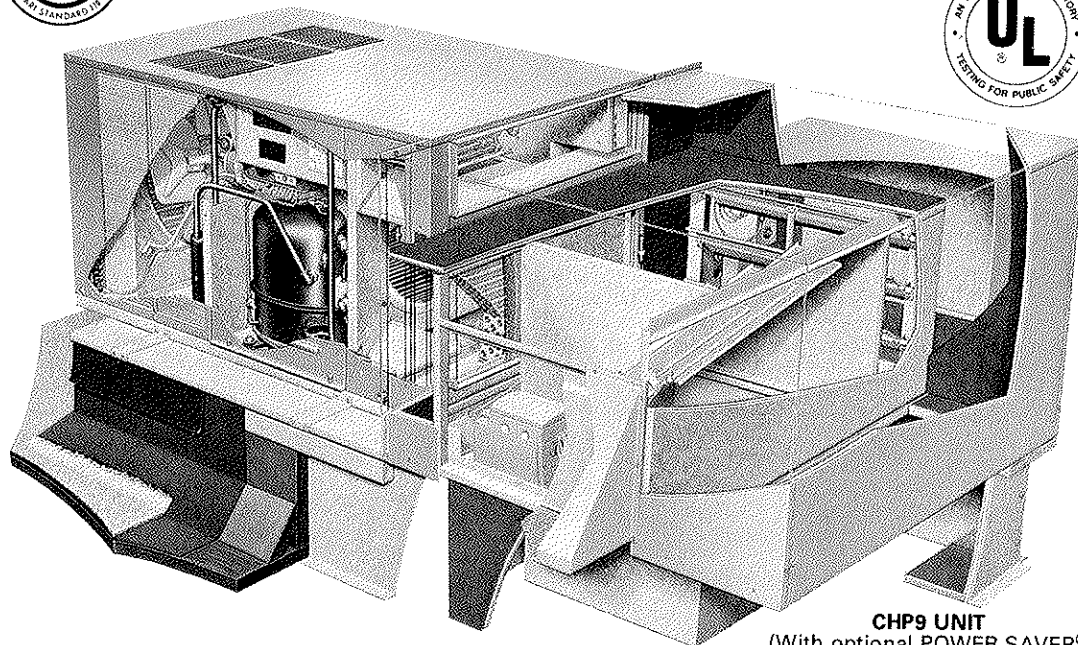


LENNOX

**solarmateTM SINGLE PACKAGE HEAT PUMPS
 CHP9 SERIES — HORIZONTAL — 50 Hz**

* 6.2 to 14.7 kW (21 200 to 50 000 Btuh) Cooling Capacity
 * 6.2 to 15.6 kW (21 200 to 53 100 Btuh) Heating Capacity
 7.7 to 27.6 kW (26 300 to 94 200 Btuh) Optional Electric Heat
 *At ARI Standard 240 Test Conditions



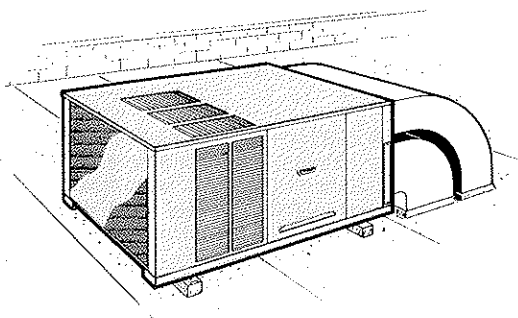
CHP9 UNIT
 (With optional POWER SAVER[®]
 duct enclosure and mounting frame)

High Performance Heat Pump Units Feature Low Operating Cost And Energy Conservation

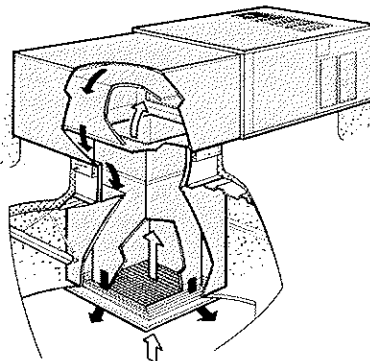
Lennox single package *solarmate*TM heat pump units are designed for residential or small commercial installations. Four models are offered with a wide and varied heating-cooling capacity range. Units can be installed with ducts extended through a wall in a crawl space, basement, utility room or attic. Installation on a slab at grade level or on a rooftop will save valuable interior floor space. Optional accessories available for rooftop installations include a duct enclosure and roof mounting frame. The mounting frame mates to the bottom of the CHP9 and duct enclosure and when flashed into the roof permits weatherproof duct connection and entry into the conditioned area. Optional POWER SAVER[®] and controls field install in duct enclosure to reduce cooling operating costs and satisfy any local code fresh air requirements. Externally mounted optional minimum fresh air damper (manual) is also available. In addition, a supply and return plenum, fiberglass duct kit and choice of flush or step-down diffusers are available for a complete combination ceiling supply and return air distribution system. The compact outdoor

single package units contain all refrigeration components (indoor and outdoor unit), air movers, air filters and optional additive electric heat in one complete package. Optional electric heaters are available in several sizes to supplement the heating capacity, space is provided in the unit for simple field installation. Indoor supply and return air openings are both at the same end of the cabinet. Outdoor air outlet is located at the opposite end. Outdoor coil air enters the unit through louvered top panel and both side panels. Powerful direct drive fan(s) discharges air through the outdoor coil quietly and efficiently. Multispeed indoor blower provides a choice of supply air flow. Large indoor and outdoor coils ensure maximum air contact and heat transfer. Cabinet is constructed of heavy gauge galvanized steel with a baked-on enamel finish. Units are shipped completely assembled, piped, pre-wired and pre-charged ready to install. In addition, units are test operated at the factory. Installer has only to locate unit, connect duct work, mount thermostat and make power supply connections to complete a low cost installation.

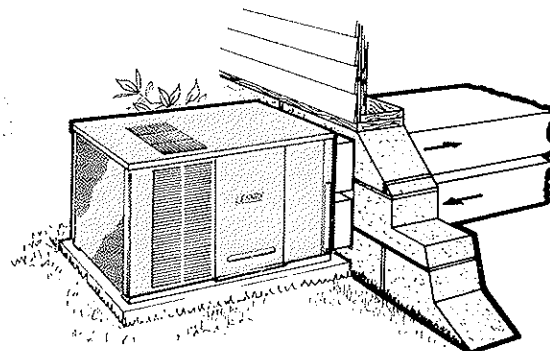
Typical Applications



Rooftop installation



Rooftop installation with optional RT9 duct enclosure and combination ceiling supply and return air system.



Unit on slab at grade level

NOTE — Specifications, Ratings and Dimensions subject to change without notice.

FEATURES

Rugged Cabinet — Constructed of heavy gauge hot dipped galvanized steel. A five station wash metal preparation assures a perfect bonding surface for the finish coat of baked-on outdoor enamel. The attractive enamel finish gives the cabinet long lasting protection from the weather. Indoor coil section of the cabinet is lined with thick fiberglass insulation. Removable panels permit complete service access to interior of cabinet. Heavy gauge steel support rails under the base elevates unit above mounting surface away from damaging moisture. Indoor coil drain pan is constructed of heavy gauge galvanized steel with a galvanized pipe (mpt) drain outlet. Drainage outlets are furnished in the outdoor coil section of the base. Electrical inlets are furnished in cabinet for wiring entry.

Duct Connections — Conditioned supply and return air openings are located one above the other on one end of the cabinet. Return air enters in the lower opening through the indoor coil and is discharged out the top opening. Both openings have flanges for ease of connecting duct work.

Refrigeration System — Complete factory sealed refrigeration system consists of: compressor, outdoor coil and fan(s), indoor coil and blower, reversing valve, hi-capacity drier, suction and discharge line service gauge ports, high pressure switch (manual reset), low pressure switch (automatic reset), suction line accumulator, check valve, solid-state defrost control, low temperature control, refrigerant lines connected and a full operating charge of refrigerant.

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.

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. A crankcase heater is furnished as standard equipment and provides protection from slugging. The 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 operation.

Large Indoor and Outdoor Coils — Lennox designed and fabricated coils are constructed of precisely spaced ripple-edged aluminum fins machine fitted to copper tubes. Design of coil provides large surface and contact area for maximum efficiency. Fins are strengthened to resist bending which can restrict air flow and reduce efficiency. Fins are equipped with collars that grip tubing for maximum contact area resulting in excellent heat transfer. Flared shoulder tubing joints and silver soldering provide tight leak proof joints. Coil is thoroughly tested under pressure to insure leak proof construction.

Efficient Outdoor Coil Fan(s) — Powerful direct drive fan(s) moves large air volumes uniformly through the entire coil resulting in high refrigerant cooling capacity. CHP9-260 and 410 models are equipped with a single fan. CHP9-513 and 653 models employ dual fans. Air enters unit through louvered top and both side panels and is discharged out through the coil. See dimension drawing for air pattern.

Powerful Indoor 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 change in wiring.

Cleanable Air Filter — Frame filters are furnished as standard equipment. Media is washable or vacuum cleanable polyurethane, coated with oil for increased efficiency. Use RP products filter coating no. 418 (P-8-5069) when reoilting is required after cleaning. Separate filter access cabinet panel provides quick and easy removal of filter(s) for servicing.

Reversing Valve — Factory installed and piped. Heavy duty valve permits quick changeover from cooling to heating and vice versa.

Flow Control Valve — Factory installed check valve by-passing tubing permits full refrigerant flow during a cooling cycle. On the reverse or heating cycle, the flow is by-passed through the by-pass tubing, thereby increasing the restriction to the flow.

Suction Line Accumulator — Factory installed and piped. Traps and prevents large amounts of liquid refrigerant from flooding directly into the compressor and causing damage on start-ups.

High and Low Pressure Switches — Factory installed and wired. Protects system against abnormal operating conditions. Low pressure reset is automatic, high pressure is manual.

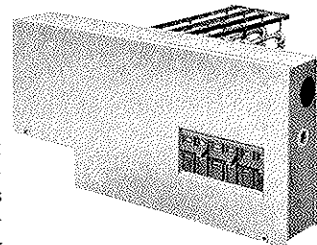
Defrost Control — Solid-state defrost control is factory set and calibrated. It initiates and controls the defrost cycle of the unit by simultaneously sensing the temperature of the coil and the ambient air by means of thermistors. When the coil temperature is reduced, due to frost on the coil, the control initiates a defrost cycle. If weather conditions do not produce frost on the coil, unit operation will not be interrupted by an unnecessary defrost cycle.

Thermostat Furnished — A deluxe wall mounted combination heating-cooling thermostat is furnished as standard equipment. It is equipped with a temperature setting dial, system selector switch, blower switch for automatic or continuous operation and built-in heat and cool anticipation. An emergency heat thermostat subbase is furnished as standard equipment. Subbase permits auxiliary electric heat only to operate in case of compressor malfunction.

Outdoor Thermostat (Optional) — Maintains the heating load on the heat pump as long as possible before allowing the auxiliary electric heat to come on the line. See bulletin in Accessories section.

Timed-Off Control (Optional) — Timed-off control (57A79) 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.

Additive Electric Heat (Optional) — Available for field installation in 7.7 thru 27.6 kW sizes. See Electric Heat Tables. The helix wound nichrome heating elements are exposed directly in the air stream resulting in instant heat transfer, lower coil temperatures and long service life. The elements are accurately located and insulated from the heavy gauge steel support frame by high quality insulators. 220/240V heaters are equipped with circuit breakers to provide overload and short circuit protection. Must be reset manually. Each set of heating elements is equipped with an accurately located limit control with fixed temperature off setting and automatic reset. In addition, elements have supplemental thermal cutoff safety fuses providing positive protection in case of hazardous overheating. On 220/240V heaters, thermal time delay relay brings the heating elements on and off the line in sequence and equal increments with a time delay between each element. On 380/420V heaters, 3 phase contactors bring the heating elements on and off the line and maintain balanced phase loading. Control box and access cover are constructed of heavy gauge galvanized steel. Electrical inlet holes are provided in the box. Electric heaters are completely factory assembled with all controls installed and wired.



Thoroughly Tested and Approved — Units have been thoroughly tested and rated in the Lennox Research Laboratory environmental test room at ARI Standard 240 conditions. In addition, units have been sound tested in the Lennox reverberant sound test room according to ARI Standard 270 conditions. Units and components within are bonded for grounding to meet safety standards for servicing required by U.L. and NEC. Blower data is from actual unit tests conducted in the Lennox Laboratory air test chamber.

ROOFTOP ACCESSORY EQUIPMENT

Optional Duct Enclosure — The RT9-65 duct enclosure is required for installation of CHP9 units with RMF9-65 roof mounting frame. For CHP9-260 & 410 models an adapter kit (50A46) is required to mate the units to the RT9-65. Duct enclosure is completely insulated and has a baked-on enamel finish. The enclosure is field assembled and secures to roof mounting frame and CHP9 unit. A mounting frame deck enclosure, included with RT9 provides a weatherproof deck for mounting the single package unit on the roof mounting frame. Securing brackets are provided to secure CHP9 unit to roof mounting frame. Supply and return air openings with flanges are provided in bottom of enclosure for connection of supply and return air duct work in double duct applications. For combination ceiling supply and return applications the SRP9-65 plenum must be added to bottom of duct enclosure. Plenum facilitates connection of the supply and return air duct to the ceiling diffuser. Application flexibility is possible with the following options.

RT9-65 Duct Enclosure:

With or Without PSD9-65 POWER SAVER®

- a — With SRP9-65 Combination Supply & Return Plenum
- b — With double duct distribution System

Optional POWER SAVER® — The entire PSD9-65 POWER SAVER control system is factory assembled and wired. The assembly field installs in the RT9-65 enclosure. The Lennox POWER SAVER system consists of: mechanically linked outdoor air and recirculated air dampers with pressure operated exhaust air dampers. The positioning of these dampers is accomplished by a 24 volt modulating spring return damper motor with adjustable minimum damper positioner and controlled by the room thermostat, adjustable mixed air controller, adjustable compressor monitor and adjustable enthalpy control. The enthalpy control senses the total heat content of the outdoor air. This unique control prevents excessive moisture laden outdoor air

that will add to the cooling load from entering the unit and yet permits cool dry air capable of cooling to enter, thus taking full advantage of free outdoor air for cooling. Fresh air intake section is furnished with cleanable polyurethane air filter.

Optional Roof Mounting Frame — The RMF9-65 roof mounting frame is available for mounting the RT9-65 duct enclosure and CHP9 units. Frame provides an automatic weather sealed rooftop installation. Approved by National Roofing Contractors Association.

Optional Combination Supply and Return Plenum — The SRP9-65 combination supply and return plenum adapts the RT9-65 duct enclosure to combination ceiling supply and return applications. The insulated plenum is field assembled and installs to bottom of the duct enclosure.

Optional Combination Supply and Return Diffusers — Lennox offers two different styles of air diffusers. The RTD step-down model extends below ceiling level when installed. The FD model is almost flush with the ceiling when installed. Supply air is discharged through the outside grilles and return air enters through the center grille on both models. Adjustable supply air vanes are available, on both models, for air distribution.

Optional Supply and Return Duct — Supply and return fiberglass duct kit (BM-7820) provides connection of combination supply and return ceiling diffuser. Furnished in nominal 1219 mm (48 in.) lengths and constructed of 25 mm (1 in.) thick fiberglass duct board with an aluminum exterior. Shipped knocked down with the tape, staples and installing instructions for field assembly. See dimension drawings.

Optional Minimum Fresh Air Damper — Minimum fresh air damper mounts external to the RT9-65 duct enclosure. Equipped with manually operated damper and necessary fittings for installing.

SPECIFICATIONS

Model No.		CHP9-261 CHP9-263	CHP9-411 CHP9-413	CHP9-513	CHP9-653
★ARI Standard 270 SRN		19	20	21	21
*Cooling Capacity @ ARI Standard 240 Conditions	Total capacity — kW (Btuh)	6.2 (21 200)	9.3 (31 600)	12.2 (41 600)	14.7 (50 000)
	Total power input — kW	3.1	4.9	6.4	8.2
	Coefficient of Performance	2.0	1.9	1.9	1.8
	EER (Btuh/Watts)	6.8	6.4	6.5	6.1
*High Temperature Heating Capacity	Dehumidifying capacity	23%	21%	19%	19%
	Total capacity — kW (Btuh)	6.2 (21 200)	9.0 (30 800)	12.5 (42 700)	15.6 (53 100)
*Low Temperature Heating Capacity	Total power input — kW	2.7	3.8	5.5	6.4
	Coefficient of Performance	2.3	2.4	2.3	2.4
Refrigerant (R-22) charge — kg (oz.)	Total capacity — kW (Btuh)	3.7 (12 500)	5.1 (17 500)	7.6 (26 100)	9.6 (32 700)
	Total power input — kW	2.3	3.1	4.6	5.6
Indoor Coil	Coefficient of Performance	1.6	1.6	1.7	1.7
	Net face area — m ² (sq. ft.)	1.5 (52)	2.0 (72)	3.8 (135)	3.9 (137)
	Tube diameter — mm (in.) & No. of rows	0.28 (3.0)	0.28 (3.0)	0.42 (4.5)	0.42 (4.5)
Indoor Coil Blower	Fin spacing — mm (fins per inch)	10 (3/8) — 2	10 (3/8) — 3	10 (3/8) — 3	10 (3/8) — 4
	Motor output — kW (hp)	1.6 (16)	1.6 (16)	1.6 (16)	1.8 (14)
Outdoor Coil	Wheel nominal diam. x width — mm (in.)	254 x 229 (10 x 9)	229 x 229 (9 x 9)	254 x 254 (10 x 10)	254 x 254 (10 x 10)
	Net face area — m ² (sq. ft.)	0.25 (1/3)	0.56 (3/4)	0.56 (3/4)	0.56 (3/4)
	Motor output — kW (hp)	0.25 (1/3)	0.56 (3/4)	0.56 (3/4)	0.56 (3/4)
Outdoor Coil Fan	Net face area — m ² (sq. ft.)	0.42 (4.5)	0.42 (4.5)	0.63 (6.75)	0.63 (6.75)
	Tube diameter — mm (in.) & No. of rows	10 (3/8) — 2	10 (3/8) — 3	10 (3/8) — 3	10 (3/8) — 4
	Fin spacing — mm (fins per inch)	1.6 (16)	1.7 (15)	1.7 (15)	1.6 (16)
Condensate drain — male pipe thread — mm (in.)	Diameter — mm (in.) & No. of blades	(1) [508 (20)] — 4	(1) [508 (20)] — 4	(2) [457 (18)] — 5	(2) [457 (18)] — 5
	Air volume — Liter/s (cfm)	905 (1920)	980 (2080)	1380 (2920)	1300 (2750)
	Rev./min.	900	900	900	900
	Motor output — kW (hp)	(1) 0.12 (1/6)	(1) 0.19 (1/4)	(2) 0.19 (1/4)	(2) 0.19 (1/4)
No. & size of filters	Motor input — Watts (total)	230	340	600	610
	mm	19 (3/4)	19 (3/4)	19 (3/4)	19 (3/4)
Net weight — kg (lbs.) (1 Package)	inches	(1) 406 x 635 x 25	(1) 406 x 635 x 25	(2) 406 x 508 x 25	(2) 406 x 508 x 25
		(1) 16 x 25 x 1	(1) 16 x 25 x 1	(2) 16 x 20 x 1	(2) 16 x 20 x 1
Optional Supply & Return Fiberglass Duct Kit		133 (293)	147 (325)	227 (500)	240 (530)
Optional Combination Ceiling Supply And Return Step-Down Diffuser		BM-7820 — †16 kg (36 lbs.)		BM-7820 — †16 kg (36 lbs.)	
Optional Combination Ceiling Supply And Return Flush Diffuser		RTD-41 — †15 kg (32 lbs.)		RTD-65 — †24 kg (52 lbs.)	
Optional Combination Supply & Return Plenum		FD-41 — †11 kg (24 lbs.)		FD-65 — †12 kg (26 lbs.)	
Optional Roof Mounting Frame		**FD-41-D — †14 kg (30 lbs.)		**FD-65-D — †15 kg (33 lbs.)	
Optional Duct Enclosure			SRP9-65 — †18 kg (39 lbs.)		
Optional POWER SAVER			RMF9-65 — †38 kg (83 lbs.)		
Optional Minimum Fresh Air Damper			RT9-65 — †61 kg (134 lbs.)		
			PSD9-65 — †36 kg (80 lbs.)		
			OAD3-65 — †3 kg (7 lbs.)		

★Rated in accordance with ARI Standard 270.

*Rated at ARI Standard 240 Conditions; At 60 Liter/s (maximum) indoor air volume per kW of cooling capacity (450 cfm per ton).

Cooling Ratings — 35°C (95°F) outdoor air temperature and 26.7°C (80°F) dry bulb and 19.4°C (67°F) wet bulb entering indoor coil air.

High Temperature Heating Ratings — 8.3°C (47°F) dry bulb and 6.1°C (43°F) wet bulb outdoor air temperature and 21.1°C (70°F) entering indoor coil air.

Low Temperature Heating Ratings — minus 8.3°C (17°F) dry bulb and minus 9.4°C (15°F) wet bulb outdoor air temperature and 21.1°C (70°F) entering indoor coil air.

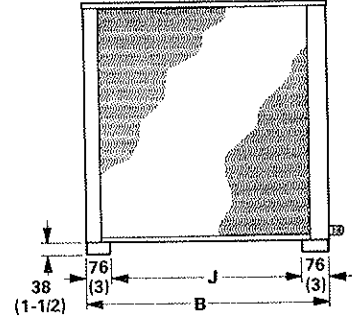
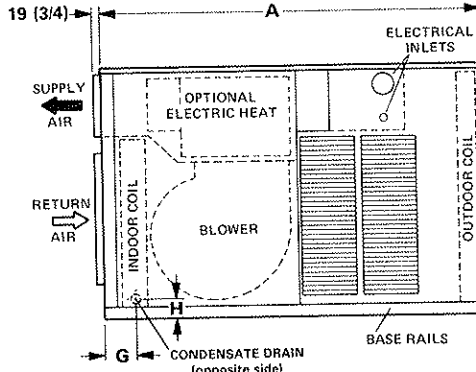
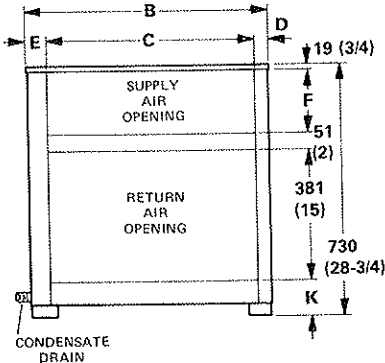
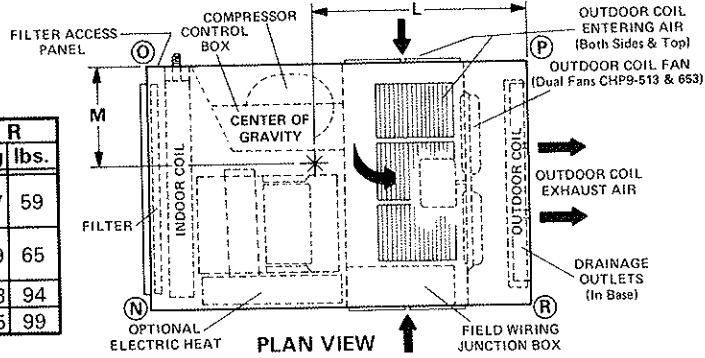
**Flush diffuser with adjustable baffle blades.

†Net weight.

DIMENSIONS — mm (inches)

CORNER WEIGHTS

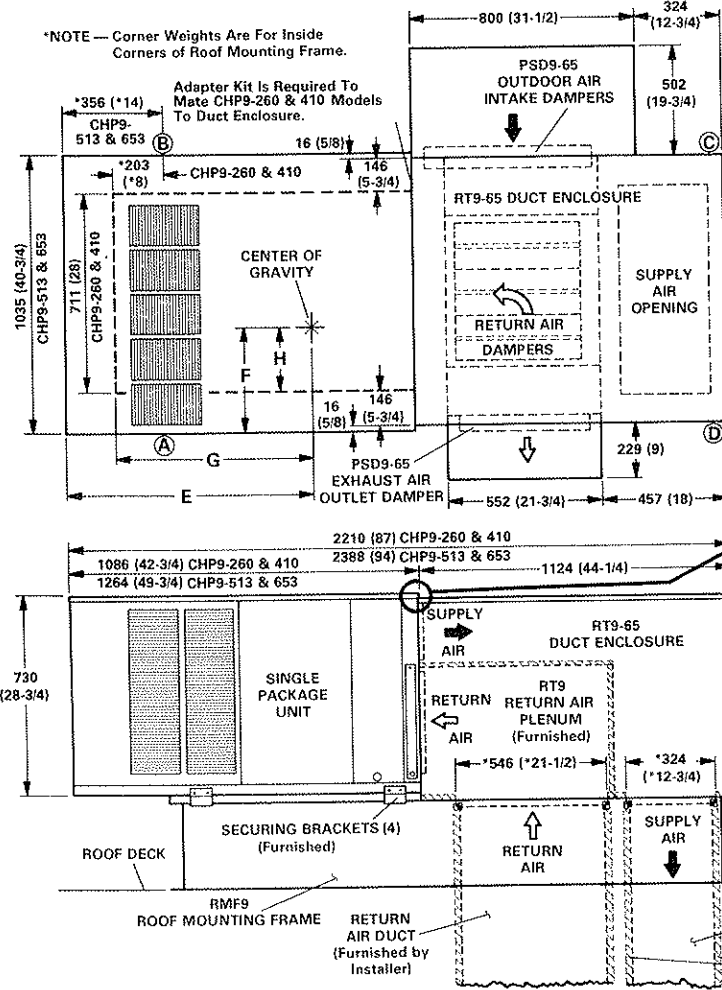
Model No.	N		O		P		R	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
CHP9-261	29	64	40	88	37	82	27	59
CHP9-263								
CHP9-411	32	71	44	98	41	91	29	65
CHP9-413								
CHP9-513	59	130	73	161	52	115	43	94
CHP9-653	63	138	78	171	55	122	45	99



Model No.	A		B		C		D		E		F		G		H		J		K		L		M	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
CHP9-260 & 410	1086	42-3/4	711	28	610	24	46	1-13/16	56	2-3/16	178	7	124	4-7/8	60	2-3/8	559	22	102	4	565	22-1/4	298	11-3/4
CHP9-513 & 653	1264	49-3/4	1035	40-3/4	864	34	70	2-3/4	102	4	203	8	152	6	64	2-1/2	883	34-3/4	76	3	737	29	464	18-1/4

OPTIONAL ROOFTOP ACCESSORIES — DIMENSIONS — mm (inches)

DOUBLE DUCT AIR DISTRIBUTION SYSTEM



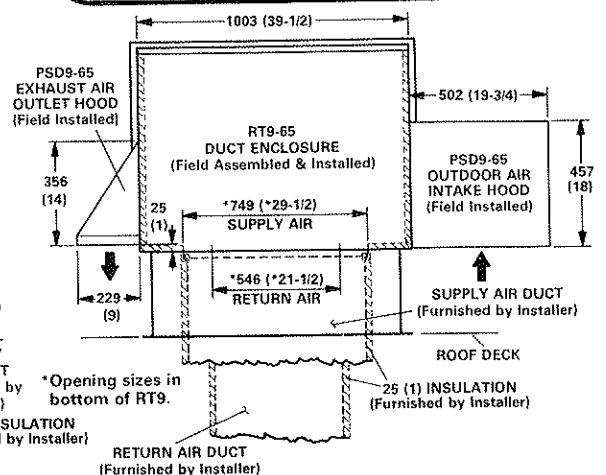
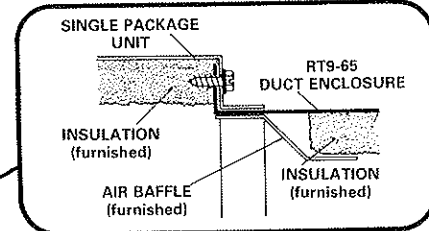
CORNER WEIGHTS

Model No.	A		B		C		D	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
CHP9-260-410	98	215	89	196	56	124	62	136
CHP9-513-653	164	361	109	240	48	106	72	159

CENTER OF GRAVITY

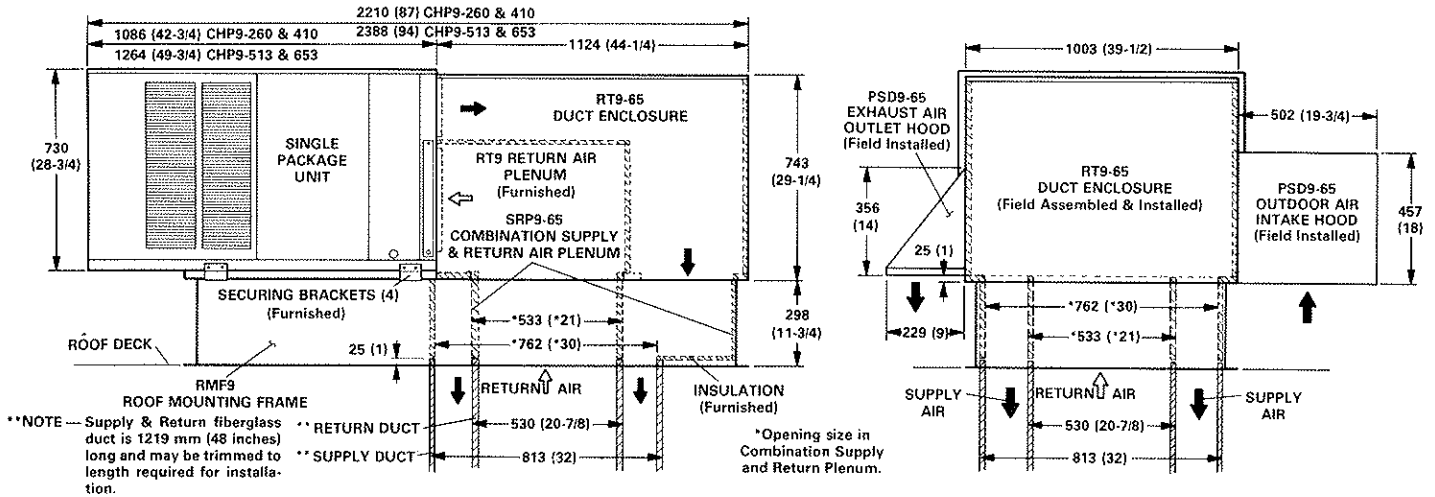
Model No.	E		F		G		H	
	mm	in.	mm	in.	mm	in.	mm	in.
CHP9-260-410	---	---	---	---	953	37-1/2	337	13-1/4
CHP9-513-653	965	38	432	17	---	---	---	---

RT9-65 Duct Enclosure Mounting Detail

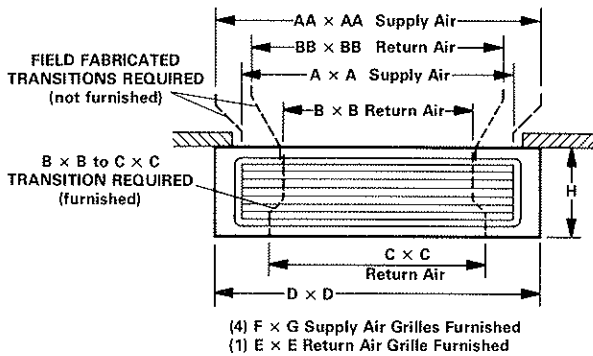


DIMENSIONS — mm (inches)

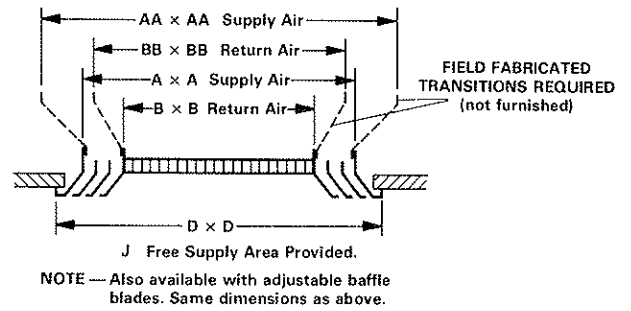
COMBINATION CEILING SUPPLY AND RETURN AIR DISTRIBUTION SYSTEM



RTD STEP-DOWN DIFFUSERS



FD FLUSH CEILING DIFFUSERS

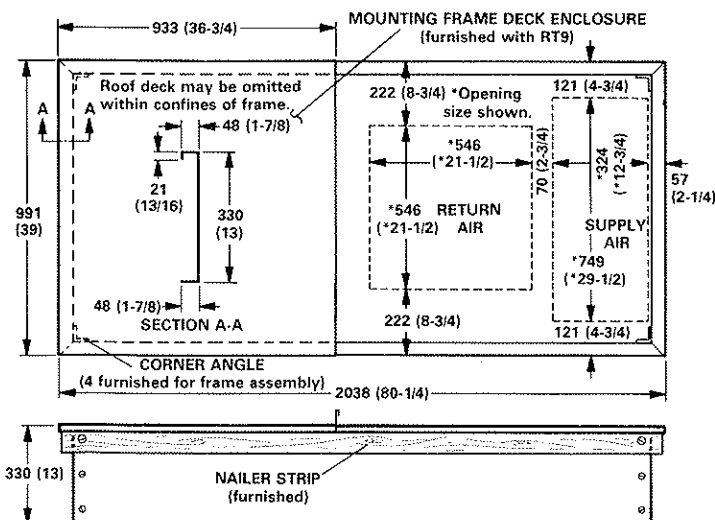


Unit Model No.	Supply & Return Air Grill Model No.		A	AA	B	BB	C	D	E	F	G	H	J	
CHP9-261-263 CHP9-411-413	RTD-41 Step-down	mm	559	762	406	533	508	610	508	127	508	203	----	
		in.	22	30	16	21	20	24	20	5	20	8	----	
	FD-41 Flush *FD-41-D Flush	mm	610	762	457	533	----	756	----	----	----	----	----	0.16 m ²
		in.	24	30	18	21	----	29-3/4	----	----	----	----	----	1.75 sq. ft.
CHP9-513 CHP9-653	RTD-65 Step-down	mm	762	----	508	----	610	914	610	152	762	254	----	
		in.	30	----	20	----	24	36	24	6	30	10	----	
	FD-65 Flush *FD-65-D Flush	mm	762	----	533	----	----	908	----	----	----	----	----	0.30 m ²
		in.	30	----	21	----	----	35-3/4	----	----	----	----	----	3.18 sq. ft.

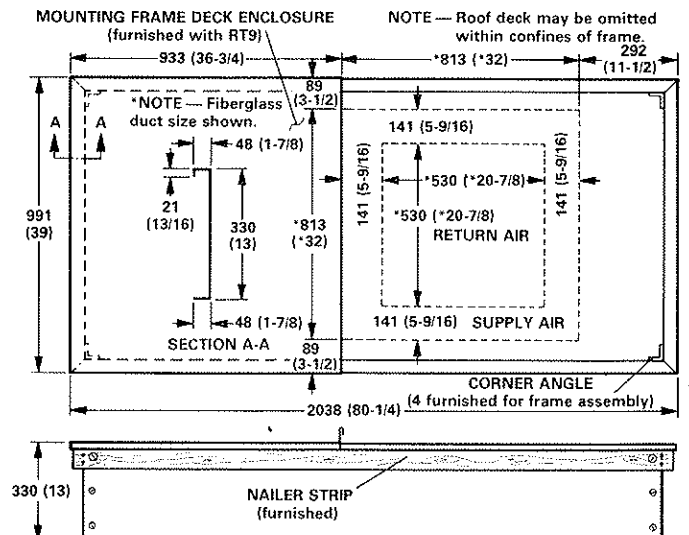
*Equipped with adjustable baffle blades.

RMF9-65 ROOF MOUNTING FRAME

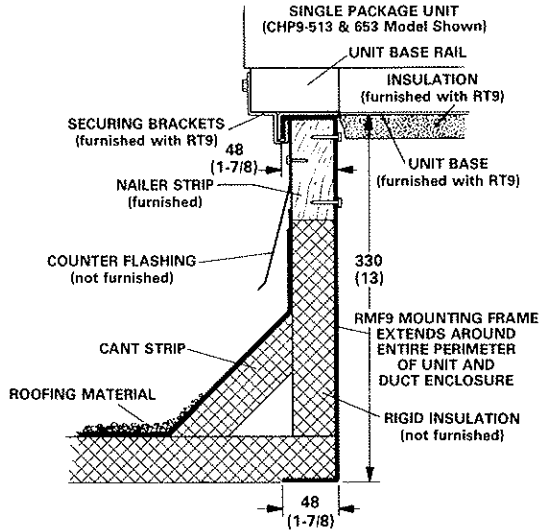
With Double Duct Openings



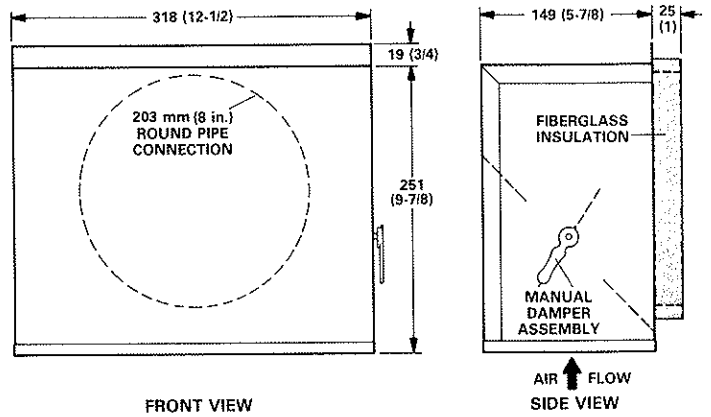
With Combination Ceiling Supply & Return Openings



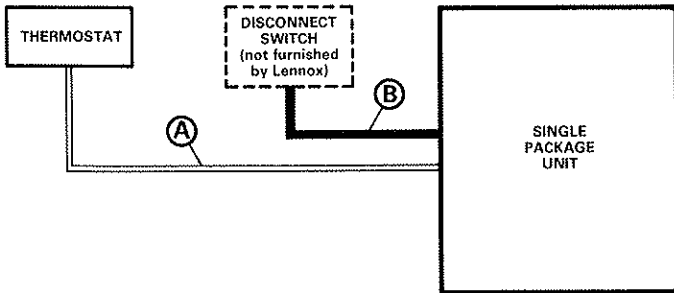
ROOF MOUNTING FRAME FLASHING DETAIL



OPTIONAL OAD3-65 MINIMUM FRESH AIR DAMPER



FIELD WIRING

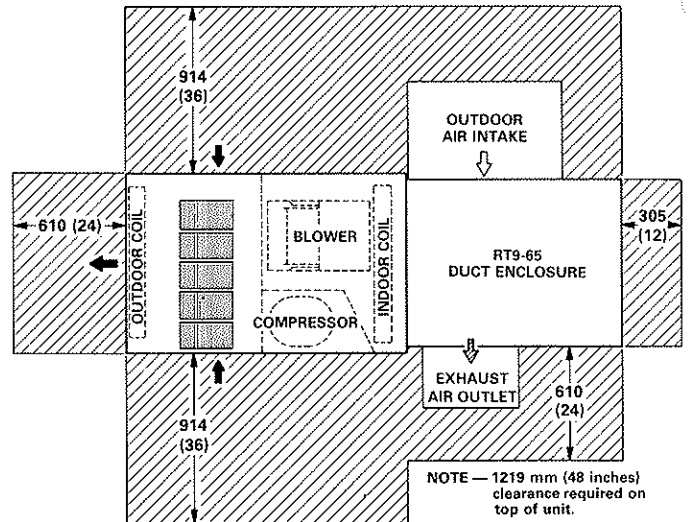


†A—Five wire 24V (Not Furnished By Lennox)

B—Single Phase, Three Phase with Neutral or Three Phase (Not Furnished By Lennox) — See electrical data.

All wiring must conform to local electrical codes.
 †If local electrical code permits may be class 2 wiring.

INSTALLATION CLEARANCES — mm (inches)



ELECTRICAL DATA

Model No.	CHP9-261	CHP9-263	CHP9-411	CHP9-413		CHP9-513		CHP9-653		
Line voltage & phase (50 Hz)	220/240V 1 phase	380/420V 3 phase with neutral	220/240V 1 phase	220/240V 3 phase	380/420V 3 phase with neutral	220/240V 3 phase	380/420V 3 phase with neutral	220/240V 3 phase	380/420V 3 phase with neutral	
Voltage range (min.-max.)	198-264V	342-462V	198-264V	198-264V	342-462V	198-264V	342-462V	198-264V	342-462V	
Compressor	Rated load amps	12.1	4.5	19.4	12.5	6.2	15.0	9.0	20.0	10.5
	Locked rotor amps	58	27	87	72	35	104	50	132	62
Outdoor Fan Motor(s)	Full load amps	1.4	*1.4	2.6	2.6	*2.6	(2) 2.6	*(2) 2.6	(2) 2.6	*(2) 2.6
	Locked rotor amps	2.9	*2.9	5.4	5.4	*5.4	(2) 5.4	*(2) 5.4	(2) 5.4	*(2) 5.4
Indoor Blower Motor	Full load amps	2.3	*2.3	5.9	5.9	*5.9	5.9	*5.9	5.9	*5.9
	Locked rotor amps	5.3	*5.3	14.2	14.2	*14.2	14.2	*14.2	14.2	*14.2

*Motors are 220/240V and are connected from phase to neutral.

CHP9-261-263 (50Hz) COOLING CAPACITY

Indoor Coil Air			Air Temperature Entering Outdoor Coil																			
			24°C (75°F)				29°C (85°F)				35°C (95°F)				41°C (105°F)				46°C (115°F)			
			Entering Dry Bulb Temperature	Entering Wet Bulb Temperature	Total Air Volume Litr/s	cfm	Total Cooling Capacity kW	Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW	Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW	Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW	Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts
27°C (80°F)	17.2°C (63°F)	305	650	6.4	21 700	0.87	2150	2280	5.7	19 600	0.92	2450	5.4	18 500	0.95	2660	5.1	17 300	0.98	2890		
		355	750	6.5	22 200	0.91	2180	2310	5.9	20 100	0.97	2490	5.5	18 800	1.00	2680	5.2	17 700	1.00	2900		
		400	850	6.7	22 700	0.96	2190	2340	6.0	20 400	1.00	2500	5.7	19 400	1.00	2700	5.3	18 200	1.00	2930		
		305	650	6.8	23 200	0.70	2210	2360	6.1	20 800	0.74	2530	5.7	19 600	0.76	2720	5.3	18 200	0.79	2940		
27°C (80°F)	19.4°C (67°F)	355	750	6.9	23 700	0.73	2240	2380	6.2	21 200	0.77	2550	5.8	19 900	0.80	2730	5.4	18 500	0.83	2960		
		400	850	7.0	24 000	0.77	2260	2400	6.3	21 500	0.81	2560	5.9	20 200	0.84	2750	5.5	18 800	0.87	2990		
		305	650	7.3	24 800	0.55	2290	2430	6.5	22 300	0.57	2600	6.1	20 900	0.59	2800	5.7	19 500	0.60	3050		
		355	750	7.4	25 300	0.57	2310	2450	6.6	22 600	0.60	2630	6.2	21 200	0.61	2830	5.8	19 800	0.63	3070		
24°C (75°F)	17.2°C (63°F)	400	850	7.5	25 700	0.59	2330	2470	6.7	22 900	0.62	2640	6.3	21 500	0.64	2850	5.9	20 000	0.66	3090		
		305	650	5.9	20 300	0.90	2090	2200	5.3	18 200	0.95	2330	5.0	17 200	0.98	2520	4.7	16 200	1.00	2780		
		355	750	6.1	20 800	0.95	2120	2230	5.5	18 600	1.00	2370	5.2	17 700	1.00	2590	4.9	16 800	1.00	2860		
		400	850	6.2	21 300	0.99	2140	2250	5.6	19 200	1.00	2420	5.4	18 300	1.00	2650	5.0	17 200	1.00	2880		
24°C (75°F)	19.4°C (67°F)	305	650	6.3	21 600	0.73	2150	2280	5.7	19 500	0.76	2450	5.4	18 300	0.78	2660	5.0	17 100	0.81	2880		
		355	750	6.5	22 100	0.76	2170	2300	5.8	19 900	0.80	2480	5.5	18 700	0.82	2670	5.1	17 400	0.85	2890		
		400	850	6.6	22 500	0.79	2190	2330	5.9	20 200	0.83	2500	5.5	18 900	0.86	2690	5.2	17 600	0.89	2900		
		305	650	6.8	23 200	0.57	2210	2360	6.1	20 900	0.59	2530	5.7	19 600	0.60	2720	5.3	18 200	0.62	2940		
21°C (70°F)	19.4°C (67°F)	355	750	6.9	23 600	0.59	2240	2380	6.2	21 200	0.61	2550	5.8	19 900	0.63	2740	5.4	18 500	0.64	2960		
		400	850	7.0	24 000	0.60	2250	2400	6.3	21 500	0.63	2560	5.9	20 100	0.65	2750	5.5	18 700	0.67	2980		
		305	650	5.5	18 900	0.94	2030	2140	5.0	16 900	0.99	2260	4.7	15 900	1.00	2390	4.4	15 100	1.00	2590		
		355	750	5.7	19 500	0.98	2050	2160	5.1	17 400	1.00	2290	4.9	16 600	1.00	2450	4.6	15 600	1.00	2690		
21°C (70°F)	15.0°C (59°F)	400	850	5.8	19 900	1.00	2080	2190	5.3	18 000	1.00	2320	5.0	17 100	1.00	2500	4.7	16 100	1.00	2770		
		305	650	5.9	20 200	0.75	2090	2200	5.3	18 100	0.79	2320	5.0	17 000	0.81	2500	4.7	15 900	0.83	2740		
		355	750	6.0	20 600	0.78	2110	2210	5.4	18 500	0.82	2350	5.1	17 400	0.85	2540	4.8	16 300	0.87	2790		
		400	850	6.2	21 000	0.81	2130	2240	5.5	18 800	0.86	2390	5.2	17 600	0.88	2580	4.8	16 500	0.91	2840		
21°C (70°F)	(17.2°C) (63°F)	305	650	6.4	21 700	0.59	2150	2280	5.7	19 500	0.61	2440	5.4	18 300	0.61	2660	5.0	17 100	0.63	2880		
		355	750	6.5	22 100	0.60	2170	2300	5.8	19 800	0.62	2480	5.5	18 600	0.64	2680	5.1	17 400	0.65	2890		
		400	850	6.6	22 500	0.62	2183	2320	5.9	20 200	0.64	2490	5.5	18 900	0.66	2690	5.2	17 600	0.68	2900		

CHP9-411-413 (50Hz) COOLING CAPACITY

Indoor Coil Air		Air Temperature Entering Outdoor Coil																					
		24°C (75°F)			29°C (85°F)			35°C (95°F)			41°C (105°F)			46°C (115°F)									
		Entering Dry Bulb Temperature	Entering Wet Bulb Temperature	Total Air Volume	Total Cooling Capacity	Sensible To Total Ratio	Comp. Motor Input	Total Cooling Capacity	Sensible To Total Ratio	Comp. Motor Input	Total Cooling Capacity	Sensible To Total Ratio	Comp. Motor Input	Total Cooling Capacity	Sensible To Total Ratio	Comp. Motor Input							
°C	°C	Liter/s cfm	kW Btuh	(S/T)	Watts	kW Btuh	(S/T)	Watts	kW Btuh	(S/T)	Watts	kW Btuh	(S/T)	Watts									
17.2°C (63°F)	17.2°C (63°F)	425	900	9.3	31 700	0.87	3340	8.9	30 300	0.89	3560	8.5	29 000	0.92	3800	8.1	27 500	0.94	4020	7.6	26 100	0.89	4230
		520	1100	9.7	33 000	0.94	3410	9.2	31 500	0.87	3650	8.8	30 000	0.99	3880	8.4	28 500	1.00	4100	7.9	27 100	1.00	4330
		615	1300	9.9	33 800	1.00	3460	9.5	32 400	1.00	3700	9.1	31 000	1.00	3960	8.7	29 600	1.00	4200	8.2	28 100	1.00	4420
27°C (80°F)	19.4°C (67°F)	425	900	10.0	34 000	0.71	3470	9.5	32 400	0.72	3710	9.0	30 800	0.74	3940	8.6	29 200	0.76	4170	8.1	27 500	0.78	4380
		520	1100	10.3	35 000	0.75	3540	9.8	33 300	0.77	3770	9.3	31 600	0.79	4000	8.8	29 900	0.82	4220	8.3	28 200	0.84	4430
		615	1300	10.5	35 700	0.81	3580	9.9	33 900	0.83	3820	9.4	32 200	0.85	4050	8.9	30 500	0.88	4270	8.4	28 800	0.91	4480
21.7°C (71°F)	21.7°C (71°F)	425	900	10.7	36 400	0.55	3620	10.2	34 700	0.56	3860	9.6	32 900	0.57	4090	9.1	31 200	0.58	4310	8.6	29 400	0.60	4530
		520	1100	10.9	37 300	0.58	3670	10.4	35 500	0.60	3910	9.9	33 700	0.61	4100	9.3	31 800	0.62	4370	8.8	30 000	0.64	4580
		615	1300	11.1	38 000	0.61	3700	10.6	36 100	0.63	3940	10.1	34 300	0.64	4180	9.5	32 900	0.66	4400	8.9	30 400	0.68	4600
24°C (75°F)	15.0°C (59°F)	425	900	8.6	29 400	0.91	3220	8.2	28 100	0.93	3400	7.9	26 800	0.95	3600	7.5	25 600	0.98	3820	7.1	24 200	1.00	4030
		520	1100	9.0	30 650	0.98	3280	8.6	29 200	1.00	3480	8.2	28 000	1.00	3710	7.9	26 800	1.00	3960	7.5	25 500	1.00	4180
		615	1300	9.3	31 700	1.00	3340	8.9	30 470	1.00	3570	8.6	29 200	1.00	3810	8.2	27 900	1.00	4050	7.8	26 500	1.00	4270
17.2°C (63°F)	17.2°C (63°F)	425	900	9.2	31 500	0.73	3330	8.8	30 100	0.75	3550	8.4	28 700	0.76	3780	7.9	27 200	0.78	4000	7.5	25 700	0.80	4200
		520	1100	9.1	32 600	0.78	3400	9.1	31 100	0.80	3620	8.7	29 600	0.82	3840	8.2	28 000	0.84	4060	7.7	26 400	0.86	4270
		615	1300	9.8	33 400	0.83	3440	9.3	31 800	0.85	3670	8.9	30 200	0.87	3890	8.4	28 600	0.90	4110	7.9	26 900	0.93	4320
19.4°C (67°F)	19.4°C (67°F)	425	900	10.0	34 000	0.57	3470	9.5	32 400	0.58	3700	9.0	30 800	0.59	3940	8.6	29 200	0.60	4160	8.1	27 500	0.61	4370
		520	1100	10.2	34 900	0.60	3540	9.7	33 200	0.61	3770	9.2	31 500	0.62	4000	8.7	29 800	0.64	4220	8.2	28 100	0.65	4420
		615	1300	10.4	35 600	0.63	3570	10.0	33 900	0.64	3800	9.4	32 100	0.65	4040	8.9	30 300	0.67	4250	8.4	28 600	0.69	4460
12.8°C (55°F)	12.8°C (55°F)	425	900	7.9	27 100	0.95	3100	7.6	26 000	0.97	3270	7.3	24 800	0.99	3440	7.0	23 700	1.00	3610	6.6	22 600	1.00	3820
		520	1100	8.3	28 300	1.00	3170	8.0	27 200	1.00	3350	7.7	26 100	1.00	3550	7.3	25 000	1.00	3760	7.0	23 900	1.00	3990
		615	1300	8.7	29 700	1.00	3230	8.4	28 500	1.00	3430	8.0	27 300	1.00	3650	7.7	26 100	1.00	3870	7.3	24 800	1.00	4100
21°C (70°F)	15.0°C (59°F)	425	900	8.5	29 100	0.76	3200	8.2	27 800	0.77	3390	7.8	26 500	0.79	3590	7.4	25 200	0.81	3790	7.0	23 900	0.83	3990
		520	1100	8.9	30 200	0.81	3260	8.4	28 800	0.82	3450	8.0	27 400	0.84	3660	7.6	26 000	0.86	3870	7.2	24 600	0.89	4080
		615	1300	9.1	31 000	0.85	3300	8.7	29 500	0.87	3500	8.2	28 000	0.89	3720	7.8	26 600	0.92	3940	7.4	25 200	0.95	4150
(17.2°C (63°F))	(17.2°C (63°F))	425	900	9.3	31 600	0.59	3330	8.8	30 100	0.60	3550	8.4	28 700	0.60	3770	8.0	27 200	0.61	3990	7.5	25 700	0.62	4200
		520	1100	9.6	32 600	0.61	3390	9.1	31 000	0.62	3610	8.7	29 500	0.63	3840	8.2	27 900	0.65	4060	7.7	26 300	0.66	4260
		615	1300	9.8	33 300	0.64	3430	9.3	31 700	0.65	3660	8.8	30 000	0.66	3880	8.3	28 400	0.68	4090	7.9	26 800	0.70	4300

CHP9-513 (50Hz) COOLING CAPACITY

Indoor Coil Air			Air Temperature Entering Outdoor Coil														
Entering Dry Bulb Temperature	Entering Wet Bulb Temperature	Air Volume Liter/s cfm	24°C (75°F)			29°C (85°F)			35°C (95°F)			41°C (105°F)			46°C (115°F)		
			Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts
17.2°C (63°F)	17.2°C (63°F)	615	12.5	0.91	4110	12.0	0.93	4403	11.3	0.96	4680	10.6	0.99	4930	10.0	1.00	5140
		710	12.9	0.96	4180	12.3	0.99	4470	11.6	1.00	4750	11.0	1.00	5030	10.3	1.00	5280
		800	13.1	1.00	4220	12.5	1.00	4540	11.9	1.00	4840	11.3	1.00	5120	10.6	1.00	5380
27°C (80°F)	19.4°C (67°F)	615	13.3	0.73	4270	12.7	0.75	4570	12.0	0.77	4860	11.2	0.79	5110	10.5	0.82	5330
		710	13.6	0.77	4310	12.9	0.79	4620	12.2	0.81	4910	11.5	0.84	5170	10.7	0.88	5390
		800	13.8	0.81	4360	13.1	0.83	4670	12.4	0.86	4960	11.6	0.89	5220	10.8	0.93	5450
21.7°C (71°F)	21.7°C (71°F)	615	14.3	0.57	4430	13.5	0.58	4760	12.8	0.59	5060	12.0	0.61	5340	11.2	0.63	5580
		710	14.5	0.59	4480	13.7	0.61	4810	13.0	0.62	5120	12.2	0.64	5400	11.4	0.66	5630
		800	14.7	0.62	4520	14.0	0.63	4840	13.2	0.65	5150	12.3	0.67	5430	11.5	0.69	5680
15.0°C (59°F)	15.0°C (59°F)	615	11.7	0.94	3930	11.2	0.97	4210	10.6	0.99	4470	10.0	1.00	4710	9.4	1.00	4940
		710	12.1	0.99	4000	11.5	1.00	4290	10.9	1.00	4570	10.3	1.00	4830	9.7	1.00	5050
		800	12.4	1.00	4070	11.8	1.00	4370	11.2	1.00	4660	10.6	1.00	4920	10.0	1.00	5140
24°C (75°F)	17.2°C (63°F)	615	12.5	0.75	4100	11.8	0.77	4380	11.2	0.79	4650	10.5	0.82	4880	9.8	0.85	5080
		710	12.7	0.79	4140	12.1	0.81	4430	11.4	0.84	4700	10.7	0.86	4940	10.0	0.90	5140
		800	12.9	0.83	4190	12.3	0.85	4480	11.6	0.88	4750	10.8	0.91	5000	10.1	0.95	5200
19.4°C (67°F)	19.4°C (67°F)	615	13.4	0.58	4260	12.7	0.59	4570	12.0	0.61	4850	11.2	0.62	5100	10.5	0.64	5320
		710	13.6	0.61	4320	12.9	0.62	4620	12.2	0.63	4900	11.4	0.65	5160	10.6	0.67	5370
		800	13.8	0.63	4350	13.1	0.64	4650	12.3	0.66	4940	11.5	0.68	5200	10.7	0.70	5420
12.8°C (55°F)	12.8°C (55°F)	615	10.9	0.98	3770	10.3	1.00	4020	9.9	1.00	4280	9.3	1.00	4520	8.8	1.00	4720
		710	11.3	1.00	3830	10.7	1.00	4120	10.2	1.00	4390	9.7	1.00	4630	9.1	1.00	4830
		800	11.6	1.00	3900	11.1	1.00	4200	10.6	1.00	4470	10.0	1.00	4710	9.3	1.00	4920
21°C (70°F)	15.8°C (59°F)	615	11.6	0.78	3910	11.0	0.80	4190	10.4	0.82	4440	9.8	0.84	4660	9.1	0.87	4830
		710	11.9	0.82	3960	11.3	0.84	4240	10.6	0.86	4500	10.0	0.89	4710	9.3	0.92	4900
		800	12.1	0.85	4010	11.5	0.87	4290	10.8	0.90	4550	10.1	0.93	4770	9.4	0.97	4950
(17.2°C (63°F))	(17.2°C (63°F))	615	12.5	0.60	4090	11.8	0.61	4380	11.2	0.62	4640	10.5	0.63	4870	9.8	0.65	5070
		710	12.7	0.62	4150	12.0	0.63	4430	11.4	0.64	4700	10.6	0.66	4930	9.9	0.68	5120
		800	12.9	0.64	4180	12.2	0.65	4470	11.5	0.67	4730	10.8	0.69	4970	10.0	0.71	5160

CHP9-653 (50Hz)/COOLING CAPACITY

Indoor Coil Air			Air Temperature Entering Outdoor Coil																			
Entering Dry Bulb Temperature	Entering Wet Bulb Temperature	Total Air Volume Liter/s cfm	24°C (75°F)			29°C (85°F)			35°C (95°F)			41°C (105°F)			46°C (115°F)							
			Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts	Total Cooling Capacity kW Btuh	Sensible To Total Ratio (S/T)	Comp. Motor Input Watts					
27°C (80°F)	17.2°C (63°F)	755	15.3	52 300	0.91	5600	14.5	49 600	0.94	5830	13.7	46 800	0.97	6100	12.8	43 800	1.00	6400	12.1	41 200	1.00	6800
		850	15.6	53 200	0.96	5680	14.8	50 500	0.98	5910	14.0	47 600	1.00	6190	13.2	45 000	1.00	6550	12.4	42 400	1.00	6960
		945	15.7	53 500	1.00	5730	15.1	51 400	1.00	5980	14.3	48 800	1.00	6300	13.5	46 200	1.00	6660	12.7	43 300	1.00	7090
27°C (80°F)	19.4°C (67°F)	755	16.2	55 200	0.74	5820	15.3	52 300	0.75	6070	14.4	49 300	0.78	6360	13.5	46 200	0.80	6690	12.6	43 000	0.83	7060
		850	16.4	56 100	0.77	5880	15.6	53 100	0.79	6130	14.7	50 000	0.81	6420	13.7	46 900	0.84	6760	12.8	43 700	0.88	7140
		945	16.6	56 700	0.80	5930	15.7	53 700	0.82	6190	14.8	50 600	0.85	6480	13.9	47 400	0.88	6820	13.0	44 200	0.92	7200
27°C (80°F)	21.7°C (71°F)	755	17.2	58 700	0.57	6080	16.3	55 600	0.58	6400	15.4	52 400	0.60	6660	14.4	49 200	0.61	7010	13.4	45 800	0.63	7420
		850	17.4	59 400	0.59	6140	16.5	56 200	0.61	6410	15.5	53 000	0.62	6730	14.6	49 700	0.64	7080	13.6	46 300	0.66	7480
		945	17.6	60 000	0.61	6180	16.6	56 800	0.63	6460	15.7	53 600	0.65	6770	14.7	50 200	0.67	7120	13.7	46 700	0.69	7530
24°C (75°F)	15.0°C (59°F)	755	14.4	49 000	0.94	5370	13.6	46 500	0.97	5580	12.8	43 700	1.00	5800	12.1	41 300	1.00	6110	11.3	38 700	1.00	6480
		850	14.7	50 100	0.99	5440	13.9	47 400	1.00	5660	13.2	44 900	1.00	5930	12.4	42 400	1.00	6260	11.7	39 800	1.00	6620
		945	14.9	51 000	1.00	5500	14.2	48 600	1.00	5750	13.5	46 100	1.00	6030	12.7	43 500	1.00	6360	12.0	40 800	1.00	6740
24°C (75°F)	17.2°C (63°F)	755	15.2	51 900	0.76	5580	14.4	49 100	0.78	5800	13.5	46 200	0.80	6060	12.7	43 300	0.83	6350	11.8	40 200	0.86	6680
		850	15.4	52 700	0.79	5630	14.6	49 900	0.81	5860	13.8	47 000	0.84	6120	12.9	43 900	0.86	6410	12.0	40 800	0.90	6750
		945	15.6	53 400	0.82	5690	14.8	50 500	0.84	5910	13.9	47 500	0.87	6180	13.0	44 400	0.90	6480	12.1	41 400	0.94	6830
24°C (75°F)	19.4°C (67°F)	755	16.2	55 200	0.59	5820	15.3	52 300	0.60	6060	14.4	49 300	0.61	6350	13.5	46 100	0.63	6670	12.6	42 900	0.65	7040
		850	16.4	56 000	0.61	5870	15.5	53 000	0.62	6130	14.6	49 900	0.63	6410	13.7	46 700	0.65	6740	12.7	43 400	0.67	7110
		945	16.6	56 600	0.63	5920	15.7	53 600	0.64	6170	14.8	50 500	0.66	6460	13.8	47 200	0.68	6790	12.8	43 800	0.70	7160
21°C (70°F)	12.8°C (55°F)	755	13.5	45 900	0.98	5140	12.7	43 300	1.00	5330	12.0	41 100	1.00	5570	11.3	38 700	1.00	5850	10.6	36 300	1.00	6160
		850	13.7	46 900	1.00	5220	13.1	44 600	1.00	5440	12.4	42 300	1.00	5690	11.7	39 800	1.00	5970	10.9	37 300	1.00	6290
		945	14.1	48 100	1.00	5300	13.4	45 800	1.00	5520	12.7	43 400	1.00	5780	12.0	40 800	1.00	6060	11.2	38 200	1.00	6400
21°C (70°F)	15.0°C (59°F)	755	14.2	48 600	0.78	5340	13.5	45 900	0.80	5540	12.7	43 200	0.82	5770	11.8	40 400	0.85	6020	11.0	37 500	0.88	6310
		850	14.5	49 500	0.81	5400	13.7	46 700	0.83	5600	12.9	43 900	0.86	5830	12.0	41 000	0.89	6090	11.2	38 100	0.92	6390
		945	14.7	50 100	0.84	5450	13.9	47 300	0.86	5650	13.0	44 500	0.89	5890	12.2	41 500	0.92	6160	11.3	38 600	0.96	6460
21°C (70°F)	(17.2°C (63°F))	755	15.2	51 900	0.60	5570	14.4	49 100	0.61	5790	13.5	46 200	0.62	6050	12.7	43 200	0.64	6330	11.8	40 100	0.66	6660
		850	15.4	52 700	0.62	5630	14.4	49 800	0.63	5860	13.7	46 800	0.64	6110	12.8	43 700	0.66	6400	11.9	40 600	0.68	6730
		945	15.6	53 300	0.64	5680	14.8	50 400	0.65	5900	13.9	47 400	0.66	6160	13.0	44 200	0.68	6450	12.0	41 000	0.70	6780

RATINGS

CHP9-261-263 (50Hz) HEATING CAPACITY

Indoor Air Volume At 21°C (70°F)		*Air Temperature Entering Outdoor Coil											
		18°C (65°F)			7°C (45°F)			Minus 4°C (25°F)			Minus 15°C (5°F)		
		Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts
Liter/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
305	650	8.1	27 600	2630	5.7	19 500	2200	4.1	14 000	1870	2.5	8500	1600
355	750	8.3	28 200	2570	6.0	20 400	2180	4.3	14 700	1860	2.7	9200	1580
400	850	8.5	28 900	2530	6.2	21 300	2170	4.5	15 500	1840	2.8	9600	1570

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.
*At 70% Relative Humidity.

CHP9-411-413 (50Hz) HEATING CAPACITY

Indoor Air Volume At 21°C (70°F)		*Air Temperature Entering Outdoor Coil											
		18°C (65°F)			7°C (45°F)			Minus 4°C (25°F)			Minus 15°C (5°F)		
		Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts
Liter/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
425	900	11.8	40 400	3680	8.6	29 400	2950	5.9	20 100	2360	3.8	13 100	1990
520	1100	12.0	40 800	3570	8.7	29 700	2870	6.0	20 300	2320	3.9	13 200	1970
615	1300	12.1	41 200	3470	8.8	30 000	2800	6.0	20 600	2270	3.9	13 400	1960

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.
*At 70% Relative Humidity.

CHP9-513 (50Hz) HEATING CAPACITY

Indoor Air Volume At 21°C (70°F)		*Air Temperature Entering Outdoor Coil											
		18°C (65°F)			7°C (45°F)			Minus 4°C (25°F)			Minus 15°C (5°F)		
		Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts
Liter/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
615	1300	14.8	50 500	5020	12.1	41 300	4140	8.9	30 400	3300	5.6	19 000	2680
710	1500	15.1	51 400	4930	12.2	41 700	4100	9.0	30 700	3270	5.6	19 100	2670
800	1700	15.3	52 200	4850	12.4	42 200	4060	9.1	30 900	3250	5.6	19 200	2650

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.
*At 70% Relative Humidity.

CHP9-653 (50Hz) HEATING CAPACITY

Indoor Air Volume At 21°C (70°F)		*Air Temperature Entering Outdoor Coil											
		18°C (65°F)			7°C (45°F)			Minus 4°C (25°F)			Minus 15°C (5°F)		
		Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts	Total Heating Capacity		Comp. Motor Input Watts
Liter/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
755	1600	19.3	65 800	5540	14.9	50 800	4670	10.6	36 200	4040	7.6	25 800	3660
850	1800	19.6	66 800	5420	15.1	51 600	4580	10.8	37 000	3990	7.7	26 200	3620
945	2000	19.9	67 900	5290	15.3	52 300	4500	11.0	37 700	3940	7.8	26 700	3570

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.
*At 70% Relative Humidity.

ELECTRIC HEAT DATA

CHP9-261-263 ELECTRIC HEAT DATA

CHP9 Model No.	Optional Electric Unit Model No. & Net Weight	No. of Steps	Volts Input	Heating Capacity	
				kW	Btuh
CHP9-261	ECH9-41-311 6 kg (14 lbs.)	1	220	7.7	26 300
			230	8.4	28 700
			240	9.2	31 400
	ECH9-41-471 7 kg (15 lbs.)	1	220	11.6	39 600
			230	12.7	43 400
			240	13.8	47 100
CHP9-263	ECH9-41-313 6 kg (14 lbs.)	1	380	7.7	26 300
			400	8.4	28 700
			415	9.2	31 400
	ECH9-41-473 7 kg (15 lbs.)	1	380	11.6	39 600
			400	12.7	43 400
			415	13.8	47 100

CHP9-411-413 ELECTRIC HEAT DATA

CHP9 Model No.	Optional Electric Unit Model No. & Net Weight	No. of Steps	Volts Input	Heating Capacity	
				kW	Btuh
CHP9-411	ECH9-41-311 6 kg (14 lbs.)	1	220	7.7	26 300
			230	8.4	28 700
			240	9.2	31 300
	ECH9-41-471 7 kg (15 lbs.)	1	220	11.6	39 600
			230	12.7	43 400
			240	13.8	47 100
	ECH9-41-631 7 kg (16 lbs.)	2	220	15.5	52 900
			230	16.9	57 700
			240	18.4	62 800
CHP9-413	ECH9-41-313 6 kg (14 lbs.)	1	380	7.7	26 300
			400	8.4	28 700
			415	9.2	31 400
	ECH9-41-473 7 kg (15 lbs.)	1	220	11.6	39 600
			230	12.7	43 400
			240	13.8	47 100
		1	380	11.6	39 600
			400	12.7	43 400
			415	13.8	47 100
	ECH9-41-563 7 kg (15 lbs.)	1	220	13.9	47 500
			230	15.2	51 900
			240	16.5	56 300
		1	380	13.9	47 500
			400	15.2	51 900
			415	16.5	56 300

CHP9-513 ELECTRIC HEAT DATA

CHP9 Model No.	Optional Electric Unit Model No. & Net Weight	No. of Steps	Volts Input	Heating Capacity	
				kW	Btuh
CHP9-513	ECH9-46-563 10 kg (23 lbs.)	1	220	13.9	47 500
			230	15.2	51 900
			240	16.5	56 300
	ECH9-51/65-563 10 kg (23 lbs.)	1	380	13.9	47 500
			400	15.2	51 900
			415	16.5	56 300
	ECH9-46-783 13 kg (28 lbs.)	2	220	19.2	65 600
			230	20.9	71 400
			240	22.8	77 900
	ECH9-51/65-783 13 kg (28 lbs.)	2	380	19.2	65 600
			400	20.9	71 400
			415	22.8	77 900
	ECH9-46-943 13 kg (28 lbs.)	2	220	23.2	79 200
			230	25.3	86 400
			240	27.6	94 200
	ECH9-51/65-943 13 kg (28 lbs.)	2	380	23.2	79 200
			400	25.3	86 400
			415	27.6	94 200

CHP9-653 ELECTRIC HEAT DATA

CHP9 Model No.	Optional Electric Unit Model No. & Net Weight	No. of Steps	Volts Input	Heating Capacity	
				kW	Btuh
CHP9-653	ECH9-65-563 10 kg (23 lbs.)	1	220	13.9	47 500
			230	15.2	51 900
			240	16.5	56 300
	ECH9-51/65-563 10 kg (23 lbs.)	1	380	13.9	47 500
			400	15.2	51 900
			415	16.5	56 300
	ECH9-65-783 13 kg (28 lbs.)	2	220	19.2	65 600
			230	20.9	71 400
			240	22.8	77 900
	ECH9-51/65-783 13 kg (28 lbs.)	2	380	19.2	65 600
			400	20.9	71 400
			415	22.8	77 900
	ECH9-65-943 13 kg (28 lbs.)	2	220	23.2	79 200
			230	25.3	86 400
			240	27.6	94 200
	ECH9-51/65-943 13 kg (28 lbs.)	2	380	23.2	79 200
			400	25.3	86 400
			415	27.6	94 200

BLOWER DATA

CHP9-261-263 (50Hz) BLOWER PERFORMANCE

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	590	1250	570	1200	530	1115	500	1050
25	0.1	560	1190	540	1135	500	1060	470	1000
50	0.2	530	1125	500	1055	470	990	440	925
75	0.3	490	1035	450	960	420	900	400	850
100	0.4	430	910	400	850	380	800	340	725
125	0.5	340	725	320	675	320	675	260	550
150	0.6	285	605	260	550	275	585	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-261-263 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	540	1140	510	1080	490	1040	470	990
25	0.1	510	1075	480	1025	460	975	440	925
50	0.2	470	990	440	940	420	890	400	850
75	0.3	420	890	400	840	370	790	350	750
100	0.4	370	780	340	725	320	680	300	640
125	0.5	310	665	280	600	270	570	250	525
150	0.6	265	560	----	----	----	----	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-261-263 (50Hz) BLOWER PERFORMANCE WITH RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	590	1245	560	1180	515	1095	465	985
25	0.1	530	1120	485	1030	455	965	425	900
50	0.2	470	1000	440	930	405	860	375	790
75	0.3	420	885	380	805	350	740	325	690
100	0.4	340	725	310	660	285	600	250	525

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-261-263 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT, RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	510	1080	475	1005	450	950	420	895
25	0.1	460	975	425	915	405	855	380	800
50	0.2	400	850	380	800	355	750	335	705
75	0.3	325	690	320	675	295	625	275	585
100	0.4	260	550	----	----	----	----	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

BLOWER DATA

CHP9-411-413 (50Hz) BLOWER PERFORMANCE

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	760	1600	700	1475	650	1380	600	1280
25	0.1	730	1550	670	1420	630	1325	590	1240
50	0.2	690	1480	640	1350	600	1270	560	1190
75	0.3	660	1400	610	1290	570	1210	530	1130
100	0.4	620	1320	570	1210	540	1140	510	1075
125	0.5	590	1250	540	1140	510	1075	480	1020
150	0.6	545	1155	510	1065	475	1010	460	970
175	0.7	490	1035	455	965	440	930	420	890

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-411-413 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	660	1390	620	1310	590	1250	560	1190
25	0.1	630	1340	590	1260	570	1210	540	1150
50	0.2	600	1280	570	1210	550	1160	520	1110
75	0.3	580	1220	540	1150	520	1110	500	1060
100	0.4	540	1150	520	1100	500	1050	480	1020
125	0.5	510	1080	490	1030	470	1000	450	960
150	0.6	480	1020	460	980	445	945	430	910

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

CHP9-411-413 (50Hz) BLOWER PERFORMANCE WITH RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	700	1480	655	1385	620	1315	590	1250
25	0.1	630	1330	585	1240	555	1180	530	1120
50	0.2	565	1195	510	1080	470	995	440	930
75	0.3	505	1070	455	960	415	880	385	820
100	0.4	455	965	400	850	----	----	----	----
125	0.5	420	890	----	----	----	----	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-411-413 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT, RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	610	1290	580	1230	560	1185	545	1150
25	0.1	545	1150	515	1090	500	1060	490	1040
50	0.2	480	1020	460	980	455	960	445	945
75	0.3	425	905	415	875	415	880	405	855
100	0.4	380	805	----	----	----	----	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

BLOWER DATA

CHP9-513 (50Hz) BLOWER PERFORMANCE

External Static Pressure		Air Volume @ Various Speeds							
		High		Medium-High		Medium-Low		Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	1060	2250	790	1680	650	1370	550	1160
25	0.1	1040	2200	780	1660	640	1360	550	1160
50	0.2	1010	2150	770	1640	640	1350	540	1150
75	0.3	990	2090	760	1610	630	1340	540	1140
100	0.4	960	2030	750	1580	620	1320	530	1130
125	0.5	930	1970	730	1550	610	1300	530	1120
150	0.6	900	1910	720	1520	600	1270	520	1110
175	0.7	870	1850	700	1480	590	1240	---	---

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-513 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT

External Static Pressure		Air Volume @ Various Speeds					
		High		Medium-High		Medium-Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	930	1980	750	1580	630	1330
25	0.1	910	1920	730	1550	620	1310
50	0.2	880	1870	710	1510	600	1280
75	0.3	860	1820	690	1470	590	1250
100	0.4	840	1770	670	1430	580	1220
125	0.5	810	1720	660	1390	560	1190
150	0.6	780	1650	635	1350	540	1140
175	0.7	750	1590	610	1300	---	---

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-513 (50Hz) BLOWER PERFORMANCE WITH RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds					
		High		Medium-High		Medium-Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	1010	2140	765	1620	635	1350
25	0.1	990	2100	745	1580	630	1335
50	0.2	965	2050	735	1560	620	1315
75	0.3	940	1990	720	1530	610	1295
100	0.4	910	1925	710	1500	600	1270
125	0.5	875	1850	690	1460	590	1245
150	0.6	850	1795	675	1430	570	1210
175	0.7	820	1735	655	1385	560	1185

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-513 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT, RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds					
		High		Medium-High		Medium-Low	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm	Liter/s	cfm
0	0	910	1930	725	1540	615	1300
25	0.1	885	1880	715	1510	600	1275
50	0.2	865	1830	695	1470	585	1240
75	0.3	840	1775	680	1440	570	1210
100	0.4	810	1720	655	1390	555	1180
125	0.5	770	1635	635	1350	545	1150
150	0.6	730	1550	615	1300	530	1120

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

BLOWER DATA

CHP9-653 (50Hz) BLOWER PERFORMANCE

External Static Pressure		Air Volume @ Various Speeds			
		High		Medium-High	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm
0	0	1040	2200	760	1610
25	0.1	1010	2150	760	1600
50	0.2	990	2100	750	1580
75	0.3	970	2050	740	1560
100	0.4	940	2000	720	1530
125	0.5	920	1940	710	1500
150	0.6	890	1880	690	1470
175	0.7	860	1820	670	1430
200	0.8	830	1760	655	1390
225	0.9	800	1700	635	1350

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-653 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT

External Static Pressure		Air Volume @ Various Speeds			
		High		Medium-High	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm
0	0	900	1910	730	1540
25	0.1	880	1860	720	1520
50	0.2	860	1820	700	1490
75	0.3	840	1770	690	1460
100	0.4	810	1720	670	1420
125	0.5	790	1670	660	1390
150	0.6	760	1610	635	1350

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-653 (50Hz) BLOWER PERFORMANCE WITH RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds			
		High		Medium-High	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm
0	0	985	2090	730	1550
25	0.1	965	2050	715	1520
50	0.2	945	2000	710	1500
75	0.3	920	1950	700	1480
100	0.4	895	1895	685	1450
125	0.5	860	1820	665	1410
150	0.6	835	1765	650	1380
175	0.7	805	1705	----	----
200	0.8	770	1635	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

CHP9-653 (50Hz) BLOWER PERFORMANCE WITH ELECTRIC HEAT, RT9-65, PSD9-65 AND DUCT DISTRIBUTION

External Static Pressure		Air Volume @ Various Speeds			
		High		Medium-High	
Pa	in. wg.	Liter/s	cfm	Liter/s	cfm
0	0	880	1860	710	1500
25	0.1	860	1820	700	1480
50	0.2	840	1780	685	1450
75	0.3	815	1725	670	1420
100	0.4	790	1670	650	1380
125	0.5	750	1585	----	----

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

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

BLOWER DATA

**CHP9-261-263 WITH RT9-65, PSD9-65
AND CEILING SUPPLY & RETURN
(With and Less Electric Heat)**

Blower Speed Setting		Air Volume @ Various Speeds With Various Discharge Grille Arrangements							
		FD-41 or FD-41-D Flush Model		RTD-41 Step-Down Model					
				2 Sides Open		3 Sides Open		4 Sides Open	
		With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.
High	Liter/s	455	505	420	465	425	480	440	490
	cfm	965	1075	895	990	905	1015	930	1040
Med-High	Liter/s	445	480	420	455	425	460	430	465
	cfm	940	1020	890	965	900	980	915	990
Med-Low	Liter/s	435	460	420	445	425	450	425	455
	cfm	920	970	885	940	895	950	905	960
Low	Liter/s	420	450	410	435	415	440	420	445
	cfm	895	950	870	920	880	930	885	940

**CHP9-411-413 WITH RT9-65, PSD9-65
AND CEILING SUPPLY & RETURN
(With and Less Electric Heat)**

Blower Speed Setting		Air Volume @ Various Speeds With Various Discharge Grille Arrangements							
		FD-41 or FD-41-D Flush Model		RTD-41 Step-Down Model					
				2 Sides Open		3 Sides Open		4 Sides Open	
		With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.
High	Liter/s	530	595	510	575	520	585	530	590
	cfm	1125	1260	1080	1220	1105	1240	1120	1250
Med-High	Liter/s	510	590	505	575	505	575	510	585
	cfm	1080	1245	1070	1215	1075	1220	1080	1240
Med-Low	Liter/s	495	575	490	560	495	565	495	570
	cfm	1050	1215	1040	1185	1045	1195	1050	1210
Low	Liter/s	490	540	480	530	485	535	490	540
	cfm	1035	1145	1020	1125	1030	1135	1035	1145

**CHP9-513 WITH RT9-65, PSD9-65
AND CEILING SUPPLY & RETURN
(With and Less Electric Heat)**

Blower Speed Setting		Air Volume @ Various Speeds With Various Discharge Grille Arrangements							
		FD-65 or FD-65-D Flush Model		RTD-65 Step-Down Model					
				2 Sides Open		3 Sides Open		4 Sides Open	
		With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.
High	Liter/s	840	885	850	900	860	960	875	980
	cfm	1780	1880	1800	1910	1825	2030	1850	2080
Med-High	Liter/s	695	715	700	720	710	740	715	755
	cfm	1470	1510	1480	1530	1500	1565	1520	1600
Med-Low	Liter/s	595	605	600	610	605	625	615	630
	cfm	1260	1285	1275	1295	1285	1320	1300	1340

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

**CHP9-653 WITH RT9-65, PSD9-65
AND CEILING SUPPLY & RETURN
(With and Less Electric Heat)**

Blower Speed Setting		Air Volume @ Various Speeds With Various Discharge Grille Arrangements							
		FD-65 or FD-65-D Flush Model		RTD-65 Step-Down Model					
				2 Sides Open		3 Sides Open		4 Sides Open	
		With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.	With Elec.	Less Elec.
High	Liter/s	825	875	835	890	845	945	860	965
	cfm	1750	1850	1770	1880	1795	2000	1820	2050
Med-High	Liter/s	690	700	695	710	705	720	710	735
	cfm	1460	1480	1475	1500	1490	1530	1505	1560

NOTE — Unit should not be operated in heating cycle at air volume within the shaded areas.

BLOWER DATA

FD FLUSH CEILING DIFFUSER AIR THROW DATA

Diffuser Model No.	Air Volume		*Effective Throw	
	Liter/s	cfm	meters	feet
FD-41 and FD-41-D	380	800	3.5	12
	425	900	4.0	13
	470	1000	4.5	14
	565	1200	5.0	16
	660	1400	5.5	18
FD-65 and FD-65-D	470	1000	2.5	9
	565	1200	3.5	11
	635	1350	3.5	12
	710	1500	4.5	14
	945	2000	5.5	18
	1060	2250	6.0	20

*Effective throw is terminated at a point where conditioned air velocity has decreased to 0.25 m/s (50 fpm).

RTD STEP DOWN CEILING DIFFUSER AIR THROW DATA

Diffuser Model No.	Air Volume		*Effective Throw						
			Horizontal Vanes 180° Straight		Horizontal Vanes 22° Down		Horizontal Vanes 45° Down		
	Liter/s	cfm	meters	feet	meters	feet	meters	feet	
RTD-41	Two Sides Open	380	800	12.0	39	10.5	34	7.0	23
		470	1000	13.0	43	11.5	38	8.0	26
		565	1200	14.5	48	13.0	42	9.0	29
		660	1400	16.5	54	14.5	48	10.0	33
	Three Sides Open	380	800	8.0	27	7.5	24	5.0	17
		470	1000	9.0	30	8.0	27	6.0	19
		565	1200	10.5	34	9.0	30	6.5	21
		660	1400	12.0	39	10.5	34	7.5	24
	Four Sides Open	380	800	6.5	22	6.0	20	4.5	14
		470	1000	7.5	24	6.5	22	4.5	15
		565	1200	8.0	27	7.5	24	5.0	17
		660	1400	9.0	30	8.0	26	6.0	19
RTD-65	Two Sides Open	565	1200	12.5	41	11.5	37	8.0	27
		755	1600	13.5	45	12.5	41	9.0	29
		945	2000	15.5	51	13.5	45	9.5	31
		1060	2250	17.0	56	15.0	50	10.5	34
	Three Sides Open	565	1200	9.0	29	8.0	27	5.5	18
		755	1600	9.5	31	9.0	29	6.0	20
		945	2000	10.5	35	9.5	31	6.5	22
		1060	2250	12.0	40	10.5	35	7.5	25
	Four Sides Open	565	1200	6.5	22	6.0	20	4.5	15
		755	1600	7.5	25	6.5	22	5.0	16
		945	2000	8.5	28	7.5	25	5.0	17
		1060	2250	9.0	30	8.0	27	5.5	18

*Effective throw is terminated at a point where conditioned air velocity has decreased to 0.25 m/s (50 fpm).

