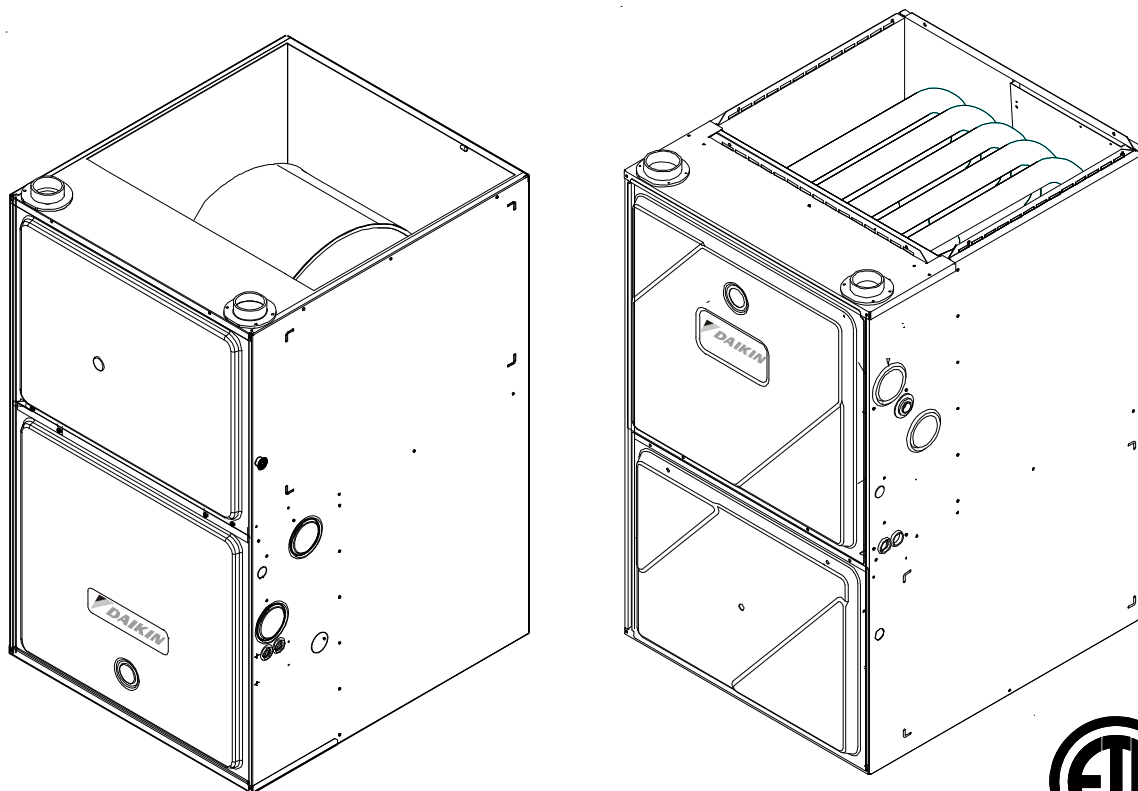


DAIKIN TECHNICAL MANUAL

DM96HS & DC96HS Modified Two Stage 40" UP TO 96% Gas Furnace Units

- Refer to Service Manual RSD6612003 for installation, operation, and troubleshooting information.
- 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. Daikin does not assume any responsibility for property damage or personal injury due to improper service procedures performed by an unqualified person.

RTD6612022
June 2013

PRODUCT IDENTIFICATION

The model and manufacturing number are used for positive identification of component parts used in manufacturing. Please use these numbers when requesting service or parts information.

	D	M	9	5	H	S	0	6	0	3	B	N	A	A	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Brand															Minor Revision
D - Daikin															A - Initial Release B - 1st Revision
Configuration															Major Revision
M - Upflow/Horizontal C - Downflow/Horizontal K - Dedicated Upflow D - Dedicated Downflow															A - Initial Release B - 1st Revision
AFUE															Nox
97 - 97% AFUE 80 - 80% AFUE															N - Natural Gas X - Low NOx
Gas Valve															Cabinet Width
M - Modulating V - 2 Stage H - Convertible 2 Stage S - Single Stage															A - 14" B - 17.5" C - 21" D - 24.5"
Motor															Maximum CFM
C - Variable Speed/ComfortNet E - High Efficiency S - Single Speed															3 - 1200 CFM 4 - 1600 CFM 5 - 2000 CFM
MBTU/h															
40 - 40,000 60 - 60,000 80 - 80,000 100 - 100,000 120 - 120,000															



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

Daikin 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", at a minimum, 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. Please use these numbers when requesting service or parts information.

DM96HS0453BXAA	DC96HS0453BXAA
DM96HS0703BXAA	DC96HS0703BXAA
DM96HS0704CXAA	DC96HS0704CXAA
DM96HS0904CXAA	DC96HS0904CXAA
DM96HS0905CXAA	DC96HS0905DXAA
DM96HS1155DXAA	DC96HS1155DXAA

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 Daikin 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 DM96HS and DC96HS 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 90° Elbows, one close nipple, straight pipe.

Right -- Straight pipe to reach gas valve.

Accessibility Clearances (Minimum)

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR DM96HS & DC96HS MODELS (INCHES)						
POSITION*	FRONT	SIDES	REAR	TOP	FLUE	FLOOR
Upflow	3	0	0	1	0	C
Horizontal	3	6	0	6	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 installation on non-combustible floors only. A non-combustible subbase must be used for installations on combustible flooring.

24" 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 FOR DM96HS MODELS			
0 to 7,000 ft.	7,001 to 9,000 ft.	9,001 to 11,000 ft.	7,001 to 11,000 ft.
LPM-06 ¹ Propane Conversion Kit (#55 Orifices)	HANG11 High Altitude Natural Gas Kit (#44 Orifices)	HANG12 High Altitude Natural Gas Kit (#45 Orifices)	HALP 10 High Altitude LP Gas Kit (#56 Orifices)

¹ LPM-06 supports Honeywell and White-Rodgers 2 stage valves

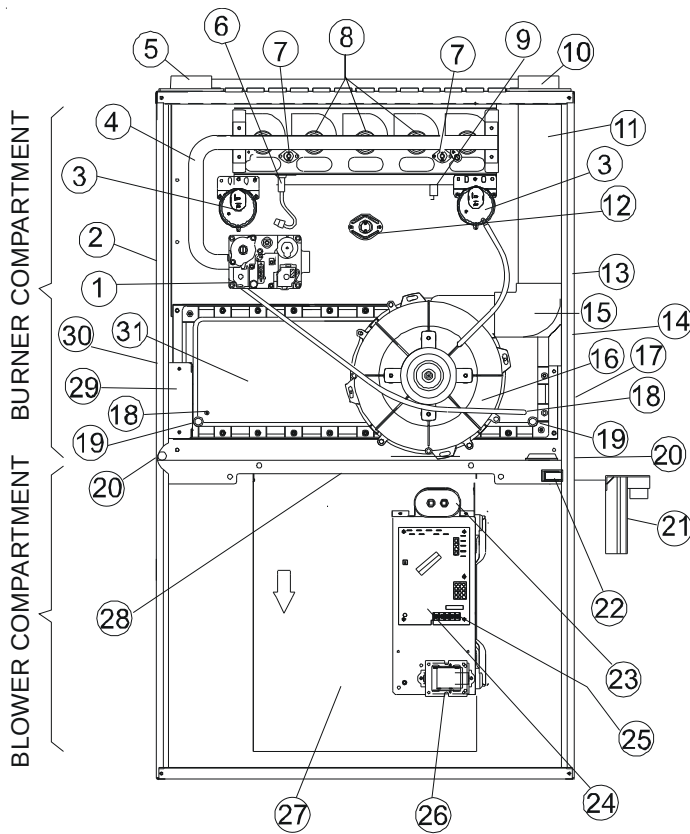
PROPANE AND HIGH ALTITUDE KITS FOR DC96HS MODELS			
0 to 7,000 ft.	7,001 to 9,000 ft.	9,001 to 11,000 ft.	7,001 to 11,000 ft.
LPM-06 ¹ Propane Conversion Kit (#55 Orifices)	HANG11 High Altitude Natural Gas Kit (#44 Orifices)	HANG12 High Altitude Natural Gas Kit (#45 Orifices)	HALP 10 High Altitude LP Gas Kit (#56 Orifices)

¹ LPM-06 supports Honeywell and White-Rodgers 2 stage valves

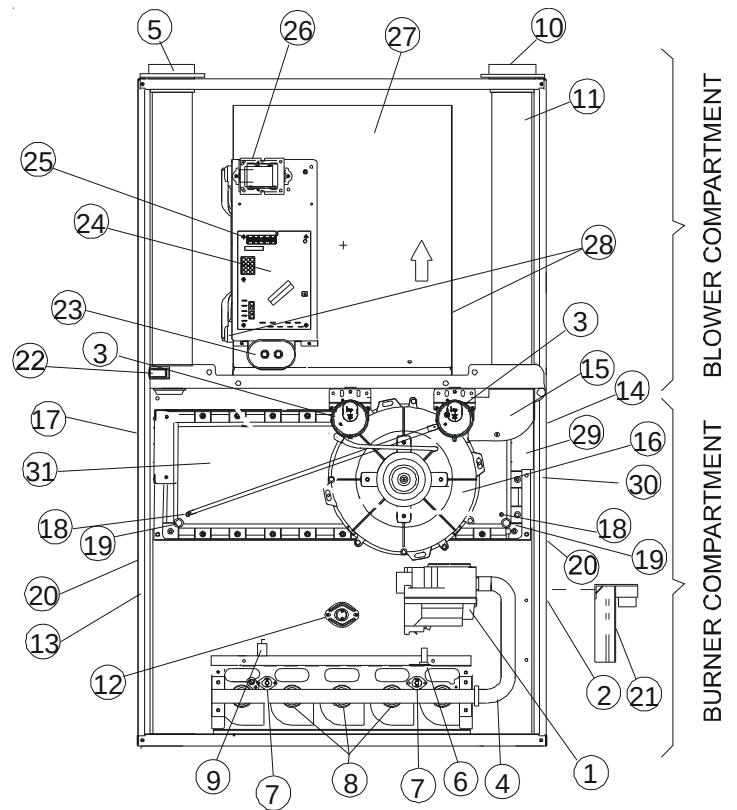
High altitude kits are purchased according to the installation altitude and usage of either natural or propane gas. Refer to the chart above for a tabular listing of appropriate altitude ranges and corresponding manufacturer's high altitude Natural Gas and Propane Gas kits. For a tabular listing of appropriate 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

DM96HS/DC96HS



Upflow/Horizontal



Counterflow/Horizontal

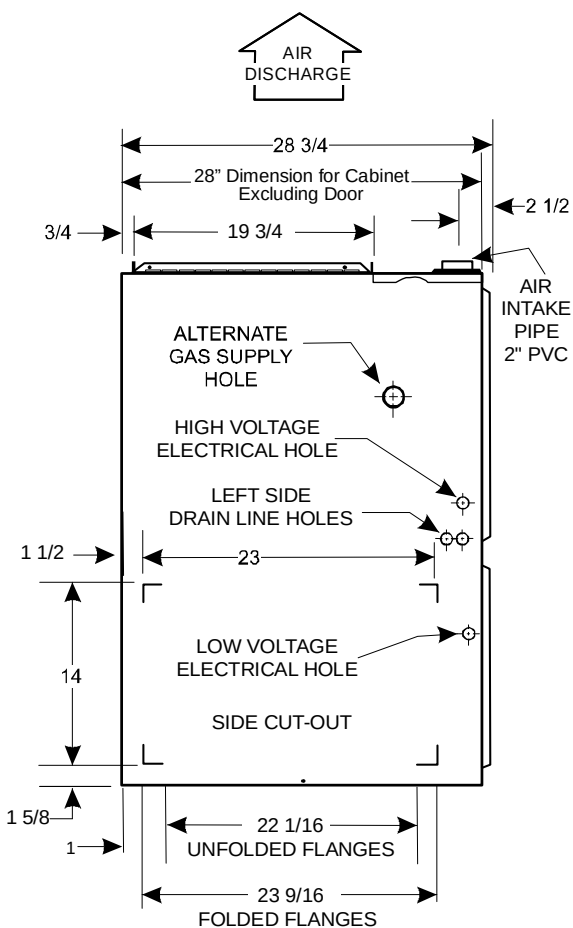
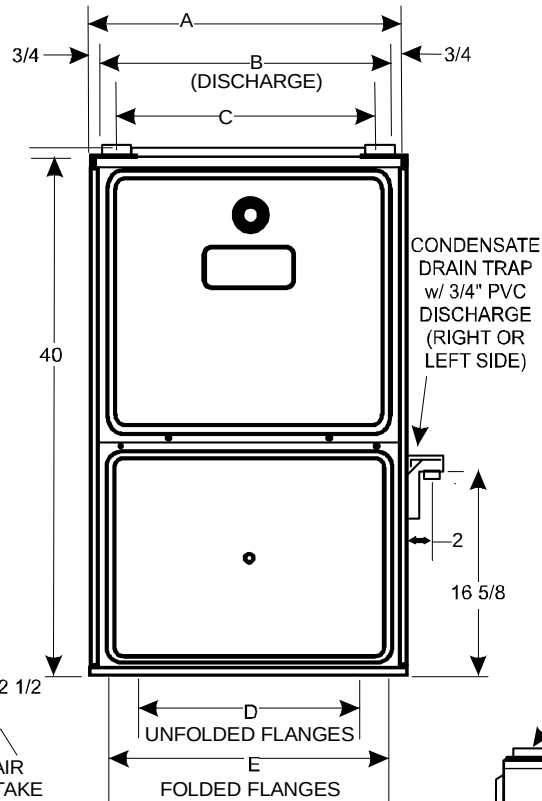
- 1 Gas Valve
- 2 Gas Line Entrance (Alternate)
- 3 Pressure Switch
- 4 Gas Manifold
- 5 Combustion Air Intake Connection / "Coupling"
- 6 Hot Surface Igniter
- 7 Rollout Limit
- 8 Burners
- 9 Flame Sensor
- 10 Flue Pipe Connection / "Coupling"
- 11 Flue Pipe (Internal)
- 12 Primary Limit
- 13 Gas Line Entrance
- 14 Flue Pipe Connection (Alternate)
- 15 Rubber Elbow
- 16 Induced Draft Blower

- 17 Electrical Connection Inlets (Alternate)
- 18 Coil Front Cover Pressure Tap
- 19 Coil Front Cover Drain Port
- 20 Drain Line Penetrations
- 21 Drain Trap
- 22 Blower Door Interlock Switch
- 23 Capacitor
- 24 Integrated Control Module
(with fuse and diagnostic LED)
- 25 24-Volt Thermostat Connections
- 26 Transformer (40 VA)
- 27 Circulator Blower
- 28 Auxiliary Limit
- 29 Junction Box
- 30 Electrical Connection Inlets
- 31 Coil Front Cover

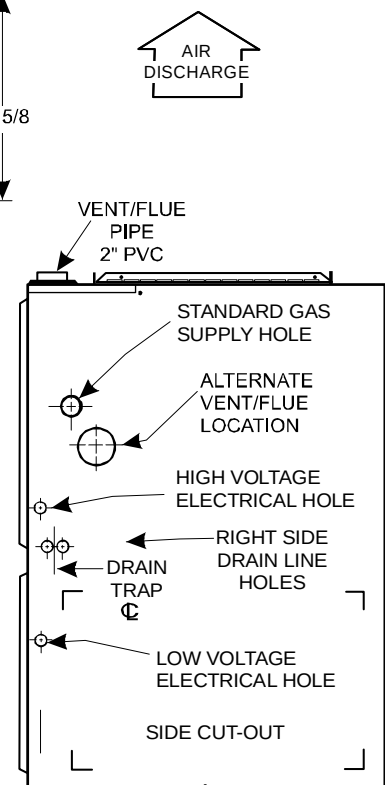
PRODUCT DIMENSIONS

DM96HS

FRONT VIEW



LEFT SIDE VIEW



RIGHT SIDE VIEW

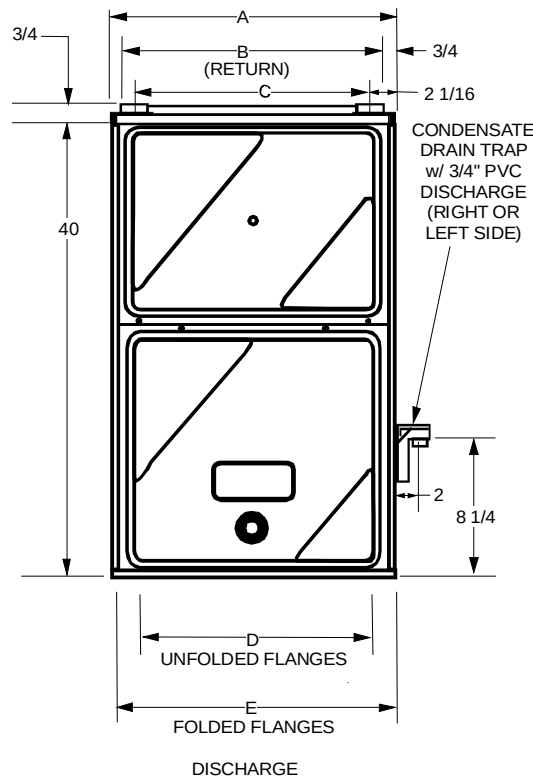
Cabinet Size	DM96HS0453BX** DM96HS0703BX**	DM96HS0704CX** DM96HS0904CX** DM96HS0905CX**	DM96HS1155DX**
A	17-1/2"	21"	24-1/2"
B	16"	19-1/2"	23"
C	12-15/16"	15-15/16"	20-7/16"
D	12-1/8"	16"	19-3/8"
E	13-5/8"	17-1/2"	20-7/8"

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

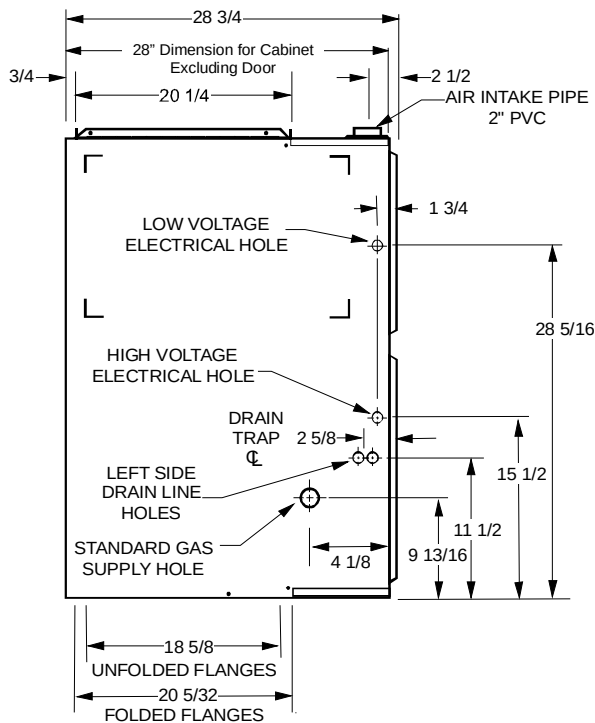
PRODUCT DIMENSIONS

DC96HS

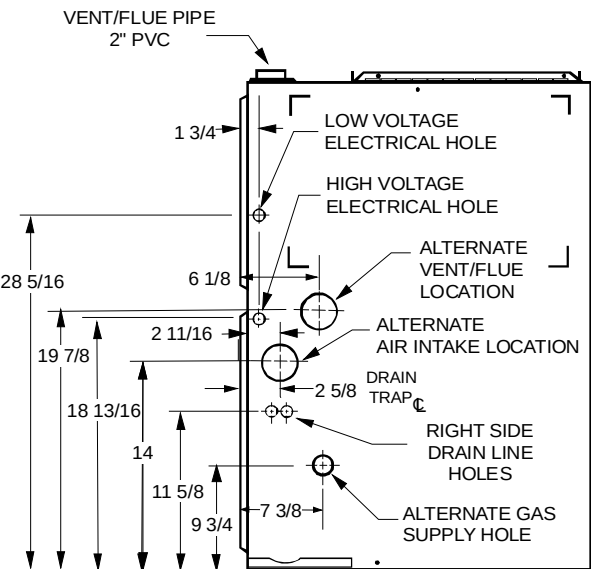
FRONTVIEW



LEFT SIDE VIEW



RIGHT SIDE VIEW



Cabinet Size	A	B	C	D	E
DC96HS0453BX** DC96HS0703BX**	17-1/2	16	12-15/16	12-1/8	13-5/8
DC96HS0704CX** DC96HS0904CX**	21	19-1/2	15-15/16	16	17-1/2
DC96HS0905DX** DC96HS1155DX**	24-1/2	23	20-7/16	19-3/8	20-7/8

All dimensions are in inches.

PRESSURE SWITCH TRIP POINTS AND USAGE CHART											
MODEL	NEGATIVE PRESSURE ID BLOWER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA ⁽¹⁾	NEGATIVE PRESSURE ID BLOWER WITH FLUE FIRING TYPICAL SEA LEVEL DATA ⁽²⁾	NEGATIVE PRESSURE COIL COVER WITH FLUE NOT FIRING TYPICAL SEA LEVEL DATA ⁽³⁾	NEGATIVE PRESSURE COIL COVER WITH FLUE FIRING TYPICAL SEA LEVEL DATA ⁽²⁾	PRESSURE SWITCH TRIP POINTS AND USAGE						
					0 to 7,000 ft.				7,001 to 11,000 ft.		9,000 to 11,000
					TRIP POINT COIL COVER PRESSURE SWITCH	COIL COVER PRESSURE SWITCH PART #	TRIP POINT ID BLOWER PRESSURE SWITCH	ID BLOWER PRESSURE SWITCH PART #	High Attitude Kit PS	High Attitude Kit PS	High Attitude Kit PS
DM96HS045 3BX**	-1.30	-1.10	-0.25	-0.10	-0.10	20197308	-1.10	0130F00000P			
DM96HS070 3BX**	-1.10	-0.95	-0.25	-0.10	-0.10	20197308	-0.95	0130F00002P			
DM96HS070 4CX**	-1.30	-1.10	-0.25	-0.10	-0.10	20197308	-1.10	0130F00000P			HAPS27 - .16
DM96HS090 4CX**	-1.40	-1.20	-0.25	-0.10	-0.10	20197308	-1.20	0130F00001P			
DM96HS090 5CX**	-1.50	-1.35	-0.25	-0.10	-0.10	20197308	-1.35	0130F00110		TBD	TBD
DM96HS115 5DX**	-1.30	-1.10	-0.25	-0.10	-0.10	20197308	-1.10	0130F00000P	HANG11 #44 Orifice	HANG12 #45 Orifice	HAPS27 - .16

(1) Data given is least negative pressure required for pressure switch to close.

(2) Data given is the least negative pressure required for pressure switch to remain closed.

PRIMARY LIMIT			
Part Number	0130F00105	20162903	20162904
Open Setting (°F)	130	160	150
DM96HS0453BX**			1
DM96HS0703BX**		1	
DM96HS0704CX**		1	
DM96HS0904CX**			1
DM96HS0905CX**	1		
DM96HS1155DX**		1	

ROLLOUT LIMIT SWITCHES		
Part Number	10123533	10123517
Open Setting (°F)	200	210
DM96HS0453BX**	1	
DM96HS0703BX**	2	
DM96HS0704CX**	2	
DM96HS0904CX**	2	
DM96HS0905CX**		2
DM96HS1155DX**	2	

AUXILIARY LIMIT SWITCHES			
Part Number	10123535	10123519	0130F00038
Open Setting (°F)	150	160	120
DM96HS0453BX**	1		
DM96HS0703BX**	1		
DM96HS0704CX**	1		
DM96HS0904CX**	1		
DM96HS0905CX**			1
DM96HS1155DX**		1	

PRESSURE SWITCH TRIP POINTS AND USAGE CHART				
MODEL	0 to 7,000 ft.			
	TRIP POINT COIL COVER PRESSURE SWITCH	PRESSURE SWITCH PART #	TRIP POINT ID BLOWER PRESSURE SWITCH	ID BLOWER PRESSURE SWITCH PART #
DC96HS0453BX**	-0.10	0130F00070	-.95	0130F00069
DC96HS0703BX**	-0.10	0130F00070	-1.20	0130F00068
DC96HS0704CX**	-0.10	0130F00070	-.95	0130F00069
DC96HS0904CX**	-0.10	0130F00070	-1.20	0130F00068
DC96HS0905DX**	-0.10	0130F00070	-.95	0130F00069
DC96HS1155DX**	-0.10	0130F00070	-.6	20197311

Note: Replacement pressure switch number is listed below high altitude kit number.

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

PRIMARY LIMIT			
Part Number	20162903	20162904	20162907
Open Setting (°F)	160	150	155
DC96HS0453BX**		1	
DC96HS0703BX**		1	
DC96HS0704CX**		1	
DC96HS0904CX**	1		
DC96HS0905DX**	1		
DC96HS1155DX**			1

AUXILIARY LIMIT SWITCHES	
Part Number	0130F00038
Open Setting (°F)	120
DC96HS0453BX**	2
DC96HS0703BX**	2
DC96HS0704CX**	2
DC96HS0904CX**	2
DC96HS0905DX**	2
DC96HS1155DX**	2

ROLLOUT LIMIT SWITCHES		
Part Number	10123517	10123534
Open Setting (°F)	210	220
DC96HS0453BX**	1	
DC96HS0703BX**	2	
DC96HS0704CX**	2	
DC96HS0904CX**		2
DC96HS0905DX**	2	
DC96HS1155DX**	2	

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	1800	2000
Input Airflow	0453BXA*	388*	388*	480	576	---	---	---	---
	0703BXA*	---	647*	647*	647*	672	---	---	---
	0704CXA*	---	---	583*	583*	672	768	---	---
	0904CXA*	---	---	863*	863*	863*	863*	---	---
	0905CXA*	---	---	863*	863*	863*	863*	864	---
	0905DXA*	---	---	---	777*	777*	777*	864	960
	1155DXA*	---	---	---	971*	971*	971*	971*	971*

*Minimum filter area dictated by heating airflow requirement.

Disposable Minimum Filter Area (in²)

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

		COOLING AIRFLOW REQUIREMENT (CFM)							
		600	800	1000	1200	1400	1600	1800	2000
Input Airflow	0453BXA*	194*	194*	240	288	---	---	---	---
	0703BXA*	---	324*	324*	324*	336	---	---	---
	0704CXA*	---	---	291*	291*	336	384	---	---
	0904CXA*	---	---	432*	432*	432*	432*	---	---
	0905CXA*	---	---	432*	432*	432*	432*	432*	---
	0905DXA*	---	---	---	388*	388*	388*	432	480
	1155DXA*	---	---	---	486*	486*	486*	486*	486*

*Minimum filter area dictated by heating airflow requirement.

Permanent Minimum Filter Area (in²)

[Based on 600 ft/min filter face velocity]

FURNACE SPECIFICATIONS

DM96HS

MODEL	DM96HS0453 BX**	DM96HS0703 BX**	DM96HS0704 CX**	DM96HS0904 CX**	DM96HS0905 CX**	DM96HS1155 DX**
BTUH						
Natural Gas Input *	46,000	69,000	69,000	92,000	92,000	115,000
Natural Gas Output	44,200	66,300	66,300	88,400	88,400	110,500
LP Gas Input	41,400	62,100	62,100	82,800	82,800	103,500
LP Gas Output	39,800	59,700	59,700	79,600	79,600	99,500
A.F.U.E.	96.1%	96.1%	96.1%	96.1%	96.1%	96.1%
Rated External Static ("w.c.)	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50	.20 - .50
Temperature Rise (°F)	35 - 65	30 - 60	35 - 65	30 - 60	30 - 60	35 - 65
ID Blower Pressure Switch Trip Point (" w.c.)	-1.10	-0.95	-1.10	-1.20	-1.35	-1.10
Front Cover Pressure Switch Trip Point (" w.c.)	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
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	1800	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	130	160
Auxiliary Limit Setting (°F)	150	150	150	150	120	160
Rollout Limit Setting (°F)	200	200	200	200	210	200
Fan Delay On Heating	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.	30 secs.
Off Heating ⁽³⁾	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) ⁽⁴⁾	2	2	2	2	2	2
Combustion Air Connector Diameter (inches) ⁽⁵⁾	2	2	2	2	2	2
Shipping Weight (lbs.)	120	123	125	144	146	163

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

⁽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: May use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

⁽³⁾ Off Heating - this fan delay timing is adjustable (100 and 150 seconds). Furnaces are shipped with 150 second off delay.

⁽⁴⁾ See Installation Instructions for appropriate vent diameter, length and number of elbows.

⁽⁵⁾ 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.

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

FURNACE SPECIFICATIONS

DC96HS

MODEL	DC96HS0453 BX**	DC96HS0703 BX**	DC96HS0704 CX**	DC96HS0904 CX**	DC96HS0905 DX**	DC96HS1155 DX**
BTUH						
Natural Gas Input *	46,000	69,000	69,000	92,000	92,000	115,000
Natural Gas Output	44,200	66,300	66,300	88,400	88,400	106,500
LP Gas Input	41,400	62,100	62,100	82,800	82,800	103,500
LP Gas Output	39,800	59,700	59,700	79,600	79,600	96,255
A.F.U.E.	96.1%	96.1%	96.1%	96.1%	96.1%	93%
Rated External Static (" w.c.)	.20" - .50"	.20" - .50"	.20" - .50"	.20" - .50"	.20" - .50"	.20" - .50"
Temperature Rise (°F)	25-55	35-65	25-55	40-70	35-65	40-70
Pressure Switch Trip Point (" w.c.)	-0.95	-1.20	-0.95	-1.20	-0.95	-0.60
Front Cover Pressure Switch Trip Point (" w.c.)	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
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.	1,200	1,200	1,600	1,600	2,000	1,906
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⁾	9.40	9.40	13.80	13.80	13.20	13.20
Maximum Overcurrent Device ⁽²⁾	15	15	15	15	15	15
Transformer (VA)	40	40	40	40	40	40
Primary Limit Setting (°F)	150	150	150	160	160	155
Auxiliary Limit Setting (°F)	120	120	120	120	120	120
Rollout Limit Setting (°F)	210	210	210	220	210	210
Fan Delay On Heating	30	30	30	30	30	30
Off Heating ⁽³⁾	150	150	150	150	150	150
Fan Delay On Cooling	5	5	5	5	5	5
Off Cooling	45	45	45	45	45	45
Fan Delay On - Fan Only	0	0	0	0	0	0
Gas Supply Pressure (Natural/Propane) (" w.c.)	7/11	7/11	7/11	7/11	7/11	7/11
Manifold Pressure (Natural/Propane)	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) ⁽⁴⁾	2	2	2	2	2	2
Shipping Weight (lbs.)	120	123	125	144	146	175

* 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

⁽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: May use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

⁽³⁾ Off Heating - this fan delay timing is adjustable (100 and 150 seconds). Furnaces are shipped with 150 second off delay.

⁽⁴⁾ See Installation Instructions for appropriate vent diameter, length and number of elbows.

⁽⁵⁾ 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.

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

DM96HS

BLOWER PERFORMANCE															
(CFM & Temperature Rise vs. External Static Pressure)															
Model <i>Heating Speed As Shipped</i>	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
DM96HS0453BX** (MED-HI)	HIGH	3.0	1352	29	1318	30	1260	31	1202	33	1128	35	1044	955	853
	MED	2.5	1214	32	1172	34	1123	35	1064	37	1012	39	938	859	741
	MED-LO	2.0	997	40	994	40	960	41	923	43	884	45	817	741	611
	LOW	1.5	757	52	753	52	734	54	704	56	674	59	620	524	438
DM96HS0703BX** (MED-HI)	HIGH	3.0	1449	41	1409	42	1326	45	1273	47	1201	49	1194	1136	1018
	MED	2.5	1192	50	1172	51	1141	52	1094	54	1046	57	973	904	793
	MED-LO	2.0	981	61	962	62	943	63	917	65	888	67	830	764	665
	LOW	1.5	750	79	730	81	714	83	692	86	657	90	620	570	502
DM96HS0704CX** (MED-HI)	HIGH	4.0	2069	29	1965	30	1871	32	1756	34	1661	36	1549	1415	1275
	MED	3.5	1752	34	1724	34	1667	36	1603	37	1488	40	1402	1290	1082
	MED-LO	3.0	1437	41	1437	41	1417	42	1369	43	1320	45	1256	1140	984
	LOW	2.5	1184	50	1177	50	1161	51	1132	52	1095	54	1047	928	837
DM96HS0904CX** (MED-HI)	HIGH	4.0	1970	40	1874	42	1757	45	1667	48	1566	51	1431	1334	1182
	MED	3.5	1713	46	1650	48	1572	50	1510	52	1418	56	1313	1211	1079
	MED-LO	3.0	1439	55	1412	56	1370	58	1327	60	1260	63	1166	1078	956
	LOW	2.5	1183	67	1155	69	1122	74	1108	72	1062	75	1011	931	816
DM96HS0905CX** (MED-HI)	HIGH	5.0	2058	39	1997	40	1928	42	1852	43	1777	45	1682	1600	1487
	MED	4.0	1718	47	1685	48	1632	49	1586	51	1520	53	1458	1369	1281
	MED-LO	3.5	1502	54	1464	55	1429	56	1380	58	1319	61	1272	1200	1137
	LOW	3.0	1305	62	1277	63	1253	64	1212	66	1175	69	1127	1081	1010
DM96HS1155DX** (MED-HI)	HIGH	5.0	2134	46	2103	47	2029	48	1941	51	1906	51	1818	1733	1625
	MED	4.0	1678	58	1643	60	1643	60	1577	62	1527	64	1489	1423	1339
	MED-LO	3.5	1453	68	1440	68	1426	69	1363	72	1349	73	1314	1253	1205
	LOW	3.0	1259	78	1239	79	1220	80	1181	83	1159	85	1118	1082	1015

1. 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.
2. All furnaces ship as high speed cooling and medium-speed heating. Installer must adjust blower cooling & heating 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. At higher altitudes, a properly de-rated unit will have approximately the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.

BLOWER PERFORMANCE SPECIFICATIONS

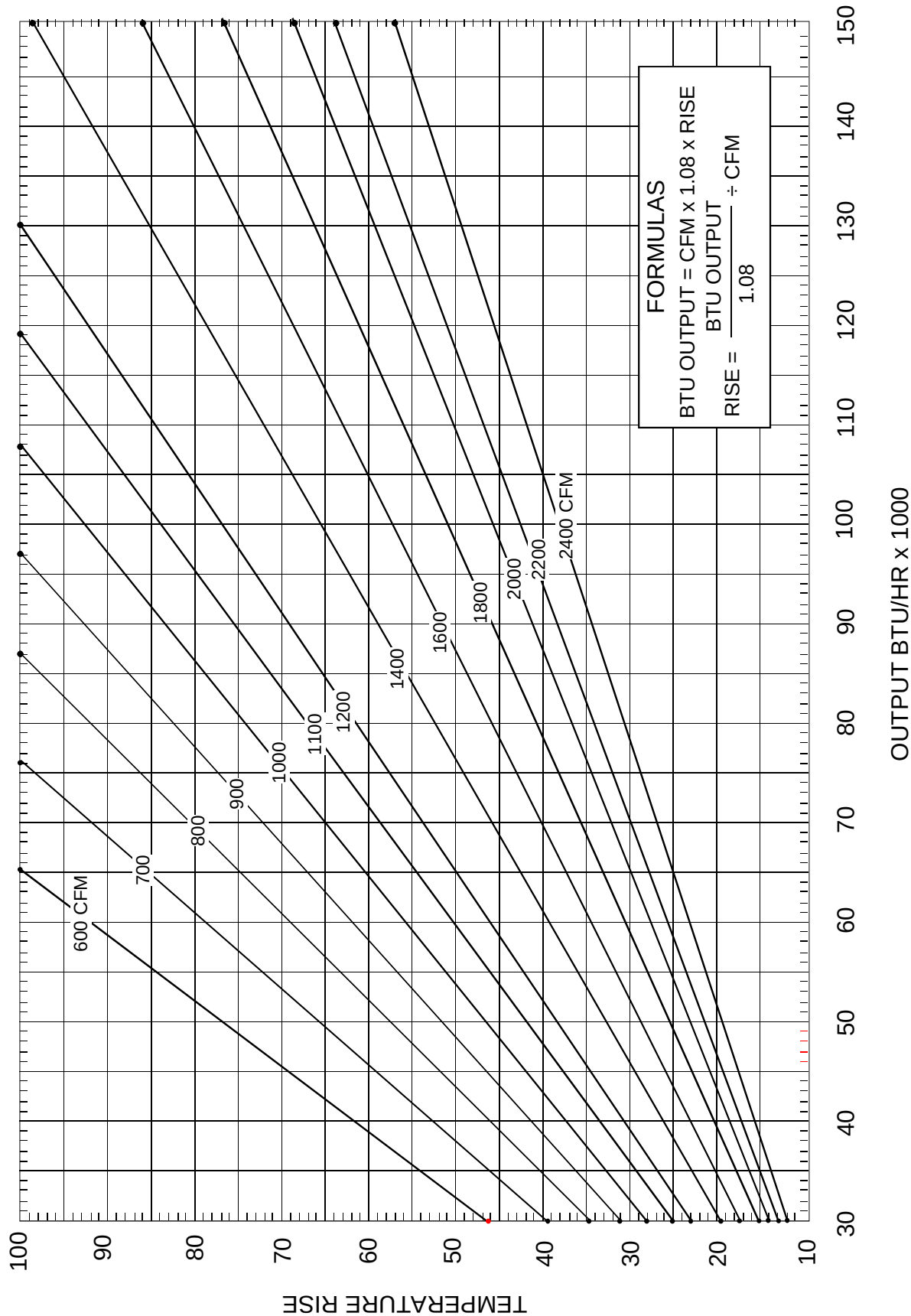
DC96HS

BLOWER PERFORMANCE															
(CFM & Temperature Rise vs. External Static Pressure)															
Model <i>Heating Speed As Shipped</i>	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
DC96HS0453BX** (MED-HI)	HIGH	3.0	1415	28	1352	30	1290	31	1196	34	1127	36	1035	936	825
	MED	2.5	1221	33	1178	34	1127	36	1073	38	1007	40	932	834	733
	MED-LO	2.0	1034	39	1000	40	976	41	935	43	881	46	818	733	662
	LOW	1.5	860	47	845	48	812	50	783	51	740	54	682	619	534
DC96HS0703BX** (MED-HI)	HIGH	3.0	1431	42	1368	44	1296	47	1228	49	1150	53	1055	962	860
	MED	2.5	1212	50	1182	51	1138	53	1091	55	1019	59	944	871	769
	MED-LO	2.0	1002	60	978	62	956	63	921	66	878	69	825	738	647
	LOW	1.5	813	74	805	75	790	76	759	80	726	83	689	644	605
DC96HS0704CX** (MED-HI)	HIGH	4.0	1755	34	1674	36	1632	37	1510	40	1423	42	1325	1241	1116
	MED	3.5	1656	36	1585	38	1536	39	1429	42	1355	45	1268	1145	1059
	MED-LO	3.0	1551	39	1488	41	1427	42	1353	45	1290	47	1195	1100	1017
	LOW	2.5	1286	47	1258	48	1241	49	1185	51	1112	54	1067	983	886
DC96HS0904CX** (MED-HI)	HIGH	4.0	1734	46	1652	49	1578	51	1508	53	1413	57	1336	1248	1154
	MED	3.5	1642	49	1558	52	1487	54	1418	57	1336	60	1243	1164	1039
	MED-LO	3.0	1522	53	1458	55	1396	58	1321	61	1253	64	1182	1101	986
	LOW	2.5	1287	63	1244	65	1184	68	1148	70	1098	73	1034	953	849
DC96HS0905DX** (MED-HI)	HIGH	5.0	2189	37	2109	38	2025	40	1948	41	1862	43	1757	1644	1537
	MED	4.0	1885	43	1831	44	1776	45	1711	47	1637	49	1539	1453	1346
	MED-LO	3.5	1665	48	1627	50	1584	51	1524	53	1462	55	1400	1323	1220
	LOW	3.0	1474	55	1440	56	1401	57	1356	59	1310	61	1255	1193	1109
DC96HS1155DX** (MED-HI)	HIGH	5.0	2134	46	2103	47	2029	48	1941	51	1906	51	1818	1733	1625
	MED	4.0	1678	58	1643	60	1643	60	1577	62	1527	64	1489	1423	1339
	MED-LO	3.5	1453	68	1440	68	1426	69	1363	72	1349	73	1314	1253	1205
	LOW	3.0	1259	78	1239	79	1220	80	1181	83	1159	85	1118	1082	1015

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BLOWER PERFORMANCE SPECIFICATIONS

BTU OUTPUT vs TEMPERATURE RISE CHART

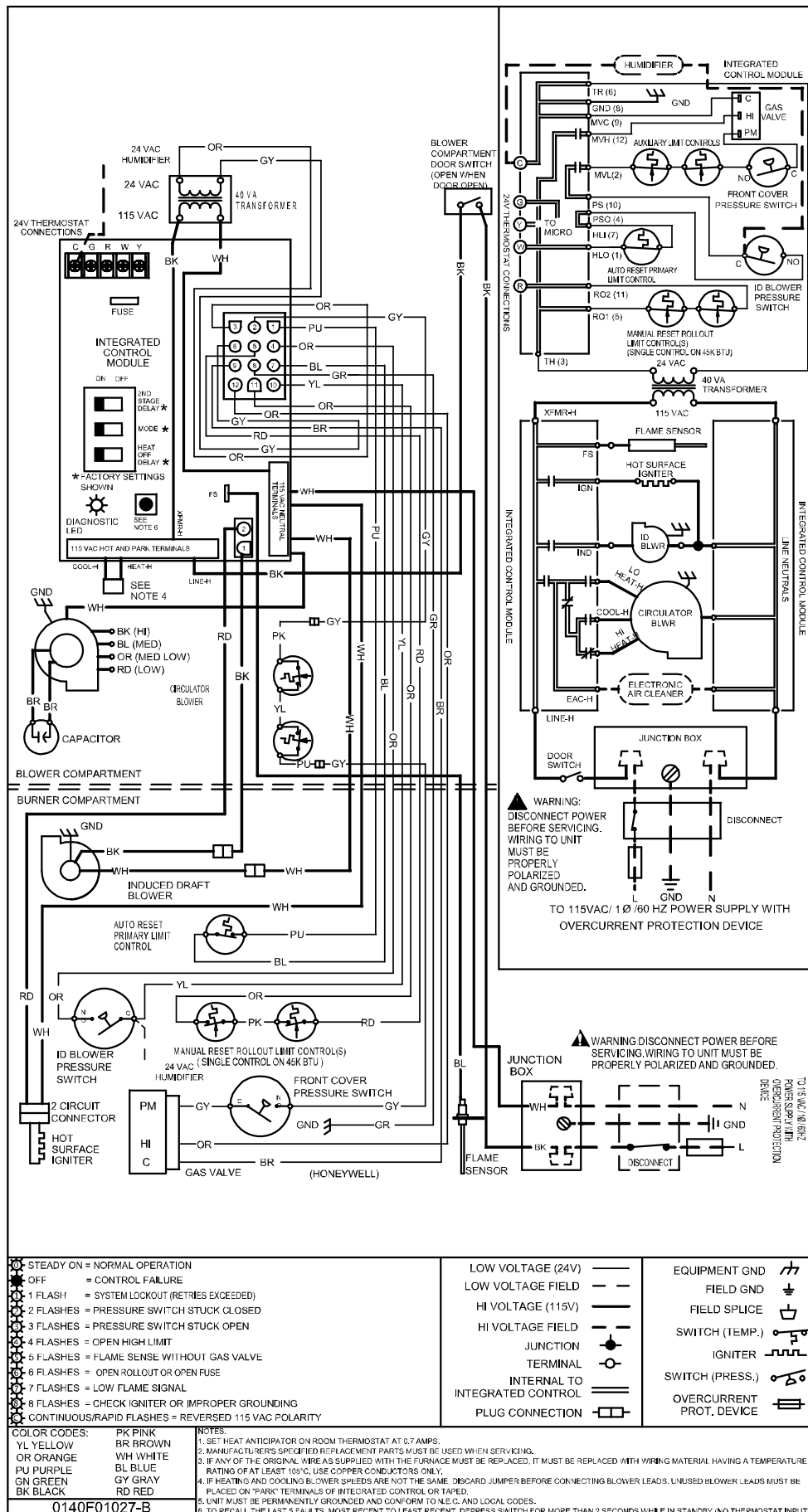


HIGH VOLTAGE!
DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



WARNING

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.



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