

ALL SEASON-DX COOLING & GAS HEATING GCS6 SERIES-HORIZONTAL

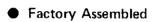
*18,000 to 58,000 Btuh Total Cooling Capacity 45,000 to 150,000 Btuh Input Heating Capacity

*ARI Certified Ratings

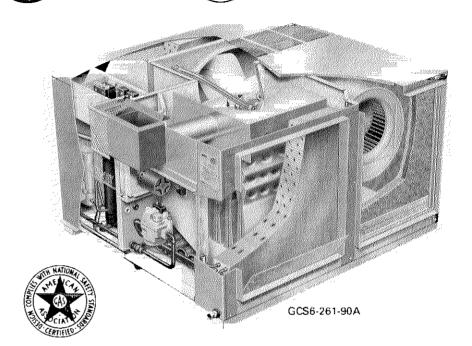
COMBINATION UNITS

ENGINEERING DATA

ROOFTOP
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- Several Sizes Available
- Dependable, Quiet Operation
- Low Profile
- Durable Attractive Cabinet
- Complete Service Access
- Easy Duct Connection
- Efficient Air Handling
- Cleanable Air Filters
- Large Size Coils
- Full Refrigerant Charge
- Rugged Compressor
- Aluminized Steel Heat Exchanger
- Aluminized Steel Burners
- Complete Safety Controls

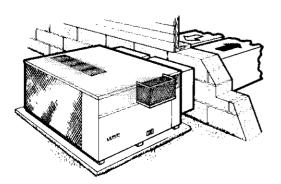


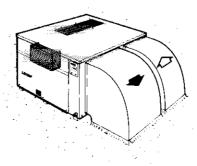
Efficient Combination Heating-Cooling Units Provide Low Cost, Space Saving Outdoor Installations

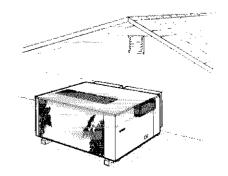
Lennox single package GCS6 series combination gas fired heating and DX cooling units are designed for residential or small commercial installations. Several models are available with a wide and varied heating-cooling capacity range. Units can be installed with duct work extended through a wall in a crawl space, basement, utility room or attic. Installation on a slab at grade level or on a roof will save valuable interior floor space. The compact single package outdoor unit contains all refrigerant components (evaporator and condensing units), gas fired heating components, air movers and air filters in one complete package. Supply and return air openings are side by side at the same end of the cabinet. Condenser air outlet is through louvered top and side panel. Powerful direct

drive fan(s) draws air through the entire condenser coil quietly and efficiently. Compressor and controls are isolated in a separate compartment. Multispeed direct drive blower provides quiet circulation of heating and cooling air. Extra large evaporator and condenser coils ensure maximum air contact and heat transfer. Heavy gauge galvanized steel cabinet has a durable baked-on outdoor enamel finish for long lasting protection. Rugged aluminized steel heat exchanger assures top heating efficiency and long service life. Silent operating gas controls provide 100% safety shut-off. A heating-cooling thermostat is furnished. Equipment is shipped completely factory assembled, wired and piped ready to install. In addition, each unit is test operated at the factory before shipment.

Typical Applications







FEATURES

Durable Heat Exchanger — Lennox designed clamshell type heat exchanger is constructed of aluminized steel for maximum service life. Edge weld construction permits normal expansion and contraction without metal fatigue. Heat exchanger design provides excellent combustion, proper venting, cleanability and low resistance to air flow. Life cycle testing insures long service life. Combination flue outlet and combustion air inlet box is coated with DURAGLASS. If for the utmost protection against corrosion. Mounting holes are furnished in the cabinet for easy field installation of the box.

Aluminized Steel Burners — Each burner has two rows of practically continuous aluminized steel rolled ports which result in quiet and clean combustion. A crossover igniter, perpendicular to the main burner, carries a positive flame from burner to burner to achieve fast, sure and safe ignition. Burners are mounted in a slide-out burner tray for complete removal from the unit for service. Each burner is easily removed and replaced individually in the tray.

Automatic Gas Controls — Silent operating gas controls provide 100% safety shut off. 24V gas control valve combines a manual main valve, bleed gas filtration, automatic electric valve and gas pressure regulation into a compact combination control. Solid-state electric direct spark ignition system provides sure and safe main burner ignition. Spark establishes main burner flame, then ceases sparking and monitors the burner flame for the entire cycle. Direct spark ignition cuts fuel consumption while giving positive burner flame and provides protection against flame-out and momentary interruption of electric power supply. Interlock safety switch prevents gas control operation when cabinet access panel is removed for servicing. Panel replacement activates switch and allows normal operation.

GCS6-650-150 Two Stage Heating — Two stage heating operation is available on GCS6-651 & 653-150/75A models. See Specification table. A combination two stage heating and single stage cooling thermostat is furnished.

Combustion Air Blower — Forced draft combustion blower exhausts combustion products in a constant updraft. Flue is not affected by wind direction and velocity. Equipped with air switch that proves blower operation before allowing automatic main gas valve to open. Motor is resiliently mounted.

Fan and Limit Controls — Factory installed and accurately located. Fan control is temperature actuated to control blower operation and has adjustable blower off temperature setting. Dual limit controls are located at front and rear of heat section for maximum protection from abnormal operating conditions. Limits have fixed temperature setting.

Rugged Cabinet — Heavy gauge galvanized steel cabinet is subject to a five station metal wash process. This preparation results in a perfect bonding surface for the finish coat of baked-on outdoor enamel. Evaporator and heat sections are lined with thick fiberglass insulation. Removable panels permit complete service access to cabinet interior. Heavy gauge steel support rails under base elevates unit above mounting surface. Drainage holes are provided in condenser coil section of the base. Evaporator coil drain pan is constructed of heavy gauge galvanized steel and has a galvanized pipe (mpt) drain outlet. Non-corrosive aluminum condenser coil grille guard is furnished. Grille protects coil from damage and permits quiet discharge of air with minimum resistance. Electrical and gas piping inlets are furnished in the cabinet. Supply and return air openings are located side by side and have flanges for ease of duct connection.

Compressor and Controls Compartment — Compressor and control box are located in a separate compartment of the cabinet, isolating them from the weather and also keeping the sound level at a minimum. Control box is conveniently located for service access with all controls factory installed and wired. Cabinet access panel removal permits complete access to the compartment.

Refrigeration System — Complete factory sealed refrigeration system consists of: compressor, condenser coil and fan(s), evaporator coil and blower, suction and discharge line service gauge ports, liquid line strainer, low pressure switch (GCS6-460-510 & 650 models), refrigerant lines connected and a full operating charge.

Dependable and Quiet Compressor — Rugged and reliable compressor is hermetically sealed. Suction cooled, overload protected, and equipped with internal pressure relief valve. Internally protected from excessive current and temperature. The entire running gear is spring mounted within the sealed can. In addition, the compressor is installed on resilient rubber mounts in the unit, assuring quiet and vibration free opeation.

Large Evaporator and Condenser Coils — Lennox designed and fabricated coils are constructed of precisely spaced ripple-edge aluminum fins machine fitted to copper tubes for maximum strength and heat transfer. Each joint is silver soldered resulting in leak proof construction. Coils are pressure leak tested at 450-500 psi.

Efficient Condenser Fan(s) — Direct drive fan(s) draws large air volumes uniformly through the entire coil resulting in high refrigerant cooling capacity. GCS6-211 thru 460 models are equipped with a single fan. GCS6-510 and 650 models employ dual fans. Air enters unit through the coil and is discharged out the louvered top and side panel.

Powerful Supply Air Blower — Units are equipped with quiet operating direct drive blowers that deliver large air volumes with low power consumption. Each blower is statically and dynamically balanced as an assembly before it is installed in the unit. Multispeed motor is isolated on rubber mounts. A choice of blower speeds is available on each blower. See blower performance charts. Change in blower speed is easily accomplished by a simple change in wiring.

Cleanable Air Filter(s) — One inch frame filters are furnished as standard equipment. Media is washable or vacuum cleanable polyurethane, oil coated for increased efficiency. Use RP products filter coating no. 418 (P-8-5069) when reoiling is required after cleaning.

Heating-Cooling Thermostat — A deluxe wall mounted combination single stage heating and single stage cooling thermostat is furnished as standard equipment. It has a temperature setting dial, system selector switch (heat-cool-off) and fan control switch (auto-on). Fan switch gives intermittent or continuous blower operation during heating or cooling cycle.

Timed-Off Control (Optional) — Available as optional equipment, order no. P-8-10238. Prevents compressor short-cycling and also allows time for suction and discharge pressure to equalize, permitting the compressor to start in an unloaded condition. Automatic reset control will shut the compressor off and hold it off for 5 minutes.

Low Ambient Control (Optional) — Units will operate satisfactorily down to 50°-55°F outdoor air temperature without any additional controls. For cases where operation below 50°-55°F is required a Low Ambient Control Kit (order no. BM-3434) can be added in the field, enabling the unit to operate properly down to 0°F.

Crankcase Heater (Optional) — Compressor crankcase heater is available as optional equipment. Order no. P-8-8852. Heater ensures proper lubrication of the compressor at all times.

Start Kits (Optional) — Available as optional equipment for field installation on the GCS6-211 thru 461 single phase units. Provides assistance for compressor start under loaded conditions or in the event of low voltage. Specify complete unit model number when ordering.

Thoroughly Tested and Approved — The design of the unit is A.G. A. Certified as a combination heating-cooling unit for outdoor installation. Complies with ANSI safety codes. Cooling system has been thoroughly tested and rated in the Lennox Laboratory environmental test room according to ARI Standard 210 test conditions. In addition, units have been sound tested in the Lennox reverberant sound test room and rated according to ARI Standard 270 conditions. Units coming within the scope of this standard (135,000 Btuh or less) carry the ARI certification seal and are Certified under the ARI Certification Program. Units and components within are bonded for grounding to meet safety standards for servicing required by U.L. and NEC. Blower data is according to actual unit tests conducted in the Lennox air test chamber. Laboratory life cycle testing of the heat exchanger proves long life of the heating element.

SPECIFICATIONS

	Model No.	GCS6-211-45A	GCS6-261-45A	GCS6-261-90A	GCS6-311-75A		GCS6-411-120A GCS6-413-120A
Heating	Btuh Input	45,000	45,000	90,000	75,000	75,000	120,000
Capacity	Btuh Output	33,750	33,750	67,500	56,250	56,250	90,000
I Caulusa Cupanitu	Total capacity Btuh	118,000	24,000	24,000	††30,000	1136,000	1136,000
*Cooling Capacity	Total Unit watts	12700	3900	3600	4500	5800	5800
ARI Certified	Dehumidifying capacity	26%	26%	26%	24%	25%	25%
Refrigerant (R 22) o	:harge	2 lbs. 5 oz.	3 lbs. 2 oz.	3 lbs, 2 oz,	3 lbs, 5 oz,	3 lbs. 4 oz.	3 lbs. 4 oz.
Blower wheel noming	nal diam, x width (in.)	9 x 7	9 x 7	9 x 9	10 x 9	10 x 9	10 x 10
Blower motor horse		1/5	1/5	1/4	1/3	1/3	1/2
Evaporator	Net face area (sq. ft.)	3,30	3,30	3.30	3.30	3,33	3,33
1 '	Tube diam, (in.) & no. of rows	3/8-2	3/8-2	3/8 -2	3/8 3	3/8-3	3/8-3
Coil	Fins per inch	16	16	16	16	15	15
C 4	Net face area (sq. ft.)	6.25	6.25	6.25	6.25	6,25	6.25
Condenser Coil	Tube diam, (in.) & no. of rows	3/8 - 1	3/8 2	3/8 2	3/8-2	3/8 2	3/8- 2
Coll	Fins per inch	18	14	14	14	18	18
	Diameter (in.) and no. of blades	(1) 18-4	(1) 18 5	(1) 185	(1) 204	(1) 20 4	(1) 20 4
C	Air volume (factory setting)	1970	2350	2350	2975	2875	2875
Condenser	Rpm (factory setting)	1115	1075	1075	1080	1060	1060
Fan	Motor horsepower	1/6	1/4	1/4	1/3	1/3	1/3
	Motor watts (factory setting)	275	375	375	550	540	540
No. & size of filters (in.)		(1) 20 x 20 x 1					
Gas supply connection mpt (in.) Natural		1/2	1/2	1/2	1/2	1/2	1/2
Recommended gas supply Natural		/	7	,	7	7	7
pressure WC		3/4	3/4	3/4	3/4	3/4	3/4
Condensate drain si. Net weight (lbs.) (1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	380	400	420	420	430	470

^{*}Rated in accordance with ARI Standard 210; 450 cfm evaporator air volume per ton of cooling capacity, 95F outdoor air temperature and 80db/67wb entering evaporator air.

SPECIFICATIONS

	Model No.	GCS6-461-100A GCS6-463-100A	GCS6-511-100A GCS6-513-100A	GCS6-511-150A GCS6-513-150A	GCS6-651-150A GCS6-653-150A	GCS6-651-150/75A GCS6-653-150/75A
Single Stage	Bruh Input	100,000	100,000	150,000	150,000	
Heating Capacity	Btuh Output	75,000	75,000	1 12,500	112,500	
Two Stage	Bruh Input (low stage)				*	75,000
Heating Capacity	Btuh Input (high stage)					150,000
Natural	Bruh Output (high stage)					112,500
*CI	Total capacity Btuh	42,000	†48	,000	†5	8,000
*Cooling Capacity	Total Unit watts	5900	††7	500	Ç	200
ARI Certified	Dehumidifying capacity	25%	24	1%		24%
Refrigerant (R-22)		4 lbs. 6 oz.	4 lbs.	11 oz.	6 lb	s. 2 oz.
Blower wheel nomi	nal diam. x width (in.)	10 x 10	12	x 12	12	2 x 12
Blower motor horse	power	1/2	3/4		3/4	
E	Net face area (sq. ft.)	3.30	5.0		5.0	
Evaporator Cod	Tube diam. (in.) & no. of rows	3/8 4	3/8 3		3/8 3	
Coll	Fins per inch	15	15		15	
Condenser	Net face area (sq. ft.)	6,25	7.64		7.64	
	Tube diam. (in.) & no. of rows	3/8 3	3/8	3 – 2	3/8-3	
Coil	Fins per inch	15	1	8	18	
	Diameter (in.) and no, of blades	(1) 20-4	(2) 1	8-5	(2) 18 5	
	Air volume (factory setting)	2875	29	50		2850
Condenser	Rpm (factory setting)	1060	10	80	1	080
Fan	Motor harsepower	1/3	1	/4		1/4
	Motor watts (factory setting)	540	6	10		600
No. & size of filters (in.) Gas supply connection mpt (in.) Natural		(1) 20 x 20 x 1	(2) 16 :	∢20 x 1	(2) 1€	5 x 20 x 1
		1/2	1	/2		1/2
	Recommended gas supply pressure WC (in.)		7		7	
Condensate drain si	2e mpt (in.)	3/4	3	/4		3/4
Net weight (lbs.) (1	Pkg.)	520	630	645		670

^{*}Rated in accordance with ARI Standard 210; 450 cfm evaporator air volume per ton of cooling capacity, 95F outdoor air temperature and 80db/67wb entering evaporator air.

HIGH ALTITUDE DERATE

If the heating value of the gas does not exceed values listed in the table, derating of the unit is not required. Should the heating value of the gas exceed the table values, or if the elevation is greater than 6,000 feet above sea level it will be necessary to derate the unit. Lennox requires that derate conditions be 4% per thousand feet above sea level. Thus at an altitude of 4000 feet, if the heating value of the gas exceeds 1000 $\rm Btu/ft^3$, the unit will require a 16% derate.

Elevation Above Sea Level (Feet)	Maximum Heating Value (Btu/ft ³)
5001 6000	900
4001 5000	950
3001-4000	1000
2001 -3000	1050
Sea Level—2000	1100

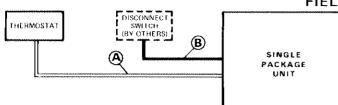
[†]Derate Capacity by 500 Btuh and reduce watts by 100 for 208 volt operation.

^{††}Derate Capacity by 1000 Bruh for 208 volt operation.

[†]Derate Capacity by 1000 Bluh for 208 volt operation.

¹¹Add 100 watts for 208 volt operation.

FIELD WIRING



- A Four wire low voltage (Single Stage Cool and Single Stage Heat)
 Five wire low voltage (Single Stage Cool and Two Stage Heat)
- B. Two or three wire power (See electrical data table)
 - All wiring must conform to NEC and local codes.

 If electrical codes permit may be class 2 wiring.

ELECTRICAL DATA

Мо	del No.	GCS6-211 -45	GCS6-261 -45	GC\$6-261 -90	GCS6-311 -75	GCS6-411 -75	GCS6-413 -75	GCS6-411 -120	GCS6-413 -120
Line voltage data		208/230v 60hz 1ph	208/230v 60hz-1ph	208/230v 60hz 1ph	208/230v 60hz 1ph	208/230v 60hz 1ph	208/240v 60hz 3ph	208/230v 60hz 1ph	208/240v 60hz 3ph
	Full load amps	11.1	14.9	14.9	17.5	23.5	13.8	23.5	13.8
Compressor	Power factor	.92	.92	.92	.92	.92	.85	.92	.85
	Locked rotor amps	53.0	74,0	74.0	85.0	111.0	77.0	111.0	77.0
Condenser Coil	Full load amps	1.4	2.6	2.6	3.0	3.0	3.0	3.0	3.0
Fan	Locked rotor amps	2.9	5.4	5.4	6.3	6.3	6.3	6.3	6.3
Evaporator Coil	Full load amps	4.5	4.5	2.2	2.3	2.3	2.3	3.9	3.9
Blower	Locked rotor amps	6.6	6.6	5.2	5.4	5.4	5.4	9.5	9.5
*Minimum circuit a	ampacity	19.8	25.7	23.4	27.2	34.7	22.6	36.3	24.2

^{*} Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

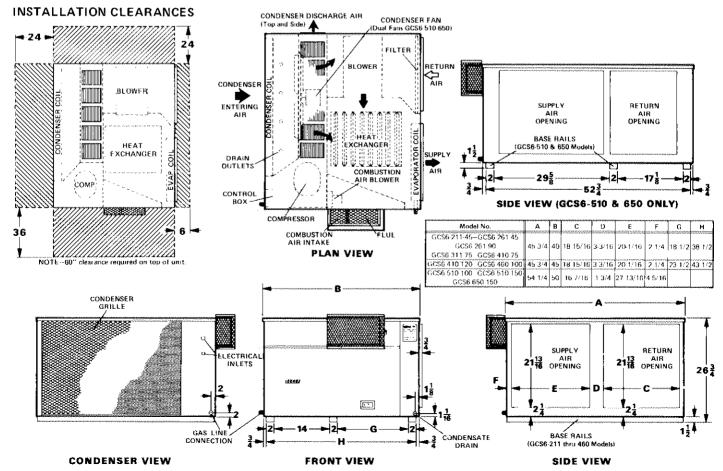
NOTE - Extremes of operating range are plus 10% and minus 5% of line voltage. 208 240v model is plus and minus 10% of line voltage.

Model No.		GCS6-461-100	GCS6-463-100	GCS6-511-100 GCS6-511-150	GCS6-513-100 GCS6-513-150	GCS6-651-150	GCS6-653-150
Line voltage data		208/230v 60hz 1ph	208/240v 60hz 3ph	208/230v 60hz 1ph	208/240v 60hz 3ph	208/230v 60hz 1ph	208/240v 60hz 3ph
	Full load amps	25.8	14.6	30.5	16.9	38.6	21.4
Compressor	Power factor	.92	.85	.92	.85	,92	.85
	Locked rotor amps	115,0	87.0	140.0	104.0	175.0	132.0
Condenser Coil	Full load amps	3.0	3,0	5.2	5.2	5.2	5.2
Fan	Locked rotor amps	6.3	6.3	10.7	10.7	10.7	10.7
Evaporator Coil	Full load amps	3.9	3.9	6.0	6.0	6.0	6.0
Blower	Locked rotor amps	9.5	9.5	14.7	14.7	14.7	14,7
*Minimum circui	t ampacity	39.2	25.2	49.3	32.3	59.5	38,0

^{*}Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus 10% and minus 5% of line voltage. 208 240v model is plus and minus 10% of line voltage.

DIMENSIONS (inches)



COOLING RATINGS

	Evapora 80F Dr				····	Outdo	oor Air Ten	nperatur	e Entering	Condense	r (F)	<u>, , , , , , , , , , , , , , , , , , , </u>		
Unit	Entering	<u> </u>	85 95 105											
Model	Wet	Total	Total	Sensible	Comp.	Total	Sensible	Comp.	Total	Sensible	Comp.	Total	Sensible	Comp.
No.	Bulb	Air Volume	Cooling	To Total	Motor	Cooling	To Total	Motor	Cooling	To Total	Motor	Cooling	To Total	Motor
	Degrees	(cfm)	Capacity (Btuh)	Ratio (S/T)	Watts Input	Capacity (Btuh)	Ratio (S/T)	Watts Input	Capacity (Btuh)	Ratio (S/T)	Watts Input	Capacity (Btuh)	Ratio (S/T)	Watts Input
	(f)		***********************	***************************************		***************************************	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************	*******************************		2210		.99	2350
	63	600	17,700	.90	1940 1960	16,600 16,900	.93 .97	2070 2090	15,500 15,900	.96 1.00	2230	14,400 14,800	1.00	2390
		675 750	18,000 18,300	.9 4 .98	1970	17,300	1.00	2110	16.300	1.00	2260	15,200	1,00	2420
	~	600	18,800	.72	1990	17,600	.74	2130	16,500	.76	2280	15,300	.79	2430
GCS6-211	67	675	19,100	.75	2000	17,900	.78	2140	16,700	.80	2290	15,500	.83	2450
4000 411	•	750	19,300	.78	2010	18,100	.81	2160	17,000	.84	2310	15,800	.87	2470
		600	20,000	.56	2050	18,800	.57	2200	17,600	.59	2360	16,400	.60	2520
	71	675	20,300	.58	2060	19,000	.59	2220	17,800	.61	2370	16,600	.63	2540
]	750	20,500	.60	2070	19,300	.61	2230	18,000	.63	2390	16,800	.65	2550
		800	23,200	.86	2800	21,900	.89	2910	20,600	.91	3050	19,400	.94	3240
	63	900	23,800	.90	2820	22,400	.93	2930	21,100	.95	3080 3110	19,800	.97 .99	3270 3310
		1000	24,100	.94	2830	22,800 23,300	.96 .71	2960 3000	21,500 21,900	,98 .73	3140	20,200	.75	3330
GCS6-261	67	800 900	24,400	.69 .72	2860 2880	23,700	.74	3020	22,300	.76	3160	20,900	.78	3360
GC30-201	67	1000	24,900	.75	2900	24,000	.76	3030	22,600	.79	3180	21,100	.81	3380
	ļ	800	26,500	.53	2930	25,000	,55	3080	23,500	.56	3230	22,000	.57	3440
	71	900	26,900	.55	2950	25,400	.57	3090	23,900	.58	3250	22,300	.59	3460
	<u> </u>	1000	27,200	.57	2960	25,700	.59	3100	24,100	.60	3260	22,600	.61	3470
		1000	29,000	.89	3280	27,400	.92	3460	25,700	.95	3660	24,000	.99	3910
	63	1125	29,500	,94	3310	27,900	.96	3490	26,200	.99	3710	24,600	1.00	3980
		1250	30,000	.98	3340	28,800	.99	3530	26,800	1.00	3760	25,100	1.00	4030 4040
l		1000	30,500	.71	3360	29,300	.73	3550	27,000 27,400	.76 .80	3770 3790	25,200 25,500	.78 .82	4040
GCS6-311	67	1125	32,200	.75 .78	3380 3400	29,700 30,000	.77 .81	3570 3600	27,400	.84	3820	25,800	.87	4090
	<u> </u>	1250 1000	32,600 33,700	.78	3450	31,100	.56	3660	28,700	.57	3890	26,700	.59	4180
	71	1125	34,100	.57	3470	31,500	.58	3680	29,000	.60	3920	27,000	.62	4210
	''	1250	34,400	.59	3480	31,800	.60	3700	29,300	.62	3940	27,300	,65	4230
	***************************************	1200	35,600	.88	4400	33,700	.90	4600	31,800	.92	4820	29,800	.95	5100
	63	1350	36,200	.92	4450	34,300	.94	4650	32,400	,96	4880	30,400	.99	5160
		1500	37,000	.96	4490	35,000	.98	4690	33,100	1.00	4920	31,100	1.00	5260
GCS6-411		1200	38,000	.70	4550	35,900	.72	4780	33,700	.74	5020	31,400	.76 .80	5300 5350
GCS6-413	67	1350	38,600	.73	4600	36,400	.75 .78	4810 4860	34,100 35,600	.77 .80	5060 5110	31,800 32,300	.86	5400
		1500 1200	39,200 40,800	.76 .54	4640 4740	36,900 37,400	.78	4980	36,000	.57	5250	33,100	.58	5570
	71	1350	41,200	.56	4780	37,800	.57	5030	36,600	.59	5300	33,600	.61	5260
	''	1500	41,800	.58	4800	38,300	.59	5050	37,000	.61	5340	33,900	.63	5660
***************************************	+	1400	42,500	.89	4480	40,300	,92	4680	38,100	.95	4910	35,900	.98	5210
	63	1575	43,300	.94	4540	41,100	.97	4760	39,000	.99	5020	36,800	1,00	5330
}	1	1750	44,100	.99	4600	42,000	1,00	4840	39,700	1.00	5090	37,400	1.00	5390
GCS6-461		1400	44,700	.71	4640	42,300	.73	4870	39,900	.76	5110	37,800	.78	5400
GCS6-461	67	1575	45,400	.75	4690	42,900	.77	4910	40,400	.80	5160	38,000	.83	5460
3000-400	ļ	1750	45,900	.79	4730	43,300	.81	4960 5080	40,900 42,300	.84 .57	5210 5350	38,400 39,700	.87 .58	5520 5670
	ļ -,	1400	47,500	.54	4850 4890	44,900 45,300	.55 .58	5130	42,300	.59	5410	40,100	.61	5740
	71	1575 1750	47,900	.56 .59	4920	45,800	.60	5160	43,100	.62	5440	40,500	.64	5780
<u> </u>	+	1600	44,600	.89	5420	42,200	.92	5800	39,000	.96	6150	35,100	1.00	6530
	63	1800	45,500	.91	5450	43,000	.94	5830	40,100	.98	6200	35,800	1.00	6550
İ		2000	46,800	.92	5510	44,300	.95	5880	41,100	.99	6250	37,200	1.00	6620
0000		1600	49,800	.73	5590	46,500	.76	5970	43,200	.80	6340	38,800	.84	6690
GCS6-511 GCS6-513	ום וו	1800	50,400	.76	5650	48,000	.78	6030	44,900	.82	6400	40,600	.87	6770
1 9090-913		2000	52,000	.78	5710	49,700	.80	6100	46,500	,84	6480	42,200	.89	6850
		1600	53,200	.57	5760	50,500	.58	6130	47,500	.59 .62	6510 6550	43,300 44,600	.61 .64	6880 6950
	71	1800 2000	54,100 55,100	.58 .60	5800 5840	51,500 52,800	.60 .61	6170	48,500 49,600	,64	6600	45,700	.66	7000
	 	2000	58,400	.87	7150	52,600	.93	7355	48,700	97	7790	44,000	1.00	8280
	63	2250	60,000	.88	7240	54,300	.95	5445	50,300	,99	7870	45,300	1,00	8360
		2500	61,200	.90	7300	55,400	.98	7495	51,400	1,00	7930	46,700	1.00	8430
		2000	63,800	.72	7420	57,800	.76	7615	53,600	.79	8040	48,300	.83	8505
GCS6-651	II D/	2250	65,300	.73	7500	59,900	.78	7715	55,400	.81	8130	49,700	.86	8575
GCS6-653		2500	67,400	.74	7610	61,600	.79	7805	57,200	.83	8230	51,300	,88	8665
		2000	69,300	.56	7700	63,800	.58	7935	59,600	.59	8350	54,300	.61	8805 8865
	71	2250	70,200	,57	7760	64,700	.59	7985	60,600	.61	8410 8450	55,300 56,300	.63 .64	8915
l	1	2500	71,000	.58	7800	65,700	.60	8035	61,500	.62	0430	1 30,300	.04	10010

GCS6-211-45 & GCS6-261-45 BLOWER PERFORMANCE

External Static	Air Volume (cfm) @ Various Speeds							
(in. wg.)	High	Medium	Low					
0	1080	965	810					
.05	1060	955	810					
.10	1040	945	810					
.15	1015	925	810					
.20	990	910	800					
.25	960	890	790					
.30	930	865	770					
.40	870	815	730					
.50	795	750	675					
.60	695	660	605					

NOTE.—All cfm. data_is_measured.external_to_the unit with the air filter in place.

GCS6-311-75

BLOWER PERFORMANCE

External Static	Air Volume (cfm) @ Various Speeds							
Pressure (in. wg.)	High	Med-High	Med-Low	Low				
0	1540	1410	1275	1075				
.05	1520	1395	1265	1070				
.10	1510	1385	1255	1065				
.15	1480	1360	1240	1055				
.20	1455	1340	1220	1040				
.25	1430	1315	1200	1025				
.30	1405	1290	1180	1005				
.40	1355	1240	1145	955				
.50	1 295	1175	1090	880				
.60	1235	1085	1015	760				
.70	1160							

NOTE-All cfm data is measured external to the unit with the air filter in place.

GCS6-411-120 & GCS6-413-120 BLOWER PERFORMANCE

1	External Static	Air Volu	me (cfm) @ Vario	us Speeds
	Pressure (in. wg.)	High	Medium	Low
Ī	0	1745	1520	1275
1	.05	1710	1495	1260
1	.10	1675	1470	1245
1	.15	1645	1445	1230
	.20	1610	1425	1215
	.25	1575	1400	1200
***	.30	1540	1370	1180
1	.40	1475	1320	1135
***	.50	1395	1250	1075
	.60	1 305	1160	980
	.70	1180		

NOTE—All cfm data is measured external to the unit with the air filter in place.

GCS6-261-90 BLOWER PERFORMANCE

External Static	Air Volume (cfm) @ Various Speeds							
Pressure (in. wg.)	High	Medium	Low					
0	1265	1020	715					
.05	1245	1010	715					
.10	1220	1000	715					
.15	1195	990	715					
.20	1170	980	710					
.25	1145	965	705					
.30	1120	950	690					
.40	1055	905	655					
.50	980	845	600					
.60	875	760						

NOTE—All cfm data is measured external to the unit with the air filter in place.

GCS6-411-75 and GCS6-413-75 BLOWER PERFORMANCE

External Static Pressure	Air Volume (cfm) @ Various Speeds						
(in. wg.)	High	Med-High	Med-Low	Low			
0	1540	1410	1275	1075			
.05	1520	1395	1265	1070			
.10	1510	1385	1255	1065			
.15	1480	1360	1240	1055			
.20	1455	1340	1220	1040			
.25	1430	1315	1200	1025			
.30	1405	1290	1180	1005			
.40	1355	1240	1145	955			
.50	1295	1175	1090	880			
.60	1235	1085	1015	760			
.70	1160						

NOTE—All cfm data is measured external to the unit with the air filter in place.

GCS6-461-100 & GCS6-463-100 BLOWER PERFORMANCE

External Static	Air Volu	Air Volume (cfm) @ Various Speeds					
Pressure (in, wg.)	High	Medium	Low				
0	1740	1480	1230				
.05	1710	1465	1220				
,10	1680	1445	1215				
.15	1645	1425	1205				
.20	1615	1410	1195				
.25	1585	1385	1185				
.30	1550	1365	1175				
.40	1475	1315	1140				
.50	1400	1255	1085				
.60	1315	1185	1025				
.70	1210	1100					

NOTE-All cfm data is measured external to the unit with the air filter in place.

GCS6-511-100, GCS6-513-100, GCS6-511-150 GCS6-513-150, GCS6-651-150 & GCS6-653-150 BLOWER PERFORMANCE

External Static Pressure (in. wg.)	Air Volume (cfm) @ Various Speeds				
	High	Med-High	Medium	Med-Low	Low
0	2460	2280	2155	1830	1670
.05	2425	2250	2120	1805	1640
.10	2390	2210	2090	1775	1610
.15	2355	2175	2050	1745	1580
.20	2320	2140	2015	1710	1550
.25	2280	2100	1975	1680	1520
.30	2230	2065	1940	1650	1490
.40	2145	1990	1870	1590	1420
.50	2060	1910	1800	1520	1355
.60	1970	1830	1720	1455	1290
.70	1880	1740	1640	1380	1220

NOTE-All cfm data is measured external to the unit with the air filter in place.