Submittal

Upflow / Downflow / Horizontal Left/Right Single Stage Non-condensing Gas Fired Furnace 100,000 BTUH

Upflow, Downflow, Horizontal Right/Left

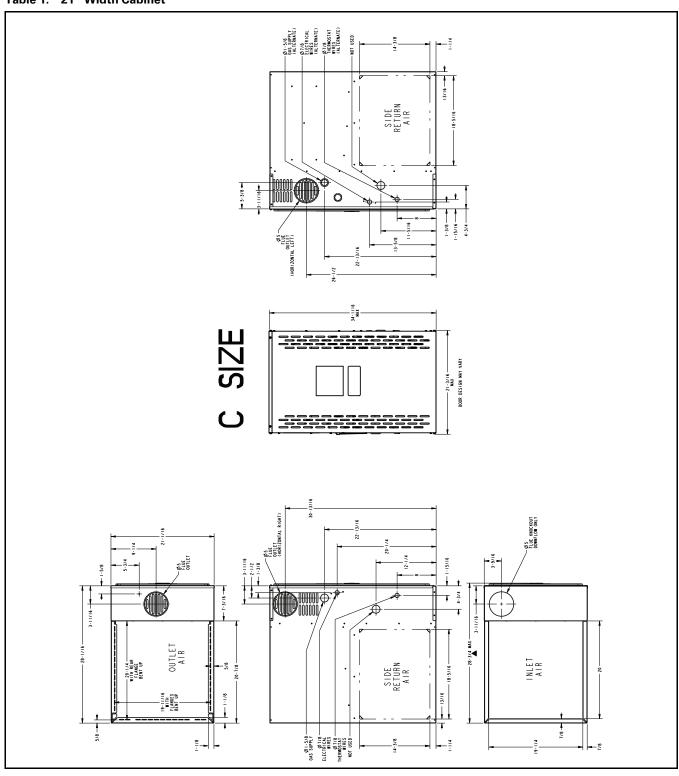
A801X100CM5SDA/B

Note: Models may have a "T" in the 12th digit designating they meet California less than 40 ng/J (NOx) emissions requirements.

Note: Graphics in this document are for representation only. Actual model may differ in appearance.

Outline Drawing

Table 1. 21" Width Cabinet



Product Specifications

MODEL	A801X100CM5SDA/B (a)
Туре	Upflow / Horizontal / Downflow
RATINGS (b)	
Input BTUH	100,000
Capacity BTUH (ICS) (c)	80,700
Temp. Rise (Min Max.) °F	30 - 60
AFUE - Rating (c)	80
Return Air Temp. (Min Max.) °F	55°F - 80°F
BLOWER DRIVE	DIRECT
Diameter - Width (in.)	11 X 11
No. Used	1
Speeds (No.) (d)	CTM - 9
CFM vs. in. w.g.	See Fan Performance Table
Motor HP	1
R.P.M.	1050
Volts / Ph / Hz	120 / 1 / 60
FLA	10.9
COMBUSTION FAN - Type	PSC
Drive - No. Speeds	Direct - 1
Motor RPM	3300 / 2680
Volts/Ph/Hz	120 / 1 / 60
FLA	0.33 / 0.58
Inducer Orifice	2.50
FILTER - Furnished?	No
Type Recommended	High Velocity
Hi Vel. (NoSize-Thk.)	1 - 20 X 25 - 1 in.

MODEL	A801X100CM5SDA/B
VENT PIPE DIAMETER - Min. (in.) (e)	4 Round
HEAT EXCHANGER - Type	Aluminized Steel
Gauge (Fired)	20 - 19
ORIFICES - Main	
Nat. Gas Qty Drill Size	5 - 45
L.P. Gas Qty Drill Size	5 - 56
GAS VALVE	Redundant - Single Stage
PILOT SAFETY DEVICE - Type	120 V SiNi Igniter
BURNERS - QTY	5
POWER CONN V/Ph/HZ (f)	120/1/60
Ampacity (Amps)	14.1 / 14.4
Max. Overcurrent Protection (Amps)	15
PIPE CONN. SIZE (IN.)	1/2
DIMENSIONS	H x W x D
Uncrated (in.)	34 x 21 x 28.75
Crated (in.)	35.5 x 23 x 30.87
WEIGHT	
Shipping (Lbs.)/Net (Lbs.)	144 / 136

⁽a) Central Furnace heating designs are certified to ANSI Z21.47 - latest edition.

⁽b) For U.S. applications, above input ratings (BTUH) are up to 2,000 feet, derate 4% per 10,000 feet for elevations above 2,000 feet above sea level.

⁽c) Based on U.S. government standard tests.

⁽d) 9 Speed constant torque ECM Blower Motor.

⁽e) Refer to the IOM Guide.

⁽f) The above wiring specifications are in accordance with National Electric Code, however, installations must comply with local codes.

Airflow Table

Furnace Airflow (CFM) Vs. External Static Pressure (in. W.C.)							
Model	Тар	Static	0.1	0.3	0.5	0.7	0.9
	1	SCFM	821	442			
		Watts	55	55			
	2	SCFM	1359	1195	1031	868	704
	2	Watts	163	180	198	215	233
	3	SCFM	1602	1461	1321	1180	1040
	3	Watts	246	268	290	312	334
	4	SCFM	1807	1678	1550	1421	1292
		Watts	336	362	388	414	440
A801X100CM5SD	5	SCFM	1827	1700	1572	1444	1317
ASUIXIUUCM55D		Watts	345	371	398	425	451
	6	SCFM	1925	1800	1675	1550	1425
		Watts	395	423	451	479	508
	7	SCFM	2102	1985	1869	1752	1635
	_ ′	Watts	503	534	566	597	628
	8	SCFM	2222	2115	2008	1901	1794
	8	Watts	602	635	667	700	732
	9	SCFM	2458	2351	2245	2138	2032
		Watts	896	913	930	947	964

CFM Versus Temperature Rise

Table 2. A801X

Model	CFM Versus Temperature Rise																		
500 600 700 800 900 1000 1100 1200 1300 1400 1500	1600	1700	1800	1900	2000	2100	2200	2300	2400										
A801X100CM5SD								57	53	49	46	44	41	39	37	35	34	32	31

General Features

NATURAL GAS MODELS

Central Heating furnace designs are certified by Intertek for both natural and L.P. gas. Limit setting and rating data were established and approved under standard rating conditions using American National Standards Institute standards.

SAFE OPERATION

The Integrated System Control is a solid state device which continuously monitors for presence of flame when the system is in the heating mode of operation. Dual solenoid combination gas valve and regulator provide additional safety.

QUICK HEATING

Durable, cycle tested, heavy gauge **tubular aluminized steel heat exchanger** quickly transfers heat to provide warm conditioned air to the structure. **Low energy power vent blower**, to increase efficiency and provide a discharge of gas fumes to the outside.

BURNERS

Multiport, Inshot burners will give years of quiet and efficient service. All models can be converted to **L.P.** gas with LP conversion kit.

INTEGRATED SYSTEM CONTROL

Exclusively designed operational program provides total control of furnace limit sensors, blowers, gas

valve, flame control and includes self diagnostics for ease of service.

ENERGY EFFICIENT OPERATION

Air-Tite™ cabinet design is certified to <1.4% air leakage per ASHRAE 193 "Method of Test for Determining the Airtightness of HVAC Equipment."

AIR DELIVERY

The 9 speed constant torque blower motor has sufficient airflow for most heating and cooling requirements and will switch from heating to cooling speeds on demand from room thermostat.

STYLING

Heavy gauge steel and "wrap-around" cabinet construction is used for strength. Every orientation has at least two venting options. There are no knockouts on cabinet.

FEATURES AND GENERAL OPERATION

The furnace utilizes a Silicon Nitride Hot Surface Ignition system, which eliminates the waste of a constant burning pilot. The integrated system control lights the main burners upon a demand for heat from the room thermostat. Complete front service access.

- a. Low energy power venter
- b. Vent proving pressure switches.

Features and Benefits

80% AFUE on A801X FURNACE MODELS

Lowers utility bills

ELECTRICALLY EFFICIENT

Efficient airflow design reduces electrical energy use

34 INCH TALL

Lighter, easier to move and fit into tight spaces like short basements or tight closets

Works great with larger, high-efficiency coils

No knockouts

4-WAY MULTI-POISE

8 SKU's — Upflow / Downflow / Horizontal Left / Horizontal Right

Added application flexibility and reduction in specification errors

AIRFI OW

At least 400 CFM/ton at 0.5 in. H_20 external static pressure

REGULATORY

All models are air tight; 1.4% or less air leakage as per ASHRAE 193

Open vestibule design provides a full 34" high open vestibule for ease of installation and service

DIMENSIONS

Width is industry standard: 21"

Depth remains approximately 28"

Cabinet is compatible with industry standard coils, as well as, other accessories

INTEGRATED FURNACE CONTROL

Setup / Status / Diagnostics / Digital Display

No dip switches

Last six errors stored

All Molex connections; no spade terminals

Low voltage labeled above and below

Rain shield over IFC keeps condensate off the control

TUBULAR ALUMINIZED STEEL HEAT EXCHANGER 9 SPEED CONSTANT TORQUE BLOWER MOTOR

Greater range of operation

Higher efficiency versus a standard PSC blower motor

Taps are electronically selectable at the IFC

FOUR-WAY MULTI-POISE (UPFLOW, DOWNFLOW, HORIZONTAL LEFT AND RIGHT)

Easier to specify

Shipped ready to install (no conversion kits required)

Every model has at least two venting options

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