

Enhanced 95% Gas Furnaces Two-Stage — Variable Speed

G2D95

Form No. AG2D95-100 (10/09)

HEAT EXCHANGER DESIGN

- 409 Stainless steel primary heat exchanger material
- AL29-4C Stainless steel secondary heat exchanger
- 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

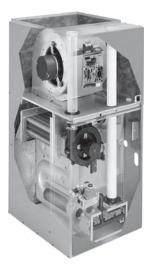
- ECM variable speed blower motor
- Motor features "soft start" and "soft stop" for quiet operation
- Active and passive dehumidification feature
- Easily removable slide-out blower design
- Dynamically balanced blower wheel with resilient motor mounts for smooth and quiet operation

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.







Counterflow









VENTING

- 2-speed induced draft motor with stainless steel shaft, steel ball bearings, and fan cooled for long life
- Vent materials for Canadian applications must comply with ULC S636
- Certified for direct and non-direct vent applications
 Direct vent refers to a combustion air supply intake pipe installed in conjunction with flue gas vent pipe.
- Internal condensate drain trap for upflow and counterflow installations
- External condensate drain kit factory provided for horizontal applications

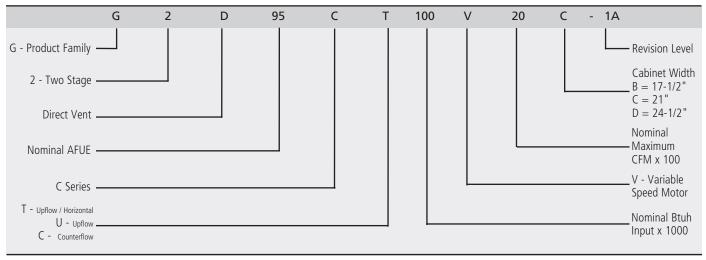
INSTALLATION FEATURES

- Left or right gas and electric entry
- Laser cut base for easy removal of knockout for bottom return 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 S	tage	2nd S	Stage	AFUE			Volts/	Min. Time Delay	Nominal	Trans.	Approx. Weight
	Input	Output	Input	Output	(ICUS)	Capacity	(in.)	Phase	Breaker or Fuse	F.L.A.	(V.A.)	(lbs.)
G2D95C(T,C)040V12B	28,000	26,600	40,000	38,000	95.0%	1.5 - 3.0	1/2	120/60/1	15	5.3	40	170
G2D95C(T,C)060V14B	42,000	39,900	60,000	57,000	95.0%	1.5 - 3.5	1/2	120/60/1	15	5.3	40	195
G2D95C(T,C)080V16C	56,000	53,280	80,000	76,000	95.0%	2.5 - 4.0	1/2	120/60/1	15	5.3	40	205
G2D95C(T,C)080V20C	56,000	53,280	80,000	76,000	95.0%	3.5 - 5.0	1/2	120/60/1	15	6.8	40	210
G2D95C(T,C)100V20	70,000	66,500	100,000	95,000	95.0%	3.5 - 5.0	1/2	120/60/1	15	6.8	40	230
G2D95C(T,C)125V20	87,500	82,250	125,000	117,500	94.0%	3.5 - 5.0	1/2	120/60/1	15	6.8	40	230
G2D95CU125V20D*	87,500	82,250	125,000	117,500	94.0%	3.5 - 5.0	1/2	120/60/1	15	6.8	40	235

^{*} Available in Upflow only

Filter Requirement Data

Airflow	Disposable Filters	Cleanable Filters		
Descriptor	Minimum Area (sq. in.)	Minimum Area (sq.in.)		
12	576	288		
14	672	336		
16	768	384		
20	960	480		

^{1.} The Airflow Descriptor is the two digits following the "V" in the model number; e.g. "20" is the Airflow Descriptor for G2D95C(T,C)080V20C.

Accessories

Kit Number	Description	Used with
ABASE512	Combustible Floor Base for 17.5 inch wide units	All Counterflow Models
ABASE568	Combustible Floor Base for 21 inch wide units	All Counterflow Models
ABASE569	Combustible Floor Base for 24.5 inch wide units	All Counterflow Models
ALPKT583-1	Propane Conversion Kit	All Two-Stage Models
ACVK2-1	Concentric Vent Kit	All Models
AFUSE576	Fuse Kit	All Models
AMB20A-2*	Filter Kit	All Upflow Models

^{*} filter in kit rated at 2000 CFM

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

Blower Performance Data

Part	ion		Motor	DI	Temp	Blower	Heatir	ng CFM	Cooling	Cool	ing CFM ext. statio	@ .50 in	W.C.
Page	Direction	Model	Size	Blower Size	Rise)		High Fire	Adjust-	Setting "A"	Setting "B"	Setting "C"	Setting "D"
Figure G2D95C(T,C)040V128 1/2 10 x 8 40 - 50									Nom.	1185	980	775	565
Part		G2D05C/TC\040\/12R	1/2	10 v Q	40 - 50				(+)	1350	1125	905	670
Page Garden Gar		G2D33C(1,C)040V12B	1/2	10 x 0	40 - 30				(-)	1005	815	655	500
Family Garden G	>					A Tap Setting*	575	865					
Family Garden G	lrflo								Nom.	1405	1235	1040	815
Family Garden G	ınte	G2D95C/T C\060\/1/R	1/2	10 v 8	50 - 60				(+)	1615	1410	1185	960
Family Garden G	Co	G2D33C(1,C)000V14B	1/2	10 x 0	30 - 00				(-)	1230	1055	870	690
Family Garden G	tal,					A Tap Setting*	650	1020					
Family Garden G	.uoz								Nom.	1600	1415	1215	1005
Family Garden G	łori	G2D05C/TC\090\/16C	2//	12 v 10	50 60				(+)	1850	1610	1395	1150
Family Garden G	\/	G2D93C(1,C)080V10C	3/4	12 X 10	50 - 60				(-)	1360	1190	1020	890
Family Garden G	flov					A Tap Setting*	950	1490					
Figure G2D95C(T,C)080V20	l d		1	12 x 10	50 - 60				Nom.	1985	1780	1590	1330
Figure Gamma Gam		C3D0EC/T C\090\/30							(+)	2180	2045	1785	1590
Fraction Garden Fraction Garden Garden	GZDS	G2D95C(1,C)080V20							(-)	1690	1495	1305	1105
Fraction Garden						C, D Tap Setting*	950	1385					
Figure G2D95CT100V2OC 1 12 x 10 50 - 60 (-) 1645 1485 1315 1170 B Tap Setting* 1105 1630 S Tap Setting* 1105 1630 S Tap Setting* 1105 1630 S Tap Setting* 1450 2115 A Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115 S Tap Setting* 1450 2115		C3D0FCT100V30C	1	12 x 10	50 - 60				Nom.	1935	1765	1560	1355
A Tap Setting* 1450 2115	<u>-</u>								(+)	2210	1985	1790	1560
A Tap Setting* 1450 2115	ont	G2D95C1100V20C							(-)	1645	1485	1315	1170
A Tap Setting* 1450 2115	loriz					B Tap Setting*	1105	1630					
A Tap Setting* 1450 2115	/ H		1	12 x 10	50 - 60				Nom.	1935	1765	1560	1355
A Tap Setting* 1450 2115	llow	C2D0ECT12EV20C							(+)	2210	1985	1790	1560
The late of the	Upi	G2D95C1125V20C							(-)	1645	1485	1315	1170
G2D95CC100V20D 1 12 x 10 50-60						A Tap Setting*	1450	2115					
G2D95CC100V20D 1 12 x 10 50-60	nly								Nom.	2045	1840	1630	1400
G2D95CC100V20D 1 12 x 10 50-60	o ×	C2D0ECH12EV20D**	1	40	F0 66				(+)	2280	2100	1860	1595
G2D95CC100V20D 1 12 x 10 50-60	l lo	G2D95C0125V20D""		12 X 10	50 - 60				(-)	1735	1570	1355	1190
G2D95CC100V20D 1 12 x 10 50-60 (+) 2205 1970 1745 1495 1080 B Tap Setting* 1105 1630 1600 1410 1225 1080 G2D95CC125V20D 1 12 x 10 50-60 (+) 2205 1970 1745 1495 1080	l y					A Tap Setting*	1450	2115					
G2D95CC100V20D 1 12 x 10 50-60 (-) 1600 1410 1225 1080 B Tap Setting* 1105 1630									Nom.	1890	1705	1490	1270
B Tap Setting* 1105 1630	Mo	63005664001/205	4	12 10	F0.60				(+)	2205	1970	1745	1495
G2D95CC125V20D 1 12 x 10 50-60 (-) 1600 1410 1225 1080		G2D95CC100V20D	1	12 x 10	50-60				(-)	1600	1410	1225	1080
G2D95CC125V20D 1 12 x 10 50-60 (-) 1600 1410 1225 1080	erfli					B Tap Setting*	1105	1630					
G2D95CC125V20D 1 12 x 10 50-60 (-) 1600 1410 1225 1080	unt								Nom.	1890	1705	1490	1270
G2D95CC125V20D 1 12 x 10 50-60 (-) 1600 1410 1225 1080	S	62005664251/225	1	12 x 10	50-60				(+)	2205	1970	1745	1495
		G2D95CC125V20D								1600	1410	1225	1080
A Tap Setting* 1450 2115						A Tap Setting*	1450	2115					

^{*} Speed tap for temperature rise within rise range.

^{**} Available in upflow only

Vent Length Specifications - Maximum

Model		Pipe Size (in.)						
iviodei	2	2-1/2	3					
G2D95C(T,C)040	60ft	90ft	90ft					
G2D95C(T,C)060	60ft	90ft	90ft					
G2D95C(T,C)080	40ft	60ft	90ft					
G2D95C(T,C)100	40ft	60ft	90ft					
G2D95C(T,C)125	NR	50ft	60ft					
*G2D95CU125	NR	50ft	60ft					

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.

Upflow Clearances To Combustibles (in.)

Model	Тор	Right Side	Left Side	Front	Back	Vent
G2D95CT040V12B						
G2D95CT060V12B						
G2D95CT080V16C						
G2D95CT080V20C	1	0	0	2	0	0
G2D95CT100V20						
G2D95CT125V20						
G2D95CU125V20D*						

^{*} Available in upflow only

Horizontal Clearances To Combustibles (in.)

Model	Тор	Right Side	Left Side	Front	Back	Vent
G2D95CT040V12B						
G2D95CT060V12B						
G2D95CT080V16C		0	0	18	0	0
G2D95CT080V20C	0					
G2D95CT100V20C						
G2D95CT125V20C						

Counterflow Clearances To Combustibles (in.)

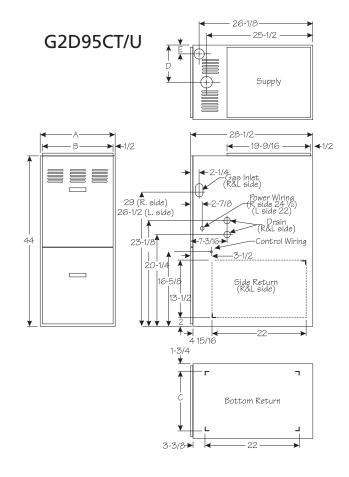
Model	Тор	Side	Front	Back	Vent		
G2D95CC040V12B							
G2D95CC060V14B							
G2D95CC080V16C	1	0	2	0	0		
G2D95CC080V20D	l						
G2D95CC100V20D							
G2D95CC125V20D							

^{*} Available in upflow only 3" diameter recommended for altitudes above 5000 ft.

Dimensions (in.) Upflow/ Horizontal

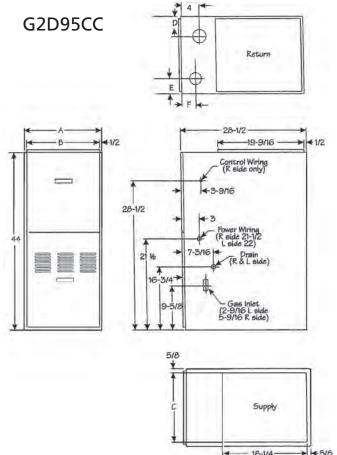
Model	А	В	С	D	E
G2D95CT040V12B	17-1/2	16-1/2	14	10-1/8	2
G2D95CT060V14B	17-1/2	16-1/2	14	11-3/4	2
G2D95CT080V16C	21	20	17-1/2	15	2
G2D95CT080V20C	21				Z
G2D95CT100V20C	21	20	17 1/2	46.412	1 1/2
G2D95CT125V20C	21	20	17-1/2	16-1/2	1-1/2
G2D95CU125V20D*	24-1/2	23-1/2	21	18	2

^{*} Available in upflow only



Dimensions (in.) Downflow

Model	А	В	С	D	Е	F
G2D95CC040V12B	17-1/2	16-1/2	16-1/4	3-2/3	4-1/2	3
G2D95CC060V14B	17-1/2			3-2/3	4-1/2	3
G2D95CC080V16C	21	20	19-3/4	5-2/3	6-1/4	3
G2D95CC080V20C	21					3
G2D95CC100V20D	24-1/2	23-1/2	23-1/4	4-2/3	6-3/8	3-1/3
G2D95CC125V20D	24-1/2		23-1/4	4-2/3		3-1/3





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

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