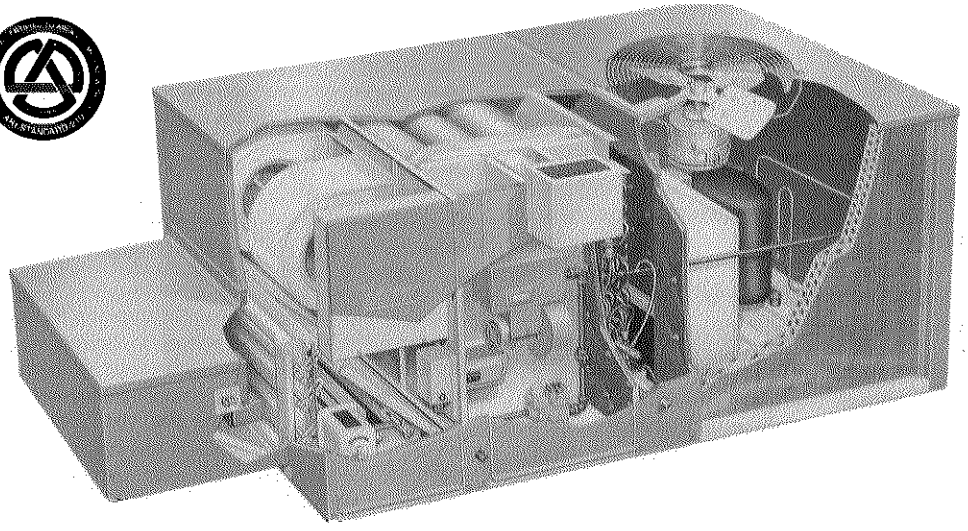
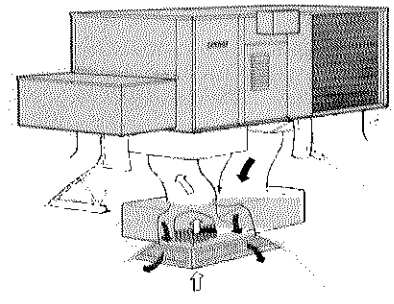
GCS9 SERIES SINGLE PACKAGE UNITS
ALL SEASON — DX COOLING & GAS HEATING
*34,000 to 58,000 Btuh Cooling Capacity
90,000 to 150,000 Btuh Input Heating Capacity

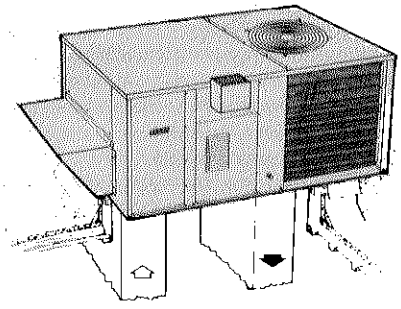
*ARI Standard 210 Certified Ratings



Typical Applications



Rooftop Installation with
Combination Ceiling Supply and Return Air System



Rooftop Installation with
Double Duct Air Distribution System

Application — Lennox GCS9 series all season DX cooling and gas fired heating units are designed for bottom (down-flo) or side (horizontal) handling of supply and return air. A separate roof mounting frame mates to the unit base and when flashed into the roof permits weatherproof duct connections and entry into the conditioned area in down-flo applications. The units can also be installed at grade level with horizontal roof mounting frame. A choice of RTD9 step-down or FD9 flush ceiling diffusers are available for combination ceiling supply and return air distribution systems. Optional economizer dampers provide "free cooling" by using outdoor air in lieu of mechanical refrigeration. Fresh air dampers are also available. Thermostat is not furnished and must be ordered extra. Units are shipped factory assembled, piped and wired.

Tested and Certified — Units are design certified by A.G.A. and ratings are certified by GAMA. Heating ratings are according to Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations. Complies with ANSI safety codes. Cooling system has been rated in the Lennox environmental test room according to DOE test procedures in accordance with ARI Standard 210-81. In addition, unit has been sound rated in the Lennox reverberant sound test room and rated in accordance with ARI Standard 270-84. Units meet California Seasonal Efficiency requirements. Blower data is according to actual unit tests conducted in the Lennox air test chamber. In addition, each unit is test operated at the factory before shipment to ensure dependable field performance.

Rugged DURATUBE® Aluminized Steel Heat Exchanger — Cylindrical tube and drum heat exchanger construction permits normal expansion and contraction without metal fatigue. Design also results in high input to heat surface ratio, low resistance to air travel reducing blower horsepower requirements and ease of cleaning. All heat exchanger surfaces, inside and out, are constructed of aluminized steel for superior resistance to corrosion and oxidation. Removable rear breeching provides complete service access. Return air flows through the heat exchanger before the evaporator coil minimizing condensation on the heat exchanger during the cooling cycle.

Gas Power Burner — Provides efficient, trouble free operation and is unaffected by adverse wind or atmospheric conditions. Aluminized steel venturi mixes air and gas in correct proportion for proper combustion. Stainless steel flame spreader fits flame to combustion chamber resulting in uniform heat distribution. Electric direct spark ignition system provides sure, safe main burner ignition. Spark is intermittent and occurs only when required. 24 volt redundant combination control valve combines a manual main shut-off valve, pressure regulation and automatic electric valve (dual) into one compact control. Electronic flame sensor controls assure safe and reliable operation. Combustion air blower is equipped with air pressure switch which proves blower operation, prepurging heat exchanger, before allowing main gas valve to open. Motor is resiliently mounted. In addition, burner has inspection glass for flame viewing, easy combustion air adjustment and is easily removed for service.

(continued)

FEATURES

Fan and Limit Controls — Factory installed and accurately located. Fan time delay allows blower operation approximately three minutes after burner shut-off. Dual limit controls have fixed temperature setting and protect heating system from abnormal operating conditions.

Durable Cabinet — Constructed of heavy gauge galvanized steel and subject to a five station metal wash process. This preparation process results in a perfect bonding surface for the finish paint coat of baked-on outdoor enamel. Long lasting enamel finish provides maximum protection from all types of weather. Base section and all cabinet panels where conditioned air is handled are lined with thick fiberglass insulation. Large removable panels allow complete service access. Electrical inlets are furnished in the cabinet for wiring entry. Control box with all controls factory installed and wired is conveniently located in the return air section. Flue vent outlet is fabricated of aluminum for long service life. Removable lifting lugs are furnished for safe and easy rigging. Deep, corrosion resistant evaporator coil drain pan is equipped with a galvanized pipe (mpt) drain outlet.

Refrigeration System — Complete refrigeration system consists of: compressor, condenser coil, evaporator coil, expansion valve, suction and discharge line service gauge ports, liquid line strainer, low pressure switch (automatic reset), refrigerant lines connected and a full operating charge of refrigerant.

Copper Tube Evaporator and Condenser Coils — Extra large surface area and circuiting of Lennox designed coils provide maximum cooling efficiency, excellent heat transfer and low air resistance. Lennox fabricated coils are constructed of precisely spaced ripple-edged aluminum fins fitted to durable copper tubes. Fins are equipped with collars that grip tubing for maximum contact area. Flared shoulder tubing connections and silver soldering provide tight, leakproof joints. Long life copper tubing is easy to field service. Coil is thoroughly factory tested under high pressure to insure leakproof construction.

Dependable and Quiet Compressor — Reliable compressor is hermetically sealed and provides trouble-free operation and long service life. Built-in protection devices assure protection from excessive current and temperature. Suction cooled, overload protected and equipped with internal pressure relief. The entire running gear is spring mounted within the sealed housing. In addition, the compressor is installed in the unit on resilient rubber mounts assuring quiet and vibration free operation.

Compressor Crankcase Heater — Furnished and factory installed. Prevents migration of liquid refrigerant into the compressor and ensures proper compressor lubrication at all times. Heater is thermostatically controlled and temperature actuated to operate only when required.

Efficient Condenser Fan — Direct drive fan draws air through the dual condenser coils and discharges it vertically, up and away from the building. Fan orifice design and low fan tip speed keeps operating sound level at a minimum. Uniform air movement through the coils results in high refrigerant cooling capacity. Permanently lubricated, inherently protected, ball bearing fan motor is totally enclosed for maximum protection from rain, dust and corrosion. A rain shield on the motor provides additional moisture protection. Corrosion resistant polyvinyl chloride (PVC) coated steel wire fan guard is furnished.

Powerful Dual Blowers — Units are equipped with twin direct drive centrifugal blowers precisely matched to the units for maximum efficiency and minimum noise level. Blowers are statically and dynamically balanced as an assembly before being installed in the unit. Multiple speed, two shafted motor is resiliently mounted. A choice of blower speeds is available, see blower performance tables. Change in blower speed is easily accomplished by a simple field change in wiring.

Cleanable Air Filters — One inch frame filters are furnished as standard. Media is washable or vacuum cleanable polyurethane. Filters are easily accessible for service and media is coated with oil for increased efficiency.

RMFG9-65 Standard Roof Mounting Frame (Optional) — Mounting frame mates to the GCS9 unit and provides an automatic weather sealed rooftop installation. Shipped knocked down for ease in handling, it is easily field assembled. See dimension drawing. Approved by National Roofing Contractors Association.

RMFGH9-65 Horizontal Roof Mounting Frame (Optional) — Horizontal discharge frame mates to the GCS9 unit for horizontal (side by side) supply and return air applications. Shipped knocked down for ease of shipping and handling it is easily field assembled. See dimension drawing.

PSDG9-65 Economizer (Optional) — Economizer dampers and controls are available for field installation. The economizer system consists of: outdoor air intake hood and mechanically linked outdoor air and recirculated air dampers. Damper blades are gasketed for tight seal and quiet operation. Formed damper blades rotate smoothly in nylon bearings. The positioning of these dampers is accomplished by a 24 volt three position spring return damper motor and controlled by the room thermostat, adjustable mixed air sensor, adjustable compressor monitor, and enthalpy control. The enthalpy control allows 0 to 100% outdoor air to be used for "free" cooling when outdoor temperature and humidity are acceptable. Outdoor air intake hood field installs over the intake dampers, external to the unit. Shipped knocked down, it is easily field assembled. A cleanable polyurethane media frame air filter is furnished with the hood providing extra air filtering and bird screen protection. For field installation the two damper sections simply slide in cavities provided in the GCS9 cabinet. Economizer assembly is shipped factory wired and only requires plug-in field connection for operation.

REMD9M-65 Economizer with Pressure Relief Damper (Optional) — The complete economizer assembly consists of: outdoor air intake hood, combination outdoor air and recirculated air damper with pressure operated exhaust air damper. Formed damper blades rotate smoothly in nylon bearings and are gasketed for tight seal. The economizer dampers and controls are shipped factory assembled, adjusted and cycled. The positioning of the outdoor and recirculated air damper is accomplished by a 24 volt fully modulating electronic spring return damper motor with adjustable minimum position potentiometer and controlled by the room thermostat, electronic discharge air sensor and solid-state adjustable outdoor air enthalpy control. The enthalpy control allows 0 to 100% outdoor air to be used for "free cooling" when outdoor humidity and temperature are acceptable. The field installed damper assembly slides in the return air section of the unit cabinet. Outdoor air intake hood has a baked-on polyester paint finish and field installs over the dampers, external to the unit. A cleanable aluminum or polyurethane media frame filter in the outdoor air hood provides extra air filtering and bird screen protection.

Differential Enthalpy Control (Optional) — Used with REMD9M-65 economizer only. A solid-state return air enthalpy sensor is available to be used with the outdoor air enthalpy sensor to determine which air has the lowest enthalpy. The air with the lowest enthalpy will be selected. Return air enthalpy sensor (54G44) field installs in the return air section and must be ordered extra.

OADG9-65 Automatic Minimum Fresh Air Dampers (Optional) — Automatically controlled damper assembly allows a fixed amount of outdoor air into the system. Positioning of dampers is accomplished with 24 volt multi-position spring return motor. Only requires plug-in field connection for operation. Damper assembly field installs inside the unit cabinet. Damper blades are gasketed for tight seal and quiet operation. Formed damper blades ride in nylon bearings. A field assembled rain hood is included and installs over the dampers external to the unit. A cleanable polyurethane media frame filter is provided and installs in the hood for extra air filtering and bird screen protection.

OAD3-46/65 Manual Minimum Fresh Air Damper (Optional) — Fresh air damper field installs external to the return air section of the GCS9 cabinet. Equipped with manually operated damper which will allow a fixed amount of outdoor air into the system.

Timed-Off Control (Optional) — Timed-off control (LB-50709BA) is available as optional equipment for field installation. 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 in the cooling mode down to 50°F outdoor air temperature without any additional controls. For cases where operation of the unit is required at lower ambients, a Low Ambient Control Kit (LB-57113BA) can be added in the field, enabling unit to operate properly down to 0°F. Kit must be ordered extra.

Thermostat (Optional) — Thermostat is not furnished with the unit and must be ordered extra. See Lennox Price Book.

FEATURES

SP11 Remote Status Panel (Optional) — The operation of the unit can be checked on the Remote Status Panel (12F83) located within the conditioned area. Signal lights on the panel indicate "Cool Mode," "Heat Mode," "Compressor 1," "Compressor 2," "No Heat" and "Filter." The Cool Mode signal light is green when lit and indicates cooling operation. Heat Mode light is green and reflects heating operation. Compressor 1 light is green when operating and will turn red if there is an operational malfunction. Compressor 2 light is not required and should be disregarded. The No Heat and Filter lights will show red and indicate a requirement for service. Additional controls are required for use with the Status Panel and must be specified when ordering. Filter Switch Kit (97C85) is used in conjunction with the Filter light. Status Panel Readout Relay Kit (14F92) is required to interface status panel with unit operation.

Optional RTD9-65 Combination Ceiling Supply and Return Diffuser Assembly — RTD9-65 step-down mount diffuser extends slightly below ceiling level when installed and discharges conditioned air through grilles on all four sides. Aluminum grilles are fitted with double deflection louvers for precise directional control of air flow. Return air enters through the large center grille. Assembly also includes insulated diffuser box with connection collars for round duct connection, hanging rings for suspending and molded fiberglass interior transition to insure low static and even air flow on all four sides. Transition is sealed internally to prevent recirculation. Diffuser assembly is completely factory assembled. Diffuser readily adapts to T-bar ceiling grids and plaster ceilings.

Optional FD9-65 Combination Ceiling Supply and Return Diffuser Assembly — FD9-65 flush mount diffuser installs almost flush with the ceiling level and discharges conditioned air out through fixed blade louvers on all four sides. Fixed blade louvers insure that air flow will be evenly distributed. Return air enters through large center grille. Assembly also includes insulated diffuser box with connection collars for round duct connection, support hanger eyelets at the top corners for secure installation and molded fiberglass interior transition to insure low static and even air flow on all four sides. Transition is sealed internally to prevent recirculation. Diffuser assembly is completely factory assembled. Diffuser readily adapts to T-bar ceiling grids and plaster ceilings.

Optional SRTG9-65 Supply and Return Transitions — Transitions field install in the roof mounting frame and provide segregated and simple duct connections to supply and return diffuser. Completely insulated galvanized steel transitions have collars for round duct connection. Round duct from the transitions to the diffuser is not furnished and must be provided by the installer. Transitions are completely factory assembled and easily field install in the roof mounting frame with minimum costs and labor requirement.

GCS9-410 AND GCS9-460 SPECIFICATIONS

Model No.		GCS9-411-90 GCS9-413-90	GCS9-411-120 GCS9-413-120	GCS9-461-90 GCS9-463-90	GCS9-461-120 GCS9-463-120
Heating capacity input (Btuh)		90,000	120,000	90,000	120,000
†Heating capacity output (Btuh)		72,000	93,000	72,000	93,000
†A.F.U.E.		80.9%	78.7%	80.9%	78.7%
California Seasonal Efficiency		77.3%	76.1%	77.3%	73.8%
Gas piping connection mpt (in.) Natural gas only		1/2	1/2	1/2	1/2
Recommended gas supply pressure (wc - in.) Natural gas only		6	6	6	6
★ARI Standard 270 SRN (bels)		8.0		8.0	
*ARI Standard 210 Ratings	Total cooling capacity (Btuh)	34,000		41,000	
	Total unit watts	3941		4516	
	SEER (Btuh/Watts)	9.15		9.55	
	EER (Btuh/Watts)	8.65		9.10	
Refrigerant (R-22) charge		8 lbs. 0 oz.		9 lbs. 2 oz.	
Evaporator Blower	Blower wheel nominal diameter x width (in.)	(2) 9 x 7		(2) 9 x 7	
	Motor horsepower	1/2		1/2	
Evaporator Coil	Net face area (sq. ft.)	4.69		5.21	
	Tube diameter (in.) & No. of rows	1/2 — 3		1/2 — 3	
	Fins per inch	13		13	
Condenser Coil	Net face area (sq. ft.)	15.0		15.0	
	Tube diameter (in.) & No. of rows	3/8 — 1		3/8 — 2	
	Fins per inch	18		18	
Condenser Fan	Diameter (in.) & No. of blades	24 — 4		24 — 4	
	Air volume (cfm)	4000		4000	
	Motor horsepower	1/4		1/4	
	Motor watts	350		375	
Number & size of filters (in.)		(2) 20 x 20 x 1		(2) 20 x 20 x 1	
Condensate drain size mpt (in.)		3/4		3/4	
Shipping weight of basic unit (lbs.) 1 package		833		863	
Net weight of basic unit (lbs.)		735		775	
Optional Roof Mounting Frame — (Net weight)	Standard	RMFG9-65 (144 lbs.)			
	Horizontal	RMFGH9-65 (220 lbs.)			
Optional Economizer Dampers (3 position damper motor) — (Net weight) Number & size of filters (in.)		PSDG9-65 (43 lbs.) (1) 26 x 31 x 1			
Optional Economizer Dampers with Pressure Relief (Modulating damper motor) — (Net weight) Number & size of filters (in.)		REMD9M-65 (52 lbs.) (1) 20 x 31 x 1			
Optional Minimum Fresh Air Dampers (Automatic) — (Net weight) Number & size of filters (in.)		OADG9-65 (53 lbs.) (1) 26 x 31 x 1			
Optional Minimum Fresh Air Damper (Manual) — (Net weight)		OAD3-46/65 (7 lbs.)			
Optional Combination Ceiling Supply and Return Diffusers (Net weight)	Step-down	RTD9-65 (67 lbs.)			
	Flush	FD9-65 (33 lbs.)			
	Transitions	SRTG9-65 (25 lbs.)			

★Sound Rating Number in accordance with ARI Standard 270.
*Rated in accordance with ARI Standard 210 and DOE; 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air.
†Annual Fuel Utilization Efficiency based on DOE test procedures and FTC labeling regulations.

GCS9-510 AND GCS9-650 SPECIFICATIONS

Model No.		GCS9-511-120 GCS9-513-120	GCS9-511-150 GCS9-513-150	GCS9-651-120 GCS9-653-120	GCS9-651-150 GCS9-653-150
Heating capacity input (Btuh)		120,000	150,000	120,000	150,000
†Heating capacity output (Btuh)		93,000	114,000	93,000	114,000
†A.F.U.E.		77.4%	76.1%	77.4%	76.1%
California Seasonal Efficiency		71.9%	72.8%	71.9%	72.8%
Gas piping connection mpt (in.) Natural gas only		1/2	1/2	1/2	1/2
Recommended gas supply pressure (wc - in.) Natural gas only		6	6	6	6
★ARI Standard 270 SRN (bels)		8.2		8.0	
*ARI Standard 210 Ratings	Total cooling capacity (Btuh)	47,000		58,000	
	Total unit watts	5800		6458	
	SEER (Btuh/Watts)	8.30		9.60	
	EER (Btuh/Watts)	8.10		9.00	
Refrigerant (R-22) charge		10 lbs. 0 oz.		10 lbs. 0 oz.	
Evaporator Blower	Blower wheel nominal diameter x width (in.)	(2) 10 x 6		(2) 10 x 6	
	Motor horsepower	3/4		3/4	
Evaporator Coil	Net face area (sq. ft.)	5.73		6.51	
	Tube diameter (in.) & No. of rows	1/2 — 3		1/2 — 3	
	Fins per inch	13		13	
Condenser Coil	Net face area (sq. ft.)	15.0		15.0	
	Tube diameter (in.) & No. of rows	3/8 — 2		3/8 — 3	
	Fins per inch	18		18	
Condenser Fan	Diameter (in.) & No. of blades	24 — 4		24 — 4	
	Air volume (cfm)	4000		4000	
	Motor horsepower	1/4		1/4	
	Motor watts	375		375	
Number & size of filters (in.)		(2) 20 x 20 x 1		(2) 20 x 20 x 1	
Condensate drain size mpt (in.)		3/4		3/4	
Shipping weight of basic unit (lbs.) 1 package		902		955	
Net weight of basic unit (lbs.)		785		835	
Optional Roof Mounting Frame — (Net weight)	Standard	RMFG9-65 (144 lbs.)			
	Horizontal	RMFGH9-65 (220 lbs.)			
Optional Economizer Dampers (3 position damper motor) — (Net weight) Number & size of filters (in.)		PSDG9-65 (43 lbs.) (1) 26 x 31 x 1			
Optional Economizer Dampers with Pressure Relief (Modulating damper motor) — (Net weight) Number & size of filters (in.)		REMD9M-65 (52 lbs.) (1) 20 x 31 x 1			
Optional Minimum Fresh Air Dampers (Automatic) — (Net weight) Number & size of filters (in.)		OADG9-65 (53 lbs.) (1) 26 x 31 x 1			
Optional Minimum Fresh Air Damper (Manual) — (Net weight)		OAD3-46/65 (7 lbs.)			
Optional Combination Ceiling Supply and Return Diffusers (Net weight)	Step-down	RTD9-65 (67 lbs.)			
	Flush	FD9-65 (33 lbs.)			
	Transitions	SRTG9-65 (25 lbs.)			

★Sound Rating Number in accordance with ARI Standard 270.
*Rated in accordance with ARI Standard 210 and DOE; 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air.
†Annual Fuel Utilization Efficiency based on DOE test procedures and FTC labeling regulations.

HIGH ALTITUDE DERATE

Elevation Above Sea Level (Feet)	Maximum Heating Value (Btu/ft³)
5001 — 6000	900
4001 — 5000	950
3001 — 4000	1000
2001 — 3000	1050
Sea Level — 2000	1100

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 Btu/ft³, unit will require a 16% derate.

COOLING RATINGS

NOTE – To determine sensible capacity, leaving wet bulb and dry bulb temperatures not shown in the tables, see Miscellaneous Engineering Data section, Page 9.

GCS9-411-413 COOLING CAPACITY

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Condenser Coil (°F)																					
		85					95					105					115						
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1200	34,900	2910	.82	.95	1.00	33,000	3110	.84	.98	1.00	31,000	3310	.87	1.00	1.00	29,300	3530	.90	1.00	1.00
	1350	35,600	2930	.85	.99	1.00	33,600	3130	.88	1.00	1.00	31,800	3350	.91	1.00	1.00	30,100	3570	.95	1.00	1.00
	1500	36,200	2950	.89	1.00	1.00	34,300	3160	.92	1.00	1.00	32,500	3380	.95	1.00	1.00	30,700	3610	.99	1.00	1.00
67	1200	37,100	2970	.63	.76	.88	34,900	3180	.65	.78	.92	32,700	3390	.67	.81	.95	30,700	3600	.69	.84	.99
	1350	27,600	2980	.66	.79	.93	35,300	3190	.67	.82	.96	33,200	3410	.69	.85	.99	31,100	3620	.72	.88	1.00
	1500	38,000	2990	.68	.82	.97	35,700	3210	.70	.85	1.00	33,500	3420	.72	.89	1.00	31,400	3640	.74	.92	1.00
71	1200	39,600	3040	.47	.59	.71	37,200	3260	.48	.60	.73	35,000	3480	.48	.62	.75	32,700	3710	.49	.64	.78
	1350	40,100	3050	.48	.61	.74	37,600	3270	.49	.62	.76	35,300	3500	.50	.64	.79	33,000	3730	.51	.66	.82
	1500	40,400	3060	.49	.63	.77	38,000	3280	.50	.65	.80	35,600	3510	.51	.67	.83	33,300	3740	.52	.69	.86

GCS9-461-463 COOLING CAPACITY

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Condenser Coil (°F)																					
		85					95					105					115						
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1400	41,400	3340	.80	.93	1.00	39,400	3630	.82	.95	1.00	37,400	3900	.84	.98	1.00	35,200	4160	.87	1.00	1.00
	1575	42,200	3370	.83	.97	1.00	40,300	3650	.85	.99	1.00	38,100	3940	.88	1.00	1.00	36,100	4210	.91	1.00	1.00
	1750	42,700	3380	.86	1.00	1.00	40,900	3680	.89	1.00	1.00	39,000	3980	.91	1.00	1.00	37,000	4250	.95	1.00	1.00
67	1400	44,300	3430	.62	.74	.86	42,100	3730	.63	.76	.88	39,700	4010	.65	.78	.91	37,300	4270	.67	.81	.95
	1575	45,000	3450	.64	.77	.90	42,600	3750	.65	.79	.93	40,200	4030	.67	.82	.96	37,800	4290	.69	.85	.99
	1750	45,600	3460	.68	.80	.93	43,200	3770	.69	.81	.97	40,800	4070	.71	.86	1.00	38,400	4330	.72	.90	1.00
71	1400	47,600	3530	.46	.57	.69	45,100	3840	.47	.59	.70	42,500	4130	.47	.60	.73	39,900	4400	.48	.62	.75
	1575	48,300	3550	.47	.59	.72	45,700	3860	.48	.61	.73	43,000	4150	.48	.62	.76	40,300	4420	.49	.64	.78
	1750	48,700	3570	.48	.61	.74	46,200	3870	.49	.63	.76	43,400	4170	.50	.64	.79	40,700	4440	.51	.66	.82

GCS9-511-513 COOLING CAPACITY

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Condenser Coil (°F)																					
		85					95					105					115						
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1600	48,600	4280	.78	.91	.99	46,200	4620	.80	.93	.99	43,800	4950	.83	.96	.99	41,100	5240	.85	.99	.99
	1800	49,600	4320	.81	.94	.99	47,200	4660	.84	.97	.99	44,500	4990	.86	.99	.99	42,200	5310	.89	.99	.99
	2000	50,500	4340	.84	.98	.99	47,900	4690	.87	.99	.99	45,600	5040	.89	.99	.99	43,200	5360	.93	.99	.99
67	1600	52,200	4410	.61	.73	.84	49,400	4760	.62	.74	.86	46,600	5090	.64	.77	.89	43,800	5390	.65	.79	.92
	1800	52,900	4430	.63	.75	.88	50,100	4780	.64	.77	.90	47,300	5120	.66	.80	.93	44,300	5420	.68	.83	.97
	2000	53,600	4460	.65	.78	.91	50,700	4810	.66	.80	.94	47,800	5140	.68	.83	.97	44,800	5440	.70	.86	.99
71	1600	56,000	4540	.45	.56	.67	53,100	4900	.46	.57	.69	50,000	5240	.47	.59	.71	46,800	5550	.47	.60	.73
	1800	56,800	4570	.46	.58	.70	53,700	4930	.47	.59	.72	50,600	5270	.48	.61	.74	47,300	5570	.49	.63	.77
	2000	57,500	4590	.47	.60	.72	54,300	4950	.48	.61	.75	51,100	5290	.49	.63	.77	47,800	5590	.50	.65	.80

GCS9-651-653 COOLING CAPACITY

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Condenser Coil (°F)																					
		85					95					105					115						
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	2000	60,100	4630	.82	.94	1.00	57,300	4990	.84	.97	1.00	54,700	5290	.87	1.00	1.00	52,100	5620	.89	1.00	1.00
	2250	61,100	4670	.85	1.00	1.00	58,300	5050	.87	1.00	1.00	55,700	5360	.90	1.00	1.00	52,800	5670	.93	1.00	1.00
	2500	62,000	4700	.87	1.00	1.00	59,200	5100	.90	1.00	1.00	56,500	5410	.93	1.00	1.00	53,500	5720	.96	1.00	1.00
67	2000	64,000	4780	.63	.75	.86	61,100	5220	.64	.77	.90	58,000	5510	.66	.80	.93	55,300	5850	.68	.82	.96
	2250	64,800	4810	.65	.77	.89	62,000	5270	.66	.79	.92	58,800	5570	.68	.82	.96	56,000	5900	.70	.85	.99
	2500	65,600	4840	.67	.80	.92	62,700	5320	.68	.83	.96	59,500	5620	.70	.86	1.00	56,600	5940	.72	.89	1.00
71	2000	68,100	4930	.46	.59	.70	65,000	5450	.47	.60	.73	62,000	5780	.48	.62	.75	59,000	6120	.48	.63	.77
	2250	69,000	4970	.47	.61	.73	65,800	5500	.48	.62	.76	62,700	5830	.49	.64	.78	59,600	6160	.49	.65	.81
	2500	69,700	5000	.48	.63	.74	66,500	5550	.49	.64	.78	63,300	5870	.50	.66	.81	60,200	6200	.50	.68	.84

ELECTRICAL DATA

GCS9-410 AND GCS9-460 ELECTRICAL DATA

Model No.		GCS9-411	GCS9-413		GCS9-461	GCS9-463	
Line voltage data		208/230v 60hz — 1ph	208/230v 60hz — 3ph	460v 60hz — 3ph	208/230v 60hz — 1ph	208/230v 60hz — 3ph	460v 60hz — 3ph
Compressor	Rated load amps	16.8	10.8	5.6	20.2	12.8	6.7
	Locked rotor amps	75.8	65.0	32.0	93.0	74.0	41.0
Condenser Fan Motor	Full load amps	1.9	1.9	†1.9	1.9	1.9	†1.9
	Locked rotor amps	3.3	3.3	3.3	3.3	3.3	3.3
2 KVA Transformer (FLA)		----	----	4.35	----	----	4.35
Evaporator Blower Motor	Full load amps	4.0	4.0	†4.0	4.0	4.0	†4.0
	Locked rotor amps	7.8	7.8	7.8	7.8	7.8	7.8
•Recommended maximum fuse size (amps)		40	30	15	50	30	15
Unit power factor		.94	.87	.87	.91	.87	.87
*Minimum circuit ampacity		26.9	19.4	10.0	31.2	21.9	11.3

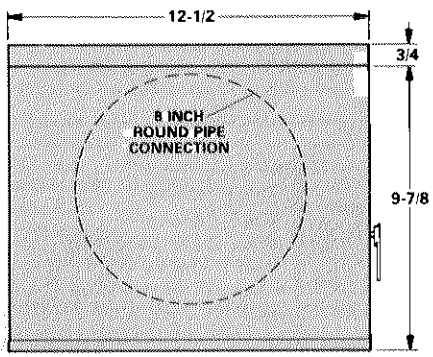
*Refer to National Electric Code manual to determine wire, fuse and disconnect size requirements.
NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.
•Where current is less than 60 amps, circuit breaker may be used in place of fuse.
†Motors are rated at 230 volts. Full load amps shown are for step-down transformer output.

GCS9-510 AND GCS9-650 ELECTRICAL DATA

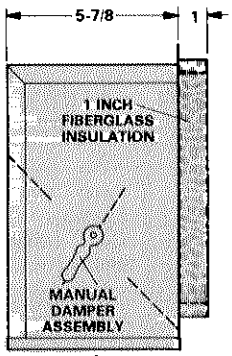
Model No.		GCS9-511	GCS9-513		GCS9-651	GCS9-653	
Line voltage data		208/230v 60hz — 1ph	208/230v 60hz — 3ph	460v 60hz — 3ph	208/230v 60hz — 1ph	208/230v 60hz — 3ph	460v 60hz — 3ph
Compressor	Rated load amps	24.3	15.1	7.4	28.9	19.2	9.6
	Locked rotor amps	114.0	84.0	42.0	142.0	124.0	62.0
Condenser Coil Fan	Full load amps	1.9	1.9	†1.9	1.9	1.9	†1.9
	Locked rotor amps	3.3	3.3	3.3	3.3	3.3	3.3
2 KVA Transformer (FLA)		----	----	4.35	----	----	4.35
Evaporator Blower Motor	Full load amps	6.0	6.0	†6.0	6.0	6.0	†6.0
	Locked rotor amps	12.8	12.8	12.8	12.8	12.8	12.8
•Recommended maximum fuse size (amps)		60	40	20	60	50	25
Unit power factor		.95	.91	.91	.96	.88	.88
*Minimum circuit ampacity		38.3	26.8	13.2	44.0	32.0	16.0

*Refer to National Electric Code manual to determine wire, fuse and disconnect size requirements.
NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.
•Where current is less than 60 amps, circuit breaker may be used in place of fuse.
†Motors are rated at 230 volts. Full load amps shown are for step-down transformer output.

OPTIONAL OAD3-46/65 MINIMUM FRESH AIR DAMPER

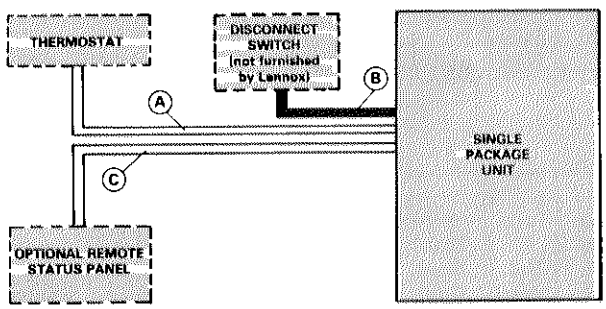


FRONT VIEW



SIDE VIEW

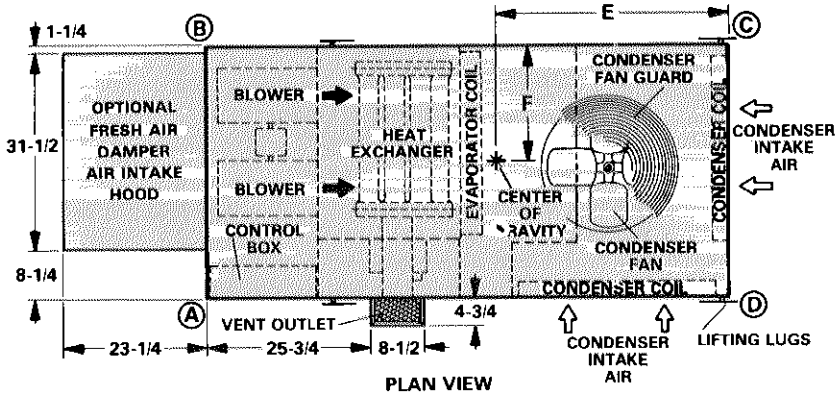
FIELD WIRING



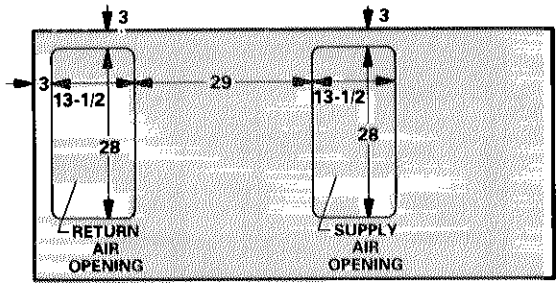
A — *Four Wire Low Voltage — (not furnished)
*If Economizer and two stage cooling thermostat are used one additional wire is required
B — Two or Three Wire Power — (not furnished) See Electrical Data
C — Seven Wire Low Voltage — (not furnished)
NOTE — All wiring must conform to NEC and local electrical codes.

DIMENSIONS (inches)

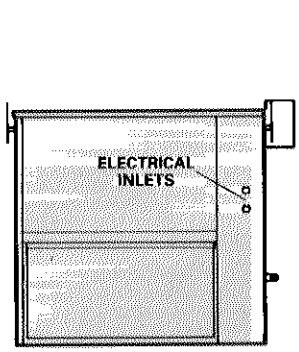
GCS9 UNIT WITH PSDG9-65 ECONOMIZER



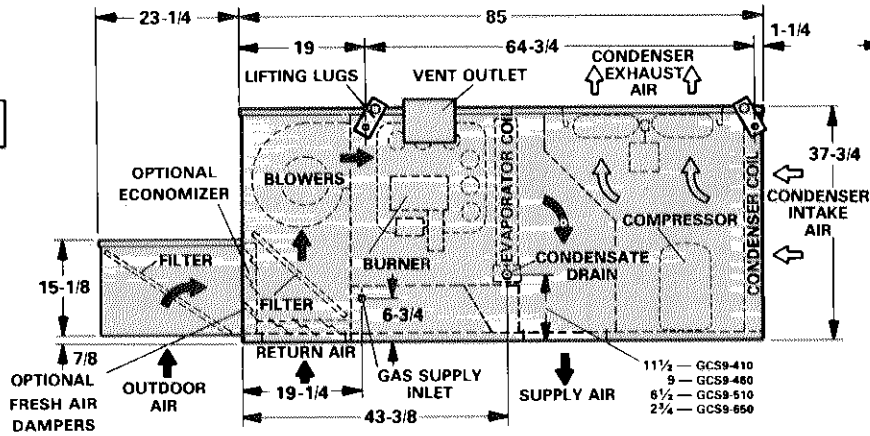
PLAN VIEW



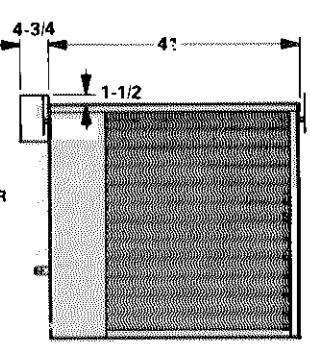
TOP VIEW-BASE SECTION



RETURN AIR END VIEW



FRONT VIEW



CONDENSER END VIEW

CORNER WEIGHTS (lbs.)

Model No.	A	B	C	D
GCS9-411-413	205	210	184	180
GCS9-461-463	210	207	199	202
GCS9-511-513	211	208	203	206
GCS9-651-653	217	207	222	232

NOTE – Corner weights are for GCS9 unit with PSDG9-65

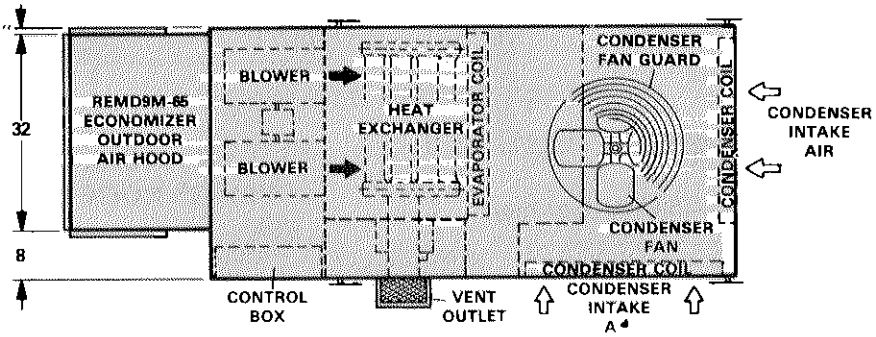
CENTER OF GRAVITY (in.)

Model No.	E	F
GCS9-411-413	45-3/8	20-1/4
GCS9-461-463	43-1/4	20-5/8
GCS9-511-513	44	20-5/8
GCS9-651-653	41	21

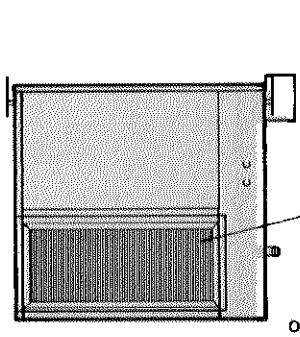
NOTE – Dimensions are for GCS9 unit with PSDG9-65

GCS9 UNIT WITH REMD9M-65 ECONOMIZER WITH PRESSURE RELIEF

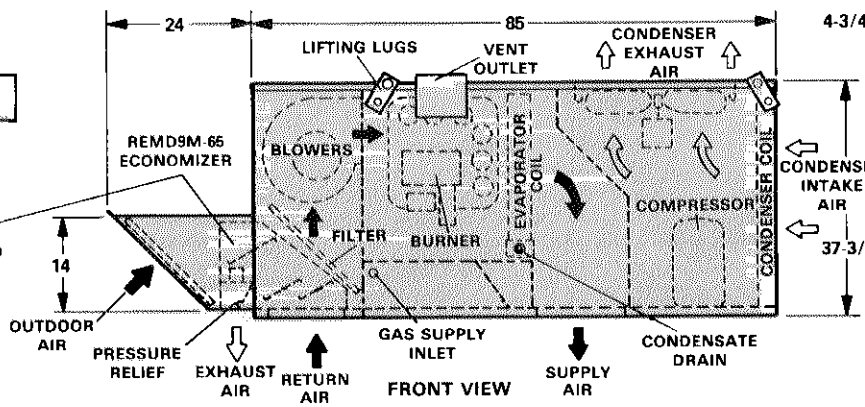
For complete unit dimensions, weights and other details, see above.



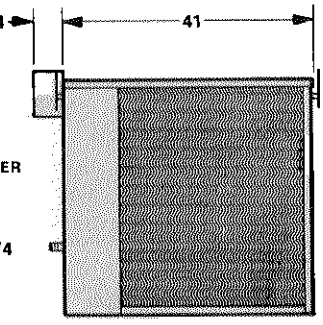
PLAN VIEW



RETURN AIR END VIEW



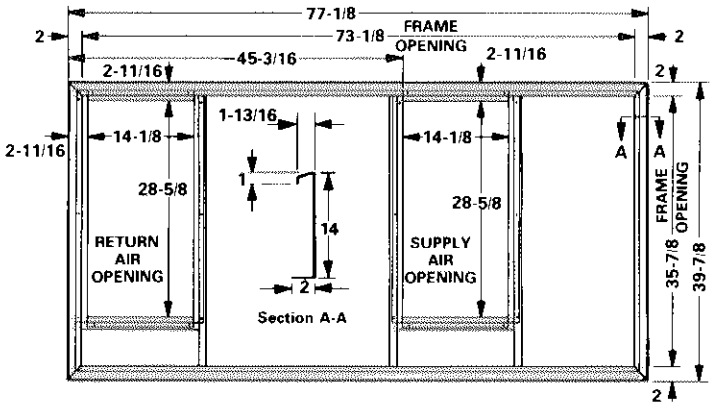
FRONT VIEW



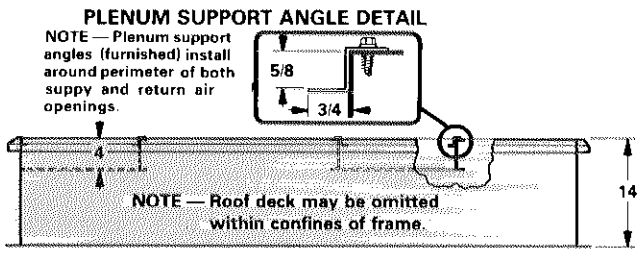
CONDENSER END VIEW

ROOF MOUNTING FRAME

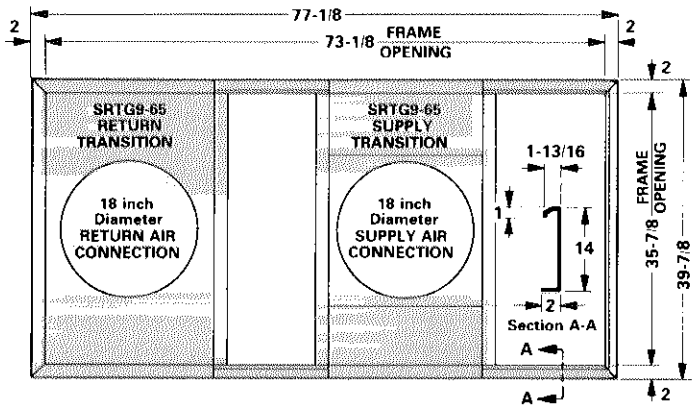
RMFG9-65 ROOF MOUNTING FRAME WITH DOUBLE DUCT OPENINGS

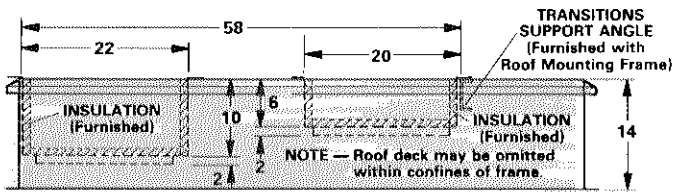


PLENUM SUPPORT ANGLE DETAIL

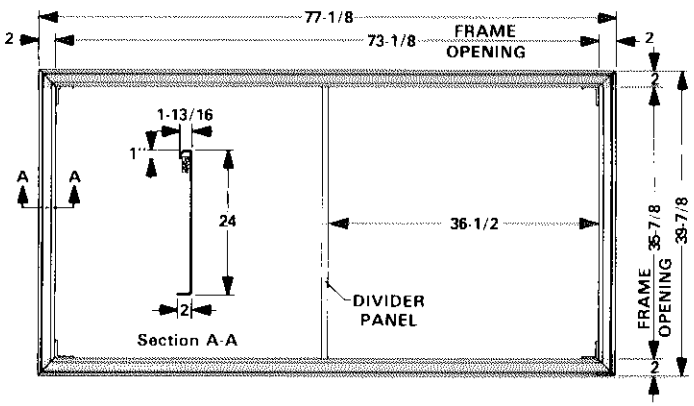


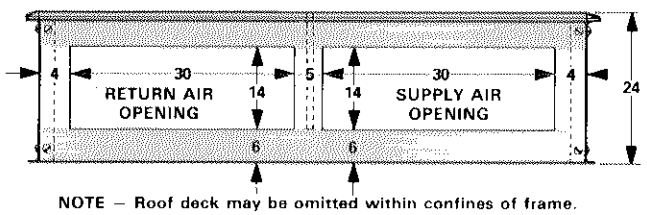
RMFG9-65 ROOF MOUNTING FRAME WITH COMBINATION SUPPLY AND RETURN TRANSITIONS FOR RTD9-65 & FD9-65 DIFFUSERS





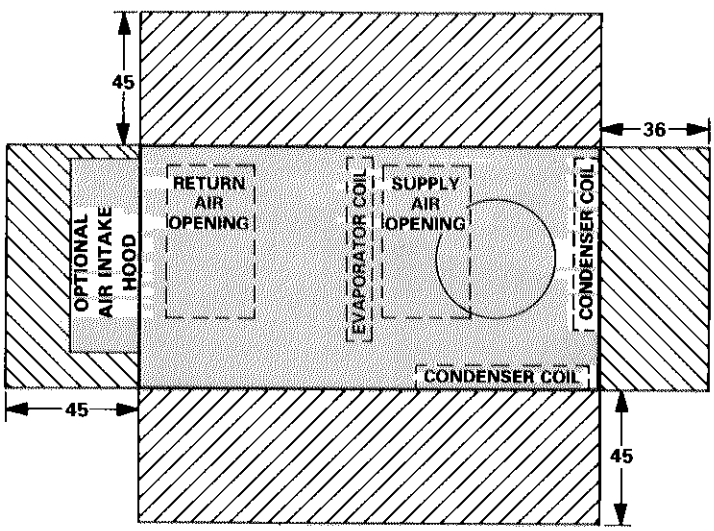
RMFGH9-65 HORIZONTAL ROOF MOUNTING FRAME





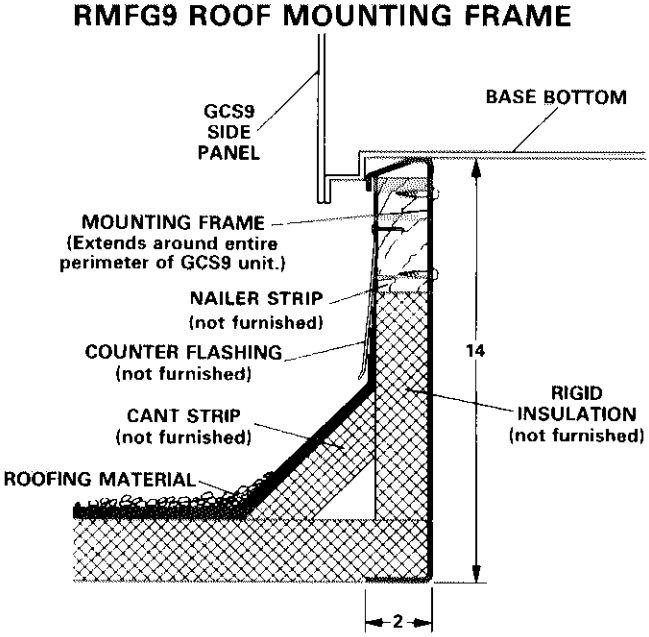
NOTE — Roof deck may be omitted within confines of frame.

INSTALLATION CLEARANCES (inches)

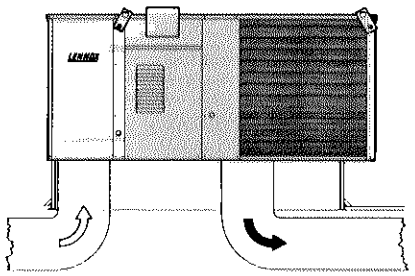


NOTE — Top Clearance Unobstructed.

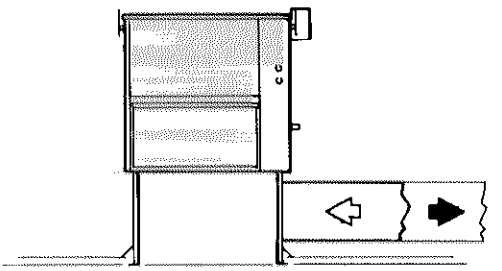
TYPICAL FLASHING FOR RMFG9 ROOF MOUNTING FRAME



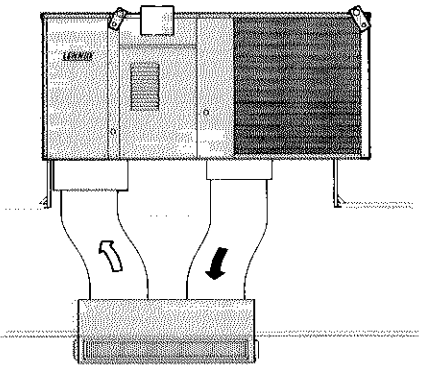
AIR PATTERN



Separate Supply and Return Air
(Double) Duct Application



Horizontal Supply and Return
Air Duct Application

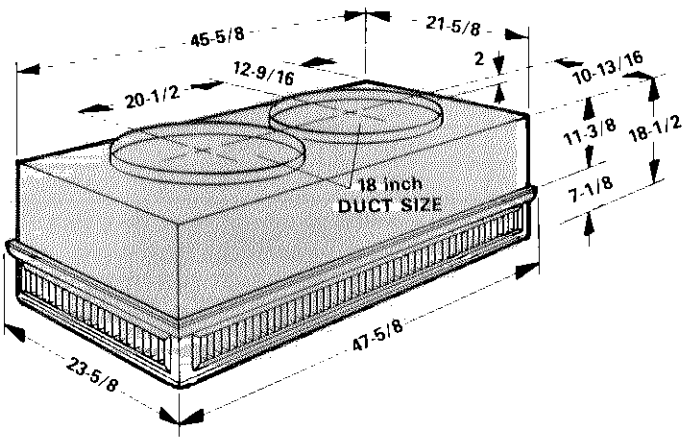


Combination Supply and Return Air Ceiling
Diffuser Step-down or Flush Grille

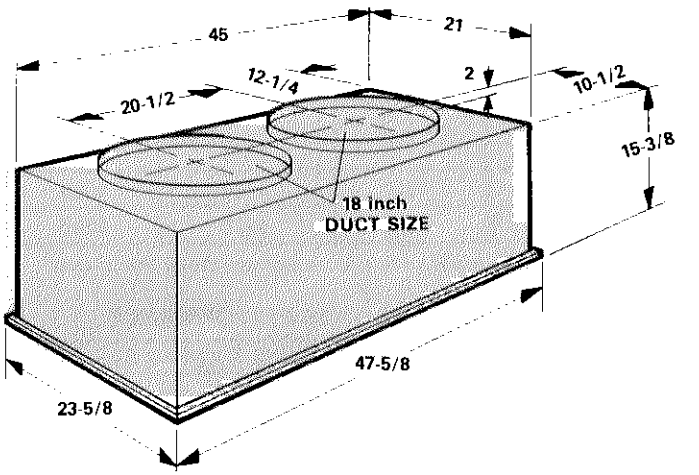
COMBINATION SUPPLY AND RETURN DIFFUSERS

DIMENSIONS (inches)

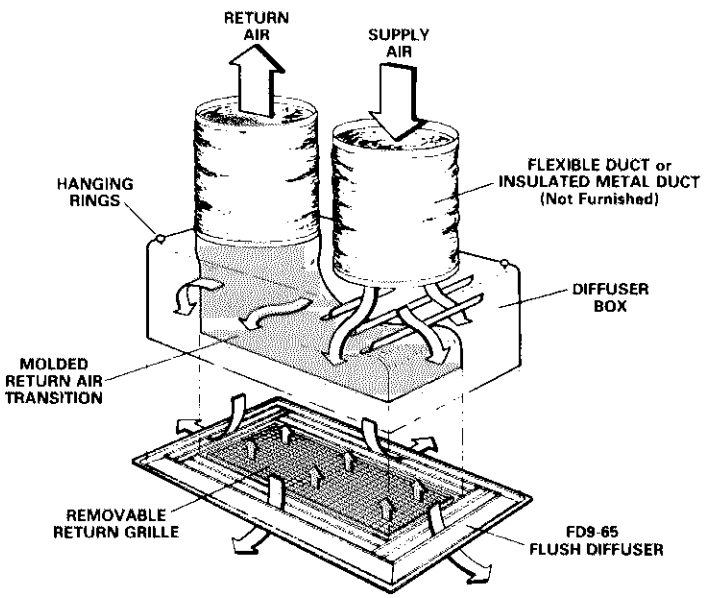
RTD9-65 STEP-DOWN CEILING DIFFUSER



FD9-65 FLUSH CEILING DIFFUSER



DIFFUSER AIR PATTERN



GCS9-411-413 BLOWER PERFORMANCE

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	1960	1725	1610
.05	1910	1700	1585
.10	1865	1660	1550
.15	1815	1620	1515
.20	1760	1575	1475
.25	1710	1535	1440
.30	1660	1485	1395
.40	1545	1390	1300
.50	1425	1285	1200

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

GCS9-411-413 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND DUCT DISTRIBUTION

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	1860	1640	1530
.05	1815	1615	1505
.10	1770	1575	1470
.15	1725	1540	1440
.20	1670	1495	1400
.25	1625	1460	1370
.30	1575	1410	1325
.40	1470	1320	1235
.50	1355	1220	1140

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

GCS9-461-463 BLOWER PERFORMANCE

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	2050	1770	1600
.05	2005	1745	1575
.10	1960	1710	1555
.15	1900	1670	1530
.20	1845	1630	1505
.25	1790	1585	1475
.30	1735	1545	1440
.40	1620	1450	1360
.50	1500	1335	1230

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

GCS9-461-463 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND DUCT DISTRIBUTION

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	1950	1680	1520
.05	1905	1660	1495
.10	1860	1625	1475
.15	1805	1585	1455
.20	1755	1550	1430
.25	1700	1505	1400
.30	1650	1470	1370
.40	1540	1380	1290
.50	1425	1270	1170

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

GCS9-511-513 BLOWER PERFORMANCE

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	2345	1865	1560
.05	2305	1850	1555
.10	2270	1830	1550
.15	2230	1810	1545
.20	2185	1790	1535
.25	2145	1760	1515
.30	2095	1730	1490
.40	2010	1665	1400
.50	1915	1585	1295

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

GCS9-511-513 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND DUCT DISTRIBUTION

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	2250	1770	1480
.05	2210	1750	1475
.10	2175	1740	1470
.15	2145	1720	1465
.20	2095	1700	1460
.25	2060	1675	1440
.30	2010	1645	1410
.40	1935	1575	1335
.50	1838	1500	1225

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

GCS9-651-653 BLOWER PERFORMANCE

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	2450	1930	1590
.05	2410	1910	1585
.10	2370	1890	1580
.15	2330	1870	1575
.20	2280	1850	1565
.25	2240	1820	1545
.30	2190	1790	1520
.40	2100	1720	1430
.50	2000	1640	1320

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

GCS9-651-653 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND DUCT DISTRIBUTION

External Static Pressure (in. wg)	Air Volume (cfm) @Various Speeds		
	High	Medium	Low
0	2350	1830	1510
.05	2310	1810	1505
.10	2270	1800	1500
.15	2240	1780	1495
.20	2190	1760	1490
.25	2150	1730	1470
.30	2100	1700	1440
.40	2020	1630	1360
.50	1920	1550	1250

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

BLOWER DATA

GCS9-411-413 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND CEILING DIFFUSERS

Blower Speed Setting	Cfm @ Various Speeds With Various Discharge Grille Arrangements			
	FD9-65 Flush Model	RTD9-65 Step-Down Model		
		2 Sides Open	3 Sides Open	4 Sides Open
High	1620	1490	1570	1620
Medium	1480	1390	1450	1480
Low	1400	1330	1380	1400

GCS9-461-463 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND CEILING DIFFUSERS

Blower Speed Setting	Cfm @ Various Speeds With Various Discharge Grille Arrangements			
	FD9-65 Flush Model	RTD9-65 Step-Down Model		
		2 Sides Open	3 Sides Open	4 Sides Open
High	1680	1540	1620	1680
Medium	1530	1430	1490	1530
Low	1430	1360	1410	1430

GCS9-511-513 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND CEILING DIFFUSERS

Blower Speed Setting	Cfm @ Various Speeds With Various Discharge Grille Arrangements			
	FD9-65 Flush Model	RTD9-65 Step-Down Model		
		2 Sides Open	3 Sides Open	4 Sides Open
High	1970	1790	1890	1970
Medium	1660	1560	1620	1660
Low	1450	1390	1430	1450

GCS9-651-653 BLOWER PERFORMANCE WITH PSDG9-65 OR REMD9M-65 AND CEILING DIFFUSERS

Blower Speed Setting	Cfm @ Various Speeds With Various Discharge Grille Arrangements			
	FD9-65 Flush Model	RTD9-65 Step-Down Model		
		2 Sides Open	3 Sides Open	4 Sides Open
High	2040	1840	1950	2040
Medium	1710	1600	1660	1710
Low	1480	1410	1460	1480

RTD9-65 STEP-DOWN CEILING DIFFUSER AIR THROW DATA

Grilles Open	Air Volume (cfm)	*Effective Throw (ft)		
		Horizontal Vanes 180° Straight	Horizontal Vanes 22° Down	Horizontal Vanes 45° Down
2 Ends Open	1000	24	22	16
	1200	25	23	17
	1400	27	25	18
	1600	29	26	19
	1800	31	27	20
	2000	33	28	21
	2200	35	30	22
	2400	38	34	23
1 Side 2 Ends Open	1000	17	16	10
	1200	18	17	11
	1400	19	18	12
	1600	20	18	12
	1800	21	19	13
	2000	23	20	14
	2200	25	22	16
	2400	27	24	17
All Ends and Sides Open	1000	13	12	8
	1200	14	13	9
	1400	15	14	9
	1600	16	14	10
	1800	17	15	10
	2000	18	16	11
	2200	19	17	12
	2400	20	18	12

*Effective throw is terminated at a point where conditioned air velocity has decreased to 50 fpm.

FD9-65 FLUSH CEILING DIFFUSER AIR THROW DATA

Air Volume (cfm)	*Effective Throw (ft)
1000	8
1200	9
1400	9
1600	10
1800	11
2000	12
2200	12
2400	13

*Terminated at the point where conditioned air velocity has decreased to 50 fpm.

GUIDE SPECIFICATIONS

Prepared for the guidance of architects, consulting engineers and mechanical contractors.

General — *Furnish and install a single package combination air to air DX mechanical cooling system and gas fired heating system, complete with automatic controls. The single package unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment. The manufacturer shall have parts and service available throughout the United States.*

The installed weight shall not be more than ..... lbs. Entire unit shall have a width of not more than ..... inches, a depth of not more than ..... inches and an overall height of not more than ..... inches. The equipment shall be shipped completely factory assembled, precharged, piped and wired internally ready for field connections. In addition, manufacturer shall test operate system at the factory before shipment.

Roof Mounting Frame — *Furnish and install a steel roof mounting frame for bottom or horizontal discharge and return air duct. It shall mate to the bottom perimeter of the equipment. When flashed into the roof it shall make a unit mounting curb and provide weatherproof duct connection and entry into the conditioned area. Flashing shall be the responsibility of a roofing contractor. Frame shall be approved by National Roofing Contractors Association.*

Air Distribution — *Equipment shall be capable of bottom or side (horizontal) handling of conditioned air. All air distribution ducts shall be fiberglass or ..... ga. galvanized steel insulated with ..... inch thick ..... lb. density fiberglass or equivalent.*

Furnish and install a (flush or step-down) optional combination ceiling supply and return air grille. It shall be capable of not less than ..... ft. radius of effective throw.

Cabinet — *Shall be of galvanized steel with a baked-on outdoor enamel paint finish. Base section and cabinet panels where conditioned air is handled shall be fully insulated to prevent sweating and minimize sound. Lifting lugs shall be provided for easy rigging. Openings shall be provided for power connection entry.*

Cooling System — *The total certified cooling capacity shall not be less than ..... Btuh with an evaporator air volume of ..... cfm, an entering wet bulb air temperature of ..... °F, an entering dry bulb air temperature of ..... °F and a condenser entering temperature of ..... °F. The compressor power input shall not exceed ..... Kw at these conditions.*

The coils shall be non-ferrous construction with aluminum fins mechanically bonded to durable copper tubes. Coils shall be pressure leak tested. Coil face area shall be not less than ..... sq. ft. (evaporator) and ..... sq. ft. (condenser). The compressor shall be resiliently mounted, have overload protection, internal pressure relief and crankcase heater. The refrigeration system shall have expansion valve, suction and discharge line service gauge ports, liquid line strainer, low pressure switch and full refrigerant charge. Shall comply with ARI Standard 210 Test Conditions, DOE test procedures and California Energy Standards.

Heating System — *The heating capacity output shall be ..... Btuh with a gas input of ..... Btuh.*

Cylindrical tube and drum heat exchanger shall be constructed of aluminized steel. Power burner shall have electric direct spark ignition, 100% safety shutoff electronic flame sensing controls, flame inspection glass window, prepurging and combustion air adjustment. All controls shall be listed for operation at low outdoor air temperatures. System shall be equipped with dual limit safety controls. Shall be A.G.A. design certified for outdoor installation when fired with natural gas only. Shall be rated and tested according to GAMA, DOE and FTC.

Service Access — *All components, wiring and inspection areas shall be completely accessible through removable panels.*

Air Movers — *Twin centrifugal conditioned air blowers shall be direct driven by a single, two shafted, 3-speed motor and be capable of delivering ..... cfm at an external static pressure of ..... inches water gauge requiring not more than ..... bhp and ..... rpm. Blowers shall be statically and dynamically balanced.*

Propeller type condenser fan shall discharge vertically and be direct driven by a ..... hp motor. Fan motor shall be totally enclosed with ball bearings, permanently lubricated, inherently protected and equipped with rain shield. Fan shall have a safety guard.

Air Filters — *Cleanable filters furnished shall have not less than ..... sq. ft. of free area.*

Economizer — *Furnish and install complete with controls an optional air mixing damper assembly including outdoor air recirculated air dampers. Pressure relief shall be available with REMD9M-65. The assembly shall provide for the introduction of outside air for minimum ventilation and free cooling. A rain hood with air filter shall mount external to the unit cabinet. The damper motor shall be 24 volt, 3 position (PSDG9-65) or fully modulating (REMD9M-65) spring return. Controls for PSDG9-65 shall include adjustable mixed air sensor, adjustable compressor monitor, minimum position potentiometer and enthalpy control. Controls for REMD9M-65 shall include electronic discharge air sensor, minimum position potentiometer and solid-state adjustable outdoor air enthalpy control. Control option for REMD9M-65 shall consist of differential enthalpy control (return air sensor).*

Automatic Minimum Fresh Air Damper — *Optional damper assembly shall be available to automatically control outdoor air requirements. The assembly shall mount within the confines of the unit cabinet. Damper motor shall be 24 volt, multi-position spring return. A rain hood with air filter shall mount external to the unit cabinet.*

Manual Minimum Fresh Air Damper — *Optional fresh air damper shall be available to manually control outdoor air requirements. The damper box shall mount external to the unit cabinet and shall be equipped with manually operated damper.*

Remote Status Panel — *Shall be available for installation within the conditioned area to observe equipment operation. The panel shall include signal lights for Cool Mode, Heat Mode, Compressor, No Heat and Filter.*

Equipment Warranty — *DURATUBE heat exchanger shall have a limited warranty for a full ten years. Compressor shall have a limited warranty for a full five years. All other components shall have a limited warranty for one year. Refer to Lennox Equipment Limited Warranty included with unit for details.*