



## G1D80BT



# ULTRA **V**

ADVANTAGE 80

# 80% Gas Furnace

## Upflow/Horizontal

### HEAT EXCHANGER

- Efficient aluminized steel tapered S-curve
- Crimped no weld construction for longer life

### CABINET

- Compact 40" height
- Insulated to increase efficiency and reduce sound levels
- Unitized construction for cabinet integrity
- Prepainted steel for maximum durability

### BLOWER

- Isolated and insulated compartment to reduce sound levels
- Easily removable slide-out design
- Multi-speed for wide airflow range
- PSC permanently lubricated motor for low maintenance and optimum efficiency
- Dynamically balanced blower with resilient motor mounts for smooth and quiet operation

### BURNERS

- Aluminized steel inshot burners for smooth ignition
- Sound attenuating burner enclosure

### CONTROLS

- Honeywell 24 V gas valve
- Integrated ignition and fan control board
- Board features self diagnostics as well as saving last five (5) fault codes in nonvolatile memory for ease of service
- Provides reverse polarity protection
- Hot surface ignition using steel shrouded, high density Norton Mini-Ignitor™
- Fan control board features adjustable fan off time in the heating mode and a 60 second fan off time delay in the cooling mode
- Fan control board provides terminals for electronic air cleaner, humidifier, furnace twinning, and continuous low speed fan operations
- Control circuit is fuse protected
- 40 VA transformer
- Color coded control wiring

### VENTING

- Permanently lubricated draft motor with stainless steel shaft and air cooled for long life
- Category 1 direct vent capable
- Outside combustion air optional

### INSTALLATION

- Left or right gas entry
- Left or right electrical power entry
- "L" models comply with California Low NOx regulations

### ACCESSORIES

- Propane conversion kit
- Twinning kit
- "Flush fit" coils
- Side return filter kit

### WARRANTY

- 20 year limited heat exchanger warranty
- 5 year limited on all parts
- Extended protection plans available



## Model Number Guide

	G	1D	80	B	T	100	D	20	C	L	1A	
G - Product Family												Series
1D - Single Stage Heat, Direct Vent												L - Low NOx Model
Nominal AFUE												Cabinet Width C = 21"
B - Series												Nom. Maximum CFM x 100
T - Upflow/Horizontal												D - Direct Drive
												Nom. Btuh Input x 1000

## Physical and Electrical Data

Model	Input (Btuh)	Output (Btuh)	AFUE	Nom. Cooling Cap.	Gas Inlet (in.)	Flue Size (in.)	Volts/Hz/Phase	Min. Time Delay Breaker or Fuse	Nominal F.L.A.	Trans. (V.A.)	Weight (lbs.)
G1D80BT050D12B	50,000	40,000	80	1.5-3.0	1/2	4	120/60/1	15	5.8	40	125
G1D80BT075D14B	75,000	60,000	80	2.0-3.5	1/2	4	120/60/1	15	7.7	40	140
G1D80BT100D14B	100,000	80,000	80	2.0-3.5	1/2	5	120/60/1	15	7.3	40	155
G1D80BT100D20C	100,000	80,000	80	3.0-5.0	1/2	5	120/60/1	15	11.7	40	180
G1D80BT125D20C	125,000	100,000	80	3.0-5.0	1/2	5	120/60/1	15	11.0	40	190
G1D80BT150D20D	150,000	120,000	80	3.0-5.0	1/2	5	120/60/1	15	11.5	40	200

## Filter Requirement Data

Airflow Descriptor	Disposable Filters			Permanent Filters		
	Min. Area (sq. in.)	Size (in.)	Quantity	Min. Area (sq. in.)	Size (in.)	Quantity
12	576	16 x 20	2	288	16 x 20	1
14	672	20 x 20	2	336	20 x 20	1
16	768	20 x 20	2	384	20 x 20	1
20	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. "20" is the Airflow Descriptor for G1D80BT100D20.
2. Areas and dimensions 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.

## Blower Performance Data

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
G1D80BT050D12B	1/3	10 x 6	30-60	Hi	1,346	1,315	1,269	1,216	1,153	1,080	995	909
				Med/Hi	1,119	1,096	1,067	1,035	981	922	852	796
				Med	918	905	883	843	806	767	719	644
				Low	787	764	745	713	667	639	579	523
G1D80BT075D14B	1/3	10 x 8	40-70	Hi	1,653	1,600	1,542	1,476	1,395	1,309	1,232	1,107
				Med/Hi	1,355	1,335	1,306	1,268	1,206	1,156	1,060	992
				Med	1,078	1,061	1,051	1,032	999	963	899	680
				Low	917	910	886	896	833	795	671	582
G1D80BT100D14B	1/3	10 x 8	50-80	Hi	1658	1609	1538	1474	1413	1337	1243	1107
				Med/Hi	1394	1365	1325	1282	1227	1163	1036	959
				Med	1104	1101	1077	1047	1009	969	903	667
				Low	931	925	904	880	843	793	645	571
G1D80BT100D20C	3/4	12 x 10	45-75	Hi	2,161	2,134	2,098	2,042	2,003	1,943	1,859	1,787
				Med/Hi	1,791	1,767	1,744	1,722	1,684	1,647	1,592	1,523
				Med	1,558	1,525	1,514	1,495	1,455	1,412	1,376	1,321
				Med/Low	1,284	1,260	1,243	1,208	1,183	1,150	1,102	1,068
				Low	1,004	970	927	892	850	809	741	686
G1D80BT125D20C	3/4	12 x 10	45-75	Hi	2,097	2,082	2,037	1,971	1,923	1,821	1,737	1,750
				Med/Hi	1,780	1,757	1,733	1,707	1,646	1,563	1,529	1,467
				Med	1,569	1,529	1,521	1,486	1,434	1,395	1,351	1,237
				Med/Low	1,310	1,283	1,253	1,225	1,189	1,156	1,094	1,020
				Low	1,017	973	950	907	828	774	720	655
G1D80BT150D20D	3/4	12 x 10	55-85	Hi	2,035	2,018	1,974	1,949	1,897	1,856	1,782	1,683
				Med/Hi	1,694	1,684	1,663	1,635	1,590	1,540	1,482	1,417
				Med	1,480	1,470	1,449	1,420	1,384	1,338	1,268	1,208
				Med/Low	1,255	1,229	1,205	1,178	1,149	1,096	1,063	1,003
				Low	987	952	920	889	830	784	734	679

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

## Accessories

Kit Number	Description	Used with
ALPKT572-3	Propane Conversion Kit	All Ultra V 80/90/91 Single Stage Models
AFILT524	Horizontal/Upflow Side Return Filter Kit (16 x 25 filter)	Ultra V 80 Upflow/Horizontal Series
ATWIN579-1	Twinning Kit	All Single Stage Ultra V Series
AFILTHA7	Side Return Filter Kit for Single Return with 5 tons airflow (double 16 x 20 filter)	All Ultra V Upflow Models
AFILT529	Bottom Return Filter Rack	All Ultra V Upflow Models
AFILT524	Upflow Side Return Filter Kit (16 x 25 Filter)	All Ultra V Upflow Models
AFUSE576	Fuse Kit	All Single Stage Ultra V Series

## Dimensions (in.)

Model	A	B	C	D	E	F
G1D80BT050D12B	17 1/2	16 1/2	14	6 1/2	5	3
G1D80BT075D14B	17 1/2	16 1/2	14	6 1/2	4 3/8	3 1/8
G1D80BT100D14B	17 1/2	16 1/2	14	6 1/2	4 1/2	3 1/4
G1D80BT100D20C	21	20	16 1/2	8 1/4	6 1/4	3 5/16
G1D80BT125D20C	21	20	16 1/2	8 1/4	4 5/8	3 1/4
G1D80BT150D20D	24 1/2	23 1/2	21	10	4 7/8	3 5/16

## Clearances\* (in.)

### Upflow

Model	Top	Right Side	Left Side	Front	Back	Vent
G1D80BT050D12B	1	0	2 <sup>1</sup>	4 <sup>3</sup>	0	6 <sup>2</sup>
G1D80BT075D14B						
G1D80BT100D14B						
G1D80BT100D20C	1	0	0	4 <sup>3</sup>	0	6 <sup>2</sup>
G1D80BT125D20C	1	0	0	4 <sup>3</sup>	0	6 <sup>2</sup>
G1D80BT150D20D						

### Horizontal

Model	Right Side	Left Side	Front	Back	Vent	Airflow			
						R to L		L to R	
						Top	Bottom	Top	Bottom
G1D80BT050D12B	0	0	18	0	6 <sup>2</sup>	1	3 <sup>2</sup>	3 <sup>2</sup>	0
G1D80BT075D14B									
G1D80BT100D14B									
G1D80BT100D20C	0	0	18	0	6 <sup>2</sup>	1	2 <sup>1</sup>	2 <sup>1</sup>	0
G1D80BT125D20C									
G1D80BT150D20D	0	0	18	0	6 <sup>2</sup>	1	0	0	0

<sup>1</sup> 0" if B1 vent is used

<sup>2</sup> 1" if B1 vent is used

<sup>3</sup> 2" if B1 vent is used

\*Clearances to combustibles. Service access to the front of the appliance to remove the blower assembly is 18".

Specifications subject to change without notice.



421 Monroe Street • Bellevue, OH 44811  
(419) 483-4840

