

Upflow, Upflow / Horizontal, Counterflow

90/92 Gas Furnace

CG90/92

Features and Benefits

HEAT EXCHANGER DESIGN

- Aluminized steel tapered S-curve design primary exchanger with crimped no weld construction for long life
- AL29-4C Stainless steel secondary heat exchanger

BURNERS

- Aluminized steel inshot burners for smooth ignition

CABINET CONSTRUCTION

- Unitized construction for cabinet integrity
- Baked on prepainted steel cabinet finish

AIR DELIVERY SYSTEM

- Easily removable slide-out blower design
- PSC multi-speed permanently lubricated blower motor for low maintenance and optimum efficiency

CONTROLS

- Single stage gas valve
- Integrated ignition and fan control
- Board features self diagnostics saving last five (5) fault codes in memory regardless of power interruption
- Hot surface high density Mini Ignitor

VENTING

- Permanently lubricated draft motor with stainless steel shaft, ball bearings, and air cooled for long life
- Design certified for direct and non-direct vent applications



Upflow
Upflow/Horizontal



Counterflow



Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your contractor for details or visit www.energystar.gov

INSTALLATION FEATURES

- Left or right gas and electric entry

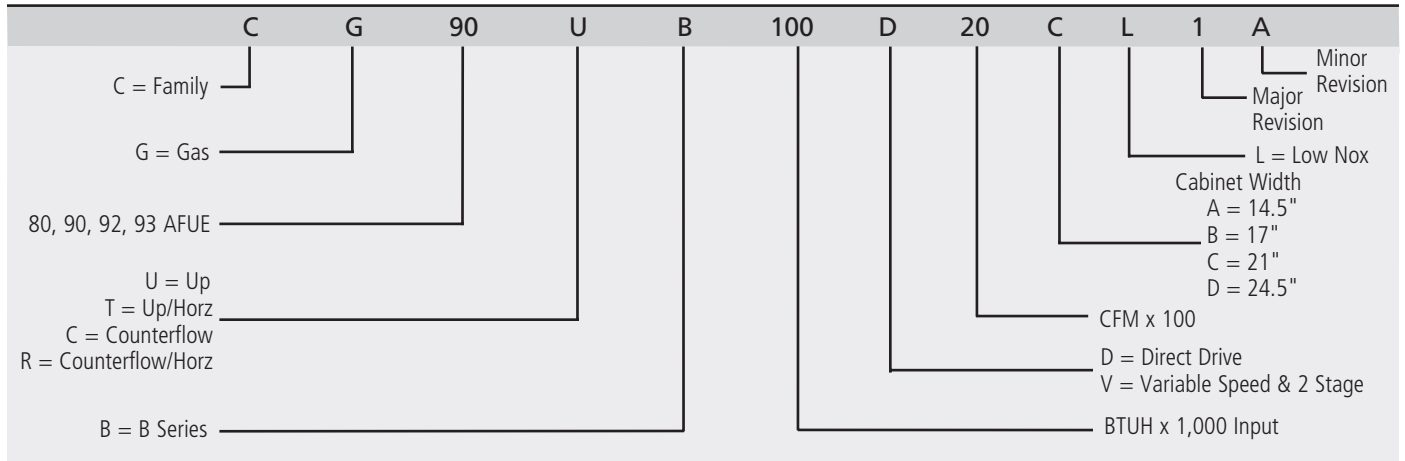
WARRANTY

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

CONCORD™
Quality heating and cooling products

90/92 Gas Furnace

Model Number Guide



Physical and Electrical Data

Direction	Model	Input (Btuh)	Output (Btuh)	AFUE (ICS)	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.)
Upflow	CG90UB050D12B	50,000	45,000	90.0%	1.5 - 3.0	1/2	120/60/1	15	5.9	40	150
	CG90UB075D12B	75,000	67,500	90.0%	1.5 - 3.0	1/2	120/60/1	15	5.9	40	180
	CG90UB075D16C	75,000	67,500	90.0%	2.5 - 4.0	1/2	120/60/1	15	6.9	40	180
	CG90UB100D16C	100,000	90,000	90.0%	2.5 - 4.0	1/2	120/60/1	15	6.9	40	190
	CG90UB100D20C	100,000	90,000	90.0%	3.0 - 5.0	1/2	120/60/1	15	8.8	40	190
	CG90UB125D20D	125,000	112,500	90.0%	3.0 - 5.0	1/2	120/60/1	15	8.8	40	215
Counterflow	CG90CB045D12B	45,000	40,000	90.0%	1.5 - 3.0	1/2	120/60/1	15	5.9	40	150
	CG90CB067D12B	67,500	60,000	90.0%	1.5 - 3.0	1/2	120/60/1	15	5.9	40	180
	CG90CB067D16C	67,500	60,000	90.0%	2.5 - 4.0	1/2	120/60/1	15	6.9	40	180
	CG90CB090D16C	90,000	81,000	90.0%	2.5 - 4.0	1/2	120/60/1	15	6.9	40	190
	CG90CB090D20C	90,000	81,000	90.0%	3.0 - 5.0	1/2	120/60/1	15	8.8	40	190
	CG90CB112D20D	112,000	100,000	90.0%	3.0 - 5.0	1/2	120/60/1	15	8.8	40	215
Upflow / Horizontal	CG92TB045D12B	45,000	41,000	92.1%	1.5 - 3.0	1/2	120/60/1	15	5.4	40	160
	CG92TB067D12B	67,500	62,000	92.1%	1.5 - 3.0	1/2	120/60/1	15	6.1	40	185
	CG92TB067D16C	67,500	62,000	92.1%	2.5 - 4.0	1/2	120/60/1	15	7.4	40	185
	CG92TB090D16C	90,000	83,000	92.1%	2.5 - 4.0	1/2	120/60/1	15	7.2	40	195
	CG92TB090D20C	90,000	83,000	92.1%	3.0 - 5.0	1/2	120/60/1	15	10.4	40	205
	CG92TB112D20C	112,500	104,000	92.1%	3.0 - 5.0	1/2	120/60/1	15	10.4	40	215

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 Upflow / Horizontal	CG90UB050D12B CG92TB045D12B	1/3	10 x 8	40 - 70	High	1,355	1,305	1,255	1,200	1,120	1,060	980	880
					Med/High	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
	CG90UB075D12B CG92TB067D12B	1/3	10 x 8	45 - 75	High	1,390	1,335	1,270	1,205	1,140	1,065	950	860
					Med/High	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
	CG90UB075D16C CG92TB067D16C	3/4	12 x 10	35 - 65	High	1,920	1,890	1,830	1,760	1,670	1,625	1,550	1,445
					Med/High	1,750	1,720	1,680	1,660	1,625	1,495	1,395	1,325
					Med	1,515	1,490	1,460	1,420	1,395	1,330	1,260	1,185
					Med/Low	1,315	1,300	1,255	1,215	1,190	1,160	1,105	1,015
					Low	1,035	980	960	950	905	850	805	720
	CG90UB100D16C CG92TB090D16C	3/4	12 x 10	45 - 75	High	1,975	1,925	1,865	1,805	1,745	1,665	1,580	1,495
					Med/High	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
	CG90UB100D20C CG92TB090D20C	.9	12 x 10	45 - 75	High	2,135	2,080	2,025	1,930	1,855	1,780	1,680	1,620
					Med/High	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	1,655	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
	CG92TB112D20C	.9	12 x 10	45 - 75	High	2,135	2,035	1,930	1,840	1,735	1,645	1,545	1,505
					Med/High	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	
CG90UB125D20D	.9	12 x 10	45 - 75	High	2,185	1,120	2,045	1,980	1,890	1,745	1,685	1,625	
				Med/High	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	1,642	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	
Counterflow	CG90CB045D12B	1/3	10 x 8	35 - 65	High	1,340	1,285	1,235	1,170	1,100	1,025	925	820
					Med/High	1,085	1,055	1,030	980	930	870	805	710
					Med	865	845	815	800	755	710	645	550
					Low	735	710	685	655	625	570	505	410
	CG90CB067D12B	1/3	10 x 8	45-65	High	1,360	1,300	1,230	1,165	1,080	1,005	945	860
					Med/High	1,270	1,210	1,155	1,085	1,020	955	900	825
					Med	1,065	1,030	990	945	890	840	770	680
					Low	895	875	845	815	795	740	690	600

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

Counterflow — Blower Performance Data continued on next page

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
Counterflow	CG90CB067D16C	3/4	12 x 10	35-65	High	1,900	1,815	1,750	1,600	1,560	1,530	1,460	1,350
					Med/High	1,715	1,695	1,620	1,585	1,495	1,460	1,385	1,305
					Med	1,600	1,570	1,485	1,475	1,435	1,365	1,280	1,220
					Med/Low	1,360	1,320	1,285	1,255	1,210	1,160	1,110	1,025
					Low	1,060	1,035	1,015	975	935	865	800	740
	CG90CB090D16C	3/4	12 x 10	35 - 65	High	2,040	1,965	1,895	1,815	1,735	1,650	1,540	1,450
					Med/High	1,800	1,750	1,700	1,625	1,555	1,475	1,395	1,305
					Med	1,600	1,570	1,535	1,460	1,400	1,355	1,285	1,205
					Med/Low	1,335	1,310	1,270	1,220	1,180	1,140	1,095	1,025
					Low	1,045	1,020	985	955	910	870	805	735
	CG90CB090D20C	0.9	12 x 10	40 - 70	High	2,115	2,015	1,910	1,820	1,725	1,630	1,545	1,425
					Med/High	2,000	1,930	1,860	1,810	1,720	1,625	1,530	1,390
					Med	1,910	1,845	1,790	1,705	1,645	1,540	1,465	1,230
					Med/Low	1,705	1,650	1,560	1,510	1,400	1,300	1,230	1,150
					Low	1,490	1,425	1,320	1,305	1,240	1,175	1,075	985
	CG90CB112D20D	0.9	12 x 10	40 - 70	High	2,115	2,015	1,910	1,820	1,725	1,630	1,545	1,425
					Med/High	2,000	1,930	1,860	1,810	1,720	1,625	1,530	1,390
					Med	1,910	1,845	1,790	1,705	1,645	1,540	1,465	1,230
					Med/Low	1,705	1,650	1,560	1,510	1,400	1,300	1,230	1,150
					Low	1,490	1,420	1,320	1,305	1,240	1,175	1,075	985

Filter Requirement Data

Maximum Airflow (CFM) ¹	Disposable Filters			Permanent (Cleanable) Filters ²		
	Minimum Area (sq. in.) ³	Size (in.) ³	Quantity	Minimum Area (sq. in.) ³	Size (in.) ³	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

Notes:

- The Airflow Descriptor is the two digits following the "D" in the model number; e.g. "20" is the Airflow Descriptor for CG90UB100D20C.
- Areas and dimensions shown for washable filters are based on filters rated at 600 feet per minute face velocity.
- Typical filter sizes are shown, however, any combination of filters whose area equals or exceeds the minimum area shown is satisfactory.

Note: Two filters are required for airflows exceeding 1600 cfm.

Vent Length Specifications - Maximum

Model	Pipe Size (in.)		
	2	2-1/2	3
CG90UB050, CG90CB045D CG92TB045	60 ft	90 ft	90 ft
CG90UB075, CG90CB067D CG92TB067	60 ft	90 ft	90 ft
CG90UB100, CG90CB090D CG92TB090D	40 ft	60 ft	90 ft
CG90UB125 / CG90CB112D CG92TB112	NR	50ft	60 ft

Allowance for vent and air intake terminals included in lengths shown.

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 4000 ft.

3" diameter required for altitudes above 5000 ft.

Accessories

Kit Number	Catalog Number	Description	Used with
ALPKT572	1.831021	Propane conversion kit	All CG90UB & CG80 models
ALPKT574	1.831022	Propane conversion kit	All CG90CB & CG92TB models
ATWIN579	1.841136	Twinning kit	All CG units excluding Variable speed models
AFILTHA7	1.841005	Single side air return filter kit with 5 tons airflow (double 16 x 20 filter)	All Upflow CG Gas furnaces
AFILT529	1.841020	Bottom return filter kit	All Upflow CG Gas furnaces
AFILT524	1.841018	Upflow side return filter kit (16 x 25 filter)	All Upflow CG Gas furnaces
AFILT525	1.841019	Counterflow filter kit	All counterflow CG Gas furnaces
ABASE512	1.841015	Combustible floor base for 17.5" wide units	All "B" Width counterflow units
ABASE568	1.841035	Combustible floor base for 21.0" wide units	All "C" Width counterflow units
ABASE569	1.841036	Combustible floor base for 24.5" wide units	All "D" Width counterflow units
ACVK2	1.851001	Concentric vent kit	All 90% models

Clearances to Combustibles (in.)

Model Number	Top	Right Side	Left Side	Front	Back	Vent
All Models All Directions	1	0	0	2*	0	0

* 18" Front Horizontal Installations

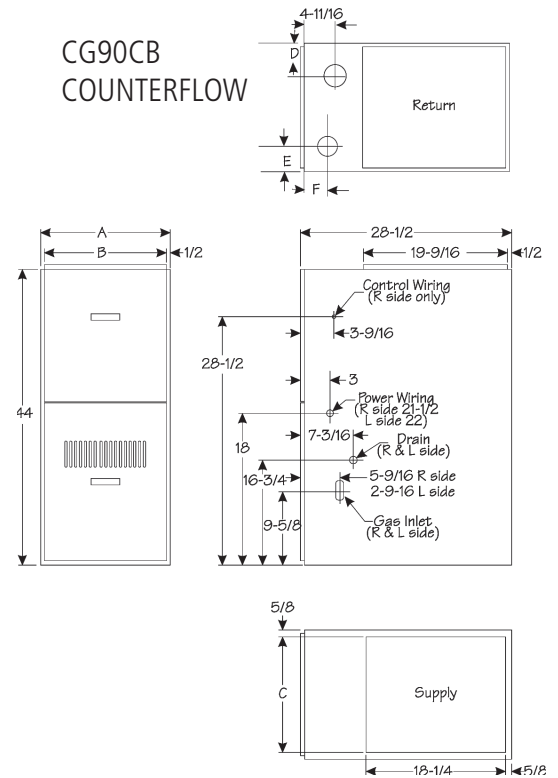
90/92 Gas Furnace

Dimensions (in.)

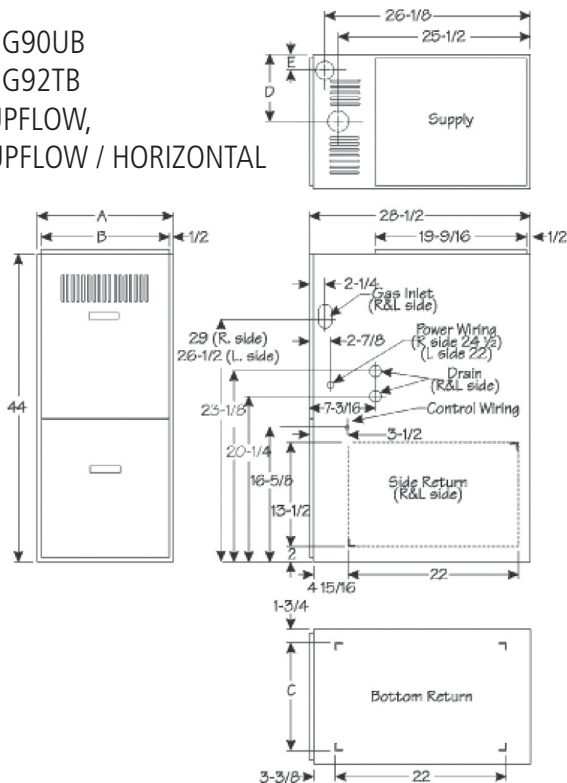
Direction	Model	A	B	C	D	E	F
Upflow / Horizontal	CG90UB050D12B CG92TB045D12B	17-1/2	16-1/2	14	10-1/8	2	---
	CG90UB075D12B CG92TB067D12B	17-1/2	16-1/2	14	11-3/4	2	---
	CG90UB075D16C CG92TB067D16C	21	20	17-1/2	13-3/8	3-5/8	---
	CG90UB100D16C CG92TB090D16C	21	20	17-1/2	15	2	---
	CG90UB100D20C CG92TB090D20C						
	CG92TB112D20C	21	20	17-1/2	16-1/2	1-5/8	---
	CG90UB125D20D	24-1/2	23-1/2	21	18-1/4	2-5/8	---
Counterflow	CG90CB045D12B	17-1/2	16-1/2	16-1/4	3-11/16	4-1/2	3
	CG90CB067D12B						
	CG90CB067D16C	21	20	19-3/4	5-11/16	6-1/4	3
	CG90CB090D16C						
	CG90CB090D20C						
	CG90CB112D20D						
CG90CB112D20D	24-1/2	23-1/2	23-1/4	4-11/16	6-3/8	3-5/16	

U = Upflow,
T = Upflow/Horizontal,
C = Counterflow,

CG90CB COUNTERFLOW



CG90UB
CG92TB
UPFLOW,
UPFLOW / HORIZONTAL



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