

### HP19 SERIES HEAT PUMP OUTDOOR UNITS 10.05 to 12.15 SEER

# HP19

Bulletin No. 210048  
August 1994  
Supersedes November 1993

\*18,000 to 61,000 Btuh (5.3 to 17.9 kW) Cooling Capacity  
\*18,800 to 59,000 Btuh (5.5 to 17.3 kW) Heating Capacity

\*ARI Standard 210/240 certified Ratings



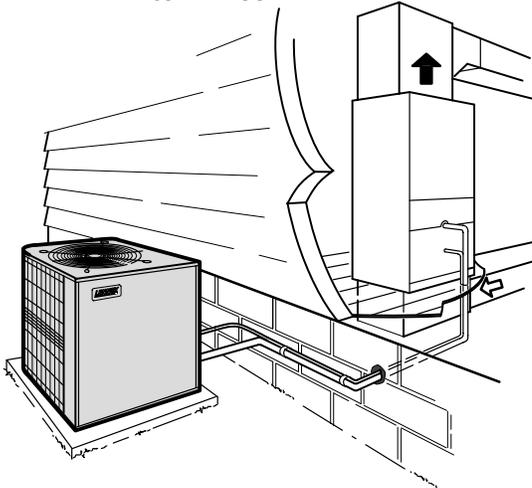
CERTIFICATION APPLIES ONLY  
WHEN THE COMPLETE  
SYSTEM IS LISTED  
WITH ARI



CERTIFICATION APPLIES ONLY  
WHEN USED WITH PROPER  
COMPONENTS AS LISTED  
WITH ARI



Typical Application



## FEATURES

**Applications** — The Lennox HP19 series heat pump outdoor units consist of seven models ranging from 1-1/2 thru 5 tons. Energy efficient outdoor units have SEER's of up to 12.15 with a cooling capacity range of 18,000 to 61,000 Btuh (5.3 to 17.9 kW) and COP ratings of up to 3.48 with heating capacities of 18,800 to 59,000 Btuh (5.5 to 17.3 kW). The units are designed for applications with remotely located indoor blower-coil units or indoor add-on coils in FM21 system installations. The outdoor units are equally suited for installation on a slab at grade level or on a rooftop. A variety of matching up-flo, down-flo and horizontal blower powered indoor units, with optional supplemental electric heat, provide selective sizing and installation versatility. For FM21 applications, see bulletin indexed in this tab section. For complete data on indoor units, see tab section, Coils — Blower Coil Units. HP19 units are test operated at the factory to insure proper operation and are shipped ready for installation. Installer has only to locate unit and make refrigerant line and electrical connections to complete installation.

**Approvals** — Units have been tested with matching indoor units in the Lennox Research Laboratory environmental test room and rated according to U.S. Department of Energy (DOE) test procedures and in accordance with ARI Standard 210/240-89. Units have been sound rated in the Lennox reverberant sound test room in accordance with ARI Standard 270-84. Units and components within are bonded for grounding to meet safety standards for servicing required by U.L., N.E.C. and C.E.C. Units are also U.L. listed and C.S.A. certified.

**Equipment Warranty** — The compressor has a limited warranty for ten years in residential installations and five years in non-residential installations. All other covered components have a limited warranty for five years. Refer to Lennox Equipment Limited Warranty included with the unit for specific details.

**Copper Tube Outdoor Coil** — Lennox designed and fabricated coil is constructed of precisely spaced ripple-edge aluminum fins machine fitted to seamless copper tubes. Precise coil circuiting gives uniform refrigerant distribution for high efficiency. Extra large wrap around "U" shaped coil configuration provides extra large surface area for excellent heat transfer with minimum air resistance. Fins are equipped with collars that grip tubing for maximum contact area. Inverted coil circuiting prevents ice buildup at coil base in low ambients. Discharge gas enters bottom of coil during defrost and heat of refrigerant flows counter to water drainage resulting in extremely clean and unobstructed fins and tubes. Fin spacing allows rapid and complete water drainage. Flared tubing connections and silver soldering provide tight, leakproof joints. Long life copper tubing is corrosion-resistant and easy to service. Coil is factory tested under high pressure to insure leakproof construction. HP19-650 model is equipped with enhanced fin coil. Entire coil is accessible for cleaning.

**Cabinet** — Heavy gauge galvanized steel cabinet is subject to a five station metal wash process. This preparation process results in 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. Drainage holes are furnished in base section for moisture removal. High density polyethylene base channels raise the unit off of the mounting surface away from damaging moisture. A non-corrosive PVC coated steel wire outdoor coil guard is furnished.

**Control Box** — Large size and conveniently located in the compressor and controls compartment for easy access. All controls are pre-wired at the factory. A low voltage terminal strip is furnished for ease of field wiring connections.

## FEATURES (Continued)

**Compressor and Controls Compartment** — Separate compressor and controls compartment protects all components from weather conditions and keeps sound transmission at a minimum. Large removable access panel provides complete service access.

**Compressor** — Rugged and reliable compressor is hermetically sealed, suction cooled and overload protected. Internally protected from excessive current and temperature. Operates efficiently at low outdoor temperatures during heating mode. Strategically located discharge muffler reduces sound level. Immersible self-regulating type crankcase heater is temperature actuated to operate only when required and ensures proper lubrication at all times. Running gear is spring mounted within sealed housing. In addition, compressor is installed on resilient rubber mounts in the unit, assuring quiet and vibration-free operation.

**Outdoor Fan** — Efficient direct drive fan moves large volumes of air uniformly through the entire outdoor coil resulting in high refrigerant cooling capacity. Vertical discharge of air minimizes operating sounds and eliminates hot air damage to lawn and shrubs. Fan motor is totally enclosed for maximum protection from weather, dust and corrosion. A rain shield on the motor provides additional protection from moisture. Fan service access is accomplished by removal of fan guard. Corrosion resistant PVC coated steel wire fan guard is furnished as standard.

**Refrigerant Line Connections, Electrical Inlets and Service Valves** — Liquid and vapor line connections are made with sweat connections inside the unit. Fully serviceable brass service valves prevent corrosion and provide easy access to refrigerant system. Liquid and vapor valves can be fully shut off, and the liquid valve can be backseated to manage refrigerant charge while servicing the system. Furnished and factory installed are gauge ports on the vapor and liquid lines and a thermometer well in the liquid line. In addition a hi-capacity drier with internal check valve and a strainer are furnished and factory installed in the liquid line. Field wiring inlets are conveniently located for ease of entry.

## OPTIONAL ACCESSORIES (Must Be Ordered Extra)

**Check and Expansion Valve Kits (Optional)** — Must be ordered extra and field installed on some indoor coil units. See ARI Ratings table for kit selection.

**Refrigerant Line Kits (Optional)** — Lines are available in several lengths and must be ordered extra. See Refrigerant Line Kit table for selection. The refrigerant lines (vapor and liquid) are shipped refrigeration clean. Lines are cleaned, dried, pressurized and sealed at the factory. Vapor line is fully insulated. Lines are furnished with a flare fitting (Indoor unit connection) on one end and less any fitting (stubbed) on the opposite end for connection to the outdoor unit. Kits are not available for HP19-650 models and lines must be furnished by the installer. Refrigerant line length should not exceed 50 ft. (15 m) in any installation. If longer length lines are required, contact your Lennox District Service Manager.

**Mounting Base (Optional)** — Rugged mounting base provides permanent foundation for outdoor units. High density polyethylene structural material is lightweight, sturdy, sound absorbing and will withstand the rigors of the sun, heat, cold, moisture, oil and refrigerant. Will not mildew or rot. Can be shipped singly or in packages of 6 to a carton. Use MB1-24 (78H50) 32" x 34" x 3" (813 mm x 864 mm x 76 mm) shipping weight 15 lbs. (7 kg) each.

**Defrost Control** — A solid-state defrost control 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 temperature below 35°F (2°C). A sensing element mounted on the outdoor coil determines when the defrost cycle is required and also when to terminate a cycle.

**Charge Compensator** — HP19-650 models only are equipped with a charge compensator located on the vapor line between the reversing valve and outdoor coil manifold. The compensator is used to collect and store excess refrigerant during the heating mode.

**Suction Line Accumulator** — Factory installed and piped accumulator is furnished on the HP19-410, 460, 510 and 650 models only. Traps and prevents large amounts of liquid refrigerant from flooding directly into the compressor and causing damage on start-ups and refrigerant cycle change.

**Reversing Valve** — 4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa. Valve operates on pressure differential between outdoor unit and indoor unit of the system. Factory installed.

**Expansion Valve** — Designed and sized specifically for use in heat pump system. Sensing bulb is located on the suction line between reversing valve and compressor thus sensing suction temperature in any cycle. Factory installed and piped.

**High Pressure Switch** — Factory installed and wired. Protects system from abnormal operating conditions. Manual reset.

**Start Controls** — Furnished and factory installed. Provides assistance for compressor start under loaded conditions or in the event of low voltage.

**Service Light Thermostat** — Factory installed on the compressor discharge line. Required for operation of conditioned area thermostat with service light.

**Ambient Compensating Thermistor** — Reduces thermostat droop to improve the operating characteristics of the heat pump system. The thermistor varies the heat anticipator resistance as ambient temperature changes. Factory installed in the discharge air stream.

**Timed-Off Control (Optional)** — Timed-Off Control LB-50709BA (32F21) 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 provides a five minute time delay between compressor shutoff and start-up.

**Thermostat (Optional)** — Thermostat is not furnished with the unit and must be ordered extra. See Thermostats bulletin in Accessories Section and Lennox Price Book.

**Low Ambient Control Kit (Optional)** — Units will operate satisfactorily in the cooling mode down to 45°F (7°C) outdoor air temperature without any additional controls. For cases where operation of the unit is required at low ambients, A Low Ambient Control Kit LB-57113BM (27J00) can be added in the field, enabling the unit to operate properly down to 30°F (-1°C).

**Outdoor Thermostat Kit (Optional)** — An outdoor thermostat can be 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 the line. Thermostat kit LB-29740BA (56A87) and mounting box M-1595 (31461) or ♂ BM-10260 (33A09) must be ordered extra.

# ARI RATINGS

Outdoor Unit Model No. ★ARI Std. 270 SRN (bels)	†ARI Standard 210/240 Ratings											Indoor Unit	★Check and Expansion Valve Kit Required	
	Cool. Cap. Btuh (kW)	High Temp. Htg. Cap. Btuh (kW)	Low Temp. Htg. Cap. Btuh (kW)	Total Unit Cool. Watts	SEER (EER) (Btuh/Watt)	Cool. C.O.P.	Total Unit High Temp. Htg. Watts	◆HSPF Region IV (Region V)	High Temp. Htg. C.O.P.	Total Unit Low Temp. Htg. Watts	Low Temp. Htg. C.O.P.			
HP19-211 (7.2)	18,000 (5.27)	19,000 (5.57)	10,800 (3.16)	1870	11.10 (9.65)	2.83	1780	7.20 (6.30)	3.12	1465	2.16	**CH22-41	●Factory Installed	
	18,000 (5.27)	18,800 (5.50)	10,800 (3.16)	1865	11.05 (9.65)	2.83	1795	7.10 (6.20)	3.06	1465	2.16	**CH22-31		
	19,000 (5.57)	19,000 (5.57)	10,800 (3.16)	1910	11.25 (9.95)	2.92	1785	7.20 (6.30)	3.12	1465	2.16	C22-31FC/B24, C22-31WFC/B24 CR22-31/B24, CR22-31W/B24 **C26-31(FC), **C26-31W(FC)		
	19,000 (5.57)	19,500 (5.71)	11,200 (3.28)	1940	10.90 (9.80)	2.92	1790	7.35 (6.35)	3.20	1505	2.18	⊕ *CVP10-26/EC10Q3	LB-85759F (56J19)	
	19,100 (5.60)	19,200 (5.63)	11,000 (3.22)	1929	11.00 (9.90)	2.90	1815	7.30 (6.25)	3.10	1505	2.14	**CR18-41		
	19,600 (5.74)	19,000 (5.57)	10,800 (3.16)	1915	11.50 (10.20)	2.99	1775	7.30 (6.30)	3.14	1465	2.16	C22-41FC/B24, CR22-41/B24 **C26-41(FC)		●Factory Installed
	19,600 (5.74)	19,200 (5.63)	10,900 (3.19)	1825	12.00 (10.70)	3.15	1670	7.80 (6.60)	3.36	1380	2.30	*CB19-21, *CBH19-21 *CB19-26, *CBH19-26		
HP19-261 (7.4)	24,200 (7.09)	24,600 (7.21)	14,200 (4.16)	2465	10.85 (9.80)	2.87	2305	7.35 (6.50)	3.12	1820	2.28	**CH22-31	●Factory Installed	
	24,400 (7.15)	24,600 (7.21)	14,400 (4.22)	2475	10.85 (9.85)	2.89	2275	7.35 (6.50)	3.16	1805	2.32	**CH22-41		
	24,600 (7.21)	24,600 (7.21)	14,400 (4.22)	2520	10.65 (9.75)	2.86	2305	7.50 (6.50)	3.12	1840	2.28	C22-31FC/B24, C22-31WFC/B24 CR22-31/B24, CR22-31W/B24 **C26-31(FC), **C26-31W(FC)		
	24,600 (7.21)	25,200 (7.38)	14,500 (4.25)	2570	10.55 (9.60)	2.80	2305	7.60 (6.45)	3.20	1845	2.30	⊕ *CVP10-31/EC10Q3	LB-85759F (56J19)	
	24,800 (7.27)	25,000 (7.33)	14,600 (4.28)	2525	11.00 (9.80)	2.87	2305	7.35 (6.50)	3.18	1840	2.32	C22-41FC/B24, CR22-41/B24 **C26-41(FC)		
	24,800 (7.27)	25,400 (7.44)	14,500 (4.25)	2585	10.50 (9.60)	2.80	2320	7.60 (6.55)	3.22	1860	2.28	⊕ *CVP10-26/EC10Q3		
	25,000 (7.33)	25,200 (7.38)	14,100 (4.13)	2577	10.65 (9.70)	2.85	2337	7.35 (6.30)	3.16	1861	2.22	**CR18-41		
	25,200 (7.38)	25,000 (7.33)	14,000 (4.10)	2455	11.30 (10.20)	3.00	2180	7.80 (6.65)	3.36	1720	2.36	*CB19-26, *CBH19-26	●Factory Installed	
26,000 (7.62)	25,200 (7.38)	13,900 (4.07)	2470	11.55 (10.50)	3.10	2140	7.90 (6.65)	3.46	1690	2.38	*CB19-31, *CBH19-31			
HP19-311 (7.4)	29,000 (8.50)	29,000 (8.50)	16,600 (4.86)	2843	10.70 (10.20)	3.00	2833	7.00 (6.00)	3.00	2211	2.20	**CR18-51	LB-85759F (56J19)	
	29,000 (8.50)	28,800 (8.44)	16,700 (4.89)	3010	10.35 (9.60)	2.80	2840	7.75 (6.45)	2.98	2240	2.14	⊕ *CVP10-31/EC10Q3		
	29,400 (8.61)	29,400 (8.61)	17,000 (4.98)	2980	11.05 (9.85)	2.89	2755	7.00 (6.00)	3.12	2215	2.24	**CH22-51	●Factory Installed	
	29,600 (8.67)	29,800 (8.73)	16,600 (4.86)	3050	10.60 (9.70)	2.85	2850	7.85 (6.45)	3.06	2320	2.10	⊕ *CVP10-41/EC10Q3		
	30,000 (8.79)	28,600 (8.38)	16,000 (4.69)	3000	11.10 (10.00)	2.93	2755	7.00 (6.00)	3.04	2225	2.10	**CH22-65		
	30,000 (8.79)	30,000 (8.79)	17,000 (4.98)	3270	10.50 (9.20)	2.70	2715	7.00 (6.00)	3.20	2195	2.20	**C26-51(FC)		
	30,600 (8.96)	30,200 (8.85)	17,000 (4.98)	3040	11.05 (10.05)	3.08	2715	7.00 (6.00)	3.26	2195	2.26	C22-51FC/B24, CR22-51/B24		
	30,500 (8.94)	28,000 (8.20)	15,800 (4.63)	3260	10.50 (9.35)	2.74	2880	7.00 (6.00)	2.80	2260	2.00	**C26-65(FC)		
	31,000 (9.08)	30,000 (8.79)	17,100 (5.01)	2885	11.80 (10.70)	3.15	2610	7.90 (6.75)	3.36	2100	2.38	*CB19-31, *CBH19-31		
	31,000 (9.08)	30,200 (8.85)	17,200 (5.04)	2910	11.60 (10.60)	3.10	2640	7.85 (6.70)	3.36	2130	2.38	*CB19-41, *CBH19-41		
	31,600 (9.26)	28,600 (8.38)	15,800 (4.63)	3090	11.20 (10.20)	2.99	2880	7.00 (6.00)	2.90	2260	2.04	C22-65FC/B24, CR22-65/B24 **C26-65(FC)EAP		
	32,400 (9.49)	30,200 (8.85)	16,900 (4.95)	2895	11.90 (11.20)	3.28	2550	7.85 (6.70)	3.48	2065	2.40	*CB21V-41, *CBH21V-41		

★Sound Rating Number in accordance with ARI Standard 270.

†Rated in accordance with ARI Standard 210/240 with 25 ft. (7.6 m) of connecting refrigerant lines;

Cooling Ratings — 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°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) db entering indoor coil air.

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

★Kit is required and must be ordered extra unless shown as factory installed.

NOTE — B24 blower not included in ratings for C22 / CR22 series coils. B24 shown for matching reference only.

\*Blower powered indoor coil unit.

\*\*For FM21 Heat Pump Control use with any Lennox furnace that meets system design requirements. See FM21 bulletin in this section for additional data.

CH22 coil may also be matched with B24 series blower units.

⊕ For Canadian usage only.

●Furnished as standard with coil.

◆Heating Seasonal Performance Factor

# ARI RATINGS

Outdoor Unit Model No. ★ARI Std. 270 SRN (bels)	†ARI Standard 210/240 Ratings											Indoor Unit	★Check and Expansion Valve Kit Required
	Cool. Cap. Btuh (kW)	High Temp. Htg. Cap. Btuh (kW)	Low Temp. Htg. Cap. Btuh (kW)	Total Unit Cool. Watts	SEER (BTuh/Watt)	Cool. C.O.P.	Total Unit High Temp. Htg. Watts	◆HSPF Region IV (Region V)	High Temp. Htg. C.O.P.	Total Unit Low Temp. Htg. Watts	Low Temp. Htg. C.O.P.		
HP19-411 HP19-413 (7.8)	35,400 (10.37)	35,000 (10.26)	20,000 (5.86)	3649	10.50 (9.70)	2.85	3374	6.80 (6.30)	3.04	2640	2.22	**CR18-51	LB-85759F (56J19)
	35,400 (10.37)	35,000 (10.26)	18,800 (5.51)	3649	10.50 (9.70)	2.85	3374	6.80 (6.30)	3.04	2575	2.14	**CR18-65	
	35,400 (10.37)	35,000 (10.26)	19,900 (5.83)	3675	10.05 (9.60)	2.80	3400	7.75 (6.55)	3.02	2675	2.18	⊕ *CVP10-46/EC10Q4	●Factory Installed
	35,400 (10.37)	35,000 (10.26)	19,900 (5.83)	3705	10.00 (9.55)	2.80	3425	7.70 (6.50)	3.00	2700	2.16	⊕ *CVP10-41/EC10Q3	
	35,400 (10.37)	35,400 (10.37)	20,400 (5.98)	3490	10.90 (10.20)	3.00	3140	8.00 (6.85)	3.30	2490	2.40	*CB19-31, *CBH19-31	
	36,000 (10.55)	35,800 (10.49)	20,600 (6.04)	3560	11.00 (10.10)	2.96	3270	7.00 (6.00)	3.20	2585	2.34	**C26-51(FC)	
	36,000 (10.55)	33,000 (9.67)	18,800 (5.51)	3550	11.05 (10.15)	2.97	3445	7.00 (6.00)	2.80	2610	2.10	**C26-65(FC)	
	36,000 (10.55)	35,800 (10.49)	20,600 (6.04)	3520	11.00 (10.20)	3.00	3140	8.10 (6.95)	3.34	2490	2.42	*CB19-41, *CBH19-41	
	36,400 (10.37)	35,000 (10.26)	20,200 (5.92)	3425	11.05 (10.60)	3.11	3050	8.05 (6.95)	3.38	2370	2.50	*CB21V-41, *CBH21V-41	
	36,600 (10.72)	35,000 (10.26)	20,000 (5.86)	3595	10.75 (10.20)	2.99	3325	7.00 (6.00)	3.08	2595	2.26	**CH22-51	
	37,000 (10.84)	35,800 (10.49)	20,600 (6.04)	3600	10.75 (10.25)	3.00	3270	7.00 (6.00)	3.20	2585	2.34	C22-51FC/B24, CR22-51/B24	
	37,000 (10.84)	36,200 (10.61)	20,800 (6.09)	3680	10.80 (10.05)	2.95	3245	7.85 (6.70)	3.26	2615	2.32	**CH19-51	
	37,200 (10.90)	36,200 (10.61)	20,800 (6.09)	3600	11.15 (10.30)	3.00	3170	8.05 (6.90)	3.36	2540	2.40	*CB19-51, *CBH19-51	
	37,400 (10.96)	35,800 (10.49)	20,000 (5.86)	3615	11.05 (10.35)	3.03	3320	7.00 (6.00)	3.16	2595	2.26	**CH22-65	
	38,500 (11.28)	33,000 (9.67)	18,800 (5.51)	3640	11.05 (10.60)	3.09	3445	7.00 (6.00)	2.80	2610	2.10	C22-65FC/B24, CR22-65/B24 **C26-65(FC)EAP	
	38,500 (11.28)	36,400 (10.67)	20,000 (5.86)	3460	12.05 (11.40)	3.34	3125	8.00 (6.80)	3.54	2450	2.46	*CB21V-51, *CBH21V-51	
HP19-461 HP19-463 (7.8)	41,000 (12.01)	41,500 (12.16)	23,600 (6.92)	4227	10.80 (9.70)	2.85	3975	7.50 (6.55)	3.06	2956	2.34	**CR18-51	LB-85759G (56J20)
	41,000 (12.01)	41,500 (12.16)	23,600 (6.92)	4227	10.80 (9.70)	2.85	3975	7.50 (6.55)	3.06	3144	2.20	**CR18-65	
	41,000 (12.01)	42,000 (12.31)	23,800 (6.97)	4325	10.50 (9.50)	2.80	3965	7.60 (6.55)	3.10	3045	2.28	⊕ *CVP10-46/EC10Q4	Factory Installed
	42,000 (12.31)	40,000 (11.72)	22,000 (6.45)	4600	11.00 (9.15)	2.68	4145	7.10 (6.20)	2.92	3115	2.16	**C26-65(FC)	
	42,500 (12.45)	43,000 (12.60)	24,400 (7.15)	4290	11.15 (9.90)	2.90	3770	8.20 (7.00)	3.34	2920	2.44	**CH19-51	
	43,000 (12.60)	43,000 (12.60)	24,400 (7.15)	4200	11.50 (10.20)	3.00	3680	8.30 (7.10)	3.42	2830	2.52	*CB19-51, *CBH19-51	
	43,500 (12.74)	41,500 (12.16)	23,000 (6.74)	4495	11.05 (9.65)	2.83	4000	7.10 (6.20)	3.04	3065	2.20	**CH22-65	
	44,500 (13.04)	41,500 (12.16)	23,000 (6.74)	4510	11.20 (9.85)	2.89	4145	7.10 (6.20)	2.92	3115	2.16	C22-65FC/B24, CR22-65/B24 **C26-65(FC)EAP	
	46,000 (13.48)	41,500 (12.16)	23,600 (6.91)	4260	12.15 (10.80)	3.16	3645	8.25 (7.15)	3.34	2720	2.54	*CB21V-51, *CBH21V-51	

★Sound Rating Number in accordance with ARI Standard 270.

†Rated in accordance with ARI Standard 210/240 with 25 ft. (7.6 m) of connecting refrigerant lines;

**Cooling Ratings** — 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°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) db entering indoor coil air.

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

★Kit is required and must be ordered extra unless shown as factory installed.

⊕ For Canadian usage only.

NOTE — B24 blower not included in ratings for C22 / CR22 series coils. B24 shown for matching reference only.

●Furnished as standard with coil.

\*Blower powered indoor coil unit.

◆Heating Seasonal Performance Factor

\*\*For FM21 Heat Pump Control use with any Lennox furnace that meets system design requirements. See FM21 bulletin in this section for additional data.

CH22 coil may also be matched with B24 series blower units.

# ARI RATINGS

Outdoor Unit Model No. ★ARI Std. 270 SRN (bels)	†ARI Standard 210/240 Ratings											Indoor Unit	★Check and Expansion Valve Kit Required
	Cool. Cap. Btuh (kW)	High Temp. Htg. Cap. Btuh (kW)	Low Temp. Htg. Cap. Btuh (kW)	Total Unit Cool. Watts	SEER (EER) (Btuh/Watt)	Cool. C.O.P.	Total Unit High Temp. Htg. Watts	◆HSPF Region IV (Region V)	High Temp. Htg. C.O.P.	Total Unit Low Temp. Htg. Watts	Low Temp. Htg. C.O.P.		
HP19-511 HP19-513 (8.0)	48,000 (14.06)	47,500 (13.92)	27,000 (7.91)	4729	11.00 (10.15)	2.95	4378	7.55 (6.50)	3.18	3381	2.34	**CR18-51, **CR18-65	LB-85759G (56J20)
	48,000 (14.06)	48,000 (14.06)	27,100 (7.90)	4810	10.75 (9.95)	2.90	4500	7.55 (6.40)	3.12	3460	2.28	⊕ *CVP10-51/EC10Q4	●Factory Installed
	49,000 (14.36)	47,000 (13.77)	28,200 (8.26)	4740	11.55 (10.35)	3.03	4205	7.10 (6.75)	3.28	3380	2.44	**C26-65(FC)	
	49,500 (14.50)	49,500 (14.50)	27,400 (8.03)	4695	11.35 (10.55)	3.10	4140	8.05 (6.70)	3.50	3240	2.48	*CB19-51, *CBH19-51	
	50,000 (14.65)	47,000 (13.77)	28,200 (8.26)	4425	11.55 (11.30)	3.31	4205	7.10 (6.75)	3.28	3380	2.44	C22-65FC/B24, CR22-65/B24 CH22-65/B24	
	50,000 (14.65)	49,500 (14.50)	27,400 (8.03)	4790	11.20 (10.45)	3.05	4210	8.10 (6.70)	3.44	3310	2.42	**CH19-51	
	50,500 (14.80)	49,000 (14.36)	26,800 (7.85)	4555	12.15 (11.05)	3.24	3870	8.30 (7.00)	3.70	3010	2.60	*CB21V-51, *CBH21V-51	
	52,000 (15.24)	49,500 (14.50)	27,400 (8.03)	4775	11.75 (10.90)	3.20	4145	8.20 (6.80)	3.50	3240	2.48	*CB19-65, *CBH19-65	
	52,000 (15.24)	49,500 (14.50)	27,600 (8.09)	4855	11.60 (10.70)	3.10	4190	8.10 (6.75)	3.46	3310	2.44	**CH19-65	
	53,000 (15.53)	48,500 (14.21)	26,800 (7.85)	4580	12.30 (11.60)	3.40	3930	8.35 (7.00)	3.60	3040	2.58	*CB21V-65, *CBH21V-65	
HP19-651 HP19-653 (8.0)	54,000 (15.82)	54,500 (15.99)	32,000 (9.38)	5340	11.00 (10.10)	2.96	4850	7.50 (6.40)	3.26	3925	2.36	**CH22-65	
	56,000 (16.41)	56,000 (16.41)	32,900 (9.64)	5940	10.45 (9.40)	2.75	5200	7.85 (6.75)	3.14	4030	2.38	⊕ *CVP10-65/EC10Q5	
	56,500 (16.55)	54,500 (15.99)	31,500 (9.23)	5375	11.00 (10.50)	3.08	4945	7.50 (6.40)	3.22	4005	2.30	CR22-65/B24	
	57,000 (16.70)	53,000 (15.53)	32,000 (9.38)	5955	10.50 (9.55)	2.80	4945	7.50 (6.40)	3.22	4095	2.28	**C26-65(FC)	
	57,500 (16.85)	54,500 (15.82)	32,000 (9.38)	5580	11.00 (10.30)	3.02	4945	7.50 (6.40)	3.22	4095	2.28	C22-65FC/B24 **C26-65(FC)EAP	
	60,000 (17.58)	56,500 (16.55)	32,800 (9.60)	5920	11.25 (10.15)	2.95	4980	7.90 (6.80)	3.32	3880	2.46	*CB19-65, *CBH19-65	
	60,500 (17.73)	56,000 (16.41)	32,200 (9.43)	5745	11.80 (10.50)	3.08	4790	8.35 (7.10)	3.42	3700	2.54	*CB21V-65, *CBH21V-65	
	60,500 (17.73)	56,500 (16.55)	32,800 (9.60)	5940	11.30 (10.20)	2.99	4960	8.15 (7.00)	3.34	3880	2.48	**CH19-65	

★Sound Rating Number in accordance with ARI Standard 270.

†Rated in accordance with ARI Standard 210/240 with 25 ft. (7.6 m) of connecting refrigerant lines;

**Cooling Ratings** — 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°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) db entering indoor coil air.

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

★Kit is required and must be ordered extra unless shown as factory installed.

●Furnished as standard with coil.

◆Heating Seasonal Performance Factor

\*Blower powered indoor coil unit.

\*\*For FM21 Heat Pump Control use with any Lennox furnace that meets system design requirements. See FM21 bulletin in this section for additional data.

C22FC/CR22/CH22 coil may also be matched with B24 series blower units.

NOTE — B24 blower not included in ratings for C22 / CR22 series coils. B24 shown for matching reference only.

⊕ For Canadian usage only.

## SPECIFICATIONS

Model No.		HP19-211	HP19-261	HP19-311	HP19-411 HP19-413	HP19-461 HP19-463	HP19-511 HP19-513	HP19-651 HP19-653	
Outdoor Coil	Net face area — sq. ft. (m <sup>2</sup> )	Outer coil	11.83 (1.10)	11.83 (1.10)	15.94 (1.48)	15.94 (1.48)	18.22 (1.69)	21.64 (2.01)	23.92 (2.22)
		Inner coil	8.57 (0.80)	8.57 (0.80)	15.34 (1.43)	15.34 (1.43)	17.53 (1.63)	20.81 (1.93)	23.01 (2.14)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
	Number of rows	1.75	1.75	2	2	2	2	2	
	Fins per inch (m)	18 (709)	18 (709)	18 (709)	18 (709)	18 (709)	18 (709)	20 (787)	
Outdoor Fan	Diameter — in. (mm) & no. of blades		20 (508) — 4	20 (508) — 4	24 (610) — 3	24 (610) — 3	24 (610) — 3	24 (610) — 4	24 (610) — 4
	Motor hp (w)		1/6 (124)	1/6 (124)	1/6 (124)	1/6 (124)	1/6 (124)	1/4 (187)	1/4 (187)
	Cfm (L/s)		2300 (1085)	2300 (1.85)	3350 (1580)	3350 (1580)	3400 (1605)	4200 (1980)	4175 (1970)
	Rpm		840	840	820	820	820	840	825
	Watts		185	185	210	210	200	315	330
*Refrigerant charge furnished (HCFC-22)		6 lbs. 5 oz. (2.86 kg)	6 lbs. 14 oz. (3.12 kg)	9 lbs. 5 oz. (4.22 kg)	12 lbs. 10 oz. (5.78 kg)	12 lbs. 10 oz. (5.78 kg)	14 lbs. 12 oz. (6.69)	18 lbs. 8 oz. (8.39)	
Liquid line o.d. — in. (mm) connection (sweat)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	
Vapor line o.d. — in. (mm) connection (sweat)		5/8 (16)	5/8 (16)	3/4 (19)	3/4 (19)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.6)	
Shipping weight — lbs. (kg) 1 package		201 (91)	204 (93)	261 (118)	267 (121)	301 (137)	321 (146)	359 (163)	

\*Refrigerant charge sufficient for 25 ft. (7.6 m) length of refrigerant lines.

## ELECTRICAL DATA

Model No.		HP19-211	HP19-261	HP19-311	HP19-411	HP19-413	HP19-461	HP19-463
Line voltage data		208/230v 60hz-1ph	208/230v 60hz-1ph	208/230v 60hz-1ph	208/230v 60hz-1ph	208/230v 60hz-3ph	208/230v 60hz-1ph	208/230v 60hz-3ph
Compressor	Rated load amps	9.7	12.1	14.2	15.6	10.8	18.3	11.7
	Power factor	.98	.98	.98	.98	.88	.98	.88
	Locked rotor amps	54.0	57.0	66.0	75.8	65.0	97.6	73.7
Outdoor Coil Fan Motor	Full load amps	1.1	1.1	1.1	1.1	1.1	1.1	1.1
	Locked rotor amps	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Rec. max. fuse or HACR circuit breaker size (amps)		20	25	30	35	25	40	25
*Minimum circuit ampacity		13.3	16.3	18.9	20.6	14.6	24.0	15.8

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.

## ELECTRICAL DATA

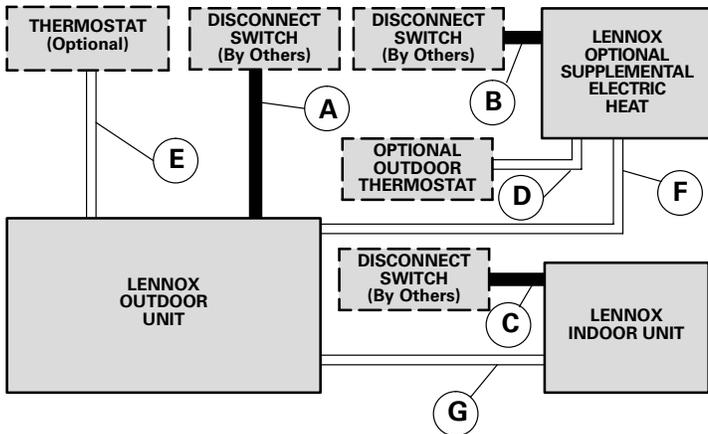
Model No.		HP19-511	HP19-513		HP19-651	HP19-653	
Line voltage data — 60 hz		208/230v 1ph	208/230v 3ph	**460v 3ph	208/230v 1ph	208/230v 3ph	**460v 3ph
Compressor	Rated load amps	18.0	12.6	6.4	22.0	14.5	7.2
	Power factor	.99	.79	.79	.99	.79	.79
	Locked rotor amps	105.0	130.0	64.0	135.0	150.0	73.0
Condenser Coil Fan Motor	Full load amps	1.7	1.7	1.1	1.7	1.7	1.1
	Locked rotor amps	3.1	3.1	2.0	3.1	3.1	2.0
Rec. max. fuse or HACR circuit breaker size (amps)		50	30	15	60	35	20
*Minimum circuit ampacity		30.5	20.1	9.9	36.9	22.5	13.1

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

\*\* Extremes of operating range are plus and minus 10% of line voltage.

NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.

## FIELD WIRING

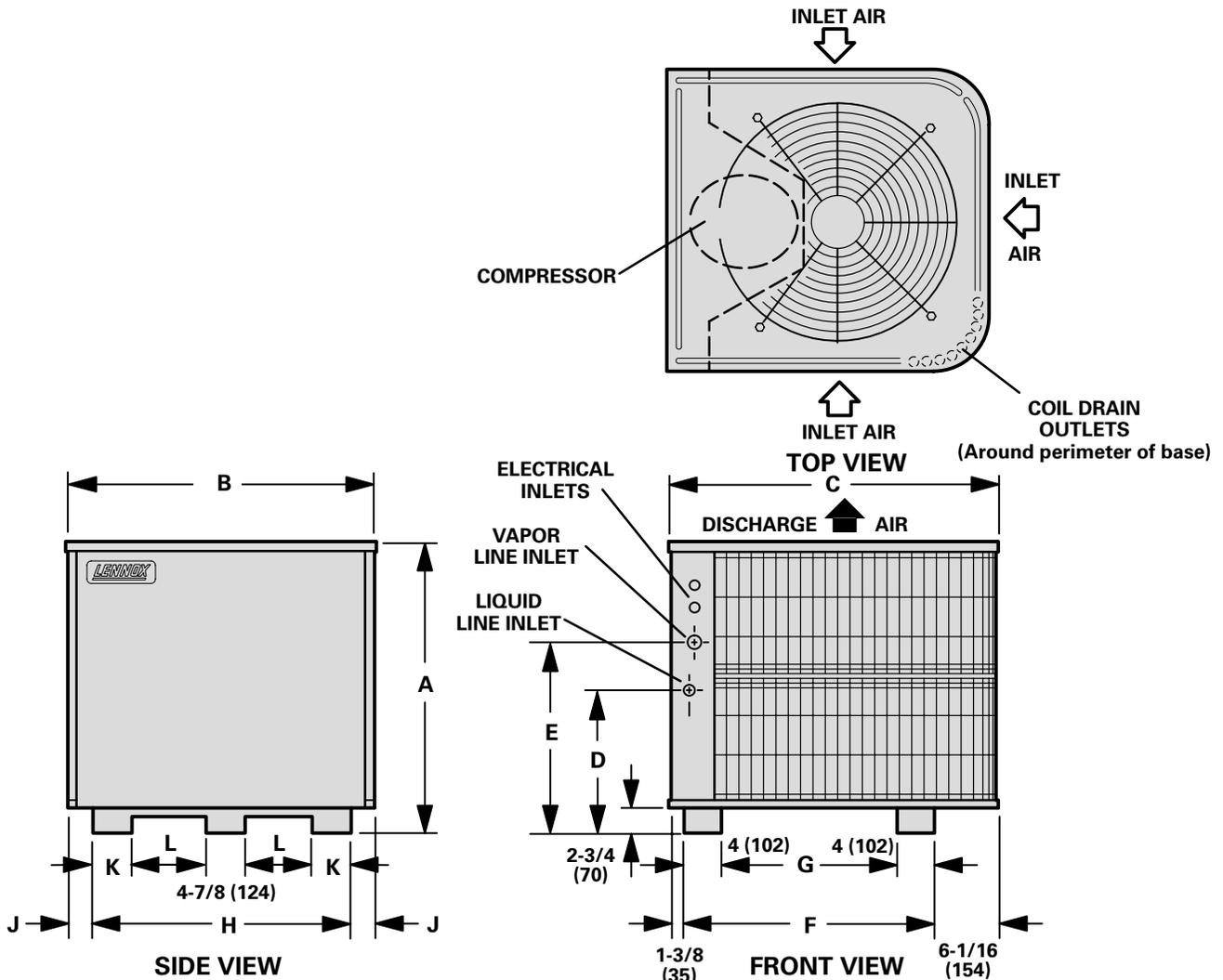


- A — Two or Three Wire Power (see Electrical Data)
- B — Two or Three Wire Power (size to heater capacity)
- C — Two Wire Power (size to indoor coil blower motor)
- D — Two Wire Low Voltage — 18 ga. minimum
- E — Eight Wire Low Voltage — 18 ga. minimum — with Electric Heat  
— Ten Wire Low Voltage with Optional Outdoor Thermostat
- F — Four Wire Low Voltage — 18 ga. minimum
- G — Three Wire Low Voltage — 18 ga. minimum

— Field Wiring Not Furnished —

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

## DIMENSIONS — inches (mm)



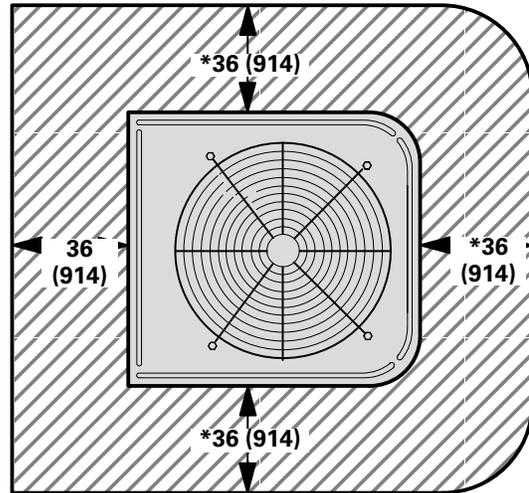
Model No.	A		B		C		D		E		F		G		H		J		K		L	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
HP19-211 HP19-261	27-7/8	581	25-7/8	657	29-7/8	759	12-1/4	311	16-3/4	425	22-7/16	570	14-7/16	367	22-1/8	562	1-7/8	48	2-7/8	73	5-1/2	140
HP19-311 HP19-411-413	30-7/8	784	32-1/8	816	34-1/16	865	12-3/4	324	17-1/4	438	26-5/8	676	18-5/8	473	28-1/8	714	2	51	3-7/8	98	7-1/2	191
HP19-461-463	34-7/8	886	32-1/8	816	34-1/16	865	13-3/4	349	18-1/4	464	26-5/8	676	18-5/8	473	28-1/8	714	2	51	3-7/8	98	7-1/2	191
HP19-511-513	40-7/8	1038	32-1/8	816	34-1/16	865	25-1/4	641	20-3/4	527	26-5/8	676	18-5/8	473	28-1/8	714	2	51	3-7/8	98	7-1/2	191
HP19-651-653	44-7/8	1140	32-1/8	816	34-1/16	865	29-1/4	743	20-3/4	527	26-5/8	676	18-5/8	473	28-1/8	714	2	51	3-7/8	98	7-1/2	191

## REFRIGERANT LINE KITS

Outdoor Unit Model No.	Line Set Model No.	Line Length		Liquid Line (o.d.)		Vapor Line (o.d.)	
		ft.	m	in.	mm	in.	mm
HP19-211 HP19-261	L10-26-20	20	6	3/8	9.5	5/8	15.8
	L10-26-25	25	8				
	L10-26-35	35	11				
	L10-26-50	50	15				
HP19-311 HP19-411 HP19-413	L10-41-20	20	6	3/8	9.5	3/4	19
	L10-41-30	30	9				
	L10-41-40	40	12				
	L10-41-50	50	15				
HP19-461 HP19-463 HP19-511 HP19-513	L10-65-30	30	9	3/8	9.5	7/8	22.2
	L10-65-40	40	12				
	L10-65-50	50	15				
	*Not available		3/8				

NOTE — Refrigerant line set should not exceed 50 ft. (15m) in any installation.  
\*Field fabricated.

## INSTALLATION CLEARANCES inches (mm)



NOTE — 48" (1219 mm) clearance required on top of unit.  
\*NOTE — One side of coil may be 12 (305) inches.

## 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.

### HP19-211 — COOLING CAPACITY — CH22-41

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 Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	210	450	5.1	17,400	1330	.68	.81	.93	4.8	16,500	1430	.69	.84	.95	4.6	15,700	1540	.71	.86	.97	4.5	15,200	1670	.71	.89	.98
	285	600	5.5	18,900	1350	.73	.87	1.00	5.2	17,900	1450	.75	.90	1.00	5.0	17,000	1570	.77	.93	1.00	4.7	16,200	1700	.78	.96	1.00
	355	750	5.8	19,900	1360	.79	.93	1.00	5.5	18,900	1480	.81	.96	1.00	5.2	17,900	1600	.83	.99	1.00	5.0	17,100	1730	.84	1.00	1.00
67°F (19.4°C)	210	450	5.3	18,200	1340	.54	.68	.80	5.1	17,400	1450	.55	.69	.81	5.0	16,900	1570	.55	.71	.82	4.7	16,100	1700	.56	.73	.84
	285	600	5.8	19,700	1350	.57	.72	.87	5.5	18,800	1470	.58	.73	.89	5.2	17,800	1600	.59	.76	.91	5.0	17,000	1730	.60	.78	.93
	355	750	6.1	20,900	1380	.60	.75	.93	5.8	19,800	1500	.62	.78	.96	5.5	18,800	1630	.63	.80	.98	5.2	17,800	1760	.64	.83	1.00
71°F (21.7°C)	210	450	5.7	19,500	1350	.41	.54	.67	5.5	18,600	1470	.41	.55	.68	5.2	17,900	1600	.41	.56	.69	5.0	17,100	1740	.42	.57	.70
	285	600	6.0	20,600	1370	.42	.57	.72	5.8	19,700	1500	.43	.58	.74	5.5	18,800	1630	.43	.60	.75	5.3	18,100	1770	.43	.62	.76
	355	750	6.4	21,800	1400	.43	.59	.77	6.1	20,700	1520	.44	.61	.79	5.7	19,600	1650	.44	.62	.81	5.5	18,700	1790	.45	.64	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

### HP19-211 — HEATING CAPACITY — CH22-41

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 (-28°C)				
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input							
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW	Btuh				
190	400	6.6	22,600	1665	5.0	17,100	1450	3.4	11,500	1240	2.1	7100	1015	0.9	3000	790									
285	600	7.0	24,000	1565	5.4	18,500	1355	3.8	12,900	1140	2.5	8500	920	1.3	4300	690									
375	800	7.3	24,900	1515	5.7	19,400	1300	4.1	13,900	1090	2.8	9400	870	1.6	5300	640									

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-211 HEATING PERFORMANCE AT 600 cfm (285 L/s) Indoor Coil Air Volume (CH22-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1565	24,000	7.0
60	16	1515	22,600	6.6
55	13	1460	21,300	6.2
50	10	1405	19,900	5.8
47	8	1375	19,100	5.6
45	7	1355	18,500	5.4
40	4	1300	16,900	5.0
35	2	1245	15,300	4.5
30	-1	1195	14,100	4.1
25	-4	1140	12,900	3.8
20	-7	1085	11,700	3.4
17	-8	1055	11,000	3.2
15	-9	1035	10,600	3.1
10	-12	975	9600	2.8
5	-15	920	8500	2.5
0	-18	860	7500	2.2
-5	-21	805	6400	1.9
-10	-23	745	5400	1.6
-15	-26	690	4300	1.3
-20	-29	635	3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-211 — COOLING CAPACITY — CH22-31

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17.2°C)	210	450	5.1	17,300	1320	.68	.81	.92	4.9	16,600	1430	.69	.84	.94	4.7	16,000	1540	.70	.86	.96	4.5	15,200	1670	.71	.89	.98
	285	600	5.5	18,600	1340	.73	.86	1.00	5.2	17,700	1450	.75	.89	1.00	4.9	16,800	1570	.76	.92	1.00	4.7	16,200	1710	.78	.97	1.00
	355	750	5.7	19,500	1350	.79	.92	1.00	5.4	18,500	1470	.81	.94	1.00	5.2	17,600	1590	.83	.99	1.00	5.0	17,200	1740	.84	1.00	1.00
67°F (19.4°C)	210	450	5.4	18,400	1340	.54	.68	.79	5.2	17,600	1450	.54	.69	.80	5.0	16,900	1570	.55	.71	.81	4.7	16,100	1700	.56	.72	.83
	285	600	5.7	19,400	1350	.57	.71	.87	5.4	18,500	1470	.58	.73	.88	5.2	17,900	1600	.59	.76	.90	5.0	17,200	1740	.59	.78	.91
	355	750	6.0	20,500	1370	.60	.74	.93	5.7	19,500	1490	.61	.76	.96	5.4	18,500	1620	.63	.80	.98	5.2	17,800	1760	.64	.83	1.00
71°F (21.7°C)	210	450	5.7	19,400	1350	.41	.54	.66	5.7	18,600	1470	.41	.55	.67	5.2	17,800	1600	.41	.56	.68	5.0	17,000	1730	.41	.57	.69
	285	600	6.0	20,500	1370	.42	.55	.72	5.8	19,700	1500	.42	.58	.73	5.6	19,000	1630	.43	.59	.74	5.3	18,100	1770	.43	.61	.75
	355	750	6.3	21,400	1390	.43	.59	.77	6.0	20,600	1520	.44	.60	.79	5.7	19,600	1650	.44	.62	.80	5.5	18,700	1790	.44	.64	.82

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — COOLING CAPACITY — C22-31(W)(FC)/B24 — C26-31(W)(FC) — CR22-31(W)/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17.2°C)	210	450	5.5	18,800	1340	.69	.82	.94	5.2	17,800	1450	.70	.84	.96	4.9	16,700	1560	.72	.86	.98	4.6	15,800	1680	.73	.89	1.00
	285	600	5.9	20,300	1360	.74	.90	1.00	5.6	19,200	1480	.76	.92	1.00	5.3	18,100	1600	.78	.95	1.00	5.0	17,000	1730	.80	.98	1.00
	355	750	6.3	21,400	1380	.80	.96	1.00	5.9	20,200	1510	.82	.99	1.00	5.6	19,100	1630	.84	1.00	1.00	5.3	18,100	1770	.86	1.00	1.00
67°F (19.4°C)	210	450	5.9	20,000	1360	.54	.67	.80	5.6	19,000	1470	.55	.69	.81	5.3	18,000	1600	.56	.70	.83	5.0	17,000	1720	.57	.72	.85
	285	600	6.3	21,600	1390	.58	.72	.87	6.0	20,400	1510	.59	.74	.89	5.7	19,300	1640	.60	.76	.91	5.3	18,100	1770	.61	.79	.94
	355	750	6.6	22,600	1410	.61	.78	.94	6.3	21,400	1540	.62	.80	.97	5.9	20,200	1660	.63	.82	.99	5.5	18,900	1790	.65	.85	1.00
71°F (21.7°C)	210	450	6.2	21,200	1380	.41	.54	.67	5.9	20,100	1500	.41	.55	.68	5.6	19,100	1630	.42	.56	.69	5.3	18,000	1760	.42	.57	.71
	285	600	6.7	22,800	1410	.42	.57	.72	6.3	21,600	1540	.43	.58	.74	6.0	20,500	1670	.43	.59	.75	5.7	19,300	1800	.44	.61	.77
	355	750	7.0	23,900	1440	.44	.61	.77	6.6	22,600	1570	.44	.62	.79	6.2	21,300	1700	.45	.63	.81	5.9	20,100	1830	.45	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — HEATING CAPACITY — CH22-31

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
190	400	6.6	22,400	1690	5.0	17,000	1465	3.4	11,500	1245	2.1	7100	1015	0.9	3000	790
285	600	6.9	23,700	1595	5.4	18,300	1370	3.8	12,900	1145	2.5	8500	920	1.3	4300	690
375	800	7.2	24,600	1540	5.6	19,200	1315	4.0	13,800	1090	2.8	9400	865	1.5	5200	640

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-211 — HEATING CAPACITY — C22-31(W)(FC)/B24 — C26-31(W)(FC) — CR22-31(W)/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
210	450	6.7	23,000	1640	5.1	17,500	1425	3.5	11,900	1210	2.2	7500	985	1.0	3400	755
285	600	7.0	23,900	1575	5.4	18,400	1360	3.8	12,900	1145	2.5	8500	920	1.3	4300	690
355	750	7.2	24,700	1530	5.6	19,200	1315	4.0	13,600	1100	2.7	9200	880	1.5	5000	650

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-211 HEATING PERFORMANCE at 600 cfm (285 L/s) Indoor Coil Air Volume (CH22-31)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	1595		23,700	6.9
60	16	1535		22,400	6.6
55	13	1480		21,000	6.2
50	10	1425		19,700	5.8
47	8	1390		18,900	5.5
45	7	1370		18,300	5.4
40	4	1315		16,800	4.9
35	2	1255		15,300	4.5
30	-1	1200		14,100	4.1
25	-4	1145		12,900	3.8
20	-7	1090		11,700	3.4
17	-8	1055		11,000	3.2
15	-9	1035		10,500	3.1
10	-12	975		9500	2.8
5	-15	920		8500	2.5
0	-18	860		7400	2.2
-5	-21	805		6400	1.9
-10	-23	750		5400	1.6
-15	-26	690		4300	1.3
-20	-29	635		3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-211 HEATING PERFORMANCE at 600 cfm (285 L/s) Indoor Coil Air Volume (C22-31 — C26-31 — CR22-31)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	1575		23,900	7.0
60	16	1520		22,600	6.6
55	13	1465		21,200	6.2
50	10	1410		19,900	5.8
47	8	1380		19,100	5.6
45	7	1360		18,400	5.4
40	4	1305		16,800	4.9
35	2	1250		15,300	4.5
30	-1	1195		14,100	4.1
25	-4	1145		12,900	3.8
20	-7	1090		11,700	3.4
17	-8	1060		11,000	3.2
15	-9	1035		10,500	3.1
10	-12	975		9500	2.8
5	-15	920		8500	2.5
0	-18	865		7400	2.2
-5	-21	805		6400	1.9
-10	-23	750		5400	1.6
-15	-26	690		4300	1.3
-20	-29	635		3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-211 — COOLING CAPACITY — CVP10-26/EC10Q3

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	285	600	5.6	19,200	1350	.77	.91	1.00	5.3	18,100	1460	.79	.95	1.00	5.0	17,100	1580	.81	.97	1.00	4.7	16,200	1710	.84	1.00	1.00
	320	675	5.8	19,700	1360	.79	.95	1.00	5.5	18,600	1470	.82	.98	1.00	5.2	17,700	1600	.84	1.00	1.00	4.9	16,800	1730	.88	1.00	1.00
67°F (19.4°C)	355	750	5.9	20,100	1360	.83	.99	1.00	5.6	19,200	1490	.85	1.00	1.00	5.4	18,300	1620	.88	1.00	1.00	5.1	17,400	1750	.91	1.00	1.00
	285	600	6.0	20,400	1370	.60	.74	.88	5.7	19,300	1490	.61	.76	.90	5.4	18,300	1620	.62	.78	.93	5.0	17,200	1740	.64	.81	.96
71°F (21.7°C)	320	675	6.2	21,000	1380	.62	.77	.92	5.8	19,800	1500	.63	.79	.95	5.5	18,700	1630	.64	.81	.97	5.1	17,600	1760	.66	.84	1.00
	355	750	6.3	21,400	1390	.63	.80	.95	5.9	20,200	1510	.65	.82	.98	5.6	19,100	1640	.66	.85	1.00	5.2	17,900	1770	.68	.88	1.00
71°F (21.7°C)	285	600	6.4	21,900	1400	.45	.58	.71	6.1	20,700	1520	.45	.59	.73	5.7	19,600	1650	.46	.61	.75	5.4	18,500	1790	.46	.62	.77
	320	675	6.6	22,400	1410	.45	.60	.74	6.2	21,200	1540	.46	.61	.76	5.9	20,000	1670	.46	.63	.78	5.5	18,900	1800	.47	.64	.81
355	750	6.7	22,800	1420	.46	.62	.78	6.3	21,600	1550	.47	.63	.80	5.9	20,300	1680	.47	.65	.82	5.6	19,200	1810	.48	.67	.85	

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — COOLING CAPACITY — CR18-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	320	675	5.8	19,700	1360	.79	.94	1.00	5.4	18,500	1470	.81	.97	1.00	5.1	17,500	1590	.83	.99	1.00	4.9	16,600	1720	.86	1.00	1.00
	355	750	5.9	20,100	1360	.81	.97	1.00	5.6	19,000	1480	.84	.99	1.00	5.3	18,100	1610	.86	1.00	1.00	5.0	17,100	1740	.90	1.00	1.00
67°F (19.4°C)	320	675	6.1	20,900	1380	.61	.76	.90	5.8	19,700	1500	.62	.78	.93	5.5	18,600	1630	.64	.80	.96	5.1	17,500	1760	.65	.83	.98
	355	750	6.3	21,300	1390	.63	.78	.93	5.9	20,100	1510	.64	.81	.96	5.6	19,000	1640	.66	.83	.99	5.3	17,900	1770	.67	.86	1.00
71°F (21.7°C)	320	675	6.5	22,100	1410	.45	.59	.73	6.2	21,000	1530	.45	.61	.75	5.8	19,900	1660	.46	.62	.77	5.5	18,700	1790	.47	.64	.80
	355	750	6.6	22,600	1410	.45	.61	.76	6.3	21,400	1540	.46	.62	.78	5.9	20,200	1670	.47	.64	.81	5.6	19,100	1810	.48	.66	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — HEATING CAPACITY — CVP10-26/EC10Q3

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	
285	600	7.0	24,000	1570	5.4	18,300	1360	3.6	12,400	1150	2.4	8200	960	1.1	3900	730				
320	675	7.2	24,500	1530	5.5	18,800	1320	3.8	12,900	1110	2.5	8700	920	1.3	4400	690				
355	750	7.2	24,600	1515	5.5	18,900	1305	3.8	13,000	1095	2.6	8800	905	1.3	4500	675				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-211 — HEATING CAPACITY — CR18-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	
320	675	7.1	24,100	1565	5.4	18,500	1345	3.7	12,700	1125	2.5	8500	902	1.3	4300	695				
355	750	7.2	24,600	1550	5.6	19,000	1330	3.9	13,200	1110	2.6	9000	905	1.4	4800	680				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-211 HEATING PERFORMANCE at 675 cfm (320 L/s) Indoor Coil Air Volume (CVP10-26/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1530	24,500	7.2
60	16	1480	23,100	6.8
55	13	1430	21,700	6.4
50	10	1380	20,300	5.9
47	8	1350	19,500	5.7
45	7	1320	18,800	5.5
40	4	1255	16,900	5.0
35	2	1185	15,100	4.4
30	-1	1150	14,000	4.1
25	-4	1110	12,900	3.8
20	-7	1075	11,900	3.5
17	-8	1055	11,200	3.3
15	-9	1030	10,800	3.2
10	-12	975	9700	2.8
5	-15	920	8700	2.5
0	-18	860	7600	2.2
-5	-21	805	6500	1.9
-10	-23	745	5500	1.6
-15	-26	690	4400	1.3
-20	-29	635	3400	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-211 HEATING PERFORMANCE at 675 cfm (320 L/s) Indoor Coil Air Volume (CR18-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1565	24,100	7.1
60	16	1510	22,700	6.7
55	13	1460	21,400	6.3
50	10	1405	20,000	5.9
47	8	1375	19,200	5.6
45	7	1345	18,500	5.4
40	4	1280	16,600	4.9
35	2	1210	14,800	4.3
30	-1	1170	13,700	4.0
25	-4	1125	12,700	3.7
20	-7	1085	11,600	3.4
17	-8	1060	11,000	3.2
15	-9	1035	10,600	3.1
10	-12	980	9500	2.8
5	-15	920	8500	2.5
0	-18	865	7500	2.2
-5	-21	805	6400	1.9
-10	-23	750	5400	1.6
-15	-26	695	4300	1.3
-20	-29	635	3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-211 — COOLING CAPACITY — C22-41FC/B24 — C26-41(FC) — CR22-41/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	210	450	5.5	18,900	1340	.69	.82	.94	5.2	17,900	1450	.70	.84	.96	4.9	16,800	1560	.72	.87	.99	4.6	15,800	1680	.73	.89	1.00
	285	600	5.9	20,300	1360	.74	.90	1.00	5.6	19,200	1480	.76	.93	1.00	5.3	18,100	1600	.78	.95	1.00	5.0	17,000	1730	.80	.98	1.00
	355	750	6.3	21,500	1390	.80	.97	1.00	5.9	20,300	1510	.82	.99	1.00	5.6	19,200	1640	.84	1.00	1.00	5.3	18,200	1770	.86	1.00	1.00
67°F (19.4°C)	210	450	5.9	20,100	1360	.54	.67	.80	5.6	19,000	1480	.55	.69	.82	5.3	18,000	1600	.56	.70	.83	5.0	17,000	1730	.57	.72	.85
	285	600	6.4	21,700	1390	.58	.73	.87	6.0	20,500	1510	.59	.74	.89	5.7	19,400	1640	.60	.76	.91	5.3	18,200	1770	.61	.79	.94
	355	750	6.7	22,800	1410	.61	.78	.94	6.3	21,500	1540	.62	.80	.97	5.9	20,200	1670	.64	.83	1.00	5.6	19,000	1800	.65	.86	1.00
71°F (21.7°C)	210	450	6.2	21,300	1380	.41	.54	.67	5.9	20,200	1510	.41	.55	.68	5.6	19,100	1630	.42	.56	.70	5.3	18,100	1760	.42	.57	.71
	285	600	6.7	22,900	1420	.42	.57	.72	6.4	21,700	1540	.43	.58	.74	6.0	20,500	1670	.43	.60	.75	5.7	19,300	1810	.44	.61	.77
	355	750	7.0	24,000	1440	.44	.61	.78	6.7	22,700	1570	.44	.62	.79	6.3	21,400	1700	.45	.64	.81	5.9	20,200	1830	.45	.65	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — COOLING CAPACITY — CB19/CBH19-21 — CB19/CBH19-26

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	285	600	5.7	19,500	1360	.77	.92	1.00	5.4	18,400	1470	.79	.94	1.00	5.1	17,300	1590	.81	.97	1.00	4.8	16,400	1710	.84	1.00	1.00
	320	675	5.9	20,000	1360	.80	.95	1.00	5.5	18,900	1480	.82	.98	1.00	5.2	17,900	1600	.85	1.00	1.00	5.0	17,000	1740	.88	1.00	1.00
	355	750	6.1	20,500	1370	.83	.98	1.00	5.7	19,400	1490	.85	1.00	1.00	5.4	18,500	1620	.88	1.00	1.00	5.2	17,600	1750	.91	1.00	1.00
67°F (19.4°C)	285	600	6.1	20,700	1370	.60	.74	.88	5.7	19,600	1500	.61	.76	.91	5.4	18,500	1620	.62	.78	.93	5.1	17,300	1750	.64	.81	.96
	320	675	6.2	21,200	1390	.62	.77	.92	5.9	20,000	1510	.63	.79	.94	5.5	18,900	1630	.65	.82	.97	5.2	17,800	1760	.66	.85	1.00
	355	750	6.3	21,600	1390	.63	.80	.95	6.0	20,400	1520	.65	.83	.98	5.7	19,300	1650	.67	.85	1.00	5.3	18,100	1770	.69	.88	1.00
71°F (21.7°C)	285	600	6.4	21,900	1400	.45	.58	.71	6.1	20,800	1530	.45	.60	.73	5.8	19,700	1660	.45	.61	.76	5.4	18,500	1790	.46	.62	.78
	320	675	6.6	22,500	1410	.45	.60	.74	6.2	21,300	1540	.46	.62	.77	5.9	20,100	1670	.46	.63	.79	5.5	18,900	1800	.47	.65	.82
	355	750	6.7	22,900	1420	.46	.62	.77	6.4	21,700	1550	.47	.63	.80	6.0	20,500	1680	.47	.65	.82	5.7	19,300	1810	.48	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-211 — HEATING CAPACITY — C22-41FC/B24 — C26-41(FC) — CR22-41/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
190	400	6.8	23,100	1630	5.2	17,600	1420	3.5	11,900	1210	2.2	7500	985	1.0	3400	760
285	600	7.1	24,100	1565	5.4	18,500	1350	3.8	12,900	1140	2.5	8500	920	1.3	4300	690
375	800	7.3	24,800	1520	5.6	19,200	1310	4.0	13,600	1100	2.7	9200	880	1.5	5100	650

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-211 — HEATING CAPACITY — CB19/CBH19-21 — CB19/CBH19-26

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
285	600	7.0	23,800	1535	5.3	18,100	1335	3.6	12,200	1125	2.3	8000	930	1.1	3900	700
320	675	7.1	24,200	1520	5.4	18,500	1320	3.7	12,600	1110	2.5	8400	915	1.3	4300	685
355	750	7.2	24,700	1510	5.6	19,000	1310	3.8	13,100	1100	2.6	8900	905	1.4	4800	675

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-211 HEATING PERFORMANCE at 600 cfm (285 L/s) Indoor Coil Air Volume (C22-41 — C26-41 — CR22-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1565	24,100	7.1
60	16	1510	22,700	6.7
55	13	1455	21,300	6.2
50	10	1405	20,000	5.9
47	8	1375	19,100	5.6
45	7	1350	18,500	5.4
40	4	1300	16,900	5.0
35	2	1245	15,300	4.5
30	-1	1195	14,100	4.1
25	-4	1140	12,900	3.8
20	-7	1090	11,700	3.4
17	-8	1055	11,000	3.2
15	-9	1035	10,600	3.1
10	-12	975	9500	2.8
5	-15	920	8500	2.5
0	-18	860	7400	2.2
-5	-21	805	6400	1.9
-10	-23	750	5400	1.6
-15	-26	690	4300	1.3
-20	-29	635	3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

### HP19-211 HEATING PERFORMANCE at 675 cfm (320 L/s) Indoor Coil Air Volume (CB19/CBH19-21-26)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1520	24,200	7.1
60	16	1470	22,800	6.7
55	13	1420	21,400	6.3
50	10	1375	20,000	5.9
47	8	1345	19,200	5.6
45	7	1320	18,500	5.4
40	4	1250	16,600	4.9
35	2	1185	14,800	4.3
30	-1	1145	13,700	4.0
25	-4	1110	12,600	3.7
20	-7	1070	11,600	3.4
17	-8	1050	10,900	3.2
15	-9	1025	10,500	3.1
10	-12	970	9500	2.8
5	-15	915	8400	2.5
0	-18	855	7400	2.2
-5	-21	800	6400	1.9
-10	-23	745	5300	1.6
-15	-26	685	4300	1.3
-20	-29	630	3300	1.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

# 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.

## HP19-261 — COOLING CAPACITY — CH22-31

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	285	600	6.8	23,300	1730	.69	.83	.94	6.5	22,100	1880	.70	.85	.96	6.1	20,900	2020	.72	.87	.98	5.7	19,600	2160	.73	.90	1.00
	375	800	7.4	25,100	1780	.75	.90	1.00	7.0	23,800	1930	.76	.93	1.00	6.6	22,500	2104	.78	.94	.99	6.2	21,000	2250	.80	.99	1.00
	470	1000	7.7	26,300	1810	.80	.97	1.00	7.3	25,000	1980	.82	.99	1.00	6.9	23,600	2160	.84	1.00	1.00	6.5	22,200	2330	.87	1.00	1.00
67°F (19.4°C)	285	600	7.2	24,500	1760	.55	.68	.80	6.8	23,300	1920	.56	.69	.82	6.5	22,100	2070	.56	.71	.84	6.1	20,800	2230	.57	.73	.86
	375	800	7.7	26,400	1820	.58	.73	.88	7.4	25,200	1990	.59	.75	.89	7.0	23,800	2160	.60	.77	.92	6.5	22,200	2320	.62	.80	.95
	470	1000	8.2	27,900	1870	.62	.78	.95	7.8	26,500	2050	.63	.80	.97	7.3	24,900	2220	.64	.83	1.00	6.8	23,100	2380	.66	.87	1.00
71°F (21.7°C)	285	600	7.5	25,600	1790	.42	.54	.68	7.2	24,400	1960	.42	.55	.69	6.8	23,200	2130	.42	.56	.70	6.4	21,800	2290	.43	.57	.72
	375	800	8.1	27,800	1860	.43	.58	.73	7.7	26,400	2050	.43	.59	.74	7.3	24,900	2230	.44	.60	.76	6.8	23,200	2390	.44	.62	.78
	470	1000	8.6	29,300	1920	.44	.61	.78	8.1	27,800	2100	.45	.63	.80	7.6	26,000	2280	.45	.64	.82	7.1	24,200	2440	.46	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — COOLING CAPACITY — CH22-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	285	600	6.9	23,500	1740	.70	.83	.95	6.5	22,300	1890	.71	.85	.97	6.2	21,100	2030	.72	.88	.99	5.8	19,800	2170	.74	.91	1.00
	375	800	7.4	25,300	1780	.75	.91	1.00	7.0	24,000	1940	.77	.94	1.00	6.7	22,700	2110	.79	.97	1.00	6.2	21,200	2260	.81	1.00	1.00
	470	1000	7.8	26,500	1820	.81	.98	1.00	7.4	25,300	2000	.83	1.00	1.00	7.0	24,000	2180	.85	1.00	1.00	6.6	22,600	2340	.87	1.00	1.00
67°F (19.4°C)	285	600	7.2	24,700	1770	.55	.68	.81	6.9	23,500	1920	.56	.70	.83	6.5	22,300	2090	.57	.71	.85	6.1	20,900	2240	.58	.73	.87
	375	800	7.8	26,700	1830	.59	.74	.88	7.4	25,400	2010	.59	.76	.90	7.0	24,000	2180	.61	.78	.93	6.6	22,400	2330	.62	.81	.96
	470	1000	8.3	28,200	1880	.62	.79	.95	7.8	26,700	2060	.63	.81	.98	7.4	25,100	2230	.64	.84	1.00	6.8	23,300	2390	.66	.88	1.00
71°F (21.7°C)	285	600	7.6	25,800	1800	.42	.54	.69	7.2	24,600	1970	.42	.55	.70	6.8	23,300	2140	.42	.56	.71	6.4	21,900	2300	.43	.58	.73
	375	800	8.2	28,000	1870	.43	.58	.74	7.8	26,700	2060	.44	.59	.75	7.4	25,100	2240	.44	.61	.77	6.9	23,400	2400	.45	.63	.79
	470	1000	8.7	29,700	1930	.44	.62	.79	8.2	28,100	2120	.45	.63	.80	7.7	26,300	2300	.45	.65	.83	7.2	24,400	2460	.46	.67	.86

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — HEATING CAPACITY — CH22-31

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	
285	600	8.6	29,500	2210	6.6	22,600	1880	4.6	15,700	1550	2.9	10,000	1245	1.3	4500	955				
375	800	9.0	30,700	2125	7.0	23,800	1795	5.0	16,900	1465	3.3	11,200	1160	1.7	5700	870				
470	1000	9.2	31,500	2065	7.2	24,600	1735	5.2	17,700	1405	3.5	12,000	1100	1.9	6500	810				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-261 — HEATING CAPACITY — CH22-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh				
285	600	8.8	30,000	2175	6.7	22,900	1855	4.6	15,700	1540	2.9	10,000	1240	1.3	4500	955				
375	800	9.1	31,200	2085	7.1	24,100	1765	5.0	16,900	1450	3.3	11,100	1150	1.7	5700	865				
470	1000	9.4	32,000	2020	7.3	24,900	1705	5.2	17,700	1385	3.5	11,900	1090	1.9	6500	800				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-261 HEATING PERFORMANCE at 800 cfm (375 L/s) Indoor Coil Air Volume (CH22-31)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2125	30,700	9.0
60	16	2045	29,000	8.5
55	13	1960	27,300	8.0
50	10	1875	25,600	7.5
47	8	1830	24,600	7.2
45	7	1795	23,800	7.0
40	4	1710	21,900	6.4
35	2	1630	20,000	5.9
30	-1	1545	18,400	5.4
25	-4	1465	16,900	5.0
20	-7	1380	15,400	4.5
17	-8	1330	14,400	4.2
15	-9	1300	13,900	4.1
10	-12	1230	12,500	3.7
5	-15	1160	11,200	3.3
0	-18	1085	9800	2.9
-5	-21	1015	8400	2.5
-10	-23	940	7100	2.1
-15	-26	870	5700	1.7
-20	-29	800	4300	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-261 HEATING PERFORMANCE at 800 cfm (375 L/s) Indoor Coil Air Volume (CH22-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2085	31,200	9.1
60	16	2005	29,400	8.6
55	13	1925	27,700	8.1
50	10	1845	25,900	7.6
47	8	1800	24,900	7.3
45	7	1765	24,100	7.1
40	4	1685	22,000	6.4
35	2	1605	19,900	5.8
30	-1	1530	18,400	5.4
25	-4	1450	16,900	5.0
20	-7	1370	15,300	4.5
17	-8	1325	14,400	4.2
15	-9	1295	13,900	4.1
10	-12	1225	12,500	3.7
5	-15	1150	11,100	3.3
0	-18	1080	9800	2.9
-5	-21	1010	8400	2.5
-10	-23	935	7100	2.1
-15	-26	865	5700	1.7
-20	-29	795	4300	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-261 — COOLING CAPACITY — C22-31(W)/FC/B24 — C26-31(W)/FC — CR22-31(W)/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C
63°F (17.2°C)	285	600	7.0	23,800	1750	.69	.83	.94	6.6	22,500	1890	.70	.85	.96	6.2	21,300	2040	.72	.87	.99	5.8	19,900	2180	.74	.90	1.00
	375	800	7.5	25,500	1790	.75	.90	1.00	7.1	24,200	1950	.76	.93	1.00	6.7	22,700	2110	.79	.96	1.00	6.2	21,200	2260	.81	.99	1.00
	470	1000	7.8	26,700	1830	.81	.98	1.00	7.5	25,500	2000	.82	1.00	1.00	7.0	24,000	2170	.85	1.00	1.00	6.6	22,500	2340	.87	1.00	1.00
67°F (19.4°C)	285	600	7.4	25,300	1780	.55	.68	.80	7.0	24,000	1940	.56	.69	.82	6.7	22,700	2110	.56	.71	.84	6.2	21,300	2260	.57	.73	.86
	375	800	8.0	27,200	1850	.58	.73	.88	7.6	25,800	2020	.59	.75	.90	7.1	24,200	2190	.60	.77	.92	6.6	22,500	2340	.62	.80	.95
	470	1000	8.4	28,600	1890	.61	.78	.95	7.9	27,000	2070	.63	.81	.97	7.4	25,300	2240	.64	.84	1.00	6.8	23,300	2390	.66	.87	1.00
71°F (21.7°C)	285	600	7.9	26,800	1830	.41	.54	.68	7.5	25,500	2010	.42	.55	.69	7.1	24,100	2180	.42	.56	.70	6.6	22,500	2340	.43	.57	.72
	375	800	8.5	28,900	1910	.43	.57	.73	8.0	27,300	2090	.43	.59	.74	7.5	25,600	2260	.44	.60	.76	7.0	23,800	2420	.44	.62	.78
	470	1000	8.9	30,300	1960	.44	.61	.78	8.4	28,500	2140	.45	.62	.80	7.8	26,700	2310	.45	.64	.82	7.2	24,700	2470	.46	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — COOLING CAPACITY — CVP10-31/EC10Q3

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh		75°F/24°C	80°F/27°C	85°F/29°C
63°F (17.2°C)	380	800	7.4	25,100	1830	.77	.91	1.00	6.9	23,700	1980	.79	.94	1.00	6.6	22,400	2130	.81	.97	1.00	6.2	21,000	2290	.84	1.00	1.00
	425	900	7.5	25,700	1840	.79	.95	1.00	7.1	24,300	2000	.82	.98	1.00	6.7	23,000	2160	.84	1.00	1.00	6.4	21,700	2330	.88	1.00	1.00
	470	1000	7.7	26,300	1850	.82	.98	1.00	7.3	24,900	2020	.85	1.00	1.00	6.9	23,700	2200	.88	1.00	1.00	6.5	22,300	2370	.91	1.00	1.00
67°F (19.4°C)	380	800	7.9	26,900	1870	.60	.74	.87	7.5	25,500	2040	.61	.76	.90	7.0	24,000	2220	.62	.78	.93	6.6	22,400	2380	.64	.81	.97
	425	900	8.1	27,500	1890	.61	.76	.91	7.6	26,100	2070	.63	.79	.94	7.2	24,500	2240	.64	.82	.97	6.7	22,800	2400	.66	.85	1.00
	470	1000	8.2	28,100	1910	.63	.79	.95	7.8	26,600	2090	.64	.82	.97	7.3	25,000	2270	.66	.85	1.00	6.8	23,100	2420	.68	.89	1.00
71°F (21.7°C)	380	800	8.4	28,700	1930	.44	.58	.71	8.0	27,200	2120	.45	.59	.73	7.5	25,600	2300	.45	.61	.75	7.0	23,800	2470	.46	.62	.79
	425	900	8.6	29,500	1960	.45	.60	.73	8.2	27,900	2150	.45	.61	.76	7.6	26,100	2330	.46	.63	.79	7.1	24,300	2490	.47	.66	.82
	470	1000	8.8	30,100	1980	.46	.61	.76	8.3	28,400	2170	.46	.63	.79	7.8	26,600	2350	.47	.65	.82	7.2	24,600	2510	.48	.67	.86

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — HEATING CAPACITY — C22-31(W)/FC/B24 — C26-31(W)/FC — CR22-31(W)/B24

Indoor Coil Air Volume 70°F db (21°C db)	L/s		cfm		Air Temperature Entering Outdoor Coil																			
					65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
					Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
kW	Btuh	kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
	285	600	8.7	29,800	2180	6.7	22,800	1860	4.6	15,700	1545	2.9	10,000	1245	1.3	4500	960							
	375	800	9.1	31,000	2090	7.0	24,000	1775	5.0	16,900	1455	3.3	11,200	1160	1.7	5700	870							
	470	1000	9.3	31,800	2030	7.3	24,800	1715	5.2	17,700	1395	3.5	12,000	1095	1.9	6500	810							

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-261 — HEATING CAPACITY — CVP10-31/EC10Q3

Indoor Coil Air Volume 70°F db (21°C db)	L/s		cfm		Air Temperature Entering Outdoor Coil																			
					65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
					Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
kW	Btuh	kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
	380	800	9.2	31,300	2110	7.0	23,800	1790	4.7	16,100	1470	3.2	10,900	1195	1.6	5400	910							
	425	900	9.3	31,600	2065	7.1	24,100	1745	4.8	16,400	1425	3.3	11,200	1150	1.7	5700	865							
	470	1000	9.4	32,000	2030	7.2	24,500	1710	4.9	16,800	1390	3.4	11,600	1115	1.8	6100	830							

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-261 HEATING PERFORMANCE at 800 cfm (375 L/s) Indoor Coil Air Volume (C22-31 — C26-31 — CR22-31)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2090	31,000	9.1
60	16	2010	29,300	8.6
55	13	1935	27,600	8.1
50	10	1855	25,800	7.6
47	8	1805	24,800	7.3
45	7	1775	24,000	7.0
40	4	1695	22,000	6.4
35	2	1615	20,000	5.9
30	-1	1535	18,400	5.4
25	-4	1455	16,900	5.0
20	-7	1380	15,400	4.5
17	-8	1330	14,400	4.2
15	-9	1300	13,900	4.1
10	-12	1230	12,500	3.7
5	-15	1160	11,200	3.3
0	-18	1085	9800	2.9
-5	-21	1015	8400	2.5
-10	-23	940	7100	2.1
-15	-26	870	5700	1.7
-20	-29	800	4300	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-261 HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume (CVP10-31/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2065	31,600	9.3
60	16	1985	29,800	8.7
55	13	1910	28,000	8.2
50	10	1830	26,300	7.7
47	8	1785	25,200	7.4
45	7	1745	24,100	7.1
40	4	1655	21,400	6.3
35	2	1560	18,700	5.5
30	-1	1495	17,500	5.1
25	-4	1425	16,400	4.8
20	-7	1360	15,200	4.5
17	-8	1320	14,500	4.2
15	-9	1290	14,000	4.1
10	-12	1220	12,600	3.7
5	-15	1150	11,200	3.3
0	-18	1075	9800	2.9
-5	-21	1005	8500	2.5
-10	-23	935	7100	2.1
-15	-26	865	5700	1.7
-20	-29	790	4400	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-261 — COOLING CAPACITY — C22-41FC/B24 — C26-41(FC) — CR22-41/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	285	600	7.0	23,900	1750	.69	.83	.94	6.6	22,600	1900	.71	.85	.97	6.3	21,400	2040	.72	.87	.99	5.9	20,000	2180	.74	.90	1.00
	375	800	7.5	25,600	1790	.75	.91	1.00	7.1	24,300	1950	.77	.93	1.00	6.7	22,800	2110	.79	.97	1.00	6.2	21,300	2260	.81	1.00	1.00
	470	1000	7.9	26,900	1830	.81	.98	1.00	7.4	25,400	2010	.83	1.00	1.00	7.1	24,100	2180	.85	1.00	1.00	6.6	22,600	2350	.87	1.00	1.00
67°F (19.4°C)	285	600	7.4	25,300	1780	.55	.68	.81	7.1	24,100	1940	.56	.69	.82	6.7	22,800	2110	.57	.71	.84	6.2	21,300	2260	.58	.73	.86
	375	800	8.0	27,400	1850	.58	.73	.88	7.6	25,900	2030	.59	.75	.90	7.1	24,300	2190	.60	.77	.92	6.6	22,600	2350	.62	.80	.96
	470	1000	8.4	28,700	1900	.62	.79	.95	7.9	27,100	2080	.63	.81	.97	7.4	25,400	2250	.64	.84	1.00	6.9	23,400	2400	.66	.88	1.00
71°F (21.7°C)	285	600	7.9	26,900	1830	.42	.54	.68	7.5	25,600	2010	.42	.55	.69	7.1	24,100	2180	.42	.56	.70	6.6	22,500	2340	.43	.57	.72
	375	800	8.5	29,000	1910	.43	.58	.73	8.0	27,400	2090	.43	.59	.74	7.5	25,700	2270	.44	.60	.76	7.0	23,900	2430	.44	.62	.79
	470	1000	8.9	30,400	1960	.44	.61	.78	8.4	28,600	2150	.45	.63	.80	7.8	26,700	2320	.45	.65	.82	7.2	24,700	2480	.46	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — COOLING CAPACITY — CVP10-26/EC10Q3

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	380	800	7.4	25,100	1820	.78	.93	1.00	6.9	23,700	1980	.80	.96	1.00	6.6	22,400	2130	.83	.98	1.00	6.2	21,000	2300	.86	1.00	1.00
	425	900	7.6	25,800	1840	.81	.97	1.00	7.2	24,400	2000	.83	.99	1.00	6.8	23,100	2170	.86	1.00	1.00	6.4	21,800	2340	.90	1.00	1.00
	470	1000	7.7	26,400	1850	.84	.99	1.00	7.4	25,100	2030	.87	1.00	1.00	7.0	23,900	2210	.90	1.00	1.00	6.6	22,500	2380	.93	1.00	1.00
67°F (19.4°C)	380	800	7.9	26,800	1870	.60	.75	.89	7.4	25,400	2040	.62	.77	.92	7.0	23,900	2210	.63	.80	.95	6.5	22,300	2370	.65	.83	.98
	425	900	8.1	27,500	1890	.62	.78	.93	7.6	26,000	2070	.63	.80	.96	7.2	24,400	2240	.65	.83	.99	6.7	22,700	2400	.67	.87	1.00
	470	1000	8.2	28,000	1910	.64	.81	.97	7.8	26,500	2090	.66	.84	.99	7.3	24,800	2260	.68	.87	1.00	6.7	23,000	2420	.70	.91	1.00
71°F (21.7°C)	380	800	8.4	28,700	1930	.44	.59	.72	8.0	27,200	2120	.45	.60	.74	7.5	25,600	2300	.45	.61	.77	7.0	23,800	2460	.46	.63	.80
	425	900	8.6	29,300	1960	.45	.61	.75	8.1	27,800	2150	.46	.62	.78	7.6	26,100	2330	.46	.64	.80	7.1	24,200	2490	.47	.66	.84
	470	1000	8.8	29,900	1980	.46	.62	.78	8.3	28,300	2170	.47	.64	.81	7.8	26,500	2350	.47	.66	.84	7.2	24,500	2510	.48	.69	.88

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — HEATING CAPACITY — C22-41FC/B24 — C26-41(FC) — CR22-41/B24

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
			Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
285	600	8.8	29,900	2165	6.7	22,900	1855	4.6	15,800	1540	3.0	10,100	1245	1.3	4600	955						
375	800	9.1	31,100	2075	7.1	24,100	1765	5.0	17,000	1450	3.3	11,200	1155	1.7	5700	865						
470	1000	9.3	31,900	2015	7.3	24,900	1700	5.2	17,800	1390	3.5	12,000	1090	1.9	6500	805						

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-261 — HEATING CAPACITY — CVP10-26/EC10Q3

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
			Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
380	800	9.2	31,400	2105	7.0	23,800	1790	4.7	15,900	1470	3.1	10,700	1190	1.5	5200	905						
425	900	9.3	31,900	2065	7.1	24,300	1750	4.8	16,400	1430	3.3	11,200	1150	1.7	5700	865						
470	1000	9.4	32,000	2025	7.2	24,400	1710	4.8	16,500	1390	3.3	11,300	1110	1.7	5800	825						

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-261 HEATING PERFORMANCE at 800 cfm (375 L/s) Indoor Coil Air Volume (C22-41 — C26-41 — CR22-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2075	31,100	9.1
60	16	1995	29,400	8.6
55	13	1920	27,700	8.1
50	10	1840	25,900	7.6
47	8	1795	24,900	7.3
45	7	1765	24,100	7.1
40	4	1685	22,100	6.5
35	2	1605	20,000	5.9
30	-1	1530	18,500	5.4
25	-4	1450	17,000	5.0
20	-7	1375	15,500	4.5
17	-8	1325	14,500	4.2
15	-9	1300	14,000	4.1
10	-12	1225	12,600	3.7
5	-15	1155	11,200	3.3
0	-18	1085	9900	2.9
-5	-21	1010	8500	2.5
-10	-23	940	7100	2.1
-15	-26	865	5700	1.7
-20	-29	795	4400	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-261 HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume (CVP10-26/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2065	31,900	9.3
60	16	1985	30,100	8.8
55	13	1910	28,300	8.3
50	10	1830	26,500	7.8
47	8	1785	25,400	7.4
45	7	1750	24,300	7.1
40	4	1655	21,600	6.3
35	2	1565	18,800	5.5
30	-1	1495	17,600	5.2
25	-4	1430	16,400	4.8
20	-7	1360	15,200	4.5
17	-8	1320	14,500	4.2
15	-9	1290	14,000	4.1
10	-12	1220	12,600	3.7
5	-15	1150	11,200	3.3
0	-18	1075	9800	2.9
-5	-21	1005	8500	2.5
-10	-23	935	7100	2.1
-15	-26	865	5700	1.7
-20	-29	790	4400	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-261 — COOLING CAPACITY — CR18-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	425	900	7.5	25,700	1840	.79	.94	1.00	7.1	24,400	2000	.81	.97	1.00	6.7	22,900	2160	.84	.99	1.00	6.3	21,500	2320	.87	1.00	1.00
67°F (19.4°C)	425	900	8.0	27,400	1880	.61	.76	.91	7.6	25,900	2060	.62	.78	.93	7.2	24,400	2240	.64	.81	.96	6.6	22,600	2390	.66	.84	.99
71°F (21.7°C)	425	900	8.5	29,100	1950	.45	.60	.73	8.1	27,600	2140	.46	.61	.76	7.6	25,900	2320	.46	.62	.78	7.0	24,000	2480	.47	.65	.82
	470	1000	8.7	29,800	1970	.46	.61	.76	8.2	28,100	2160	.46	.63	.78	7.7	26,300	2340	.47	.65	.81	7.2	24,400	2500	.48	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — COOLING CAPACITY — CB19-26 — CBH19-26

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	380	800	7.4	25,200	1830	.78	.93	1.00	7.0	23,800	1980	.80	.96	1.00	6.6	22,500	2140	.82	.98	1.00	6.2	21,100	2290	.85	1.00	1.00
	425	900	7.6	25,800	1840	.81	.97	1.00	7.2	24,500	2000	.83	.99	1.00	6.8	23,200	2170	.86	1.00	1.00	6.4	21,800	2340	.89	1.00	1.00
	470	1000	7.8	26,500	1860	.84	.99	1.00	7.4	25,100	2030	.86	1.00	1.00	7.0	23,800	2210	.89	1.00	1.00	6.6	22,400	2380	.92	1.00	1.00
67°F (19.4°C)	380	800	7.9	26,800	1860	.60	.75	.89	7.4	25,400	2040	.62	.77	.92	7.0	23,900	2210	.63	.80	.95	6.5	22,200	2370	.65	.83	.98
	425	900	8.1	27,500	1890	.62	.78	.93	7.6	26,000	2070	.64	.80	.96	7.2	24,400	2240	.65	.83	.98	6.6	22,600	2400	.67	.87	1.00
	470	1000	8.2	28,000	1910	.64	.81	.96	7.8	26,500	2090	.65	.84	.99	7.3	24,800	2260	.67	.87	1.00	6.8	23,100	2420	.70	.90	1.00
71°F (21.7°C)	380	800	8.4	28,500	1930	.45	.59	.72	7.9	27,000	2110	.45	.60	.74	7.4	25,400	2290	.46	.62	.77	6.9	23,600	2450	.46	.63	.80
	425	900	8.6	29,200	1950	.45	.61	.75	8.1	27,600	2140	.46	.62	.78	7.6	25,900	2320	.47	.64	.81	7.0	24,000	2480	.48	.66	.84
	470	1000	8.7	29,800	1970	.46	.63	.78	8.2	28,100	2160	.47	.64	.81	7.7	26,300	2340	.48	.66	.84	7.1	24,400	2500	.49	.69	.88

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — HEATING CAPACITY — CR18-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
425	900	9.3	31,600	2110	7.1	24,100	1780	4.8	16,400	1440	3.3	11,200	1160	1.7	5700	875				
470	1000	9.4	32,200	2095	7.2	24,700	1765	5.0	17,000	1425	3.5	11,800	1145	1.9	6300	860				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-261 — HEATING CAPACITY — CB19-26 — CBH19-26

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
380	800	9.1	30,900	2075	6.9	23,400	1755	4.6	15,700	1435	3.1	10,600	1160	1.5	5100	880				
425	900	9.2	31,400	2050	7.0	23,900	1730	4.7	16,200	1410	3.3	11,100	1135	1.6	5600	855				
470	1000	9.4	32,000	2035	7.2	24,500	1715	4.9	16,800	1395	3.4	11,700	1120	1.8	6200	840				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-261 HEATING PERFORMANCE AT 900 cfm (425 L/s) Indoor Coil Air Volume (CR18-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2110	31,600	9.3
60	16	2030	29,800	8.7
55	13	1950	28,000	8.2
50	10	1870	26,300	7.7
47	8	1820	25,200	7.4
45	7	1780	24,100	7.1
40	4	1675	21,400	6.3
35	2	1575	18,700	5.5
30	-1	1510	17,500	5.1
25	-4	1440	16,400	4.8
20	-7	1375	15,200	4.5
17	-8	1335	14,500	4.3
15	-9	1305	14,000	4.1
10	-12	1235	12,600	3.7
5	-15	1160	11,200	3.3
0	-18	1090	9800	2.9
-5	-21	1015	8500	2.5
-10	-23	945	7100	2.1
-15	-26	875	5700	1.7
-20	-29	800	4400	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-261 HEATING PERFORMANCE AT 900 cfm (425 L/s) Indoor Coil Air Volume (CB19-26/CBH19-26)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2050	31,400	9.2
60	16	1970	29,600	8.7
55	13	1895	27,800	8.1
50	10	1815	26,100	7.6
47	8	1770	25,000	7.3
45	7	1730	23,900	7.0
40	4	1635	21,200	6.2
35	2	1540	18,500	5.4
30	-1	1475	17,300	5.1
25	-4	1410	16,200	4.7
20	-7	1345	15,000	4.4
17	-8	1305	14,300	4.2
15	-9	1275	13,800	4.0
10	-12	1205	12,400	3.6
5	-15	1135	11,100	3.3
0	-18	1065	9700	2.8
-5	-21	995	8300	2.4
-10	-23	925	7000	2.1
-15	-26	855	5600	1.6
-20	-29	785	4300	1.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-261 — COOLING CAPACITY — CB19-31 — CBH19-31

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17.2°C)	380	800	7.4	25,200	1830	.78	.93	1.00	7.0	23,800	1980	.80	.96	1.00	6.6	22,500	2140	.82	.98	1.00	6.2	21,100	2290	.85	1.00	1.00
	425	900	7.6	25,800	1840	.81	.97	1.00	7.2	24,500	2000	.83	.99	1.00	6.8	23,200	2170	.86	1.00	1.00	6.4	21,800	2340	.89	1.00	1.00
	470	1000	7.8	26,500	1860	.84	.99	1.00	7.4	25,100	2030	.86	1.00	1.00	7.0	23,800	2210	.89	1.00	1.00	6.6	22,400	2380	.92	1.00	1.00
67°F (19.4°C)	380	800	7.9	26,800	1860	.60	.75	.89	7.4	25,400	2040	.62	.77	.92	7.0	23,900	2210	.63	.80	.95	6.5	22,200	2370	.65	.83	.98
	425	900	8.1	27,500	1890	.62	.78	.93	7.6	26,000	2070	.64	.80	.96	7.2	24,400	2240	.65	.83	.98	6.6	22,600	2400	.67	.87	1.00
	470	1000	8.2	28,000	1910	.64	.81	.96	7.8	26,500	2090	.65	.84	.99	7.3	24,800	2260	.67	.87	1.00	6.8	23,100	2420	.70	.90	1.00
71°F (21.7°C)	380	800	8.4	28,500	1930	.45	.59	.72	7.9	27,000	2110	.45	.60	.74	7.4	25,400	2290	.46	.62	.77	6.9	23,600	2450	.46	.63	.80
	425	900	8.6	29,200	1950	.45	.61	.75	8.1	27,600	2140	.46	.62	.78	7.6	25,900	2320	.47	.64	.81	7.0	24,000	2480	.48	.66	.84
	470	1000	8.7	29,800	1970	.46	.63	.78	8.2	28,100	2160	.47	.64	.81	7.7	26,300	2340	.48	.66	.84	7.1	24,400	2500	.49	.69	.88

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — COOLING CAPACITY — CR18-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17.2°C)																										
67°F (19.4°C)																										
71°F (21.7°C)																										

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-261 — HEATING CAPACITY — CB19-31 — CBH19-31

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
380	800	8.6	29,500	2040	6.9	23,600	1735	5.1	17,300	1420	3.8	12,800	1145	1.8	6300	870				
425	900	8.8	30,000	2015	7.1	24,100	1710	5.2	17,800	1395	3.9	13,300	1120	2.0	6800	845				
470	1000	9.0	30,600	2000	7.2	24,700	1695	5.4	18,400	1380	4.1	13,900	1105	2.2	7400	830				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-311 — HEATING CAPACITY — CR18-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-261 HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume (CB19/CBH19-31)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2015	30,000	8.8
60	16	1940	28,700	8.4
55	13	1865	27,300	8.0
50	10	1790	26,000	7.6
47	8	1745	25,200	7.4
45	7	1710	24,100	7.1
40	4	1615	21,400	6.3
35	2	1525	18,600	5.5
30	-1	1460	18,200	5.3
25	-4	1395	17,800	5.2
20	-7	1330	17,400	5.1
17	-8	1290	17,200	5.0
15	-9	1260	16,500	4.8
10	-12	1190	14,900	4.4
5	-15	1120	13,300	3.9
0	-18	1050	11,700	3.4
-5	-21	985	10,000	2.9
-10	-23	915	8400	2.5
-15	-26	845	6800	2.0
-20	-29	775	5200	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-311 HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume (CR18-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18			
60	16			
55	13			
50	10			
47	8			
45	7			
40	4			
35	2			
30	-1			
25	-4			
20	-7			
17	-8			
15	-9			
10	-12			
5	-15			
0	-18			
-5	-21			
-10	-23			
-15	-26			
-20	-29			

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-311 — COOLING CAPACITY — CVP10-31/EC10Q3

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	425	900	8.7	29,800	2160	.74	.87	.99	8.2	28,100	2320	.76	.90	1.00	7.7	26,300	2510	.78	.93	1.00	7.1	24,400	2740	.81	.97	1.00
	470	1000	8.9	30,500	2170	.76	.90	1.00	8.5	28,900	2330	.78	.93	1.00	7.9	27,000	2530	.80	.96	1.00	7.4	25,100	2760	.84	.99	1.00
	520	1100	9.1	31,100	2180	.78	.93	1.00	8.6	29,500	2340	.80	.95	1.00	8.1	27,600	2540	.83	.99	1.00	7.6	25,800	2790	.86	1.00	1.00
67°F (19.4°C)	425	900	9.4	32,100	2200	.58	.71	.83	8.9	30,300	2360	.59	.72	.86	8.3	28,400	2580	.60	.75	.89	7.7	26,400	2810	.62	.78	.93
	470	1000	9.6	32,900	2210	.59	.73	.86	9.1	31,000	2390	.60	.75	.89	8.5	29,000	2610	.62	.77	.92	7.9	26,900	2830	.64	.80	.96
	520	1100	9.8	33,500	2220	.60	.75	.89	9.3	31,600	2410	.61	.77	.92	8.6	29,500	2630	.63	.79	.95	8.0	27,300	2850	.65	.83	.99
71°F (21.7°C)	425	900	10.1	34,300	2250	.44	.56	.68	9.5	32,300	2450	.44	.57	.70	8.9	30,400	2660	.45	.59	.72	8.3	28,300	2880	.45	.60	.75
	470	1000	10.3	35,000	2290	.45	.57	.70	9.7	33,100	2480	.45	.58	.72	9.1	31,000	2690	.46	.60	.74	8.4	28,800	2900	.46	.62	.77
	520	1100	10.5	35,700	2320	.45	.59	.72	9.9	33,700	2510	.45	.60	.74	9.2	31,500	2710	.46	.62	.77	8.6	29,300	2920	.47	.64	.80

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — COOLING CAPACITY — CH22-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	375	800	8.4	28,800	2140	.70	.83	.96	8.1	27,500	2300	.71	.85	.98	7.6	25,800	2500	.73	.88	1.00	7.2	24,400	2750	.74	.92	1.00
	470	1000	9.0	30,800	2170	.74	.88	1.00	8.5	29,100	2340	.75	.91	1.00	8.0	27,300	2550	.77	.94	1.00	7.5	25,700	2790	.79	.99	1.00
	565	1200	9.4	32,200	2200	.78	.93	1.00	8.9	30,400	2390	.80	.96	1.00	8.4	28,500	2610	.82	.99	1.00	7.9	26,900	2840	.84	1.00	1.00
67°F (19.4°C)	375	800	9.0	30,600	2170	.55	.69	.81	8.5	29,100	2340	.56	.70	.83	8.1	27,600	2560	.56	.72	.85	7.6	25,800	2800	.57	.75	.87
	470	1000	9.5	32,500	2210	.57	.72	.87	9.0	30,700	2410	.58	.74	.89	8.5	28,900	2620	.59	.76	.91	7.9	27,000	2850	.61	.80	.94
	565	1200	10.0	34,000	2280	.60	.75	.92	9.4	32,000	2470	.61	.78	.95	8.7	29,800	2670	.62	.81	.98	8.1	27,800	2880	.64	.84	1.00
71°F (21.7°C)	375	800	9.4	32,100	2250	.41	.55	.67	9.0	30,800	2410	.41	.56	.69	8.5	29,100	2630	.42	.57	.71	7.9	27,100	2850	.42	.59	.73
	470	1000	10.0	34,000	2290	.42	.57	.72	9.5	32,300	2480	.42	.58	.74	8.9	30,400	2680	.43	.59	.79	8.3	28,400	2900	.43	.62	.78
	565	1200	10.4	35,500	2350	.43	.59	.76	9.8	33,400	2540	.43	.61	.78	9.2	31,400	2730	.44	.62	.80	8.6	29,200	2930	.45	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — HEATING CAPACITY — CVP10-31/EC10Q3

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil													
			65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-28°C)					
			Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input				
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
425	900	10.5	35,800	2555	8.0	27,400	2195	5.5	18,900	1830	3.7	12,600	1485	1.8	6300	1130
470	1000	10.6	36,100	2505	8.1	27,700	2145	5.6	19,200	1780	3.8	12,900	1435	1.9	6600	1080
520	1100	10.7	36,500	2525	8.2	28,100	2165	5.7	19,600	1800	3.9	13,300	1455	2.1	7000	1100

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-311 — HEATING CAPACITY — CH22-51

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil													
			65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-28°C)					
			Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input	Total Heating Capacity	Comp. Motor Watts Input				
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	
375	800	10.6	36,200	2570	8.1	27,500	2200	5.4	18,500	1830	3.6	12,200	1480	1.7	5800	1130
470	1000	10.9	37,200	2505	8.3	28,400	2140	5.7	19,400	1765	3.9	13,200	1415	2.0	6700	1065
565	1200	11.1	37,900	2470	8.5	29,100	2100	5.9	20,100	1725	4.1	13,900	1380	2.2	7500	1025

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (CVP10-31/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2505	36,100	10.6
60	16	2415	34,100	10.0
55	13	2325	32,000	9.4
50	10	2240	30,000	8.8
47	8	2185	28,800	8.4
45	7	2145	27,700	8.1
40	4	2045	25,100	7.4
35	2	1945	22,400	6.6
30	-1	1865	20,800	6.1
25	-4	1780	19,200	5.6
20	-7	1700	17,700	5.2
17	-8	1650	16,700	4.9
15	-9	1615	16,100	4.7
10	-12	1525	14,500	4.2
5	-15	1435	12,900	3.8
0	-18	1345	11,300	3.3
-5	-21	1255	9,700	2.8
-10	-23	1170	8,200	2.4
-15	-26	1080	6,600	1.9
-20	-29	990	5,000	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (CH22-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2505	37,200	10.9
60	16	2415	35,100	10.3
55	13	2325	33,000	9.7
50	10	2230	30,900	9.1
47	8	2180	29,600	8.7
45	7	2140	28,400	8.3
40	4	2040	25,400	7.4
35	2	1940	22,300	6.5
30	-1	1850	20,900	6.1
25	-4	1765	19,400	5.7
20	-7	1680	17,900	5.2
17	-8	1630	17,100	5.0
15	-9	1595	16,400	4.8
10	-12	1505	14,800	4.3
5	-15	1415	13,200	3.9
0	-18	1330	11,600	3.4
-5	-21	1240	10,000	2.9
-10	-23	1155	8300	2.4
-15	-26	1065	6700	2.0
-20	-29	975	5100	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-311 — COOLING CAPACITY — CVP10-41/EC10Q3

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	425	900	8.9	30,500	2170	.74	.88	.99	8.4	28,800	2330	.76	.90	1.00	7.9	27,000	2520	.78	.94	1.00	7.3	25,000	2760	.81	.97	1.00
	470	1000	9.2	31,300	2180	.76	.91	1.00	8.6	29,500	2350	.78	.93	1.00	8.1	27,700	2540	.81	.97	1.00	7.5	25,700	2790	.84	1.00	1.00
	520	1100	9.4	32,000	2200	.78	.93	1.00	8.9	30,200	2360	.80	.96	1.00	8.3	28,300	2570	.83	.99	1.00	7.8	26,500	2820	.87	1.00	1.00
67°F (19.4°C)	425	900	9.6	32,900	2210	.58	.71	.84	9.1	31,100	2390	.59	.73	.86	8.5	29,000	2600	.61	.75	.89	7.9	26,900	2830	.62	.78	.93
	470	1000	9.9	33,700	2220	.59	.73	.87	9.3	31,700	2420	.60	.75	.90	8.7	29,700	2630	.62	.78	.93	8.1	27,500	2850	.64	.81	.97
	520	1100	10.1	34,300	2260	.61	.75	.90	9.5	32,300	2450	.62	.77	.93	8.9	30,200	2650	.63	.80	.96	8.2	27,900	2870	.66	.84	.99
71°F (21.7°C)	425	900	10.3	35,100	2290	.44	.56	.68	9.7	33,100	2490	.44	.57	.70	9.1	31,000	2690	.45	.59	.72	8.4	28,800	2900	.46	.60	.75
	470	1000	10.5	35,900	2330	.45	.58	.70	9.9	33,800	2520	.45	.59	.72	9.3	31,700	2720	.46	.60	.75	8.6	29,400	2920	.46	.62	.78
	520	1100	10.7	36,500	2360	.45	.59	.72	10.1	34,400	2540	.46	.60	.75	9.4	32,200	2740	.46	.62	.77	8.8	29,900	2940	.47	.64	.81

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — COOLING CAPACITY — CH22-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	375	800	8.6	29,300	2150	.70	.83	.95	8.2	28,000	2310	.71	.85	.97	7.7	26,300	2510	.73	.88	1.00	7.2	24,700	2760	.74	.92	1.00
	470	1000	9.1	31,000	2180	.74	.90	1.00	8.6	29,500	2350	.76	.93	1.00	8.1	27,700	2570	.78	.96	1.00	7.6	26,000	2810	.80	.99	1.00
	565	1200	9.5	32,400	2210	.78	.94	1.00	9.0	30,700	2410	.80	.97	1.00	8.5	29,000	2630	.82	.99	1.00	8.0	27,300	2850	.85	1.00	1.00
67°F (19.4°C)	375	800	9.2	31,400	2180	.55	.68	.81	8.7	29,700	2360	.56	.70	.83	8.2	28,100	2590	.57	.72	.85	7.7	26,400	2820	.58	.74	.87
	470	1000	9.7	33,000	2240	.58	.72	.87	9.1	31,200	2430	.59	.74	.89	8.6	29,200	2630	.60	.78	.92	8.1	27,500	2860	.61	.79	.94
	565	1200	10.1	34,400	2300	.60	.75	.92	9.5	32,300	2480	.62	.77	.95	8.9	30,200	2680	.63	.81	.98	8.2	28,100	2890	.65	.84	1.00
71°F (21.7°C)	375	800	9.8	33,300	2250	.41	.55	.68	9.3	31,600	2450	.42	.56	.69	8.8	29,900	2660	.42	.57	.70	8.2	28,000	2880	.42	.58	.72
	470	1000	10.3	35,000	2330	.42	.57	.72	9.7	33,200	2520	.43	.58	.74	9.1	31,100	2720	.43	.60	.75	8.5	29,000	2920	.44	.61	.78
	565	1200	10.6	36,200	2390	.43	.59	.76	10.0	34,200	2570	.44	.60	.78	9.4	32,000	2750	.44	.62	.80	8.7	29,800	2940	.45	.64	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — HEATING CAPACITY — CVP10-41/EC10Q3

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 (-28°C)			
	L/s	cfm	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input			
425	900	10.9	37,100	2545	8.2	28,100	2185	5.5	18,800	1830	3.6	12,200	1480	1.8	6000	1120				
470	1000	11.0	37,700	2505	8.4	28,700	2145	5.7	19,400	1790	3.8	12,800	1440	1.9	6600	1080				
520	1100	11.1	38,000	2475	8.5	29,000	2115	5.8	19,700	1760	3.8	13,100	1410	2.0	6900	1050				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-311 — HEATING CAPACITY — CH22-65

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 (-28°C)			
	L/s	cfm	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input	kW	Btuh	Comp. Motor Watts Input			
375	800	10.7	36,500	2555	8.1	27,600	2195	5.4	18,500	1735	3.5	12,100	1330	1.7	5700	1015				
470	1000	11.0	37,400	2495	8.4	28,500	2135	5.7	19,500	1675	3.8	13,000	1270	1.9	6600	955				
565	1200	11.2	38,100	2455	8.6	29,200	2095	5.9	20,200	1635	4.0	13,700	1230	2.1	7300	915				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (CVP10-41/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2505	37,700	11.0
60	16	2415	35,500	10.4
55	13	2325	33,300	9.8
50	10	2240	31,100	9.1
47	8	2185	29,800	8.7
45	7	2145	28,700	8.4
40	4	2055	25,800	7.6
35	2	1960	22,900	6.7
30	-1	1875	21,200	6.2
25	-4	1790	19,400	5.7
20	-7	1705	17,700	5.2
17	-8	1655	16,600	4.9
15	-9	1620	16,000	4.7
10	-12	1530	14,400	4.2
5	-15	1440	12,800	3.8
0	-18	1350	11,300	3.3
-5	-21	1260	9700	2.8
-10	-23	1170	8100	2.4
-15	-26	1080	6600	1.9
-20	-29	995	5000	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (CH22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2495	37,400	11.0
60	16	2405	35,300	10.3
55	13	2315	33,100	9.7
50	10	2225	31,000	9.1
47	8	2175	29,700	8.7
45	7	2135	28,500	8.4
40	4	2040	25,600	7.5
35	2	1940	22,800	6.7
30	-1	1805	21,100	6.2
25	-4	1675	19,500	5.7
20	-7	1540	17,800	5.2
17	-8	1460	16,800	4.9
15	-9	1430	16,200	4.7
10	-12	1350	14,600	4.3
5	-15	1270	13,000	3.8
0	-18	1190	11,400	3.3
-5	-21	1110	9800	2.9
-10	-23	1035	8200	2.4
-15	-26	955	6600	1.9
-20	-29	875	5000	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-311 — COOLING CAPACITY — C22-51FC/B24 — C26-51(FC) — CR22-51/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17.2°C)	375	800	8.8	30,100	2160	.70	.84	.96	8.4	28,500	2320	.72	.86	.98	7.8	26,700	2520	.73	.89	1.00	7.3	24,800	2760	.75	.92	1.00
	470	1000	9.4	32,200	2200	.74	.89	1.00	8.9	30,200	2390	.76	.92	1.00	8.3	28,300	2600	.78	.96	1.00	7.7	26,200	2820	.81	.99	1.00
	565	1200	9.8	33,600	2260	.79	.95	1.00	9.3	31,700	2450	.81	.98	1.00	8.7	29,600	2650	.83	1.00	1.00	8.1	27,700	2870	.86	1.00	1.00
67°F (19.4°C)	375	800	9.3	31,700	2190	.56	.69	.82	8.8	30,000	2370	.56	.70	.84	8.2	28,100	2590	.57	.72	.86	7.6	26,100	2820	.59	.75	.89
	470	1000	9.9	33,900	2270	.58	.73	.87	9.3	31,900	2460	.59	.75	.90	8.7	29,800	2660	.60	.77	.92	8.1	27,600	2870	.62	.80	.96
	565	1200	10.3	35,300	2340	.61	.77	.93	9.7	33,200	2530	.62	.79	.96	9.1	30,900	2710	.63	.82	.99	8.4	28,600	2910	.65	.86	1.00
71°F (21.7°C)	375	800	9.7	33,100	2250	.42	.55	.69	9.2	31,300	2440	.42	.56	.70	8.6	29,400	2650	.43	.57	.72	8.0	27,400	2860	.43	.59	.74
	470	1000	10.3	35,300	2340	.43	.58	.73	9.8	33,300	2530	.43	.59	.75	9.2	31,300	2720	.44	.60	.77	8.5	29,100	2920	.44	.62	.79
	565	1200	10.8	36,800	2420	.44	.60	.77	10.1	34,600	2590	.44	.62	.79	9.5	32,300	2770	.45	.64	.81	8.8	30,100	2950	.46	.66	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — COOLING CAPACITY — CB19/CBH19-31 — CB19/CBH19-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh								
63°F (17.2°C)	425	900	9.1	30,900	2180	.75	.89	1.00	8.6	29,300	2340	.77	.92	1.00	8.0	27,400	2540	.80	.95	1.00	7.5	25,500	2780	.83	.98	1.00
	470	1000	9.3	31,900	2190	.78	.92	1.00	8.8	30,000	2360	.80	.95	1.00	8.3	28,200	2570	.83	.98	1.00	7.7	26,200	2810	.86	1.00	1.00
	520	1100	9.6	32,600	2210	.80	.95	1.00	9.0	30,800	2380	.82	.97	1.00	8.4	28,800	2600	.85	1.00	1.00	7.9	27,000	2840	.89	1.00	1.00
67°F (19.4°C)	425	900	9.7	33,100	2210	.59	.72	.85	9.1	31,200	2390	.60	.74	.88	8.6	29,200	2610	.61	.77	.91	7.9	27,000	2840	.63	.80	.95
	470	1000	9.9	33,900	2230	.60	.75	.89	9.3	31,900	2430	.62	.77	.91	8.7	29,800	2640	.63	.80	.95	8.1	27,500	2860	.65	.83	.98
	520	1100	10.1	34,500	2270	.62	.77	.91	9.5	32,500	2460	.63	.79	.94	8.9	30,300	2660	.65	.82	.97	8.2	28,000	2870	.67	.86	1.00
71°F (21.7°C)	425	900	10.3	35,000	2290	.44	.57	.70	9.7	33,100	2480	.44	.58	.72	9.1	31,000	2690	.45	.60	.74	8.4	28,800	2900	.46	.62	.77
	470	1000	10.5	35,900	2330	.44	.59	.72	9.9	33,800	2520	.45	.60	.74	9.3	31,600	2710	.46	.62	.77	8.6	29,300	2920	.47	.64	.80
	520	1100	10.7	36,500	2360	.45	.60	.74	10.1	34,400	2540	.46	.62	.77	9.4	32,200	2740	.46	.63	.80	8.7	29,800	2940	.48	.66	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 HEATING CAPACITY — C22-51FC/B24 — C26-51(FC) — CR22-51/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
375	800	10.8	36,700	2515	8.2	27,900	2160	5.5	18,800	1805	3.7	12,500	1465	1.7	5900	1115
470	1000	11.0	37,700	2450	8.5	28,900	2095	5.8	19,800	1740	4.0	13,500	1400	2.0	6900	1055
565	1200	11.3	38,500	2410	8.7	29,600	2060	6.0	20,500	1700	4.2	14,200	1360	2.2	7600	1015

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-311 — HEATING CAPACITY — CB19/CBH19-31 — CB19/CBH19-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
425	900	10.9	37,200	2455	8.3	28,300	2110	5.6	19,200	1760	3.7	12,600	1420	1.8	6100	1075
470	1000	11.1	37,800	2430	8.5	28,900	2085	5.8	19,800	1735	3.9	13,200	1395	2.0	6700	1050
520	1100	11.3	38,500	2410	8.7	29,600	2065	6.0	20,500	1715	4.1	13,900	1375	2.2	7400	1030

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (C22-51 — C26-51 — CR22-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2450	37,700	11.0
60	16	2365	35,600	10.4
55	13	2275	33,500	9.8
50	10	2190	31,400	9.2
47	8	2135	30,100	8.8
45	7	2095	28,900	8.5
40	4	2000	25,800	7.6
35	2	1905	22,700	6.7
30	-1	1825	21,300	6.2
25	-4	1740	19,800	5.8
20	-7	1660	18,300	5.4
17	-8	1610	17,500	5.1
15	-9	1575	16,800	4.9
10	-12	1490	15,100	4.4
5	-15	1400	13,500	4.0
0	-18	1315	11,800	3.5
-5	-21	1225	10,200	3.0
-10	-23	1140	8500	2.5
-15	-26	1055	6900	2.0
-20	-29	965	5200	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-311 HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (CB19/CBH19-31-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2430	37,800	11.1
60	16	2345	35,600	10.4
55	13	2255	33,500	9.8
50	10	2170	31,300	9.2
47	8	2120	30,000	8.8
45	7	2085	28,900	8.5
40	4	1990	26,000	7.6
35	2	1900	23,200	6.8
30	-1	1820	21,500	6.3
25	-4	1735	19,800	5.8
20	-7	1655	18,100	5.3
17	-8	1605	17,100	5.0
15	-9	1570	16,500	4.8
10	-12	1485	14,800	4.3
5	-15	1395	13,200	3.9
0	-18	1310	11,600	3.4
-5	-21	1225	10,000	2.9
-10	-23	1135	8400	2.5
-15	-26	1050	6700	2.0
-20	-29	965	5100	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-311 — COOLING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
			L/s	cfm		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C
63°F (17.2°C)	375	800	9.1	31,100	2180	.70	.83	.96	8.6	29,200	2340	.71	.86	.98	8.0	27,300	2550	.73	.89	1.00	7.4	25,100	2780	.76	.93	1.00
	470	1000	9.6	32,900	2230	.74	.90	1.00	9.1	30,900	2420	.76	.93	1.00	8.4	28,800	2630	.78	.96	1.00	7.8	26,500	2840	.81	1.00	1.00
	565	1200	10.1	34,300	2310	.79	.95	1.00	9.4	32,100	2480	.81	.99	1.00	8.9	30,200	2680	.83	1.00	1.00	8.3	28,200	2890	.86	1.00	1.00
67°F (19.4°C)	375	800	9.7	33,000	2240	.55	.68	.81	9.1	31,100	2430	.56	.70	.83	8.5	29,000	2640	.57	.72	.86	7.9	26,900	2850	.59	.74	.88
	470	1000	10.2	34,900	2340	.58	.73	.87	9.6	32,900	2510	.59	.75	.89	9.0	30,700	2700	.60	.77	.92	8.3	28,400	2900	.62	.80	.96
	565	1200	10.6	36,100	2400	.61	.77	.93	10.0	34,000	2570	.62	.79	.96	9.3	31,600	2750	.63	.82	.99	8.5	29,100	2930	.65	.86	1.00
71°F (21.7°C)	375	800	10.2	34,900	2340	.42	.55	.68	9.6	32,800	2520	.42	.56	.70	9.0	30,800	2710	.42	.57	.71	8.4	28,600	2910	.43	.58	.73
	470	1000	10.8	36,800	2430	.43	.57	.73	10.2	34,700	2590	.43	.59	.74	9.5	32,400	2770	.44	.60	.76	8.8	30,000	2950	.44	.62	.79
	565	1200	11.2	38,100	2490	.44	.60	.77	10.5	35,800	2650	.44	.62	.79	9.8	33,400	2820	.45	.63	.81	9.1	30,900	2990	.46	.66	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — COOLING CAPACITY — CB21V-41 — CBH21V-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
			L/s	cfm		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C
63°F (17.2°C)	375	800	9.2	31,300	2170	.72	.85	.97	8.6	29,500	2330	.73	.87	.99	8.01	27,500	2520	.75	.90	1.00	7.5	25,500	2760	.78	.94	1.00
	470	1000	9.7	33,000	2200	.76	.91	1.00	9.1	31,200	2380	.78	.93	1.00	8.5	29,100	2590	.81	.97	1.00	7.9	27,100	2820	.84	1.00	1.00
	565	1200	10.1	34,500	2250	.80	.96	1.00	9.5	32,500	2440	.83	.99	1.00	8.9	30,500	2650	.86	1.00	1.00	8.4	28,500	2870	.90	1.00	1.00
67°F (19.4°C)	375	800	9.8	33,300	2200	.57	.69	.81	9.2	31,500	2390	.58	.71	.83	8.6	29,400	2600	.59	.73	.86	8.0	27,300	2830	.60	.75	.90
	470	1000	10.3	35,200	2280	.59	.73	.87	9.7	33,100	2470	.61	.76	.90	9.1	31,000	2670	.62	.78	.93	8.4	28,600	2870	.64	.81	.97
	565	1200	10.7	36,500	2340	.62	.78	.93	10.0	34,300	2520	.64	.80	.96	9.4	32,000	2710	.65	.83	.99	8.6	29,500	2910	.68	.87	1.00
71°F (21.7°C)	375	800	10.3	35,200	2280	.43	.55	.66	9.8	33,300	2470	.43	.56	.68	9.2	31,300	2680	.44	.57	.70	8.5	29,000	2890	.45	.59	.72
	470	1000	10.9	37,100	2370	.44	.58	.71	10.2	34,900	2550	.45	.59	.73	9.6	32,700	2740	.45	.61	.75	8.9	30,400	2930	.46	.63	.79
	565	1200	11.3	38,500	2430	.45	.61	.75	10.6	36,200	2600	.46	.62	.78	9.9	33,900	2780	.47	.64	.81	9.2	31,300	2960	.48	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-311 — HEATING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
	L/s	cfm		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh
375	800	10.2	34,800	2755	7.6	26,100	2335	5.0	17,200	1915	3.3	11,300	1540	1.5	5200	1175				
470	1000	10.5	35,800	2675	7.9	27,100	2255	5.3	18,200	1830	3.6	12,300	1460	1.8	6300	1095				
565	1200	10.7	36,600	2620	8.2	27,900	2200	5.6	19,000	1780	3.8	13,000	1405	2.1	7000	1040				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-311 — HEATING CAPACITY — CB21V-41 — CBH21V-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
	L/s	cfm		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh
425	900	10.9	37,200	2460	8.2	27,900	2135	5.4	18,300	1815	3.5	12,100	1475	1.7	5700	1125				
495	1050	11.2	38,200	2400	8.5	28,900	2075	5.7	19,300	1750	3.8	13,100	1410	2.0	6700	1060				
565	1200	11.5	39,100	2355	8.7	29,800	2030	5.9	20,200	1710	4.1	14,000	1370	2.2	7600	1020				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-311 HEAT PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume (C22-65 — C26-65 — CR22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2675	35,800	10.5
60	16	2570	33,700	9.9
55	13	2465	31,700	9.3
50	10	2360	29,600	8.7
47	8	2300	28,300	8.3
45	7	2255	27,100	7.9
40	4	2140	24,200	7.1
35	2	2030	21,200	6.2
30	-1	1930	19,700	5.8
25	-4	1830	18,200	5.3
20	-7	1735	16,800	4.9
17	-8	1675	15,900	4.7
15	-9	1640	15,300	4.5
10	-12	1550	13,800	4.0
5	-15	1460	12,300	3.6
0	-18	1365	10,800	3.2
-5	-21	1275	9300	2.7
-10	-23	1185	7800	2.3
-15	-26	1095	6300	1.8
-20	-29	1005	4800	1.4

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-311 HEATING PERFORMANCE at 1050 cfm (495 L/s) Indoor Coil Air Volume (CB21V/CBH21V-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2400	38,200	11.2
60	16	2315	36,000	10.5
55	13	2235	33,800	9.9
50	10	2155	31,500	9.2
47	8	2105	30,200	8.8
45	7	2075	28,900	8.5
40	4	1995	25,600	7.5
35	2	1915	22,300	6.5
30	-1	1830	20,800	6.1
25	-4	1750	19,300	5.7
20	-7	1670	17,800	5.2
17	-8	1620	16,900	5.0
15	-9	1585	16,300	4.8
10	-12	1500	14,700	4.3
5	-15	1410	13,100	3.8
0	-18	1325	11,500	3.4
-5	-21	1235	9900	2.9
-10	-23	1150	8300	2.4
-15	-26	1060	6700	2.0
-20	-29	975	5100	1.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — CR18-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	615	1300	10.7	36,500	2710	.79	.93	1.00	10.0	34,100	2900	.81	.96	1.00	9.4	32,200	3090	.84	.99	1.00	8.8	30,100	3250	.87	1.00	1.00
67°F (19.4°C)	615	1300	11.4	38,900	2760	.61	.76	.90	10.7	36,600	2970	.62	.78	.92	10.1	34,300	3150	.64	.80	1.00	9.3	31,800	3310	.66	.84	.98
71°F (21.7°C)	615	1300	12.1	41,400	2820	.45	.59	.73	11.4	39,000	3030	.46	.61	.75	10.7	36,600	3220	.46	.62	.77	10.0	34,100	3390	.47	.64	.81
	685	1450	12.4	42,300	2840	.46	.61	.75	11.7	39,900	3050	.46	.62	.78	10.9	37,300	3240	.47	.64	.81	10.2	34,800	3410	.48	.66	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — CR18-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)																										
67°F (19.4°C)																										
71°F (21.7°C)																										

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — HEATING CAPACITY — CR18-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
																kW	Btuh	kW	Btuh	kW
615	1300	12.9	44,000	3130	9.8	33,500	2625	6.7	22,700	2110	4.5	15,500	1690	2.3	7900	1270				
685	1450	13.1	44,800	3105	10.0	34,300	2600	6.9	23,500	2085	4.8	16,300	1665	2.6	8700	1245				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — CR18-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
																kW	Btuh	kW	Btuh	kW

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CR18-51)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Watts Input		Btuh	kW
65	18	3130		44,000	12.9
60	16	3005		41,500	12.2
55	13	2880		39,000	11.4
50	10	2760		36,500	10.7
47	8	2685		35,000	10.3
45	7	2625		33,500	9.8
40	4	2470		29,800	8.7
35	2	2320		26,000	7.6
30	-1	2215		24,300	7.1
25	-4	2110		22,700	6.7
20	-7	2005		21,000	6.2
17	-8	1940		20,000	5.9
15	-9	1900		19,200	5.6
10	-12	1795		17,400	5.1
5	-15	1690		15,500	4.5
0	-18	1585		13,600	4.0
-5	-21	1480		11,700	3.4
-10	-23	1375		9800	2.9
-15	-26	1270		7900	2.3
-20	-29	1165		6000	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-411-413 HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CR18-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Watts Input		Btuh	kW
65	18				
60	16				
55	13				
50	10				
47	8				
45	7				
40	4				
35	2				
30	-1				
25	-4				
20	-7				
17	-8				
15	-9				
10	-12				
5	-15				
0	-18				
-5	-21				
-10	-23				
-15	-26				
-20	-29				

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — CVP10-46/EC10Q4

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	545	1150	10.4	35,400	2680	.75	.90	1.00	9.8	33,300	2880	.78	.93	1.00	9.1	31,100	3060	.80	.96	1.00	8.5	29,100	3220	.83	.99	1.00
	615	1300	10.7	36,400	2710	.78	.93	1.00	10.0	34,200	2900	.80	.96	1.00	9.4	32,100	3090	.83	.99	1.00	8.8	30,200	3260	.86	1.00	1.00
	685	1450	10.9	37,300	2730	.80	.96	1.00	10.3	35,200	2930	.83	.99	1.00	9.7	33,200	3120	.86	1.00	1.00	9.2	31,300	3290	.90	1.00	1.00
67°F (19.4°C)	545	1150	11.2	38,100	2750	.58	.72	.85	10.6	36,000	2950	.60	.74	.88	9.9	33,700	3140	.62	.77	.91	9.2	31,400	3300	.63	.80	.95
	615	1300	11.5	39,200	2770	.60	.75	.89	10.8	37,000	2980	.62	.77	.92	10.1	34,600	3160	.63	.80	.95	9.4	32,200	3330	.65	.83	.99
	685	1450	11.8	40,100	2790	.62	.77	.92	11.1	37,800	2990	.63	.80	.95	10.3	35,300	3180	.65	.83	.99	9.6	32,800	3350	.67	.86	1.00
71°F (21.7°C)	545	1150	12.0	40,800	2810	.44	.57	.69	11.3	38,700	3020	.44	.58	.71	10.6	36,300	3210	.45	.60	.73	9.9	33,800	3380	.46	.61	.76
	615	1300	12.3	42,000	2830	.45	.59	.71	11.6	39,600	3040	.45	.60	.74	10.9	37,100	3240	.46	.62	.77	10.1	34,600	3410	.47	.64	.80
	685	1450	12.5	42,800	2850	.46	.60	.74	11.8	40,400	3060	.46	.62	.77	11.1	37,800	3260	.47	.63	.80	10.3	35,200	3430	.48	.66	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — CVP10-41/EC10Q3

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	545	1150	10.4	35,600	2690	.76	.90	1.00	9.8	33,500	2880	.78	.93	1.00	9.2	31,400	3060	.80	.96	1.00	8.6	29,400	3220	.83	.99	1.00
	615	1300	10.7	36,600	2710	.78	.94	1.00	10.1	34,500	2910	.81	.97	1.00	9.5	32,400	3090	.83	.99	1.00	8.9	30,500	3270	.87	1.00	1.00
	685	1450	11.0	37,600	2730	.81	.97	1.00	10.4	35,500	2940	.84	.99	1.00	9.8	33,500	3130	.86	1.00	1.00	9.3	31,600	3300	.90	1.00	1.00
67°F (19.4°C)	545	1150	11.3	38,400	2750	.59	.73	.86	10.6	36,200	2960	.60	.75	.89	9.9	33,900	3140	.62	.77	.92	9.3	31,600	3310	.64	.80	.96
	615	1300	11.6	39,500	2780	.60	.78	.90	10.9	37,300	2980	.62	.77	.92	10.2	34,900	3170	.64	.80	.96	9.5	32,400	3330	.66	.84	.99
	685	1450	11.8	40,300	2800	.62	.78	.93	11.1	38,000	3000	.64	.80	.96	10.4	35,600	3190	.66	.83	.99	9.7	33,000	3350	.68	.87	1.00
71°F (21.7°C)	545	1150	12.0	41,100	2810	.43	.57	.70	11.4	38,800	3020	.45	.58	.72	10.7	36,500	3220	.45	.60	.74	10.0	34,000	3390	.46	.62	.77
	615	1300	12.3	42,100	2840	.45	.58	.72	11.7	39,800	3050	.46	.60	.74	11.0	37,400	3240	.46	.62	.77	10.2	34,800	3410	.47	.64	.80
	685	1450	12.7	43,200	2860	.46	.60	.74	11.9	40,600	3070	.46	.62	.77	11.1	38,000	3260	.47	.64	.80	10.4	35,400	3430	.48	.66	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — HEATING CAPACITY — CVP10-46/EC10Q4

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
545	1150	12.7	43,500	3155	9.7	33,000	2655	6.5	22,300	2150	4.3	14,800	1730	2.1	7300	1310
615	1300	12.9	44,100	3115	9.8	33,600	2615	6.7	22,900	2110	4.5	15,400	1690	2.3	7900	1270
685	1450	13.0	44,300	3090	9.9	33,800	2590	6.8	23,100	2085	4.6	15,600	1665	2.4	8100	1245

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — CVP10-41/EC10Q3

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
545	1150	12.9	44,000	3155	9.8	33,500	2655	6.7	22,800	2145	4.5	15,300	1730	2.3	7800	1310
615	1300	12.9	44,100	3115	9.8	33,600	2615	6.7	22,900	2105	4.5	15,400	1690	2.3	7900	1270
685	1450	13.0	44,500	3090	10.0	34,000	2590	6.8	23,300	2080	4.6	15,800	1665	2.4	8300	1245

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CVP10-46/EC10Q4)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3115	44,100	12.9
60	16	2990	41,600	12.2
55	13	2870	39,000	11.4
50	10	2750	36,500	10.7
47	8	2675	35,000	10.3
45	7	2615	33,600	9.8
40	4	2465	30,100	8.8
35	2	2315	26,600	7.8
30	-1	2210	24,700	7.2
25	-4	2110	22,900	6.7
20	-7	2005	21,000	6.2
17	-8	1945	19,900	5.8
15	-9	1900	19,100	5.6
10	-12	1795	17,300	5.1
5	-15	1690	15,400	4.5
0	-18	1585	13,500	4.0
-5	-21	1480	11,600	3.4
-10	-23	1375	9700	2.8
-15	-26	1270	7900	2.3
-20	-29	1165	6000	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-411-413 HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CVP10-41/EC10Q3)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3115	44,100	12.9
60	16	2990	41,600	12.2
55	13	2870	39,000	11.4
50	10	2750	36,500	10.7
47	8	2675	35,000	10.3
45	7	2615	33,600	9.8
40	4	2460	30,100	8.8
35	2	2310	26,600	7.8
30	-1	2210	24,700	7.2
25	-4	2105	22,900	6.7
20	-7	2005	21,000	6.2
17	-8	1945	19,900	5.8
15	-9	1900	19,100	5.6
10	-12	1795	17,300	5.1
5	-15	1690	15,400	4.5
0	-18	1585	13,500	4.0
-5	-21	1480	11,600	3.4
-10	-23	1375	9700	2.8
-15	-26	1270	7900	2.3
-20	-29	1165	6000	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — CB19/CBH19-31 — CB19/CBH19-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	545	1150	10.5	35,900	2700	.77	.92	1.00	9.9	33,800	2890	.79	.94	1.00	9.3	31,800	3080	.82	.97	1.00	8.7	29,700	3240	.85	1.00	1.00
	615	1300	10.9	37,100	2720	.80	.95	1.00	10.3	35,000	2920	.83	.97	1.00	9.6	32,800	3110	.85	1.00	1.00	9.0	30,800	3280	.88	1.00	1.00
	685	1450	11.2	38,100	2750	.83	.98	1.00	10.5	36,000	2950	.86	1.00	1.00	9.9	33,900	3140	.88	1.00	1.00	9.4	32,000	3310	.92	1.00	1.00
67°F (19.4°C)	545	1150	11.3	38,400	2750	.60	.74	.88	10.6	36,200	2950	.61	.76	.90	9.9	33,900	3140	.63	.79	.94	9.2	31,500	3300	.64	.82	.97
	615	1300	11.6	39,500	2780	.62	.77	.91	10.9	37,100	2980	.63	.80	.94	10.2	34,700	3170	.65	.82	.97	9.5	32,300	3330	.67	.86	1.00
	685	1450	11.8	40,300	2800	.64	.80	.95	11.1	37,900	3000	.65	.83	.97	10.4	35,400	3190	.67	.86	1.00	9.5	32,900	3350	.69	.89	1.00
71°F (21.7°C)	545	1150	12.0	40,900	2810	.44	.58	.71	11.3	38,600	3020	.45	.60	.74	10.6	36,100	3210	.46	.61	.76	9.9	33,700	3380	.46	.63	.79
	615	1300	12.3	41,900	2830	.45	.60	.74	11.6	39,500	3040	.46	.62	.77	10.9	37,100	3230	.46	.63	.79	10.1	34,500	3410	.47	.65	.83
	685	1450	12.5	42,800	2850	.46	.62	.77	11.8	40,400	3060	.47	.64	.80	11.1	37,800	3260	.47	.66	.83	10.3	35,200	3430	.48	.68	.86

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — CB21V-41 — CBH21V-41

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	425	900	10.2	34,900	2660	.71	.84	.96	9.6	32,900	2850	.73	.86	.98	9.0	30,800	3030	.75	.89	1.00	8.4	28,800	3190	.77	.92	1.00
	520	1100	10.8	36,900	2700	.75	.89	1.00	10.2	34,800	2900	.77	.92	1.00	9.6	32,600	3080	.79	.95	1.00	8.9	30,300	3250	.82	.98	1.00
	615	1300	11.3	38,600	2740	.79	.94	1.00	10.6	36,300	2940	.81	.96	1.00	10.0	34,100	3130	.84	.99	1.00	9.3	31,900	3300	.87	1.00	1.00
67°F (19.4°C)	425	900	11.0	37,400	2710	.56	.68	.80	10.3	35,300	2920	.57	.70	.82	9.7	33,200	3100	.58	.72	.85	9.1	31,000	3270	.60	.74	.88
	520	1100	11.6	39,500	2760	.59	.72	.85	10.9	37,200	2970	.60	.74	.88	10.2	34,900	3150	.61	.76	.91	9.5	32,500	3320	.63	.79	.94
	615	1300	12.0	41,100	2800	.61	.76	.90	11.3	38,600	3000	.62	.78	.93	10.6	36,100	3190	.64	.81	.96	9.8	33,600	3360	.66	.84	.99
71°F (21.7°C)	425	900	11.6	39,700	2770	.43	.55	.66	11.0	37,600	2970	.43	.55	.67	10.4	35,400	3170	.44	.57	.69	9.7	33,100	3340	.44	.58	.71
	520	1100	12.3	41,900	2820	.44	.57	.69	11.6	39,500	3020	.44	.58	.71	10.9	37,100	3220	.45	.59	.73	10.2	34,700	3390	.45	.61	.76
	615	1300	12.7	43,500	2850	.45	.59	.73	12.0	41,000	3060	.45	.61	.75	11.3	38,500	3260	.46	.62	.78	10.5	35,800	3430	.47	.64	.81

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — HEATING CAPACITY — CB19/CBH19-31 — CB19/CBH19-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
545	1150	13.0	44,200	3005	9.9	33,700	2555	6.7	22,900	2100	4.5	15,200	1705	2.2	7400	1290
615	1300	13.2	44,900	2970	10.1	34,400	2520	6.9	23,600	2065	4.7	15,900	1670	2.4	8100	1255
685	1450	13.4	45,800	2945	10.3	35,300	2495	7.2	24,500	2040	4.9	16,800	1645	2.6	9000	1230

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — CB21V-41 — CBH21V-41

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
425	900	12.5	42,700	3110	9.5	32,300	2640	6.4	21,800	2170	4.2	14,300	1760	2.0	6700	1345
495	1050	12.9	44,000	3025	9.8	33,600	2560	6.8	23,100	2085	4.6	15,600	1680	2.3	8000	1260
565	1200	13.2	45,100	2965	10.2	34,700	2500	7.1	24,200	2025	4.9	16,700	1620	2.7	9100	1200

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CB19/CBH19-31-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2970	44,900	13.2
60	16	2860	42,400	12.4
55	13	2750	39,800	11.7
50	10	2640	37,300	10.9
47	8	2575	35,800	10.5
45	7	2520	34,400	10.1
40	4	2380	30,800	9.0
35	2	2245	27,300	8.0
30	-1	2155	25,400	7.4
25	-4	2065	23,600	6.9
20	-7	1975	21,700	6.4
17	-8	1920	20,600	6.0
15	-9	1880	19,800	5.8
10	-12	1775	17,900	5.2
5	-15	1670	15,900	4.7
0	-18	1565	14,000	4.1
-5	-21	1465	12,000	3.5
-10	-23	1360	10,100	3.0
-15	-26	1255	8100	2.4
-20	-29	1150	6200	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

### HP19-411-413 HEATING PERFORMANCE at 1050 cfm (495 L/s) Indoor Coil Air Volume (CB21V/CBH21V-41)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3025	44,000	12.9
60	16	2910	41,500	12.2
55	13	2800	39,000	11.4
50	10	2685	36,500	10.7
47	8	2615	35,000	10.3
45	7	2560	33,600	9.8
40	4	2420	30,200	8.8
35	2	2280	26,700	7.8
30	-1	2185	24,900	7.3
25	-4	2085	23,100	6.8
20	-7	1990	21,300	6.2
17	-8	1930	20,200	5.9
15	-9	1890	19,400	5.7
10	-12	1785	17,500	5.1
5	-15	1680	15,600	4.57
0	-18	1575	13,700	4.0
-5	-21	1470	11,800	3.5
-10	-23	1365	9900	2.9
-15	-26	1260	8000	2.3
-20	-29	1160	6100	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — CH22-51

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	470	1000	10.6	36,200	2650	.71	.85	.98	10.1	34,400	2850	.73	.87	1.00	9.5	32,400	3030	.74	.90	1.00	8.9	30,300	3200	.76	.94	1.00
	565	1200	11.1	38,000	2690	.75	.89	1.00	10.6	36,000	2900	.76	.92	1.00	9.9	33,900	3090	.78	.96	1.00	9.3	31,600	3250	.81	.99	1.00
	660	1400	11.5	39,300	2720	.79	.94	1.00	10.9	37,200	2930	.80	.97	1.00	10.3	35,100	3120	.82	1.00	1.00	9.7	33,100	3310	.85	1.00	1.00
67°F (19.4°C)	470	1000	11.2	38,300	2700	.56	.70	.83	10.7	36,400	2910	.57	.71	.85	10.1	34,300	3100	.58	.73	.87	9.4	32,100	3270	.59	.76	.89
	565	1200	11.8	40,200	2740	.58	.73	.88	11.2	38,100	2960	.59	.75	.90	10.5	35,900	3150	.60	.77	.92	9.8	33,600	3320	.62	.80	.95
	660	1400	12.2	41,600	2780	.60	.76	.93	11.5	39,400	2990	.62	.78	.95	10.9	37,100	3180	.63	.81	.98	10.2	34,700	3360	.64	.84	1.00
71°F (21.7°C)	470	1000	11.8	40,300	2750	.42	.56	.70	11.2	38,200	2960	.42	.57	.71	10.6	36,000	3150	.43	.58	.73	9.9	33,700	3330	.43	.59	.74
	565	1200	12.4	42,300	2790	.43	.58	.73	11.8	40,100	3000	.43	.59	.75	11.1	37,900	3200	.44	.60	.76	10.3	35,300	3380	.44	.62	.78
	660	1400	12.8	43,700	2830	.44	.60	.77	12.2	41,500	3040	.44	.61	.78	11.5	39,100	3240	.45	.63	.80	10.7	36,500	3420	.45	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — C22-51FC/B24 — C26-51(FC) — CR22-51/B24

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	470	1000	10.8	36,800	2660	.71	.85	.97	10.2	34,700	2860	.73	.88	1.00	9.6	32,600	3050	.74	.90	1.00	8.9	30,400	3210	.76	.94	1.00
	565	1200	11.3	38,700	2710	.75	.90	1.00	10.7	36,400	2910	.76	.93	1.00	10.0	34,100	3100	.79	.96	1.00	9.3	31,900	3270	.81	.99	1.00
	660	1400	11.8	40,200	2740	.78	.94	1.00	11.1	37,900	2950	.80	.97	1.00	10.4	35,500	3140	.83	1.00	1.00	9.8	33,300	3310	.85	1.00	1.00
67°F (19.4°C)	470	1000	11.4	38,800	2710	.56	.70	.83	10.8	36,700	2920	.57	.71	.85	10.1	34,500	3110	.58	.73	.87	9.4	32,200	3280	.59	.76	.90
	565	1200	12.0	40,900	2760	.58	.73	.88	11.3	38,600	2970	.59	.75	.90	10.6	36,300	3160	.60	.77	.92	9.9	33,800	3330	.62	.80	.95
	660	1400	12.4	42,400	2800	.60	.76	.92	11.7	39,900	3000	.62	.79	.95	11.0	37,500	3200	.63	.81	.98	10.2	34,900	3370	.65	.84	1.00
71°F (21.7°C)	470	1000	11.9	40,700	2760	.42	.56	.70	11.3	38,500	2960	.42	.57	.71	10.6	36,300	3160	.43	.58	.73	9.9	33,900	3330	.43	.59	.75
	565	1200	12.6	42,900	2800	.43	.58	.73	11.9	40,500	3010	.43	.59	.75	11.2	38,100	3210	.44	.60	.77	10.4	35,600	3390	.44	.62	.79
	660	1400	13.0	44,400	2840	.44	.60	.77	12.3	41,900	3060	.44	.61	.78	11.5	39,400	3250	.45	.63	.80	10.8	36,800	3430	.45	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — HEATING CAPACITY — CH22-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
470	1000	12.6	43,100	3170	9.4	32,100	2670	6.0	20,400	2160	4.1	14,000	1735	1.8	6300	1315
565	1200	13.1	44,800	3125	9.9	33,700	2625	6.5	22,100	2115	4.6	15,700	1690	2.3	8000	1270
660	1400	13.1	44,800	3090	9.9	33,700	2590	6.4	22,000	2080	4.6	15,600	1655	2.3	8000	1235

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — C22-51FC/B24 — C26-51(FC) — CR22-51/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
470	1000	12.8	43,600	3090	9.6	32,900	2620	6.4	21,700	2140	4.5	15,200	1730	2.1	7300	1310
565	1200	13.0	44,500	3045	9.9	33,800	2575	6.6	22,600	2095	4.7	16,100	1685	2.4	8200	1265
660	1400	13.2	45,200	3010	10.1	34,500	2540	6.8	23,300	2060	4.9	16,700	1650	2.6	8900	1230

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume (CH22-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3125	44,800	13.1
60	16	3005	42,300	12.4
55	13	2880	39,700	11.6
50	10	2755	37,100	10.9
47	8	2685	35,600	10.4
45	7	2625	33,700	9.9
40	4	2480	29,000	8.5
35	2	2335	24,300	7.1
30	-1	2225	23,200	6.8
25	-4	2115	22,100	6.5
20	-7	2010	21,000	6.2
17	-8	1945	20,300	5.9
15	-9	1900	19,500	5.7
10	-12	1795	17,600	5.2
5	-15	1690	15,700	4.6
0	-18	1585	13,800	4.0
-5	-21	1480	11,800	3.5
-10	-23	1375	9900	2.9
-15	-26	1270	8000	2.3
-20	-29	1165	6100	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-411-413 HEAT PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume (C22-51 — C26-51 — CR22-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3045	44,500	13.0
60	16	2930	42,000	12.3
55	13	2815	39,600	11.6
50	10	2700	37,100	10.9
47	8	2630	35,600	10.4
45	7	2575	33,800	9.9
40	4	2435	29,300	8.6
35	2	2295	24,800	7.3
30	-1	2195	23,700	6.9
25	-4	2095	22,600	6.6
20	-7	1995	21,500	6.3
17	-8	1935	20,800	6.1
15	-9	1895	20,000	5.9
10	-12	1790	18,100	5.3
5	-15	1685	16,100	4.7
0	-18	1580	14,100	4.1
-5	-21	1475	12,100	3.5
-10	-23	1370	10,200	3.0
-15	-26	1265	8200	2.4
-20	-29	1160	6200	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — CB19-51 — CBH19-51 — CH19-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17.2°C)	545	1150	10.9	37,300	2730	.77	.92	1.00	10.3	35,100	2930	.79	.94	1.00	9.6	32,900	3110	.82	.97	1.00	9.0	30,800	3280	.85	1.00	1.00
	615	1300	11.3	38,500	2760	.82	.95	1.00	10.6	36,300	2960	.82	.98	1.00	10.0	34,100	3150	.85	1.00	1.00	9.4	32,100	3320	.89	1.00	1.00
	685	1450	11.6	39,600	2780	.83	.98	1.00	11.0	37,400	2980	.86	1.00	1.00	10.3	35,300	3180	.89	1.00	1.00	9.7	33,200	3360	.92	1.00	1.00
67°F (19.4°C)	545	1150	11.7	39,800	2790	.60	.74	.88	11.0	37,400	2990	.61	.76	.91	10.3	35,100	3180	.62	.79	.94	9.6	32,600	3340	.64	.82	.97
	615	1300	12.0	40,900	2810	.62	.77	.92	11.3	38,500	3010	.63	.79	.95	10.5	35,900	3200	.65	.82	.98	9.8	33,400	3370	.67	.86	1.00
	685	1450	12.3	41,900	2830	.63	.80	.95	11.5	39,300	3030	.65	.83	.98	10.8	36,700	3220	.67	.86	1.00	10.0	34,100	3390	.69	.89	1.00
71°F (21.7°C)	545	1150	12.4	42,300	2840	.44	.58	.71	11.7	39,900	3050	.45	.59	.73	11.0	37,400	3240	.45	.61	.76	10.2	34,800	3410	.46	.63	.79
	615	1300	12.7	43,400	2870	.45	.60	.74	12.0	40,900	3080	.46	.61	.77	11.2	38,300	3270	.46	.63	.80	10.4	35,600	3440	.47	.65	.83
	685	1450	13.0	44,300	2890	.46	.62	.77	12.3	41,800	3100	.47	.64	.80	11.4	39,000	3290	.47	.66	.83	10.6	36,300	3460	.48	.68	.87

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — CH22-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C
63°F (17.2°C)	470	1000	10.8	36,800	2670	.71	.85	.97	10.2	34,800	2870	.72	.87	1.00	9.6	32,800	3060	.74	.90	1.00	9.0	30,600	3220	.76	.94	1.00
	565	1200	11.3	38,500	2710	.75	.89	1.00	10.7	36,400	2910	.76	.92	1.00	10.0	34,100	3100	.78	.96	1.00	9.3	31,900	3270	.81	.99	1.00
	660	1400	11.6	39,700	2740	.78	.95	1.00	11.0	37,600	2950	.80	.98	1.00	10.4	35,400	3150	.82	1.00	1.00	9.8	33,500	3330	.85	1.00	1.00
67°F (19.4°C)	470	1000	11.5	39,300	2730	.56	.69	.82	10.9	37,200	2940	.57	.71	.84	10.3	35,100	3130	.57	.73	.86	9.6	32,800	3300	.59	.75	.89
	565	1200	12.0	40,900	2770	.58	.72	.87	11.4	38,800	2970	.59	.74	.89	10.7	36,500	3170	.60	.77	.92	10.0	34,100	3350	.61	.80	.95
	660	1400	12.3	42,000	2790	.60	.75	.92	11.7	39,800	3010	.61	.78	.95	11.0	37,600	3200	.63	.81	.97	10.3	35,000	3380	.64	.84	1.00
71°F (21.7°C)	470	1000	12.2	41,700	2790	.42	.55	.69	11.6	39,500	3000	.42	.56	.70	10.9	37,200	3190	.42	.57	.72	10.2	34,900	3370	.43	.59	.74
	565	1200	12.7	43,300	2820	.43	.57	.73	12.0	41,100	3040	.43	.58	.74	11.3	38,700	3240	.43	.60	.76	10.6	36,200	3420	.44	.62	.78
	660	1400	13.0	44,300	2850	.44	.59	.76	12.3	42,100	3060	.44	.60	.78	11.6	39,700	3260	.45	.62	.80	10.9	37,200	3450	.45	.64	.82

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — HEATING CAPACITY — CB19-51 — CBH19-51 — CH19-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
545	1150	13.1	44,700	2970	10.0	34,100	2535	6.8	23,100	2090	4.5	15,400	1705	2.2	7500	1290
615	1300	13.3	45,400	2935	10.2	34,800	2500	7.0	23,800	2055	4.7	16,100	1670	2.4	8200	1255
685	1450	13.6	46,300	2910	10.5	35,700	2475	7.2	24,700	2030	5.0	17,000	1645	2.7	9100	1230

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — CH22-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
470	1000	12.6	42,900	3160	9.5	32,400	2660	6.3	21,400	2160	4.3	14,700	1735	2.1	7100	1315
565	1200	12.8	43,800	3115	9.8	33,300	2620	6.5	22,300	2120	4.6	15,600	1695	2.3	8000	1275
660	1400	13.0	44,500	3080	10.0	34,000	2585	6.7	23,000	2085	4.8	16,300	1660	2.5	8700	1240

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEAT PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume (CB19/CBH19-51 — CH19-51)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	2935		45,400	13.3
60	16	2830		42,800	12.5
55	13	2725		40,300	11.8
50	10	2620		37,700	11.0
47	8	2555		36,200	10.6
45	7	2500		34,800	10.2
40	4	2365		31,200	9.1
35	2	2230		27,600	8.1
30	-1	2145		25,700	7.5
25	-4	2055		23,800	7.0
20	-7	1970		21,900	6.4
17	-8	1920		20,800	6.1
15	-9	1880		20,000	5.9
10	-12	1775		18,000	5.3
5	-15	1670		16,100	4.7
0	-18	1565		14,100	4.1
-5	-21	1465		12,100	3.5
-10	-23	1360		10,200	3.0
-15	-26	1255		8,200	2.4
-20	-29	1150		6,200	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-411-413 HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume (CH22-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	3115		43,800	12.8
60	16	2995		41,300	12.1
55	13	2870		38,900	11.4
50	10	2750		36,400	10.7
47	8	2680		34,900	10.2
45	7	2620		33,300	9.8
40	4	2475		29,100	8.5
35	2	2330		24,900	7.3
30	-1	2225		23,600	6.9
25	-4	2120		22,300	6.5
20	-7	2010		21,000	6.2
17	-8	1950		20,200	5.9
15	-9	1905		19,400	5.7
10	-12	1800		17,500	5.1
5	-15	1695		15,600	4.6
0	-18	1590		13,700	4.0
-5	-21	1495		11,800	3.5
-10	-23	1380		9,900	2.9
-15	-26	1275		8,000	2.3
-20	-29	1170		6,100	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-411-413 — COOLING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts				
63°F (17.2°C)	470	1000	11.1	38,000	2700	.71	.85	.97	10.5	35,800	2890	.72	.87	1.00	9.8	33,600	3080	.74	.90	1.00	9.1	31,200	3240	.77	.94	1.00
	565	1200	11.7	40,000	2740	.75	.90	1.00	11.0	37,500	2940	.76	.93	1.00	10.3	35,000	3120	.79	.96	1.00	9.6	32,600	3290	.81	.99	1.00
	660	1400	12.1	41,300	2770	.78	.95	1.00	11.4	38,800	2970	.80	.98	1.00	10.7	36,400	3160	.83	1.00	1.00	10.0	34,100	3340	.85	1.00	1.00
67°F (19.4°C)	470	1000	11.9	40,500	2760	.56	.69	.83	11.2	38,200	2960	.57	.71	.85	10.5	35,900	3150	.58	.73	.87	9.8	33,400	3320	.59	.75	.89
	565	1200	12.5	42,500	2800	.58	.73	.87	11.8	40,100	3010	.59	.74	.89	11.0	37,500	3200	.60	.77	.92	10.2	34,800	3370	.62	.80	.95
	660	1400	12.9	44,000	2830	.60	.76	.92	12.1	41,300	3040	.61	.79	.95	11.3	38,600	3230	.63	.81	.98	10.5	35,800	3400	.65	.85	1.00
71°F (21.7°C)	470	1000	12.6	43,000	2810	.42	.55	.69	11.9	40,600	3020	.42	.56	.71	11.2	38,100	3220	.43	.57	.72	10.4	35,600	3390	.43	.59	.74
	565	1200	13.2	45,000	2850	.43	.57	.73	12.4	42,400	3060	.43	.58	.74	11.7	39,800	3260	.44	.60	.76	10.9	37,100	3440	.44	.62	.78
	660	1400	13.6	46,300	2890	.44	.60	.76	12.8	43,700	3100	.44	.61	.78	12.0	40,900	3300	.45	.63	.80	11.2	38,100	3470	.45	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 — COOLING CAPACITY — CB21V-51 — CBH21V-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb								
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C			
L/s	cfm	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts	kW	Btuh	Watts				
63°F (17.2°C)	545	1150	11.1	37,800	2720	.75	.90	1.00	10.4	35,500	2920	.77	.93	1.00	9.7	33,200	3100	.80	.96	1.00	9.1	30,900	3260	.83	.99	1.00
	615	1300	11.4	39,000	2750	.78	.94	1.00	10.7	36,600	2950	.81	.97	1.00	10.0	34,300	3130	.83	1.00	1.00	9.4	32,200	3310	.87	1.00	1.00
	685	1450	11.7	40,000	2780	.81	.97	1.00	11.1	37,800	2980	.84	1.00	1.00	10.4	35,500	3170	.87	1.00	1.00	9.8	33,300	3350	.90	1.00	1.00
67°F (19.4°C)	545	1150	11.8	40,400	2780	.59	.73	.86	11.1	38,000	2980	.60	.75	.89	10.4	35,600	3170	.61	.77	.92	9.7	33,000	3340	.63	.80	.96
	615	1300	12.2	41,600	2810	.61	.75	.90	11.5	39,100	3010	.62	.78	.93	10.7	36,500	3200	.63	.80	.96	9.9	33,800	3370	.65	.84	1.00
	685	1450	12.5	42,500	2830	.62	.78	.94	11.7	39,900	3040	.64	.81	.97	10.9	37,200	3220	.66	.84	1.00	10.1	34,600	3390	.68	.87	1.00
71°F (21.7°C)	545	1150	12.5	42,800	2840	.44	.57	.70	11.8	40,400	3040	.44	.58	.72	11.1	37,800	3240	.45	.60	.74	10.3	35,200	3410	.46	.62	.77
	615	1300	12.9	43,900	2860	.45	.59	.73	12.1	41,400	3070	.45	.60	.75	11.4	38,800	3270	.46	.62	.78	10.5	36,000	3440	.47	.64	.81
	685	1450	13.2	45,000	2890	.45	.61	.76	12.4	42,300	3090	.46	.62	.78	11.6	39,500	3290	.47	.64	.81	10.8	36,700	3460	.48	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-411-413 HEATING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
L/s	cfm	kW	Btuh	Watts	kW	Btuh	Watts									
470	1000	11.8	40,400	3345	8.9	30,200	2780	5.7	19,600	2205	4.0	13,600	1750	1.9	6400	1325
565	1200	12.1	41,400	3305	9.1	31,200	2735	6.0	20,600	2160	4.3	14,600	1705	2.2	7400	1285
660	1400	12.4	42,200	3270	9.4	32,100	2705	6.3	21,400	2130	4.5	15,400	1675	2.4	8300	1250

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-411-413 — HEATING CAPACITY — CB21V-51 — CBH21V-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
L/s	cfm	kW	Btuh	Watts	kW	Btuh	Watts									
635	1350	13.5	46,100	3055	10.1	34,400	2575	6.6	22,500	2085	4.4	15,100	1700	2.2	7500	1285
710	1500	13.6	46,500	3035	10.2	34,800	2555	6.7	22,900	2065	4.5	15,500	1680	2.3	7900	1265
780	1650	13.8	47,000	3025	10.3	35,300	2545	6.9	23,400	2055	4.7	16,000	1670	2.5	8400	1255

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-411-413 HEAT PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume (C22-65 — C26-65 — CR22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3305	41,400	12.1
60	16	3165	39,000	11.4
55	13	3025	36,700	10.8
50	10	2885	34,300	10.1
47	8	2800	32,900	9.6
45	7	2735	31,200	9.1
40	4	2570	27,000	7.9
35	2	2410	22,800	6.7
30	-1	2285	21,700	6.4
25	-4	2160	20,600	6.0
20	-7	2035	19,500	5.7
17	-8	1960	18,800	5.5
15	-9	1920	18,100	5.3
10	-12	1815	16,400	4.8
5	-15	1705	14,600	4.3
0	-18	1600	12,800	3.8
-5	-21	1495	11,000	3.2
-10	-23	1390	9200	2.7
-15	-26	1285	7400	2.2
-20	-29	1175	5700	1.7

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-411-413 HEATING PERFORMANCE at 1500 cfm (710 L/s) Indoor Coil Air Volume (CB21V/CBH21V-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3035	46,500	13.6
60	16	2920	43,700	12.8
55	13	2805	40,900	12.0
50	10	2690	38,100	11.2
47	8	2620	36,400	10.7
45	7	2555	34,800	10.2
40	4	2395	30,700	9.0
35	2	2235	26,600	7.8
30	-1	2150	24,800	7.3
25	-4	2065	22,900	6.7
20	-7	1980	21,100	6.2
17	-8	1930	20,000	5.9
15	-9	1890	19,200	5.6
10	-12	1785	17,400	5.1
5	-15	1680	15,500	4.5
0	-18	1575	13,600	4.0
-5	-21	1470	11,700	3.4
-10	-23	1370	9800	2.9
-15	-26	1265	7900	2.3
-20	-29	1160	6000	1.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-461-463 — COOLING CAPACITY — CR18-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	660	1400	12.3	42,100	3220	.76	.91	1.00	11.7	40,000	3440	.78	.93	1.00	11.0	37,400	3910	.81	.97	1.00	10.3	35,000	4050	.84	.99	1.00
67°F (19.4°C)	660	1400	12.7	43,300	3240	.79	.94	1.00	11.9	40,500	3470	.81	.97	1.00	11.3	38,400	3750	.84	.99	1.00	10.5	35,900	4090	.87	1.00	1.00
71°F (21.7°C)	660	1400	13.1	44,800	3280	.80	.96	.99	12.4	42,400	3520	.81	.96	.99	11.7	39,900	3810	.82	.98	.99	10.9	37,200	4170	.88	.99	.96
71°F (21.7°C)	730	1550	13.4	45,800	3300	.81	.97	.99	12.7	43,300	3540	.82	.97	.99	11.9	40,700	3840	.84	.98	.96	11.1	37,900	4200	.89	.99	.99
71°F (21.7°C)	730	1550	13.9	47,500	3340	.85	.98	.99	13.2	45,000	3590	.85	.99	.99	12.4	42,400	3910	.86	.99	.99	11.6	39,600	4290	.91	.99	.99
71°F (21.7°C)	730	1550	14.2	48,500	3360	.86	.99	.99	13.5	45,900	3620	.86	.99	.99	12.7	43,200	3940	.87	.99	.99	11.8	40,300	4330	.92	.99	.99

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — COOLING CAPACITY — CR18-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)																										
67°F (19.4°C)																										
71°F (21.7°C)																										

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — HEATING CAPACITY — CR18-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
				kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh			
660	1400	15.3	52,200	3850	11.7	39,900	3175	8.0	27,300	2495	5.3	18,200	1950	2.7	9300	1465				
730	1550	15.6	53,200	3820	12.0	40,900	3145	8.3	28,300	2465	5.6	19,200	1920	3.0	10,300	1435				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-461-463 — HEATING CAPACITY — CR18-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
				kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh			

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-461-463 HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (CR18-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3850	52,200	15.3
60	16	3680	49,200	14.4
55	13	3515	46,300	13.6
50	10	3345	43,300	12.7
47	8	3245	41,500	12.2
45	7	3175	39,900	11.7
40	4	2995	36,000	10.5
35	2	2815	32,000	9.4
30	-1	2655	29,700	8.7
25	-4	2495	27,300	8.0
20	-7	2335	25,000	7.3
17	-8	2240	23,600	6.9
15	-9	2190	22,700	6.7
10	-12	2070	20,500	6.0
5	-15	1950	18,200	5.3
0	-18	1830	16,000	4.7
-5	-21	1705	13,800	4.0
-10	-23	1585	11,500	3.4
-15	-26	1465	9300	2.7
-20	-29	1345	7100	2.1

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-461-463 HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (CR18-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18			
60	16			
55	13			
50	10			
47	8			
45	7			
40	4			
35	2			
30	-1			
25	-4			
20	-7			
17	-8			
15	-9			
10	-12			
5	-15			
0	-18			
-5	-21			
-10	-23			
-15	-26			
-20	-29			

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-461-463 — COOLING CAPACITY — CVP10-46/EC10Q4

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	590	1250	12.1	41,200	3200	.74	.88	.99	11.4	39,000	3420	.76	.90	1.00	10.7	36,600	3680	.78	.93	1.00	10.0	34,100	4000	.81	.97	1.00
	660	1400	12.4	42,200	3220	.76	.91	1.00	11.7	39,800	3440	.78	.94	1.00	11.0	37,400	3720	.81	.97	1.00	10.3	35,000	4050	.84	.99	1.00
	730	1550	12.6	43,000	3240	.79	.94	1.00	11.9	40,700	3470	.81	.97	1.00	11.2	38,300	3750	.83	.99	1.00	10.5	36,000	4100	.87	1.00	1.00
67°F (19.4°C)	590	1250	12.9	44,100	3260	.58	.71	.84	12.3	41,800	3500	.59	.73	.86	11.5	39,300	3790	.60	.75	.89	10.8	36,800	4140	.62	.78	.93
	660	1400	13.2	45,100	3290	.59	.74	.87	12.5	42,700	3530	.61	.76	.90	11.8	40,200	3820	.62	.78	.93	11.0	37,500	4080	.64	.81	.96
	730	1550	13.5	46,100	3310	.61	.76	.90	12.8	43,600	3550	.62	.78	.93	12.0	41,000	3850	.64	.81	.96	11.2	38,200	4220	.66	.84	.99
71°F (21.7°C)	590	1250	13.7	46,900	3320	.44	.56	.69	13.0	44,500	3580	.44	.57	.70	12.3	42,000	3890	.44	.59	.72	11.5	39,300	4270	.45	.60	.75
	660	1400	14.1	48,000	3350	.44	.58	.71	13.4	45,600	3610	.45	.59	.73	12.6	43,000	3930	.45	.61	.75	11.7	40,100	4320	.46	.62	.78
	730	1550	14.4	49,100	3370	.45	.59	.73	13.6	46,500	3630	.45	.61	.75	12.8	43,700	3960	.46	.62	.78	12.0	40,800	4350	.47	.64	.81

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — COOLING CAPACITY — CB19-51 — CBH19-51 — CH19-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	590	1250	12.6	43,100	3240	.75	.90	1.00	11.9	40,700	3470	.77	.92	1.00	11.2	38,300	3750	.79	.95	1.00	10.5	35,800	4090	.82	.98	1.00
	660	1400	13.0	44,200	3270	.78	.93	1.00	12.2	41,700	3500	.80	.96	1.00	11.5	39,400	3790	.82	.98	1.00	10.8	37,000	4150	.86	1.00	1.00
	730	1550	13.2	45,200	3290	.81	.96	1.00	12.6	42,900	3530	.83	.98	1.00	11.9	40,500	3830	.86	1.00	1.00	11.2	38,100	4210	.89	1.00	1.00
67°F (19.4°C)	590	1250	13.4	45,700	3300	.59	.73	.86	12.7	43,300	3550	.60	.74	.88	12.0	40,800	3840	.61	.77	.91	11.1	38,000	4210	.63	.79	.95
	660	1400	12.7	46,900	3330	.60	.75	.89	13.0	44,300	3580	.62	.77	.92	12.2	41,700	3880	.63	.80	.95	11.4	38,800	4250	.65	.83	.98
	730	1550	14.0	47,800	3350	.62	.78	.93	13.2	45,200	3600	.63	.80	.95	12.4	42,400	3910	.65	.83	.98	11.6	39,500	4280	.67	.86	1.00
71°F (21.7°C)	590	1250	14.2	48,500	3360	.44	.57	.70	13.5	45,900	3620	.44	.58	.72	12.7	43,200	3940	.45	.60	.74	11.8	40,300	4330	.46	.61	.77
	660	1400	14.6	49,700	3380	.45	.59	.73	13.8	47,000	3650	.45	.60	.75	13.0	44,200	3980	.46	.62	.77	12.1	41,200	4370	.47	.64	.80
	730	1550	14.8	50,600	3400	.45	.61	.75	14.0	47,900	3680	.46	.62	.78	13.2	45,000	4010	.47	.64	.81	12.3	41,900	4410	.48	.66	.84

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — HEATING CAPACITY — CVP10-46/EC10Q4

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
			Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
590	1250	15.4	52,400	3790	11.7	39,900	3170	7.9	27,100	2545	5.2	17,900	2020	2.6	8900	1535						
660	1400	15.5	52,900	3725	11.8	40,400	3105	8.1	27,600	2480	5.4	18,400	1955	2.8	9400	1470						
730	1550	15.7	53,600	3685	12.0	41,100	3065	8.3	28,300	2440	5.6	19,100	1915	3.0	10,100	1430						

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-461-463 — HEATING CAPACITY — CB19-51 — CBH19-51 — CH19-51

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-28°C)			
			Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input					
kW	Btuh	kW	Btuh	kW		Btuh	kW		Btuh	kW		Btuh										
590	1250	15.6	53,300	3610	11.9	40,500	3035	8.0	27,400	2455	5.3	18,000	1955	2.5	8700	1480						
660	1400	15.9	54,200	3570	12.1	41,400	2995	8.3	28,300	2415	5.5	18,900	1915	2.8	9600	1440						
730	1550	16.2	55,200	3540	12.4	42,400	2965	8.6	29,300	2385	5.8	19,900	1885	3.1	10,600	1410						

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-461-463 HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (CVP10-46/EC10Q4)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3725	52,900	15.5
60	16	3570	49,900	14.6
55	13	3415	46,800	13.7
50	10	3260	43,800	12.8
47	8	3170	42,000	12.3
45	7	3105	40,400	11.8
40	4	2940	36,400	10.7
35	2	2775	32,400	9.5
30	-1	2625	30,000	8.8
25	-4	2480	27,600	8.1
20	-7	2335	25,200	7.4
17	-8	2245	23,800	7.0
15	-9	2195	22,900	6.7
10	-12	2075	20,600	6.0
5	-15	1955	18,400	5.4
0	-18	1830	16,100	4.7
-5	-21	1710	13,900	4.1
-10	-23	1590	11,600	3.4
-15	-26	1470	9,400	2.8
-20	-29	1345	7,100	2.1

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-461-463 HEAT PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (CB19/CBH19-51 — CH19-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3570	54,200	15.9
60	16	3425	51,100	15.0
55	13	3285	48,000	14.1
50	10	3140	44,900	13.2
47	8	3055	43,000	12.6
45	7	2995	41,400	12.1
40	4	2840	37,300	10.9
35	2	2685	33,200	9.7
30	-1	2550	30,800	9.0
25	-4	2415	28,300	8.3
20	-7	2280	25,900	7.6
17	-8	2200	24,400	7.2
15	-9	2150	23,500	6.9
10	-12	2035	21,200	6.2
5	-15	1915	18,900	5.5
0	-18	1795	16,600	4.9
-5	-21	1675	14,200	4.2
-10	-23	1555	11,900	3.5
-15	-26	1440	9,600	2.8
-20	-29	1320	7,300	2.1

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-461-463 — COOLING CAPACITY — CH22-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17.2°C)	565	1200	12.7	43,400	3410	.72	.86	.99	12.0	41,100	3660	.74	.89	1.00	11.4	38,800	3960	.75	.91	1.00	10.6	36,100	4320	.77	.95	1.00
	660	1400	13.2	44,900	3450	.75	.91	1.00	12.5	42,700	3700	.77	.93	1.00	11.7	39,900	4020	.79	.97	1.00	10.9	37,300	4400	.81	1.00	1.00
	755	1600	13.5	46,100	3470	.79	.95	1.00	12.8	43,700	3740	.81	.98	1.00	12.1	41,200	4060	.83	1.00	1.00	11.4	38,800	4480	.85	1.00	1.00
67°F (19.4°C)	565	1200	13.5	46,100	3470	.57	.70	.84	12.8	43,700	3740	.57	.72	.86	12.1	41,400	4060	.58	.74	.88	11.3	38,600	4460	.60	.76	.91
	660	1400	14.0	47,800	3510	.59	.73	.88	13.2	45,200	3790	.60	.75	.90	12.5	42,600	4120	.61	.78	.93	11.6	39,700	4530	.62	.81	.96
	755	1600	14.4	49,100	3540	.61	.76	.92	13.6	46,400	3820	.62	.79	.95	12.8	43,600	4160	.63	.81	.98	11.9	40,600	4580	.65	.85	1.00
71°F (21.7°C)	565	1200	14.3	48,700	3530	.42	.56	.70	13.6	46,300	3820	.43	.57	.72	12.8	43,800	4160	.43	.58	.73	12.0	40,800	4590	.44	.60	.75
	660	1400	14.8	50,400	3570	.43	.58	.73	14.0	47,700	3860	.44	.59	.75	13.2	45,000	4220	.44	.61	.77	12.3	42,000	4650	.45	.62	.79
	755	1600	15.2	51,800	3600	.44	.60	.77	14.3	48,900	3900	.44	.61	.78	13.5	46,000	4270	.45	.63	.80	12.6	42,900	4710	.46	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — COOLING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C		
63°F (17.2°C)	565	1200	13.2	45,000	3430	.72	.86	.99	12.5	42,500	3670	.73	.89	1.00	11.7	39,900	3970	.75	.92	1.00	10.9	37,200	4330	.77	.95	1.00
	660	1400	13.7	46,600	3460	.75	.91	1.00	12.9	44,000	3710	.77	.93	1.00	12.1	41,300	4030	.79	.97	1.00	11.3	38,400	4410	.81	1.00	1.00
	755	1600	14.1	48,000	3490	.78	.95	1.00	13.2	45,200	3750	.80	.98	1.00	12.5	42,500	4070	.83	1.00	1.00	11.7	39,900	4480	.85	1.00	1.00
67°F (19.4°C)	565	1200	14.0	47,800	3490	.57	.70	.84	13.2	45,200	3750	.57	.72	.86	12.5	42,500	4080	.58	.74	.88	11.6	39,700	4470	.60	.76	.91
	660	1400	14.5	49,500	3520	.59	.73	.88	13.7	46,800	3800	.60	.75	.90	12.9	43,900	4130	.61	.78	.93	12.0	40,800	4540	.62	.81	.96
	755	1600	14.9	50,900	3550	.60	.76	.92	14.1	48,100	3840	.62	.79	.95	13.2	44,900	4180	.63	.81	.98	12.3	41,800	4590	.65	.85	1.00
71°F (21.7°C)	565	1200	14.8	50,500	3540	.42	.56	.70	14.0	47,800	3830	.43	.57	.72	13.2	45,000	4180	.43	.58	.73	12.3	42,000	4600	.44	.59	.75
	660	1400	15.3	52,300	3580	.43	.58	.73	14.5	49,400	3880	.43	.59	.75	13.6	46,400	4240	.44	.60	.77	12.7	43,200	4670	.45	.62	.79
	755	1600	15.7	53,700	3610	.44	.60	.76	14.9	50,700	3920	.44	.61	.78	13.9	47,500	4290	.45	.63	.80	13.0	44,200	4720	.46	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — HEATING CAPACITY — CH22-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
	L/s	cfm		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh
565	1200	15.3	52,300	3895	11.8	40,100	3260	8.1	27,700	2620	5.3	18,000	2090	2.6	8800	1580				
660	1400	15.6	53,200	3845	12.0	41,000	3210	8.4	28,600	2570	5.5	18,900	2040	2.8	9600	1535				
755	1600	15.8	53,900	3805	12.2	41,700	3170	8.6	29,300	2525	5.7	19,600	1995	3.0	10,400	1490				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-461-463 — HEATING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
	L/s	cfm		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh
565	1200	14.8	50,400	4115	11.3	38,400	3415	7.7	26,200	2710	5.0	16,900	2150	2.4	8100	1635				
660	1400	15.1	51,400	4050	11.5	39,400	3350	8.0	27,200	2645	5.2	17,800	2085	2.7	9100	1565				
755	1600	15.3	52,200	4000	11.8	40,100	3300	8.2	27,900	2595	5.5	18,600	2035	2.9	9900	1515				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-461-463 HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (CH22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3845	53,200	15.6
60	16	3690	50,200	14.7
55	13	3535	47,200	13.8
50	10	3375	44,200	13.0
47	8	3285	42,400	12.4
45	7	3210	41,000	12.0
40	4	3030	37,400	11.0
35	2	2850	33,800	9.9
30	-1	2710	31,200	9.1
25	-4	2570	28,600	8.4
20	-7	2430	26,000	7.6
17	-8	2345	24,400	7.2
15	-9	2295	23,500	6.9
10	-12	2165	21,200	6.2
5	-15	2040	18,900	5.5
0	-18	1915	16,600	4.9
-5	-21	1785	14,300	4.2
-10	-23	1660	11,900	3.5
-15	-26	1535	9600	2.8
-20	-29	1405	7300	2.1

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-461-463 HEAT PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume (C22-65 — C26-65 — CR22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4050	51,400	15.1
60	16	3875	48,500	14.2
55	13	3705	45,500	13.3
50	10	3530	42,600	12.5
47	8	3430	40,800	12.0
45	7	3350	39,400	11.5
40	4	3150	35,800	10.5
35	2	2955	32,300	9.5
30	-1	2800	29,800	8.7
25	-4	2645	27,200	8.0
20	-7	2490	24,600	7.2
17	-8	2395	23,100	6.8
15	-9	2345	22,200	6.5
10	-12	2215	20,000	5.9
5	-15	2085	17,800	5.2
0	-18	1955	15,700	4.6
-5	-21	1825	13,500	4.0
-10	-23	1695	11,300	3.3
-15	-26	1565	9100	2.7
-20	-29	1435	6900	2.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-461-463 — COOLING CAPACITY — CB21V — CBH21V-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	685	1450	13.4	45,900	3340	.78	.93	1.00	12.7	43,400	3590	.80	.96	1.00	12.0	40,800	3880	.82	.99	1.00	11.2	38,200	4260	.85	1.00	1.00
	755	1600	13.7	46,900	3360	.80	.97	1.00	13.0	44,400	3610	.83	.99	1.00	12.3	41,900	3930	.85	1.00	1.00	11.5	39,400	4320	.89	1.00	1.00
	825	1750	14.0	47,900	3380	.83	.99	1.00	13.3	45,500	3640	.85	1.00	1.00	12.6	43,000	3970	.88	1.00	1.00	11.8	40,400	4370	.92	1.00	1.00
67°F (19.4°C)	685	1450	14.3	48,900	3400	.60	.75	.90	13.5	46,200	3660	.62	.77	.92	12.7	43,300	3980	.63	.80	.96	11.8	40,300	4370	.65	.83	.99
	755	1600	14.6	49,800	3420	.62	.78	.93	13.8	47,000	3690	.63	.80	.96	12.9	44,100	4010	.65	.83	.99	12.0	41,000	4410	.67	.86	1.00
	825	1750	14.9	50,700	3440	.63	.80	.96	14.0	47,800	3710	.65	.83	.99	13.1	44,700	4040	.67	.86	1.00	12.2	41,600	4440	.69	.90	1.00
71°F (21.7°C)	685	1450	15.1	51,600	3460	.45	.59	.73	14.3	48,800	3740	.45	.60	.75	13.4	45,800	4080	.46	.62	.77	12.5	42,700	4500	.46	.64	.80
	755	1600	15.4	52,600	3480	.45	.60	.75	14.6	49,700	3770	.46	.62	.78	13.7	46,600	4120	.47	.64	.80	12.7	43,400	4530	.47	.66	.84
	825	1750	15.7	53,500	3500	.46	.62	.78	14.8	50,500	3790	.47	.64	.80	13.9	47,300	4140	.47	.66	.84	12.9	44,000	4570	.48	.68	.87

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — COOLING CAPACITY — CR18-51 — CR18-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	755	1600	13.9	47,300	3570	.77	.92	1.00	13.1	44,800	3810	.79	.94	1.00	12.3	41,900	4100	.82	.97	1.00	11.5	39,300	4470	.85	1.00	1.00
	825	1800	14.2	48,600	3600	.80	.95	1.00	13.4	45,700	3840	.82	.98	1.00	12.6	43,100	4150	.85	1.00	1.00	11.9	40,600	4530	.88	1.00	1.00
	755	1600	14.7	50,300	3630	.60	.75	.88	14.0	47,700	3890	.61	.77	.91	13.1	44,800	4210	.63	.79	.94	12.2	41,800	4600	.64	.82	.97
67°F (19.4°C)	825	1800	15.1	51,600	3660	.62	.77	.92	14.3	48,800	3920	.63	.80	.94	13.4	45,800	4250	.65	.82	.97	12.5	42,600	4640	.67	.85	1.00
	755	1600	15.6	53,400	3690	.45	.59	.72	14.8	50,600	3970	.45	.60	.74	13.9	47,600	4320	.46	.61	.76	13.0	44,400	4730	.46	.63	.79
	825	1800	16.0	54,700	3720	.45	.60	.75	15.2	51,800	4010	.46	.62	.77	14.2	48,600	4360	.47	.63	.80	13.3	45,300	4780	.47	.66	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-461-463 — HEATING CAPACITY — CB21V — CBH21V-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
685	1450	14.8	50,600	3775	11.3	38,500	3160	7.6	25,800	2545	5.0	16,900	2010	2.3	8000	1525
755	1600	15.2	51,900	3720	11.7	39,800	3105	7.9	27,100	2490	5.3	18,200	1955	2.7	9300	1470
825	1750	12.3	52,100	3710	11.7	40,000	3095	8.0	27,300	2480	5.4	18,400	1945	2.8	9500	1460

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-511-513 — HEATING CAPACITY — CR18-51 — CR18-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
755	1600	16.9	57,600	4150	13.0	44,200	3450	8.9	30,400	2735	6.0	20,600	2185	3.1	10,500	1640
825	1800	17.2	58,700	4115	13.3	45,300	3415	9.2	31,500	2700	6.4	21,700	2150	3.4	11,600	1605

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-461-463 HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (CB21V/CBH21V-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3720	51,900	15.2
60	16	3565	49,000	14.4
55	13	3415	46,100	13.5
50	10	3260	43,200	12.7
47	8	3170	41,500	12.2
45	7	3105	39,800	11.7
40	4	2950	35,700	10.5
35	2	2790	31,500	9.2
30	-1	2640	29,300	8.6
25	-4	2490	27,100	7.9
20	-7	2340	24,900	7.3
17	-8	2250	23,600	6.9
15	-9	2200	22,700	6.7
10	-12	2075	20,500	6.0
5	-15	1955	18,200	5.3
0	-18	1835	16,000	4.7
-5	-21	1715	13,800	4.0
-10	-23	1590	11,500	3.4
-15	-26	1470	9300	2.7
-20	-29	1350	7100	2.1

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-511-513 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CR18-51 — CR18-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4150	57,600	16.9
60	16	3980	54,400	16.0
55	13	3810	51,200	15.0
50	10	3635	47,900	14.0
47	8	3535	46,000	13.5
45	7	3450	44,200	13.0
40	4	3230	39,600	11.6
35	2	3015	35,100	10.3
30	-1	2875	32,700	9.6
25	-4	2735	30,400	8.9
20	-7	2595	28,000	8.2
17	-8	2510	26,600	7.8
15	-9	2455	25,600	7.5
10	-12	2320	23,100	6.8
5	-15	2185	20,600	6.0
0	-18	2050	18,000	5.3
-5	-21	1915	15,500	4.5
-10	-23	1775	13,000	3.8
-15	-26	1640	10,500	3.1
-20	-29	1005	8000	2.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-511-513 — COOLING CAPACITY — CVP10-51/EC10Q4

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	660	1400	13.7	46,600	3550	.75	.89	1.00	12.9	44,000	3790	.76	.91	1.00	12.1	41,200	4080	.78	.94	1.00	11.3	38,400	4420	.81	.98	1.00
	755	1600	14.0	47,700	3580	.77	.93	1.00	13.2	45,100	3820	.79	.96	1.00	12.4	42,300	4120	.82	.99	1.00	11.6	39,700	4490	.85	1.00	1.00
	850	1800	14.3	48,900	3600	.81	.97	1.00	13.5	46,200	3850	.83	.99	1.00	12.8	43,600	4170	.85	1.00	1.00	12.0	41,100	4560	.89	1.00	1.00
67°F (19.4°C)	660	1400	14.6	49,800	3620	.58	.72	.85	13.8	47,100	3880	.59	.74	.87	13.0	44,400	4200	.60	.76	.90	12.1	41,400	4580	.62	.78	.94
	755	1600	15.0	51,200	3650	.60	.75	.89	14.2	48,500	3920	.61	.77	.92	13.3	45,500	4240	.63	.79	.95	12.4	42,400	4630	.64	.82	.98
	850	1800	15.4	52,400	3670	.62	.78	.93	14.5	49,500	3950	.63	.80	.96	13.6	46,500	4270	.65	.83	.99	12.7	43,300	4670	.67	.86	1.00
71°F (21.7°C)	660	1400	15.6	53,100	3690	.43	.57	.69	14.7	50,300	3970	.44	.58	.71	13.9	47,400	4310	.45	.59	.73	13.0	44,300	4720	.45	.60	.75
	755	1600	16.0	54,700	3720	.44	.58	.72	15.2	51,700	4000	.45	.60	.74	14.2	48,600	4360	.45	.61	.76	13.3	45,600	4780	.46	.63	.79
	850	1800	16.4	55,900	3740	.45	.60	.75	15.5	52,800	4030	.45	.62	.77	14.5	49,600	4390	.46	.63	.80	13.5	46,100	4820	.47	.65	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 COOLING CAPACITY — CB19-51 — CBH19-51 — CH19-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	660	1400	13.9	47,400	3580	.76	.90	1.00	13.2	44,900	3820	.77	.92	1.00	12.4	42,300	4120	.80	.95	1.00	11.6	39,500	4490	.82	.98	1.00
	755	1600	14.4	49,000	3610	.79	.94	1.00	13.6	46,300	3860	.81	.97	1.00	12.8	43,600	4170	.83	.99	1.00	12.0	41,000	4560	.86	1.00	1.00
	850	1800	14.7	50,300	3630	.82	.97	1.00	14.0	47,700	3900	.84	1.00	1.00	13.2	45,000	4220	.87	1.00	1.00	12.5	42,500	4630	.90	1.00	1.00
67°F (19.4°C)	660	1400	14.8	50,400	3640	.59	.73	.86	14.0	47,800	3900	.60	.75	.89	13.2	45,000	4220	.61	.77	.92	12.3	42,000	4610	.63	.80	.95
	755	1600	15.2	52,000	3670	.61	.76	.90	14.4	49,200	3940	.62	.78	.93	13.5	46,200	4260	.64	.81	.96	12.6	42,900	4660	.66	.84	.99
	850	1800	15.6	53,300	3690	.63	.79	.94	14.7	50,200	3970	.64	.82	.97	13.8	47,100	4300	.66	.85	.99	12.8	43,800	4710	.68	.88	1.00
71°F (21.7°C)	660	1400	15.7	53,600	3700	.44	.57	.70	14.9	50,800	3980	.44	.58	.72	14.0	47,800	4320	.45	.60	.74	13.1	44,600	4740	.46	.62	.77
	755	1600	16.1	55,100	3730	.45	.59	.73	15.3	52,100	4020	.45	.61	.76	14.4	49,000	4370	.46	.62	.78	13.4	45,700	4800	.47	.64	.81
	850	1800	16.5	56,400	3750	.46	.61	.77	15.6	53,300	4050	.46	.63	.79	14.7	50,000	4410	.47	.65	.82	13.6	46,400	4840	.48	.67	.86

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — HEATING CAPACITY — CVP10-51/EC10Q4

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	
660	1400	16.8	57,200	4305	12.8	43,600	3590	8.7	29,700	2870	5.8	19,800	2305	2.9	9800	1750				
755	1600	16.9	57,800	4230	13.0	44,200	3515	8.9	30,300	2795	6.0	20,400	2230	3.0	10,400	1675				
850	1800	17.2	58,700	4170	13.2	45,100	3455	9.1	31,200	2735	6.2	21,300	2170	3.3	11,300	1615				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-511-513 HEATING CAPACITY — CB19-51 — CBH19-51 — CH19-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	
660	1400	17.3	59,200	4005	13.2	45,100	3380	9.0	30,600	2745	5.9	20,300	2225	2.9	9900	1685				
755	1600	17.6	60,200	3960	13.5	46,100	3335	9.3	31,600	2700	6.2	21,300	2180	3.2	10,900	1640				
850	1800	18.0	61,300	3930	13.8	47,200	3305	9.6	32,700	2670	6.6	22,400	2150	3.5	12,000	1610				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-511-513 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CVP10-51/EC10Q4)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4230	57,800	16.9
60	16	4055	54,500	16.0
55	13	3880	51,200	15.0
50	10	3710	48,000	14.1
47	8	3605	46,000	13.5
45	7	3515	44,200	13.0
40	4	3300	39,600	11.6
35	2	3080	35,100	10.3
30	-1	2935	32,700	9.6
25	-4	2795	30,300	8.9
20	-7	2650	27,900	8.2
17	-8	2565	26,400	7.7
15	-9	2510	25,400	7.4
10	-12	2370	22,900	6.7
5	-15	2230	20,400	6.0
0	-18	2095	17,900	5.2
-5	-21	1955	15,400	4.5
-10	-23	1815	12,900	3.8
-15	-26	1675	10,400	3.0
-20	-29	1540	7,900	2.3

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-511-513 HEAT PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CB19/CBH19-51 — CH19-51)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3960	60,200	17.6
60	16	3810	56,800	16.6
55	13	3655	53,400	15.6
50	10	3505	50,000	14.7
47	8	3415	48,000	14.1
45	7	3335	46,100	13.5
40	4	3140	41,400	12.1
35	2	2945	36,600	10.7
30	-1	2820	34,100	10.0
25	-4	2700	31,600	9.3
20	-7	2580	29,100	8.5
17	-8	2505	27,600	8.1
15	-9	2450	26,600	7.8
10	-12	2315	23,900	7.0
5	-15	2180	21,300	6.2
0	-18	2045	18,700	5.5
-5	-21	1910	16,100	4.7
-10	-23	1775	13,500	4.0
-15	-26	1640	10,900	3.2
-20	-29	1505	8,300	2.4

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-511-513 — COOLING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		75°F 24°C	80°F 27°C	85°F 29°C	kW		Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C			
63°F (17.2°C)	660	1400	14.9	50,800	3630	.72	.86	.99	14.2	48,400	3930	.73	.88	1.00	13.5	46,000	4240	.75	.90	1.00	12.7	43,300	4520	.76	.93	1.00
	755	1600	15.3	52,100	3670	.75	.90	1.00	14.6	49,800	3970	.76	.92	1.00	13.8	47,200	4280	.78	.95	1.00	13.1	44,600	4580	.80	.98	1.00
	850	1800	15.6	53,400	3690	.78	.94	1.00	14.9	50,800	4010	.79	.96	1.00	14.2	48,300	4320	.81	.98	1.00	13.4	45,800	4630	.83	1.00	1.00
67°F (19.4°C)	660	1400	15.7	53,600	3700	.56	.70	.84	15.0	51,200	4020	.57	.72	.86	14.3	48,800	4340	.58	.73	.87	13.5	46,200	4650	.59	.75	.89
	755	1600	16.2	55,200	3730	.58	.73	.88	15.4	52,600	4060	.59	.75	.90	14.7	50,100	4390	.60	.76	.92	13.9	47,400	4700	.61	.79	.94
	850	1800	16.5	56,400	3760	.60	.76	.92	15.8	53,800	4100	.61	.78	.94	15.0	51,100	4420	.62	.80	.96	14.2	48,400	4750	.63	.82	.98
71°F (21.7°C)	660	1400	16.5	56,400	3760	.42	.56	.70	15.8	54,000	4100	.42	.57	.72	15.1	51,400	4430	.43	.58	.73	14.3	48,800	4760	.43	.59	.74
	755	1600	17.1	58,200	3800	.43	.58	.73	16.3	55,500	4140	.43	.59	.74	15.5	52,800	4480	.43	.60	.76	14.7	50,000	4820	.44	.61	.77
	850	1800	17.4	59,400	3830	.43	.59	.76	16.6	56,700	4180	.44	.60	.77	15.8	53,900	4520	.44	.62	.79	15.0	51,100	4860	.45	.63	.81

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — COOLING CAPACITY — CH22-65

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		75°F 24°C	80°F 27°C	85°F 29°C	kW		Btuh	75°F 24°C	80°F 27°C	85°F 29°C		kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C			
63°F (17.2°C)	660	1400	14.6	49,900	3610	.72	.86	.99	14.0	47,700	3920	.73	.88	1.00	13.3	45,500	4220	.75	.91	1.00	12.6	43,100	4520	.76	.93	1.00
	755	1600	15.0	51,300	3650	.75	.90	1.00	14.4	49,000	3960	.76	.92	1.00	13.7	46,600	4270	.78	.95	1.00	12.9	44,100	4570	.80	.98	1.00
	850	1800	15.4	52,500	3680	.78	.94	1.00	14.7	50,100	3990	.79	.96	1.00	14.0	47,800	4310	.81	.99	1.00	13.3	45,400	4620	.83	1.00	1.00
67°F (19.4°C)	660	1400	15.5	52,800	3690	.57	.70	.84	14.8	50,500	4000	.57	.72	.86	14.1	48,200	4330	.58	.73	.87	13.4	45,800	4640	.59	.75	.89
	755	1600	15.9	54,300	3720	.58	.73	.88	15.2	52,000	4050	.59	.75	.90	14.5	49,500	4370	.60	.77	.92	13.7	46,900	4690	.61	.79	.94
	850	1800	16.3	55,500	3750	.60	.76	.92	15.5	53,000	4080	.61	.78	.94	14.8	50,500	4410	.62	.80	.96	14.0	47,900	4730	.63	.82	.98
71°F (21.7°C)	660	1400	16.3	55,500	3750	.42	.56	.70	15.6	53,300	4080	.42	.57	.72	14.9	50,900	4420	.43	.58	.73	14.2	48,400	4750	.43	.59	.74
	755	1600	16.7	57,100	3790	.43	.58	.73	16.0	54,700	4130	.43	.59	.74	15.3	52,200	4470	.43	.60	.76	14.5	49,500	4800	.44	.61	.77
	850	1800	17.1	58,300	3810	.44	.59	.76	16.4	55,800	4160	.44	.61	.77	15.6	53,300	4500	.44	.62	.79	14.8	50,500	4840	.45	.63	.81

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — HEATING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP — CR22-65/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
660	1400	17.0	58,000	4055	13.0	44,500	3505	8.9	30,500	2955	6.2	21,000	2380	3.0	10,300	1805
755	1600	17.2	58,800	3990	13.3	45,300	3440	9.2	31,300	2890	6.4	21,800	2315	3.3	11,100	1740
850	1800	17.4	59,500	3940	13.5	46,000	3390	9.4	32,000	2845	6.6	22,500	2270	3.5	11,800	1695

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-511-513 — HEATING CAPACITY — CH22-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		
660	1400	17.4	59,500	3855	13.5	45,900	3350	9.3	31,700	2845	6.4	21,900	2300	3.2	10,800	1740
755	1600	17.6	60,200	3800	13.7	46,600	3290	9.5	32,400	2785	6.6	22,600	2240	3.4	11,500	1685
850	1800	17.8	60,900	3755	13.9	47,300	3245	9.7	33,000	2740	6.8	23,300	2195	3.6	12,200	1640

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-511-513 HEAT PERFORMANCE at 1600 cfm(755 L/s) Indoor Coil Air Volume (C22-65 — C26-65 — CR22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3990	58,800	17.2
60	16	3850	55,600	16.3
55	13	3710	52,500	15.4
50	10	3575	49,300	14.4
47	8	3490	47,400	13.9
45	7	3440	45,300	13.3
40	4	3310	40,200	11.8
35	2	3180	35,200	10.3
30	-1	3035	33,200	9.7
25	-4	2890	31,300	9.2
20	-7	2745	29,400	8.6
17	-8	2660	28,200	8.3
15	-9	2605	27,100	7.9
10	-12	2460	24,500	7.2
5	-15	2315	21,800	6.4
0	-18	2170	19,100	5.6
-5	-21	2030	16,500	4.8
-10	-23	1885	13,800	4.0
-15	-26	1740	11,100	3.3
-20	-29	1595	8,500	2.5

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

### HP19-511-513 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CH22-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3800	60,200	17.6
60	16	3670	57,000	16.7
55	13	3545	53,800	15.8
50	10	3415	50,600	14.8
47	8	3340	48,700	14.3
45	7	3290	46,600	13.7
40	4	3170	41,400	12.1
35	2	3050	36,300	10.6
30	-1	2920	34,300	10.1
25	-4	2785	32,400	9.5
20	-7	2655	30,400	8.9
17	-8	2575	29,300	8.6
15	-9	2520	28,100	8.2
10	-12	2380	25,400	7.4
5	-15	2240	22,600	6.6
0	-18	2100	19,800	5.8
-5	-21	1960	17,100	5.0
-10	-23	1825	14,300	4.2
-15	-26	1685	11,500	3.4
-20	-29	1545	8,800	2.6

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).

# 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.

## HP19-511-513 — COOLING CAPACITY — CB21V-51 — CBH21V-51

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	730	1550	14.0	47,700	3630	.77	.92	1.00	13.2	45,000	3890	.79	.94	1.00	12.4	42,200	4200	.81	.97	1.00	11.6	39,600	4590	.84	1.00	1.00
	800	1700	14.2	48,600	3650	.79	.95	1.00	13.4	45,900	3920	.81	.97	1.00	12.7	43,300	4240	.84	1.00	1.00	11.9	40,600	4650	.87	1.00	1.00
	875	1850	14.5	49,500	3670	.81	.97	1.00	13.7	46,900	3940	.83	1.00	1.00	13.0	44,200	4280	.86	1.00	1.00	12.2	41,600	4700	.90	1.00	1.00
67°F (19.4°C)	730	1550	14.9	50,700	3690	.60	.74	.88	14.1	48,000	3970	.61	.76	.91	13.2	45,000	4310	.62	.78	.94	12.3	41,900	4720	.64	.81	.98
	800	1700	15.1	51,700	3710	.61	.76	.91	14.3	48,900	4000	.62	.78	.94	13.4	45,800	4340	.64	.81	.97	12.5	42,600	4760	.66	.84	1.00
	875	1850	15.4	52,600	3730	.62	.79	.94	14.5	49,600	4020	.64	.81	.97	13.6	46,500	4370	.65	.84	1.00	12.6	43,100	4790	.68	.87	1.00
71°F (21.7°C)	730	1550	15.7	53,700	3750	.44	.58	.71	14.9	50,800	4050	.45	.59	.73	14.0	47,700	4410	.45	.61	.76	13.0	44,400	4850	.46	.63	.79
	800	1700	16.0	54,700	3770	.45	.59	.74	15.1	51,700	4080	.45	.61	.76	14.2	48,500	4450	.46	.63	.79	13.2	45,100	4890	.47	.65	.82
	875	1850	16.3	55,600	3790	.45	.61	.76	15.4	52,500	4100	.46	.62	.78	14.4	49,200	4470	.47	.64	.81	13.4	45,700	4920	.48	.67	.85

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — COOLING CAPACITY — CB19-65 — CBH19-65 — CH19-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C				75°F/24°C	80°F/27°C	85°F/29°C
L/s	cfm	kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh				kW	Btuh			
63°F (17.2°C)	660	1400	14.7	50,000	3630	.74	.88	1.00	13.8	47,200	3880	.76	.90	1.00	13.0	44,200	4190	.78	.93	1.00	12.1	41,200	4570	.80	.97	1.00
	755	1600	15.0	51,200	3650	.77	.92	1.00	14.2	48,600	3920	.79	.95	1.00	13.4	45,800	4240	.81	.98	1.00	12.5	42,600	4640	.84	1.00	1.00
	850	1800	15.4	52,700	3680	.80	.96	1.00	14.6	49,700	3950	.82	.99	1.00	13.7	46,900	4290	.85	1.00	1.00	12.9	44,000	4710	.88	1.00	1.00
67°F (19.4°C)	660	1400	15.6	53,200	3690	.58	.71	.84	14.7	50,300	3970	.59	.73	.87	13.8	47,200	4300	.60	.75	.90	12.9	43,900	4710	.62	.78	.93
	755	1600	16.1	54,900	3720	.60	.74	.88	15.2	51,800	4010	.61	.76	.91	14.2	48,500	4350	.62	.79	.94	13.2	45,000	4770	.64	.82	.98
	850	1800	16.5	56,300	3750	.62	.77	.92	15.5	53,000	4040	.63	.79	.95	14.5	49,600	4390	.64	.82	.99	13.4	45,900	4820	.67	.86	1.00
71°F (21.7°C)	660	1400	16.5	56,300	3750	.44	.56	.69	15.6	53,200	4040	.44	.57	.70	14.7	50,000	4410	.45	.59	.73	13.6	46,500	4840	.45	.60	.75
	755	1600	17.0	57,900	3780	.44	.58	.72	16.0	54,700	4090	.45	.59	.74	15.0	51,300	4460	.45	.61	.76	14.0	47,700	4900	.46	.63	.79
	850	1800	17.4	59,300	3810	.45	.60	.75	16.4	55,900	4120	.46	.61	.77	15.4	52,400	4500	.46	.63	.80	14.2	48,600	4950	.47	.66	.83

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — HEATING CAPACITY — CB21V-51 — CBH21V-51

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
																			kW	Btuh
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh			
685	1450	17.5	59,700	4205	13.2	44,900	3520	8.7	29,800	2830	5.9	20,000	2280	2.8	9700	1725				
755	1600	17.8	60,700	4150	13.4	45,900	3470	9.0	30,800	2775	6.2	21,000	2225	3.1	10,700	1675				
825	1750	18.0	61,600	4110	13.7	46,800	3430	9.3	31,700	2735	6.4	21,900	2185	3.4	11,600	1635				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-511-513 — HEATING CAPACITY — CB19-65 — CBH19-65 — CH19-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
																			kW	Btuh
L/s	cfm	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh			
660	1400	17.3	59,200	4010	13.2	45,100	3385	9.0	30,600	2750	5.9	20,300	2230	2.9	9900	1685				
755	1600	17.6	60,200	3965	13.5	46,100	3340	9.3	31,600	2705	6.2	21,300	2185	3.2	10,900	1640				
850	1800	18.0	61,300	3935	13.8	47,200	3310	9.6	32,700	2675	6.6	22,400	2155	3.5	12,000	1610				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-511-513 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CB21V/CBH21V-51)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	4150		60,700	17.8
60	16	3985		57,200	16.8
55	13	3820		53,600	15.7
50	10	3655		50,100	14.7
47	8	3555		48,000	14.1
45	7	3470		45,900	13.4
40	4	3260		40,600	11.9
35	2	3045		35,300	10.3
30	-1	2910		33,100	9.7
25	-4	2775		30,800	9.0
20	-7	2640		28,600	8.4
17	-8	2560		27,200	8.0
15	-9	2505		26,200	7.7
10	-12	2365		23,600	6.9
5	-15	2225		21,000	6.2
0	-18	2090		18,500	5.4
-5	-21	1950		15,900	4.7
-10	-23	1810		13,300	3.9
-15	-26	1675		10,700	3.1
-20	-29	1535		8,200	2.4

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-511-513 HEAT PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CB19/CBH19-65 — CH19-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18	3965		60,200	17.6
60	16	3815		56,800	16.6
55	13	3660		53,400	15.6
50	10	3510		50,000	14.7
47	8	3420		48,000	14.1
45	7	3340		46,100	13.5
40	4	3150		41,400	12.1
35	2	2955		36,600	10.7
30	-1	2830		34,100	10.0
25	-4	2705		31,600	9.3
20	-7	2585		29,100	8.5
17	-8	2510		27,600	8.1
15	-9	2455		26,600	7.8
10	-12	2320		23,900	7.0
5	-15	2185		21,300	6.2
0	-18	2050		18,700	5.5
-5	-21	1915		16,100	4.7
-10	-23	1775		13,500	4.0
-15	-26	1640		10,900	3.2
-20	-29	1505		8,300	2.4

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-511-513 — COOLING CAPACITY — CB21V-65 — CBH21V-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)					
						Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb					
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	710	1500	14.6	49,800	3460	.75	.90	1.00	13.7	46,800	3710	.77	.93	1.00	12.9	44,000	4010	.80	.96	1.00	12.0	41,000	4380	.82	.99	1.00
	825	1750	15.0	51,300	3490	.79	.95	1.00	14.2	48,600	3750	.81	.98	1.00	13.3	45,400	4070	.84	1.00	1.00	12.5	42,800	4470	.87	1.00	1.00
	945	2000	15.4	52,700	3520	.83	.99	1.00	14.6	49,900	3790	.85	1.00	1.00	13.8	47,200	4130	.88	1.00	1.00	13.0	44,400	4540	.92	1.00	1.00
67°F (19.4°C)	710	1500	15.5	52,900	3520	.59	.73	.86	14.7	50,000	3790	.60	.75	.89	13.7	46,900	4120	.61	.77	.92	12.8	43,600	4510	.63	.80	.96
	825	1750	16.0	54,700	3560	.61	.76	.91	15.1	51,700	3830	.62	.79	.94	14.2	48,400	4170	.64	.81	.98	13.2	44,900	4570	.66	.85	1.00
	945	2000	16.5	56,300	3580	.63	.80	.96	15.5	52,800	3870	.65	.83	.99	14.5	49,400	4210	.67	.86	1.00	13.3	45,500	4610	.69	.90	1.00
71°F (21.7°C)	710	1500	16.5	55,900	3580	.44	.57	.70	15.5	52,900	3870	.44	.58	.72	14.5	49,600	4220	.45	.60	.74	13.5	46,200	4640	.46	.62	.77
	825	1750	16.9	57,800	3610	.45	.60	.74	15.9	54,400	3910	.45	.61	.76	14.9	51,000	4270	.46	.63	.79	13.9	47,400	4700	.47	.65	.82
	945	2000	17.3	59,200	3640	.46	.62	.78	16.3	55,800	3940	.46	.63	.80	15.3	52,200	4310	.47	.66	.83	14.2	48,300	4750	.48	.68	.87

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 — COOLING CAPACITY — CH22-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)					
						Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb					
L/s	cfm	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C	kW	Btuh	75°F 24°C	80°F 27°C	85°F 29°C					
63°F (17.2°C)	615	1300	15.3	52,300	3920	.67	.81	.92	14.7	50,000	4240	.69	.82	.94	14.0	47,700	4550	.70	.84	.96	13.2	45,200	4860	.71	.86	.99
	755	1600	16.2	55,200	3980	.71	.85	.99	15.5	52,800	4310	.73	.87	1.00	14.7	50,200	4640	.74	.90	1.00	14.0	47,600	4950	.76	.92	1.00
	895	1900	16.8	57,300	4030	.75	.90	1.00	16.0	54,700	4370	.77	.93	1.00	15.2	51,800	4700	.79	.95	1.00	14.4	49,200	5030	.81	.98	1.00
67°F (19.4°C)	615	1300	16.3	55,500	3990	.53	.66	.79	15.6	53,200	4320	.54	.68	.80	14.9	50,700	4660	.54	.69	.82	14.1	48,200	4980	.55	.70	.83
	755	1600	17.2	58,600	4050	.55	.70	.84	16.4	56,000	4390	.56	.71	.85	15.6	53,400	4740	.57	.73	.87	14.9	50,700	5080	.58	.74	.89
	895	1900	17.8	60,700	4100	.58	.73	.89	17.0	58,100	4450	.59	.75	.91	16.2	55,300	4810	.60	.77	.93	15.4	52,500	5150	.61	.79	.95
71°F (21.7°C)	615	1300	17.2	58,700	4060	.40	.53	.66	16.5	56,200	4400	.40	.54	.67	15.7	53,700	4750	.40	.55	.68	15.0	51,100	5100	.41	.56	.69
	755	1600	18.1	61,800	4120	.41	.56	.70	17.3	59,200	4480	.41	.56	.71	16.6	56,500	4840	.41	.57	.72	15.7	53,700	5200	.42	.58	.74
	895	1900	18.8	64,100	4170	.42	.58	.73	18.0	61,300	4540	.42	.59	.75	17.1	58,500	4910	.42	.60	.76	16.3	55,500	5270	.43	.61	.78

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-511-513 — HEATING CAPACITY — CB21V-65 — CBH21V-65

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 (-28°C)			
	L/s	cfm	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input
660	1400	17.1	58,400	4040	13.0	44,300	3425	8.7	29,700	2770	5.7	19,600	2370	2.7	9,400	1800
755	1600	17.5	59,700	3970	13.4	45,600	3355	9.1	31,000	2700	6.1	20,900	2295	3.1	10,700	1725
850	1800	17.8	60,900	3920	13.7	46,800	3305	9.4	32,200	2650	6.5	22,100	2245	3.5	11,900	1675

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-651-653 — HEATING CAPACITY — CH22-65

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 (-28°C)			
	L/s	cfm	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input	kW	Btuh	Total Heating Capacity	Comp. Motor Watts Input
615	1300	19.9	67,800	4580	15.0	51,300	3950	10.0	34,200	3320	6.8	23,300	2695	3.3	11,100	2060
755	1600	20.4	69,500	4440	15.5	53,000	3810	10.5	35,900	3175	7.3	24,900	2550	3.7	12,700	1915
895	1900	20.7	70,700	4330	15.9	54,300	3700	10.9	37,200	3070	7.7	26,200	2445	4.1	14,000	1810

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-511-513 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CB21V/CBH21V-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18		3970	59,700	17.5
60	16		3830	56,300	16.5
55	13		3690	52,900	15.5
50	10		3555	49,500	14.5
47	8		3470	47,500	13.9
45	7		3355	45,600	13.4
40	4		3065	40,700	11.9
35	2		2775	35,900	10.5
30	-1		2735	33,400	9.8
25	-4		2700	31,000	9.1
20	-7		2660	28,500	8.4
17	-8		2640	27,000	7.9
15	-9		2580	26,000	7.6
10	-12		2440	23,400	6.9
5	-15		2295	20,900	6.1
0	-18		2155	18,300	5.4
-5	-21		2010	15,800	4.6
-10	-23		1870	13,200	3.9
-15	-26		1725	10,700	3.1
-20	-29		1585	8100	2.4

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-651-653 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CH22-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C			Btuh	kW
65	18		4440	69,500	20.4
60	16		4280	65,600	19.2
55	13		4125	61,700	18.1
50	10		3945	57,800	16.9
47	8		3875	55,500	16.3
45	7		3810	53,000	15.5
40	4		3645	46,700	13.7
35	2		3485	40,500	11.9
30	-1		3330	38,200	11.2
25	-4		3175	35,900	10.5
20	-7		3020	33,600	9.8
17	-8		2930	32,300	9.5
15	-9		2965	31,000	9.1
10	-12		2710	28,000	8.2
5	-15		2550	24,900	7.3
0	-18		2390	21,900	6.4
-5	-21		2235	18,800	5.5
-10	-23		2075	15,800	4.6
-15	-26		1915	12,700	3.7
-20	-29		1760	9700	2.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-651-653 — COOLING CAPACITY — CVP10-65/EC10Q5

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	800	1700	16.8	57,200	4790	.74	.87	.99	15.9	54,400	5140	.75	.89	1.00	15.1	51,600	5520	.77	.92	1.00	14.2	48,600	5910	.79	.94	1.00
	910	1925	17.3	58,900	4830	.76	.91	1.00	16.4	55,900	5200	.78	.93	1.00	15.5	53,000	5590	.80	.95	1.00	14.7	50,200	5990	.82	.98	1.00
	1015	2150	17.7	60,300	4870	.79	.94	1.00	16.8	57,300	5250	.81	.96	1.00	15.9	54,200	5650	.83	.98	1.00	15.0	51,300	6070	.86	1.00	1.00
67°F (19.4°C)	800	1700	17.9	61,100	4890	.58	.71	.83	17.0	58,100	5280	.59	.72	.86	16.1	55,100	5690	.60	.74	.88	15.3	52,200	6120	.61	.76	.90
	910	1925	18.4	62,800	4940	.59	.73	.87	17.5	59,700	5340	.60	.75	.89	16.6	56,600	5760	.62	.77	.92	15.7	53,500	6190	.63	.79	.94
	1015	2150	18.8	64,200	4980	.61	.76	.90	17.9	61,000	5390	.62	.78	.93	16.9	57,800	5810	.63	.80	.95	16.0	54,600	6260	.65	.83	.98
71°F (21.7°C)	800	1700	19.0	65,000	5000	.44	.56	.68	18.2	62,000	5420	.44	.57	.70	17.3	58,900	5860	.44	.58	.71	16.3	55,900	6320	.45	.59	.73
	910	1925	19.5	66,700	5060	.44	.58	.71	18.6	63,600	5480	.45	.59	.72	17.7	60,500	5930	.45	.60	.74	16.8	57,400	6420	.46	.61	.76
	1015	2150	20.0	68,200	5100	.45	.59	.73	19.1	65,100	5530	.45	.61	.75	18.1	61,800	6000	.46	.62	.77	17.2	58,600	6500	.46	.63	.80

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 — COOLING CAPACITY — CR22-65FC/B24

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
L/s	cfm	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C	kW	Btuh	75°F/24°C	80°F/27°C	85°F/29°C					
63°F (17.2°C)	615	1300	15.8	53,800	3920	.67	.80	.92	15.1	51,400	4250	.68	.82	.94	14.3	48,900	4560	.70	.84	.96	13.6	46,500	4860	.71	.86	.98
	755	1600	16.6	56,800	3990	.71	.85	.99	15.9	54,300	4310	.72	.87	1.00	15.1	51,600	4640	.74	.89	1.00	14.3	48,800	4960	.76	.92	1.00
	895	1900	17.3	59,000	4040	.75	.90	1.00	16.5	56,400	4370	.77	.92	1.00	15.6	53,200	4710	.79	.95	1.00	14.7	50,300	5030	.81	.98	1.00
67°F (19.4°C)	615	1300	16.7	57,000	4000	.53	.66	.78	16.0	54,600	4330	.54	.67	.80	15.3	52,100	4660	.54	.69	.81	14.5	49,400	4990	.55	.70	.83
	755	1600	17.6	60,200	4060	.55	.70	.83	16.9	57,600	4400	.56	.71	.85	16.1	54,900	4750	.57	.72	.87	15.3	52,100	5090	.58	.74	.89
	895	1900	18.4	62,700	4110	.58	.73	.89	17.5	59,700	4460	.59	.75	.91	16.6	56,800	4820	.60	.76	.93	15.8	53,800	5160	.61	.78	.95
71°F (21.7°C)	615	1300	17.7	60,300	4060	.40	.53	.66	16.9	57,700	4410	.40	.54	.67	16.1	55,100	4760	.40	.55	.68	15.4	52,400	5110	.41	.55	.69
	755	1600	18.6	63,500	4120	.41	.56	.69	17.8	60,800	4480	.41	.56	.71	17.0	58,000	4850	.41	.57	.72	16.1	55,100	5200	.42	.58	.73
	895	1900	19.3	65,900	4180	.42	.58	.73	18.5	63,000	4550	.42	.59	.75	17.6	60,000	4920	.42	.60	.76	16.7	56,900	5280	.43	.61	.78

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 HEATING CAPACITY — CVP10-65/EC10Q5

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
800	1700	21.0	71,700	5305	15.7	53,700	4430	10.2	34,700	3535	7.0	24,000	2855	3.4	11,500	2175				
910	1925	21.4	73,100	5195	16.1	55,100	4320	10.6	36,100	3425	7.4	25,400	2745	3.8	12,900	2065				
1015	2150	21.6	73,600	5100	16.3	55,600	4225	10.7	36,600	3330	7.6	25,900	2650	3.9	13,400	1970				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-651-653 — HEATING CAPACITY — CR22-65FC/B24

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW
615	1300	19.5	66,700	4705	14.7	50,300	4060	9.8	33,300	3415	6.6	22,500	2775	3.1	10,500	2130				
755	1600	20.1	68,700	4535	15.3	52,300	3890	10.3	35,300	3245	7.2	24,400	2605	3.7	12,500	1960				
895	1900	20.5	69,800	4440	15.6	53,400	3800	10.7	36,400	3155	7.5	25,600	2515	4.0	13,600	1865				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-651-653 HEATING PERFORMANCE at 1925 cfm (910 L/s) Indoor Coil Air Volume (CVP10-65/EC10Q5)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Btuh		kW	
65	18	5195	73,100	21.4	
60	16	4980	68,900	20.2	
55	13	4770	64,700	19.0	
50	10	4555	60,500	17.7	
47	8	4430	58,000	17.0	
45	7	4320	55,100	16.1	
40	4	4040	47,700	14.0	
35	2	3760	40,300	11.8	
30	-1	3590	38,200	11.2	
25	-4	3425	36,100	10.6	
20	-7	3255	34,100	10.0	
17	-8	3155	32,800	9.6	
15	-9	3085	31,600	9.3	
10	-12	2915	28,500	8.4	
5	-15	2745	25,400	7.4	
0	-18	2575	22,300	6.5	
-5	-21	2405	19,100	5.6	
-10	-23	2235	16,000	4.7	
-15	-26	2065	12,900	3.8	
-20	-29	1895	9800	2.9	

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-651-653 HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume (CR22-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Btuh		kW	
65	18	4535	68,700	20.1	
60	16	4375	64,800	19.0	
55	13	4215	61,000	17.9	
50	10	4055	57,100	16.7	
47	8	3955	54,800	16.1	
45	7	3890	52,300	15.3	
40	4	3725	46,100	13.5	
35	2	3560	39,900	11.7	
30	-1	3405	37,600	11.0	
25	-4	3245	35,300	10.3	
20	-7	3090	33,000	9.7	
17	-8	2995	31,600	9.3	
15	-9	2930	30,400	8.9	
10	-12	2770	27,400	8.0	
5	-15	2605	24,400	7.2	
0	-18	2445	21,400	6.3	
-5	-21	2285	18,500	5.4	
-10	-23	2120	15,500	4.5	
-15	-26	1960	12,500	3.7	
-20	-29	1795	9500	2.8	

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-651-653 — COOLING CAPACITY — C22-65/B24 — C26-65(FC) — C26-65(FC)EAP

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	800	1700	16.9	57,600	4010	.72	.87	.99	16.1	55,000	4340	.74	.89	1.00	15.3	52,300	4670	.75	.91	1.00	14.4	49,300	4980	.77	.94	1.00
	945	2000	17.5	59,600	4050	.76	.92	1.00	16.6	56,700	4380	.77	.94	1.00	15.8	53,900	4720	.79	.97	1.00	14.9	50,900	5060	.81	.99	1.00
	1085	2300	17.9	61,200	4080	.79	.96	1.00	17.1	58,200	4420	.81	.98	1.00	16.2	55,300	4760	.83	1.00	1.00	15.4	52,600	5120	.85	1.00	1.00
67°F (19.4°C)	800	1700	17.9	61,000	4080	.57	.71	.84	17.1	58,300	4430	.58	.72	.86	16.3	55,500	4770	.58	.74	.88	15.4	52,600	5120	.59	.76	.90
	945	2000	18.5	63,200	4130	.59	.74	.89	17.7	60,300	4480	.60	.76	.91	16.8	57,300	4830	.61	.78	.93	15.9	54,300	5180	.62	.80	.95
	1085	2300	19.0	64,700	4160	.61	.78	.94	18.1	61,600	4520	.62	.80	.96	17.2	58,600	4880	.63	.82	.98	16.3	55,600	5230	.64	.84	1.00
71°F (21.7°C)	800	1700	18.8	64,200	4150	.43	.56	.71	18.0	61,500	4510	.43	.57	.72	17.2	58,600	4880	.43	.58	.73	16.3	55,700	5230	.43	.59	.75
	945	2000	19.5	66,500	4200	.43	.58	.74	18.6	63,500	4560	.44	.59	.75	17.7	60,500	4930	.44	.61	.77	16.8	57,400	5300	.44	.62	.79
	1085	2300	20.0	68,100	4230	.44	.61	.78	19.1	65,100	4610	.45	.62	.79	18.1	61,900	4980	.45	.63	.81	17.2	58,700	5350	.46	.65	.82

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 — COOLING CAPACITY — CB19-65 — CBH19-65 — CH19-65

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		Compressor Motor Watts Input	Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb		Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb							
			kW	Btuh		kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh	kW	Btuh		kW	Btuh						
63°F (17.2°C)	800	1700	17.7	60,500	4880	.73	.85	.98	16.9	57,600	5260	.74	.88	1.00	15.9	54,300	5660	.76	.90	1.00	15.1	51,300	6060	.77	.93	1.00
	910	1925	18.4	62,700	4930	.75	.89	1.00	17.3	59,200	5320	.77	.92	1.00	16.4	56,000	5720	.78	.94	1.00	15.5	52,800	6160	.81	.97	1.00
	1015	2150	18.7	63,700	4970	.77	.92	1.00	17.8	60,600	5370	.79	.95	1.00	16.8	57,300	5790	.81	.98	1.00	15.9	54,100	6240	.84	1.00	1.00
67°F (19.4°C)	800	1700	18.8	64,300	4980	.57	.70	.82	17.9	61,200	5390	.58	.71	.84	17.0	58,100	5830	.59	.73	.86	16.1	54,900	6270	.60	.75	.89
	910	1925	19.4	66,300	5040	.59	.72	.85	18.5	63,000	5460	.60	.74	.88	17.5	59,800	5900	.61	.76	.90	16.5	56,400	6380	.62	.78	.93
	1015	2150	19.9	68,000	5090	.60	.75	.89	19.0	64,700	5520	.61	.76	.91	17.9	61,200	5980	.62	.79	.94	17.0	58,000	6460	.64	.81	.97
71°F (21.7°C)	800	1700	19.9	67,900	5090	.44	.56	.67	19.0	64,900	5520	.44	.56	.68	18.1	61,600	6000	.44	.57	.70	17.2	58,600	6500	.44	.58	.72
	910	1925	20.5	70,100	5150	.44	.57	.69	19.5	66,700	5600	.45	.58	.71	18.6	63,500	6090	.45	.59	.73	17.7	60,300	6610	.45	.60	.75
	1015	2150	21.1	72,000	5200	.45	.59	.72	20.1	68,500	5670	.45	.60	.74	19.1	65,100	6170	.46	.61	.76	18.1	61,700	6700	.46	.62	.78

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 — HEATING CAPACITY — C22-65FC/B24 — C26-65(FC) — C26-65(FC)EAP

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
800	1700	20.3	69,200	4445	15.4	52,400	3860	10.2	34,900	3280	7.0	23,800	2670	3.4	11,500	2030
945	2000	20.6	70,400	4345	15.7	53,600	3760	10.6	36,100	3180	7.3	25,000	2570	3.8	12,800	1930
**	2300	20.9	71,400	4270	16.0	54,600	3685	10.9	37,100	3105	7.6	26,000	2495	4.0	13,800	1855

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

## HP19-651-653 — HEATING CAPACITY — CB19-65 — CBH19-65 — CH19-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	
L/s	cfm	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh	kW		Btuh
800	1700	21.4	72,900	5120	16.1	54,800	4185	10.5	35,900	3175	7.3	24,900	2770	3.5	12,100	2095
910	1925	21.7	74,100	5065	16.4	56,000	4130	10.9	37,100	3120	7.6	26,100	2715	3.9	13,300	2040
1015	2150	22.1	75,500	5025	16.8	57,400	4090	11.3	38,500	3080	8.1	27,500	2675	4.3	14,700	2000

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-651-653 HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume (C22-65 — C26-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Btuh	kW	Btuh	kW
65	18	4345	12.6	70,400	20.6
60	16	4200	12.3	66,400	19.5
55	13	4055	11.9	62,500	18.3
50	10	3910	11.5	58,500	17.1
47	8	3820	11.2	56,100	16.4
45	7	3760	11.0	53,600	15.7
40	4	3615	10.6	47,200	13.8
35	2	3465	10.2	40,900	12.0
30	-1	3320	9.8	38,500	11.3
25	-4	3180	9.4	36,100	10.6
20	-7	3040	9.0	33,800	9.9
17	-8	2955	8.7	32,400	9.5
15	-9	2890	8.5	31,100	9.1
10	-12	2730	8.1	28,100	8.2
5	-15	2570	7.6	25,000	7.3
0	-18	2410	7.1	22,000	6.4
-5	-21	2250	6.6	18,900	5.5
-10	-23	2090	6.1	15,800	4.6
-15	-26	1930	5.6	12,800	3.8
-20	-29	1770	5.1	9700	2.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

### HP19-651-653 HEAT PERFORMANCE at 1925 cfm (910 L/s) Indoor Coil Air Volume (CB19/CBH19-65 — CH19-65)

*Outdoor Temperature		Compressor Motor Watts Input		Total Output	
°F	°C	Btuh	kW	Btuh	kW
65	18	5065	14.8	74,100	21.7
60	16	4860	14.2	69,900	20.5
55	13	4660	13.6	65,700	19.3
50	10	4455	13.0	61,500	18.0
47	8	4335	12.7	59,000	17.3
45	7	4225	12.4	56,000	16.4
40	4	3955	11.6	48,600	14.2
35	2	3685	10.8	41,200	12.1
30	-1	3530	10.4	39,100	11.5
25	-4	3370	9.9	37,100	10.9
20	-7	3215	9.5	35,000	10.3
17	-8	3120	9.2	33,800	9.9
15	-9	3050	9.0	32,500	9.5
10	-12	2885	8.4	29,300	8.6
5	-15	2715	8.0	26,100	7.6
0	-18	2545	7.5	22,900	6.7
-5	-21	2375	7.0	19,700	5.8
-10	-23	2210	6.5	16,500	4.8
-15	-26	2040	6.0	13,300	3.9
-20	-29	1870	5.5	10,100	3.0

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F (21°C).

# 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.

## HP19-651-653 — COOLING CAPACITY — CB21V-65 — CBH21V-65

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		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor Watts Input	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
L/s	cfm			75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C			75°F 24°C	80°F 27°C	85°F 29°C
63°F (17.2°C)	710	1500	17.3	58,900	4770	.70	.83	.94	16.4	55,900	5140	.72	.84	.97	15.5	52,900	5510	.73	.87	.99	14.7	50,000	5920	.75	.89	1.00
	825	1750	18.0	61,300	4840	.73	.86	.99	17.1	58,200	5210	.75	.89	1.00	16.1	54,900	5610	.76	.91	1.00	15.2	51,800	6020	.78	.94	1.00
	945	2000	18.5	63,200	4890	.76	.90	1.00	17.5	59,700	5270	.77	.93	1.00	16.6	56,600	5690	.79	.95	1.00	15.6	53,400	6110	.82	.98	1.00
67°F (19.4°C)	710	1500	18.3	62,400	4870	.56	.68	.79	17.4	59,500	5260	.57	.69	.81	16.5	56,400	5680	.58	.70	.83	15.6	53,400	6110	.58	.72	.85
	825	1750	19.0	65,000	4940	.58	.70	.82	18.1	61,900	5350	.59	.72	.85	17.2	58,700	5780	.59	.74	.87	16.3	55,500	6230	.61	.75	.90
	945	2000	19.7	67,100	5000	.59	.73	.86	18.7	63,800	5420	.60	.75	.89	17.8	60,600	5860	.61	.77	.91	16.8	57,300	6330	.63	.79	.94
71°F (21.7°C)	710	1500	19.3	66,000	4970	.43	.54	.65	18.5	63,000	5390	.43	.55	.66	17.6	60,000	5840	.43	.56	.68	16.7	56,900	6310	.44	.57	.69
	825	1750	20.1	68,600	5050	.44	.56	.68	19.2	65,500	5480	.44	.57	.69	18.3	62,300	5960	.44	.58	.71	17.3	59,200	6450	.44	.59	.72
	945	2000	20.8	71,000	5110	.44	.58	.70	19.8	67,500	5570	.45	.59	.72	18.8	64,300	6050	.45	.60	.74	17.9	61,000	6570	.45	.61	.76

NOTE — All values are gross capacities and do not include evaporator coil blower motor heat deduction.

## HP19-651-653 — HEATING CAPACITY — CB21V-65 — CBH21V-65

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 (-28°C)			
	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input	Total Heating Capacity		Comp. Motor Watts Input		
	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh			
L/s	cfm																			
660	1400	20.6	70,300	5280	15.6	53,400	4440	10.5	35,900	3605	6.8	23,100	2830	3.2	11,000	2160				
755	1600	21.0	71,800	5145	16.1	54,900	4305	11.0	37,400	3470	7.2	24,600	2695	3.7	12,500	2025				
850	1800	21.5	73,500	5040	16.6	56,600	4200	11.5	39,100	3365	7.7	26,300	2590	4.2	14,200	1920				

NOTE — Heating capacities include the effect of defrost cycles in the temperature range where they occur.

### HP19-651-653 HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (CB21V/CBH21V-65)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	5145	71,800	21.0
60	16	4935	67,700	19.8
55	13	4720	63,600	18.6
50	10	4505	59,500	17.4
47	8	4380	57,000	16.7
45	7	4305	54,900	16.1
40	4	4120	49,700	14.6
35	2	3935	44,400	13.0
30	-1	3700	40,900	12.0
25	-4	3470	37,400	11.0
20	-7	3235	33,900	9.9
17	-8	3095	31,800	9.3
15	-9	3030	30,600	9.0
10	-12	2860	27,600	8.1
5	-15	2695	24,600	7.2
0	-18	2525	21,600	6.3
-5	-21	2360	18,600	5.4
-10	-23	2195	15,600	4.6
-15	-26	2025	12,500	3.7
-20	-29	1860	9500	2.8

\*Outdoor temperature 70% relative humidity. Indoor temperature 70°F(21°C).