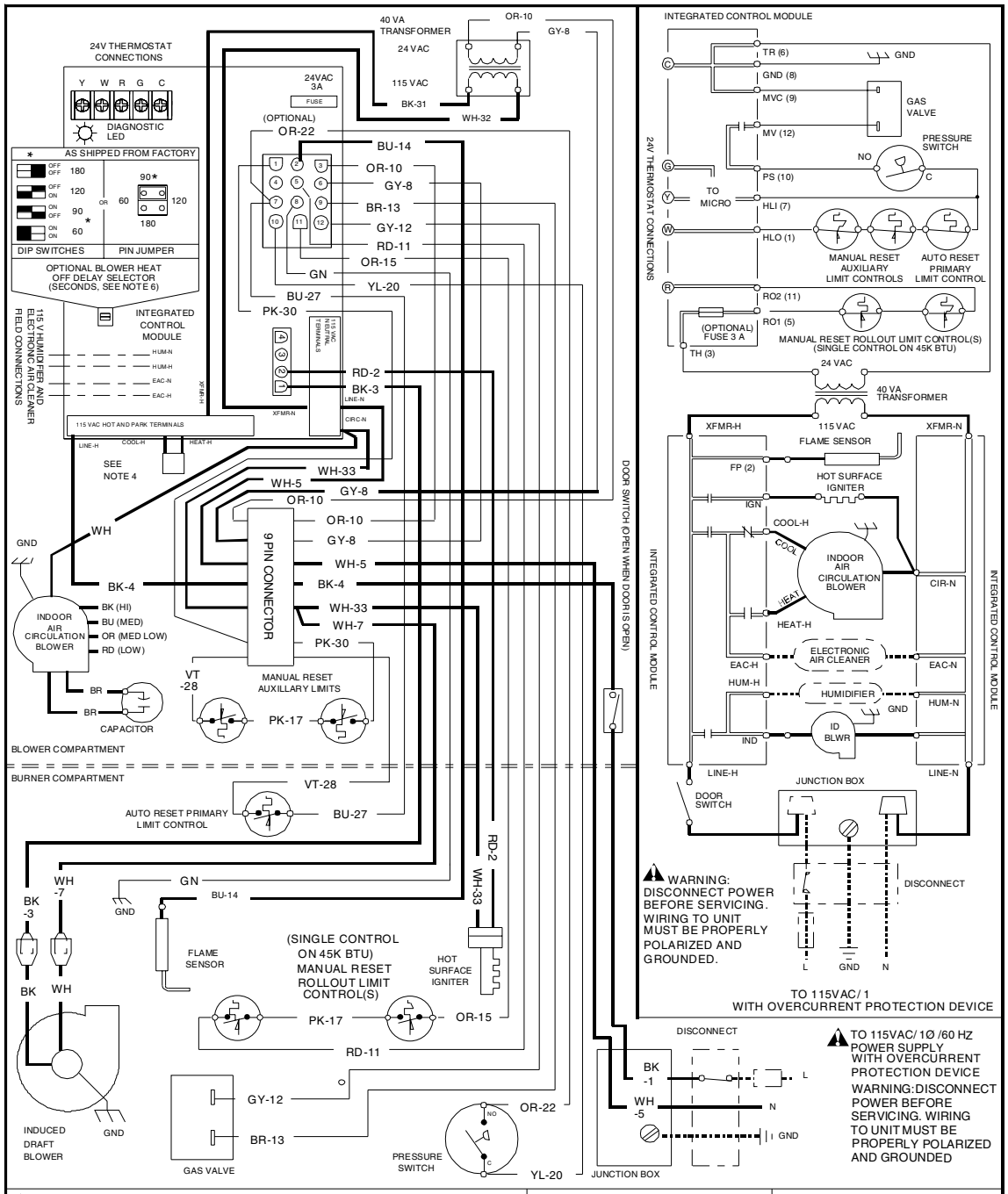
NOTES:
1. SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
2. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
3. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105
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***FA** (Manufacturing Numbers P1241801-08F)
GUIC***FX** (Manufacturing Numbers P1241901-08F)

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

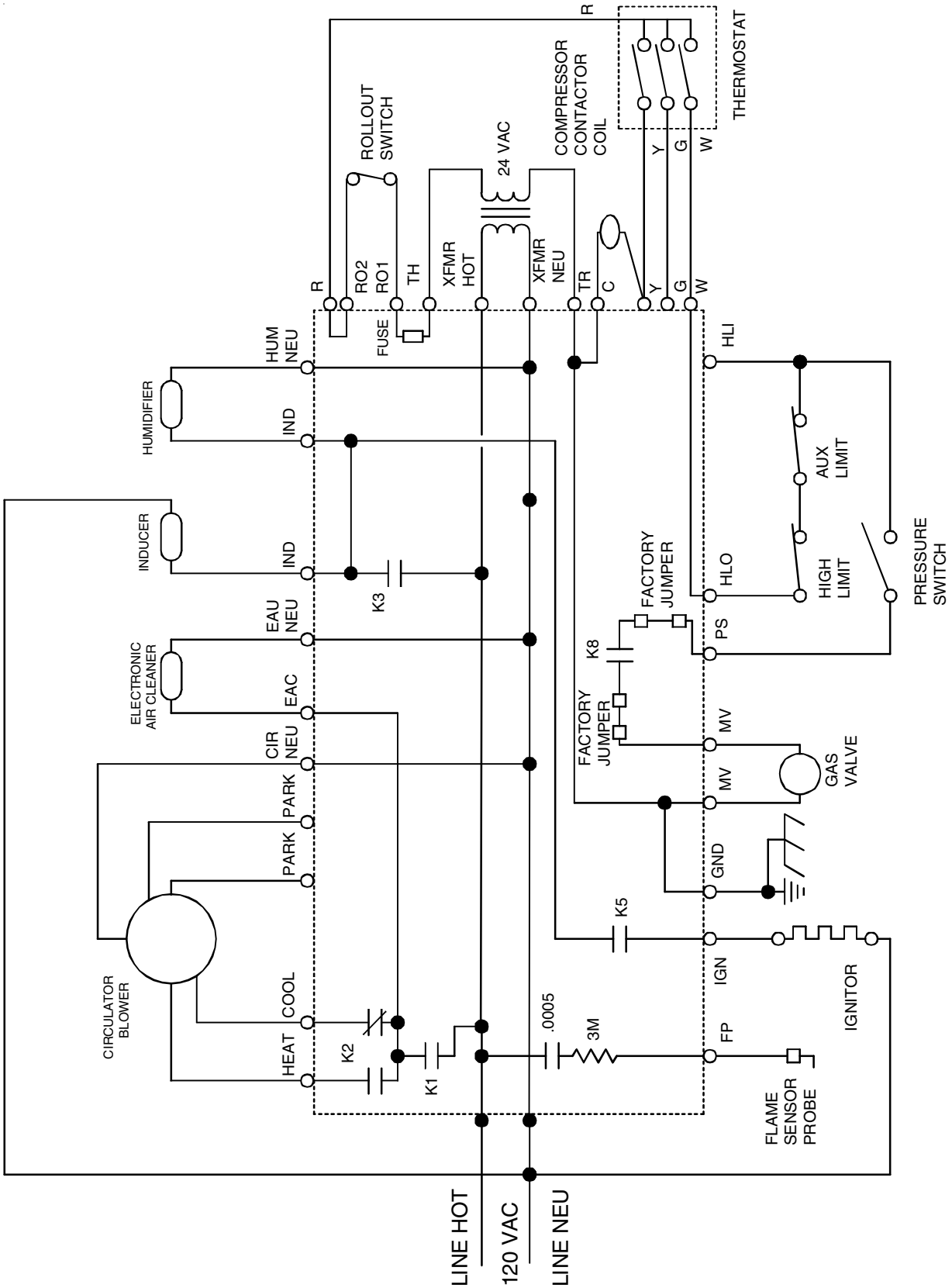
20364401 REV.00

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°C. USE COPPER CONDUCTORS ONLY.
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.

SCHEMATICS



TYPICAL SCHEMATIC

GUIC*FA/FX** & GCIC***FX** MODEL FURNACES**

WHITE-RODGERS 50A65 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.