

CHP20R
ELITE® SERIES - RESIDENTIAL

2 to 5 Ton (7.0 to 17.6 kW)

SEER - up to 12.65

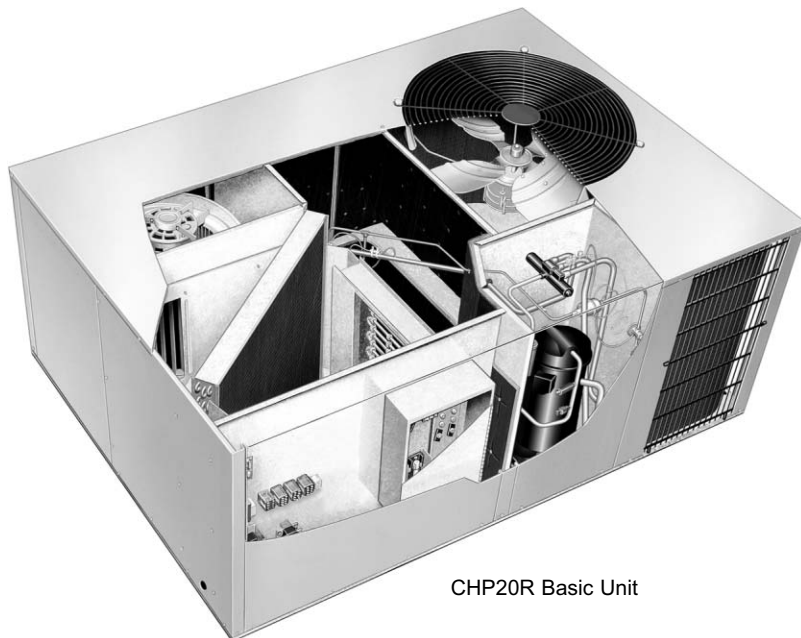
Net Cooling Capacity - 24,000 to 59,000 Btuh (7.0 to 17.3 kW)

Heating Capacity - 24,200 to 56,000 (7.1 to 16.4 kW)

Optional Electric Heat - 5 to 25 kW

Bulletin No. 210359

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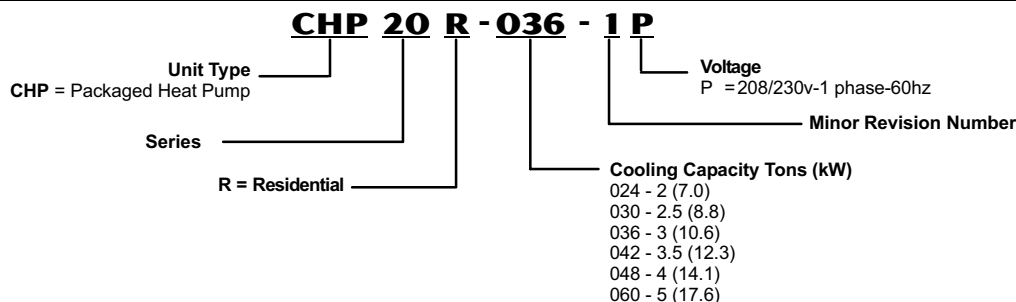


CHP20R Basic Unit



REGISTERED
QUALITY
SYSTEMS

MODEL NUMBER IDENTIFICATION



FEATURES

Application

- SEER of up to 12.65.
- 2 through 5 ton (7.0 through 17.6 kW).
- Single phase power supply.
- Bottom (down-flow) or horizontal supply and return air.
- Designed for outdoor rooftop or ground level installations in residential applications.

Approvals

- Certified in accordance with the USE certification program, which is based on ARI Standard 210/240-94.
- Sound rated in the Lennox reverberant sound test room in accordance with test conditions included in ARI Standard 270-95.
- Tested in the Lennox Research Laboratory environmental test room.
- Rated according to U.S. Department of Energy (DOE) test procedures.
- Units and components within are bonded for grounding to meet safety standards for servicing required by CSA, NEC and CEC.
- Blower data is from unit tests conducted in the Lennox Laboratory air test chamber.
- Optional electric heaters are UL and ULC listed and are rated and tested according to DOE test procedures and FTC labeling regulations.
- Developed in accordance with ISO 9002 quality standards.

FEATURES

Equipment Warranty

- Compressor - limited warranty for ten years in residential applications, 5 years in non-residential applications.
- All other covered components - limited warranty for five years in residential applications, one year in non-residential applications.
- Refer to Lennox Equipment Limited Warranty certificate for specific details.

Refrigeration System

- All models include: check/expansion valve, reversing valve, filter drier, suction and liquid line service gauge ports and full refrigerant charge.
- Freezestat prevents coil freeze-up during low ambient operation or loss of air flow.
- Low ambient operation down to 30°F (-1°C) in cooling mode without additional controls.

Cabinet

- Heavy gauge, galvanized steel cabinet with five station metal wash process.
- Powder enamel paint, electrostatically bonded to the metal, provides superior rust and corrosion protection.
- Control box is conveniently located with all controls factory wired.
- Large removable panels provide service access.
- Base section and cabinet panels exposed to conditioned air are lined with thick fiberglass insulation.
- Flanged supply and return air openings.
- Electrical inlets furnished for entry into the cabinet.
- Indoor coil drain pan constructed of painted, corrosion resistant galvanized steel with galvanized steel pipe drain outlet coupling.
- Lifting brackets factory installed.

Coil Guards

- PVC coated steel wire guards to protect outdoor coil.
- Not for use with optional Hail Guards.

Copeland Scroll™ Compressor

- Compressor features high efficiency with uniform suction flow, constant discharge flow and high volumetric efficiency and quiet operation.
- Compressor consists of two involute spiral scrolls matched together to generate a series of crescent shaped gas pockets between them.
- During compression, one scroll remains stationary while the other scroll orbits around it.
- Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates.
- As the spiral movement continues, gas pockets are pushed to the center of the scrolls. Volume between the pockets is simultaneously reduced.
- When pocket reaches the center, gas is now at high pressure and is forced out of a port located in the center of the fixed scrolls.
- During compression, several pockets are compressed simultaneously resulting in a smooth continuous compression cycle.
- Continuous flank contact, maintained by centrifugal force, minimizes gas leakage and maximizes efficiency.
- Scroll compressor is tolerant to the effects of slugging and contaminants. If this occurs, scrolls separate, allowing liquid or contaminants to be worked toward the center and discharged.
- Low gas pulses during compression reduces operational sound levels.
- Compressor motor is internally protected from excessive current and temperature.
- Compressor is installed in the unit on resilient rubber mounts for vibration free operation.



Outdoor Coil Fan

- Direct drive fan moves large air volumes uniformly through entire outdoor coil for high refrigerant cooling capacity.
- Vertical air discharge keeps air up and away from building.
- Permanently lubricated, permanent split capacitor (PSC) motor.
- Motor totally enclosed for maximum protection from weather, dust and corrosion.
- Corrosion resistant PVC (polyvinyl chloride) coated steel wire fan guard is furnished as standard.

Copper Tube/Enhanced Fin Coil

- Lennox designed and fabricated coil.
- Ripple-edged aluminum fins.
- Long life copper tubing for ease of field servicing.
- Copper tube construction, indoor coil tubes are rifled for improved efficiency.
- Lanced fins provide maximum exposure of fin surface to air stream resulting in excellent heat transfer.
- Fin collars grip tubing for maximum contact area.
- Flared shoulder tubing connections/silver soldering construction.
- Corrosion resistant PVC (polyvinyl chloride) coated steel coil guard furnished on all models.
- Coil is factory tested under high pressure to insure leakproof construction.

Defrost Control

- A solid-state defrost control board is furnished as standard equipment. It gives a defrost cycle (14 minutes) for every 30, 60 or 90 minutes (adjustable) of compressor "on" time at outdoor coil temperature below 35°F (1.7°C).
- A sensing element mounted on the low pressure side of the outdoor thermal expansion valve determines when the defrost cycle is required. Pressure switch mounted on discharge vapor line terminates defrost cycle.

Blower

- Multi-speed direct drive blowers.
- Each blower assembly statically and dynamically balanced.
- Multiple-speed permanent split capacitor (PSC) motor resiliently mounted.
- Blower speeds are easily changed on the blower motor.
- See blower performance tables.

Filter (Not Furnished)

- Filter and provisions for mounting must be field provided.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Ceiling Diffusers

- Aluminum grilles, large center grille, insulated diffuser box with flanges, hanging rings furnished, interior transition (even air flow), internally sealed (prevents recirculation), adapts to T-bar ceiling grids or plaster ceilings.
- Step-Down diffusers feature double deflection louvers.
- Flush diffusers have fixed blade louvers.

Ceiling Diffuser Transitions (Supply and Return)

- Used with diffusers and installs in roof mounting frame.
- Galvanized steel construction, flanges furnished for duct connection, fully insulated.

Electric Heat

- Helix wound nichrome elements, time delay for element staging, individual element limit controls, wiring harness, may be two-stage controlled.
- **ECH16R** - Supplemental thermal cutoff safety fuses and thermal relay sequencer.
- **ECH16** - Supplemental secondary limits, heating control relay, fuse block, thermal relay sequencer (20-25 kW 208/230v) and galvanized steel control box.

Electric Heat Single Point Power Source Sub-Fuse Box

- Use with ECH16R electric heaters in conjunction with ECH16 fuse box for single point power source applications.
- Installs internal to unit.
- Fuses furnished.
- Constructed of galvanized steel with prepunched mounting holes

Unit Single Point Power Source Sub Fuse Box

- Installs internal to unit, provides sub-fusing to the unit, used in conjunction with ECH16 or ECH16R for single point power source applications.
- Fuses furnished.
- Constructed of galvanized steel with prepunched mounting holes and electrical inlet and outlet holes, hinged box cover.

Hail Guards

- Heavy duty field installed coil guard protects coils from damage. Not for use with Coil Guards.

Low Ambient Control Kit

- Units operate down to 30°F (-1°C) outdoor air temperature in cooling mode without any additional controls.
- Low Ambient Kit can be field installed, enabling unit to operate properly down to 0°F (-17.7°C).

Outdoor Air Damper Section (Down-Flow)

- Damper assembly replaces blower access panel.
- Manually adjustable, 0 to 25% (fixed) outdoor air.
- Outdoor air hood with cleanable filter included.

Outdoor Thermostat Kit

- Used to lock out some of the electric heating elements on indoor units where two stage control is applicable.
- Outdoor thermostat maintains the heating load on the low power input as long as possible before allowing the full power load to come on line.

Roof Curb Power Entry Kit

- Allows power entry through roof mounting frame, knockouts provided in roof frame.
- Kit contains 40 in. (1016 mm) armored conduit and installation hardware.
- Two kits are required, one for low voltage and one for high voltage.
- See Dimension Drawing.

Roof Mounting Frame

- Nailer strip furnished, mates to unit, U.S. National Roofing Contractors Approved, shipped knocked down.
- RMF16-41 may be used on all sizes, with a slight unit overhang on CHP20R-036-042-048-060 units.
- Sound Reduction Plate must be ordered separately for field installation (US Only).

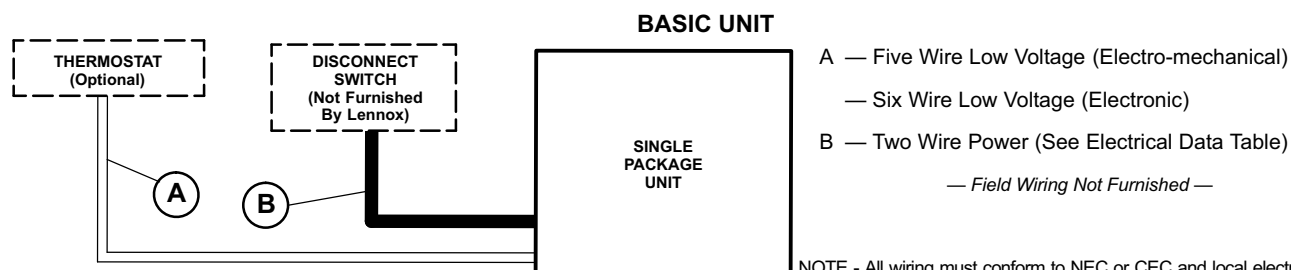
Timed Off Control

- Prevents compressor short-cycling and allows time for suction and discharge pressure to equalize, permitting the compressor to start in an unloaded condition.
- Automatic reset control provides a time delay between compressor shutoff and start-up.

Unit Stand-Off Mounting Kit

- Elevates horizontal application units above mounting surface.
- Includes six high impact polystyrene stand-off mounts.
- See dimension drawings.

FIELD WIRING



NOTE - All wiring must conform to NEC or CEC and local electrical codes.

SPECIFICATIONS

		Model No.	CHP20R-024	CHP20R-030	CHP20R-036
Heating/ Cooling Performance	Nominal Tonnage (kW)		2 (7.0)	2.5 (8.8)	3 (10.5)
	★ARI Cooling Ratings	Cooling Capacity - Btuh (kW)	24,000 (7.0)	30,200 (8.8)	37,400 (11.0)
		Total unit watts	2555	3145	3475
		SEER (Btuh/Watts)	11.00	11.00	12.65
		EER (Btuh/Watts)	9.4	9.6	10.8
	★ARI High Temperature Heating Ratings	Total Capacity - Btuh (kW)	24,200 (7.1)	29,800 (8.7)	35,200 (10.3)
		Total unit watts	2245	2800	3280
		C.O.P	3.16	3.12	3.14
		HSPF - Region IV (Region V)	6.60 (5.90)	6.60 (5.90)	6.90 (6.10)
	★ARI Low Temperature Heating Ratings	Total Capacity - Btuh (kW)	14,800 (4.3)	18,600 (5.4)	22,200 (6.5)
Total unit watts		2085	2595	3060	
C.O.P		2.06	2.10	2.10	
	*Sound Rating Number (dB)	80	80	82	
	Refrigerant Charge (HCFC-22)	5 lbs. 0 oz. (2.27 kg)	6 lbs. 8 oz. (2.95 kg)	9 lbs. 12 oz. (4.42 kg)	
Outdoor Coil	Net face area - sq. ft. (m ²)	Outer coil	8.6 (0.80)	8.6 (0.80)	14.3 (1.33)
		Inner coil	5.3 (0.49)	8.3 (0.77)	9.9 (1.28)
	Tube diameter - in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
	Number of rows	1.6	2	1.7	
	Fins per inch (m)	20 (787)	20 (787)	20 (787)	
Outdoor Coil Fan	Motor output - hp (W)	1/6 (124)	1/6 (124)	1/4 (187)	
	Motor watts	220	220	340	
	Diameter - in. (mm)	20 (508)	20 (508)	24 (610)	
	Number of blades	4	4	4	
	Air Volume - cfm (L/s)	2350 (1110)	2200 (1040)	3600 (1700)	
Indoor Coil	Net face area - sq. ft. (m ²)	3.2 (0.30)	4.1 (0.38)	5.8 (0.54)	
	Tube diameter - in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
	Number of rows	3	3	3	
	Fins per inch (m)	15 (591)	15 (591)	15 (591)	
	Condensate drain coupling size npt - in.	3/4	3/4	3/4	
Indoor Coil Blower	Motor output - hp (W)	1/3 (249)	1/3 (249)	1/2 (373)	
	Wheel nominal diameter x width - in. (mm)	9 x 8 (229 x 203)	10 x 7 (254 x 178)	10 x 8 (254 x 203)	
Shipping Data	Net weight, basic unit	305 lbs. (138 kg)	355 lbs. (161 kg)	455 lbs. (206 kg)	
	Shipping weight, basic unit - 1 pkg.	390 lbs. (177 kg)	419 lbs. (190 kg)	525 lbs. (238 kg)	
Electrical characteristics (60 hz)		208/230V-1ph	208/230V-1ph	208/230V-1ph	
OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA					
Ceiling Diffusers	Step-Down - Net weight	RTD9-65 - 67 lbs. (30 kg)	RTD9-65 - 67 lbs. (30 kg)	RTD9-65 - 67 lbs. (30 kg)	
	Flush - Net weight	FD9-65 - 37 lbs.(17 kg)	FD9-65 - 37 lbs.(17 kg)	FD9-65 - 37 lbs.(17 kg)	
Ceiling Diffuser Transitions (Supply and Return) - Net weight		SRT16-65 - 20 lbs. (9 kg)	SRT16-65 - 20 lbs. (9 kg)	SRT16-65 - 20 lbs. (9 kg)	
Electric Heat See Electric Heat Data Tables Pages 11-12					
Electric Heat or Unit Single Point Power Source Sub-Fuse See Electric Heat Data Tables, Pages 11-12					
Hail Guards		90N90 (2 per order)	90N90 (2 per order)	90N91 (3 per order)	
Low Ambient Control Kit		27J00	27J00	27J00	
Outdoor Air Damper Section	Down-Flow -Net Weight	OAD16-41 - 12 lbs. (5 kg)	OAD16-41 - 12 lbs. (5 kg)	OAD16-65 - 12 lbs. (5 kg)	
	Number and size of filter - in. (mm)	(1) 5 x 17 x 1 (127 x 432 x 25)	(1) 5 x 17 x 1 (127 x 432 x 25)	(1) 8 x 17 x 1 (203 x 432 x 25)	
Outdoor Thermostat Kit	Thermostat Kit	56A87	56A87	56A87	
	Mounting Box	31461	31461	31461	
Roof Curb Power Entry Kit	1/2 in. (13 mm)	18H70	18H70	18H70	
	1 in. (26 mm)	18H71	18H71	18H71	
	1-1/2 in. (39 mm)	18H72	18H72	18H72	
Roof Mounting Frame	Frame - Net Weight	RMF16-41 - 75 lbs. (35 kg)	RMF16-41 - 75 lbs. (35 kg)	RMF16-41 - 75 lbs. (35 kg) or RMF16-65 - 86 lbs. (39 kg)	
	Sound Reduction Plate - US Only - For RMF16-41 For RMF16-65	73H80 ---	73H80 ---	73H80 73H82	
Timed Off Control		47J27	47J27	47J27	
Unit Stand-Off Mounting Kit		38H18	38H18	38H18	

*Sound Rating Number in accordance with test conditions included in ARI Standard 270.

★Certified in accordance with the USE certification program, which is based on ARI standard 210/240.

Cooling Ratings— 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19.5°C) wb entering indoor coil air.

High Temperature Heating Ratings— 47°F (8°C) db/43°F (6°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

Low Temperature Heating Ratings— 17°F (-8°C) db/15°F (-9°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

SPECIFICATIONS

		Model No.	CHP20R-042	CHP20R-048	CHP20R-060
Heating/ Cooling Performance	Nominal Tonnage (kW)		3.5 (12.3)	4 (14.0)	5 (17.5)
	★ARI Cooling Ratings	Cooling Capacity - Btuh (kW)	43,000 (12.6)	48,000 (14.1)	59,000 (17.3)
		Total unit watts	4105	4500	5790
		SEER (Btuh/Watts)	12.05	12.55	12.00
		EER (Btuh/Watts)	10.5	10.7	10.2
	★ARI High Temperature Heating Ratings	Total Capacity - Btuh (kW)	41,500 (12.2)	46,500 (13.6)	56,000 (16.4)
		Total unit watts	3880	4135	5110
		C.O.P	3.20	3.30	3.22
		HSPF - Region IV (Region V)	7.15 (6.30)	7.20 (6.20)	7.20 (6.20)
	★ARI Low Temperature Heating Ratings	Total Capacity - Btuh (kW)	26,200 (7.7)	28,200 (8.3)	33,000 (9.7)
Total unit watts		3515	3725	4485	
	C.O.P	2.26	2.22	2.16	
	*Sound Rating Number (dB)	82	82	82	
	Refrigerant Charge (HCFC-22)	9 lbs. 12 oz. (4.42 kg)	10 lbs. 4 oz. (4.65 kg)	11 lbs. 0 oz. (4.99 kg)	
Outdoor Coil	Net face area - sq. ft. (m ²)	Outer coil	14.3 (1.33)	14.3 (1.33)	14.3 (1.33)
		Inner coil	9.9 (1.28)	13.8 (1.28)	13.8 (1.28)
	Tube diameter - in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
	Number of rows	1.7	2	2	
	Fins per inch (m)	20 (787)	20 (787)	20 (787)	
Outdoor Coil Fan	Motor output - hp (W)	1/4 (187)	1/4 (187)	1/4 (187)	
	Motor watts	340	340	340	
	Diameter - in. (mm)	24 (610)	24 (610)	24 (610)	
	Number of blades	4	4	4	
	Air Volume - cfm (L/s)	3600 (1700)	3600 (1700)	3600 (1700)	
Indoor Coil	Net face area - sq. ft. (m ²)	5.8 (0.54)	5.8 (0.54)	5.8 (0.54)	
	Tube diameter - in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
	Number of rows	3	4	4	
	Fins per inch (m)	15 (591)	14 (551)	14 (551)	
	Condensate drain coupling size npt - in.	3/4	3/4	3/4	
Indoor Coil Blower	Motor output - hp (W)	1/2 (373)	3/4 (560)	3/4 (560)	
	Wheel nominal diameter x width - in. (mm)	10 x 8 (254 x 203)	11 x 8 (279 x 203)	11 x 8 (279 x 203)	
Shipping Data	Net weight, basic unit	455 lbs. (206 kg)	535 lbs. (243 kg)	535 (243)	
	Shipping weight, basic unit - 1 pkg.	525 lbs. (238 kg)	610 lbs. (277 kg)	610 (277)	
Electrical characteristics (60 hz)		208/230V-1ph	208/230V-1ph	208/230V-1ph	
OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA					
Ceiling Diffusers	Step-Down - Net Weight	RTD9-65 - 67 lbs. (30 kg)	RTD9-65 - 67 lbs. (30 kg)	RTD9-65 - 67 lbs. (30 kg)	
	Flush - Net Weight	FD9-65 - 37 lbs.(17 kg)	FD9-65 - 37 lbs.(17 kg)	FD9-65 - 37 lbs.(17 kg)	
Ceiling Diffuser Transitions (Supply and Return)		SRT16-65 - 20 lbs. (9 kg)	SRT16-65 - 20 lbs. (9 kg)	SRT16-65 - 20 lbs. (9 kg)	
Electric Heat		See Electric Heat Data Tables Pages 11-12			
Electric Heat or Unit Single Point Power Source Sub-Fuse		See Electric Heat Data Tables, Pages 11-12			
Hail Guards		90N91 (3 per order)	90N91 (3 per order)	90N91 (3 per order)	
Low Ambient Control Kit		27J00	27J00	27J00	
Outdoor Air Damper Section	Down-flow - Net Weight	OAD16-65 - 12 lbs. (5 kg)	OAD16-65 - 12 lbs. (5 kg)	OAD16-65 - 12 lbs. (5 kg)	
	Number and Size of Filter - in. (mm)	(1) 8 x 17 x 1 (203 x 432 x 25)	(1) 8 x 17 x 1 (203 x 432 x 25)	(1) 8 x 17 x 1 (203 x 432 x 25)	
Outdoor Thermostat Kit	Thermostat Kit	56A87	56A87	56A87	
	Mounting Box	31461	31461	31461	
Roof Curb Power Entry Kit	1/2 in. (13 mm)	18H70	18H70	18H70	
	1 in. (26 mm)	18H71	18H71	18H71	
	1-1/2 in. (39 mm)	18H72	18H72	18H72	
Roof Mounting Frame	Frame - Net Weight	RMF16-41 - 75 lbs. (35 kg) or RMF16-65 - 86 lbs. (39 kg)	RMF16-41 - 75 lbs. (35 kg) or RMF16-65 - 86 lbs. (39 kg)	RMF16-41 - 75 lbs. (35 kg) or RMF16-65 - 86 lbs. (39 kg)	
		Sound Reduction Plate - US Only - For RMF16-41 RMF16-65	73H80 73H82	73H80 73H82	73H80 73H82
	Timed Off Control		47J27	47J27	47J27
Unit Stand-Off Mounting Kit		38H18	38H18	38H18	

*Sound Rating Number in accordance with test conditions included in ARI Standard 270.

★Certified in accordance with the USE certification program, which is based on ARI standard 210/240.

Cooling Ratings— 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19.5°C) wb entering indoor coil air.

High Temperature Heating Ratings— 47°F (8°C) db/43°F (6°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

Low Temperature Heating Ratings— 17°F (-8°C) db/15°F (-9°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.

COOLING AND HEATING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

CHP20R-024 — COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	640	300	23.5	6.9	1.75	.70	.83	.96	22.6	6.6	1.98	.71	.85	.97	21.7	6.4	2.23	.72	.87	.99	20.8	6.1	2.51	.74	.89	1.00
	800	380	24.5	7.2	1.76	.75	.90	1.00	23.5	6.9	1.98	.77	.92	1.00	22.6	6.6	2.23	.78	.94	1.00	21.7	6.4	2.52	.80	.96	1.00
	960	455	25.3	7.4	1.76	.80	.96	1.00	24.3	7.1	1.99	.82	.98	1.00	23.4	6.9	2.24	.84	.99	1.00	22.5	6.6	2.52	.86	1.00	1.00
67°F (19°C)	640	300	25.1	7.4	1.76	.55	.67	.80	24.1	7.1	1.99	.56	.69	.81	23.2	6.8	2.24	.56	.70	.83	22.2	6.5	2.52	.57	.71	.85
	800	380	26.0	7.6	1.76	.58	.73	.87	24.9	7.3	2.00	.59	.74	.89	23.9	7.0	2.25	.60	.76	.91	22.9	6.7	2.53	.61	.77	.92
	960	455	26.6	7.8	1.77	.61	.78	.93	25.5	7.5	2.00	.62	.80	.95	24.5	7.2	2.26	.63	.81	.97	23.4	6.9	2.54	.65	.84	.99
71°F (22°C)	640	300	26.8	7.9	1.77	.42	.54	.65	25.8	7.6	2.00	.42	.54	.66	24.8	7.3	2.26	.42	.55	.67	23.7	6.9	2.53	.43	.56	.69
	800	380	27.7	8.1	1.77	.43	.56	.70	26.6	7.8	2.01	.43	.57	.72	25.5	7.5	2.26	.43	.59	.73	24.4	7.2	2.54	.44	.60	.75
	960	455	28.4	8.3	1.77	.44	.60	.76	27.2	8.0	2.01	.44	.61	.77	26.0	7.6	2.27	.45	.62	.79	24.9	7.3	2.55	.45	.63	.81

CHP20R-030 — COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	30.0	8.8	2.15	.72	.85	.97	28.9	8.5	2.42	.72	.86	.98	27.8	8.1	2.73	.74	.88	1.00	26.5	7.8	3.10	.75	.90	1.00
	1000	470	31.2	9.1	2.16	.77	.92	1.00	30.1	8.8	2.43	.78	.93	1.00	28.9	8.5	2.75	.79	.95	1.00	27.6	8.1	3.12	.81	.97	1.00
	1200	565	32.2	9.4	2.17	.82	.97	1.00	31.1	9.1	2.43	.84	.99	1.00	29.9	8.8	2.76	.85	1.00	1.00	28.7	8.4	3.12	.87	1.00	1.00
67°F (19°C)	800	380	31.9	9.3	2.17	.56	.69	.82	30.8	9.0	2.44	.57	.70	.83	29.5	8.6	2.76	.58	.71	.84	28.3	8.3	3.12	.59	.73	.86
	1000	470	33.0	9.7	2.18	.59	.74	.88	31.8	9.3	2.45	.60	.76	.90	30.5	8.9	2.77	.61	.77	.92	29.2	8.6	3.14	.62	.79	.94
	1200	565	33.8	9.9	2.19	.62	.80	.95	32.6	9.6	2.46	.63	.81	.96	31.2	9.1	2.78	.64	.83	.98	29.8	8.7	3.15	.66	.85	1.00
71°F (22°C)	800	380	34.1	10.0	2.19	.43	.55	.66	32.9	9.6	2.47	.43	.55	.67	31.6	9.3	2.78	.43	.56	.69	30.2	8.9	3.15	.43	.57	.70
	1000	470	35.2	10.3	2.20	.43	.58	.72	33.9	9.9	2.48	.44	.59	.73	32.5	9.5	2.79	.44	.59	.74	31.0	9.1	3.16	.45	.61	.76
	1200	565	35.9	10.5	2.21	.45	.61	.77	34.6	10.1	2.49	.45	.62	.79	33.1	9.7	2.81	.46	.64	.80	31.6	9.3	3.17	.46	.65	.83

CHP20R-024 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input
640	300	29.2	8.6	2.02	22.6	6.6	1.87	15.7	4.6	1.73	10.8	3.2	1.48	5.4	1.6	1.12
800	380	29.6	8.7	1.89	23.0	6.7	1.74	16.1	4.7	1.60	11.2	3.3	1.35	5.8	1.7	.99
960	455	29.9	8.8	1.81	23.3	6.8	1.66	16.4	4.8	1.52	11.5	3.4	1.27	6.1	1.8	.91

CHP20R-030 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input
800	380	36.0	10.6	2.43	27.6	8.1	2.26	18.7	5.5	2.08	13.8	4.0	1.87	6.8	2.0	1.40
1000	470	36.5	10.7	2.27	28.1	8.2	2.10	19.2	5.6	1.92	14.3	4.2	1.71	7.3	2.1	1.24
1200	565	37.1	10.9	2.17	28.7	8.4	2.00	19.8	5.8	1.82	14.9	4.4	1.61	7.9	2.3	1.14

CHP20R-024 - HEATING PERFORMANCE at 800 cfm (380 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	1.89	29.6	8.7	
60	16	1.84	28.1	8.2	
55	13	1.80	26.5	7.8	
50	10	1.76	25.0	7.3	
47	8	1.74	24.1	7.1	
45	7	1.74	23.0	6.7	
40	4	1.73	20.4	6.0	
35	2	1.72	17.8	5.2	
30	-1	1.66	16.9	5.0	
25	-4	1.60	16.1	4.7	
20	-7	1.53	15.3	4.5	
17	-8	1.50	14.8	4.3	
15	-9	1.48	14.1	4.1	
10	-12	1.44	12.6	3.7	
5	-15	1.35	11.2	3.3	
0	-18	1.26	9.9	2.9	
-5	-21	1.17	8.5	2.5	
-10	-23	1.08	7.1	2.1	
-15	-26	.99	5.8	1.7	
-20	-29	.90	4.4	1.3	

CHP20R-030 - HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	2.27	36.5	10.7	
60	16	2.23	34.7	10.2	
55	13	2.18	32.8	9.6	
50	10	2.14	30.9	9.1	
47	8	2.12	29.8	8.7	
45	7	2.10	28.1	8.2	
40	4	2.03	24.0	7.0	
35	2	1.97	19.9	5.8	
30	-1	1.94	19.5	5.7	
25	-4	1.92	19.2	5.6	
20	-7	1.89	18.8	5.5	
17	-8	1.88	18.6	5.5	
15	-9	1.86	17.9	5.2	
10	-12	1.82	16.0	4.7	
5	-15	1.71	14.3	4.2	
0	-18	1.59	12.5	3.7	
-5	-21	1.48	10.8	3.2	
-10	-23	1.36	9.0	2.6	
-15	-26	1.24	7.3	2.1	
-20	-29	1.13	5.6	1.6	

COOLING AND HEATING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

CHP20R-036 COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	960	455	36.7	10.8	2.34	.74	.87	1.00	35.4	10.4	2.63	.75	.88	1.00	34.0	10.0	2.97	.76	.90	1.00	32.5	9.5	3.36	.77	.92	1.00
	1200	565	38.2	11.2	2.35	.79	.94	1.00	36.8	10.8	2.64	.80	.96	1.00	35.4	10.4	2.98	.82	.98	1.00	33.9	9.9	3.37	.84	1.00	1.00
	1440	680	39.4	11.5	2.36	.84	1.00	1.00	38.1	11.2	2.65	.86	1.00	1.00	36.7	10.8	2.99	.87	1.00	1.00	35.3	10.3	3.38	.90	1.00	1.00
67°F (19°C)	960	455	39.2	11.5	2.35	.58	.71	.84	37.8	11.1	2.65	.58	.72	.85	36.3	10.6	2.99	.59	.73	.87	34.8	10.2	3.37	.60	.75	.89
	1200	565	40.6	11.9	2.36	.61	.76	.91	39.1	11.5	2.66	.62	.78	.93	37.5	11.0	3.00	.63	.79	.95	35.9	10.5	3.38	.64	.81	.97
	1440	680	41.6	12.2	2.37	.64	.82	.98	40.0	11.7	2.66	.65	.83	.99	38.4	11.3	3.00	.66	.85	1.00	36.7	10.8	3.39	.67	.87	1.00
71°F (22°C)	960	455	41.9	12.3	2.37	.44	.56	.68	40.4	11.8	2.66	.44	.57	.69	38.9	11.4	3.00	.44	.57	.70	37.2	10.9	3.39	.44	.58	.72
	1200	565	43.3	12.7	2.38	.45	.59	.74	41.7	12.2	2.67	.45	.60	.75	40.1	11.8	3.01	.45	.61	.77	38.3	11.2	3.40	.46	.62	.79
	1440	680	44.3	13.0	2.38	.46	.63	.79	42.6	12.5	2.68	.47	.64	.81	40.9	12.0	3.02	.47	.65	.83	39.1	11.5	3.41	.47	.67	.85

CHP20R-042 COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1225	580	41.8	12.3	2780	.78	.94	1.00	39.7	11.6	3100	.79	.96	1.00	37.8	11.1	3500	.81	.99	1.00	35.8	10.5	4000	.82	1.00	1.00
	1400	660	43.0	12.6	2800	.81	.98	1.00	41.0	12.0	3120	.82	1.00	1.00	39.1	11.5	3520	.84	1.00	1.00	37.1	10.9	4030	.86	1.00	1.00
	1575	745	44.0	12.9	2810	.84	1.00	1.00	42.2	12.4	3140	.85	1.00	1.00	40.3	11.8	3550	.87	1.00	1.00	38.5	11.3	4070	.89	1.00	1.00
67°F (19°C)	1225	580	44.4	13.0	2820	.61	.76	.91	42.5	12.5	3150	.62	.77	.92	40.5	11.9	3550	.62	.79	.94	38.4	11.3	4060	.63	.81	.96
	1400	660	45.7	13.4	2840	.63	.79	.95	43.6	12.8	3170	.64	.81	.97	41.5	12.2	3580	.65	.83	.99	39.4	11.5	4090	.66	.85	1.00
	1575	745	46.8	13.7	2860	.65	.82	.99	44.6	13.1	3190	.66	.85	1.00	42.4	12.4	3600	.67	.87	1.00	40.3	11.8	4120	.68	.89	1.00
71°F (22°C)	1225	580	47.0	13.8	2860	.45	.59	.76	45.0	13.2	3200	.46	.60	.77	42.9	12.6	3610	.46	.61	.78	40.8	12.0	4130	.46	.63	.80
	1400	660	48.4	14.2	2880	.46	.62	.79	46.3	13.6	3220	.46	.63	.80	44.1	12.9	3640	.47	.64	.81	41.9	12.3	4160	.47	.65	.83
	1575	745	49.5	14.5	2900	.47	.64	.82	47.3	13.9	3240	.47	.65	.83	45.1	13.2	3670	.48	.66	.85	42.8	12.5	4190	.48	.68	.87

CHP20R-036 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW
960	455	42.3	12.4	2.81	32.6	9.6	2.60	22.2	6.5	2.38	16.3	4.8	2.15	8.0	2.3	1.62
1200	565	43.0	12.6	2.63	33.3	9.8	2.42	22.9	6.7	2.20	17.0	5.0	1.96	8.7	2.5	1.43
1440	680	43.7	12.8	2.52	34.0	10.0	2.31	23.6	6.9	2.09	17.7	5.2	1.85	9.4	2.8	1.32

CHP20R-042 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW	Comp. Motor kW Input	Total Heating Capacity kBtuh	kW
1225	580	51.8	15.2	3400	39.3	11.5	3050	28.5	8.4	2775	19.5	5.7	2385	9.6	2.8	1830
1400	660	52.5	15.4	3245	40.0	11.7	2895	29.2	8.6	2620	20.3	5.9	2230	10.3	3.0	1675
1575	745	53.2	15.6	3135	40.7	11.9	2785	29.9	8.8	2510	20.9	6.1	2125	11.0	3.2	1570

CHP20R-036 - HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.63	43.0	12.6
60	16	2.58	40.8	12.0
55	13	2.53	38.6	11.3
50	10	2.48	36.5	10.7
47	8	2.45	35.1	10.3
45	7	2.42	33.3	9.8
40	4	2.33	28.6	8.4
35	2	2.24	24.0	7.0
30	-1	2.22	23.4	6.9
25	-4	2.20	22.9	6.7
20	-7	2.18	22.4	6.6
17	-8	2.16	22.1	6.5
15	-9	2.14	21.3	6.2
10	-12	2.10	19.1	5.6
5	-15	1.96	17.0	5.0
0	-18	1.83	14.9	4.4
-5	-21	1.70	12.9	3.8
-10	-23	1.57	10.8	3.2
-15	-26	1.43	8.7	2.5
-20	-29	1.30	6.6	1.9

CHP20R-042 - HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.25	52.5	15.4
60	16	3.16	49.4	14.5
55	13	3.08	46.3	13.6
50	10	2.99	43.2	12.7
47	8	2.94	41.4	12.1
45	7	2.90	40.0	11.7
40	4	2.79	36.5	10.7
35	2	2.70	33.1	9.7
30	-1	2.66	31.2	9.1
25	-4	2.62	29.2	8.6
20	-7	2.59	27.3	8.0
17	-8	2.56	26.2	7.7
15	-9	2.51	25.2	7.4
10	-12	2.37	22.7	6.7
5	-15	2.23	20.3	5.9
0	-18	2.09	17.8	5.2
-5	-21	1.96	15.3	4.5
-10	-23	1.82	12.8	3.8
-15	-26	1.68	10.3	3.0
-20	-29	1.54	7.9	2.3

COOLING AND HEATING RATINGS

NOTE - For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

CHP20R-048 COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1280	605	48.5	14.2	3.13	.72	.85	.97	46.8	13.7	3.52	.73	.86	.99	44.9	13.2	3.97	.74	.88	1.00	42.9	12.6	4.50	.75	.90	1.00
	1600	755	50.4	14.8	3.16	.77	.92	1.00	48.6	14.2	3.54	.79	.94	1.00	46.7	13.7	3.99	.80	.96	1.00	44.6	13.1	4.51	.82	.98	1.00
	1920	905	52.0	15.2	3.17	.83	.98	1.00	50.2	14.7	3.56	.84	1.00	1.00	48.4	14.2	4.01	.86	1.00	1.00	46.4	13.6	4.53	.88	1.00	1.00
67°F (19°C)	1280	605	51.5	15.1	3.17	.57	.69	.82	49.7	14.6	3.55	.57	.70	.83	47.7	14.0	4.00	.58	.71	.85	45.5	13.3	4.53	.59	.73	.87
	1600	755	53.2	15.6	3.20	.60	.75	.89	51.2	15.0	3.58	.60	.76	.91	49.1	14.4	4.03	.61	.78	.93	46.9	13.7	4.54	.62	.80	.95
	1920	905	54.4	15.9	3.21	.63	.81	.96	52.4	15.4	3.60	.64	.82	.98	50.2	14.7	4.04	.65	.84	.99	47.9	14.0	4.56	.67	.86	1.00
71°F (22°C)	1280	605	54.8	16.1	3.22	.43	.55	.67	52.9	15.5	3.60	.43	.55	.68	50.8	14.9	4.05	.43	.56	.69	48.4	14.2	4.57	.43	.57	.70
	1600	755	56.5	16.6	3.24	.44	.58	.72	54.4	15.9	3.63	.44	.59	.74	52.2	15.3	4.07	.44	.60	.75	49.8	14.6	4.58	.45	.61	.77
	1920	905	57.6	16.9	3.26	.45	.62	.78	55.4	16.2	3.64	.46	.63	.80	53.1	15.6	4.08	.46	.64	.82	50.6	14.8	4.60	.46	.66	.84

CHP20R-060 COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1600	755	60.1	17.6	4.18	.73	.87	.99	57.9	17.0	4.69	.74	.88	1.00	55.6	16.3	5.28	.76	.90	1.00	53.2	15.6	5.93	.77	.92	1.00
	2000	945	62.4	18.3	4.21	.79	.94	1.00	60.2	17.6	4.73	.80	.96	1.00	57.9	17.0	5.31	.82	.97	1.00	55.4	16.2	5.96	.83	.99	1.00
	2400	1135	64.5	18.9	4.23	.84	1.00	1.00	62.3	18.3	4.75	.86	1.00	1.00	60.0	17.6	5.34	.88	1.00	1.00	57.7	16.9	5.99	.90	1.00	1.00
67°F (19°C)	1600	755	63.7	18.7	4.22	.57	.71	.84	61.5	18.0	4.74	.58	.72	.85	59.0	17.3	5.32	.59	.73	.87	56.5	16.6	5.98	.60	.74	.89
	2000	945	65.8	19.3	4.25	.61	.77	.91	63.4	18.6	4.77	.61	.78	.93	60.9	17.8	5.36	.62	.79	.95	58.2	17.1	6.00	.64	.81	.97
	2400	1135	67.3	19.7	4.27	.64	.82	.98	64.8	19.0	4.78	.65	.84	.99	62.2	18.2	5.37	.66	.86	1.00	59.4	17.4	6.02	.68	.88	1.00
71°F (22°C)	1600	755	67.9	19.9	4.27	.43	.56	.68	65.5	19.2	4.79	.43	.56	.69	62.9	18.4	5.38	.44	.57	.70	60.2	17.6	6.03	.44	.58	.72
	2000	945	69.9	20.5	4.29	.44	.59	.74	67.3	19.7	4.82	.45	.60	.75	64.6	18.9	5.40	.45	.61	.77	61.8	18.1	6.05	.45	.62	.79
	2400	1135	71.3	20.9	4.31	.46	.63	.80	68.6	20.1	4.83	.46	.64	.82	65.8	19.3	5.42	.47	.65	.84	62.9	18.4	6.06	.47	.67	.86

CHP20R-048 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)	Total Heating Capacity		Air Temperature Entering Outdoor Coil													
			65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)					
			kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW
1280	605	57.2	16.8	3.50	43.4	12.7	3.24	28.5	8.4	2.97	20.6	6.0	2.65	10.2	3.0	2.00
1600	755	58.1	17.0	3.27	44.3	13.0	3.01	29.4	8.6	2.75	21.5	6.3	2.43	11.1	3.3	1.77
1920	905	59.1	17.3	3.14	45.3	13.3	2.88	30.4	8.9	2.61	22.5	6.6	2.29	12.1	3.5	1.64

CHP20R-060 - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)	Total Heating Capacity		Air Temperature Entering Outdoor Coil													
			65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)					
			kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW	Comp. Motor kW Input	kBtuh	kW
1600	755	70.2	20.6	4.33	53.4	15.6	4.48	35.8	10.5	4.95	24.1	7.1	3.18	11.9	3.5	2.39
2000	945	71.6	21.0	4.09	54.8	16.1	4.24	37.2	10.9	4.71	25.5	7.5	2.94	13.3	3.9	2.15
2400	1135	72.8	21.3	3.94	56.0	16.4	4.09	38.4	11.3	4.56	26.7	7.8	2.79	14.5	4.2	2.00

CHP20R-048 - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.27	58.1	17.0
60	16	3.21	55.0	16.1
55	13	3.15	51.9	15.2
50	10	3.09	48.9	14.3
47	8	3.05	47.0	13.8
45	7	3.01	44.3	13.0
40	4	2.93	37.4	11.0
35	2	2.84	30.5	8.9
30	-1	2.79	30.0	8.8
25	-4	2.75	29.4	8.6
20	-7	2.70	28.8	8.4
17	-8	2.68	28.5	8.4
15	-9	2.65	27.2	8.0
10	-12	2.59	24.1	7.1
5	-15	2.43	21.5	6.3
0	-18	2.26	18.9	5.5
-5	-21	2.10	16.3	4.8
-10	-23	1.94	13.7	4.0
-15	-26	1.77	11.1	3.3
-20	-29	1.61	8.5	2.5

CHP20R-060 - HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	4.09	71.6	21.0
60	16	4.00	67.7	19.8
55	13	3.92	63.8	18.7
50	10	3.83	59.9	17.6
47	8	3.78	57.5	16.9
45	7	4.24	54.8	16.1
40	4	5.38	48.0	14.1
35	2	6.53	41.2	12.1
30	-1	5.62	39.2	11.5
25	-4	4.71	37.2	10.9
20	-7	3.80	35.2	10.3
17	-8	3.26	34.1	10.0
15	-9	3.22	32.5	9.5
10	-12	3.13	28.6	8.4
5	-15	2.94	25.5	7.5
0	-18	2.74	22.5	6.6
-5	-21	2.54	19.4	5.7
-10	-23	2.35	16.3	4.8
-15	-26	2.15	13.3	3.9
-20	-29	1.95	10.2	3.0

BLOWER DATA - All air data is measured external to the unit with dry coil and without air filter.**CHP20R-024 BLOWER PERFORMANCE @ 230V** (For 208V unit operation, derate air volume by 7%)

External Static Pressure in. w.g. Pa		Down-Flow Air Openings								Horizontal Air Openings							
		Air Volume at Various Blower Speeds								Air Volume at Various Blower Speeds							
		High		Medium-High		Medium-Low		Low		High		Medium-High		Medium-Low		Low	
cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s		
0	0	1385	655	1025	485	900	425	685	325	1435	675	1035	490	895	420	625	295
.05	12	1380	650	1035	490	915	430	700	330	1420	670	1050	495	915	430	645	305
.10	25	1365	645	1045	495	925	435	710	335	1400	660	1060	500	925	435	660	310
.15	37	1350	635	1045	495	930	440	715	335	1380	650	1060	500	935	440	670	315
.20	50	1330	630	1040	490	930	440	715	335	1360	640	1060	500	935	440	675	320
.25	62	1305	615	1030	485	925	435	715	335	1335	630	1050	495	930	440	675	320
.30	75	1275	600	1010	475	915	430	705	335	1305	615	1035	490	920	435	670	315
.40	100	1205	570	965	455	880	415	680	320	1235	585	985	465	875	415	650	305
.50	125	1120	530	890	420	820	385	640	300	1155	545	910	430	810	380	605	285
.60	150	1015	480	800	380	740	350	585	275	1065	505	810	380	720	340	545	255
.70	175	900	425	685	325	640	300	510	240	960	455	690	325	605	285	465	220
.75	185	835	395	615	290	580	275	470	220	905	425	620	295	540	255	415	195

CHP20R-030 BLOWER PERFORMANCE @ 230V (For 208V unit operation, derate air volume by 7%)

External Static Pressure in. w.g. Pa		Down-Flow Air Openings								Horizontal Air Openings							
		Air Volume at Various Blower Speeds								Air Volume at Various Blower Speeds							
		High		Medium-High		Medium-Low		Low		High		Medium-High		Medium-Low		Low	
cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s		
0	0	1485	700	1250	590	1085	500	905	425	1485	700	1345	635	1115	525	920	435
.05	12	1460	690	1250	590	1075	505	900	425	1480	700	1340	630	1120	530	930	440
.10	25	1430	675	1240	585	1070	505	895	420	1465	690	1335	630	1120	530	940	445
.15	37	1400	660	1235	585	1060	500	890	420	1455	685	1325	625	1115	525	945	445
.20	50	1375	650	1225	580	1045	495	885	420	1435	675	1315	620	1110	525	945	445
.25	62	1345	635	1215	575	1035	490	875	415	1420	670	1305	615	1105	520	940	445
.30	75	1315	620	1200	565	1020	480	865	410	1400	660	1285	605	1095	515	935	440
.40	100	1255	590	1165	550	990	465	835	395	1350	635	1250	590	1065	505	910	430
.50	125	1190	560	1125	530	950	450	805	380	1295	610	1200	565	1025	485	875	415
.60	150	1125	530	1075	510	910	430	770	365	1230	580	1145	540	975	460	820	385
.70	175	1060	500	1015	480	865	410	725	340	1160	545	1075	505	915	430	755	355
.75	185	1025	485	985	465	840	395	700	330	1120	530	1040	490	885	420	720	340

CHP20R-036/042 BLOWER PERFORMANCE @ 230V (For 208V unit operation, derate air volume by 7%)

External Static Pressure in. w.g. Pa		Down-Flow Air Openings								Horizontal Air Openings							
		Air Volume at Various Blower Speeds								Air Volume at Various Blower Speeds							
		High		Medium-High		Medium-Low		Low		High		Medium-High		Medium-Low		Low	
cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s		
0	0	2015	950	1610	760	1425	670	1240	585	2075	980	1675	790	1445	680	1275	600
.05	12	2000	945	1595	755	1420	670	1235	585	2060	970	1660	785	1440	680	1270	600
.10	25	1980	935	1580	745	1415	670	1235	585	2040	965	1645	775	1435	675	1270	600
.15	37	1960	925	1575	745	1415	670	1230	580	2020	955	1635	770	1435	675	1265	595
.20	50	1935	915	1560	735	1405	665	1225	580	1995	940	1620	765	1425	670	1260	595
.25	62	1910	900	1540	725	1395	660	1215	575	1965	930	1600	755	1415	670	1250	590
.30	75	1885	890	1520	715	1385	655	1205	570	1940	915	1580	745	1405	665	1240	585
.40	100	1825	860	1485	700	1355	640	1185	560	1880	890	1545	730	1375	650	1220	575
.50	125	1760	830	1445	680	1315	620	1160	550	1815	855	1500	710	1335	630	1195	565
.60	150	1690	800	1395	660	1260	595	1130	535	1740	820	1450	685	1280	605	1165	550
.70	175	1615	760	1335	630	1190	560	1095	515	1655	780	1395	660	1210	570	1130	535
.75	185	1575	745	1300	615	1145	540	1065	505	1605	755	1365	645	1165	550	1110	525

BLOWER DATA - All air data is measured external to the unit with dry coil and without air filter.

CHP20R-048/060 BLOWER PERFORMANCE - 230 VOLTS (For 208V unit operation, derate air volume by 7%)

External Static Pressure		Down-Flow Air Openings										Horizontal Air Openings									
		Air Volume at Various Blower Speeds										Air Volume at Various Blower Speeds									
		High		Medium-High		Medium		Medium-Low		Low		High		Medium-High		Medium		Medium-Low		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s	cfm	L/s
0	0	2375	1120	2255	1065	2070	975	1810	855	1570	740	2475	1170	2280	1075	2100	990	1840	870	1500	710
.05	10	2350	1110	2235	1055	2060	970	1805	850	1565	740	2450	1155	2260	1065	2090	985	1835	865	1505	710
.10	25	2325	1095	2215	1045	2045	965	1795	845	1565	740	2425	1145	2235	1055	2075	980	1825	860	1505	710
.15	35	2300	1085	2190	1035	2030	960	1785	845	1560	735	2400	1135	2215	1045	2055	970	1815	855	1505	710
.20	50	2270	1070	2165	1020	2010	950	1775	840	1550	730	2370	1120	2190	1035	2035	960	1800	850	1500	710
.25	60	2245	1060	2145	1010	1990	940	1760	830	1545	730	2340	1105	2160	1020	2015	950	1785	845	1495	705
.30	75	2215	1045	2115	1000	1970	930	1745	825	1535	725	2305	1090	2135	1010	1995	940	1770	835	1485	700
.40	100	2150	1015	2060	970	1925	910	1710	805	1510	715	2240	1055	2075	980	1945	920	1730	815	1460	690
.50	125	2085	985	2000	945	1875	885	1670	790	1475	695	2165	1020	2010	950	1895	895	1680	795	1430	675
.60	150	2015	950	1935	915	1815	855	1625	765	1435	675	2090	985	1935	915	1835	865	1625	765	1390	655
.70	175	1940	915	1865	880	1755	830	1570	740	1390	655	2005	945	1860	880	1765	835	1560	735	1340	630
.75	185	1900	895	1825	860	1720	810	1540	725	1360	640	1960	925	1820	860	1730	815	1525	720	1310	620

DIFFUSER AIR RESISTANCE									
Air Volume		Total Air Resistance							
		RTD9-65 Diffuser						FD9-65 Diffuser	
		2 Ends Open		1 Side 2 Ends Open		All Ends & Sides Open			
cfm	L/s	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa
800	380	.15	37	.13	32	.11	27	.11	27
1000	470	.19	47	.16	40	.14	35	.14	35
1200	565	.25	62	.20	50	.17	42	.17	42
1400	660	.33	82	.26	65	.20	50	.20	50
1600	755	.43	107	.32	80	.20	50	.24	60
1800	850	.56	139	.40	90	.30	75	.30	75
2000	945	.73	182	.50	124	.36	90	.36	90
2200	1040	.95	236	.63	157	.44	109	.44	109

CEILING DIFFUSER AIR THROW DATA					
Model No.		RTD9-65		FD9-65	
Air Volume		Effective Throw		Effective Throw	
cfm	L/s	ft.	m	ft.	m
1000	470	10 - 17	3 - 5	15 - 20	5 - 6
1200	565	11 - 18	3 - 5	16 - 22	5 - 7
1400	660	12 - 19	4 - 6	17 - 24	5 - 7
1600	755	12 - 20	4 - 6	18 - 25	5 - 8
1800	850	13 - 21	4 - 6	20 - 28	6 - 9
2000	945	14 - 23	4 - 7	21 - 29	6 - 9
2200	1040	16 - 25	5-8	22 - 30	7 - 9

Effective throw based on terminal velocities of 75 ft. (22.9 m) per minute.

WET INDOOR COIL AIR RESISTANCE				
Model Number	Air Volume		Air Resistance	
	cfm	L/s	in. w.g.	Pa
CHP20R-024	600	285	0.05	12
	800	380	0.06	15
	1000	470	0.07	17
	1200	565	0.08	20
CHP20R-030	800	380	0.09	22
	1000	470	0.10	25
	1200	565	0.11	27

Model Number	Air Volume		Air Resistance	
	cfm	L/s	in. w.g.	Pa
CHP20R-036 CHP20R-042	1000	470	0.08	20
	1200	565	0.09	22
	1400	660	0.10	25
	1600	755	0.11	27
CHP20R-048 CHP20R-060	1600	755	0.08	20
	1800	850	0.09	22
	2000	945	0.10	25
	2200	1040	0.11	27

ELECTRICAL DATA							
General Data	Model No.	CHP20R-024	CHP20R-030	CHP20R-036	CHP20R-042	CHP20R-048	CHP20R-060
		208/230v	208/230v	208/230v	208/230v	208/230v	208/230v
Line voltage data - 60 hz - 1 phase							
Rec. maximum fuse size (amps)		30	35	40	50	50	70
†Minimum Circuit Ampacity		19	22	27	32	31	44
Compressor	Rated load amps	12.2	13.8	16.1	20.1	19.2	28.8
	Locked rotor amps	61.0	73.0	88.0	104.0	137.0	148.0
Outdoor Coil Fan Motor	Full load amps	1.1	1.1	2.3	2.3	2.3	2.3
	Locked rotor amps	2.2	2.2	4.4	4.4	4.4	4.4
Indoor Coil Blower Motor	Motor output - hp (W)	1/3 (249)	1/3 (249)	1/2 (373)	1/2 (373)	3/4 (560)	3/4 (560)
	Full load amps	2.1	3.0	3.9	3.9	4.6	4.6
	Locked rotor amps	4.2	6.2	8.3	8.3	10.0	10.0

†Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

ELECTRIC HEAT DATA - CHP20R-024-030-036

Single Package Unit Model No.	Electric Heater Model No. & Net Weight	No. of Steps	Volts Input	Electric Heat kW Input	Electric Heat Btuh Input	Heater Only †Minimum Circuit Ampacity	†Total Unit + Electric Heat		Optional Single Point Power Source Boxes	
							†Minimum Circuit Ampacity	Maximum Fuse Size	Heater Sub-Fuse Box	Unit Sub-Fuse Box
CHP20R-024 1 phase	5 kW ECH16R-5 (31H46) 4 lbs. (2 kg)	1	208	3.8	12,800	26	45	50	ECH16R-26/41-5 (31H26)	ECH16-261 (31H10)
		1	220	4.2	14,300	26	45	50		
		1	230	4.6	15,700	26	45	50		
		1	240	5.0	17,100	26	45	50		
	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	17,900	37	55	60	ECH16R-26/65-7 (31H25)	ECH16-261 (31H10)
		1	220	5.9	20,100	37	55	60		
		1	230	6.4	21,900	37	55	60		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	71	80	ECH16R-26/65-10 (31H24)	ECH16-261 (31H10)
		1	220	8.4	28,700	53	71	80		
		1	230	9.2	31,300	53	71	80		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,400	79	97	100	Not required	ECH16-261 (31H10)
		1	220	12.6	43,000	79	97	100		
1		230	13.8	47,100	79	97	100			
CHP20R-030 1 phase	5 kW ECH16R-5 (31H46) 4 lbs. (2 kg)	1	208	3.8	12,800	26	48	50	ECH16R-26/41-5 (31H26)	ECH16-311 (31H11)
		1	220	4.2	14,300	26	48	50		
		1	230	4.6	15,700	26	48	50		
		1	240	5.0	17,100	26	48	50		
	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	17,900	37	58	60	ECH16R-26/65-7 (31H25)	ECH16-311 (31H11)
		1	220	5.9	20,100	37	58	60		
		1	230	6.4	21,800	37	58	60		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	74	80	ECH16R-26/65-10 (31H24)	ECH16-311 (31H11)
		1	220	8.4	28,700	53	74	80		
		1	230	9.2	31,300	53	74	80		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,400	79	100	100	Not required	ECH16-311 (31H11)
		1	220	12.6	43,000	79	100	100		
1		230	13.8	47,100	79	100	100			
CHP20R-036 1 phase	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	18,100	37	63	70	ECH16R-26/65-7 (31H25)	ECH16-411 (31H12)
		1	220	5.9	20,100	37	63	70		
		1	230	6.4	21,800	37	63	70		
		1	240	7.0	23,900	37	63	70		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	79	80	ECH16R-26/65-10 (31H24)	ECH16-411 (31H12)
		1	220	8.4	28,700	53	79	80		
		1	230	9.2	31,400	53	79	80		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,600	79	105	110	Not required	ECH16-411 (31H12)
		1	220	12.6	43,000	79	105	110		
		1	230	13.8	47,100	79	105	110		
	20 kW ECH16-20 (31H28) 19 lbs. (9 kg)	1	208	15.0	51,200	105	131	150	Not required	ECH16-411 (31H12)
		1	220	16.8	57,300	105	131	150		
1		230	18.4	62,800	105	131	150			
		1	240	20.0	68,300	105	131	150		

†Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

ELECTRIC HEAT DATA - CHP20R-042-048-060

Single Package Unit Model No.	Electric Heater Model No. & Net Weight	No. of Steps	Volts Input	Electric Heat kW Input	Electric Heat Btuh Input	Heater Only †Minimum Circuit Ampacity	†Total Unit + Electric Heat		Optional Single Point Power Source Boxes	
							†Minimum Circuit Ampacity	Maximum Fuse Size	Heater Sub-Fuse Box	Unit Sub-Fuse Box
CHP20R-042 1 phase	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	18,000	37	68	80	ECH16R-26/65-7 (31H25)	ECH16-511 (31H13)
		1	220	5.9	20,000	37	68	80		
		1	230	6.4	22,000	37	68	80		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	84	90	ECH16R-26/65-10 (31H24)	ECH16-511 (31H13)
		1	220	8.4	28,700	53	84	90		
		1	230	9.2	31,300	53	84	90		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,500	79	110	110	Not required	ECH16-511 (31H13)
		1	220	12.6	43,000	79	110	110		
		1	230	13.8	47,000	79	110	110		
	20 kW ECH16-20 (31H28) 19 lbs. (9 kg)	1	208	15.0	51,200	105	136	150	Not required	ECH16-511 (31H13)
		1	220	16.8	57,300	105	136	150		
		1	230	18.4	62,700	105	136	150		
25 kW ECH16-25 (31H29) 19 lbs. (9 kg)	1	208	18.8	64,200	131	162	175	Not required	ECH16-511 (31H13)	
	1	220	21.0	71,700	131	162	175			
	1	230	23.0	78,500	131	162	175			
CHP20R-048 1 phase	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	18,000	37	68	70	ECH16R-26/65-7 (31H25)	ECH16-511 (31H13)
		1	220	5.9	20,000	37	68	70		
		1	230	6.4	22,000	37	68	70		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	83	90	ECH16R-26/65-10 (31H24)	ECH16-511 (31H13)
		1	220	8.4	28,700	53	83	90		
		1	230	9.2	31,300	53	83	90		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,500	79	110	110	Not required	ECH16-511 (31H13)
		1	220	12.6	43,000	79	110	110		
		1	230	13.8	47,000	79	110	110		
	20 kW ECH16-20 (31H28) 19 lbs. (9 kg)	1	208	15.0	51,200	105	136	150	Not required	ECH16-511 (31H13)
		1	220	16.8	57,300	105	136	150		
		1	230	18.4	62,700	105	136	150		
25 kW ECH16-25 (31H29) 19 lbs. (9 kg)	1	208	18.8	64,200	131	162	175	Not required	ECH16-511 (31H13)	
	1	220	21.0	71,700	131	162	175			
	1	230	23.0	78,500	131	162	175			
CHP20R-060 1 phase	7 kW ECH16R-7 (31H47) 5 lbs. (2 kg)	1	208	5.3	18,000	37	80	100	ECH16R-26/65-7 (31H25)	ECH16-651 (31H14)
		1	220	5.9	20,000	37	80	100		
		1	230	6.4	22,000	37	80	100		
	10 kW ECH16R-10 (31H48) 5 lbs. (2 kg)	1	208	7.5	25,600	53	95	110	ECH16R-26/65-10 (31H24)	ECH16-651 (31H14)
		1	220	8.4	28,700	53	95	110		
		1	230	9.2	31,300	53	95	110		
	15 kW ECH16-15 (31H27) 18 lbs. (8 kg)	1	208	11.3	38,500	79	122	125	Not required	ECH16-651 (31H14)
		1	220	12.6	43,000	79	122	125		
		1	230	13.8	47,000	79	122	125		
	20 kW ECH16-20 (31H28) 19 lbs. (9 kg)	1	208	15.0	51,200	105	148	150	Not required	ECH16-651 (31H14)
		1	220	16.8	57,300	105	148	150		
		1	230	18.4	62,700	105	148	150		
25 kW ECH16-25 (31H29) 19 lbs. (9 kg)	1	208	18.8	64,200	131	174	175	Not required	ECH16-651 (31H14)	
	1	220	21.0	71,700	131	174	175			
	1	230	23.0	78,500	131	174	175			
		1	240	25.0	85,300	131	174	175		

†Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

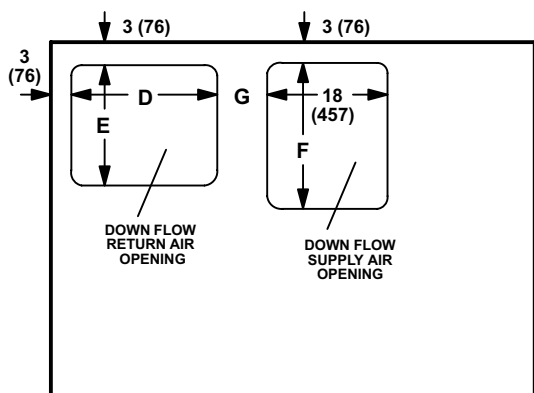
DIMENSIONS - INCHES (MM)

CORNER WEIGHTS

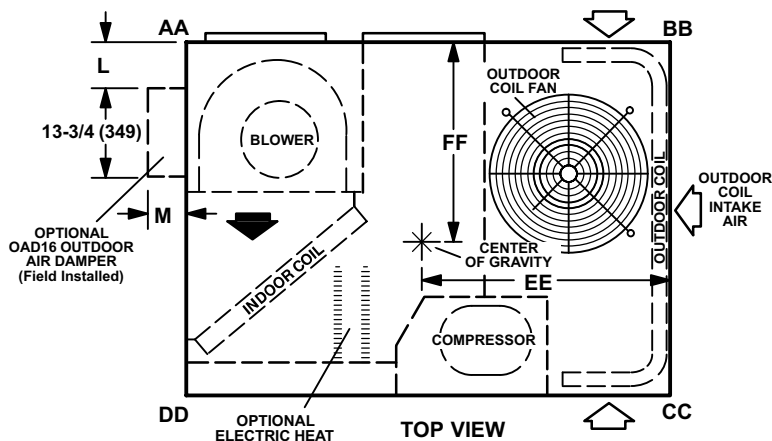
Model Number	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
CHP20R-024	61	28	65	30	92	42	87	39
CHP20R-030	71	32	76	34	108	49	101	46
CHP20R-036-042	89	40	95	43	140	64	131	60
CHP20R-048-060	104	47	112	51	165	75	154	70

CENTER OF GRAVITY

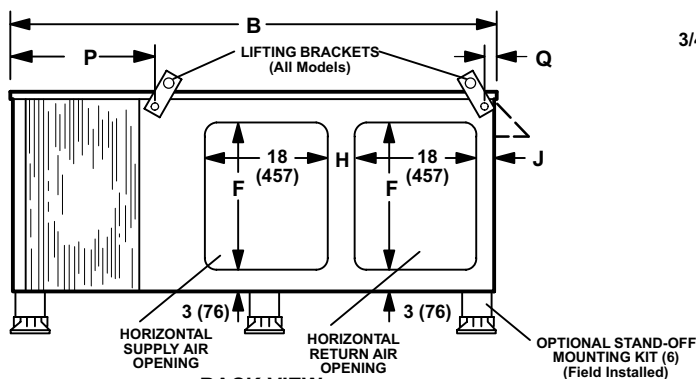
Model Number	EE		FF	
	inch	mm	inch	mm
CHP20R-024-030	29	737	27	686
CHP20R-036-042-048-060	35	889	31	787



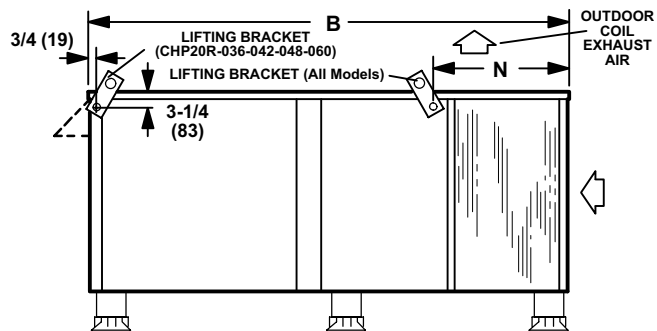
TOP VIEW BASE SECTION



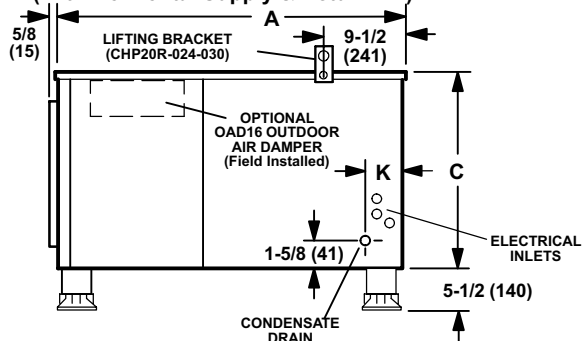
TOP VIEW



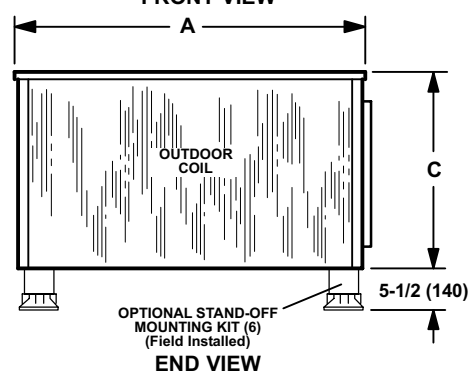
BACK VIEW
(With Horizontal Supply & Return Air)



FRONT VIEW



END VIEW



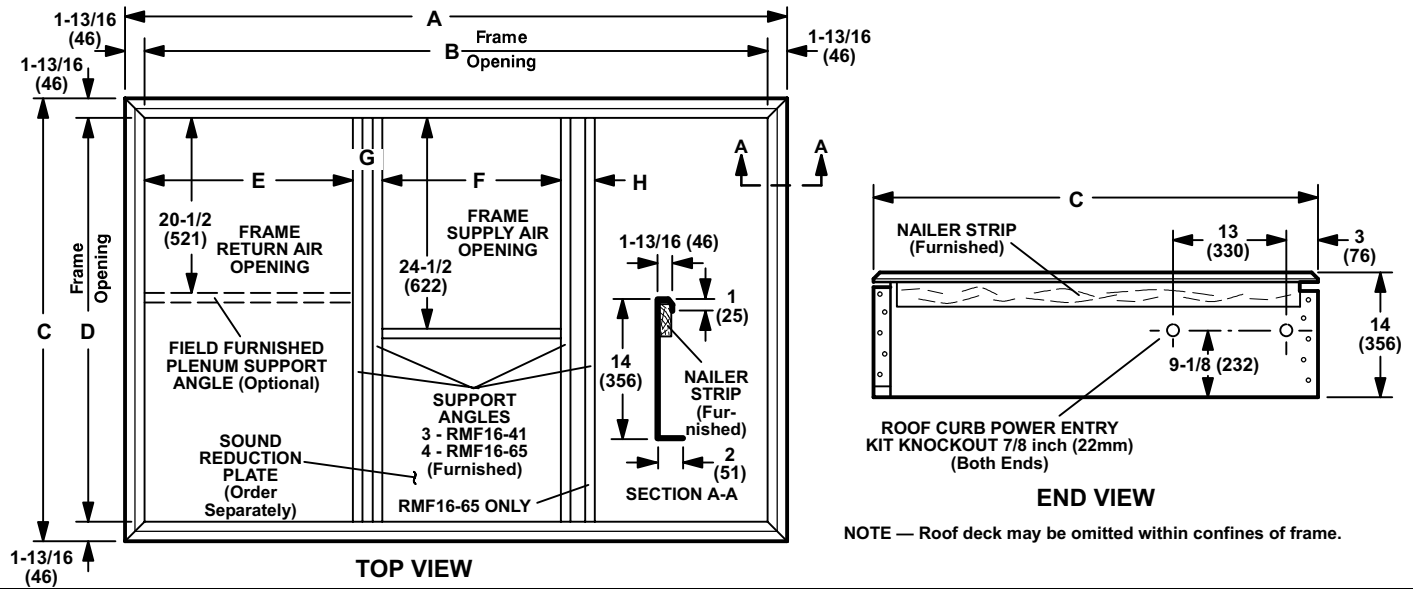
END VIEW

Model No.	A		B		C		D		E		F		G		H	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
CHP20R-024-030	46	1168	60	1524	23	584	18	457	13	330	13	330	10	254	3	76
CHP20R-036-042-048-060	52	1321	72-1/2	1842	29	737	22	559	18	457	22	737	7-1/2	191	5	127

Model No.	J		K		L		M		N		P		Q	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
CHP20R-024-030	4	102	6-1/2	165	2	51	5	127	20	508	16-5/8	422	4	102
CHP20R-036-042-048-060	3	76	6-1/8	156	5	127	8	203	19-3/8	492	19-3/8	492	3/4	19

ACCESSORY DIMENSIONS - INCHES (MM)

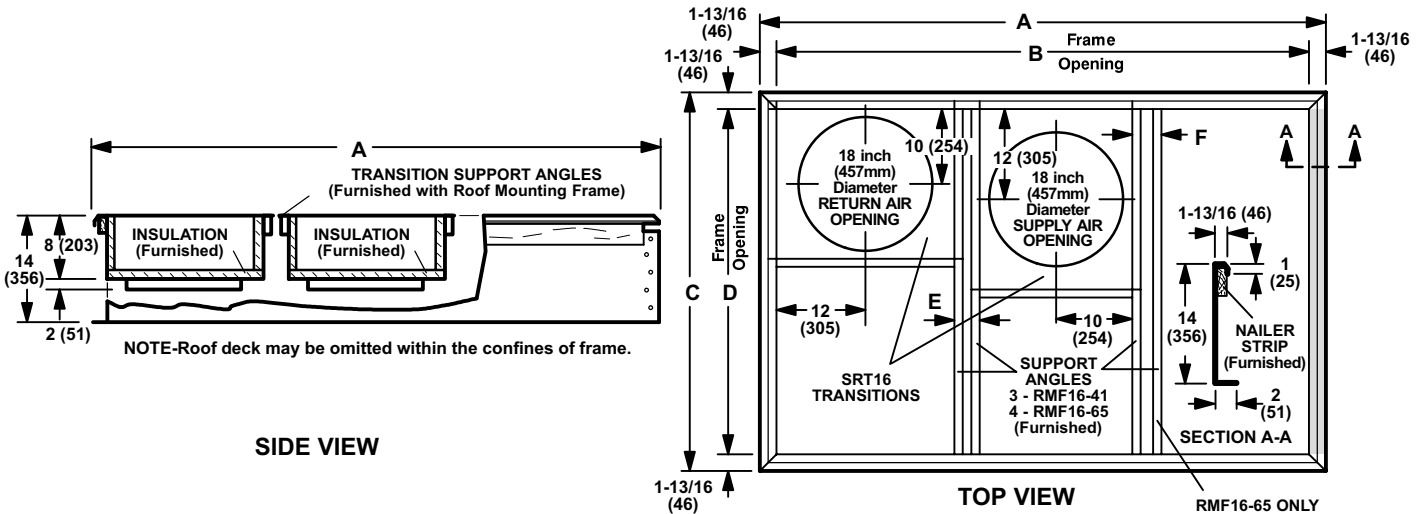
RMF16-41 & RMF16-65 ROOF MOUNTING FRAME WITH DOUBLE DUCT OPENING



Model Number	A		B		C		D		E		F		G		H	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
RMF16-41	56-3/8	1432	52-3/4	1340	44-1/8	1121	40-1/2	1029	24-3/8	619	20-9/16	522	4	102	---	---
RMF16-65	69	1753	65-3/8	1661	50-1/2	1283	46-7/8	1191	24-1/4	616	20-1/2	521	4	102	4	102

□ 3-1/4 inches (83 mm) for CHP20-024-030.

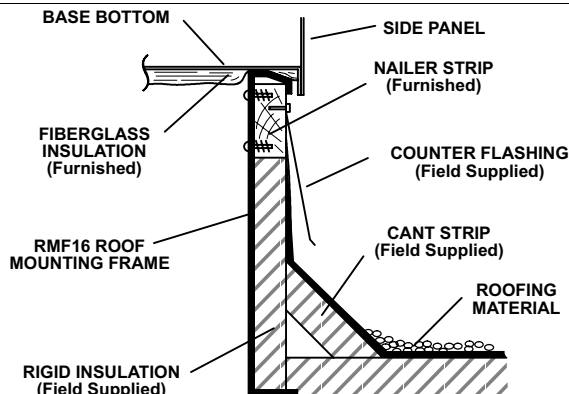
RMF16-41 & RMF16-65 ROOF MOUNTING FRAMES WITH SRT16-65 SUPPLY AND RETURN AIR TRANSITIONS FOR FD9-65 & RTD9-65 CEILING DIFFUSERS



Model Number	A		B		C		D		E		F	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
RMF16-41 With SRT16-65	56-3/8	1432	52-3/4	1340	44-1/8	1121	40-1/2	1029	4	102	---	---
RMF16-65 With SRT16-65	69	1753	65-3/8	1661	50-1/2	1283	46-7/8	1191	4	102	4	102

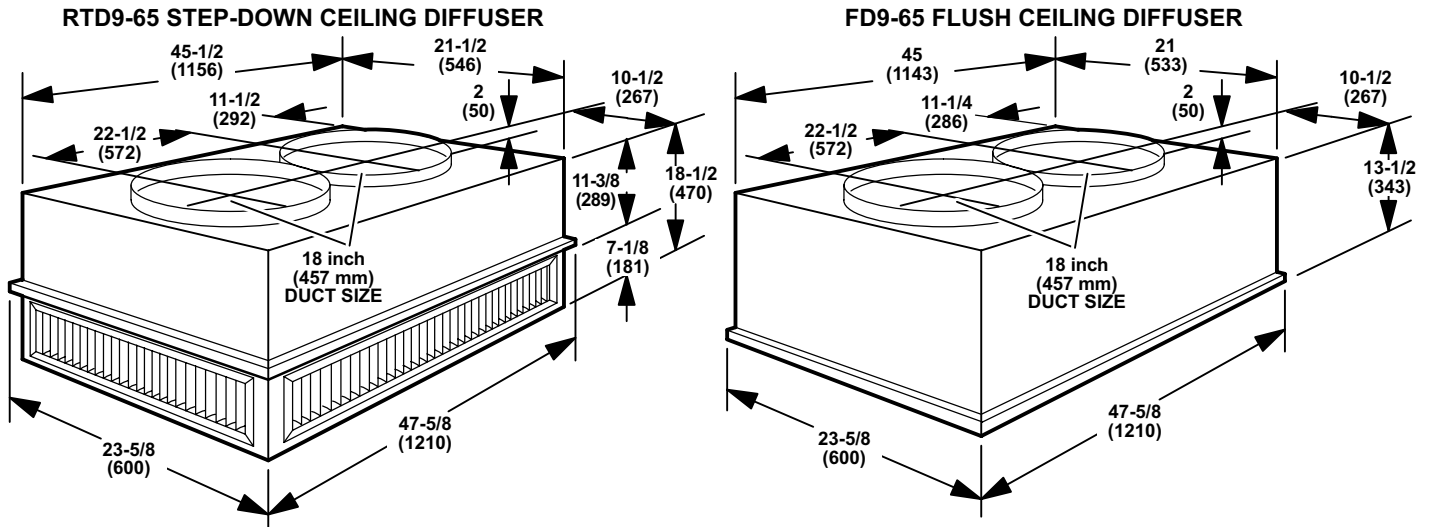
□ 3-1/4 inches (83 mm) for CHP20-024-030.

TYPICAL FLASHING DETAIL FOR RMF16 ROOF MOUNTING FRAME



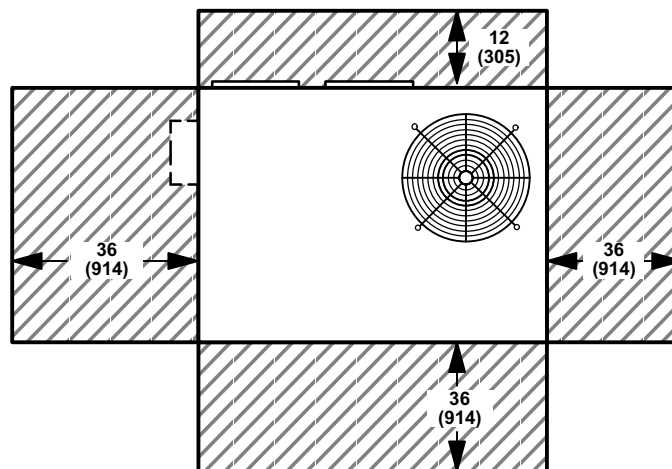
ACCESSORY DIMENSIONS - INCHES (MM)

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS



INSTALLATION CLEARANCES - INCHES (MM)

CHP20R BASIC UNIT



- NOTE — Top Clearance 60 in. (1525 mm).
- NOTE — Entire perimeter of unit base requires support when elevated above mounting surface.