

### HEAT EXCHANGER DESIGN

- 409 Stainless steel primary heat exchanger material
- AL29-4C Stainless steel secondary heat exchanger material
- Weldless crimped S-curve primary heat exchanger design for maximum durability

### BURNERS

- Aluminized steel in shot burners for smooth ignition
- Isolated burner enclosure for quiet operation

### CABINET CONSTRUCTION

- Unitized construction for cabinet integrity
- Heat exchanger compartment and blower compartment insulated to increase efficiency and reduce sound levels
- Baked on prepainted steel cabinet finish

### AIR DELIVERY SYSTEM

- Direct Drive multi-speed PCS blower motor
- Easily removable slide-out blower design
- Dynamically balanced blower wheel with resilient motor mounts for smooth and quiet operation

### CONTROLS

- Two stage gas valve
- Integrated ignition and fan control
- System Sentry™ control features five (5) fault codes with push button memory recall, regardless of power interruption
- Hot surface ignition system uses high density mini ignitor with stainless steel shroud
- Control features 120 volt electronic air cleaner and humidifier terminals
- Control circuit is fuse protected
- Color coded control wiring
- Compatible with single or two stage thermostats for heating  
*Two stage thermostat is required when installed with two stage cooling unit.*

### INSTALLATION FEATURES

- Left or right gas and electric entry
- Laser cut base for easy removal of knockout for upflow/horizontal applications



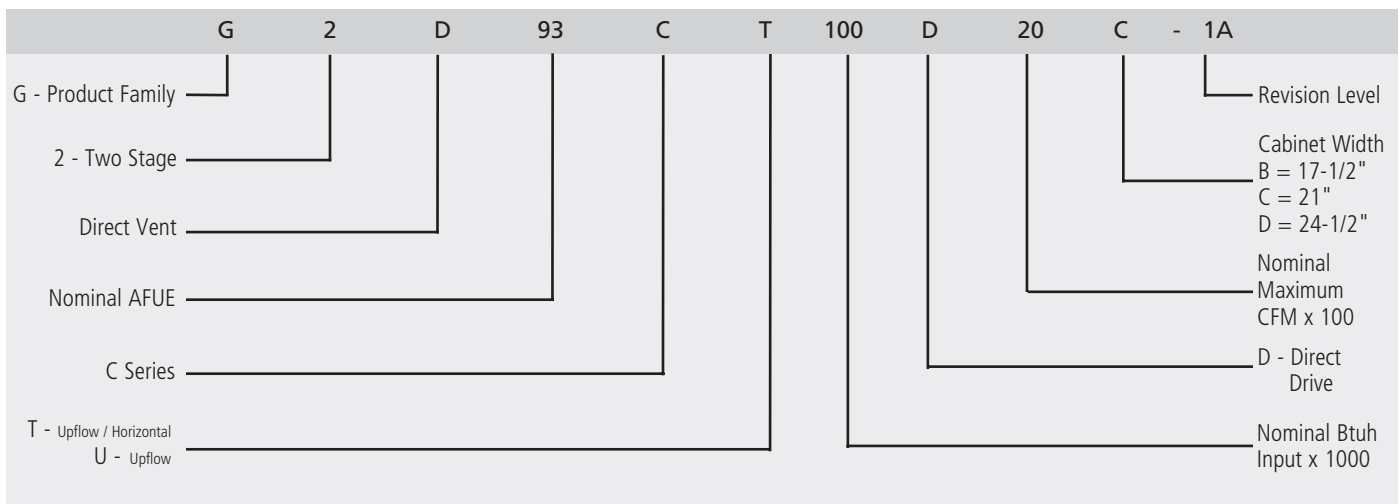
### VENTING

- 2-speed induced draft motor with stainless steel shaft, steel ball bearings, and fan cooled for long life
- Certified for direct and non-direct vent applications
- Internal condensate drain trap for upflow installations
- External condensate drain kit factory provided for US horizontal applications, available for Canadian applications

### WARRANTY

- 10 year limited parts warranty / lifetime heat exchanger warranty available.  
See limited warranty document for details

## Model Number Guide



## Physical and Electrical Data

Model	1st Stage		2nd Stage		AFUE (ICUS)	Nom. Cooling Capacity	Gas Inlet (in.)	Volts/ Hz/ Phase	Min. Time Delay Breaker or Fuse	Nominal F.L.A.	Trans. (V.A.)	Approx. Weight (lbs.)
	Input	Output	Input	Output								
G2D93CT040D12B	28,000	26,180	40,000	36,800	93.0%	1.5 - 3.0	1/2	120/60/1	15	5.4	40	160
G2D93CT060D12B	42,000	39,060	60,000	55,200	93.0%	1.5 - 3.0	1/2	120/60/1	15	6.1	40	185
G2D93CT080D16C	56,000	52,080	80,000	73,600	93.0%	2.5 - 4.0	1/2	120/60/1	15	7.4	40	195
G2D93CT080D20C	56,000	52,080	80,000	73,600	93.0%	3.0 - 5.0	1/2	120/60/1	15	7.2	40	195
G2D93CT100D20C	70,000	65,100	100,000	92,000	93.0%	3.0 - 5.0	1/2	120/60/1	15	9.6	40	205
G2D93CT125D20C	87,500	79,625	125,000	114,000	92.0%	3.0 - 5.0	1/2	120/60/1	15	9.6	40	215
G2D93CU125D20D	87,500	79,625	125,000	114,000	91.0%	3.0 - 5.0	1/2	120/60/1	15	9.6	40	220

## Filter Requirement Data

Maximum Airflow (CFM) <sup>1</sup>	Disposable Filters			Permanent (Cleanable) Filters <sup>2</sup>		
	Minimum Area (sq. in.) <sup>3</sup>	Size (in.) <sup>3</sup>	Quantity	Minimum Area (sq. in.) <sup>3</sup>	Size (in.) <sup>3</sup>	Quantity
1200	576	16 x 20	2	288	16 x 20	1
1400	672	20 x 20	2	336	20 x 20	1
1600	768	20 x 20	2	384	20 x 20	1
2000	960	20 x 25	2	480	20 x 25	1

1. The Airflow Descriptor is the two digits following the "D" in the model number; e.g. "16" is the Airflow Descriptor for G2D93CT080D16C.

2. Areas shown for permanent filters are based on filters rated at 600 feet per minute face velocity.

3. Typical filter sizes are shown, however, any combination of filters whose area equals or exceeds the minimum area shown is satisfactory.

## Accessories

Kit Number	Description	Used with
ALPKT583-1	Propane Conversion Kit	G2D93 Models
AFILT529-1	Bottom Return Filter Kit	All Upflow Capable Models
ACVK2-1	Concentric Vent Kit*	All High Efficiency Models
AFILTHA7-2	Side Return Filter Kit for Single Return with 5 tons airflow (double 16 x 20 filter)	All Upflow Capable Models
AFILT524	Upflow Side Return Filter Kit (16 x 25 filter)	All Upflow Capable Models

\* Does not comply with ULC S636 Canadian Code, US applications only

# Blower Performance Data

Direction	Model	Motor Size (hp)	Blower Size	Temp Rise (°F)	Blower Speed	*CFM @ ext. Static Pressure - in. w.c. with Filter(s)							
						.20	.30	.40	.50	.60	.70	.80	.90
Upflow / Horizontal	G2D93CT040D12B	1/3	10 x 8	30 - 60	Hi	1,355	1,305	1,255	1,200	1,120	1,060	980	880
					Med/Hi	1,085	1,075	1,045	1,010	965	915	840	750
					Med	865	855	840	815	780	740	680	605
					Low	740	730	720	680	665	620	575	500
	G2D93CT060D12B	1/3	10 x 8	40 - 70	Hi	1,390	1,335	1,270	1,205	1,140	1,065	950	860
					Med/Hi	1,230	1,175	1,135	1,080	1,010	930	840	720
					Med	1,010	985	955	910	870	805	720	585
					Low	870	845	835	800	760	690	600	495
	G2D93CT080D16C	3/4	12 x 10	40 - 70	Hi	1,975	1,925	1,865	1,805	1,745	1,665	1,580	1,495
					Med/Hi	1,705	1,665	1,620	1,585	1,535	1,475	1,400	1,300
					Med	1,480	1,455	1,425	1,395	1,345	1,300	1,240	1,180
					Med/Low	1,260	1,240	1,215	1,185	1,140	1,100	1,045	975
					Low	970	945	910	890	860	790	745	675
	G2D93CT080D20C	.9	12 x 10	40 - 70	Hi	2,135	2,080	2,025	1,930	1,855	1,780	1,680	1,620
					Med/Hi	1,975	1,930	1,900	1,830	1,765	1,670	1,570	1,520
					Med	1,875	1,845	1,795	1,725	1,685	1,585	1,575	1,435
					Med/Low	1,765	1,740	1,715	1,650	1,580	1,520	1,410	1,340
					Low	1,635	1,585	1,555	1,505	1,460	1,385	1,310	1,250
	G2D93CT100D20C	.9	12 x 10	40 - 70	Hi	2,185	2,120	2,045	1,980	1,890	1,745	1,685	1,625
					Med/Hi	2,035	1,960	1,895	1,845	1,785	1,705	1,610	1,550
Med					1,870	1,840	1,800	1,740	1,655	1,615	1,535	1,420	
Med/Low					1,725	1,685	1,640	1,615	1,565	1,485	1,385	1,340	
Low					1,590	1,550	1,530	1,475	1,445	1,365	1,280	1,205	
G2D93CT125D20C	.9	12 x 10	45 - 75	Hi	2,135	2,035	1,930	1,840	1,735	1,645	1,545	1,505	
				Med/Low	2,020	1,950	1,880	1,830	1,725	1,630	1,530	1,440	
				Med	1,930	1,865	1,810	1,720	1,660	1,555	1,480	1,345	
				Med/Low	1,720	1,665	1,575	1,525	1,415	1,315	1,240	1,160	
				Low	1,505	1,435	1,335	1,320	1,250	1,185	1,085	995	
Upflow	G2D93CU125D20D	.9	12 x 10	45 - 75	Hi	2,185	2,120	2,045	1,980	1,890	1,745	1,685	1,625
					Med/Hi	2,035	1,960	1,895	1,845	1,785	1,705	1,610	1,550
					Med	1,870	1,840	1,800	1,740	1,655	1,615	1,535	1,420
					Med/Low	1,725	1,685	1,640	1,615	1,565	1,485	1,385	1,340
					Low	1,590	1,550	1,530	1,475	1,445	1,365	1,280	1,205

\* .50 in w.c. Max. Approved Ext. Static Pressure

## Vent Length Specifications - Maximum

Model	Pipe Size (in.)		
	2	2-1/2	3
G2D93CT040	60 ft	90 ft	90 ft
G2D93CT060	60 ft	90 ft	90 ft
G2D93CT080	40 ft	60 ft	90 ft
G2D93CT100	NR	50 ft	60 ft
G2D93C(U,T)125	NR	50 ft	60 ft

One 90° elbow equals 5 ft. of pipe. Preferred fittings are DWV (Drain, Waste, Vent) or long sweep. Minimum length 5 ft. and 1 elbow not including the vent and air intake terminals.  
 2" diameter not recommended for altitudes above 4,000 ft.  
 3" diameter recommended for altitudes above 5,000 ft.

## Clearances To Combustibles (in.) Upflow

Model	Top	Right Side	Left Side	Front	Back	Vent
G2D93CT040D12B	1	0	0	2	0	0
G2D93CT060D12B						
G2D93CT080D16C						
G2D93CT080D20C						
G2D93CT100D20C						
G2D93CT125D20C						
G2D93CU125D20D						

## Clearances To Combustibles (in.) Horizontal

Model	Top	Right Side	Left Side	Front	Back	Vent
G2D93CT040D12B	0	0	0	18	0	0
G2D93CT060D12B						
G2D93CT080D16C						
G2D93CT080D20C						
G2D93CT100D20C						
G2D93CT125D20C						
G2D93CU125D20D						

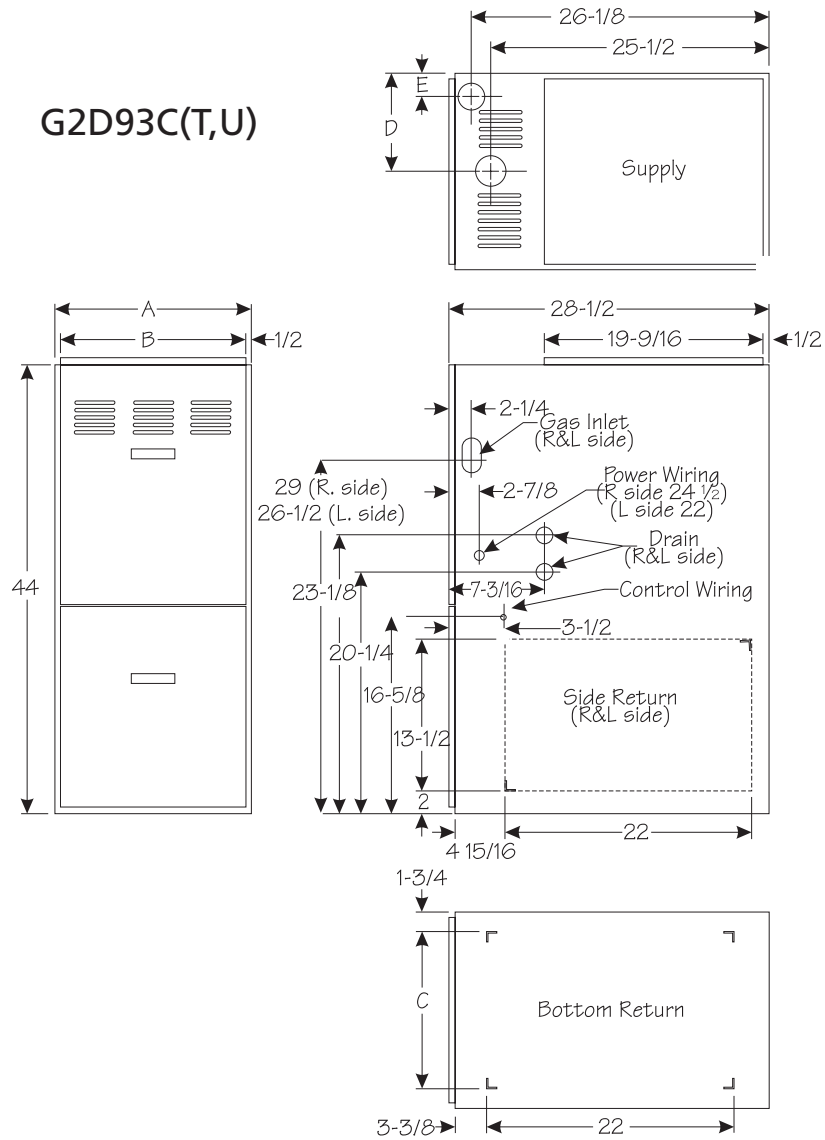
Note: Clearance to combustibles. Service access to the front of the appliance to remove the blower assembly is 18".

## Dimensions (in.)

Model	A	B	C	D	E
G2D93CT040D12B	17-1/2	16-1/2	14	10-1/4	2
G2D93CT060D14B	17-1/2	16-1/2	14	11-3/4	2
G2D93CT080D16C	21	20	17-1/2	15	2
G2D93CT100D20C	21	20	17-1/2	16-1/2	1-1/2
G2D93CT125D20C					
G2D93CU125D20D*	24-1/2	23-1/2	21	18-1/4	2-5/8

\* Upflow only

### G2D93C(T,U)



All specifications and illustrations  
subject to change without notice  
and without incurring obligations.



(800) 448-5872  
[www.armstrongair.com](http://www.armstrongair.com)