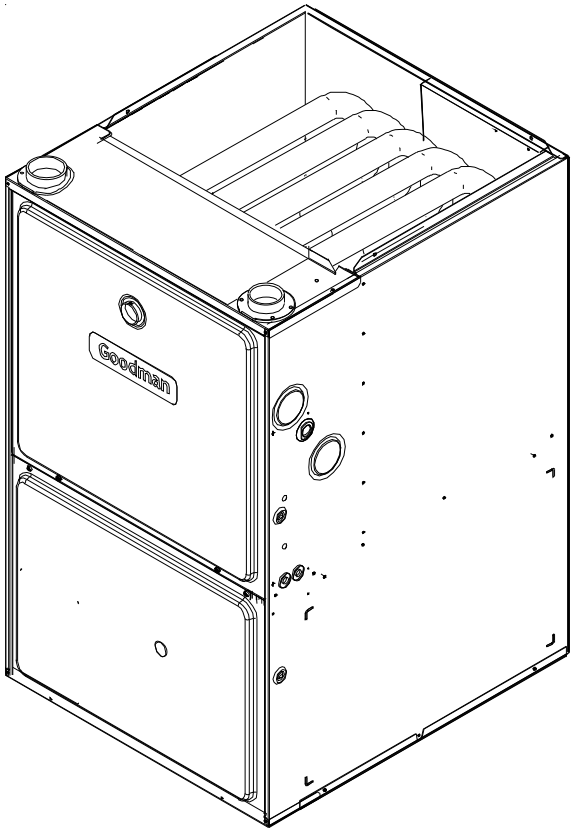
TECHNICAL MANUAL

GKS9
40" 90% Gas Furnaces

- Refer to Service Manual RS6610004* 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 numbers listed on page 3.



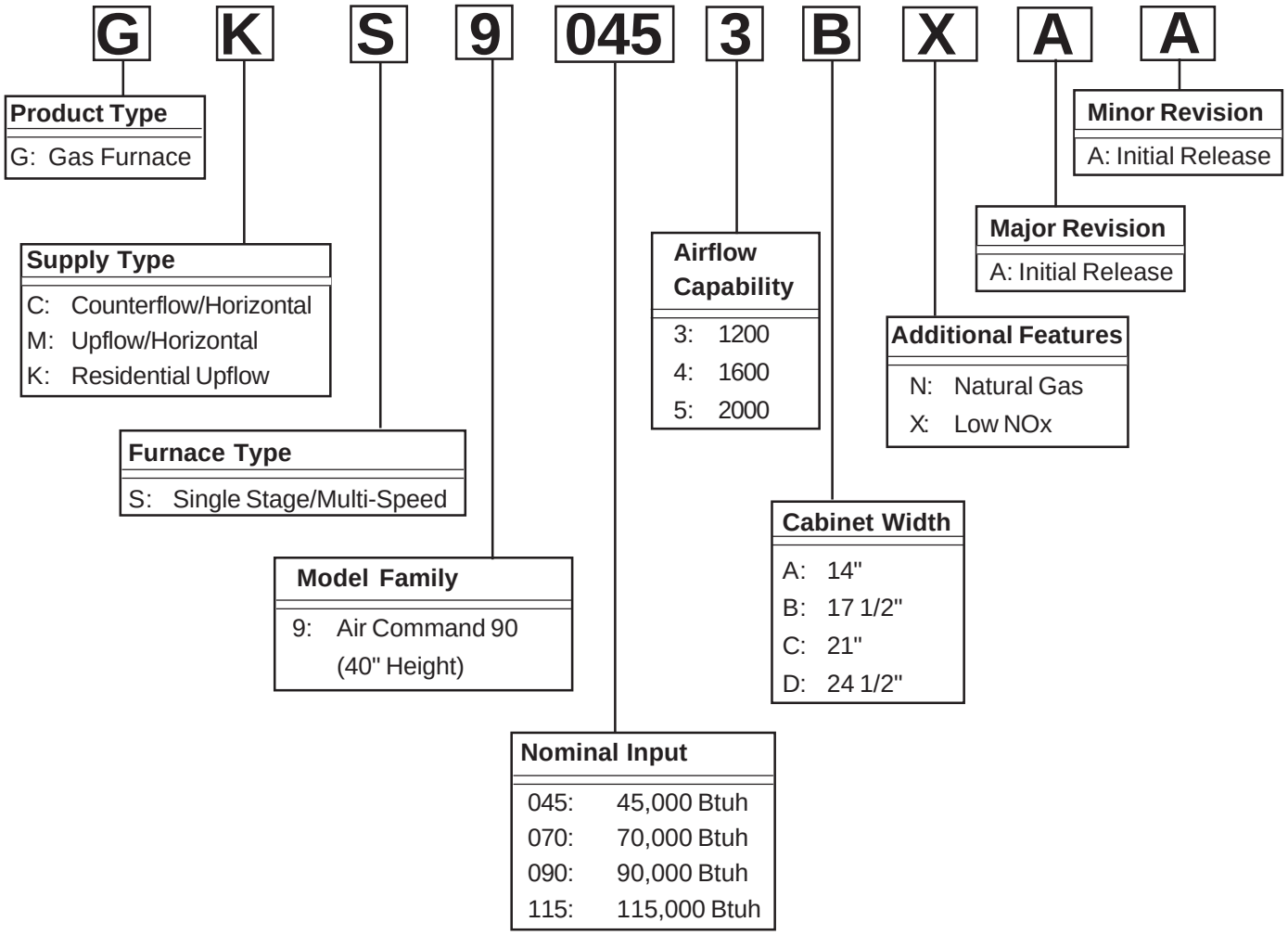
This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6612017r2
June 2009

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

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.

⚠ WARNING **Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.**

⚠ WARNING **Installation and repair of this unit should be performed ONLY by individuals meeting the requirements of an "entry level technician" as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.**

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.

GKS90453BX*
GKS90703BX*
GKS90704CX*
GKS90904CX*
GKS90905DX*
GKS91155DX*

** Indicates minor revision & is not used for order entry or inventory management*

⚠ WARNING **The United States Environmental Protection Agency ("EPA") has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.**

⚠ WARNING **Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.**

⚠ WARNING **To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.**

PRODUCT DESIGN

General Operation

The GKS9 furnaces are equipped with an electronic ignition device used 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.

Notes:

1. Installer must supply one or two PVC pipes: one for combustion air (optional) and one for the flue outlet (required). Vent pipe must be either 2” or 3” in diameter, depending upon furnace input, number of elbows, length of run and installation (1 or 2 pipes). The optional Combustion Air Pipe is dependent on installation/code requirements and must be 2” or 3” diameter PVC.
2. Line voltage wiring can enter through the right or left side of the furnace. Low voltage wiring can enter through the right or left side of furnace.
3. Conversion kits for high altitude natural or propane gas operation are available. See High Altitude Derate chart for details.
4. Installer must supply the following gas line fittings, depending on which entrance is used:

   Left -- Two 90º Elbows, one close nipple, straight pipe.

   Right -- Straight pipe to reach gas valve.

Accessibility Clearances (Minimum)

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES)						
POSITION*	**FRONT**	**SIDES**	**REAR**	**TOP**	**FLUE**	**FLOOR**
Upflow	-	0	0	1	0	C
Counterflow	1	0	0	1	0	NC
Horizontal	1	6	0	4	0	C

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

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

NC= For instalaltion on non-combustible floors only. A combustible 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.

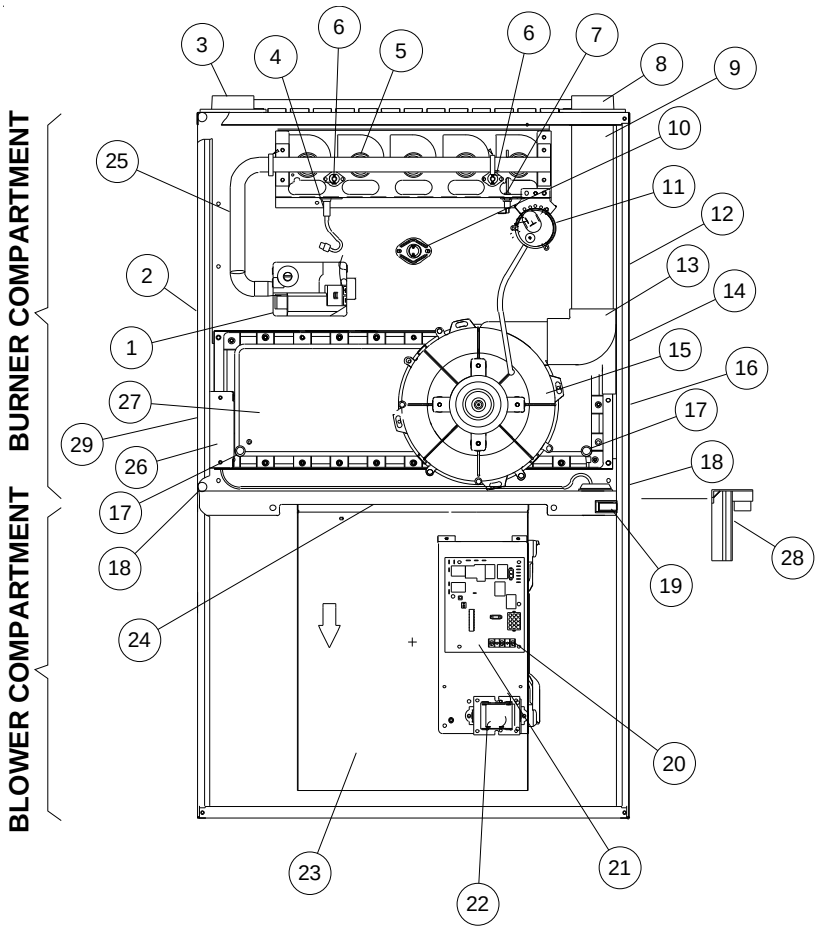
High Altitude Derate

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				
0 - 7,000 ft.	**7,001-9,000 ft.**	**9,001-11,000 ft.**	**7,001-11,000 ft.**	**7,001-11,000 ft.**
LPT-00A Propane Conversion Kit (#55 Orifices)	**TBD**	**TBD**	**TBD**	**TBD**

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.

COMPONENT IDENTIFICATION

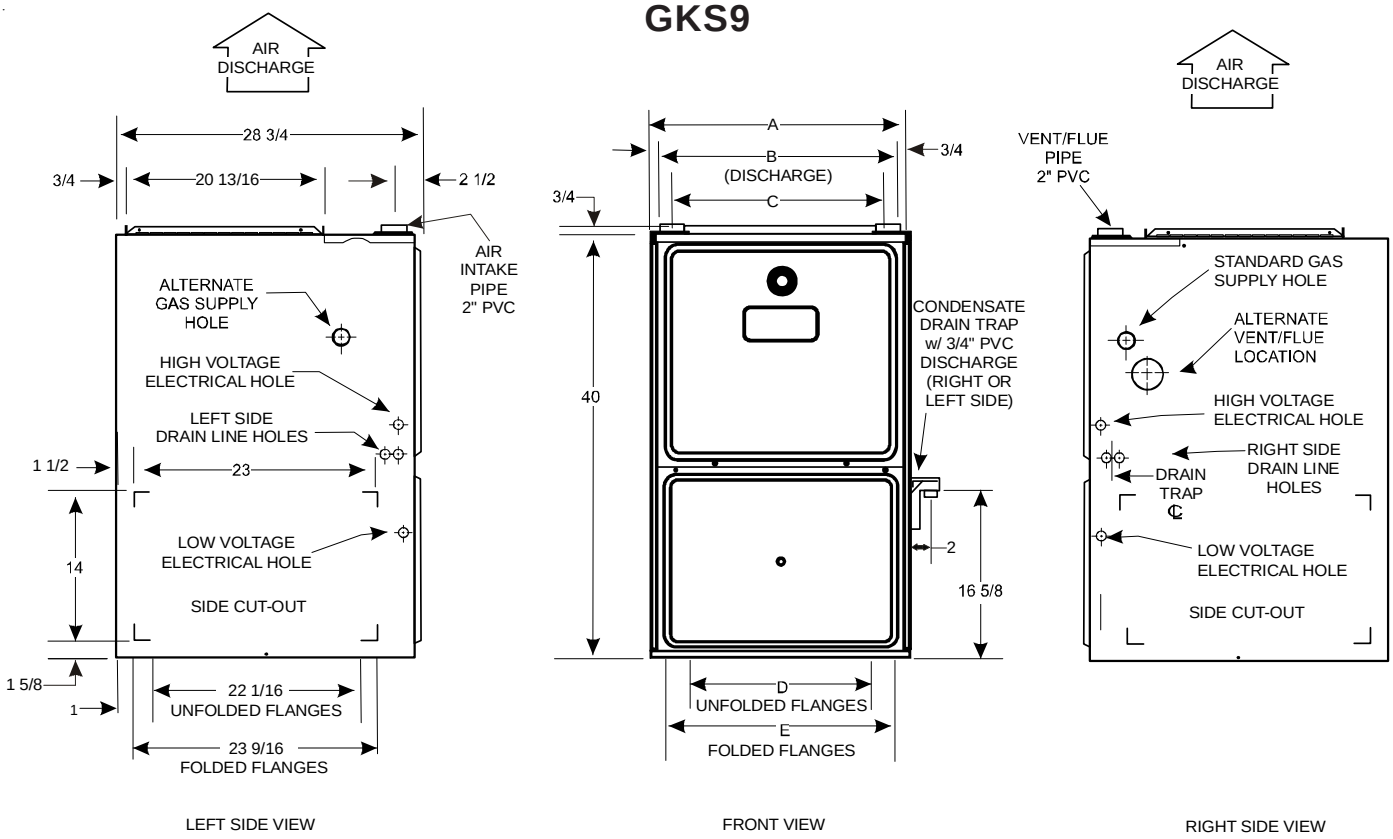


Upflow/Horizontal

1 Gas Valve
2 Gas Line Entrance (Alternate)
3 Combustion Air Intake Connection / “Coupling”
4 Hot Surface Igniter
5 Burners
6 Rollout Limit
7 Flame Sensor
8 Flue Pipe Connection / “Coupling”
9 Flue Pipe (Internal)
10 Primary Limit
11 Pressure Switch
12 Gas Line Entrance
13 Rubber Elbow
14 Flue Pipe Connection (Alternate)
15 Induced Draft Blower
16 Electrical Connection Inlets (Alternate)
17 Coil Front Cover Drain Port
18 Drain Line Penetrations
19 Blower Door Interlock Switch
20 24-Volt Thermostat Connections
21 Integrated Control Module (with fuse and diagnostic LED)
22 Transformer (40 VA)
23 Circulator Blower
24 Auxiliary Limit
25 Gas Manifold
26 Junction Box
27 Coil Front Cover
28 Drain Trap
29 Electrical Connection Inlets

COMPONENT IDENTIFICATION

GKS9



Cabinet Size	A	B	C	D	E
GKS90453BX* GKS90703BX*	17-1/2	16	12-15/16	12-1/8	13-5/8
GKS90704CX* GKS90904CX*	21	19-1/2	15-15/16	16	17-1/2
GKS90905DX* GKS91155DX*	24-1/2	23	20-7/16	19-3/8	20-7/8

All dimensions are in inches.

NOTE: *Airflow area will be reduced by approximately 18% if duct flanges are not unfolded. This could cause performance issues and noise issues.*

PRODUCT DESIGN

PRESSURE SWITCH TRIP POINTS AND USAGE CHART				
MODEL	**NEGATIVE PRESSURE ID BLOWER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA**	**NEGATIVE PRESSURE ID BLOWER WITH FLUE FIRING TYPICAL SEA LEVEL DATA**	**NEGATIVE PRESSURE COIL COVER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA**	**NEGATIVE PRESSURE COIL COVER WITH FLUE FIRING TYPICAL SEA LEVEL DATA**
GKS90453BX*	-1.40	-1.20	-0.52	-0.37
GKS90703BX*	-1.30	-1.10	-0.52	-0.37
GKS90704CX*	-1.30	-1.10	-0.52	-0.37
GKS90904CX*	-1.10	-0.95	-0.52	-0.37
GKS90905DX*	-0.90	-0.75	-0.52	-0.37
GKS91155DX*	-1.30	-1.10	-0.52	-0.37

(1) Data given for the flue not firing is least negative pressure required for switch to close.
(2) Data given for the flue firing is least negative pressure required for the switch to remain closed.

	PRESSURE SWITCH TRIP POINTS AND USAGE						
	0 to 7,000 ft.				**7,001 to 11,000 ft.**		
MODEL	**TRIP POINT COIL COVER PRESSURE SWITCH**	**COIL COVER PRESSURE SWITCH PART #***	**TRIP POINT ID BLOWER PRESSURE SWITCH**	**ID BLOWER PRESSURE SWITCH PART #***	**TRIP POINT COIL COVER PRESSURE SWITCH**	**TRIP POINT ID BLOWER PRESSURE SWITCH**	**HIGH ALTITUDE KIT**
GKS90453BX*	-0.37	20197312	-1.20	0130F00001P	TBD	TBD	TBD
GKS90703BX*	-0.37	20197312	-1.10	0130F00000P	TBD	TBD	TBD
GKS90704CX*	-0.37	20197312	-1.10	0130F00000P	TBD	TBD	TBD
GKS90904CX*	-0.37	20197312	-0.95	0130F00002P	TBD	TBD	TBD
GKS90905DX*	-0.37	20197312	-0.75	0130F00004	TBD	TBD	TBD
GKS91155DX*	-0.37	20197312	-1.10	0130F00001P	TBD	TBD	TBD

Note: For installations in Canada, this 90% furnace is certified only to 4500.ft.
Note: All negative pressure readings are in inches of water column (" w.c.).

GKS9 furnaces are shipped without coil cover pressure switches. All GKS9 models are shipped from the factory as Dedicated Upflow but can be installed as a Horizontal Left or a Horizontal Right, ONLY after installing GKS9 Horizontal Installation Kit 0270K00012, which contains Pressure Switch 20197312.

PRODUCT DESIGN

T.O.D. PRIMARY LIMIT			
Part Number	**20162903**	**20162904**	**20162906**
Open Setting (°F)	160	150	170
GKS90453BX*		1	
GKS90703BX*	1		
GKS90704CX*	1		
GKS90904CX*		1	
GKS90905DX*	1		
GKS91155DX*			1

ROLLOUT LIMIT SWITCHES	
Part Number	**10123514 or 10123533**
Open Setting (°F)	200
GKS90453BX*	1
GKS90703BX*	2
GKS90704CX*	2
GKS90904CX*	2
GKS90905DX*	2
GKS91155DX*	2

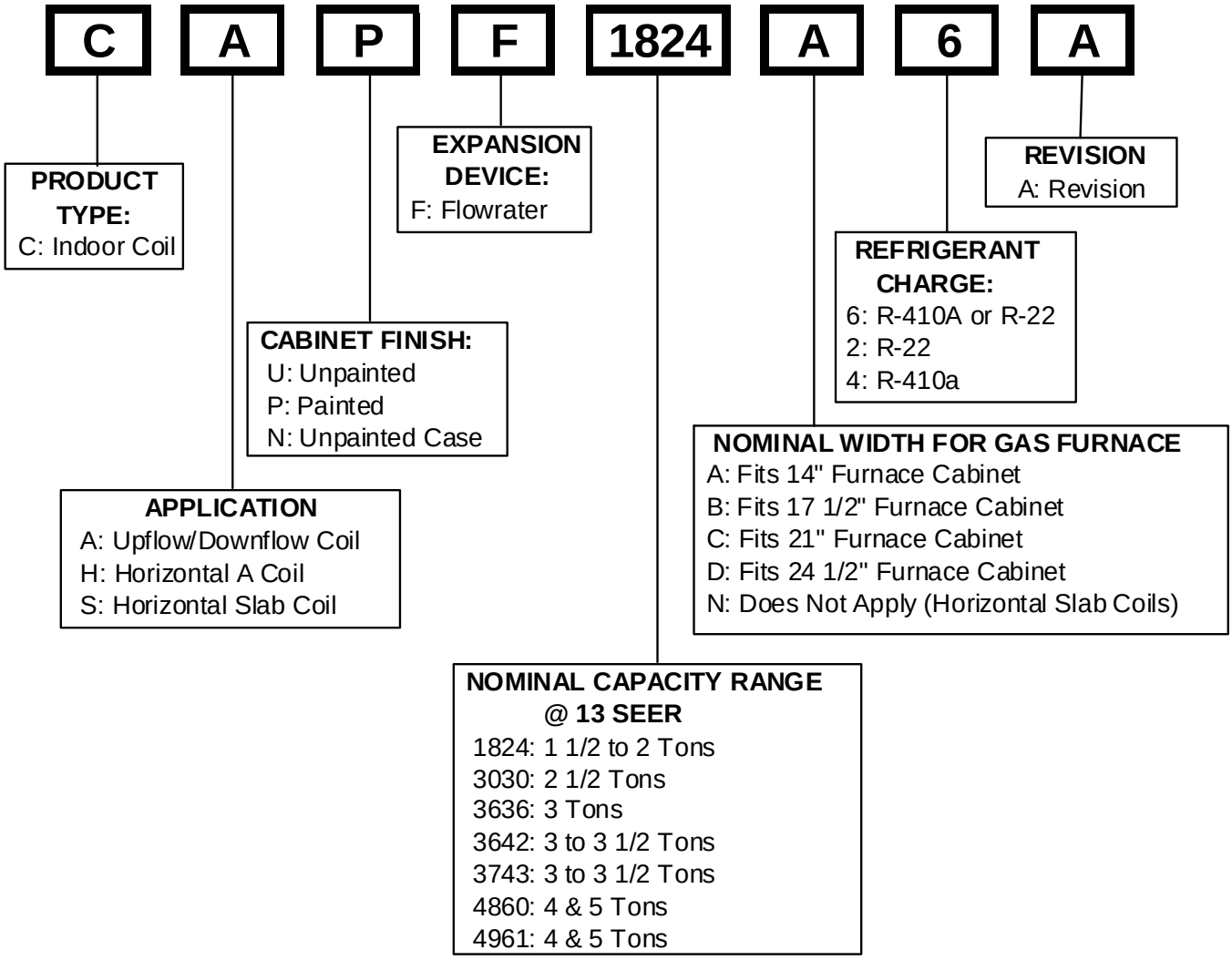
AUXILIARY LIMIT SWITCHES		
Part Number	**10123519**	**10123535**
Open Setting (°F)	160	150
GKS90453BX*		1
GKS90703BX*		1
GKS90704CX*		1
GKS90904CX*		1
GKS90905DX*		1
GKS91155DX*	1	

PRODUCT DESIGN

Coil Matches:

A large array of Amana® brand coils are available for use with the GKS9 furnaces, in either upflow, counterflow, or horizontal applications. These coils are available in both cased and uncased models (with the option of a field installed TXV expansion device). These 90%+ furnaces match up with the existing Amana® brand coils as shown in the chart below.

Coil Matches (for Goodman® units using R22 and R-410A):



- All CAPF coils in B, C, & D widths have insulated blank off plates for use with one size smaller furnaces.
- All CAPF coils have a CAUF equivalent.
- All CHPF coils in B, C & D heights have an insulated Z bracket for use with one size smaller furnace.
- All proper coil combinations are subject to being ARI rated with a matched outdoor unit.

PRODUCT DESIGN

Thermostats:

NOTE: Complete lineup of thermostats can be found in the Thermostat Specification Sheets.

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		
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)
17-1/2	14 x 25 x 1	350
21	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
Input__Airflow	0453_X*	376*	384	480	576	---	---	---
	0703_X*	---	564*	564*	564*	672	---	---
	0704_X*	---	---	564*	564*	672	768	---
	0904_X*	---	---	752*	752*	752*	768	---
	0905_X*	---	---	---	752*	752*	768	800
	1155_X*	---	---	---	940*	940*	940*	800

*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
Input__Airflow	0453_X*	188*	192	240	288	---	---	---
	0703_X*	---	282*	282*	282*	336	---	---
	0704_X*	---	---	260*	260*	336	384	---
	0904_X*	---	---	376*	376*	376*	384	---
	0905_X*	---	---	---	376*	376*	384	480
	115_X*	---	---	---	470*	470*	470*	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	GKS9 0453BX*	GKS9 0703BX*	GKS9 0704CX*	GKS9 0904CX*	GKS9 0905DX*	GKS9 1155DX*
Btuh						
Input (US)	46,000	69,000	69,000	92,000	92,000	115,000
Output (US)	42,800	64,400	63,900	86,000	86,000	106,500
Input (CAN)	46,000	69,000	69,000	92,000	92,000	115,000
Output (CAN)	42,800	64,400	63,900	86,000	85,300	106,500
A.F.U.E.	92.1%	92.1%	92.1%	92.1%	92.1%	92.1%
Rated External Static (" w.c.)	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50
Temperature Rise (°F)	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65	35 - 65
ID Blower Pressure Switch Trip Point (" w.c.)	-1.20	-1.10	-1.10	-0.95	-0.75	-1.10
Blower Wheel (D" x W")	10 x 8	10 x 8	10 x 10	10 x 10	11 x 10	11 x 10
Blower Horsepower	1/3	1/3	1/2	1/2	3/4	3/4
Blower Speeds	4	4	4	4	4	4
Max CFM @ 0.5 E.S.P.	1200	1200	1600	1600	2000	2000
Power Supply	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1	115-60-1
Minimum Circuit Ampacity (MCA)[1]	9.4	9.4	13.8	13.8	13.2	13.2
Maximum Overcurrent Device[2]	15.0	15.0	15.0	15.0	15.0	15.0
Transformer (VA)	40	40	40	40	40	40
Primary Limit Setting (°F)	150	160	160	150	160	170
Auxiliary Limit Setting (°F)	150	150	150	150	150	160
Rollout Limit Setting (°F)	200	200	200	200	200	200
Fan Delay On Heating	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.
Off Heating	150 secs.	150 secs.	150 secs.	150 secs.	150 secs.	150 secs.
Fan Delay On Cooling	6 sec.	6 sec.	6 sec.	6 sec.	6 sec.	6 sec.
Off Cooling	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
Manifold Pressure (Natural/Propane) ("w.c.)	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
Number of Burners	2	3	3	4	4	5
Vent Connector Diameter (inches) [3]	2	2	2	2	2	2
Combustion Air Connector Diameter (inches) [4]	2	2	2	2	2	2
Shipping Weight (lbs.)	132	135	153	158	170	175

[1] Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.
[2] Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.
[3] See Installation Instructions for appropriate vent diameter, length and number of elbows.
[4] See Installation Instructions for appropriate combustion air pipe diameter, length and number of elbows.

NOTE: This data is provided as a guide, it is important to electrically connect the unit and properly size fuses/circuit breakers and wires in accordance with all national and/or local electrical codes. Use copper wire only.

1. These furnaces are manufactured for natural gas operation. Optional kits are available for conversion to propane 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 or 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.

Unit specifications are subject to change without notice. **ALWAYS** refer to the units serial plate for the most up-to-date general and electrical information.

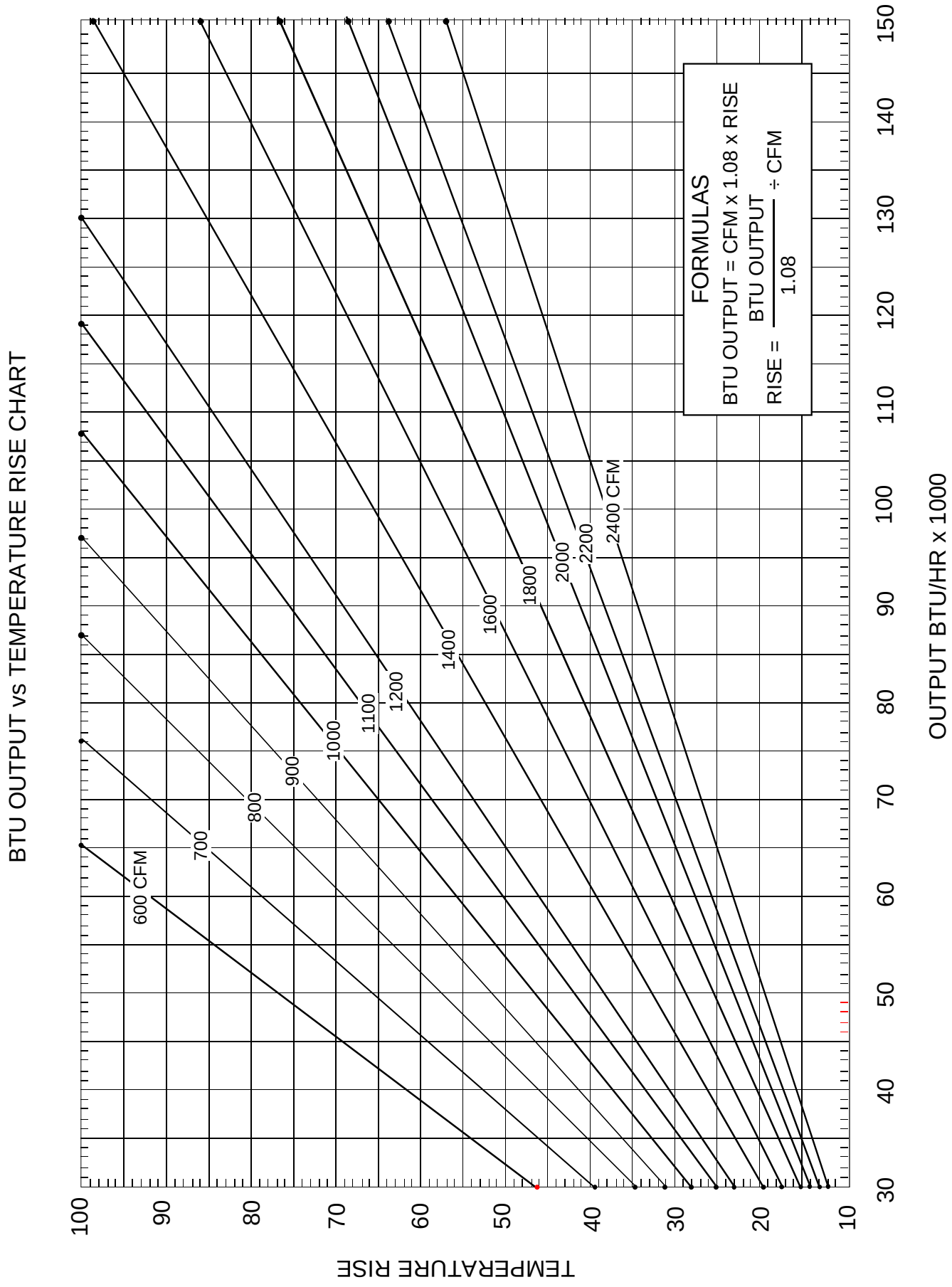
BLOWER PERFORMANCE SPECIFICATIONS

BLOWER PERFORMANCE
(CFM & Temperature Rise vs. External Static Pressure)

Model (Heating Speed As Shipped)	Motor Speed	Tons AC at 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
	HIGH	3.0	1352	---	1318	---	1260	---	1202	---	1128	---	1044	955	853
GKS90453BX*	MED	2.5	1214	---	1172	---	1123	---	1064	---	1012	---	938	859	741
(LOW)	MED-LO	2.0	997	---	994	---	960	35	923	36	884	38	817	741	611
	LOW	1.5	757	44	753	44	734	45	704	47	674	49	620	524	438
	HIGH	3.0	1449	36	1409	37	1326	39	1273	41	1201	43	1194	1136	1018
GKS90703BX*	MED	2.5	1192	43	1172	44	1141	45	1094	47	1046	49	973	904	793
(MED-HI)	MED-LO	2.0	981	53	962	54	943	55	917	56	888	58	830	764	665
	LOW	1.5	750	---	730	---	714	---	692	---	657	---	620	570	502
	HIGH	4.0	2069	---	1965	---	1871	---	1756	---	1661	---	1549	1415	1275
GKS90704CX*	MED	3.5	1752	---	1724	---	1667	---	1603	---	1488	35	1402	1290	1082
(LOW)	MED-LO	3.0	1437	36	1437	36	1417	36	1369	38	1320	39	1256	1140	984
	LOW	2.5	1184	44	1177	44	1161	44	1132	46	1095	47	1047	928	837
	HIGH	4.0	1970	---	1874	35	1757	38	1667	40	1566	42	1431	1334	1182
GKS90904CX*	MED	3.5	1713	39	1650	40	1572	42	1510	44	1418	47	1313	1211	1079
(MED-LO)	MED-LO	3.0	1439	46	1412	47	1370	48	1327	50	1260	53	1166	1078	956
	LOW	2.5	1183	56	1155	57	1122	59	1108	60	1062	62	1011	931	816
	HIGH	5.0	2147	---	2114	---	2057	---	2030	---	1978	---	1889	1784	1713
GKS90905DX*	MED	4.0	1675	40	1686	---	1640	40	1623	41	1557	43	1501	1455	1360
(MED-LO)	MED-LO	3.5	1489	45	1470	45	1436	46	1409	47	1361	49	1318	1243	1130
	LOW	3.0	1307	51	1265	52	1234	54	1203	55	1168	57	1096	1053	991
	HIGH	5.0	2134	40	2103	40	2029	42	1941	44	1906	44	1818	1733	1625
GKS91155DX*	MED	4.0	1678	51	1643	52	1643	52	1577	54	1527	56	1489	1423	1339
(MED-HI)	MED-LO	3.5	1453	58	1440	59	1426	59	1363	62	1349	63	1314	1253	1205
	LOW	3.0	1259	67	1239	68	1220	70	1181	---	1159	---	1118	1082	1015

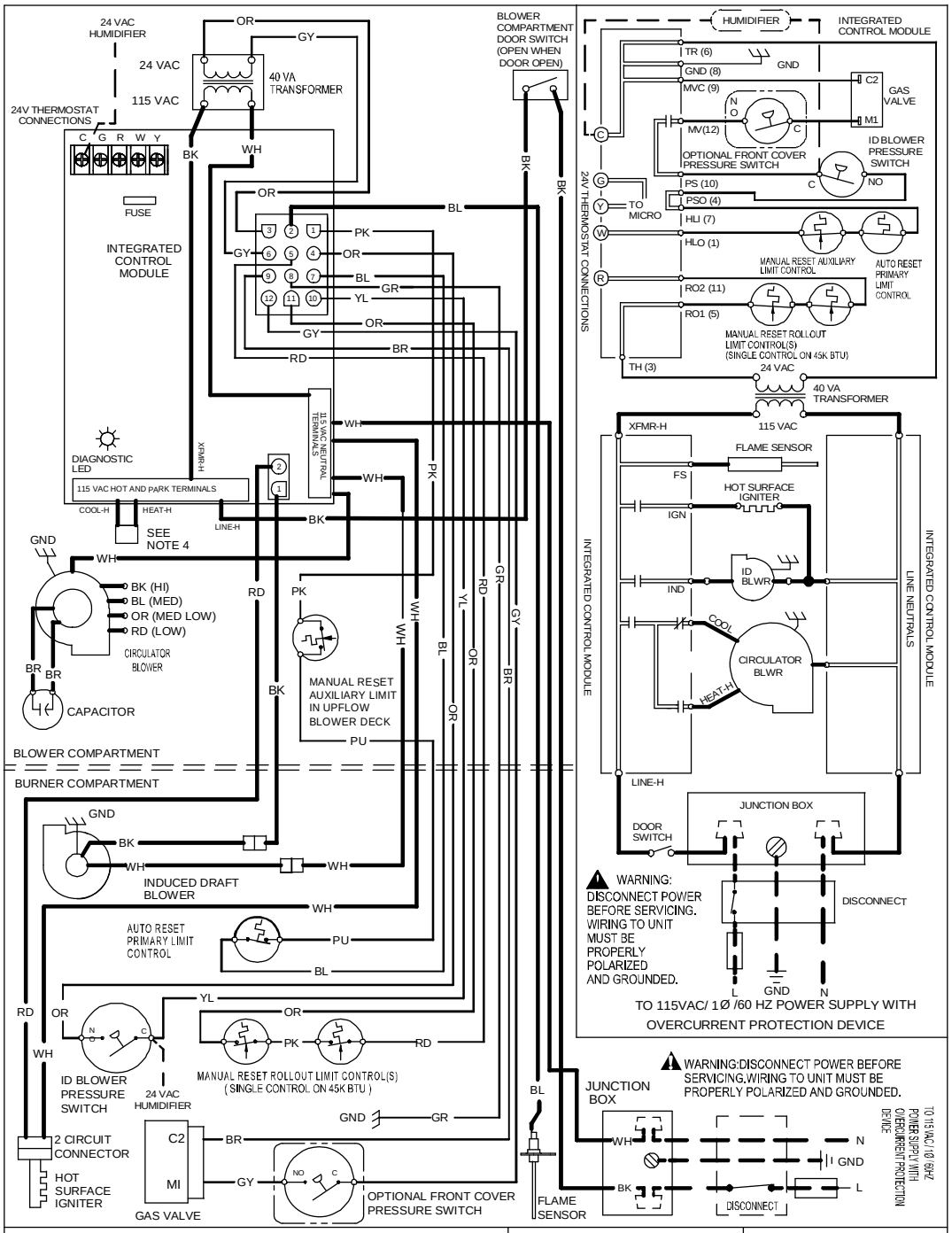
1. CFM in chart is without filters(s). Filters do not ship with this furnace, but must be provided by the installer. If the furnace requires two return filters, this chart assumes both filters are installed.
2. All furnaces ship as high speed cooling. Installer must adjust blower cooling speed as needed.
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



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.

WARNING



- STEADY ON = NORMAL OPERATION
- OFF = CONTROL FAILURE
- 1 FLASH = SYSTEM LOCKOUT (RETRIES EXCEEDED)
- 2 FLASHES = PRESSURE SWITCH STUCK CLOSED
- 3 FLASHES = PRESSURE SWITCH STUCK OPEN
- 4 FLASHES = OPEN HIGH LIMIT
- 5 FLASHES = FLAME SENSE WITHOUT GAS VALVE
- 6 FLASHES = OPEN ROLLOUT
- CONTINUOUS/RAPID FLASHES = REVERSED 115 VAC POLARITY

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
PU PURPLE	WH WHITE
GN GREEN	BL BLUE
BK BLACK	GY GRAY
	RD RED

0140F00236 REV. D

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.

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