LENNOX

ENGINEERING DATA

12HPB

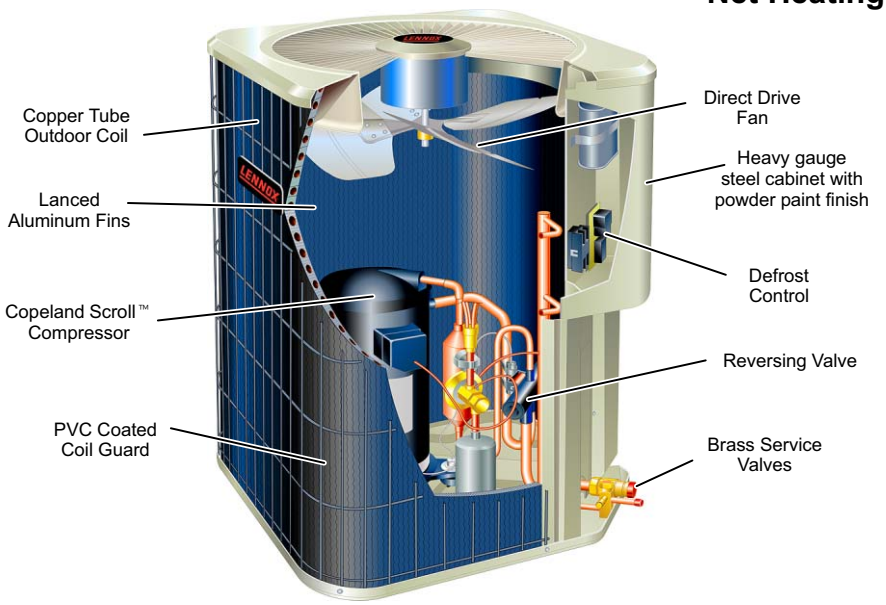
MERIT® SERIES

SEER up to 13.50

Net Cooling Capacity - 22,200 to 58,000 Btuh

Net Heating Capacity - 23,200 to 54,500 Btuh

Bulletin No. 210078
November 2003
Supersedes July 2000



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI

REGISTERED QUALITY SYSTEMS

MODEL NUMBER IDENTIFICATION

12 HP B 24 - 2

SEER

Unit Type
HP - Heat Pump Outdoor Unit

Series

Nominal Cooling Capacity
24 - 2 tons (7.0 kW)
30 - 2.5 tons (8.8 kW)
36 - 3 tons (10.6 kW)
42 - 3.5 tons (12.3 kW)
48 - 4 tons (14.1 kW)
60 - 5 tons (17.6 kW)

Minor Revision Number

FEATURES

CONTENTS

EQUIPMENT WARRANTY

Compressor - Five year limited warranty.
All other covered components - One year limited warranty.
Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

APPLICATIONS

SEER of up to 13.50.
HSPF of up to 8.30 (Region IV).
2 through 5 Ton (7.0 through 17.6 kW) sizes.
Single phase power supply.
Vertical air discharge allows concealment behind shrubs at grade level or out of sight on a roof.
Matching blower powered indoor coil units with supplemental electric heat or add-on furnace indoor coils (FM21 applications) provide a wide range of cooling and heating capacities and applications. See ARI Ratings table.
For indoor unit data, see tab section Coils - Blower Coil Units.
For FM21 applications, see bulletin indexed in this tab section.
Units shipped completely factory assembled, piped and wired. Each unit is test operated at the factory ensuring proper operation. Installer must set outdoor unit, connect refrigerant lines and make electrical connections to complete job.

Visit us at www.lennox.com
For the latest technical information, www.davenet.com

FEATURES

APPROVALS

Certified in accordance with the USE certification program, which is based ARI Standard 210/240.
Sound rated in Lennox reverberant sound test room in accordance with test conditions included in ARI Standard 270-95.
Tested in the Lennox Research Laboratory environmental test room.
Rated according to U.S. Department of Energy (DOE) test procedures.
Units and components within bonded for grounding to meet safety standards for servicing required by UL, NEC and CEC.
Units are UL listed and ULC certified.
ISO 9001 Registered Manufacturing Quality System.

CABINET

Heavy-gauge steel cabinet with five station metal wash process.
Powder paint finish provides rust and corrosion protection.
Painted base section.
Control box is conveniently located with all controls factory wired.
Corner patch plate allows access to compressor components.
Drainage holes are provided in base section for moisture removal.

Refrigerant Line Connections, Electrical Inlets, Service Valves

Sweat connection vapor and liquid lines are located on corner of unit cabinet.
Fully serviceable brass service valves prevent corrosion and provide access to refrigerant system. Vapor valve can be fully shut off, while liquid valve may be front seated to manage refrigerant charge while servicing system.
Refrigerant line connections and field wiring inlets are located in one central area of cabinet for easy access. See dimension drawing.

REFRIGERANT SYSTEM

Reversing Valve

Factory installed 4-way reversing valve provides rapid change in refrigerant flow direction resulting in quick changeover from cooling to heating and vice-versa.
Valve operates on pressure differential between outdoor unit and indoor unit.

Copper Tube/Enhanced Fin Coil

Lennox designed and fabricated coil.
Ripple-edged aluminum fins.
Copper tube construction.
Lanced fins provide maximum exposure of fin surface to air stream resulting in excellent heat transfer.
Fin collars grip tubing for maximum contact area.
Flared shoulder tubing connections/silver soldering construction.
Coil is factory tested under high pressure to ensure leakproof construction.
Entire coil is accessible for cleaning.
PVC coated steel wire coil guard furnished as standard.

Outdoor Coil Fan

Direct drive fan moves large air volumes uniformly through entire outdoor coil for high refrigerant cooling and heating capacity.
Vertical air discharge minimizes operating sounds and eliminates damage to lawn and shrubs.
Fan motor has sleeve bearings and is inherently protected.
Motor totally enclosed for maximum protection from weather, dust and corrosion.
Rain shield on motor provides additional protection from moisture.
Louvered steel top fan guard furnished as standard.
Fan service access accomplished by removal of fan guard.

Hi-Capacity Drier

Factory installed.
Drier traps any moisture or dirt that could contaminate the refrigerant system.

Expansion Valve - Outdoor Unit

Designed and sized specifically for heat pump systems.
Sensing bulb located on suction line between reversing valve and compressor to sense suction temperature in any cycle.
Factory installed and piped.

COMPRESSOR

Copeland Scroll™ Compressor

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

DEFROST CONTROL

Solid-state control furnished as standard.
Gives a demand defrost cycle whenever system heating performance falls below optimum levels. The sensing element on coil determines when defrost cycle is required and when to terminate cycle.
Anti-short cycle (5 minutes) incorporated into the control.
Diagnostic LED's furnished as an aid in troubleshooting.
Conveniently located in control box.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

CONTROLS

Freezestat
Installs on or near the discharge line of the evaporator or on the suction line.
Senses suction line temperature and cycles the compressor off when suction line temperature falls below it's setpoint.
Opens at 29°F (-2°C) and closes at 58°F (14°C).

Low Ambient Kit (Expansion Valve Systems Only)
Units operate satisfactorily down to 45°F (7°C) outdoor air temperature without any additional controls.
Low Ambient Control Kit can be field installed, allowing unit operation down to 30°F (-1°C).

Mild Weather Kit
Heat pump units operate satisfactorily in the heating mode at outdoor air temperatures up to 75°F (24°C).
Mild Ambient Kit can be field installed, allowing heating operation above 75°F (24°C).

Monitor Kit
Field installed Monitor Kit includes ambient compensating thermistor and service light thermostat.
Thermistor reduces thermostat droop to improve the operating characteristics of the heat pump system.
Service light thermostat allows operation of the service light on the indoor thermostat.

Outdoor Thermostat Kit
Outdoor thermostat can be used to lock out some electric heating elements on indoor units where two stage control is applicable.
Outdoor thermostat maintains heating load on low power input as long as possible before allowing full power load to come on line.
Thermostat kit and mounting box must be ordered extra.

Thermostat
Thermostat not furnished with unit. See Thermostats bulletin in the Controls Section and Lennox Price Book.

REFRIGERATION SYSTEM

Check and Expansion Valve Kits
Must be ordered extra and field installed on certain evaporator units. See ARI Ratings table.
Chatleff style fitting.

Refrigerant Line Kits
Refrigerant lines (suction & liquid) are shipped refrigeration clean.
Lines are cleaned, dried, pressurized and sealed at factory.
Suction line fully insulated.
L15 lines are stubbed at both ends.
Kits are not available for 12HPB60 models and must be field fabricated.

High Pressure Switch
Shuts off unit if abnormal operating conditions cause the discharge pressure to rise above setting.
Protects compressor from excessive condensing pressure.
Automatic reset, will lock unit out after three trips.

Loss Of Charge kit
Protects the compressor from low pressure conditions such as low refrigerant charge, or low/no air flow.
Automatic reset, will lock unit out after three trips.

CABINET

Mounting Base
High density polyethylene mounting base is lightweight, sturdy, sound absorbing and will withstand the effects of sun, heat, cold, moisture, oil and refrigerant.
Provides permanent foundation for condensing units.
22-1/4 x 22-1/4 x 3 in. (565 x 565 x 76 mm) shipping weight 6 lbs. (3 kg) each.

Hail Guards
Constructed of louvered heavy gauge steel painted to match cabinet.
Surrounds unit on all four sides to prevent damage to the coil.

Unit Stand-Off Kit
Black high density polyethylene feet are available to raise unit off of mounting surface away from damaging moisture.
Four feet are furnished per order number.

COMPRESSOR

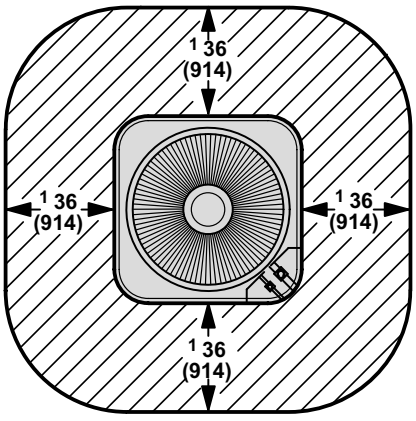
Compressor Low Ambient Cut-Out
Non-adjustable switch (low ambient cut-out) prevents compressor operation when outdoor temperature is below 35°F (2°C).

Crankcase Heater
Crankcase heater prevents migration of liquid refrigerant into compressor and ensures proper compressor lubrication.

Compressor Sound Cover
A reinforced vinyl compressor cover containing a 1-1/2 in. (38.1 mm) thick batt of 2 to 2.7 lb. density fiberglass insulation.
All open edges are sealed with a one-inch wide hook and loop fastening tape.

Compressor Hard Start Kit
Units are equipped with a PSC compressor motor. This type of motor normally doesn't need a potential relay and start capacitor. In conditions such as low voltage, this kit may be required to increase the compressor starting torque.

INSTALLATION CLEARANCES - IN. (MM)



[1] One of the coil sides adjacent to control box must be 30 in. (762 mm) for service.
One of the remaining sides may be 12 in. (914 mm)
One of the remaining sides may be 6 inches (305 mm)
NOTE — 48 in. (1219 mm) clearance required on top of unit.
NOTE — 24 in. (610 mm) required between two units

SPECIFICATIONS

			12HPB24	12HPB30	12HPB36	12HPB42	12HPB48	12HPB60
General Data		**Model No.**	**12HPB24**	**12HPB30**	**12HPB36**	**12HPB42**	**12HPB48**	**12HPB60**
		Nominal Tonnage (kW)	2 (7.0)	2.5 (8.8)	3 (10.6)	3.5 (12.3)	4 (14.1)	5 (17.6)
Connections (sweat)		Liquid line o.d. - 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)
		Vapor line o.d. - in. (mm)	3/4 (19)	3/4 (19)	7/8 (22.2)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.6)
[1] Refrigerant (HCFC-22) furnished			6 lbs. 14 oz. (3.12 kg)	7 lbs. 14 oz. (3.57 kg)	8 lbs. 1 oz. (3.66 kg)	8 lbs. 8 oz. (3.86 kg)	11 lbs. 12 oz. (5.33 kg)	12 lbs. 8 oz. (5.67 kg)
Outdoor Coil	Net face area sq. ft. (m^2)	Outer coil	15.21 (1.41)	15.21 (1.41)	15.21 (1.41)	15.21 (1.41)	21.11 (1.96)	21.11 (1.96)
		Inner coil	5.44 (0.51)	14.50 (1.35)	14.50 (1.35)	14.50 (1.35)	20.31 (1.89)	20.31 (1.89)
	Tube diameter - in. (mm) & no. of rows		5/16 (8) - 1.37	5/16 (8) - 2	5/16 (8) - 2	5/16 (8) - 2	5/16 (8) - 2	5/16 (8) - 2
	Fins per inch (m)		18 (709)	22 (866)	22 (866)	22 (866)	22 (866)	22 (866)
Outdoor Fan	Diameter - in. (mm) & No. of blades		18 (457) - 3	18 (457) - 4	18 (457) - 4	18 (457) - 4	22 (559) - 4	22 (559) - 4
	Motor output - hp (W)		1/6 (124)	1/6 (124)	1/6 (124)	1/3 (249)	1/3 (249)	1/3 (249)
	Cfm (L/s)		2500 (1180)	2450 (1155)	2450 (1155)	2930 (1385)	3890 (1835)	3890 (1835)
	Rpm		1100	1100	1100	1100	1085	1085
	Watts		200	200	200	310	375	375
Shipping Data	lbs. (kg) 1 package		162 (73)	181 (82)	187 (85)	190 (86)	248 (112)	255 (116)

ELECTRICAL DATA

Electrical Data (60 hz)	Line voltage data - 1 ph		208/230V	208/230V	208/230V	208/230V	208/230V	208/230V
	[2] Maximum overcurrent protection (amps)		20	30	35	40	45	60
	[3] Minimum circuit ampacity		14.0	18.0	20.4	24.4	25.9	38.0
	Compressor	Rated load amps	10.3	13.5	15.4	18.0	19.2	28.9
		Power factor	.96	.96	.96	.95	.96	.96
		Locked rotor amps	56.0	72.5	88.0	104.0	129.0	169.0
	Outdoor coil fan	Full load amps	1.1	1.1	1.1	1.9	1.9	1.9
		Locked rotor amps	1.9	1.9	1.9	4.1	4.1	4.1

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Compressor Crankcase Heater			**90P12**	**90P12**	**90P12**	**90P12**	**90P12**	**90P12**
Compressor Low Ambient Cut-Off			**45F08**	**45F08**	**45F08**	**45F08**	**45F08**	**45F08**
Compressor Hard Start Kit			**10J42**	**10J42**	**10J42**	**10J42**	**81J69**	**81J69**
Compressor Sound Cover			**69J03**	**69J03**	**69J03**	**69J03**	**69J03**	**69J03**
Freezestat		3/8 in. tubing	**93G35**	**93G35**	**93G35**	**93G35**	**93G35**	**93G35**
		1/2 in. tubing	**39H29**	**39H29**	**39H29**	**39H29**	**39H29**	**39H29**
		5/8 in. tubing	**50A93**	**50A93**	**50A93**	**50A93**	**50A93**	**50A93**
Hail Guards			**17L73**	**17L73**	**17L73**	**17L73**	**17L74**	**17L74**
High Pressure Switch Kit			**94J46**	**94J46**	**94J46**	**94J46**	**94J46**	**94J46**
Loss of Charge Kit			**94J47**	**94J47**	**94J47**	**94J47**	**94J47**	**94J47**
Low Ambient Kit			**27J00**	**27J00**	**27J00**	**27J00**	**27J00**	**27J00**
Mild Weather Kit			**33M07**	**33M07**	**33M07**	**33M07**	**33M07**	**33M07**
Monitor Kit - Service Light			**76F53**	**76F53**	**76F53**	**76F53**	**76F53**	**76F53**
Outdoor Thermostat Kit		Thermostat	**56A87**	**56A87**	**56A87**	**56A87**	**56A87**	**56A87**
		Mounting Box - US	**31461**	**31461**	**31461**	**31461**	**31461**	**31461**
		Canada	**33A09**	**33A09**	**33A09**	**33A09**	**33A09**	**33A09**
Mounting Base		Part No. - Catalog Number	MB2-S **(69J06)**	MB2-S **(69J06)**	MB2-S **(69J06)**	MB2-S **(69J06)**	MB2-L **(69J07)**	MB2-L **(69J07)**
		Net Weight	6 lbs. (3 kg)	6 lbs. (3 kg)	6 lbs. (3 kg)	6 lbs. (3 kg)	15 lbs. (7 kg)	15 lbs. (7 kg)
Refrigerant Line Set		15 ft. (4.6 m) length	L15-41-15	L15-41-15	L15-65-15	L15-65-15	L15-65-15	Field Fabricate
		20 ft. (6 m) length	L15-41-20	L15-41-20	Not Available	Not Available	Not Available	Field Fabricate
		30 ft. (9 m) length	L15-41-30	L15-41-30	L15-65-30	L15-65-30	L15-65-30	Field Fabricate
		40 ft. (12 m) length	L15-41-40	L15-41-40	L15-65-40	L15-65-40	L15-65-40	Field Fabricate
		50 ft. (15 m) length	L15-41-50	L15-41-50	L15-65-50	L15-65-50	L15-65-50	Field Fabricate
Unit Stand-Off Kit			**94J45**	**94J45**	**94J45**	**94J45**	**94J45**	**94J45**

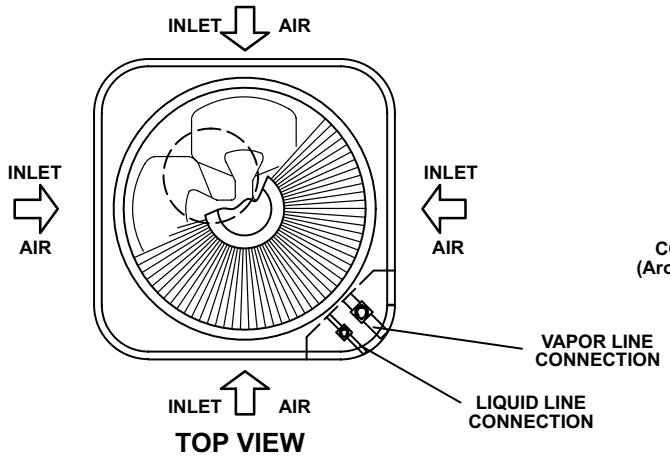
NOTE - Extremes of operating range are plus 10% and minus 5% of line voltage

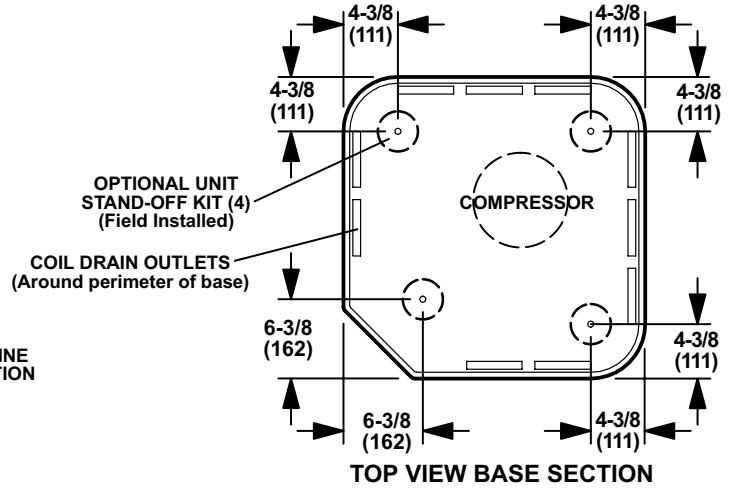
1 Refrigerant charge is sufficient for 15 ft. (4.6 m) length line set.

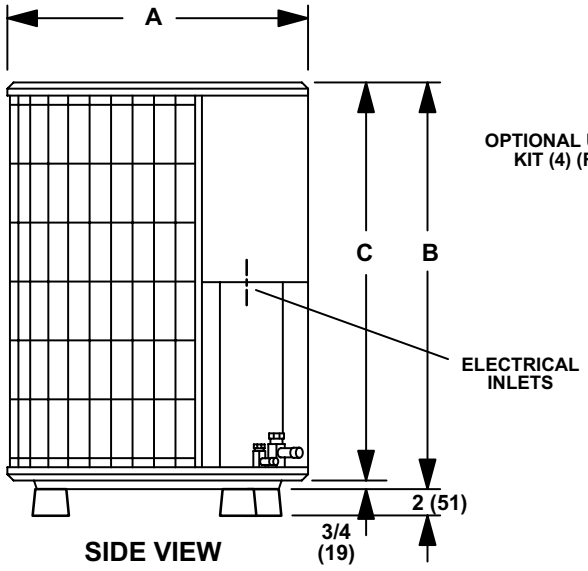
2 HACR type circuit breaker or fuse.

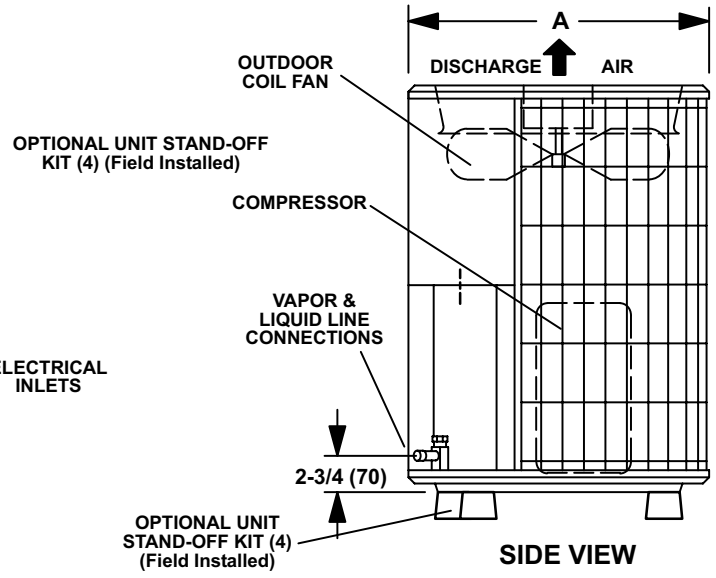
3 Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

DIMENSIONS - INCHES (MM)



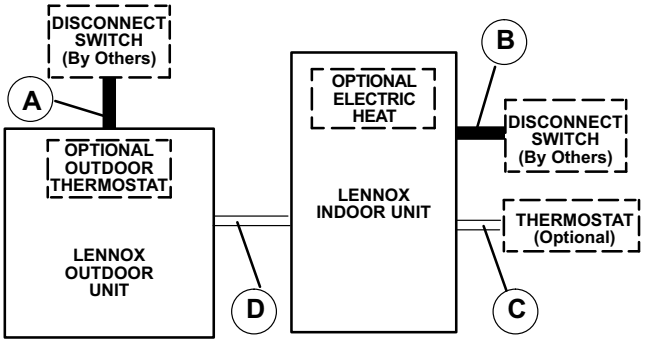






Model No.		A	B	C
12HPB24 - 12HPB30	in.	24-1/4	33-1/4	32-1/2
12HPB36 - 12HPB42	mm	616	819	826
12HPB48 - 12HPB60	in.	28-1/4	37	36-1/4
	mm	718	940	921

FIELD WIRING



A — Two Wire Power (see Electrical Data)

B — Two or Three Wire Power (size to heater capacity)

C — Twelve Wire Low Voltage — 18 ga. minimum

— Fourteen Wire Low Voltage with Optional Outdoor Thermostat

D — Eight Wire Low Voltage — 18 ga. minimum

— Ten Wire Low Voltage with Optional Outdoor Thermostat

— Field Wiring Not Furnished —

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

ARI RATINGS — 2 - 2.5 TON

Outdoor Unit Model No. / Unit Size / [1] Sound Rating Number		[2] ARI Standard 210/240 Ratings																	
		Cooling Capacity		High Temp. Heating Capacity		Low Temp. Heating Capacity		Efficiency				Total Cool. Watts	Total High Htg. Watts	Total Low Htg. Watts	High Htg. COP	Low Htg. COP	Indoor Unit Model No.	Check and Expansion Valve Kit
		Btuh	kW	Btuh	kW	Btuh	kW	SEER	EER	HSPF IV	HSPF V							
12HPB24 2 Ton (76 dB)	**Blower Coil Units**	~~22,200~~	~~6.5~~	~~24,400~~	~~7.2~~	~~14,600~~	~~4.3~~	~~12.00~~	~~10.55~~	~~7.70~~	~~6.70~~	~~2105~~	~~2300~~	~~1885~~	~~3.11~~	~~2.27~~	~~CB28UH-018/024 (UF/HZ)~~	~~Factory Installed~~
		~~22,200~~	~~6.5~~	~~24,400~~	~~7.2~~	~~14,600~~	~~4.3~~	~~12.00~~	~~10.55~~	~~7.70~~	~~6.70~~	~~2105~~	~~2300~~	~~1885~~	~~3.11~~	~~2.27~~	~~CB29M-21/26 (Multi)~~	~~Factory Installed~~
		23,400	6.9	23,200	6.8	14,600	4.3	12.20	10.60	7.70	6.70	2210	2045	1845	3.32	2.32	CB28UH-030 (Up-Flo/Hrz.)	Factory Installed
		23,400	6.9	23,200	6.8	14,600	4.3	12.20	10.60	7.70	6.70	2210	2045	1845	3.32	2.32	CB29M-31 (Multi)	Factory Installed
		24,400	7.2	23,400	6.9	14,600	4.3	12.70	10.95	8.00	6.80	2230	1975	1790	3.47	2.39	[3] CB30M-21/26 (Multi)	Factory Installed
		24,400	7.2	23,400	6.9	14,600	4.3	12.70	10.95	8.00	6.80	2230	1975	1790	3.47	2.39	CB30U-21/26 (Up-Flow)	Factory Installed
		24,800	7.3	23,600	6.9	14,600	4.3	13.10	11.60	8.30	7.05	2140	1900	1720	3.64	2.49	CB30M-31 (Multi)	Factory Installed
		24,800	7.3	23,600	6.9	14,600	4.3	13.10	11.60	8.30	7.05	2140	1900	1720	3.64	2.49	CB30U-31 (Up-Flow)	Factory Installed
		23,200	6.8	23,600	6.9	14,800	4.3	12.50	10.85	8.10	7.00	2140	1975	1770	3.50	2.45	[4] CVP10-26/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	23,800	7.0	23,400	6.9	14,800	4.3	12.20	10.75	7.80	6.90	2215	2030	1855	3.38	2.34	C26-26	Factory Installed
		24,800	7.3	23,600	6.9	14,800	4.3	12.70	11.15	8.00	6.80	2225	2005	1820	3.45	2.38	C26-31	Factory Installed
		24,800	7.3	23,600	6.9	14,800	4.3	12.70	11.15	8.00	6.80	2225	2005	1820	3.45	2.38	C33-36A/B/C	**56J19**
	Down-Flow Coils	~~22,600~~	~~6.6~~	~~23,200~~	~~6.8~~	~~14,600~~	~~4.3~~	~~11.70~~	~~10.20~~	~~7.60~~	~~6.60~~	~~2215~~	~~2120~~	~~1875~~	~~3.21~~	~~2.28~~	~~CR26-18N-F~~	~~**56J19**~~
		24,400	7.2	23,600	6.9	14,800	4.3	12.70	11.00	8.00	6.85	2220	2035	1845	3.40	2.35	CR26-30N-F	**56J19**
	Horizontal Coils	23,200	6.8	23,400	6.9	14,800	4.3	12.10	10.50	7.80	6.75	2210	2080	1875	3.30	2.31	CH23-31	**56J19**
		23,200	6.8	23,400	6.9	14,800	4.3	12.10	10.50	7.80	6.75	2210	2080	1875	3.30	2.31	CH33-36A/B/C-2F	**56J19**
12HPB30 2.5 Ton (78 dB) U.S. (76 dB) Canada	**Blower Coil Units**	~~28,600~~	~~8.4~~	~~30,000~~	~~8.8~~	~~18,200~~	~~5.3~~	~~12.05~~	~~10.60~~	~~7.50~~	~~6.50~~	~~2700~~	~~2745~~	~~2425~~	~~3.20~~	~~2.20~~	~~CB28UH-036 (Up-Flo/Hrz.)~~	~~Factory Installed~~
		~~28,600~~	~~8.4~~	~~30,000~~	~~8.8~~	~~18,200~~	~~5.3~~	~~12.05~~	~~10.60~~	~~7.50~~	~~6.50~~	~~2700~~	~~2745~~	~~2425~~	~~3.20~~	~~2.20~~	~~CB29M-41 (Multi)~~	~~Factory Installed~~
		30,400	8.9	29,800	8.7	17,800	5.2	13.05	11.65	8.00	6.75	2605	2495	2270	3.50	2.30	[3] CB30M-31 (Multi)	Factory Installed
		30,400	8.9	29,800	8.7	17,800	5.2	13.05	11.65	8.00	6.75	2605	2495	2270	3.50	2.30	CB30U-31 (Up-Flow)	Factory Installed
		30,600	9.0	30,000	8.8	18,000	5.3	13.05	11.55	8.00	6.80	2645	2510	2295	3.50	2.30	CB30M-41 (Multi)	Factory Installed
		30,600	9.0	30,000	8.8	18,000	5.3	13.05	11.55	8.00	6.80	2645	2510	2295	3.50	2.30	CB30U-41/46 (Up-Flow)	[5] **56J19**
		31,000	9.1	29,600	8.7	17,600	5.2	13.50	12.30	8.10	6.80	2515	2370	2240	3.66	2.30	CB31MV-41 (Multi)	Factory Installed
		28,400	8.3	30,400	8.9	19,500	5.7	12.50	10.60	8.05	7.15	2690	2540	2310	3.50	2.48	[4] CVP10-31/EC10 (Up-Flow)	Factory Installed
		29,200	8.6	30,400	8.9	19,500	5.7	12.75	10.80	8.20	7.25	2700	2485	2280	3.60	2.52	[4] CVP10-41/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	29,600	8.7	30,200	8.9	19,200	5.6	13.00	11.00	8.00	7.05	2695	2535	2310	3.50	2.44	C26-31	Factory Installed
		29,800	8.7	30,400	8.9	19200	5.6	13.00	11.05	8.05	7.10	2705	2505	2300	3.56	2.46	C26-41	Factory Installed
		29,800	8.7	30,400	8.9	19,200	5.6	13.00	11.05	8.05	7.10	2705	2505	2300	3.56	2.46	C33-38A/B	**56J19**
	Down-Flow Coils	29,200	8.6	30,200	8.9	19,200	5.6	12.75	10.80	7.90	7.00	2700	2575	2320	3.44	2.42	CR26-30N-F	**56J19**
		29,800	8.7	30,400	8.9	19,200	5.6	13.00	11.00	8.10	7.15	2705	2500	2280	3.56	2.48	CR26-36N/W-F	**56J19**
	Horizontal Coils	29,600	8.7	30,200	8.9	19,200	5.6	13.00	11.00	7.60	6.70	2695	2535	2310	3.50	2.44	CH33-36A/B-2F	**56J19**
		29,600	8.7	30,200	8.9	19,200	5.6	13.00	11.00	7.60	6.70	2695	2535	2310	3.50	2.44	CH23-41	**56J19**

NOTE - Ratings for all C26 and C33 coils include all cased and uncased coils.

NOTE - Use FM21 Control with any listed coil and furnace that meets system design requirements. See FM21 page in Thermostats and Controls section for additional data.

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

2 Certified in accordance with USE certification program which is based on 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 (-8.3°C) db/15°F (-9.4°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.

3 Most popular blower coil combination.

4 Canada Only.

5 **Factory installed check/expansion valves on indoor units MUST be replaced with separately ordered check/expansion valve kit shown.**

ARI RATINGS — 3 - 3.5 TON

Outdoor Unit Model No. / Unit Size / [1] Sound Rating Number		[2] ARI Standard 210/240 Ratings																
		Cooling Capacity		High Temp. Heating Capacity		Low Temp. Heating Capacity		Efficiency				Total Cool. Watts	Total High Htg. Watts	Total Low Htg. Watts	High Htg. COP	Low Htg. COP	Indoor Unit Model No.	Check and Expansion Valve Kit
		Btuh	kW	Btuh	kW	Btuh	kW	SEER	EER	HSPF IV	HSPF V							
12HPB36 3 Ton (78 dB) U.S. (76 dB) Canada	**Blower Coil Units**	33,000	9.7	33,400	9..8	21,200	6.2	12.05	10.05	7.50	6.70	3280	3060	2700	3.20	2.30	CB28UH-036 (Up-Flo/Hrz.)	Factory Installed
		33,000	9.7	33,400	9..8	21,200	6.2	12.05	10.05	7.50	6.70	3280	3060	2700	3.20	2.30	CB29M-41 (Multi)	Factory Installed
		34,600	10.1	33,400	9.8	21,200	6.2	12.30	10.50	7.50	6.70	3290	3060	2700	3.20	2.30	CB28UH-042 (Up-Flo/Hrz.)	Factory Installed
		34,600	10.1	33,400	9.8	21,200	6.2	12.30	10.50	7.50	6.70	3290	3060	2700	3.20	2.30	CB29M-46 (Multi)	Factory Installed
		34,600	10.1	33,600	9.8	21,100	6.2	12.10	10.25	7.40	6.50	3370	3075	2810	3.20	2.20	CB28UH-048 (Up-Flo/Hrz.)	Factory Installed
		34,600	10.1	33,600	9.8	21,100	6.2	12.10	10.25	7.40	6.50	3370	3075	2810	3.20	2.20	CB29M-51 (Multi)	Factory Installed
		34,600	10.1	33,000	9.7	20,800	6.1	13.05	10.95	7.70	6.70	3165	2845	2650	3.40	2.30	CB30M-31 (Multi)	Factory Installed
		34,600	10.1	33,000	9.7	20,800	6.1	13.05	10.95	7.70	6.70	3165	2845	2650	3.40	2.30	CB30U-31 (Up-Flow)	Factory Installed
		35,000	10.3	33,400	9.8	21,000	6.2	13.05	11.15	7.70	6.75	3135	2880	2675	3.40	2.30	[3] CB30M-41 (Multi)	Factory Installed
		35,000	10.3	33,400	9.8	21,000	6.2	13.05	11.15	7.70	6.75	3135	2880	2675	3.40	2.30	CB30U-41/46 (Up-Flow)	Factory Installed
		35,000	10.3	33,400	9.8	21,000	6.2	13.05	11.00	7.80	6.80	3175	2880	2675	3.40	2.30	CB30M-46 (Multi)	Factory Installed
		35,200	10.3	33,000	9.7	20,700	6.1	13.50	11.55	8.10	7.10	3050	2625	2425	3.68	2.50	CB31MV-41 (Multi)	Factory Installed
		34,600	10.1	35,200	10.3	21,800	6.4	12.50	10.65	8.00	7.05	3250	2960	2590	3.50	2.48	[4] CVP10-41/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	35,200	10.3	34,400	10.1	21,800	6.4	12.75	10.85	7.80	6.90	3235	2925	2665	3.44	2.40	C26-41	Factory Installed
		35,200	10.3	34,400	10.1	21,800	6.4	12.75	10.85	7.80	6.90	3235	2925	2665	3.44	2.40	C33-38A/B	**56J20**
		35,600	10.4	34,600	10.1	21,800	6.4	12.75	10.90	7.80	6.85	3265	2930	2700	3.44	2.36	C26-46	Factory Installed
		35,600	10.4	34,600	10.1	21,800	64	12.75	10.90	7.80	6.85	3265	2930	2700	3.44	2.36	C33-48B/C	**56J20**
	Down-Flow Coils	33,400	9.8	33,800	9.9	21,600	6.3	12.50	10.60	7.60	6.85	3160	3075	2630	3.24	2.40	CR26-30N-F	**56J20**
		35,200	10.3	34,400	10.1	21,800	6.4	12.75	10.80	7.95	7.05	3260	2920	2595	3.46	2.46	CR26-36N/W-F	**56J20**
		35,600	10.4	34,600	10.1	21,800	6.4	12.75	10.90	7.95	7.00	3270	2885	2620	3.52	2.44	CR26-48N/W-F	**56J20**
	Horizontal Coils	34,400	10.1	34,400	10.1	22,200	6.5	12.50	10.60	7.20	6.30	3250	2960	2625	3.40	2.48	CH33-36A/B-2F	**56J20**
		34,400	10.1	34,400	10.1	22,200	6.5	12.50	10.60	7.20	6.30	3250	2960	2625	3.40	2.48	CH23-41	**56J20**
		35,200	10.3	34,400	10.1	21,800	6.4	12.75	10.85	7.4	6.50	3245	2925	2665	3.44	2.40	CH33-42B-2F	**56J20**
		35,200	10.3	34,400	10.1	21,800	6.4	12.75	10.85	7.4	6.50	3245	2925	2665	3.44	2.40	CH23-51	**56J20**
12HPB42 3.5 Ton (80 dB) U.S. (78 dB) Canada	**Blower Coil Units**	39,500	11.6	39,000	11.4	25,000	7.3	12.05	10.15	7.50	6.75	3885	3685	3185	3.10	2.30	CB30M-41 (Multi)	Factory Installed
		39,500	11.6	39,000	11.4	25,000	7.3	12.20	10.20	7.50	6.80	3870	3570	3130	3.20	2.34	CB31MV-41 (Multi)	Factory Installed
		40,000	11.7	39,500	11.6	25,200	7.4	11.50	9.85	7.20	6.60	4055	3860	3355	3.00	2.20	CB28UH-042 (Up-Flo/Hrz.)	Factory Installed
		40,000	11.7	39,500	11.6	25,200	7.4	11.50	9.85	7.20	6.60	4055	3860	3355	3.00	2.20	CB29M-46 (Multi)	Factory Installed
		40,500	11.9	40,000	11.7	25,600	7.5	11.30	9.65	7.20	6.55	4195	3905	3410	3.00	2.20	CB28UH-048 (Up-Flo/Hrz.)	Factory Installed
		40,500	11.9	40,000	11.7	25,600	7.5	11.30	9.65	7.20	6.55	4195	3905	3410	3.00	2.20	CB29M-51 (Multi)	Factory Installed
		40,500	11.9	39,500	11.6	25,000	7.3	12.15	10.35	7.60	6.80	3915	3615	3185	3.20	2.30	[3] CB30M-46 (Multi)	Factory Installed
		40,500	11.9	39,500	11.6	25,000	7.3	12.15	10.35	7.60	6.80	3915	3615	3185	3.20	2.30	CB30U-41/46 (Up-Flow)	Factory Installed
		41,500	12.2	39,500	11.6	25,000	7.3	12.30	10.60	7.60	6.80	3910	3505	3185	3.30	2.30	CB30M-51 (Multi)	Factory Installed
		41,500	12.2	39,500	11.6	25,000	7.3	12.30	10.60	7.60	6.80	3910	3505	3185	3.30	2.30	CB30U-51 (Up-Flow)	Factory Installed
		42,000	12.3	39,000	11.4	24,600	7.2	12.60	11.00	7.60	6.80	3810	3380	3055	3.38	2.36	CB31MV-51 (Multi)	Factory Installed
		39,500	11.6	39,000	11.4	25,200	7.4	11.75	9.95	7.50	6.75	3995	3465	3170	3.30	2.32	[4] CVP10-46/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	41,000	12.0	39,000	11.4	25,200	7.4	12.00	10.20	7.40	6.65	4010	3500	3215	3.26	2.30	C26-46	Factory Installed
		41,000	12.0	39,000	11.4	25,200	7.4	12.00	10.20	7.40	6.65	4010	3500	3215	3.26	2.30	C33-48B/C	**56J20**
	Down-Flow Coils	40,500	11.9	39,000	11.4	25,200	7.4	11.75	10.05	7.45	6.70	4005	3485	3180	3.26	2.32	CR26-36N/W-F	**56J20**
		41,000	12.0	39,000	11.4	25,200	7.4	12.00	10.25	7.50	6.75	4015	3435	3175	3.32	2.32	CR26-48N/W-F	**56J20**
	Horizontal Coils	40,500	11.9	38,800	11.4	25,400	7.4	11.75	10.10	7.20	6.30	4010	3425	3165	2.34	2.34	CH23-51	**56J20**
		40,500	11.9	38,800	11.4	25,400	7.4	11.75	10.10	7.20	6.30	4010	3425	3165	2.34	2.34	CH33-36A/B-2F	**56J20**

NOTE - Ratings for all C26 and C33 coils include all cased and uncased coils.

NOTE - Use FM21 Control with any listed coil and furnace that meets system design requirements. See FM21 page in Thermostats and Controls section for additional data.

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

2 Certified in accordance with USE certification program which is based on 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 (-8.3°C) db/15°F (-9.4°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.

3 Most popular blower coil combination.

4 Canada Only.

Outdoor Unit Model No. Unit Size [1] Sound Rating Number		[2] ARI Standard 210/240 Ratings																Indoor Unit Model No.	Check and Expansion Valve Kit Required
		Cooling Capacity		High Temp. Heating Capacity		Low Temp. Heating Capacity		Efficiency				Total Cool. Watts	Total High Htg. Watts	Total Low Htg. Watts	High Htg. COP	Low Htg. COP			
		Btuh	kW	Btuh	kW	Btuh	kW	SEER	EER	HSPF IV	HSPF V								
12HPB48 4 Ton (82 dB) U.S. (80 dB) Canada	**Blower Coil Units**	47,000	13.8	46,000	13.5	29,000	8.5	11.80	10.25	7.20	6.40	4585	4495	4045	3.00	2.10		CB28UH-042 (Up-Flo/Hrz.)	Factory Installed
		47,000	13.8	46,000	13.5	29,000	8.5	11.80	10.25	7.20	6.40	4585	4495	4045	3.00	2.10		CB29M-46 (Multi)	Factory Installed
		47,000	13.8	46,000	13.5	29,000	8.5	12.05	10.30	7.30	6.40	4560	4495	4045	3.00	2.10		CB28UH-048 (Up-Flo/Hrz.)	Factory Installed
		47,000	13.8	46,000	13.5	29,000	8.5	12.05	10.30	7.30	6.40	4560	4495	4045	3.00	2.10		CB29M-51 (Multi)	Factory Installed
		47,000	13.8	46,000	13.5	28,800	8.4	12.50	10.90	7.60	6.65	4320	4350	3835	3.10	2.20		CB30M-46 (Multi)	Factory Installed
		47,000	13.8	46,000	13.5	28,800	8.4	12.50	10.90	7.60	6.65	4320	4350	3835	3.10	2.20		CB30U-41/46 (Up-Flow)	Factory Installed
		47,500	13.9	46,000	13.5	29,000	8.5	12.05	10.30	7.30	6.40	4605	4495	4045	3.00	2.10		CB28UH-060 (Up-Flo/Hrz.)	Factory Installed
		47,500	13.9	46,000	13.5	29,000	8.5	12.05	10.30	7.30	6.40	4605	4495	4045	3.00	2.10		CB29M-65 (Multi)	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	13.05	11.10	7.70	6.70	4410	4210	3860	3.20	2.20		[3] CB30M-51 (Multi)	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	13.05	11.10	7.70	6.70	4410	4210	3860	3.20	2.20		CB30U-51 (Up-Flow)	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	13.05	11.00	7.70	6.70	4455	4210	3860	3.20	2.20		CB30M-65 (Multi)	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	13.05	11.00	7.70	6.70	4455	4210	3860	3.20	2.20		CB30U-65 (Up-Flow)	Factory Installed
		49,000	14.4	46,000	11.5	28,800	8.4	13.20	11.25	7.80	6.75	4360	4160	3800	3.24	2.22		CB31MV-51 (Multi)	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	13.05	11.05	7.80	6.75	4435	4185	3825	3.22	2.22		CB31MV-65 (Multi)	Factory Installed
		46,000	13.5	46,000	13.5	29,000	8.5	12.00	10.20	7.75	6.80	4500	4070	3680	3.32	2.30		[4] CVP10-51/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	46,000	13.5	45,500	13.3	28,600	8.4	12.25	10.40	7.45	6.60	4420	4235	3780	3.14	2.22		C26-46	Factory Installed
		47,500	13.9	46,000	13.5	29,000	8.5	12.25	10.50	7.60	6.70	4520	4150	3770	3.24	2.26		C26-51	Factory Installed
		47,500	13.9	46,000	13.5	29,000	8.5	12.25	10.50	7.60	6.70	4520	4150	3770	3.24	2.26		C33-48B/C	**56J20**
		49,000	14.4	46,000	13.5	29,000	8.5	12.50	10.70	7.75	6.80	4555	4025	3700	3.34	2.28		C26-65EAP	Factory Installed
		49,000	14.4	46,000	13.5	29,000	8.5	12.50	10.70	7.75	6.80	4555	4025	3700	3.34	2.28		C33-50/60C	**56J20**
	Down-Flow Coils	47,500	13.9	46,000	13.5	29,000	8.5	12.25	10.45	7.70	6.75	4525	4100	3705	3.28	2.28		CR26-48N/W-F	**56J20**
		48,000	13.1	46,000	13.5	29,000	8.5	12.50	10.60	7.85	6.85	4535	4010	3650	3.36	2.32		CR26-60N/W-F	**56J20**
	Horizontal Coils	46,500	13.6	44,000	12.9	26,000	739	12.25	10.55	6.80	5.90	4405	3910	3525	3.30	2.16		CH33-44B-2F	**56J20**
		46,500	13.6	44,000	12.9	26,000	739	12.25	10.55	6.80	5.90	4405	3910	3525	3.30	2.16		CH23-51	**56J20**
		47,000	13.8	44,500	13.0	26,000	7.6	12.50	10.65	6.80	5.90	4415	3880	3590	3.36	2.12		CH33-48C-2F	**56J20**
		47,000	13.8	44,500	13.0	26,000	7.6	12.50	10.65	6.80	5.90	4415	3880	3590	3.36	2.12		CH23-65	**56J20**
		49,000	14.4	46,000	13.5	29,000	8.5	12.50	10.70	7.75	6.80	4555	4025	3700	3.34	2.28		CH23-68	**56J20**
		49,000	14.4	46,000	13.5	29,000	8.5	12.50	10.70	7.75	6.80	4555	4025	3700	3.34	2.28		CH33-60D-2F	**56J20**
12HPB60 5 Ton (82 dB) U.S. (80 dB) Canada	**Blower Coil Units**	55,000	16.1	54,500	16.0	34,400	10.1	11.05	9.50	7.10	6.40	5780	5705	4800	2.80	2.10		CB28UH-048 (Up-Flo/Hrz.)	Factory Installed
		55,000	16.1	54,500	16.0	34,400	10.1	11.05	9.50	7.10	6.40	5780	5705	4800	2.80	2.10		CB29M-51 (Multi)	Factory Installed
		55,000	16.1	54,500	16.0	34,200	10.0	11.05	9.60	7.10	6.40	5735	5705	4770	2.80	2.10		CB28UH-060 (Up-Flo/Hrz.)	Factory Installed
		55,000	16.1	54,500	16.0	34,200	10.0	11.05	9.60	7.10	6.40	5735	5705	4770	2.80	2.10		CB29M-65 (Multi)	Factory Installed
		56,000	16.4	53,500	15.7	33,200	9.7	12.05	10.50	7.60	6.85	5330	4915	4235	3.00	2.20		CB30M-51 (Multi)	Factory Installed
		56,000	16.4	53,500	15.7	33,200	9.7	12.05	10.50	7.60	6.85	5330	4915	4235	3.00	2.20		CB30U-51 (Up-Flow)	Factory Installed
		56,000	16.4	53,500	15.7	33,000	9.7	12.15	10.60	7.80	6.85	5280	4900	4170	3.20	2.32		CB31MV-51 (Multi)	Factory Installed
		58,000	17.0	54,000	15.8	33,600	9.8	12.05	10.55	7.60	6.70	5495	5275	4475	3.00	2.20		[3] CB30M-65 (Multi)	Factory Installed
		58,000	17.0	54,000	15.8	33,600	9.8	12.05	10.55	7.60	6.70	5495	5275	4475	3.00	2.20		CB30U-65 (Up-Flow)	Factory Installed
		58,000	17.0	54,000	15.8	33,400	9.8	12.15	10.60	7.60	6.75	5460	5240	4410	3.02	2.22		CB31MV-65 (Multi)	Factory Installed
		54,500	16.0	54,000	15.8	35,200	10.3	11.50	9.75	7.75	6.95	5605	5010	4490	3.16	2.30		[4] CVP10-65/EC10 (Up-Flow)	Factory Installed
	Up-Flow Coils	55,000	16.1	53,500	15.7	34,800	10.2	11.75	10.00	7.50	6.75	5515	5140	4550	3.06	2.24		C26-51	Factory Installed
		55,000	16.1	53,500	15.7	34,800	10.2	11.75	10.00	7.50	6.75	5515	5140	4550	3.06	2.24		C33-50/60C	**56J20**
		57,500	16.9	54,000	15.8	34,800	10.2	12.00	10.30	7.70	6.90	5565	4995	4465	3.16	2.30		C26-65EAP	Factory Installed
		57,500	16.9	54,000	15.8	34,800	10.2	12.00	10.30	7.70	6.90	5565	4995	4465	3.16	2.30		C33-60D	**56J20**
	Down-Flow Coils	55,000	16.1	53,500	15.7	34,800	10.2	11.75	10.00	7.55	6.80	5495	5135	4495	3.06	2.26		CR26-48N/W-F	**56J20**
		57,000	16.7	54,500	16.0	35,200	10.3	11.75	10.10	7.80	7.00	5655	4940	4450	3.22	2.32		CR26-60N/W-F	**56J20**
	Horizontal Coils	54,500	16.0	53,500	15.7	34,600	10.1	11.50	9.70	7.00	6.00	5625	4940	4410	3.20	2.32		CH33-48C-2F	**56J20**
		54,500	16.0	53,500	15.7	34,600	10.1	11.50	9.70	7.00	6.00	5625	4940	4410	3.20	2.32		CH23-65	**56J20**
		57,500	16.9	54,000	15.8	34,800	10.2	12.00	10.30	7.70	6.90	5565	4995	4465	3.16	2.30		CH33-60D-2F	**56J20**
		57,500	16.9	54,000	15.8	34,800	10.2	12.00	10.30	7.70	6.90	5565	4995	4465	3.16	2.30		CH23-68	**56J20**

NOTE - Ratings for all C26 and C33 coils include all cased and uncased coils.

NOTE - Use FM21 Control with any listed coil and furnace that meets system design requirements. See FM21 page in Thermostats and Controls section for additional data.

[1] Sound Rating Number in accordance with test conditions included in ARI Standard 270.

[2] Certified in accordance with USE certification program which is based on 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 (-8.3°C) db/15°F (-9.4°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.

[3] Most popular blower coil combination.

[4] Canada Only.

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

12HPB24 — COOLING CAPACITY — CB28UH-018/024 - CB29M-21/26

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		
	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°C)	305	650	6.4	21,900	1460	.72	.86	.97	6.2	21,100	1650	.74	.88	.99	6.0	20,400	1860	.75	.89	1.0	5.7	19,500	2110	.76	.91	1.0
	380	800	6.6	22,600	1470	.77	.92	1.0	6.4	21,800	1660	.79	.94	1.0	6.2	21,100	1870	.8	.95	1.0	5.9	20,200	2110	.82	.97	1.0
	450	950	6.8	23,300	1470	.82	.97	1.0	6.6	22,500	1660	.83	.98	1.0	6.4	21,700	1870	.85	.99	1.0	6.1	20,900	2110	.86	1.0	1.0
67°F (19°C)	305	650	6.8	23,300	1470	.57	.70	.83	6.6	22,500	1660	.57	.71	.84	6.3	21,600	1870	.58	.72	.86	6.1	20,800	2110	.59	.74	.88
	380	800	7.0	24,000	1470	.6	.75	.89	6.8	23,100	1660	.6	.76	.91	6.5	22,200	1870	.61	.77	.92	6.2	21,300	2110	.62	.79	.94
	450	950	7.2	24,500	1470	.62	.80	.94	6.9	23,500	1670	.63	.81	.96	6.6	22,600	1880	.64	.83	.97	6.4	21,700	2120	.65	.85	.99
71°F (22°C)	305	650	7.3	24,900	1470	.43	.55	.67	7.0	24,000	1670	.43	.56	.68	6.8	23,100	1880	.43	.56	.70	6.5	22,200	2110	.43	.57	.71
	380	800	7.5	25,600	1480	.43	.58	.72	7.2	24,600	1670	.44	.59	.74	6.9	23,700	1880	.44	.59	.75	6.7	22,700	2120	.44	.61	.77
	450	950	7.6	26,100	1480	.44	.61	.77	7.4	25,100	1670	.45	.62	.79	7.1	24,100	1890	.45	.63	.80	6.8	23,100	2120	.46	.65	.83

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

12HPB24 — COOLING CAPACITY — CB28UH-030 - CB29M-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		
	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°C)	285	600	6.7	22,700	1530	.71	.84	.96	6.4	21,900	1730	.72	.85	.97	6.2	21,100	1950	.73	.87	.98	5.9	20,300	2210	.74	.88	.99
	380	800	7.0	23,800	1540	.77	.92	1.0	6.7	23,000	1740	.79	.93	1.0	6.5	22,200	1960	.8	.95	1.0	6.2	21,300	2210	.81	.97	1.0
	470	1000	7.3	24,800	1540	.83	.98	1.0	7.0	23,900	1750	.85	.99	1.0	6.8	23,100	1970	.86	1.0	1.0	6.5	22,300	2220	.88	1.0	1.0
67°F (19°C)	285	600	7.1	24,200	1540	.56	.69	.80	6.9	23,400	1740	.56	.69	.82	6.6	22,500	1960	.57	.70	.83	6.3	21,600	2220	.57	.71	.85
	380	800	7.4	25,300	1540	.59	.75	.89	7.1	24,300	1750	.6	.76	.91	6.9	23,400	1970	.61	.77	.92	6.6	22,400	2220	.62	.79	.94
	470	1000	7.6	26,000	1550	.63	.81	.95	7.3	25,000	1750	.64	.82	.97	7.0	24,000	1970	.65	.84	.99	6.7	23,000	2220	.66	.86	1.0
71°F (22°C)	285	600	7.6	25,900	1550	.42	.54	.66	7.3	25,000	1750	.42	.54	.66	7.0	24,000	1970	.43	.55	.68	6.8	23,100	2220	.43	.56	.69
	380	800	7.9	27,000	1550	.43	.58	.72	7.6	26,000	1760	.44	.59	.73	7.3	24,900	1980	.44	.60	.76	7.0	23,900	2230	.44	.61	.77
	470	1000	8.1	27,700	1550	.45	.62	.79	7.8	26,600	1760	.45	.63	.80	7.5	25,500	1980	.46	.64	.82	7.2	24,400	2230	.46	.66	.84

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

12HPB24 — HEATING CAPACITY — CB28UH- 018/024 - CB29M-21/26

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	
305	650	8.8	29,900	2195	6.8	23,200	1910	4.8	16,400	1620	3.1	10,600	1355	1.6	5,300	1040
380	800	8.9	30,300	2090	6.9	23,600	1805	4.9	16,800	1515	3.2	11,000	1250	1.7	5,700	935
450	950	9.0	30,600	2020	7.0	23,900	1735	5.0	17,100	1445	3.3	11,300	1180	1.8	6,000	865

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

12HPB24 — HEATING CAPACITY — CB28UH-030 - CB29M-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	
285	600	8.3	28,300	1825	6.6	22,400	1680	4.8	16,400	1535	3.3	11,100	1365	1.6	5,600	1030
380	800	8.3	28,400	1700	6.6	22,500	1555	4.8	16,500	1410	3.3	11,200	1240	1.7	5,700	905
470	1000	8.6	29,200	1590	6.8	23,300	1445	5.1	17,300	1300	3.5	12,000	1130	1.9	6,500	795

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

12HPB24 — HEATING PERFORMANCE CB28UH-018/024 - CB29M-21/26 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2090	30,300	8.9
60	16	2025	28,600	8.4
55	13	1955	27,000	7.9
50	10	1885	25,400	7.4
47	8	1845	24,400	7.2
45	7	1805	23,600	6.9
40	4	1720	21,500	6.3
35	2	1630	19,500	5.7
30	-1	1575	18,100	5.3
25	-4	1515	16,800	4.9
20	-7	1460	15,400	4.5
17	-8	1430	14,600	4.3
15	-9	1400	13,900	4.1
10	-12	1330	12,300	3.6
5	-15	1250	11,000	3.2
0	-18	1175	9,700	2.8
-5	-21	1095	8,300	2.4
-10	-23	1015	7,000	2.1
-15	-26	935	5,700	1.7
-20	-29	855	4,400	1.3

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

12HPB24 — HEATING PERFORMANCE CB28UH-030 - CB29M-31 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1700	28,400	8.3
60	16	1665	26,900	7.9
55	13	1630	25,500	7.5
50	10	1595	24,100	7.1
47	8	1575	23,200	6.8
45	7	1555	22,500	6.6
40	4	1505	20,600	6.0
35	2	1450	18,800	5.5
30	-1	1430	17,600	5.2
25	-4	1410	16,500	4.8
20	-7	1385	15,300	4.5
17	-8	1375	14,600	4.3
15	-9	1360	14,000	4.1
10	-12	1325	12,600	3.7
5	-15	1240	11,200	3.3
0	-18	1160	9,900	2.9
-5	-21	1075	8,500	2.5
-10	-23	990	7,100	2.1
-15	-26	905	5,700	1.7
-20	-29	825	4,400	1.3

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

HEATING AND COOLING RATINGS

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

12HPB24 — COOLING CAPACITY —CB30M-21/26 - CB30U-21/26

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		
	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°C)	285	600	6.9	23,500	1560	.71	.84	.95	6.7	22,700	1760	.72	.85	.97	6.4	21,800	1990	.73	.87	.98	6.1	20,900	2240	.74	.88	1.0
	380	800	7.3	24,800	1570	.77	.92	1.0	7.0	23,900	1770	.78	.94	1.0	6.7	22,900	2000	.8	.96	1.0	6.4	22,000	2250	.82	.97	1.0
	470	1000	7.6	25,800	1570	.83	.98	1.0	7.3	24,900	1780	.85	1.0	1.0	7.0	24,000	2000	.87	1.0	1.0	6.8	23,100	2250	.89	1.0	1.0
67°F (19°C)	285	600	7.4	25,200	1570	.56	.68	.80	7.1	24,200	1780	.56	.69	.81	6.8	23,300	2000	.57	.70	.83	6.5	22,300	2250	.57	.71	.85
	380	800	7.7	26,400	1570	.59	.74	.89	7.4	25,300	1780	.6	.76	.91	7.1	24,300	2010	.61	.77	.93	6.8	23,300	2260	.62	.79	.94
	470	1000	8.0	27,200	1570	.63	.81	.96	7.6	26,000	1790	.64	.83	.98	7.3	25,000	2010	.65	.84	.99	7.0	23,900	2260	.67	.87	1.0
71°F (22°C)	285	600	7.9	27,000	1570	.42	.54	.65	7.6	26,000	1790	.42	.54	.66	7.3	25,000	2010	.42	.55	.67	7.0	23,900	2260	.43	.56	.69
	380	800	8.3	28,200	1570	.44	.58	.72	7.9	27,100	1790	.44	.59	.73	7.6	26,000	2020	.44	.60	.75	7.3	24,800	2270	.45	.61	.77
	470	1000	8.5	29,000	1580	.45	.62	.79	8.1	27,800	1790	.45	.63	.80	7.8	26,600	2020	.46	.64	.82	7.4	25,400	2270	.46	.66	.84

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

12HPB24 — COOLING CAPACITY — CB30M-31 - CB30U-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		
	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°C)	285	600	6.9	23,700	1520	.71	.83	.95	6.7	22,800	1720	.72	.85	.97	6.4	21,900	1940	.72	.86	.98	6.2	21,000	2190	.74	.88	1.0
	380	800	7.3	25,000	1530	.77	.92	1.0	7.0	24,000	1730	.78	.94	1.0	6.8	23,100	1950	.79	.96	1.0	6.5	22,100	2190	.81	.98	1.0
	470	1000	7.6	26,100	1530	.83	.98	1.0	7.4	25,100	1740	.85	1.0	1.0	7.1	24,200	1960	.87	1.0	1.0	6.8	23,300	2200	.89	1.0	1.0
67°F (19°C)	285	600	7.4	25,400	1530	.56	.68	.80	7.2	24,400	1730	.56	.69	.81	6.9	23,400	1950	.57	.70	.83	6.6	22,500	2190	.57	.71	.84
	380	800	7.8	26,700	1530	.59	.74	.88	7.5	25,600	1740	.6	.75	.91	7.2	24,500	1960	.61	.77	.92	6.9	23,400	2200	.62	.79	.95
	470	1000	8.1	27,500	1540	.63	.81	.96	7.7	26,300	1740	.64	.83	.98	7.4	25,200	1960	.65	.85	.99	7.1	24,100	2210	.67	.86	1.0
71°F (22°C)	285	600	8.0	27,300	1530	.42	.53	.65	7.7	26,200	1740	.42	.54	.66	7.4	25,100	1960	.43	.55	.67	7.1	24,100	2200	.43	.56	.68
	380	800	8.4	28,600	1540	.43	.57	.72	8.0	27,300	1750	.44	.59	.73	7.7	26,200	1970	.44	.60	.75	7.3	25,000	2210	.44	.61	.76
	470	1000	8.6	29,400	1540	.45	.62	.78	8.2	28,100	1750	.45	.63	.80	7.9	26,800	1980	.46	.64	.82	7.5	25,600	2210	.46	.66	.84

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

12HPB24 — HEATING CAPACITY — CB30M-21/26 - CB30U-21/26

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	
285	600	8.4	28,500	1760	6.6	22,500	1630	4.8	16,300	1495	3.2	11,000	1335	1.6	5,500	1010
380	800	8.4	28,700	1625	6.7	22,700	1495	4.8	16,500	1360	3.3	11,200	1200	1.7	5,700	875
470	1000	8.6	29,400	1535	6.9	23,400	1405	5.0	17,200	1270	3.5	11,900	1110	1.9	6,400	785

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

12HPB24 — HEATING CAPACITY — CB30M-31 - CB30U-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	
285	600	8.4	28,600	1730	6.6	22,400	1600	4.7	16,200	1470	3.1	10,700	1315	1.6	5,300	995
380	800	8.5	29,000	1600	6.7	22,800	1470	4.9	16,600	1340	3.3	11,100	1185	1.7	5,700	865
470	1000	8.6	29,500	1505	6.8	23,300	1375	5.0	17,100	1245	3.4	11,600	1090	1.8	6,200	770

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

12HPB24 — HEATING PERFORMANCE
CB30M-21/26 - CB30U-21/26 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1625	28,700	8.4
60	16	1595	27,200	8.0
55	13	1565	25,700	7.5
50	10	1530	24,300	7.1
47	8	1515	23,400	6.9
45	7	1495	22,700	6.7
40	4	1445	20,800	6.1
35	2	1395	18,900	5.5
30	-1	1375	17,700	5.2
25	-4	1360	16,500	4.8
20	-7	1340	15,300	4.5
17	-8	1325	14,600	4.3
15	-9	1315	14,000	4.1
10	-12	1285	12,500	3.7
5	-15	1200	11,200	3.3
0	-18	1120	9,800	2.9
-5	-21	1040	8,500	2.5
-10	-23	960	7,100	2.1
-15	-26	875	5,700	1.7
-20	-29	795	4,400	1.3

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

12HPB24 — HEATING PERFORMANCE
CB30M-31 - CB30U-31 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1600	29,000	8.5
60	16	1570	27,500	8.1
55	13	1540	26,000	7.6
50	10	1510	24,500	7.2
47	8	1490	23,600	6.9
45	7	1470	22,800	6.7
40	4	1425	20,900	6.1
35	2	1375	19,000	5.6
30	-1	1355	17,800	5.2
25	-4	1340	16,600	4.9
20	-7	1320	15,300	4.5
17	-8	1310	14,600	4.3
15	-9	1295	14,000	4.1
10	-12	1265	12,500	3.7
5	-15	1185	11,100	3.3
0	-18	1105	9,800	2.9
-5	-21	1025	8,400	2.5
-10	-23	945	7,100	2.1
-15	-26	865	5,700	1.7
-20	-29	785	4,400	1.3

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

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

12HPB24 — 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) 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	80°F 27°C	85°F 29°C
63°F (17°C)	285	600	6.5	22,200	1520	.71	.84	.95	6.3	21,400	1720	.71	.85	.96	6.0	20,600	1940	.72	.86	.98	5.8	19,800	2190	.74	.88	.99
	380	800	6.9	23,500	1530	.77	.91	1.0	6.6	22,600	1730	.78	.93	1.0	6.4	21,700	1950	.8	.95	1.0	6.1	20,900	2190	.81	.97	1.0
	470	1000	7.2	24,400	1530	.83	.98	1.0	6.9	23,500	1730	.84	1.0	1.0	6.7	22,700	1950	.86	1.0	1.0	6.4	21,900	2200	.88	1.0	1.0
67°F (19°C)	285	600	7.0	23,800	1530	.56	.68	.80	6.7	22,900	1730	.56	.69	.81	6.4	22,000	1950	.57	.70	.83	6.2	21,100	2200	.57	.71	.84
	380	800	7.3	24,900	1530	.59	.74	.88	7.0	24,000	1740	.6	.75	.90	6.7	23,000	1960	.61	.77	.92	6.4	22,000	2200	.62	.79	.94
	470	1000	7.5	25,700	1540	.63	.81	.96	7.2	24,600	1740	.64	.83	.98	6.9	23,600	1960	.65	.84	.99	6.6	22,600	2210	.66	.86	1.0
71°F (22°C)	285	600	7.5	25,500	1530	.42	.54	.65	7.2	24,500	1740	.42	.54	.66	6.9	23,600	1960	.42	.55	.67	6.6	22,600	2200	.43	.56	.69
	380	800	7.8	26,700	1540	.43	.58	.72	7.5	25,600	1750	.44	.59	.73	7.2	24,600	1970	.44	.59	.75	6.9	23,500	2210	.45	.60	.77
	470	1000	8.0	27,400	1540	.45	.62	.78	7.7	26,300	1750	.45	.63	.80	7.4	25,200	1970	.46	.64	.82	7.1	24,100	2220	.46	.66	.84

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

12HPB24 — COOLING CAPACITY — C26-26

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		
	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°C)	285	600	6.8	23,100	1530	.71	.84	.96	6.5	22,200	1720	.72	.86	.97	6.3	21,400	1940	.73	.87	.98	6.0	20,600	2190	.75	.88	1.0
	380	800	7.1	24,300	1530	.77	.92	1.0	6.9	23,400	1730	.78	.94	1.0	6.6	22,500	1950	.8	.96	1.0	6.3	21,600	2200	.82	.98	1.0
	470	1000	7.4	25,300	1530	.83	.98	1.0	7.2	24,400	1740	.85	1.0	1.0	6.9	23,500	1960	.87	1.0	1.0	6.7	22,700	2200	.89	1.0	1.0
67°F (19°C)	285	600	7.2	24,700	1530	.56	.68	.81	6.9	23,700	1730	.57	.69	.82	6.7	22,800	1950	.57	.71	.83	6.4	21,900	2200	.58	.72	.85
	380	800	7.5	25,700	1540	.6	.75	.89	7.2	24,700	1740	.6	.77	.91	7.0	23,800	1960	.61	.78	.93	6.7	22,800	2200	.62	.79	.94
	470	1000	7.8	26,500	1540	.64	.81	.96	7.4	25,400	1740	.65	.83	.98	7.2	24,400	1960	.66	.85	.99	6.9	23,400	2210	.67	.87	1.0
71°F (22°C)	285	600	7.7	26,400	1540	.42	.54	.66	7.4	25,400	1740	.43	.55	.67	7.2	24,400	1960	.43	.55	.68	6.9	23,400	2210	.43	.56	.69
	380	800	8.1	27,500	1540	.44	.58	.72	7.7	26,400	1750	.44	.59	.74	7.4	25,400	1970	.44	.60	.76	7.1	24,300	2210	.44	.61	.77
	470	1000	8.3	28,200	1540	.45	.62	.79	7.9	27,100	1750	.45	.63	.81	7.6	25,900	1970	.46	.65	.83	7.3	24,800	2210	.47	.66	.85

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

12HPB24 — 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
L/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
285	600	8.4	28,500	1780	6.6	22,500	1635	4.8	16,300	1485	3.2	11,000	1320	1.6	5,400	990
380	800	8.5	28,900	1685	6.7	22,900	1540	4.9	16,700	1390	3.3	11,400	1225	1.7	5,800	895
470	1000	8.6	29,400	1555	6.9	23,400	1410	5.0	17,200	1260	3.5	11,900	1095	1.8	6,300	765

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

12HPB24 — HEATING CAPACITY — C26-26

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	
285	600	8.3	28,300	1770	6.6	22,400	1645	4.8	16,400	1515	3.3	11,100	1365	1.6	5,500	1025
380	800	8.4	28,600	1650	6.7	22,700	1525	4.9	16,700	1395	3.3	11,400	1245	1.7	5,800	905
470	1000	8.6	29,300	1540	6.9	23,400	1415	5.1	17,400	1285	3.5	12,100	1135	1.9	6,500	795

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

12HPB24 — HEATING PERFORMANCE CVP10-26/EC10Q3 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1685	28,900	8.5
60	16	1650	27,400	8.0
55	13	1615	25,900	7.6
50	10	1580	24,500	7.2
47	8	1560	23,600	6.9
45	7	1540	22,900	6.7
40	4	1485	21,000	6.2
35	2	1435	19,100	5.6
30	-1	1415	17,900	5.2
25	-4	1390	16,700	4.9
20	-7	1370	15,500	4.5
17	-8	1355	14,800	4.3
15	-9	1340	14,200	4.2
10	-12	1305	12,700	3.7
5	-15	1225	11,400	3.3
0	-18	1140	10,000	2.9
-5	-21	1060	8,600	2.5
-10	-23	975	7,200	2.1
-15	-26	895	5,800	1.7
-20	-29	810	4,400	1.3

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

12HPB24 — HEATING PERFORMANCE C26-26 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1650	28,600	8.4
60	16	1620	27,100	7.9
55	13	1590	25,700	7.5
50	10	1565	24,300	7.1
47	8	1545	23,400	6.9
45	7	1525	22,700	6.7
40	4	1480	20,800	6.1
35	2	1430	19,000	5.6
30	-1	1415	17,800	5.2
25	-4	1395	16,700	4.9
20	-7	1380	15,500	4.5
17	-8	1370	14,800	4.3
15	-9	1360	14,200	4.2
10	-12	1330	12,800	3.8
5	-15	1245	11,400	3.3
0	-18	1160	10,000	2.9
-5	-21	1075	8,600	2.5
-10	-23	990	7,200	2.1
-15	-26	905	5,800	1.7
-20	-29	820	4,400	1.3

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

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

12HPB24 — COOLING CAPACITY — C26-31

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		
	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°C)	285	600	7.0	24,000	1530	.71	.83	.95	6.8	23,100	1730	.72	.85	.97	6.5	22,200	1950	.73	.86	.98	6.2	21,300	2200	.74	.88	1.0
	380	800	7.4	25,300	1540	.77	.92	1.0	7.1	24,300	1740	.78	.94	1.0	6.9	23,400	1960	.8	.95	1.0	6.6	22,400	2210	.81	.97	1.0
	470	1000	7.7	26,300	1540	.83	.99	1.0	7.4	25,400	1740	.85	1.0	1.0	7.2	24,500	1960	.87	1.0	1.0	6.9	23,600	2210	.89	1.0	1.0
67°F (19°C)	285	600	7.5	25,700	1540	.56	.68	.80	7.2	24,700	1740	.56	.69	.81	7.0	23,800	1960	.57	.70	.83	6.7	22,800	2210	.57	.71	.85
	380	800	7.9	27,000	1540	.59	.74	.89	7.6	25,800	1750	.6	.76	.91	7.3	24,800	1970	.61	.77	.92	6.9	23,700	2210	.62	.79	.95
	470	1000	8.1	27,800	1540	.63	.81	.96	7.8	26,600	1750	.64	.83	.98	7.5	25,500	1970	.65	.84	.99	7.2	24,400	2220	.67	.86	1.0
71°F (22°C)	285	600	8.1	27,600	1540	.42	.54	.65	7.8	26,500	1750	.43	.54	.66	7.4	25,400	1970	.42	.55	.67	7.2	24,400	2210	.43	.56	.68
	380	800	8.5	28,900	1540	.43	.57	.72	8.1	27,700	1760	.44	.58	.73	7.8	26,500	1980	.44	.60	.75	7.4	25,300	2220	.45	.61	.76
	470	1000	8.7	29,600	1550	.45	.62	.78	8.3	28,400	1760	.45	.63	.80	7.9	27,100	1980	.46	.64	.82	7.6	25,900	2230	.46	.66	.84

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

12HPB24 — C33-36A/B/C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	600	285	23.3	6.8	1.46	.71	.85	.96	22.5	6.6	1.64	.72	.86	.97	21.7	6.4	1.85	.73	.87	.99	20.7	6.1	2.10	.75	.89	1.00
	800	380	24.5	7.2	1.46	.77	.93	1.00	23.7	6.9	1.64	.79	.94	1.00	22.8	6.7	1.85	.80	.96	1.00	21.7	6.4	2.11	.83	.98	1.00
	1000	470	25.5	7.5	1.47	.84	.99	1.00	24.6	7.2	1.65	.85	1.00	1.00	23.8	7.0	1.86	.87	1.00	1.00	22.8	6.7	2.11	.90	1.00	1.00
67°F (19°C)	600	285	24.9	7.3	1.46	.56	.69	.81	24.0	7.0	1.65	.57	.70	.82	23.1	6.8	1.85	.57	.71	.84	22.1	6.5	2.11	.58	.72	.86
	800	380	26.0	7.6	1.47	.60	.75	.90	25.0	7.3	1.65	.61	.77	.91	24.0	7.0	1.86	.62	.78	.93	22.9	6.7	2.11	.63	.80	.95
	1000	470	26.7	7.8	1.48	.64	.82	.97	25.7	7.5	1.66	.65	.83	.99	24.7	7.2	1.87	.66	.85	1.00	23.5	6.9	2.12	.67	.88	1.00
71°F (22°C)	600	285	26.6	7.8	1.48	.43	.54	.66	25.6	7.5	1.66	.43	.55	.67	24.7	7.2	1.87	.43	.56	.68	23.6	6.9	2.11	.43	.56	.69
	800	380	27.6	8.1	1.48	.44	.59	.73	26.7	7.8	1.66	.44	.59	.74	25.6	7.5	1.87	.45	.60	.76	24.4	7.2	2.12	.45	.62	.78
	1000	470	28.3	8.3	1.49	.45	.63	.80	27.3	8.0	1.67	.46	.64	.81	26.2	7.7	1.88	.46	.65	.83	24.9	7.3	2.13	.47	.67	.86

12HPB24 — HEATING CAPACITY — C26-31

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	
285	600	8.4	28,600	1745	6.6	22,600	1615	4.8	16,400	1485	3.3	11,100	1330	1.6	5,500	1000
380	800	8.5	28,900	1630	6.7	22,900	1500	4.9	16,700	1370	3.3	11,400	1215	1.7	5,800	885
470	1000	8.7	29,600	1520	6.9	23,600	1390	5.1	17,400	1260	3.5	12,100	1105	1.9	6,500	775

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

12HPB24 - C33-36A/B/C - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil											
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
600	285	28.3	8.3	1.88	21.9	6.4	1.76	15.1	4.4	1.63	10.6	3.1	1.48	5.2	1.5	1.12
800	380	28.8	8.4	1.72	22.4	6.6	1.60	15.6	4.6	1.47	11.1	3.3	1.31	5.7	1.7	.96
1000	470	29.3	8.6	1.62	22.9	6.7	1.50	16.1	4.7	1.37	11.6	3.4	1.21	6.2	1.8	.86

12HPB24 — HEATING PERFORMANCE C26-31 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1630	28,900	8.5
60	16	1600	27,400	8.0
55	13	1570	25,900	7.6
50	10	1540	24,500	7.2
47	8	1520	23,600	6.9
45	7	1500	22,900	6.7
40	4	1455	21,000	6.2
35	2	1405	19,100	5.6
30	-1	1385	17,900	5.2
25	-4	1370	16,700	4.9
20	-7	1350	15,500	4.5
17	-8	1340	14,800	4.3
15	-9	1325	14,200	4.2
10	-12	1295	12,700	3.7
5	-15	1215	11,400	3.3
0	-18	1130	10,000	2.9
-5	-21	1050	8,600	2.5
-10	-23	970	7,200	2.1
-15	-26	885	5,800	1.7
-20	-29	805	4,400	1.3

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

12HPB24 - C33-36A/B/C - HEATING PERFORMANCE at 800 cfm (380 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	1.72	28.8	8.4
60	16	1.69	27.3	8.0
55	13	1.66	25.8	7.6
50	10	1.63	24.4	7.2
47	8	1.61	23.5	6.9
45	7	1.60	22.4	6.6
40	4	1.55	19.6	5.7
35	2	1.50	16.9	5.0
30	-1	1.49	16.2	4.7
25	-4	1.47	15.6	4.6
20	-7	1.45	14.9	4.4
17	-8	1.44	14.5	4.2
15	-9	1.43	14.0	4.1
10	-12	1.40	12.5	3.7
5	-15	1.31	11.1	3.3
0	-18	1.22	9.8	2.9
-5	-21	1.13	8.4	2.5
-10	-23	1.05	7.1	2.1
-15	-26	.96	5.7	1.7
-20	-29	.87	4.4	1.3

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

12HPB24 — COOLING CAPACITY — CR26-18N-F

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	80°F 27°C	85°F 29°C
63°F (17°C)	285	600	6.4	22,000	1530	.7	.83	.95	6.2	21,300	1730	.71	.85	.96	6.0	20,500	1950	.72	.86	.97	5.8	19,700	2210	.73	.87	.99
	380	800	6.8	23,100	1530	.76	.91	1.0	6.5	22,300	1730	.77	.92	1.0	6.3	21,500	1960	.79	.94	1.0	6.0	20,600	2210	.8	.96	1.0
	470	1000	7.0	23,900	1540	.82	.97	1.0	6.8	23,100	1740	.83	.98	1.0	6.5	22,300	1960	.84	.99	1.0	6.3	21,500	2210	.86	1.0	1.0
67°F (19°C)	285	600	6.9	23,500	1540	.56	.68	.80	6.7	22,700	1730	.56	.69	.81	6.4	21,900	1960	.57	.69	.83	6.2	21,000	2210	.57	.71	.84
	380	800	7.2	24,500	1540	.59	.73	.88	6.9	23,600	1740	.6	.75	.89	6.7	22,700	1960	.6	.76	.91	6.4	21,800	2210	.61	.78	.93
	470	1000	7.4	25,200	1540	.62	.79	.94	7.1	24,200	1750	.63	.81	.96	6.8	23,300	1970	.64	.83	.97	6.5	22,300	2220	.65	.85	.99
71°F (22°C)	285	600	7.4	25,200	1540	.42	.54	.65	7.1	24,300	1740	.42	.54	.66	6.9	23,400	1970	.42	.55	.67	6.6	22,500	2210	.43	.56	.68
	380	800	7.7	26,200	1550	.43	.57	.71	7.4	25,200	1750	.44	.58	.72	7.1	24,300	1970	.44	.59	.74	6.8	23,300	2220	.44	.60	.76
	470	1000	7.9	26,900	1550	.45	.61	.77	7.6	25,800	1750	.45	.62	.79	7.3	24,800	1980	.46	.63	.81	7.0	23,800	2220	.46	.64	.82

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

12HPB24 — COOLING CAPACITY — CR26-30N-F

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	80°F 27°C	85°F 29°C
63°F (17°C)	285	600	6.9	23,600	1530	.71	.83	.95	6.7	22,700	1730	.71	.85	.97	6.4	21,900	1950	.73	.86	.98	6.2	21,000	2200	.74	.88	1.0
	380	800	7.3	24,800	1540	.77	.92	1.0	7.0	23,900	1740	.78	.94	1.0	6.7	23,000	1960	.8	.95	1.0	6.5	22,100	2200	.82	.97	1.0
	470	1000	7.6	25,800	1540	.83	.98	1.0	7.3	24,900	1740	.85	1.0	1.0	7.0	24,000	1960	.86	1.0	1.0	6.8	23,100	2210	.88	1.0	1.0
67°F (19°C)	285	600	7.4	25,200	1540	.56	.68	.80	7.1	24,300	1740	.56	.69	.82	6.9	23,400	1960	.57	.70	.83	6.6	22,400	2210	.58	.71	.85
	380	800	7.7	26,400	1540	.59	.74	.89	7.4	25,400	1750	.6	.76	.91	7.1	24,300	1970	.61	.77	.92	6.8	23,300	2210	.62	.79	.94
	470	1000	7.9	27,100	1540	.63	.81	.96	7.6	26,100	1750	.64	.82	.97	7.3	25,000	1970	.65	.84	.99	7.0	23,900	2220	.67	.86	1.0
71°F (22°C)	285	600	7.9	27,100	1540	.42	.54	.65	7.6	26,000	1750	.42	.54	.66	7.3	25,000	1970	.43	.55	.68	7.0	24,000	2220	.43	.56	.69
	380	800	8.3	28,200	1550	.44	.58	.72	7.9	27,100	1750	.44	.59	.73	7.6	26,000	1980	.44	.60	.75	7.3	24,900	2220	.45	.61	.77
	470	1000	8.5	29,000	1550	.45	.62	.78	8.1	27,800	1760	.45	.63	.80	7.8	26,600	1980	.46	.64	.82	7.5	25,500	2220	.46	.65	.84

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

12HPB24 — HEATING CAPACITY — CR26-18N-F

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	8.3	28,200	1915	6.5	22,300	1745	4.8	16,300	1570	3.2	11,000	1390	1.6	5,500	1055
380	800	8.3	28,400	1780	6.6	22,500	1610	4.8	16,500	1435	3.3	11,200	1255	1.7	5,700	920
470	1000	8.5	29,100	1660	6.8	23,200	1490	5.0	17,200	1315	3.5	11,900	1135	1.9	6,400	800

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

12HPB24 — HEATING CAPACITY — CR26-30N-F

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	8.4	28,600	1785	6.6	22,600	1650	4.8	16,400	1515	3.3	11,100	1355	1.6	5,500	1020
380	800	8.5	28,900	1665	6.7	22,900	1530	4.9	16,700	1395	3.3	11,400	1235	1.7	5,800	900
470	1000	8.7	29,600	1555	6.9	23,600	1420	5.1	17,400	1285	3.5	12,100	1125	1.9	6,500	790

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

12HPB24 — HEATING PERFORMANCE CR26-18N-F — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1780	28,400	8.3
60	16	1740	26,900	7.9
55	13	1700	25,500	7.5
50	10	1660	24,100	7.1
47	8	1635	23,200	6.8
45	7	1610	22,500	6.6
40	4	1550	20,600	6.0
35	2	1495	18,800	5.5
30	-1	1465	17,600	5.2
25	-4	1435	16,500	4.8
20	-7	1410	15,300	4.5
17	-8	1395	14,600	4.3
15	-9	1375	14,000	4.1
10	-12	1335	12,600	3.7
5	-15	1255	11,200	3.3
0	-18	1170	9,900	2.9
-5	-21	1085	8,500	2.5
-10	-23	1005	7,100	2.1
-15	-26	920	5,700	1.7
-20	-29	835	4,400	1.3

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

12HPB24 — HEATING PERFORMANCE CR26-30N-F — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1665	28,900	8.5
60	16	1635	27,400	8.0
55	13	1600	25,900	7.6
50	10	1570	24,500	7.2
47	8	1550	23,600	6.9
45	7	1530	22,900	6.7
40	4	1480	21,000	6.2
35	2	1430	19,100	5.6
30	-1	1410	17,900	5.2
25	-4	1395	16,700	4.9
20	-7	1375	15,500	4.5
17	-8	1360	14,800	4.3
15	-9	1350	14,200	4.2
10	-12	1320	12,700	3.7
5	-15	1235	11,400	3.3
0	-18	1150	10,000	2.9
-5	-21	1070	8,600	2.5
-10	-23	985	7,200	2.1
-15	-26	900	5,800	1.7
-20	-29	815	4,400	1.3

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

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

12HPB24 — COOLING CAPACITY — CH23-31

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		
	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°C)	285	600	6.6	22,500	1520	.71	.84	.96	6.4	21,700	1720	.72	.85	.97	6.1	20,900	1940	.73	.87	.98	5.9	20,000	2190	.74	.89	1.0
	380	800	6.9	23,700	1530	.77	.92	1.0	6.7	22,800	1730	.78	.94	1.0	6.4	22,000	1950	.8	.95	1.0	6.2	21,100	2190	.82	.97	1.0
	470	1000	7.2	24,600	1530	.83	.98	1.0	6.9	23,700	1730	.85	1.0	1.0	6.7	22,900	1950	.87	1.0	1.0	6.5	22,100	2190	.88	1.0	1.0
67°F (19°C)	285	600	7.0	24,000	1530	.56	.68	.80	6.8	23,100	1730	.56	.69	.82	6.5	22,300	1950	.57	.70	.83	6.3	21,400	2200	.57	.71	.85
	380	800	7.4	25,100	1530	.59	.75	.89	7.1	24,100	1740	.6	.76	.91	6.8	23,200	1950	.61	.78	.92	6.5	22,200	2200	.62	.79	.94
	470	1000	7.6	25,800	1530	.63	.81	.96	7.3	24,800	1740	.64	.83	.98	7.0	23,800	1960	.65	.84	.99	6.7	22,800	2200	.67	.86	1.0
71°F (22°C)	285	600	7.5	25,700	1530	.42	.54	.65	7.3	24,800	1740	.42	.54	.67	7.0	23,800	1960	.43	.55	.68	6.7	22,800	2200	.43	.56	.69
	380	800	7.9	26,800	1540	.44	.58	.72	7.6	25,800	1740	.44	.59	.74	7.2	24,700	1970	.44	.60	.75	6.9	23,700	2210	.45	.61	.77
	470	1000	8.1	27,500	1540	.45	.62	.79	7.7	26,400	1750	.45	.63	.80	7.4	25,300	1970	.46	.64	.82	7.1	24,200	2210	.47	.66	.84

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

12HPB24 — CH33-36A/B/C-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	600	285	23.2	6.8	1.46	.71	.84	.95	22.4	6.6	1.64	.72	.85	.97	21.5	6.3	1.86	.73	.86	.98	20.6	6.0	2.11	.74	.88	1.00
	800	380	24.4	7.2	1.47	.76	.91	1.00	23.6	6.9	1.65	.78	.93	1.00	22.7	6.7	1.86	.79	.95	1.00	21.6	6.3	2.11	.81	.97	1.00
	1000	470	25.3	7.4	1.47	.82	.98	1.00	24.5	7.2	1.65	.84	.99	1.00	23.6	6.9	1.86	.86	1.00	1.00	22.6	6.6	2.12	.88	1.00	1.00
67°F (19°C)	600	285	24.8	7.3	1.47	.56	.68	.80	23.9	7.0	1.65	.57	.69	.81	23.0	6.7	1.86	.57	.70	.83	22.0	6.4	2.11	.58	.71	.85
	800	380	25.9	7.6	1.48	.59	.74	.89	25.0	7.3	1.66	.60	.75	.90	24.0	7.0	1.87	.61	.77	.92	22.9	6.7	2.12	.62	.79	.94
	1000	470	26.6	7.8	1.48	.63	.80	.96	25.7	7.5	1.66	.64	.82	.97	24.6	7.2	1.87	.65	.84	.99	23.5	6.9	2.13	.66	.86	1.00
71°F (22°C)	600	285	26.5	7.8	1.48	.43	.54	.65	25.6	7.5	1.66	.43	.54	.66	24.6	7.2	1.87	.43	.55	.67	23.5	6.9	2.12	.43	.56	.69
	800	380	27.6	8.1	1.49	.44	.58	.72	26.6	7.8	1.67	.44	.58	.73	25.6	7.5	1.88	.44	.59	.75	24.4	7.2	2.13	.45	.60	.77
	1000	470	28.3	8.3	1.49	.45	.62	.78	27.3	8.0	1.68	.46	.63	.80	26.2	7.7	1.89	.46	.64	.82	25.0	7.3	2.13	.46	.65	.84

12HPB24 — HEATING CAPACITY — CH23-31

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	
285	600	8.3	28,400	1840	6.6	22,500	1700	4.8	16,500	1555	3.3	11,200	1385	1.6	5,600	1045
380	800	8.4	28,600	1715	6.7	22,700	1575	4.9	16,700	1430	3.3	11,400	1260	1.7	5,800	920
470	1000	8.6	29,300	1600	6.9	23,400	1460	5.1	17,400	1315	3.5	12,100	1145	1.9	6,500	805

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

12HPB24 - CH33-36A/B/C-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil											
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
600	285	28.3	8.3	1.88	21.8	6.4	1.80	15.1	4.4	1.72	10.6	3.1	1.58	5.2	1.5	1.19
800	380	28.8	8.4	1.71	22.3	6.5	1.63	15.6	4.6	1.55	11.1	3.3	1.41	5.7	1.7	1.02
1000	470	29.2	8.6	1.61	22.7	6.7	1.53	16.0	4.7	1.45	11.5	3.4	1.31	6.1	1.8	.92

12HPB24 — HEATING PERFORMANCE CH23-31 — at 800 cfm (380 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	1715	28,600	8.4
60	16	1680	27,100	7.9
55	13	1650	25,700	7.5
50	10	1615	24,300	7.1
47	8	1595	23,400	6.9
45	7	1575	22,700	6.7
40	4	1520	20,800	6.1
35	2	1470	19,000	5.6
30	-1	1450	17,800	5.2
25	-4	1430	16,700	4.9
20	-7	1405	15,500	4.5
17	-8	1395	14,800	4.3
15	-9	1380	14,200	4.2
10	-12	1345	12,800	3.8
5	-15	1260	11,400	3.3
0	-18	1175	10,000	2.9
-5	-21	1090	8,600	2.5
-10	-23	1005	7,200	2.1
-15	-26	920	5,800	1.7
-20	-29	835	4,400	1.3

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

12HPB24 - CH33-36A/B/C-2F - HEATING PERFORMANCE at 800 cfm (380 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	1.71	28.8	8.4
60	16	1.69	27.3	8.0
55	13	1.67	25.8	7.6
50	10	1.65	24.3	7.1
47	8	1.64	23.4	6.9
45	7	1.63	22.3	6.5
40	4	1.60	19.6	5.7
35	2	1.57	16.9	5.0
30	-1	1.56	16.2	4.7
25	-4	1.55	15.6	4.6
20	-7	1.54	14.9	4.4
17	-8	1.53	14.5	4.2
15	-9	1.52	13.9	4.1
10	-12	1.50	12.4	3.6
5	-15	1.41	11.1	3.3
0	-18	1.31	9.7	2.8
-5	-21	1.21	8.4	2.5
-10	-23	1.11	7.0	2.1
-15	-26	1.02	5.7	1.7
-20	-29	.92	4.4	1.3

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

12HPB30 — COOLING CAPACITY — CB28UH-036 - CB29M-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	425	900	8.4	28,800	1870	.74	.89	.99	8.1	27,800	2120	.76	.90	1.00	7.8	26,700	2390	.77	.92	1.00	7.5	25,700	2690	.79	.94	1.00
	470	1000	8.6	29,300	1880	.77	.92	1.00	8.3	28,300	2120	.78	.93	1.00	8.0	27,200	2390	.80	.95	1.00	7.6	26,100	2690	.81	.97	1.00
	520	1100	8.7	29,800	1880	.79	.95	1.00	8.4	28,700	2120	.81	.96	1.00	8.1	27,700	2390	.82	.98	1.00	7.8	26,600	2690	.84	.99	1.00
67°F (19.4°C)	425	900	9.0	30,700	1880	.58	.72	.85	8.6	29,500	2130	.59	.73	.87	8.3	28,300	2400	.59	.75	.89	8.0	27,200	2700	.60	.76	.91
	470	1000	9.1	31,100	1880	.59	.75	.89	8.8	29,900	2130	.60	.76	.90	8.4	28,700	2400	.61	.77	.92	8.1	27,500	2700	.62	.79	.94
	520	1100	9.2	31,500	1880	.61	.77	.92	8.9	30,200	2130	.62	.79	.94	8.5	29,000	2400	.63	.80	.95	8.1	27,800	2700	.64	.82	.97
71°F (21.7°C)	425	900	9.6	32,700	1890	.43	.56	.69	9.2	31,500	2140	.43	.57	.71	8.9	30,200	2410	.43	.58	.72	8.5	29,000	2710	.44	.59	.74
	470	1000	9.7	33,200	1890	.43	.58	.72	9.3	31,900	2140	.44	.59	.74	9.0	30,600	2410	.44	.60	.75	8.6	29,300	2710	.44	.61	.77
	520	1100	9.8	33,500	1890	.44	.59	.75	9.4	32,200	2140	.44	.60	.76	9.1	30,900	2410	.45	.61	.78	8.7	29,600	2710	.45	.63	.80

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

12HPB30 — COOLING CAPACITY — CB30M-31 - CB30U-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		
	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)	400	850	8.7	29,800	1890	.73	.87	.99	8.4	28,700	2130	.74	.88	1.00	8.1	27,600	2400	.76	.90	1.00	7.7	26,400	2710	.77	.92	1.00
	470	1000	9.0	30,700	1890	.77	.92	1.00	8.6	29,500	2140	.78	.94	1.00	8.3	28,300	2410	.80	.95	1.00	8.0	27,200	2710	.82	.97	1.00
	540	1150	9.2	31,400	1890	.81	.96	1.00	8.9	30,200	2140	.82	.98	1.00	8.5	29,100	2410	.84	.99	1.00	8.2	27,900	2710	.86	1.00	1.00
67°F (19.4°C)	400	850	9.3	31,800	1890	.57	.70	.83	9.0	30,600	2140	.58	.72	.85	8.6	29,300	2420	.58	.73	.87	8.2	28,100	2710	.59	.74	.89
	470	1000	9.6	32,600	1900	.59	.74	.89	9.2	31,300	2150	.60	.76	.90	8.8	30,000	2420	.61	.77	.92	8.4	28,700	2720	.62	.79	.94
	540	1150	9.7	33,200	1900	.61	.78	.93	9.3	31,800	2150	.63	.80	.95	8.9	30,500	2420	.64	.82	.97	8.6	29,200	2720	.65	.84	.99
71°F (21.7°C)	400	850	10.0	34,100	1900	.43	.55	.68	9.6	32,700	2160	.43	.56	.69	9.2	31,300	2430	.43	.57	.70	8.8	30,000	2730	.43	.58	.72
	470	1000	10.2	34,900	1900	.43	.58	.72	9.8	33,400	2160	.44	.59	.73	9.4	32,000	2430	.44	.60	.75	9.0	30,600	2730	.45	.61	.77
	540	1150	10.4	35,500	1900	.44	.60	.76	9.9	33,900	2160	.45	.61	.78	9.5	32,500	2440	.45	.62	.79	9.1	31,100	2730	.46	.64	.81

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

12HPB30 — HEATING CAPACITY — CB28UH-036 - CB29M-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	10.8	36,800	2165	8.2	28,100	1920	5.5	18,800	1650	4.0	13,500	1465	2.0	6,800	1020
470	1000	10.9	37,100	2370	8.3	28,400	2125	5.6	19,100	1855	4.0	13,800	1670	2.1	7,100	1225
520	1100	12.2	41,500	2545	9.6	32,800	2300	6.9	23,500	2030	5.3	18,200	1845	3.4	11,500	1400

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

12HPB30 — HEATING CAPACITY — CB30M-31 - CB30U-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	
400	850	10.6	36,200	2270	8.0	27,400	2095	5.3	18,000	1910	3.7	12,600	1745	1.8	6,200	1295
470	1000	10.8	37,000	2175	8.3	28,200	2000	5.5	18,800	1815	3.9	13,400	1650	2.1	7,000	1200
545	1150	11.0	37,400	2105	8.4	28,600	1930	5.6	19,200	1745	4.0	13,800	1580	2.2	7,400	1130

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

12HPB30 — HEATING PERFORMANCE CB28UH-036 - CB29M-41 at 1000 cfm (472 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2370	37,100	10.9
60	16	2315	35,100	10.3
55	13	2265	33,100	9.7
50	10	2210	31,200	9.1
47	8	2175	30,000	8.8
45	7	2125	28,400	8.3
40	4	1990	24,300	7.1
35	2	1855	20,300	5.9
30	-1	1855	19,700	5.8
25	-4	1855	19,100	5.6
20	-7	1855	18,500	5.4
17	-8	1855	18,200	5.3
15	-9	1830	17,400	5.1
10	-12	1780	15,400	4.5
5	-15	1670	13,800	4.0
0	-18	1555	12,100	3.5
-5	-21	1445	10,500	3.1
-10	-23	1335	8,800	2.6
-15	-26	1225	7,100	2.1
-20	-29	1110	5,500	1.6

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

12HPB30 — HEATING PERFORMANCE CB30M-31 - CB30U-31 at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2175	37,000	10.8
60	16	2140	35,000	10.3
55	13	2100	33,000	9.7
50	10	2065	31,000	9.1
47	8	2040	29,800	8.7
45	7	2000	28,200	8.3
40	4	1910	24,100	7.1
35	2	1815	20,100	5.9
30	-1	1815	19,400	5.7
25	-4	1815	18,800	5.5
20	-7	1815	18,200	5.3
17	-8	1815	17,800	5.2
15	-9	1800	17,000	5.0
10	-12	1760	15,000	4.4
5	-15	1650	13,400	3.9
0	-18	1535	11,800	3.5
-5	-21	1425	10,200	3.0
-10	-23	1310	8,600	2.5
-15	-26	1200	7,000	2.1
-20	-29	1090	5,300	1.6

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

HEATING AND COOLING RATINGS — 2.5 TON

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

12HPB30 — COOLING CAPACITY — CB30M-41 - CB30U-41/46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	425	900	8.9	30,400	1890	.74	.89	1.00	8.6	29,300	2140	.75	.90	1.00	8.2	28,100	2410	.77	.92	1.00	7.9	26,900	2710	.78	.94	1.00
	470	1000	9.1	31,000	1890	.77	.92	1.00	8.7	29,800	2140	.78	.94	1.00	8.4	28,600	2410	.80	.96	1.00	8.0	27,400	2710	.81	.97	1.00
	520	1100	9.2	31,500	1890	.79	.95	1.00	8.9	30,300	2140	.81	.97	1.00	8.5	29,100	2410	.83	.98	1.00	8.2	27,900	2710	.84	1.00	1.00
67°F (19.4°C)	425	900	9.5	32,500	1900	.58	.72	.85	9.1	31,200	2150	.58	.73	.87	8.8	29,900	2420	.59	.74	.89	8.4	28,600	2720	.60	.76	.91
	470	1000	9.7	33,000	1890	.59	.74	.89	9.3	31,600	2150	.60	.76	.90	8.9	30,300	2420	.61	.77	.92	8.5	29,000	2720	.62	.79	.95
	520	1100	9.8	33,400	1900	.61	.77	.92	9.4	32,000	2150	.62	.79	.94	9.0	30,700	2420	.63	.80	.96	8.6	29,300	2720	.64	.82	.98
71°F (21.7°C)	425	900	10.2	34,800	1900	.43	.56	.69	9.8	33,300	2160	.43	.57	.70	9.3	31,900	2430	.43	.58	.72	8.9	30,500	2730	.44	.59	.73
	470	1000	10.3	35,300	1900	.43	.58	.72	9.9	33,800	2160	.44	.59	.73	9.5	32,300	2440	.44	.60	.75	9.1	30,900	2730	.45	.61	.77
	520	1100	10.5	35,700	1900	.44	.59	.74	10.0	34,200	2160	.44	.60	.76	9.6	32,700	2440	.45	.61	.78	9.2	31,300	2740	.45	.63	.80

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

12HPB30 — COOLING CAPACITY — CB31MV-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	425	900	8.9	30,500	1890	.74	.89	1.00	8.6	29,400	2140	.75	.90	1.00	8.3	28,200	2410	.77	.92	1.00	7.9	27,000	2710	.78	.94	1.00
	460	975	9.1	31,000	1890	.76	.91	1.00	8.7	29,700	2140	.77	.93	1.00	8.4	28,600	2410	.79	.95	1.00	8.0	27,400	2710	.81	.97	1.00
	515	1090	9.3	31,600	1890	.79	.95	1.00	8.9	30,300	2140	.81	.96	1.00	8.5	29,100	2410	.82	.98	1.00	8.2	28,000	2710	.84	1.00	1.00
67°F (19.4°C)	425	900	9.6	32,600	1900	.58	.72	.85	9.1	31,200	2150	.58	.73	.87	8.8	30,000	2420	.59	.74	.89	8.4	28,700	2720	.60	.76	.91
	460	975	9.7	33,000	1900	.59	.74	.88	9.3	31,600	2150	.60	.75	.90	8.9	30,300	2420	.61	.77	.92	8.5	29,000	2720	.62	.78	.94
	515	1090	9.8	33,500	1900	.61	.77	.91	9.4	32,100	2150	.62	.78	.93	9.0	30,700	2420	.63	.80	.95	8.6	29,400	2720	.64	.82	.97
71°F (21.7°C)	425	900	10.2	34,900	1900	.43	.56	.69	9.8	33,500	2160	.43	.57	.70	9.4	32,000	2430	.43	.58	.72	9.0	30,600	2730	.44	.59	.73
	460	975	10.3	35,300	1900	.43	.57	.71	9.9	33,800	2160	.44	.58	.73	9.5	32,400	2440	.44	.59	.74	9.1	30,900	2730	.44	.60	.76
	515	1090	10.5	35,800	1900	.44	.59	.74	10.1	34,300	2160	.44	.60	.76	9.6	32,800	2440	.45	.61	.78	9.2	31,300	2740	.45	.62	.80

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

12HPB30 — HEATING CAPACITY — CB30M-41 - CB30U-41/46

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	
400	850	10.8	36,900	2205	8.2	28,100	2040	5.5	18,700	1860	3.9	13,300	1695	2.0	6,700	1250
470	1000	10.9	37,200	2145	8.3	28,400	1980	5.6	19,000	1800	4.0	13,600	1635	2.1	7,000	1190
545	1150	10.9	37,300	2095	8.4	28,500	1930	5.6	19,100	1750	4.0	13,700	1585	2.1	7,100	1140

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

12HPB30 — HEATING CAPACITY — CB31MV-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	10.7	36,600	2125	8.1	27,800	2035	5.4	18,400	1940	3.8	13,000	1770	2.0	6,700	1290
460	975	10.8	36,800	2080	8.2	28,000	1990	5.5	18,600	1895	3.9	13,200	1725	2.0	6,900	1245
515	1090	10.8	37,000	2020	8.3	28,200	1930	5.5	18,800	1835	3.9	13,400	1665	2.1	7,100	1185

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

12HPB30 — HEATING PERFORMANCE
CB30M-41 - CB30U-41/46 at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2145	37,200	10.9
60	16	2110	35,200	10.3
55	13	2075	33,200	9.7
50	10	2040	31,200	9.1
47	8	2015	30,000	8.8
45	7	1980	28,400	8.3
40	4	1890	24,300	7.1
35	2	1800	20,200	5.9
30	-1	1800	19,600	5.7
25	-4	1800	19,000	5.6
20	-7	1800	18,400	5.4
17	-8	1800	18,000	5.3
15	-9	1785	17,200	5.0
10	-12	1745	15,200	4.5
5	-15	1635	13,600	4.0
0	-18	1525	11,900	3.5
-5	-21	1415	10,300	3.0
-10	-23	1300	8,700	2.5
-15	-26	1190	7,000	2.1
-20	-29	1080	5,400	1.6

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

12HPB30 — HEATING PERFORMANCE
CB31MV-41 at 975 cfm (460 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2080	36,800	10.8
60	16	2060	34,800	10.2
55	13	2040	32,800	9.6
50	10	2020	30,800	9.0
47	8	2005	29,600	8.7
45	7	1990	28,000	8.2
40	4	1955	23,900	7.0
35	2	1915	19,900	5.8
30	-1	1905	19,300	5.7
25	-4	1895	18,600	5.5
20	-7	1885	18,000	5.3
17	-8	1875	17,600	5.2
15	-9	1870	16,800	4.9
10	-12	1845	14,800	4.3
5	-15	1725	13,200	3.9
0	-18	1605	11,600	3.4
-5	-21	1485	10,000	2.9
-10	-23	1365	8,500	2.5
-15	-26	1245	6,900	2.0
-20	-29	1125	5,300	1.6

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

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

12HPB30 — 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		
	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)	400	850	8.3	28,300	1860	.72	.86	.98	8.0	27,200	2100	.73	.87	.99	7.7	26,200	2370	.74	.89	1.00	7.4	25,100	2670	.76	.91	1.00
	470	1000	8.5	29,100	1860	.75	.91	1.00	8.2	28,000	2110	.77	.93	1.00	7.9	26,900	2370	.78	.94	1.00	7.6	25,800	2670	.80	.96	1.00
	540	1150	8.7	29,800	1860	.79	.95	1.00	8.4	28,700	2110	.81	.97	1.00	8.1	27,600	2380	.83	.99	1.00	7.8	26,600	2670	.85	1.00	1.00
67°F (19.4°C)	400	850	8.9	30,200	1870	.56	.69	.82	8.5	29,000	2110	.57	.70	.84	8.2	27,900	2380	.57	.72	.86	7.8	26,700	2680	.58	.73	.88
	470	1000	9.1	30,900	1870	.58	.73	.88	8.7	29,700	2120	.59	.74	.89	8.4	28,500	2380	.60	.76	.91	8.0	27,300	2680	.61	.78	.93
	540	1150	9.2	31,500	1870	.60	.77	.92	8.9	30,200	2120	.61	.79	.94	8.5	29,000	2390	.62	.80	.96	8.1	27,700	2680	.64	.82	.98
71°F (21.7°C)	400	850	9.5	32,300	1870	.42	.54	.67	9.1	31,000	2120	.42	.55	.68	8.7	29,800	2390	.43	.56	.69	8.4	28,500	2690	.43	.57	.71
	470	1000	9.7	33,000	1880	.43	.57	.71	9.3	31,700	2130	.43	.58	.72	8.9	30,400	2400	.43	.59	.74	8.5	29,100	2690	.44	.60	.75
	540	1150	9.8	33,600	1880	.44	.59	.74	9.4	32,200	2130	.44	.60	.76	9.1	30,900	2400	.44	.61	.78	8.6	29,500	2690	.45	.63	.80

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

12HPB30 — 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) 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	80°F 27°C	85°F 29°C
63°F (17.2°C)	400	850	8.5	29,000	1860	.72	.86	.98	8.1	27,800	2110	.73	.88	1.00	7.8	26,700	2380	.74	.89	1.00	7.5	25,600	2670	.76	.91	1.00
	470	1000	8.7	29,800	1870	.76	.91	1.00	8.4	28,700	2110	.77	.93	1.00	8.1	27,500	2380	.79	.95	1.00	7.7	26,400	2680	.80	.97	1.00
	540	1150	9.0	30,600	1870	.80	.96	1.00	8.6	29,400	2120	.81	.98	1.00	8.3	28,300	2380	.83	.99	1.00	8.0	27,200	2680	.85	1.00	1.00
67°F (19.4°C)	400	850	9.1	30,900	1870	.56	.69	.82	8.7	29,700	2120	.57	.70	.84	8.4	28,500	2390	.58	.72	.86	8.0	27,200	2680	.58	.73	.88
	470	1000	9.3	31,700	1870	.58	.73	.88	8.9	30,400	2120	.59	.75	.90	8.5	29,100	2390	.60	.76	.92	8.2	27,900	2680	.61	.78	.94
	540	1150	9.5	32,300	1870	.61	.77	.93	9.1	31,000	2120	.62	.79	.95	8.7	29,700	2390	.63	.81	.97	8.3	28,400	2690	.64	.83	.99
71°F (21.7°C)	400	850	9.7	33,100	1870	.42	.54	.67	9.3	31,800	2130	.42	.55	.68	8.9	30,400	2400	.43	.56	.69	8.5	29,100	2690	.43	.57	.71
	470	1000	9.9	33,900	1880	.43	.57	.71	9.5	32,500	2130	.43	.58	.72	9.1	31,100	2400	.43	.59	.74	8.7	29,700	2700	.44	.60	.76
	540	1150	10.1	34,500	1880	.44	.59	.75	9.7	33,000	2140	.44	.60	.76	9.3	31,600	2410	.45	.62	.78	8.9	30,200	2700	.45	.63	.80

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

12HPB30 — HEATING CAPACITY — CVP10-31/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	
400	850	10.7	36,400	2200	8.3	28,300	2040	5.7	19,500	1875	4.3	14,600	1600	2.1	7200	1225
470	1000	10.8	36,900	2105	8.4	28,800	1945	5.9	20,000	1775	4.4	15,100	1505	2.3	7700	1130
540	1150	10.9	37,300	2010	8.5	29,100	1850	6.0	20,400	1680	4.5	15,400	1410	2.4	8100	1035

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

12HPB30 — 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	
400	850	10.8	36,800	2105	8.4	28,500	1960	5.7	19,600	1810	4.3	14,600	1550	2.2	7500	1190
470	1000	10.8	36,700	2010	8.3	28,400	1865	5.7	19,500	1715	4.2	14,500	1455	2.2	7400	1095
540	1150	10.7	36,600	1915	8.3	28,200	1770	5.7	19,300	1620	4.2	14,400	1360	2.1	7300	1000

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

12HPB30 — HEATING PERFORMANCE CVP10-31/EC10Q3 at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2105	36,900	10.8
60	16	2065	35,100	10.3
55	13	2025	33,300	9.8
50	10	1990	31,500	9.2
47	8	1965	30,400	8.9
45	7	1945	28,800	8.4
40	4	1890	24,700	7.2
35	2	1840	20,700	6.1
30	-1	1810	20,400	6.0
25	-4	1775	20,000	5.9
20	-7	1745	19,700	5.8
17	-8	1730	19,500	5.7
15	-9	1690	18,800	5.5
10	-12	1595	16,900	5.0
5	-15	1505	15,100	4.4
0	-18	1410	13,200	3.9
-5	-21	1315	11,400	3.3
-10	-23	1225	9500	2.8
-15	-26	1130	7700	2.3
-20	-29	1035	5900	1.7

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

12HPB30 — HEATING PERFORMANCE CVP10-41/EC10Q3 at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2010	36,700	10.8
60	16	1975	34,900	10.2
55	13	1940	33,000	9.7
50	10	1905	31,100	9.1
47	8	1885	30,000	8.8
45	7	1865	28,400	8.3
40	4	1815	24,300	7.1
35	2	1770	20,300	5.9
30	-1	1745	19,900	5.8
25	-4	1715	19,500	5.7
20	-7	1690	19,000	5.6
17	-8	1675	18,800	5.5
15	-9	1635	18,100	5.3
10	-12	1545	16,300	4.8
5	-15	1455	14,500	4.2
0	-18	1365	12,800	3.8
-5	-21	1275	11,000	3.2
-10	-23	1185	9200	2.7
-15	-26	1095	7400	2.2
-20	-29	1005	5600	1.6

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

HEATING AND COOLING RATINGS — 2.5 TON

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

12HPB30 — COOLING CAPACITY — C26-31 — CH23-41

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	390	825	8.6	29,300	1860	.71	.85	.97	8.3	28,200	2100	.72	.87	.99	7.9	27,100	2370	.74	.89	1.00	7.6	26,000	2670	.75	.90	1.00
	460	975	8.9	30,200	1860	.75	.90	1.00	8.5	29,100	2110	.76	.92	1.00	8.2	27,900	2380	.78	.94	1.00	7.9	26,800	2670	.80	.96	1.00
	530	1125	9.1	31,000	1870	.79	.95	1.00	8.7	29,800	2110	.80	.97	1.00	8.4	28,600	2380	.82	.98	1.00	8.1	27,500	2680	.84	1.00	1.00
67°F (19.4°C)	390	825	9.2	31,300	1870	.56	.69	.82	8.8	30,100	2110	.56	.70	.83	8.5	28,900	2380	.57	.71	.85	8.1	27,700	2680	.58	.73	.87
	460	975	9.4	32,100	1870	.58	.73	.87	9.0	30,800	2120	.59	.74	.89	8.7	29,600	2390	.60	.75	.91	8.3	28,300	2680	.61	.77	.93
	530	1125	9.6	32,700	1870	.60	.76	.92	9.2	31,400	2120	.61	.78	.94	8.8	30,100	2390	.62	.80	.96	8.4	28,800	2680	.63	.82	.98
71°F (21.7°C)	390	825	9.8	33,500	1870	.42	.54	.66	9.4	32,200	2130	.42	.55	.67	9.1	30,900	2400	.42	.56	.69	8.7	29,600	2690	.43	.56	.70
	460	975	10.1	34,300	1880	.43	.56	.70	9.6	32,900	2130	.43	.57	.71	9.2	31,500	2400	.43	.58	.73	8.9	30,200	2690	.44	.59	.75
	530	1125	10.2	34,900	1880	.44	.59	.74	9.8	33,400	2130	.44	.60	.76	9.4	32,000	2400	.44	.61	.78	9.0	30,600	2700	.45	.62	.80

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

12HPB30 — COOLING CAPACITY — C26-41

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	400	850	8.7	29,600	1860	.72	.86	.98	8.3	28,400	2110	.73	.88	1.00	8.0	27,300	2380	.74	.89	1.00	7.7	26,200	2670	.76	.91	1.00
	470	1000	8.9	30,400	1870	.76	.91	1.00	8.6	29,200	2110	.77	.93	1.00	8.2	28,100	2380	.79	.95	1.00	7.9	26,900	2680	.80	.97	1.00
	540	1150	9.1	31,200	1870	.79	.96	1.00	8.8	30,000	2120	.81	.97	1.00	8.4	28,800	2380	.83	.99	1.00	8.1	27,700	2680	.85	1.00	1.00
67°F (19.4°C)	400	850	9.2	31,500	1870	.56	.69	.82	8.9	30,300	2120	.57	.70	.84	8.5	29,100	2390	.58	.72	.86	8.1	27,800	2680	.58	.73	.88
	470	1000	9.5	32,300	1870	.58	.73	.88	9.1	31,000	2120	.59	.75	.90	8.7	29,700	2390	.60	.76	.92	8.3	28,400	2680	.61	.78	.94
	540	1150	9.6	32,900	1870	.61	.77	.93	9.3	31,600	2120	.62	.79	.95	8.9	30,200	2390	.63	.81	.97	8.5	28,900	2690	.64	.83	.98
71°F (21.7°C)	400	850	9.9	33,800	1870	.42	.54	.67	9.5	32,400	2130	.42	.55	.68	9.1	31,100	2400	.43	.56	.69	8.7	29,700	2690	.43	.57	.71
	470	1000	10.1	34,500	1880	.43	.57	.71	9.7	33,100	2130	.43	.58	.72	9.3	31,700	2400	.43	.59	.74	8.9	30,300	2700	.44	.60	.75
	540	1150	10.3	35,100	1880	.44	.59	.75	9.8	33,600	2140	.44	.60	.76	9.4	32,200	2410	.44	.61	.78	9.0	30,800	2700	.45	.63	.80

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

12HPB30 — HEATING CAPACITY — C26-31 — CH23-41

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	
390	825	10.7	36,500	2210	8.3	28,300	2050	5.7	19,500	1885	4.2	14,500	1615	2.1	7200	1240
460	975	10.8	36,800	2105	8.4	28,600	1945	5.8	19,800	1785	4.3	14,800	1510	2.2	7600	1135
530	1125	10.9	37,300	2000	8.5	29,100	1840	5.9	20,300	1680	4.5	15,400	1405	2.4	8100	1030

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

12HPB30 — HEATING CAPACITY — C26-41

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	
400	850	10.8	36,700	2150	8.3	28,300	2005	5.7	19,400	1855	4.2	14,400	1590	2.1	7200	1220
470	1000	10.9	37,100	2055	8.4	28,800	1910	5.8	19,800	1760	4.3	14,800	1495	2.2	7600	1120
540	1150	11.0	37,500	1955	8.6	29,200	1810	5.9	20,200	1660	4.5	15,200	1395	2.3	8000	1025

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

12HPB30 — HEATING PERFORMANCE C26-31 — CH23-41 at 975 cfm (460 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2105	36,800	10.8
60	16	2065	35,000	10.3
55	13	2025	33,100	9.7
50	10	1990	31,300	9.2
47	8	1965	30,200	8.9
45	7	1945	28,600	8.4
40	4	1895	24,600	7.2
35	2	1845	20,600	6.0
30	-1	1815	20,200	5.9
25	-4	1785	19,800	5.8
20	-7	1755	19,400	5.7
17	-8	1735	19,200	5.6
15	-9	1695	18,500	5.4
10	-12	1605	16,700	4.9
5	-15	1510	14,800	4.3
0	-18	1415	13,000	3.8
-5	-21	1320	11,200	3.3
-10	-23	1230	9400	2.8
-15	-26	1135	7600	2.2
-20	-29	1040	5800	1.7

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

12HPB30 — HEATING PERFORMANCE C26-41 at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2055	37,100	10.9
60	16	2020	35,300	10.3
55	13	1985	33,400	9.8
50	10	1950	31,500	9.2
47	8	1925	30,400	8.9
45	7	1910	28,800	8.4
40	4	1860	24,700	7.2
35	2	1815	20,600	6.0
30	-1	1785	20,200	5.9
25	-4	1760	19,800	5.8
20	-7	1730	19,400	5.7
17	-8	1715	19,200	5.6
15	-9	1680	18,500	5.4
10	-12	1585	16,700	4.9
5	-15	1495	14,800	4.3
0	-18	1400	13,000	3.8
-5	-21	1305	11,200	3.3
-10	-23	1215	9400	2.8
-15	-26	1120	7600	2.2
-20	-29	1030	5800	1.7

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

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

12HPB30 — C33-38A/B COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	28.1	8.2	1.89	.73	.86	.98	27.1	7.9	2.13	.73	.88	.99	26.2	7.7	2.39	.75	.89	1.00	25.1	7.4	2.70	.76	.91	1.00
	950	450	29.1	8.5	1.90	.76	.91	1.00	28.0	8.2	2.14	.78	.93	1.00	26.9	7.9	2.40	.79	.94	1.00	25.8	7.6	2.71	.80	.96	1.00
	1100	520	29.8	8.7	1.90	.80	.95	1.00	28.7	8.4	2.14	.82	.97	1.00	27.6	8.1	2.41	.83	.99	1.00	26.5	7.8	2.71	.85	1.00	1.00
67°F (19°C)	800	380	30.2	8.9	1.90	.57	.70	.82	29.0	8.5	2.15	.58	.71	.84	27.9	8.2	2.41	.58	.72	.86	26.8	7.9	2.71	.59	.73	.88
	950	450	31.0	9.1	1.90	.59	.74	.88	29.8	8.7	2.15	.60	.75	.89	28.6	8.4	2.42	.60	.76	.91	27.4	8.0	2.72	.62	.78	.93
	1100	520	31.7	9.3	1.91	.61	.77	.92	30.4	8.9	2.16	.62	.79	.94	29.2	8.6	2.42	.63	.80	.96	27.9	8.2	2.72	.64	.82	.98
71°F (22°C)	800	380	32.3	9.5	1.91	.43	.55	.67	31.1	9.1	2.16	.43	.56	.68	29.9	8.8	2.42	.44	.56	.69	28.7	8.4	2.72	.44	.57	.70
	950	450	33.2	9.7	1.91	.44	.57	.71	31.9	9.3	2.16	.44	.58	.72	30.6	9.0	2.43	.44	.59	.74	29.3	8.6	2.73	.45	.60	.76
	1100	520	33.9	9.9	1.91	.45	.60	.75	32.5	9.5	2.17	.45	.61	.76	31.1	9.1	2.44	.45	.62	.78	29.8	8.7	2.74	.46	.63	.80

12HPB30 — COOLING CAPACITY — CR26-30N-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	400	850	8.2	28,100	1860	.72	.86	.98	7.9	27,100	2100	.73	.88	.99	7.6	26,100	2360	.74	.89	1.00	7.3	25,000	2670	.76	.91	1.00
	470	1000	8.5	28,900	1860	.76	.91	1.00	8.1	27,800	2100	.77	.93	1.00	7.9	26,800	2370	.79	.95	1.00	7.5	25,700	2670	.80	.96	1.00
	540	1150	8.6	29,500	1860	.80	.95	1.00	8.3	28,400	2110	.81	.97	1.00	8.0	27,400	2370	.83	.98	1.00	7.7	26,300	2670	.85	1.00	1.00
67°F (19.4°C)	400	850	8.8	29,900	1860	.56	.70	.83	8.4	28,800	2110	.57	.71	.84	8.1	27,700	2380	.58	.72	.86	7.8	26,500	2670	.58	.73	.88
	470	1000	9.0	30,600	1860	.58	.73	.88	8.6	29,400	2110	.59	.75	.90	8.3	28,200	2380	.60	.76	.92	7.9	27,000	2680	.61	.78	.94
	540	1150	9.1	31,100	1870	.61	.77	.92	8.8	29,900	2120	.62	.79	.94	8.4	28,700	2390	.63	.81	.96	8.1	27,500	2680	.64	.82	.98
71°F (21.7°C)	400	850	9.3	31,900	1870	.42	.55	.67	9.0	30,700	2120	.42	.55	.68	8.6	29,500	2390	.43	.56	.69	8.3	28,300	2680	.43	.57	.71
	470	1000	9.6	32,600	1870	.43	.57	.71	9.2	31,300	2120	.43	.58	.72	8.8	30,100	2390	.43	.59	.74	8.4	28,800	2690	.44	.60	.76
	540	1150	9.7	33,100	1880	.44	.59	.75	9.3	31,800	2130	.44	.60	.76	8.9	30,500	2400	.44	.61	.78	8.6	29,200	2690	.45	.63	.80

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

12HPB30 - C33-38A/B - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
800	380	29.7	8.7	2.11	22.2	6.5	2.01	14.3	4.2	1.91	9.9	2.9	1.76	4.9	1.4	1.31
1000	470	30.2	8.9	1.99	22.7	6.7	1.89	14.8	4.3	1.78	10.4	3.0	1.64	5.4	1.6	1.18
1200	565	30.6	9.0	1.92	23.1	6.8	1.82	15.2	4.5	1.71	10.8	3.2	1.57	5.8	1.7	1.11

12HPB30 — HEATING CAPACITY — CR26-30N-F

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	
400	850	10.7	36,500	2260	8.3	28,300	2080	5.7	19,500	1895	4.2	14,500	1615	2.1	7300	1240
470	1000	10.8	36,800	2155	8.4	28,600	1975	5.8	19,800	1795	4.3	14,800	1510	2.2	7600	1135
540	1150	10.9	37,200	2050	8.5	28,900	1870	5.9	20,200	1690	4.5	15,200	1405	2.3	7900	1030

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

12HPB30 - C33-38A/B - HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	1.99	30.2	8.9
60	16	1.97	28.5	8.4
55	13	1.94	26.8	7.9
50	10	1.92	25.1	7.4
47	8	1.91	24.1	7.1
45	7	1.89	22.7	6.7
40	4	1.84	19.3	5.7
35	2	1.78	15.8	4.6
30	-1	1.78	15.3	4.5
25	-4	1.78	14.8	4.3
20	-7	1.78	14.3	4.2
17	-8	1.78	14.0	4.1
15	-9	1.77	13.3	3.9
10	-12	1.75	11.7	3.4
5	-15	1.64	10.4	3.0
0	-18	1.52	9.2	2.7
-5	-21	1.41	7.9	2.3
-10	-23	1.30	6.7	2.0
-15	-26	1.18	5.4	1.6
-20	-29	1.07	4.2	1.2

12HPB30 — HEATING PERFORMANCE CR26-30N-F at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2155	36,800	10.8
60	16	2110	35,000	10.3
55	13	2065	33,100	9.7
50	10	2025	31,300	9.2
47	8	2000	30,200	8.9
45	7	1975	28,600	8.4
40	4	1920	24,600	7.2
35	2	1865	20,500	6.0
30	-1	1830	20,200	5.9
25	-4	1795	19,800	5.8
20	-7	1760	19,400	5.7
17	-8	1735	19,200	5.6
15	-9	1700	18,500	5.4
10	-12	1605	16,700	4.9
5	-15	1510	14,800	4.3
0	-18	1415	13,000	3.8
-5	-21	1325	11,200	3.3
-10	-23	1230	9400	2.8
-15	-26	1135	7600	2.2
-20	-29	1040	5800	1.7

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

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

12HPB30 — COOLING CAPACITY — CR26-36N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	400	850	8.7	29,600	1860	.72	.86	.98	8.4	28,500	2110	.73	.88	.99	8.0	27,400	2370	.74	.89	1.00	7.7	26,200	2670	.76	.91	1.00
	470	1000	8.9	30,500	1860	.76	.91	1.00	8.6	29,300	2110	.77	.93	1.00	8.2	28,100	2380	.79	.95	1.00	7.9	27,000	2670	.80	.97	1.00
	540	1150	9.1	31,200	1870	.79	.96	1.00	8.8	30,000	2110	.81	.97	1.00	8.5	28,900	2380	.83	.99	1.00	8.1	27,700	2680	.85	1.00	1.00
67°F (19.4°C)	400	850	9.3	31,600	1870	.56	.69	.82	8.9	30,300	2120	.57	.71	.84	8.5	29,100	2380	.58	.72	.86	8.2	27,900	2680	.58	.73	.88
	470	1000	9.5	32,300	1870	.58	.73	.88	9.1	31,000	2120	.59	.75	.90	8.7	29,800	2390	.60	.76	.92	8.4	28,500	2680	.61	.78	.94
	540	1150	9.6	32,900	1870	.61	.77	.93	9.3	31,600	2120	.62	.79	.95	8.9	30,300	2390	.63	.81	.96	8.5	29,000	2690	.64	.83	.98
71°F (21.7°C)	400	850	9.9	33,800	1870	.42	.54	.67	9.5	32,400	2130	.42	.55	.68	9.1	31,100	2400	.43	.56	.69	8.7	29,800	2690	.43	.57	.71
	470	1000	10.1	34,500	1880	.43	.57	.71	9.7	33,100	2130	.43	.58	.72	9.3	31,700	2400	.43	.59	.74	8.9	30,400	2690	.44	.60	.76
	540	1150	10.3	35,100	1880	.44	.59	.75	9.9	33,700	2130	.44	.60	.76	9.4	32,200	2400	.44	.61	.78	9.0	30,800	2700	.45	.63	.80

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

12HPB30 — CH33-36A/B-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	27.4	8.0	1.88	.73	.86	.98	26.5	7.8	2.12	.74	.87	.99	25.5	7.5	2.39	.75	.89	1.00	24.5	7.2	2.70	.76	.91	1.00
	950	450	28.2	8.3	1.89	.76	.91	1.00	27.3	8.0	2.13	.78	.93	1.00	26.3	7.7	2.40	.79	.94	1.00	25.2	7.4	2.70	.80	.96	1.00
	1100	520	28.9	8.5	1.89	.80	.96	1.00	27.9	8.2	2.13	.81	.97	1.00	26.9	7.9	2.40	.83	.99	1.00	25.9	7.6	2.70	.84	1.00	1.00
67°F (19°C)	800	380	29.3	8.6	1.89	.57	.70	.83	28.3	8.3	2.13	.58	.71	.84	27.2	8.0	2.40	.59	.72	.86	26.1	7.6	2.71	.59	.73	.88
	950	450	30.1	8.8	1.90	.59	.74	.88	29.0	8.5	2.14	.60	.75	.89	27.9	8.2	2.41	.61	.76	.91	26.7	7.8	2.71	.62	.78	.93
	1100	520	30.6	9.0	1.90	.61	.78	.93	29.5	8.6	2.14	.62	.79	.94	28.4	8.3	2.41	.63	.80	.96	27.2	8.0	2.71	.64	.82	.98
71°F (22°C)	800	380	31.3	9.2	1.90	.43	.55	.67	30.2	8.9	2.15	.43	.56	.68	29.1	8.5	2.41	.43	.56	.69	27.9	8.2	2.72	.44	.57	.71
	950	450	32.1	9.4	1.90	.44	.58	.71	30.9	9.1	2.15	.44	.58	.73	29.7	8.7	2.42	.44	.59	.74	28.5	8.4	2.72	.45	.60	.76
	1100	520	32.7	9.6	1.91	.45	.60	.75	31.4	9.2	2.16	.45	.61	.77	30.2	8.9	2.43	.45	.62	.78	29.0	8.5	2.72	.46	.63	.80

12HPB30 — HEATING CAPACITY — CR26-36N/W-F

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	
400	850	10.8	36,700	2160	8.3	28,400	2000	5.7	19,400	1840	4.2	14,400	1575	2.1	7200	1205
470	1000	10.9	37,100	2060	8.4	28,800	1905	5.8	19,800	1745	4.3	14,800	1475	2.2	7600	1110
540	1150	10.9	37,200	2050	8.4	28,800	1895	5.8	19,900	1735	4.4	14,900	1465	2.2	7600	1100

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

12HPB30 - CH33-36A/B-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
800	380	29.6	8.7	2.14	22.2	6.5	2.03	14.3	4.2	1.90	9.9	2.9	1.75	4.9	1.4	1.30
1000	470	30.1	8.8	2.03	22.7	6.7	1.91	14.8	4.3	1.79	10.4	3.0	1.64	5.4	1.6	1.19
1200	565	30.5	8.9	1.95	23.1	6.8	1.84	15.2	4.5	1.71	10.8	3.2	1.56	5.8	1.7	1.11

12HPB30 — HEATING PERFORMANCE CR26-36N/W-F 1000 cfm at (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2060	37,100	10.9
60	16	2025	35,300	10.3
55	13	1985	33,400	9.8
50	10	1945	31,500	9.2
47	8	1925	30,400	8.9
45	7	1905	28,800	8.4
40	4	1855	24,700	7.2
35	2	1805	20,600	6.0
30	-1	1775	20,200	5.9
25	-4	1745	19,800	5.8
20	-7	1715	19,400	5.7
17	-8	1700	19,200	5.6
15	-9	1660	18,500	5.4
10	-12	1570	16,700	4.9
5	-15	1475	14,800	4.3
0	-18	1385	13,000	3.8
-5	-21	1295	11,200	3.3
-10	-23	1200	9400	2.8
-15	-26	1110	7600	2.2
-20	-29	1020	5800	1.7

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

12HPB30 - CH33-36A/B-2F - HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.03	30.1	8.8
60	16	2.00	28.4	8.3
55	13	1.98	26.7	7.8
50	10	1.95	25.1	7.4
47	8	1.94	24.1	7.1
45	7	1.91	22.7	6.7
40	4	1.85	19.3	5.7
35	2	1.79	15.8	4.6
30	-1	1.79	15.3	4.5
25	-4	1.79	14.8	4.3
20	-7	1.79	14.3	4.2
17	-8	1.79	14.0	4.1
15	-9	1.78	13.3	3.9
10	-12	1.75	11.7	3.4
5	-15	1.64	10.4	3.0
0	-18	1.53	9.2	2.7
-5	-21	1.41	7.9	2.3
-10	-23	1.30	6.7	2.0
-15	-26	1.19	5.4	1.6
-20	-29	1.07	4.2	1.2

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

12HPB36 — COOLING CAPACITY — CB28UH-036 - CB29M-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	470	1000	9.6	32,900	2300	.73	.87	.98	9.3	31,800	2590	.74	.89	.99	9.0	30,600	2930	.76	.90	1.00	8.6	29,300	3320	.77	.92	1.00
	565	1200	9.9	33,900	2300	.77	.92	1.00	9.6	32,700	2600	.79	.94	1.00	9.2	31,500	2940	.80	.96	1.00	8.9	30,200	3330	.82	.97	1.00
	660	1400	10.2	34,800	2310	.82	.97	1.00	9.8	33,600	2610	.83	.98	1.00	9.5	32,400	2950	.85	.99	1.00	9.1	31,100	3330	.87	1.00	1.00
67°F (19.4°C)	470	1000	10.3	35,000	2310	.57	.71	.84	9.9	33,800	2610	.58	.72	.85	9.5	32,500	2950	.59	.73	.87	9.1	31,100	3340	.59	.75	.89
	565	1200	10.5	35,800	2320	.60	.75	.89	10.1	34,600	2620	.60	.76	.91	9.7	33,200	2960	.61	.78	.93	9.3	31,800	3350	.62	.80	.95
	660	1400	10.7	36,500	2320	.62	.79	.94	10.3	35,200	2620	.63	.81	.96	9.9	33,800	2960	.64	.83	.97	9.5	32,400	3350	.65	.84	.99
71°F (21.7°C)	470	1000	10.9	37,300	2330	.43	.56	.68	10.6	36,000	2630	.43	.56	.69	10.1	34,600	2970	.43	.57	.71	9.7	33,200	3360	.43	.58	.72
	565	1200	11.2	38,100	2330	.44	.58	.73	10.8	36,800	2630	.44	.59	.74	10.4	35,400	2980	.44	.60	.76	9.9	33,900	3370	.45	.61	.77
	660	1400	11.4	38,800	2340	.45	.61	.77	11.0	37,400	2640	.45	.62	.79	10.5	35,900	2980	.45	.63	.80	10.1	34,400	3370	.46	.64	.82

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

12HPB36 — COOLING CAPACITY — CB28UH-042 - CB29M-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	470	1000	10.1	34,400	2330	.73	.87	.98	9.7	33,100	2630	.74	.88	.99	9.3	31,800	2970	.75	.90	1.00	8.9	30,500	3360	.77	.92	1.00
	565	1200	10.4	35,400	2340	.77	.92	1.00	10.0	34,200	2640	.79	.94	1.00	9.6	32,800	2980	.80	.96	1.00	9.2	31,500	3370	.82	.98	1.00
	660	1400	10.7	36,400	2340	.82	.97	1.00	10.3	35,100	2640	.83	.98	1.00	9.9	33,800	2990	.85	.99	1.00	9.5	32,500	3390	.87	1.00	1.00
67°F (19.4°C)	470	1000	10.7	36,600	2350	.57	.70	.84	10.3	35,300	2650	.58	.72	.85	9.9	33,900	2990	.58	.73	.87	9.5	32,400	3390	.59	.74	.89
	565	1200	11.0	37,500	2360	.60	.75	.89	10.6	36,100	2660	.60	.76	.91	10.2	34,700	3000	.61	.78	.93	9.7	33,200	3400	.62	.80	.95
	660	1400	11.2	38,300	2360	.62	.79	.94	10.8	36,800	2660	.63	.81	.96	10.3	35,300	3010	.64	.83	.98	9.9	33,800	3400	.65	.85	.99
71°F (21.7°C)	470	1000	11.5	39,100	2370	.43	.55	.68	11.0	37,700	2670	.43	.56	.69	10.6	36,200	3020	.43	.57	.70	10.1	34,600	3410	.43	.58	.72
	565	1200	11.7	40,000	2380	.44	.58	.72	11.3	38,600	2680	.44	.59	.74	10.8	37,000	3020	.44	.60	.75	10.4	35,400	3420	.45	.61	.77
	660	1400	11.9	40,700	2380	.45	.61	.77	11.5	39,200	2680	.45	.62	.79	11.0	37,600	3030	.45	.63	.80	10.5	35,900	3430	.46	.64	.82

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

12HPB36 — HEATING CAPACITY — CB28UH-036 - CB29M-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	
470	1000	11.8	40,200	2740	9.1	31,100	2495	6.2	21,300	2235	4.7	15,900	1965	2.3	7,900	1480
565	1200	11.9	40,700	2605	9.3	31,600	2360	6.4	21,800	2100	4.8	16,400	1830	2.5	8,400	1345
660	1400	12.1	41,200	2510	9.4	32,100	2265	6.5	22,300	2005	5.0	16,900	1735	2.6	8,900	1250

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

12HPB36 — HEATING CAPACITY — CB28UH-042 - CB29M-46

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	11.8	40,200	2765	9.1	31,100	2515	6.2	21,300	2250	4.7	15,900	1990	2.3	7,900	1495
565	1200	11.9	40,700	2635	9.3	31,600	2385	6.4	21,800	2120	4.8	16,400	1860	2.5	8,400	1365
660	1400	12.0	41,100	2545	9.4	32,000	2295	6.5	22,200	2030	4.9	16,800	1770	2.6	8,800	1275

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

12HPB36 — HEATING PERFORMANCE
CB28UH-036 - CB29M-41 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2605	40,700	11.9
60	16	2550	38,700	11.3
55	13	2490	36,700	10.8
50	10	2430	34,600	10.1
47	8	2395	33,400	9.8
45	7	2360	31,600	9.3
40	4	2270	27,100	7.9
35	2	2180	22,600	6.6
30	-1	2140	22,200	6.5
25	-4	2100	21,800	6.4
20	-7	2060	21,400	6.3
17	-8	2035	21,200	6.2
15	-9	2010	20,400	6.0
10	-12	1955	18,400	5.4
5	-15	1830	16,400	4.8
0	-18	1710	14,400	4.2
-5	-21	1585	12,400	3.6
-10	-23	1465	10,400	3.0
-15	-26	1345	8,400	2.5
-20	-29	1220	6,400	1.9

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

12HPB36 — HEATING PERFORMANCE
CB28UH-042 - CB29M-46 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2635	40,700	11.9
60	16	2580	38,700	11.3
55	13	2520	36,700	10.8
50	10	2460	34,600	10.1
47	8	2425	33,400	9.8
45	7	2385	31,600	9.3
40	4	2285	27,100	7.9
35	2	2185	22,600	6.6
30	-1	2150	22,200	6.5
25	-4	2120	21,800	6.4
20	-7	2085	21,400	6.3
17	-8	2065	21,200	6.2
15	-9	2040	20,400	6.0
10	-12	1985	18,400	5.4
5	-15	1860	16,400	4.8
0	-18	1735	14,400	4.2
-5	-21	1610	12,400	3.6
-10	-23	1485	10,400	3.0
-15	-26	1365	8,400	2.5
-20	-29	1240	6,400	1.9

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

HEATING AND COOLING RATINGS — 3 TON

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

12HPB36 — COOLING CAPACITY — CB28UH-048 - CB29M-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		
	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)	470	1000	10.1	34,600	2330	.73	.87	.98	9.8	33,300	2620	.74	.88	1.00	9.4	32,000	2960	.75	.90	1.00	9.0	30,600	3360	.77	.92	1.00
	565	1200	10.5	35,700	2330	.77	.92	1.00	10.1	34,400	2630	.79	.94	1.00	9.7	33,000	2970	.80	.96	1.00	9.3	31,600	3370	.82	.98	1.00
	660	1400	10.7	36,600	2340	.81	.97	1.00	10.3	35,300	2640	.83	.98	1.00	10.0	34,000	2980	.85	1.00	1.00	9.6	32,700	3380	.87	1.00	1.00
67°F (19.4°C)	470	1000	10.8	36,800	2340	.57	.70	.83	10.4	35,500	2640	.58	.71	.85	10.0	34,100	2980	.58	.73	.87	9.6	32,600	3380	.59	.74	.89
	565	1200	11.1	37,800	2350	.59	.75	.89	10.7	36,400	2650	.60	.76	.91	10.2	34,900	2990	.61	.78	.93	9.8	33,400	3390	.62	.80	.95
	660	1400	11.3	38,600	2350	.62	.79	.94	10.9	37,100	2650	.63	.81	.96	10.4	35,600	3000	.64	.82	.98	10.0	34,000	3400	.65	.85	.99
71°F (21.7°C)	470	1000	11.5	39,400	2360	.43	.55	.68	11.1	38,000	2660	.43	.56	.69	10.7	36,400	3010	.43	.57	.70	10.2	34,900	3400	.43	.58	.72
	565	1200	11.8	40,400	2370	.44	.58	.72	11.4	38,900	2670	.44	.59	.74	10.9	37,300	3020	.44	.60	.75	10.4	35,600	3410	.45	.61	.77
	660	1400	12.0	41,100	2380	.45	.61	.77	11.6	39,600	2680	.45	.62	.78	11.1	37,900	3020	.45	.63	.80	10.6	36,200	3420	.46	.64	.82

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

12HPB36 — COOLING CAPACITY — CB30M-31 - CB30U-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		
	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)	495	1050	10.1	34,400	2310	.74	.88	.99	9.7	33,200	2610	.75	.90	1.00	9.3	31,900	2950	.77	.92	1.00	8.9	30,500	3340	.78	.94	1.00
	540	1150	10.3	35,000	2320	.76	.91	1.00	9.9	33,700	2610	.78	.93	1.00	9.5	32,400	2950	.79	.94	1.00	9.1	31,000	3340	.81	.96	1.00
	590	1250	10.4	35,500	2320	.78	.94	1.00	10.0	34,200	2620	.80	.95	1.00	9.6	32,900	2960	.81	.97	1.00	9.2	31,500	3350	.83	.99	1.00
67°F (19.4°C)	495	1050	10.7	36,600	2330	.58	.72	.85	10.3	35,300	2630	.58	.73	.87	9.9	33,900	2970	.59	.74	.88	9.5	32,400	3360	.60	.76	.90
	540	1150	10.9	37,100	2330	.59	.74	.88	10.5	35,700	2630	.60	.75	.90	10.1	34,300	2970	.61	.77	.91	9.6	32,800	3360	.62	.78	.93
	590	1250	11.0	37,500	2330	.60	.76	.91	10.6	36,100	2630	.61	.77	.92	10.2	34,700	2970	.62	.79	.94	9.7	33,100	3370	.63	.81	.96
71°F (21.7°C)	495	1050	11.5	39,100	2350	.43	.56	.69	11.0	37,700	2650	.43	.57	.70	10.6	36,200	2990	.43	.58	.72	10.1	34,600	3380	.44	.59	.73
	540	1150	11.6	39,600	2350	.43	.57	.71	11.2	38,200	2650	.44	.58	.73	10.7	36,600	3000	.44	.59	.74	10.3	35,000	3390	.44	.60	.76
	590	1250	11.7	40,000	2350	.44	.59	.74	11.3	38,500	2650	.44	.60	.75	10.8	36,900	3000	.44	.61	.77	10.3	35,300	3390	.45	.62	.79

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

12HPB36 — HEATING CAPACITY — CB28UH-048 - CB29M-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	
470	1000	11.8	40,300	2645	9.1	31,000	2455	6.2	21,000	2250	4.5	15,400	2030	2.2	7,500	1515
565	1200	12.0	41,100	2510	9.3	31,800	2320	6.4	21,800	2115	4.7	16,200	1895	2.4	8,300	1380
660	1400	12.2	41,500	2415	9.4	32,200	2225	6.5	22,200	2020	4.9	16,600	1800	2.5	8,700	1285

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

12HPB36 — HEATING CAPACITY — CB30M-31 - CB30U-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	
495	1050	11.7	40,000	2485	9.1	30,900	2340	6.2	21,100	2185	4.6	15,700	1995	2.3	7,900	1460
545	1150	11.8	40,300	2425	9.1	31,200	2280	6.3	21,400	2125	4.7	16,000	1935	2.4	8,200	1400
590	1250	11.9	40,500	2370	9.2	31,400	2225	6.3	21,600	2070	4.7	16,200	1880	2.5	8,400	1345

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

12HPB36 — HEATING PERFORMANCE
CB28UH-048 - CB29M-51 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2510	41,100	12.0
60	16	2465	39,000	11.4
55	13	2420	36,900	10.8
50	10	2380	34,900	10.2
47	8	2350	33,600	9.8
45	7	2320	31,800	9.3
40	4	2235	27,200	8.0
35	2	2155	22,600	6.6
30	-1	2135	22,200	6.5
25	-4	2115	21,800	6.4
20	-7	2095	21,400	6.3
17	-8	2085	21,100	6.2
15	-9	2065	20,300	5.9
10	-12	2025	18,200	5.3
5	-15	1895	16,200	4.7
0	-18	1765	14,200	4.2
-5	-21	1635	12,300	3.6
-10	-23	1510	10,300	3.0
-15	-26	1380	8,300	2.4
-20	-29	1250	6,300	1.8

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

12HPB36 — HEATING PERFORMANCE
CB30M-31 - CB30U-31 at 1150 cfm (545 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2425	40,300	11.8
60	16	2395	38,300	11.2
55	13	2360	36,300	10.6
50	10	2330	34,200	10.0
47	8	2310	33,000	9.7
45	7	2280	31,200	9.1
40	4	2210	26,700	7.8
35	2	2135	22,200	6.5
30	-1	2130	21,800	6.4
25	-4	2125	21,400	6.3
20	-7	2120	21,000	6.2
17	-8	2115	20,800	6.1
15	-9	2100	20,000	5.9
10	-12	2070	18,000	5.3
5	-15	1935	16,000	4.7
0	-18	1805	14,000	4.1
-5	-21	1670	12,100	3.5
-10	-23	1535	10,100	3.0
-15	-26	1400	8,200	2.4
-20	-29	1270	6,200	1.8

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

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

12HPB36 — COOLING CAPACITY — CB30M-41 - CB30U-41/46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	470	1000	10.1	34,500	2250	.73	.87	.98	9.8	33,300	2530	.74	.88	1.00	9.3	31,900	2860	.75	.90	1.00	9.0	30,600	3240	.77	.92	1.00
	565	1200	10.4	35,600	2250	.77	.92	1.00	10.1	34,300	2540	.79	.94	1.00	9.7	33,000	2870	.80	.96	1.00	9.3	31,600	3250	.82	.98	1.00
	660	1400	10.7	36,600	2260	.81	.97	1.00	10.3	35,300	2550	.83	.98	1.00	10.0	34,000	2890	.85	1.00	1.00	9.6	32,600	3270	.87	1.00	1.00
67°F (19.4°C)	470	1000	10.8	36,800	2260	.57	.70	.83	10.4	35,500	2550	.58	.71	.85	10.0	34,000	2880	.58	.73	.87	9.5	32,500	3270	.59	.74	.89
	565	1200	11.1	37,800	2270	.60	.75	.89	10.7	36,400	2560	.60	.76	.91	10.2	34,900	2890	.61	.78	.93	9.8	33,300	3270	.62	.80	.95
	660	1400	11.3	38,500	2280	.62	.79	.94	10.8	37,000	2570	.63	.81	.96	10.4	35,500	2900	.64	.83	.98	10.0	34,000	3280	.65	.85	.99
71°F (21.7°C)	470	1000	11.5	39,300	2280	.43	.55	.68	11.1	37,900	2570	.43	.56	.69	10.7	36,400	2910	.43	.57	.70	10.2	34,800	3290	.43	.58	.72
	565	1200	11.8	40,300	2290	.44	.58	.72	11.4	38,800	2580	.44	.59	.74	10.9	37,200	2920	.44	.60	.75	10.4	35,600	3300	.45	.61	.77
	660	1400	12.0	41,000	2300	.45	.61	.77	11.6	39,500	2590	.45	.62	.78	11.1	37,800	2920	.45	.63	.80	10.6	36,100	3310	.46	.64	.82

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

12HPB36 — COOLING CAPACITY — CB30M-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	470	1000	10.0	34,200	2320	.73	.87	.98	9.6	32,900	2610	.74	.88	1.00	9.3	31,600	2950	.75	.90	1.00	8.9	30,300	3340	.77	.92	1.00
	565	1200	10.3	35,300	2320	.77	.92	1.00	10.0	34,000	2620	.79	.94	1.00	9.6	32,600	2960	.80	.96	1.00	9.2	31,300	3350	.82	.98	1.00
	660	1400	10.6	36,200	2330	.81	.97	1.00	10.2	34,900	2630	.83	.98	1.00	9.8	33,600	2970	.85	1.00	1.00	9.5	32,300	3370	.87	1.00	1.00
67°F (19.4°C)	470	1000	10.7	36,400	2330	.57	.70	.83	10.3	35,100	2630	.58	.71	.85	9.9	33,700	2970	.58	.73	.87	9.4	32,200	3370	.59	.74	.89
	565	1200	11.0	37,400	2340	.60	.75	.89	10.6	36,000	2640	.60	.76	.91	10.1	34,500	2980	.61	.78	.93	9.7	33,000	3370	.62	.80	.95
	660	1400	11.2	38,100	2350	.62	.79	.94	10.8	36,700	2640	.63	.81	.96	10.3	35,200	2990	.64	.83	.98	9.8	33,600	3380	.65	.85	.99
71°F (21.7°C)	470	1000	11.4	38,900	2350	.43	.55	.68	11.0	37,500	2650	.43	.56	.69	10.6	36,000	3000	.43	.57	.70	10.1	34,400	3390	.43	.58	.72
	565	1200	11.7	39,900	2360	.44	.58	.72	11.3	38,400	2660	.44	.59	.74	10.8	36,800	3010	.44	.60	.75	10.3	35,200	3400	.45	.61	.77
	660	1400	11.9	40,600	2370	.45	.61	.77	11.5	39,100	2670	.45	.62	.78	11.0	37,400	3010	.45	.63	.80	10.5	35,800	3410	.46	.64	.82

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

12HPB36 — HEATING CAPACITY — CB30M-41 - CB30U-41/46

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	11.8	40,200	2540	9.1	31,000	2385	6.2	21,100	2220	4.5	15,500	2035	2.3	7,700	1510
565	1200	12.0	40,800	2420	9.3	31,600	2265	6.4	21,700	2100	4.7	16,100	1915	2.4	8,300	1390
660	1400	12.0	41,100	2335	9.3	31,900	2180	6.4	22,000	2015	4.8	16,400	1830	2.5	8,600	1305

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

12HPB36 — HEATING CAPACITY — CB30M-46

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	11.8	40,300	2580	9.1	31,100	2425	6.2	21,200	2255	4.6	15,600	2075	2.3	7,800	1535
565	1200	12.0	40,800	2460	9.3	31,600	2305	6.4	21,700	2135	4.7	16,100	1955	2.4	8,300	1415
660	1400	12.1	41,200	2375	9.4	32,000	2220	6.5	22,100	2050	4.8	16,500	1870	2.5	8,700	1330

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

12HPB36 — HEATING PERFORMANCE CB30M-41 - CB30U-41/46 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2420	40,800	12.0
60	16	2385	38,800	11.4
55	13	2350	36,700	10.8
50	10	2320	34,600	10.1
47	8	2300	33,400	9.8
45	7	2265	31,600	9.3
40	4	2185	27,000	7.9
35	2	2100	22,500	6.6
30	-1	2100	22,100	6.5
25	-4	2100	21,700	6.4
20	-7	2095	21,200	6.2
17	-8	2095	21,000	6.2
15	-9	2080	20,200	5.9
10	-12	2050	18,100	5.3
5	-15	1915	16,100	4.7
0	-18	1785	14,200	4.2
-5	-21	1650	12,200	3.6
-10	-23	1520	10,200	3.0
-15	-26	1390	8,300	2.4
-20	-29	1255	6,300	1.8

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

12HPB36 — HEATING PERFORMANCE CB30M-46 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2460	40,800	12.0
60	16	2425	38,800	11.4
55	13	2390	36,700	10.8
50	10	2360	34,600	10.1
47	8	2340	33,400	9.8
45	7	2305	31,600	9.3
40	4	2220	27,000	7.9
35	2	2135	22,500	6.6
30	-1	2135	22,100	6.5
25	-4	2135	21,700	6.4
20	-7	2135	21,200	6.2
17	-8	2135	21,000	6.2
15	-9	2120	20,200	5.9
10	-12	2090	18,100	5.3
5	-15	1955	16,100	4.7
0	-18	1820	14,200	4.2
-5	-21	1685	12,200	3.6
-10	-23	1550	10,200	3.0
-15	-26	1415	8,300	2.4
-20	-29	1280	6,300	1.8

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

HEATING AND COOLING RATINGS — 3 TON

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

12HPB36 — COOLING CAPACITY — CB31MV-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	535	1135	10.3	35,000	2250	.76	.91	1.00	9.9	33,700	2540	.78	.93	1.00	9.5	32,400	2870	.79	.94	1.00	9.1	31,000	3250	.81	.96	1.00
	600	1275	10.4	35,600	2250	.79	.94	1.00	10.1	34,300	2540	.80	.96	1.00	9.7	33,000	2870	.82	.98	1.00	9.3	31,600	3250	.84	.99	1.00
	660	1400	10.6	36,200	2260	.81	.97	1.00	10.2	34,900	2550	.83	.98	1.00	9.8	33,600	2880	.85	1.00	1.00	9.5	32,300	3260	.87	1.00	1.00
67°F (19.4°C)	535	1135	10.9	37,200	2270	.59	.74	.88	10.5	35,800	2560	.60	.75	.90	10.1	34,300	2890	.61	.77	.91	9.6	32,800	3270	.62	.78	.93
	600	1275	11.0	37,700	2270	.60	.76	.91	10.6	36,300	2560	.61	.78	.93	10.2	34,800	2890	.62	.80	.95	9.7	33,200	3270	.64	.82	.97
	660	1400	11.2	38,100	2270	.62	.79	.94	10.8	36,700	2560	.63	.81	.96	10.3	35,200	2900	.64	.83	.98	9.8	33,600	3280	.65	.85	.99
71°F (21.7°C)	535	1135	11.6	39,700	2290	.43	.57	.71	11.2	38,200	2580	.44	.58	.73	10.8	36,700	2910	.44	.59	.74	10.3	35,000	3300	.44	.60	.76
	600	1275	11.8	40,200	2290	.44	.59	.74	11.3	38,700	2580	.44	.60	.76	10.9	37,100	2920	.45	.61	.77	10.4	35,400	3300	.45	.62	.79
	660	1400	11.9	40,600	2290	.45	.61	.77	11.5	39,100	2590	.45	.62	.78	11.0	37,400	2920	.45	.63	.80	10.5	35,800	3300	.46	.64	.82

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

12HPB36 — 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) 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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	10.1	34,600	2270	.74	.88	1.00	9.8	33,300	2560	.75	.90	1.00	9.4	32,000	2900	.77	.92	1.00	9.0	30,600	3280	.78	.94	1.00
	565	1200	10.4	35,400	2280	.77	.92	1.00	10.0	34,100	2570	.79	.94	1.00	9.6	32,800	2900	.80	.96	1.00	9.2	31,400	3280	.82	.98	1.00
	635	1350	10.6	36,100	2280	.81	.96	1.00	10.2	34,800	2570	.82	.98	1.00	9.8	33,500	2910	.84	.99	1.00	9.4	32,100	3290	.86	1.00	1.00
67°F (19.4°C)	495	1050	10.8	36,800	2290	.58	.72	.85	10.4	35,400	2580	.58	.73	.87	10.0	34,000	2910	.59	.74	.88	9.5	32,500	3300	.60	.76	.90
	565	1200	11.0	37,500	2290	.60	.75	.89	10.6	36,100	2580	.61	.76	.91	10.1	34,600	2920	.61	.78	.93	9.7	33,100	3300	.63	.80	.95
	635	1350	11.2	38,100	2300	.62	.78	.93	10.8	36,700	2590	.63	.80	.95	10.3	35,100	2920	.64	.82	.97	9.8	33,600	3310	.65	.84	.99
71°F (21.7°C)	495	1050	11.5	39,200	2310	.43	.56	.69	11.1	37,800	2600	.43	.57	.70	10.6	36,300	2940	.44	.58	.72	10.2	34,700	3320	.44	.59	.73
	565	1200	11.7	39,900	2310	.44	.58	.73	11.3	38,500	2610	.44	.59	.74	10.8	36,900	2940	.44	.60	.76	10.3	35,300	3330	.45	.61	.77
	635	1350	11.9	40,500	2320	.45	.60	.76	11.4	39,000	2610	.45	.61	.78	11.0	37,400	2950	.45	.62	.79	10.5	35,700	3340	.46	.64	.81

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

12HPB36 — HEATING CAPACITY — CB31MV-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	
535	1135	11.7	40,000	2325	9.0	30,800	2180	6.2	21,000	2035	4.5	15,500	1835	2.3	7,700	1350
600	1275	11.8	40,400	2255	9.1	31,200	2110	6.3	21,400	1965	4.7	15,900	1765	2.4	8,100	1280
660	1400	11.9	40,700	2205	9.2	31,500	2060	6.4	21,700	1915	4.7	16,200	1715	2.5	8,400	1230

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

12HPB36 — 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	
495	1050	12.5	42,800	2625	9.6	32,800	2365	6.5	22,200	2095	4.8	16,400	1770	2.4	8100	1350
565	1200	12.7	43,200	2540	9.8	33,300	2280	6.7	22,700	2010	5.0	16,900	1685	2.5	8600	1265
635	1350	12.8	43,800	2455	9.9	33,900	2190	6.8	23,300	1920	5.1	17,500	1600	2.7	9200	1180

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

12HPB36 — HEATING PERFORMANCE CB31MV-41 at 1275 cfm (600 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2255	40,400	11.8
60	16	2220	38,300	11.2
55	13	2185	36,300	10.6
50	10	2150	34,200	10.0
47	8	2130	33,000	9.7
45	7	2110	31,200	9.1
40	4	2060	26,700	7.8
35	2	2010	22,200	6.5
30	-1	1990	21,800	6.4
25	-4	1965	21,400	6.3
20	-7	1945	21,000	6.2
17	-8	1930	20,700	6.1
15	-9	1920	19,900	5.8
10	-12	1885	17,800	5.2
5	-15	1765	15,900	4.7
0	-18	1640	14,000	4.1
-5	-21	1520	12,000	3.5
-10	-23	1400	10,100	3.0
-15	-26	1280	8,100	2.4
-20	-29	1160	6,200	1.8

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

12HPB36 — HEATING PERFORMANCE CVP10-41/EC10Q3 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2540	43,200	12.7
60	16	2475	41,000	12.0
55	13	2415	38,800	11.4
50	10	2350	36,500	10.7
47	8	2315	35,200	10.3
45	7	2280	33,300	9.8
40	4	2190	28,500	8.4
35	2	2100	23,800	7.0
30	-1	2055	23,200	6.8
25	-4	2010	22,700	6.7
20	-7	1965	22,100	6.5
17	-8	1935	21,800	6.4
15	-9	1895	21,000	6.2
10	-12	1790	18,900	5.5
5	-15	1685	16,900	5.0
0	-18	1580	14,800	4.3
-5	-21	1475	12,700	3.7
-10	-23	1370	10,700	3.1
-15	-26	1265	8600	2.5
-20	-29	1160	6500	1.9

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

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

12HPB36 — COOLING CAPACITY — C26-41 - CH23-51

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		
	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)	470	1000	10.3	35,000	2270	.73	.87	.98	9.9	33,700	2550	.74	.88	1.00	9.5	32,400	2890	.75	.90	1.00	9.1	31,000	3270	.77	.92	1.00
	540	1150	10.5	35,800	2270	.76	.91	1.00	10.1	34,500	2560	.78	.93	1.00	9.7	33,100	2900	.79	.94	1.00	9.3	31,700	3280	.81	.96	1.00
	615	1300	10.7	36,500	2280	.79	.95	1.00	10.3	35,200	2570	.81	.96	1.00	9.9	33,800	2900	.82	.98	1.00	9.5	32,400	3290	.84	1.00	1.00
67°F (19.4°C)	470	1000	10.9	37,200	2280	.57	.71	.83	10.5	35,900	2570	.58	.72	.85	10.1	34,400	2910	.59	.73	.87	9.6	32,900	3290	.59	.74	.89
	540	1150	11.1	37,900	2290	.59	.74	.88	10.7	36,600	2580	.60	.75	.90	10.3	35,100	2920	.61	.77	.91	9.8	33,500	3300	.62	.78	.93
	615	1300	11.3	38,600	2290	.61	.77	.92	10.9	37,100	2590	.62	.79	.94	10.4	35,600	2920	.63	.80	.95	10.0	34,000	3310	.64	.82	.97
71°F (21.7°C)	470	1000	11.6	39,700	2300	.43	.55	.68	11.2	38,300	2590	.43	.56	.69	10.8	36,700	2930	.43	.57	.70	10.3	35,200	3320	.44	.58	.72
	540	1150	11.9	40,500	2310	.44	.57	.71	11.4	39,000	2600	.44	.58	.73	11.0	37,400	2940	.44	.59	.74	10.5	35,800	3330	.44	.60	.76
	615	1300	12.0	41,100	2310	.44	.59	.75	11.6	39,500	2610	.45	.60	.76	11.1	37,900	2940	.45	.61	.78	10.6	36,200	3330	.45	.63	.80

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

12HPB36 — C33-38A/B COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	33.7	9.9	2.31	.72	.85	.97	32.5	9.5	2.60	.73	.87	.98	31.2	9.1	2.93	.74	.89	1.00	29.9	8.8	3.32	.76	.90	1.00
	1200	565	34.8	10.2	2.31	.76	.91	1.00	33.5	9.8	2.61	.77	.92	1.00	32.2	9.4	2.94	.78	.94	1.00	30.9	9.1	3.33	.80	.96	1.00
	1400	660	35.7	10.5	2.32	.80	.95	1.00	34.4	10.1	2.62	.81	.97	1.00	33.1	9.7	2.95	.83	.98	1.00	31.8	9.3	3.34	.85	.99	1.00
67°F (19°C)	1000	470	36.0	10.6	2.32	.56	.69	.82	34.7	10.2	2.62	.57	.70	.84	33.3	9.8	2.96	.58	.71	.85	31.9	9.3	3.34	.58	.73	.87
	1200	565	37.0	10.8	2.33	.59	.73	.88	35.6	10.4	2.63	.59	.75	.89	34.2	10.0	2.96	.60	.76	.91	32.7	9.6	3.36	.61	.78	.93
	1400	660	37.7	11.0	2.34	.61	.77	.92	36.3	10.6	2.63	.62	.79	.94	34.8	10.2	2.97	.63	.81	.96	33.3	9.8	3.37	.64	.83	.98
71°F (22°C)	1000	470	38.4	11.3	2.34	.42	.55	.67	37.1	10.9	2.64	.43	.55	.68	35.6	10.4	2.98	.43	.56	.69	34.1	10.0	3.37	.43	.57	.70
	1200	565	39.4	11.5	2.35	.43	.57	.71	38.0	11.1	2.65	.43	.58	.72	36.5	10.7	2.99	.44	.59	.74	34.9	10.2	3.38	.44	.60	.75
	1400	660	40.1	11.8	2.36	.44	.60	.75	38.7	11.3	2.65	.44	.60	.77	37.1	10.9	2.99	.45	.62	.78	35.4	10.4	3.39	.45	.63	.80

12HPB36 — HEATING CAPACITY - C26-41 - CH23-51

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	
470	1000	12.2	41,500	2560	9.4	32,100	2370	6.4	22,000	2170	4.8	16,400	1865	2.4	8100	1425
540	1150	12.3	42,000	2465	9.6	32,600	2275	6.6	22,500	2075	5.0	16,900	1770	2.5	8600	1330
615	1300	12.5	42,500	2365	9.7	33,100	2170	6.7	23,000	1975	5.1	17,400	1665	2.7	9100	1230

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

12HPB36 - C33-38A/B - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1000	470	41.0	12.0	2.64	31.5	9.2	2.52	21.3	6.2	2.39	15.8	4.6	2.18	7.8	2.3	1.62
1200	565	41.5	12.2	2.49	32.0	9.4	2.37	21.8	6.4	2.25	16.3	4.8	2.03	8.3	2.4	1.47
1400	660	41.9	12.3	2.40	32.4	9.5	2.28	22.2	6.5	2.16	16.7	4.9	1.94	8.7	2.5	1.38

12HPB36 — HEATING PERFORMANCE C26-41 - CH23-51 at 1150 cfm (540 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2465	42,000	12.3
60	16	2420	39,900	11.7
55	13	2375	37,800	11.1
50	10	2330	35,700	10.5
47	8	2300	34,400	10.1
45	7	2275	32,600	9.6
40	4	2200	27,900	8.2
35	2	2130	23,300	6.8
30	-1	2100	22,900	6.7
25	-4	2075	22,500	6.6
20	-7	2050	22,100	6.5
17	-8	2030	21,800	6.4
15	-9	1990	21,000	6.2
10	-12	1880	18,900	5.5
5	-15	1770	16,900	5.0
0	-18	1660	14,800	4.3
-5	-21	1550	12,700	3.7
-10	-23	1440	10,700	3.1
-15	-26	1330	8600	2.5
-20	-29	1220	6500	1.9

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

12HPB36 - C33-38A/B - HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.49	41.5	12.2
60	16	2.46	39.4	11.5
55	13	2.43	37.3	10.9
50	10	2.40	35.2	10.3
47	8	2.39	33.9	9.9
45	7	2.37	32.0	9.4
40	4	2.33	27.3	8.0
35	2	2.29	22.7	6.7
30	-1	2.27	22.2	6.5
25	-4	2.25	21.8	6.4
20	-7	2.23	21.4	6.3
17	-8	2.21	21.2	6.2
15	-9	2.20	20.4	6.0
10	-12	2.17	18.2	5.3
5	-15	2.03	16.3	4.8
0	-18	1.89	14.3	4.2
-5	-21	1.75	12.3	3.6
-10	-23	1.61	10.3	3.0
-15	-26	1.47	8.3	2.4
-20	-29	1.33	6.4	1.9

HEATING AND COOLING RATINGS — 3 TON

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

12HPB36 — COOLING CAPACITY — C26-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	10.4	35,600	2270	.74	.88	1.00	10.0	34,200	2570	.75	.90	1.00	9.6	32,800	2900	.77	.92	1.00	9.2	31,400	3280	.78	.94	1.00
	565	1200	10.7	36,400	2280	.78	.93	1.00	10.3	35,000	2570	.79	.94	1.00	9.8	33,600	2910	.81	.96	1.00	9.4	32,200	3290	.82	.98	1.00
	635	1350	10.9	37,100	2290	.81	.97	1.00	10.5	35,800	2580	.82	.98	1.00	10.1	34,400	2910	.84	1.00	1.00	9.7	33,000	3300	.86	1.00	1.00
67°F (19.4°C)	495	1050	11.1	37,800	2290	.58	.72	.85	10.7	36,400	2590	.59	.73	.87	10.2	34,900	2920	.59	.74	.89	9.8	33,300	3300	.60	.76	.91
	565	1200	11.3	38,500	2300	.60	.75	.90	10.9	37,100	2590	.61	.77	.91	10.4	35,600	2930	.62	.78	.93	10.0	34,000	3310	.63	.80	.95
	635	1350	11.5	39,100	2300	.62	.79	.94	11.0	37,600	2590	.63	.80	.95	10.6	36,100	2930	.64	.82	.97	10.1	34,500	3320	.65	.84	.99
71°F (21.7°C)	495	1050	11.8	40,400	2310	.43	.56	.69	11.4	38,800	2610	.43	.57	.70	10.9	37,300	2940	.44	.58	.72	10.4	35,600	3330	.44	.59	.73
	565	1200	12.0	41,100	2320	.44	.58	.73	11.6	39,500	2610	.44	.59	.74	11.1	37,900	2950	.44	.60	.76	10.6	36,200	3340	.45	.61	.78
	635	1350	12.2	41,600	2320	.45	.61	.76	11.8	40,100	2620	.45	.62	.78	11.3	38,400	2960	.45	.63	.80	10.7	36,600	3340	.46	.64	.82

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

12HPB36 — C33-48B/C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	34.3	10.1	2.32	.72	.85	.97	33.1	9.7	2.61	.73	.87	.99	31.8	9.3	2.95	.74	.89	.99	30.5	8.9	3.33	.76	.90	1.00
	1200	565	35.4	10.4	2.32	.76	.91	1.00	34.1	10.0	2.62	.77	.92	1.00	32.8	9.6	2.95	.79	.94	1.00	31.4	9.2	3.35	.80	.96	1.00
	1400	660	36.3	10.6	2.33	.80	.95	1.00	35.0	10.3	2.63	.81	.97	1.00	33.7	9.9	2.96	.83	.98	1.00	32.3	9.5	3.36	.85	1.00	1.00
67°F (19°C)	1000	470	36.6	10.7	2.33	.57	.69	.82	35.3	10.3	2.63	.57	.70	.84	33.9	9.9	2.97	.58	.72	.85	32.5	9.5	3.36	.58	.73	.87
	1200	565	37.6	11.0	2.34	.59	.73	.88	36.2	10.6	2.64	.59	.75	.89	34.8	10.2	2.97	.60	.76	.91	33.3	9.8	3.37	.61	.78	.93
	1400	660	38.3	11.2	2.35	.61	.78	.92	36.9	10.8	2.64	.62	.79	.94	35.4	10.4	2.99	.63	.81	.96	33.9	9.9	3.38	.64	.83	.98
71°F (22°C)	1000	470	39.1	11.5	2.35	.42	.55	.67	37.7	11.0	2.65	.43	.55	.68	36.2	10.6	2.99	.43	.56	.69	34.7	10.2	3.38	.43	.57	.70
	1200	565	40.1	11.8	2.36	.43	.57	.71	38.6	11.3	2.66	.44	.58	.72	37.1	10.9	3.00	.44	.59	.74	35.5	10.4	3.39	.44	.60	.75
	1400	660	40.9	12.0	2.37	.44	.60	.75	39.4	11.5	2.66	.44	.61	.77	37.8	11.1	3.01	.45	.62	.78	36.1	10.6	3.41	.45	.63	.80

12HPB36 — HEATING CAPACITY — C26-46

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	
495	1050	12.2	41,700	2535	9.4	32,100	2370	6.4	21,900	2190	4.8	16,300	1890	2.3	8000	1450
565	1200	12.4	42,300	2430	9.6	32,700	2260	6.6	22,500	2085	5.0	16,900	1785	2.5	8600	1340
635	1350	12.5	42,700	2320	9.7	33,200	2150	6.7	22,900	1975	5.1	17,300	1675	2.6	9000	1230

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

12HPB36 - C33-48B/C - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1000	470	40.9	12.0	2.71	31.5	9.2	2.56	21.3	6.2	2.40	15.8	4.6	2.16	7.8	2.3	1.61
1200	565	41.4	12.1	2.57	32.0	9.4	2.42	21.8	6.4	2.26	16.3	4.8	2.02	8.3	2.4	1.47
1400	660	41.8	12.3	2.46	32.4	9.5	2.31	22.2	6.5	2.15	16.7	4.9	1.91	8.7	2.5	1.36

12HPB36 — HEATING PERFORMANCE C26-46 at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2430	42,300	12.4
60	16	2390	40,100	11.8
55	13	2350	38,000	11.1
50	10	2310	35,900	10.5
47	8	2285	34,600	10.1
45	7	2260	32,700	9.6
40	4	2195	28,100	8.2
35	2	2125	23,400	6.9
30	-1	2105	22,900	6.7
25	-4	2085	22,500	6.6
20	-7	2060	22,100	6.5
17	-8	2050	21,800	6.4
15	-9	2005	21,000	6.2
10	-12	1895	18,900	5.5
5	-15	1785	16,900	5.0
0	-18	1675	14,800	4.3
-5	-21	1560	12,700	3.7
-10	-23	1450	10,700	3.1
-15	-26	1340	8600	2.5
-20	-29	1230	6500	1.9

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

12HPB36 - C33-48B/C - HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.57	41.4	12.1
60	16	2.53	39.3	11.5
55	13	2.50	37.2	10.9
50	10	2.46	35.1	10.3
47	8	2.44	33.9	9.9
45	7	2.42	32.0	9.4
40	4	2.37	27.3	8.0
35	2	2.33	22.6	6.6
30	-1	2.30	22.2	6.5
25	-4	2.26	21.8	6.4
20	-7	2.23	21.4	6.3
17	-8	2.21	21.2	6.2
15	-9	2.20	20.4	6.0
10	-12	2.16	18.2	5.3
5	-15	2.02	16.3	4.8
0	-18	1.88	14.3	4.2
-5	-21	1.75	12.3	3.6
-10	-23	1.61	10.3	3.0
-15	-26	1.47	8.3	2.4
-20	-29	1.33	6.4	1.9

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

12HPB36 — COOLING CAPACITY — CR26-30N-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	400	850	9.6	32,900	2250	.70	.83	.94	9.3	31,700	2530	.71	.84	.96	8.9	30,500	2870	.72	.86	.97	8.6	29,300	3240	.73	.87	.99
	470	1000	9.9	33,800	2250	.73	.87	.98	9.6	32,600	2540	.74	.89	.99	9.2	31,400	2870	.76	.90	1.00	8.8	30,100	3260	.77	.92	1.00
	540	1150	10.1	34,600	2260	.76	.91	1.00	9.8	33,400	2550	.78	.93	1.00	9.4	32,100	2880	.79	.94	1.00	9.0	30,800	3260	.81	.96	1.00
67°F (19.4°C)	400	850	10.3	35,000	2260	.56	.68	.80	9.9	33,800	2550	.56	.69	.81	9.5	32,500	2880	.57	.70	.82	9.1	31,200	3270	.57	.71	.84
	470	1000	10.5	35,900	2270	.57	.71	.84	10.2	34,700	2560	.58	.72	.85	9.8	33,300	2890	.59	.73	.87	9.3	31,900	3270	.59	.75	.89
	540	1150	10.7	36,600	2270	.59	.74	.88	10.3	35,300	2560	.60	.75	.90	9.9	33,900	2900	.61	.77	.91	9.5	32,400	3280	.62	.78	.93
71°F (21.7°C)	400	850	11.0	37,400	2280	.43	.54	.65	10.6	36,100	2570	.43	.54	.66	10.2	34,700	2900	.43	.55	.67	9.8	33,300	3290	.43	.56	.68
	470	1000	11.2	38,200	2280	.43	.56	.68	10.8	36,900	2580	.43	.56	.69	10.4	35,500	2910	.43	.57	.71	10.0	34,000	3300	.44	.58	.72
	540	1150	11.4	38,900	2290	.44	.58	.72	11.0	37,600	2580	.44	.58	.73	10.6	36,100	2920	.44	.59	.74	10.1	34,500	3300	.45	.60	.76

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

12HPB36 — COOLING CAPACITY — CR26-36N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	10.3	35,200	2270	.74	.88	1.00	9.9	33,900	2560	.75	.90	1.00	9.6	32,600	2890	.77	.92	1.00	9.1	31,200	3270	.78	.94	1.00
	565	1200	10.6	36,000	2270	.77	.92	1.00	10.2	34,700	2560	.79	.94	1.00	9.8	33,300	2900	.80	.96	1.00	9.3	31,900	3280	.82	.98	1.00
	635	1350	10.8	36,700	2270	.80	.96	1.00	10.4	35,400	2570	.82	.97	1.00	10.0	34,000	2900	.84	.99	1.00	9.6	32,600	3280	.85	1.00	1.00
67°F (19.4°C)	495	1050	11.0	37,400	2280	.58	.72	.85	10.6	36,100	2570	.58	.73	.87	10.1	34,600	2910	.59	.74	.88	9.7	33,100	3290	.60	.76	.90
	565	1200	11.2	38,100	2280	.60	.75	.89	10.8	36,700	2580	.60	.76	.91	10.3	35,200	2910	.61	.78	.93	9.8	33,600	3300	.62	.80	.95
	635	1350	11.3	38,600	2290	.62	.78	.93	10.9	37,200	2580	.62	.80	.95	10.5	35,700	2920	.63	.81	.97	10.0	34,100	3300	.65	.83	.98
71°F (21.7°C)	495	1050	11.7	39,900	2300	.43	.56	.69	11.3	38,500	2590	.43	.57	.70	10.8	36,900	2930	.44	.58	.72	10.3	35,300	3320	.44	.59	.73
	565	1200	11.9	40,600	2310	.44	.58	.73	11.5	39,100	2600	.44	.59	.74	11.0	37,500	2940	.44	.60	.76	10.5	35,900	3320	.45	.61	.77
	635	1350	12.0	41,100	2310	.44	.60	.76	11.6	39,600	2600	.45	.61	.77	11.1	38,000	2940	.45	.62	.79	10.6	36,300	3330	.46	.64	.81

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

12HPB36 — HEATING CAPACITY — CR26-30N-F

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	
400	850	11.9	40,700	2910	9.2	31,500	2600	6.4	21,800	2280	4.7	16,200	1925	2.4	8100	1485
470	1000	12.0	41,100	2770	9.4	32,000	2460	6.5	22,200	2140	4.9	16,700	1785	2.5	8500	1340
540	1150	12.3	41,800	2630	9.6	32,700	2320	6.7	22,900	2000	5.1	17,400	1645	2.7	9200	1200

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

12HPB36 — HEATING CAPACITY — CR26-36N/W-F

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	
495	1050	12.2	41,600	2560	9.4	32,200	2330	6.5	22,100	2095	4.8	16,500	1780	2.4	8200	1360
565	1200	12.3	42,000	2470	9.6	32,600	2240	6.6	22,500	2005	5.0	16,900	1690	2.5	8600	1270
635	1350	12.5	42,500	2380	9.7	33,100	2150	6.7	23,000	1915	5.1	17,400	1605	2.7	9100	1185

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

12HPB36 — HEATING PERFORMANCE CR26-30N-F at 1000 cfm (470 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2770	41,100	12.0
60	16	2695	39,100	11.5
55	13	2620	37,100	10.9
50	10	2545	35,000	10.3
47	8	2500	33,800	9.9
45	7	2460	32,000	9.4
40	4	2355	27,500	8.1
35	2	2250	23,000	6.7
30	-1	2195	22,600	6.6
25	-4	2140	22,200	6.5
20	-7	2085	21,800	6.4
17	-8	2050	21,600	6.3
15	-9	2005	20,800	6.1
10	-12	1895	18,700	5.5
5	-15	1785	16,700	4.9
0	-18	1675	14,700	4.3
-5	-21	1565	12,600	3.7
-10	-23	1455	10,600	3.1
-15	-26	1340	8500	2.5
-20	-29	1230	6500	1.9

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

12HPB36 — HEATING PERFORMANCE CR26-36N/W-F at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2470	42,000	12.3
60	16	2415	39,900	11.7
55	13	2360	37,800	11.1
50	10	2305	35,700	10.5
47	8	2275	34,400	10.1
45	7	2240	32,600	9.6
40	4	2160	28,000	8.2
35	2	2080	23,400	6.9
30	-1	2040	22,900	6.7
25	-4	2005	22,500	6.6
20	-7	1965	22,100	6.5
17	-8	1945	21,800	6.4
15	-9	1900	21,000	6.2
10	-12	1795	18,900	5.5
5	-15	1690	16,900	5.0
0	-18	1585	14,800	4.3
-5	-21	1480	12,700	3.7
-10	-23	1375	10,700	3.1
-15	-26	1270	8600	2.5
-20	-29	1165	6500	1.9

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

HEATING AND COOLING RATINGS — 3 TON

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

12HPB36 — COOLING CAPACITY — CR26-48N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	10.4	35,500	2270	.74	.88	1.00	10.0	34,200	2560	.75	.90	1.00	9.6	32,800	2900	.77	.92	1.00	9.2	31,400	3280	.78	.94	1.00
	565	1200	10.6	36,300	2280	.77	.92	1.00	10.3	35,000	2570	.79	.94	1.00	9.8	33,600	2910	.80	.96	1.00	9.4	32,200	3290	.82	.98	1.00
	635	1350	10.9	37,100	2280	.80	.96	1.00	10.5	35,700	2580	.82	.98	1.00	10.1	34,300	2910	.84	.99	1.00	9.6	32,900	3290	.86	1.00	1.00
67°F (19.4°C)	495	1050	11.1	37,800	2290	.58	.71	.85	10.7	36,400	2580	.58	.73	.86	10.2	34,900	2920	.59	.74	.88	9.8	33,400	3300	.60	.76	.90
	565	1200	11.3	38,600	2290	.60	.75	.89	10.9	37,100	2590	.60	.76	.91	10.4	35,600	2930	.61	.78	.93	10.0	34,000	3310	.62	.80	.95
	635	1350	11.5	39,100	2300	.61	.78	.93	11.0	37,700	2590	.62	.80	.95	10.6	36,100	2930	.63	.81	.97	10.1	34,500	3320	.65	.83	.99
71°F (21.7°C)	495	1050	11.8	40,400	2310	.43	.56	.69	11.4	38,900	2610	.43	.57	.70	10.9	37,300	2940	.44	.58	.71	10.5	35,700	3330	.44	.59	.73
	565	1200	12.0	41,100	2320	.44	.58	.72	11.6	39,600	2610	.44	.59	.74	11.1	37,900	2950	.44	.60	.75	10.6	36,200	3340	.45	.61	.77
	635	1350	12.2	41,700	2320	.44	.60	.76	11.8	40,100	2620	.45	.61	.77	11.3	38,400	2960	.45	.62	.79	10.8	36,700	3340	.46	.64	.81

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

12HPB36 — CH33-36A/B-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	32.8	9.6	2.29	.72	.86	.97	31.7	9.3	2.59	.73	.87	.98	30.5	8.9	2.92	.74	.89	.99	29.2	8.6	3.31	.76	.91	1.00
	1200	565	33.8	9.9	2.30	.76	.91	1.00	32.6	9.6	2.60	.77	.92	1.00	31.4	9.2	2.93	.79	.94	1.00	30.2	8.9	3.32	.80	.95	1.00
	1400	660	34.6	10.1	2.31	.80	.95	1.00	33.4	9.8	2.60	.82	.97	1.00	32.2	9.4	2.93	.83	.98	1.00	31.0	9.1	3.32	.85	.99	1.00
67°F (19°C)	1000	470	35.0	10.3	2.31	.57	.69	.82	33.7	9.9	2.60	.57	.71	.84	32.5	9.5	2.94	.58	.72	.86	31.1	9.1	3.33	.59	.73	.87
	1200	565	35.8	10.5	2.31	.59	.74	.88	34.6	10.1	2.61	.60	.75	.89	33.2	9.7	2.95	.60	.77	.91	31.8	9.3	3.34	.61	.78	.93
	1400	660	36.5	10.7	2.32	.61	.78	.92	35.2	10.3	2.61	.62	.79	.94	33.8	9.9	2.95	.63	.81	.96	32.4	9.5	3.34	.64	.82	.97
71°F (22°C)	1000	470	37.3	10.9	2.32	.42	.55	.67	36.0	10.6	2.62	.43	.55	.68	34.6	10.1	2.96	.43	.56	.69	33.2	9.7	3.35	.43	.57	.71
	1200	565	38.2	11.2	2.33	.43	.57	.71	36.8	10.8	2.63	.43	.58	.73	35.4	10.4	2.97	.44	.59	.74	33.9	9.9	3.36	.44	.60	.76
	1400	660	38.8	11.4	2.34	.44	.60	.76	37.4	11.0	2.63	.45	.61	.77	36.0	10.6	2.98	.45	.62	.79	34.5	10.1	3.37	.45	.63	.80

12HPB36 — HEATING CAPACITY — CR26-48N/W-F

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	
495	1050	12.3	41,800	2485	9.4	32,200	2295	6.4	22,000	2095	4.8	16,400	1795	2.4	8100	1370
565	1200	12.4	42,300	2405	9.6	32,700	2215	6.6	22,500	2015	5.0	16,900	1715	2.5	8600	1290
635	1350	12.5	42,800	2325	9.8	33,300	2135	6.8	23,100	1935	5.1	17,400	1635	2.7	9200	1210

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

12HPB36 - CH33-36A/B-2F HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1000	470	40.9	12.0	2.74	31.4	9.2	2.57	21.3	6.2	2.40	15.8	4.6	2.16	7.8	2.3	1.60
1200	565	41.4	12.1	2.60	31.9	9.3	2.44	21.8	6.4	2.27	16.3	4.8	2.02	8.3	2.4	1.47
1400	660	41.8	12.3	2.50	32.3	9.5	2.33	22.2	6.5	2.16	16.7	4.9	1.92	8.7	2.5	1.36

12HPB36 — HEATING PERFORMANCE CR26-48N/W-F at 1200 cfm (565 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2405	42,300	12.4
60	16	2360	40,100	11.8
55	13	2315	38,000	11.1
50	10	2270	35,900	10.5
47	8	2240	34,600	10.1
45	7	2215	32,700	9.6
40	4	2140	28,100	8.2
35	2	2070	23,400	6.9
30	-1	2040	23,000	6.7
25	-4	2015	22,500	6.6
20	-7	1985	22,100	6.5
17	-8	1970	21,800	6.4
15	-9	1925	21,000	6.2
10	-12	1820	18,900	5.5
5	-15	1715	16,900	5.0
0	-18	1605	14,800	4.3
-5	-21	1500	12,700	3.7
-10	-23	1395	10,700	3.1
-15	-26	1290	8600	2.5
-20	-29	1180	6500	1.9

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

12HPB36 - CH33-36A/B-2F HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.60	41.4	12.1
60	16	2.56	39.3	11.5
55	13	2.52	37.2	10.9
50	10	2.48	35.1	10.3
47	8	2.46	33.8	9.9
45	7	2.44	31.9	9.3
40	4	2.38	27.3	8.0
35	2	2.33	22.6	6.6
30	-1	2.30	22.2	6.5
25	-4	2.27	21.8	6.4
20	-7	2.24	21.4	6.3
17	-8	2.22	21.2	6.2
15	-9	2.20	20.4	6.0
10	-12	2.16	18.3	5.4
5	-15	2.02	16.3	4.8
0	-18	1.88	14.3	4.2
-5	-21	1.75	12.3	3.6
-10	-23	1.61	10.3	3.0
-15	-26	1.47	8.3	2.4
-20	-29	1.33	6.4	1.9

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

12HPB36 — COOLING CAPACITY — CH23-41

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	10.2	34,900	2360	.77	.92	1.00	9.7	33,100	2550	.79	.94	1.00	9.1	31,200	2730	.81	.97	1.00	8.6	29,300	2900	.84	.99	1.00
	565	1200	10.5	35,800	2380	.80	.96	1.00	10.0	34,000	2570	.83	.98	1.00	9.4	32,200	2760	.85	1.00	1.00	8.9	30,400	2940	.88	1.00	1.00
	635	1350	10.8	36,700	2390	.84	.99	1.00	10.2	34,900	2600	.86	1.00	1.00	9.7	33,100	2790	.89	1.00	1.00	9.2	31,300	2980	.92	1.00	1.00
67°F (19.4°C)	495	1050	10.9	37,300	2410	.59	.74	.88	10.3	35,200	2610	.60	.76	.91	9.7	33,200	2790	.62	.78	.93	9.1	31,000	2970	.63	.81	.96
	565	1200	11.1	38,000	2420	.61	.78	.93	10.5	35,900	2620	.63	.80	.95	9.9	33,800	2820	.64	.83	.98	9.3	31,600	3000	.66	.86	1.00
	635	1350	11.3	38,600	2430	.63	.81	.96	10.7	36,500	2640	.65	.84	.98	10.1	34,400	2830	.67	.87	1.00	9.4	32,100	3020	.69	.90	1.00
71°F (21.7°C)	495	1050	11.8	40,100	2460	.43	.57	.71	11.1	37,900	2680	.44	.59	.73	10.5	35,700	2880	.44	.60	.76	9.8	33,400	3070	.45	.62	.78
	565	1200	12.0	40,800	2480	.44	.60	.75	11.3	38,600	2700	.45	.61	.77	10.6	36,300	2900	.45	.63	.80	10.0	34,000	3090	.46	.65	.83
	635	1350	12.1	41,400	2490	.45	.62	.79	11.5	39,100	2710	.46	.64	.81	10.8	36,800	2920	.46	.66	.84	10.1	34,400	3110	.47	.68	.87

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

12HPB36 — CH33-42B-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																								
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	34.1	10.0	2.31	.72	.85	.97	32.9	9.6	2.60	.73	.87	.98	31.6	9.3	2.93	.74	.89	.99	30.3	8.9	3.32	.76	.90	1.00
	1200	565	35.1	10.3	2.32	.76	.91	1.00	33.9	9.9	2.61	.77	.92	1.00	32.6	9.6	2.94	.79	.94	1.00	31.2	9.1	3.33	.80	.96	1.00
	1400	660	36.1	10.6	2.32	.80	.95	1.00	34.8	10.2	2.61	.81	.97	1.00	33.5	9.8	2.95	.83	.98	1.00	32.1	9.4	3.34	.85	1.00	1.00
67°F (19°C)	1000	470	36.4	10.7	2.32	.56	.69	.82	35.1	10.3	2.61	.57	.70	.83	33.7	9.9	2.95	.58	.72	.85	32.2	9.4	3.34	.59	.73	.87
	1200	565	37.3	10.9	2.33	.59	.73	.87	36.0	10.6	2.63	.59	.75	.89	34.5	10.1	2.96	.60	.76	.91	33.0	9.7	3.35	.61	.78	.93
	1400	660	38.1	11.2	2.34	.61	.77	.92	36.7	10.8	2.63	.62	.79	.94	35.2	10.3	2.97	.63	.81	.96	33.6	9.8	3.36	.64	.83	.97
71°F (22°C)	1000	470	38.8	11.4	2.34	.43	.55	.67	37.5	11.0	2.64	.43	.55	.68	36.0	10.6	2.98	.43	.56	.69	34.5	10.1	3.37	.43	.57	.70
	1200	565	39.8	11.7	2.35	.43	.57	.71	38.4	11.3	2.65	.43	.58	.72	36.9	10.8	2.98	.44	.59	.74	35.3	10.3	3.38	.44	.60	.75
	1400	660	40.6	11.9	2.36	.44	.60	.75	39.1	11.5	2.65	.45	.61	.77	37.5	11.0	2.99	.45	.62	.78	35.9	10.5	3.39	.45	.63	.80

12HPB36 — HEATING CAPACITY — CH23-41

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	
495	1050	12.2	41,500	2605	9.5	32,300	2365	6.5	22,300	2120	4.9	16,700	1870	2.5	8,400	1390
565	1200	12.3	41,800	2535	9.6	32,600	2295	6.6	22,600	2050	5.0	17,000	1800	2.5	8,700	1320
635	1350	12.3	42,000	2475	9.6	32,800	2235	6.7	22,800	1990	5.0	17,200	1740	2.6	8,900	1260

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

12HPB36 - CH33-42B-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil											
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1000	470	41.0	12.0	2.65	31.5	9.2	2.53	21.3	6.2	2.39	15.8	4.6	2.17	7.8	2.3	1.61
1200	565	41.5	12.2	2.52	32.0	9.4	2.39	21.8	6.4	2.26	16.3	4.8	2.03	8.3	2.4	1.47
1400	660	41.9	12.3	2.42	32.4	9.5	2.29	22.2	6.5	2.16	16.7	4.9	1.93	8.7	2.5	1.37

12HPB36 — HEATING PERFORMANCE CH23-41 at 1200 cfm (555 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2535	41,800	12.3
60	16	2475	39,800	11.7
55	13	2420	37,700	11.0
50	10	2365	35,600	10.4
47	8	2330	34,400	10.1
45	7	2295	32,600	9.6
40	4	2205	28,000	8.2
35	2	2115	23,400	6.9
30	-1	2080	23,000	6.7
25	-4	2050	22,600	6.6
20	-7	2015	22,200	6.5
17	-8	1995	22,000	6.4
15	-9	1975	21,200	6.2
10	-12	1920	19,100	5.6
5	-15	1800	17,000	5.0
0	-18	1680	14,900	4.4
-5	-21	1560	12,900	3.8
-10	-23	1440	10,800	3.2
-15	-26	1320	8,700	2.5
-20	-29	1200	6,600	1.9

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

12HPB36 - CH33-42B-2F - HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.52	41.5	12.2
60	16	2.49	39.4	11.5
55	13	2.46	37.3	10.9
50	10	2.43	35.1	10.3
47	8	2.41	33.9	9.9
45	7	2.39	32.0	9.4
40	4	2.35	27.3	8.0
35	2	2.31	22.6	6.6
30	-1	2.28	22.2	6.5
25	-4	2.26	21.8	6.4
20	-7	2.23	21.4	6.3
17	-8	2.22	21.2	6.2
15	-9	2.21	20.3	5.9
10	-12	2.17	18.2	5.3
5	-15	2.03	16.3	4.8
0	-18	1.89	14.3	4.2
-5	-21	1.75	12.3	3.6
-10	-23	1.61	10.3	3.0
-15	-26	1.47	8.3	2.4
-20	-29	1.33	6.4	1.9

HEATING AND COOLING RATINGS — 3.5 TON

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

12HPB42 — COOLING CAPACITY — CB30M-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	495	1050	11.3	38,700	2790	.71	.84	.95	10.9	37,300	3140	.72	.85	.97	10.5	35,800	3550	.73	.87	.98	10.1	34,300	4000	.74	.88	1.00
	590	1250	11.7	39,900	2800	.74	.89	.99	11.3	38,400	3160	.76	.90	1.00	10.8	36,900	3560	.77	.92	1.00	10.3	35,300	4010	.79	.94	1.00
	685	1450	12.0	40,900	2810	.78	.93	1.00	11.5	39,400	3170	.79	.95	1.00	11.1	37,900	3570	.81	.96	1.00	10.6	36,300	4020	.83	.98	1.00
67°F (19.4°C)	495	1050	12.1	41,300	2810	.56	.68	.80	11.7	39,800	3170	.56	.69	.82	11.2	38,200	3570	.57	.70	.83	10.7	36,600	4020	.58	.72	.85
	590	1250	12.4	42,400	2830	.58	.72	.85	12.0	40,800	3180	.58	.73	.87	11.5	39,200	3580	.59	.74	.89	11.0	37,500	4030	.60	.76	.91
	685	1450	12.7	43,200	2830	.60	.76	.90	12.2	41,600	3190	.61	.77	.92	11.7	39,900	3590	.62	.79	.94	11.2	38,200	4040	.63	.80	.96
71°F (21.7°C)	495	1050	12.9	44,100	2840	.42	.54	.66	12.5	42,500	3200	.42	.54	.66	12.0	40,800	3600	.43	.55	.68	11.5	39,100	4060	.43	.56	.69
	590	1250	13.2	45,200	2850	.43	.56	.69	12.7	43,500	3210	.43	.57	.71	12.3	41,800	3610	.43	.58	.72	11.7	40,000	4070	.44	.59	.74
	685	1450	13.5	46,000	2860	.44	.59	.73	13.0	44,300	3210	.44	.59	.75	12.5	42,500	3620	.44	.60	.76	11.9	40,700	4070	.45	.62	.78

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

12HPB42 — COOLING CAPACITY — CB31MV-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	80°F 27°C	85°F 29°C
63°F (17.2°C)	595	1265	11.5	39,300	2790	.74	.89	1.00	11.1	37,900	3150	.76	.90	1.00	10.7	36,400	3550	.77	.92	1.00	10.2	34,900	4000	.79	.94	1.00
	660	1400	11.7	40,000	2800	.77	.92	1.00	11.3	38,600	3150	.78	.94	1.00	10.9	37,100	3560	.80	.95	1.00	10.4	35,500	4000	.82	.97	1.00
	730	1545	11.9	40,700	2800	.80	.95	1.00	11.5	39,200	3160	.81	.97	1.00	11.0	37,700	3560	.83	.98	1.00	10.6	36,200	4010	.85	.99	1.00
67°F (19.4°C)	595	1265	12.3	41,800	2810	.58	.72	.85	11.8	40,300	3170	.59	.73	.87	11.3	38,600	3570	.59	.75	.89	10.8	36,900	4020	.60	.76	.91
	660	1400	12.4	42,400	2820	.59	.75	.89	12.0	40,800	3180	.60	.76	.91	11.5	39,200	3580	.61	.78	.92	11.0	37,500	4030	.62	.79	.94
	730	1545	12.6	42,900	2820	.61	.77	.92	12.1	41,300	3180	.62	.79	.94	11.6	39,600	3580	.63	.81	.96	11.1	37,900	4030	.64	.82	.97
71°F (21.7°C)	595	1265	13.1	44,600	2840	.43	.56	.69	12.6	42,900	3200	.43	.57	.71	12.1	41,200	3600	.43	.58	.72	11.5	39,400	4050	.44	.59	.74
	660	1400	13.2	45,200	2840	.44	.58	.72	12.7	43,500	3200	.44	.59	.74	12.3	41,800	3610	.44	.60	.75	11.7	39,900	4060	.45	.61	.77
	730	1545	13.4	45,700	2850	.44	.60	.75	12.9	44,000	3210	.44	.61	.77	12.4	42,200	3610	.45	.62	.78	11.8	40,300	4070	.45	.63	.80

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

12HPB42 — HEATING CAPACITY — CB30M-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	
495	1050	13.7	46,900	3435	10.6	36,200	3055	7.2	24,500	2640	5.5	18,900	2370	2.8	9,400	1790
590	1250	13.9	47,400	3280	10.8	36,700	2900	7.3	25,000	2485	5.7	19,400	2215	2.9	9,900	1635
685	1450	14.0	47,900	3180	10.9	37,200	2800	7.5	25,500	2385	5.8	19,900	2115	3.0	10,400	1535

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

12HPB42 — HEATING CAPACITY — CB31MV-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	
595	1265	13.8	47,000	3220	10.6	36,300	2900	7.2	24,600	2570	5.6	19,000	2265	2.8	9,500	1685
660	1400	13.9	47,400	3145	10.8	36,700	2825	7.3	25,000	2495	5.7	19,400	2190	2.9	9,900	1610
730	1545	14.1	48,000	3085	10.9	37,300	2765	7.5	25,600	2435	5.9	20,000	2130	3.1	10,500	1550

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

12HPB42 — HEATING PERFORMANCE
CB30M-41 1250 cfm at (590 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3280	47,400	13.9
60	16	3200	45,100	13.2
55	13	3115	42,700	12.5
50	10	3030	40,400	11.8
47	8	2980	39,000	11.4
45	7	2900	36,700	10.8
40	4	2695	30,800	9.0
35	2	2490	25,000	7.3
30	-1	2490	25,000	7.3
25	-4	2485	25,000	7.3
20	-7	2480	25,000	7.3
17	-8	2480	25,000	7.3
15	-9	2445	24,100	7.1
10	-12	2365	21,700	6.4
5	-15	2215	19,400	5.7
0	-18	2070	17,000	5.0
-5	-21	1925	14,600	4.3
-10	-23	1780	12,200	3.6
-15	-26	1635	9,900	2.9
-20	-29	1490	7,500	2.2

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

12HPB42 — HEATING PERFORMANCE
CB31MV-41 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3145	47,400	13.9
60	16	3070	45,100	13.2
55	13	3000	42,700	12.5
50	10	2925	40,400	11.8
47	8	2880	39,000	11.4
45	7	2825	36,700	10.8
40	4	2695	30,800	9.0
35	2	2560	25,000	7.3
30	-1	2525	25,000	7.3
25	-4	2495	25,000	7.3
20	-7	2460	25,000	7.3
17	-8	2440	25,000	7.3
15	-9	2410	24,100	7.1
10	-12	2335	21,700	6.4
5	-15	2190	19,400	5.7
0	-18	2045	17,000	5.0
-5	-21	1900	14,600	4.3
-10	-23	1755	12,200	3.6
-15	-26	1610	9,900	2.9
-20	-29	1465	7,500	2.2

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

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

12HPB42 — COOLING CAPACITY — CB28UH-042 - CB29M-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	565	1200	11.7	40,000	2860	.74	.88	.99	11.3	38,600	3220	.75	.89	1.00	10.9	37,100	3630	.76	.91	1.00	10.4	35,500	4090	.78	.93	1.00
	635	1350	12.0	40,800	2860	.76	.91	1.00	11.5	39,400	3230	.78	.93	1.00	11.1	37,800	3640	.79	.94	1.00	10.6	36,200	4100	.81	.96	1.00
	710	1500	12.2	41,500	2870	.79	.94	1.00	11.7	40,000	3230	.80	.96	1.00	11.3	38,500	3640	.82	.97	1.00	10.8	36,900	4100	.84	.99	1.00
67°F (19.4°C)	565	1200	12.5	42,500	2880	.57	.71	.84	12.0	41,000	3240	.58	.72	.86	11.5	39,400	3650	.59	.74	.88	11.0	37,700	4110	.60	.75	.89
	635	1350	12.7	43,200	2880	.59	.74	.88	12.2	41,700	3250	.60	.75	.90	11.7	40,000	3660	.61	.77	.91	11.2	38,200	4120	.62	.78	.93
	710	1500	12.8	43,800	2890	.61	.77	.91	12.4	42,200	3250	.61	.78	.93	11.9	40,500	3660	.62	.80	.95	11.3	38,700	4130	.63	.82	.97
71°F (21.7°C)	565	1200	13.3	45,400	2900	.43	.56	.68	12.8	43,700	3270	.43	.56	.70	12.3	42,000	3680	.43	.57	.71	11.8	40,200	4150	.44	.58	.73
	635	1350	13.5	46,000	2910	.43	.57	.71	13.0	44,400	3270	.44	.58	.73	12.5	42,600	3690	.44	.59	.74	12.0	40,800	4150	.44	.60	.76
	710	1500	13.7	46,600	2910	.44	.59	.74	13.2	44,900	3280	.44	.60	.76	12.6	43,100	3690	.45	.61	.77	12.1	41,200	4160	.45	.62	.79

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

12HPB42 — COOLING CAPACITY — CB28UH-048 - CB29M-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		
	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	11.9	40,700	2880	.73	.87	.99	11.5	39,200	3240	.75	.89	1.00	11.0	37,700	3660	.76	.91	1.00	10.6	36,100	4120	.77	.93	1.00
	660	1400	12.2	41,700	2890	.77	.92	1.00	11.8	40,200	3260	.78	.94	1.00	11.3	38,700	3670	.80	.95	1.00	10.8	37,000	4130	.82	.97	1.00
	755	1600	12.5	42,700	2900	.81	.96	1.00	12.1	41,200	3260	.82	.97	1.00	11.6	39,600	3680	.84	.99	1.00	11.1	38,000	4150	.86	1.00	1.00
67°F (19.4°C)	565	1200	12.7	43,300	2900	.57	.71	.84	12.2	41,700	3270	.58	.72	.86	11.7	40,000	3690	.59	.73	.87	11.2	38,300	4150	.60	.75	.89
	660	1400	13.0	44,200	2910	.59	.75	.89	12.5	42,500	3280	.60	.76	.91	12.0	40,800	3700	.61	.78	.92	11.4	39,000	4160	.62	.79	.94
	755	1600	13.2	44,900	2920	.62	.78	.93	12.7	43,300	3280	.62	.80	.95	12.1	41,400	3700	.64	.82	.97	11.6	39,700	4170	.65	.84	.98
71°F (21.7°C)	565	1200	13.5	46,200	2930	.43	.56	.68	13.0	44,500	3300	.43	.56	.70	12.5	42,700	3710	.43	.57	.71	12.0	40,900	4180	.44	.58	.72
	660	1400	13.8	47,100	2940	.44	.58	.72	13.3	45,300	3310	.44	.59	.74	12.7	43,500	3720	.44	.60	.75	12.2	41,600	4190	.45	.61	.77
	755	1600	14.0	47,800	2940	.44	.60	.76	13.5	46,000	3310	.45	.61	.78	12.9	44,100	3730	.45	.62	.79	12.4	42,200	4200	.46	.64	.81

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

12HPB42 — HEATING CAPACITY — CB28UH-042 - CB29M-46

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	
565	1200	14.0	47,600	3390	10.7	36,600	3010	7.2	24,700	2600	5.6	19,000	2320	2.8	9,400	1715
660	1400	14.1	48,100	3355	10.9	37,100	2975	7.4	25,200	2565	5.7	19,500	2285	2.9	9,900	1680
755	1600	14.2	48,400	3220	11.0	37,400	2840	7.5	25,500	2430	5.8	19,800	2150	3.0	10,200	1545

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

12HPB42 — HEATING CAPACITY — CB28UH-048 - CB29M-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	
565	1200	14.1	48,100	3410	10.9	37,100	3030	7.4	25,100	2615	5.7	19,300	2350	2.8	9,600	1765
660	1400	14.2	48,600	3290	11.0	37,600	2910	7.5	25,600	2495	5.8	19,800	2230	3.0	10,100	1645
755	1600	14.4	49,200	3195	11.2	38,200	2815	7.7	26,200	2400	6.0	20,400	2135	3.1	10,700	1550

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

12HPB42 — HEATING PERFORMANCE
CB28UH-042 - CB29M-46 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3355	48,100	14.1
60	16	3270	45,700	13.4
55	13	3185	43,300	12.7
50	10	3105	40,900	12.0
47	8	3055	39,500	11.6
45	7	2975	37,100	10.9
40	4	2775	31,200	9.1
35	2	2580	25,200	7.4
30	-1	2570	25,200	7.4
25	-4	2565	25,200	7.4
20	-7	2555	25,200	7.4
17	-8	2550	25,200	7.4
15	-9	2520	24,200	7.1
10	-12	2435	21,900	6.4
5	-15	2285	19,500	5.7
0	-18	2135	17,100	5.0
-5	-21	1980	14,700	4.3
-10	-23	1830	12,300	3.6
-15	-26	1680	9,900	2.9
-20	-29	1530	7,600	2.2

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

12HPB42 — HEATING PERFORMANCE
CB28UH-048 - CB29M-51 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3290	48,600	14.2
60	16	3210	46,200	13.5
55	13	3125	43,800	12.8
50	10	3040	41,400	12.1
47	8	2990	40,000	11.7
45	7	2910	37,600	11.0
40	4	2700	31,600	9.3
35	2	2495	25,600	7.5
30	-1	2495	25,600	7.5
25	-4	2495	25,600	7.5
20	-7	2495	25,600	7.5
17	-8	2495	25,600	7.5
15	-9	2460	24,600	7.2
10	-12	2380	22,200	6.5
5	-15	2230	19,800	5.8
0	-18	2085	17,400	5.1
-5	-21	1935	15,000	4.4
-10	-23	1790	12,500	3.7
-15	-26	1645	10,100	3.0
-20	-29	1495	7,700	2.3

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

HEATING AND COOLING RATINGS — 3.5 TON

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

12HPB42 — COOLING CAPACITY — CB30M-46 - CB30U-41/46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	11.8	40,400	2800	.74	.89	.99	11.4	38,900	3160	.76	.90	1.00	10.9	37,300	3560	.77	.92	1.00	10.5	35,800	4010	.79	.94	1.00
	660	1400	12.0	41,100	2810	.77	.92	1.00	11.6	39,600	3160	.78	.94	1.00	11.2	38,100	3570	.80	.95	1.00	10.7	36,500	4020	.82	.97	1.00
	730	1550	12.3	41,800	2810	.80	.95	1.00	11.8	40,300	3170	.81	.97	1.00	11.4	38,800	3570	.83	.98	1.00	10.9	37,200	4020	.85	.99	1.00
67°F (19.4°C)	590	1250	12.6	42,900	2820	.58	.72	.85	12.1	41,300	3180	.58	.73	.87	11.6	39,600	3580	.59	.74	.89	11.1	37,900	4030	.60	.76	.91
	660	1400	12.7	43,500	2830	.59	.75	.89	12.3	41,900	3190	.60	.76	.91	11.8	40,200	3590	.61	.78	.92	11.3	38,400	4040	.62	.79	.94
	730	1550	12.9	44,100	2830	.61	.77	.92	12.4	42,400	3190	.62	.79	.94	11.9	40,700	3590	.63	.81	.96	11.4	38,900	4050	.64	.83	.98
71°F (21.7°C)	590	1250	13.4	45,700	2850	.43	.56	.69	12.9	44,100	3210	.43	.57	.71	12.4	42,300	3610	.43	.58	.72	11.9	40,500	4070	.44	.59	.74
	660	1400	13.6	46,400	2850	.44	.58	.72	13.1	44,700	3210	.44	.59	.74	12.6	42,900	3620	.44	.60	.75	12.0	41,000	4070	.45	.61	.77
	730	1550	13.7	46,900	2860	.44	.60	.75	13.2	45,200	3220	.44	.61	.77	12.7	43,300	3620	.45	.62	.78	12.1	41,400	4080	.45	.63	.80

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

12HPB42 — COOLING CAPACITY — CB30M-51 - CB30U-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		
	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	12.0	40,900	2810	.73	.87	.99	11.5	39,400	3170	.74	.89	1.00	11.1	37,800	3580	.76	.91	1.00	10.6	36,100	4030	.77	.93	1.00
	660	1400	12.3	42,000	2830	.77	.92	1.00	11.8	40,400	3180	.78	.94	1.00	11.4	38,800	3590	.80	.96	1.00	10.9	37,100	4040	.82	.98	1.00
	755	1600	12.6	43,000	2830	.81	.96	1.00	12.1	41,400	3190	.82	.98	1.00	11.7	39,800	3600	.84	.99	1.00	11.2	38,200	4050	.86	1.00	1.00
67°F (19.4°C)	565	1200	12.8	43,600	2840	.57	.71	.84	12.3	41,900	3200	.58	.72	.85	11.8	40,200	3600	.59	.73	.87	11.3	38,400	4060	.59	.75	.89
	660	1400	13.1	44,600	2850	.59	.74	.89	12.6	42,900	3210	.60	.76	.91	12.0	41,100	3610	.61	.77	.93	11.5	39,200	4060	.62	.79	.95
	755	1600	13.3	45,400	2860	.61	.78	.93	12.8	43,600	3210	.62	.80	.95	12.3	41,800	3620	.64	.82	.97	11.7	39,900	4080	.65	.84	.99
71°F (21.7°C)	565	1200	13.7	46,600	2870	.43	.55	.68	13.1	44,800	3230	.43	.56	.69	12.6	43,000	3630	.43	.57	.71	12.0	41,100	4090	.44	.58	.72
	660	1400	14.0	47,600	2880	.43	.58	.72	13.4	45,800	3240	.44	.59	.73	12.8	43,800	3640	.44	.60	.75	12.3	41,900	4100	.45	.61	.77
	755	1600	14.2	48,300	2890	.44	.60	.76	13.6	46,500	3240	.45	.61	.77	13.0	44,500	3650	.45	.62	.79	12.5	42,500	4110	.46	.64	.81

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

12HPB42 — HEATING CAPACITY — CB30M-46 - CB30U-41/46

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	
590	1250	14.0	47,900	3230	10.8	36,800	2900	7.2	24,700	2540	5.6	19,000	2290	2.8	9,600	1705
660	1400	14.1	48,200	3150	10.9	37,100	2820	7.3	25,000	2460	5.7	19,300	2210	2.9	9,900	1625
730	1550	14.2	48,600	3085	11.0	37,500	2755	7.4	25,400	2395	5.8	19,700	2145	3.0	10,300	1560

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

12HPB42 — HEATING CAPACITY — CB30M-51 - CB30U-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	
565	1200	14.0	47,800	3110	10.8	36,700	2865	7.2	24,600	2595	5.5	18,900	2365	2.8	9,500	1755
660	1400	14.1	48,200	2995	10.9	37,100	2750	7.3	25,000	2480	5.7	19,300	2250	2.9	9,900	1640
755	1600	14.2	48,600	2915	11.0	37,500	2670	7.4	25,400	2400	5.8	19,700	2170	3.0	10,300	1560

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

12HPB42 — HEATING PERFORMANCE
CB30M-46 - CB30U-41/46 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3150	48,200	14.1
60	16	3080	45,800	13.4
55	13	3005	43,400	12.7
50	10	2935	41,000	12.0
47	8	2890	39,500	11.6
45	7	2820	37,100	10.9
40	4	2640	31,000	9.1
35	2	2460	25,000	7.3
30	-1	2460	25,000	7.3
25	-4	2460	25,000	7.3
20	-7	2460	25,000	7.3
17	-8	2460	25,000	7.3
15	-9	2430	24,000	7.0
10	-12	2360	21,600	6.3
5	-15	2210	19,300	5.7
0	-18	2065	16,900	5.0
-5	-21	1920	14,600	4.3
-10	-23	1770	12,200	3.6
-15	-26	1625	9,900	2.9
-20	-29	1475	7,500	2.2

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

12HPB42 — HEATING PERFORMANCE
CB30M-51 - CB30U-51 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2995	48,200	14.1
60	16	2940	45,800	13.4
55	13	2890	43,400	12.7
50	10	2835	41,000	12.0
47	8	2800	39,500	11.6
45	7	2750	37,100	10.9
40	4	2615	31,000	9.1
35	2	2480	25,000	7.3
30	-1	2480	25,000	7.3
25	-4	2480	25,000	7.3
20	-7	2480	25,000	7.3
17	-8	2480	25,000	7.3
15	-9	2460	24,000	7.0
10	-12	2405	21,600	6.3
5	-15	2250	19,300	5.7
0	-18	2100	16,900	5.0
-5	-21	1945	14,600	4.3
-10	-23	1795	12,200	3.6
-15	-26	1640	9,900	2.9
-20	-29	1490	7,500	2.2

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

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

12HPB42 — COOLING CAPACITY — CB31MV-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		
	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)	570	1205	12.0	41,000	2810	.73	.87	.99	11.5	39,400	3170	.74	.89	1.00	11.1	37,800	3570	.76	.91	1.00	10.6	36,100	4020	.77	.93	1.00
	670	1425	12.4	42,200	2820	.77	.93	1.00	11.9	40,600	3180	.79	.94	1.00	11.4	38,900	3590	.80	.96	1.00	10.9	37,300	4040	.82	.98	1.00
	765	1625	12.7	43,200	2830	.81	.97	1.00	12.2	41,600	3190	.83	.99	1.00	11.7	40,000	3600	.85	1.00	1.00	11.3	38,500	4050	.87	1.00	1.00
67°F (19.4°C)	570	1205	12.8	43,700	2840	.57	.71	.84	12.3	42,000	3200	.58	.72	.85	11.8	40,300	3600	.59	.73	.87	11.3	38,500	4050	.59	.75	.89
	670	1425	13.1	44,700	2850	.60	.75	.89	12.6	43,000	3210	.60	.76	.91	12.1	41,200	3610	.61	.78	.93	11.5	39,400	4060	.62	.80	.95
	765	1625	13.4	45,600	2850	.62	.79	.94	12.8	43,800	3210	.63	.81	.96	12.3	42,000	3620	.64	.82	.98	11.8	40,100	4080	.65	.85	1.00
71°F (21.7°C)	570	1205	13.7	46,700	2870	.43	.55	.68	13.2	44,900	3220	.43	.56	.69	12.6	43,100	3630	.43	.57	.71	12.1	41,200	4090	.44	.58	.72
	670	1425	14.0	47,700	2880	.44	.58	.72	13.5	45,900	3230	.44	.59	.74	12.9	44,000	3640	.44	.60	.76	12.3	42,000	4100	.45	.61	.77
	765	1625	14.2	48,500	2880	.45	.61	.77	13.7	46,700	3240	.45	.62	.78	13.1	44,700	3650	.45	.63	.80	12.5	42,600	4110	.46	.64	.82

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

12HPB42 — 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) 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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	11.6	39,700	2730	.75	.89	1.00	11.2	38,300	3080	.76	.91	1.00	10.8	36,800	3470	.77	.92	1.00	10.3	35,200	3910	.79	.94	1.00
	660	1400	11.8	40,400	2740	.77	.93	1.00	11.4	39,000	3080	.79	.94	1.00	11.0	37,500	3480	.80	.96	1.00	10.5	35,900	3920	.82	.98	1.00
	730	1550	12.0	41,100	2740	.80	.96	1.00	11.6	39,700	3090	.82	.97	1.00	11.2	38,100	3480	.83	.99	1.00	10.7	36,600	3920	.85	1.00	1.00
67°F (19.4°C)	590	1250	12.3	42,100	2750	.58	.72	.86	11.9	40,600	3100	.59	.73	.87	11.4	39,000	3490	.60	.75	.89	10.9	37,300	3930	.61	.76	.91
	660	1400	12.5	42,800	2750	.60	.75	.89	12.1	41,200	3110	.61	.76	.91	11.6	39,600	3500	.62	.78	.93	11.1	37,800	3940	.63	.80	.95
	730	1550	12.7	43,300	2760	.62	.78	.93	12.2	41,700	3110	.62	.79	.95	11.8	40,100	3500	.63	.81	.96	11.2	38,300	3940	.65	.83	.98
71°F (21.7°C)	590	1250	13.2	44,900	2770	.43	.57	.70	12.7	43,300	3120	.44	.57	.71	12.2	41,500	3520	.44	.58	.72	11.7	39,800	3960	.44	.59	.74
	660	1400	13.3	45,500	2780	.44	.58	.73	12.9	43,900	3130	.44	.59	.74	12.3	42,100	3530	.45	.60	.76	11.8	40,300	3970	.45	.61	.77
	730	1550	13.5	46,100	2790	.45	.60	.76	13.0	44,400	3140	.45	.61	.77	12.5	42,600	3530	.45	.62	.79	11.9	40,700	3980	.46	.63	.81

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

12HPB42 — HEATING CAPACITY — CB31MV-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	
570	1205	13.8	47,100	3095	10.6	36,100	2855	7.1	24,100	2600	5.4	18,400	2345	2.7	9,200	1745
675	1425	14.0	47,600	2970	10.7	36,600	2730	7.2	24,600	2475	5.5	18,900	2220	2.8	9,700	1620
765	1625	14.1	48,100	2895	10.9	37,100	2655	7.4	25,100	2400	5.7	19,400	2145	3.0	10,200	1545

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

12HPB42 — 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	
660	1400	13.7	46,900	2895	10.6	36,200	2665	7.2	24,600	2425	5.6	19,100	2090	2.8	9600	1590
730	1550	13.9	47,300	2805	10.7	36,600	2580	7.3	25,000	2340	5.7	19,500	2005	2.9	9900	1505
800	1700	13.9	47,500	2720	10.8	36,900	2495	7.4	25,200	2250	5.8	19,700	1915	3.0	10,200	1420

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

12HPB42 — HEATING PERFORMANCE
CB31MV-51 at 1425 cfm (675 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2970	47,600	14.0
60	16	2920	45,200	13.2
55	13	2865	42,800	12.5
50	10	2810	40,400	11.8
47	8	2775	39,000	11.4
45	7	2730	36,600	10.7
40	4	2620	30,600	9.0
35	2	2505	24,600	7.2
30	-1	2490	24,600	7.2
25	-4	2475	24,600	7.2
20	-7	2460	24,600	7.2
17	-8	2450	24,600	7.2
15	-9	2425	23,600	6.9
10	-12	2375	21,200	6.2
5	-15	2220	18,900	5.5
0	-18	2070	16,600	4.9
-5	-21	1920	14,300	4.2
-10	-23	1770	12,000	3.5
-15	-26	1620	9,700	2.8
-20	-29	1470	7,400	2.2

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

12HPB42 — HEATING PERFORMANCE
CVP10-46/EC10Q4 at 1550 cfm (730 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2805	47,300	13.9
60	16	2755	45,000	13.2
55	13	2700	42,700	12.5
50	10	2650	40,400	11.8
47	8	2620	39,000	11.4
45	7	2580	36,600	10.7
40	4	2480	30,700	9.0
35	2	2385	24,700	7.2
30	-1	2360	24,800	7.3
25	-4	2340	25,000	7.3
20	-7	2315	25,100	7.4
17	-8	2300	25,200	7.4
15	-9	2250	24,200	7.1
10	-12	2125	21,900	6.4
5	-15	2005	19,500	5.7
0	-18	1880	17,100	5.0
-5	-21	1755	14,700	4.3
-10	-23	1630	12,300	3.6
-15	-26	1505	9900	2.9
-20	-29	1380	7600	2.2

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

HEATING AND COOLING RATINGS — 3.5 TON

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

12HPB42 — COOLING CAPACITY — C26-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	11.9	40,700	2730	.75	.90	1.00	11.5	39,300	3080	.76	.91	1.00	11.0	37,700	3470	.78	.93	1.00	10.6	36,100	3910	.79	.95	1.00
	660	1400	12.2	41,500	2740	.78	.93	1.00	11.7	40,000	3090	.79	.95	1.00	11.3	38,400	3480	.81	.96	1.00	10.8	36,800	3920	.83	.98	1.00
	730	1550	12.4	42,200	2740	.81	.96	1.00	11.9	40,700	3090	.82	.98	1.00	11.5	39,100	3490	.84	.99	1.00	11.0	37,500	3930	.86	1.00	1.00
67°F (19.4°C)	590	1250	12.7	43,200	2750	.59	.73	.86	12.2	41,600	3100	.59	.74	.88	11.7	40,000	3500	.60	.75	.90	11.2	38,200	3940	.61	.77	.92
	660	1400	12.9	43,900	2760	.60	.76	.90	12.4	42,200	3110	.61	.77	.92	11.9	40,500	3500	.62	.78	.94	11.4	38,800	3940	.63	.80	.96
	730	1550	13.0	44,400	2760	.62	.78	.93	12.5	42,800	3110	.63	.80	.95	12.0	41,000	3510	.64	.82	.97	11.5	39,200	3950	.65	.84	.99
71°F (21.7°C)	590	1250	13.5	46,000	2780	.44	.57	.70	13.0	44,400	3130	.44	.58	.71	12.5	42,600	3520	.44	.59	.73	11.9	40,700	3970	.44	.59	.74
	660	1400	13.7	46,700	2780	.44	.59	.73	13.2	44,900	3130	.44	.60	.75	12.6	43,100	3530	.45	.61	.76	12.1	41,300	3970	.45	.62	.78
	730	1550	13.8	47,200	2790	.45	.61	.76	13.3	45,500	3140	.45	.61	.78	12.8	43,600	3530	.45	.63	.79	12.2	41,700	3980	.46	.64	.81

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

12HPB42 — C33-48B/C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)			
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	40.0	11.7	2.80	.73	.87	.98	38.6	11.3	3.16	.74	.88	.99	37.1	10.9	3.58	.75	.89	1.00	35.6	10.4	4.04	.76	.91	1.00
	1400	660	41.1	12.0	2.81	.76	.91	1.00	39.6	11.6	3.17	.77	.92	1.00	38.1	11.2	3.58	.79	.94	1.00	36.6	10.7	4.05	.80	.96	1.00
	1600	755	41.9	12.3	2.82	.80	.95	1.00	40.5	11.9	3.18	.81	.96	1.00	39.0	11.4	3.59	.82	.98	1.00	37.4	11.0	4.06	.84	.99	1.00
67°F (19°C)	1200	565	42.7	12.5	2.82	.57	.70	.83	41.1	12.0	3.18	.57	.71	.84	39.5	11.6	3.60	.58	.72	.86	37.9	11.1	4.07	.59	.74	.88
	1400	660	43.6	12.8	2.83	.59	.73	.88	42.0	12.3	3.19	.60	.75	.89	40.3	11.8	3.61	.60	.76	.91	38.6	11.3	4.07	.61	.78	.93
	1600	755	44.3	13.0	2.83	.61	.77	.92	42.7	12.5	3.20	.62	.78	.94	41.0	12.0	3.62	.62	.80	.95	39.2	11.5	4.08	.64	.82	.97
71°F (22°C)	1200	565	45.5	13.3	2.84	.43	.55	.67	43.9	12.9	3.21	.43	.56	.69	42.2	12.4	3.63	.43	.56	.70	40.4	11.8	4.10	.43	.57	.71
	1400	660	46.4	13.6	2.85	.43	.57	.71	44.8	13.1	3.22	.44	.58	.72	43.0	12.6	3.64	.44	.59	.74	41.2	12.1	4.11	.44	.60	.75
	1600	755	47.1	13.8	2.86	.44	.59	.75	45.4	13.3	3.23	.44	.60	.76	43.6	12.8	3.65	.45	.61	.78	41.8	12.3	4.12	.45	.62	.80

12HPB42 — HEATING CAPACITY — C26-46

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	
590	1250	13.7	46,900	2885	10.6	36,200	2665	7.2	24,600	2435	5.6	19,100	2105	2.8	9500	1600
660	1400	13.9	47,300	2805	10.7	36,600	2585	7.3	25,000	2355	5.7	19,500	2025	2.9	9900	1520
730	1550	14.0	47,600	2725	10.8	36,900	2505	7.4	25,300	2275	5.8	19,800	1945	3.0	10,200	1440

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

12HPB42 - C33-48B/C HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1200	565	29.4	8.6	3.02	25.3	7.4	2.90	19.9	5.8	2.77	20.2	5.9	2.53	4.1	1.2	1.87
1400	660	39.9	11.7	2.89	35.8	10.5	2.77	30.4	8.9	2.64	30.7	9.0	2.40	14.6	4.3	1.73
1600	755	30.3	8.9	2.79	26.2	7.7	2.67	20.8	6.1	2.54	21.1	6.2	2.30	5.0	1.5	1.63

12HPB42 — HEATING PERFORMANCE C26-46 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2805	47,300	13.9
60	16	2755	45,000	13.2
55	13	2705	42,700	12.5
50	10	2655	40,400	11.8
47	8	2625	39,000	11.4
45	7	2585	36,600	10.7
40	4	2490	30,700	9.0
35	2	2395	24,700	7.2
30	-1	2375	24,800	7.3
25	-4	2355	25,000	7.3
20	-7	2335	25,100	7.4
17	-8	2325	25,200	7.4
15	-9	2275	24,200	7.1
10	-12	2150	21,900	6.4
5	-15	2025	19,500	5.7
0	-18	1895	17,100	5.0
-5	-21	1770	14,700	4.3
-10	-23	1645	12,300	3.6
-15	-26	1520	9900	2.9
-20	-29	1395	7600	2.2

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

12HPB42 - C33-48B/C HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.89	39.9	11.7
60	16	2.86	39.4	11.5
55	13	2.83	38.9	11.4
50	10	2.80	38.4	11.3
47	8	2.78	38.2	11.2
45	7	2.77	35.8	10.5
40	4	2.72	30.0	8.8
35	2	2.68	24.2	7.1
30	-1	2.66	27.3	8.0
25	-4	2.64	30.4	8.9
20	-7	2.62	33.5	9.8
17	-8	2.61	35.3	10.3
15	-9	2.60	35.1	10.3
10	-12	2.57	34.7	10.2
5	-15	2.40	30.7	9.0
0	-18	2.23	26.6	7.8
-5	-21	2.07	22.6	6.6
-10	-23	1.90	18.6	5.5
-15	-26	1.73	14.6	4.3
-20	-29	1.57	10.6	3.1

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

12HPB42 — COOLING CAPACITY — CR26-36N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	11.9	40,700	2730	.75	.89	1.00	11.5	39,300	3070	.76	.91	1.00	11.1	37,800	3460	.78	.93	1.00	10.6	36,200	3900	.79	.95	1.00
	660	1400	12.1	41,400	2730	.78	.93	1.00	11.7	40,000	3080	.79	.94	1.00	11.3	38,400	3470	.81	.96	1.00	10.8	36,900	3910	.82	.98	1.00
	730	1550	12.3	42,100	2740	.80	.96	1.00	11.9	40,600	3080	.82	.97	1.00	11.5	39,100	3480	.84	.99	1.00	11.0	37,500	3920	.85	1.00	1.00
67°F (19.4°C)	590	1250	12.7	43,200	2740	.59	.73	.86	12.2	41,600	3090	.59	.74	.88	11.7	40,000	3490	.60	.75	.90	11.2	38,300	3930	.61	.77	.92
	660	1400	12.8	43,800	2750	.60	.75	.90	12.4	42,200	3100	.61	.77	.91	11.9	40,500	3490	.62	.78	.93	11.4	38,800	3930	.63	.80	.95
	730	1550	13.0	44,300	2760	.62	.78	.93	12.5	42,700	3100	.63	.80	.95	12.0	41,000	3500	.64	.81	.96	11.5	39,200	3940	.65	.83	.98
71°F (21.7°C)	590	1250	13.5	45,900	2770	.44	.57	.70	13.0	44,300	3120	.44	.58	.71	12.5	42,600	3510	.44	.58	.73	12.0	40,800	3960	.44	.59	.74
	660	1400	13.7	46,600	2770	.44	.59	.73	13.2	44,900	3120	.44	.59	.74	12.6	43,100	3520	.45	.60	.76	12.1	41,300	3960	.45	.61	.78
	730	1550	13.8	47,100	2780	.45	.60	.76	13.3	45,400	3130	.45	.61	.77	12.8	43,600	3520	.45	.62	.79	12.2	41,700	3970	.46	.64	.81

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

12HPB42 — COOLING CAPACITY — CR26-48N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	12.1	41,200	2740	.75	.89	1.00	11.6	39,700	3090	.76	.91	1.00	11.2	38,100	3480	.78	.93	1.00	10.7	36,500	3920	.79	.95	1.00
	660	1400	12.3	42,000	2740	.78	.93	1.00	11.9	40,500	3090	.79	.94	1.00	11.4	38,900	3490	.81	.96	1.00	10.9	37,200	3930	.82	.98	1.00
	730	1550	12.5	42,700	2750	.80	.96	1.00	12.0	41,100	3100	.82	.97	1.00	11.6	39,500	3490	.83	.99	1.00	11.1	37,900	3930	.85	1.00	1.00
67°F (19.4°C)	590	1250	12.8	43,800	2760	.58	.72	.86	12.4	42,200	3110	.59	.74	.88	11.9	40,500	3500	.60	.75	.89	11.3	38,700	3940	.61	.77	.91
	660	1400	13.0	44,500	2760	.60	.75	.90	12.5	42,800	3120	.61	.77	.91	12.0	41,000	3510	.62	.78	.93	11.5	39,200	3950	.63	.80	.95
	730	1550	13.2	45,000	2770	.62	.78	.93	12.7	43,300	3120	.62	.80	.95	12.2	41,600	3510	.63	.81	.97	11.6	39,700	3950	.65	.83	.98
71°F (21.7°C)	590	1250	13.7	46,600	2790	.43	.57	.70	13.2	45,000	3130	.44	.57	.71	12.6	43,100	3530	.44	.58	.73	12.1	41,300	3970	.44	.59	.74
	660	1400	13.9	47,300	2790	.44	.58	.73	13.4	45,600	3140	.44	.59	.74	12.8	43,700	3540	.45	.60	.76	12.3	41,800	3980	.45	.61	.78
	730	1550	14.0	47,900	2790	.45	.60	.76	13.5	46,100	3140	.45	.61	.77	13.0	44,200	3540	.45	.62	.79	12.4	42,200	3990	.46	.64	.81

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

12HPB42 — HEATING CAPACITY — CR26-36N/W-F

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	
590	1250	13.7	46,800	2920	10.6	36,200	2685	7.2	24,500	2435	5.6	19,000	2095	2.8	9500	1595
660	1400	13.9	47,300	2840	10.7	36,600	2600	7.3	25,000	2350	5.7	19,500	2010	2.9	9900	1510
730	1550	13.9	47,500	2755	10.8	36,900	2520	7.4	25,200	2270	5.8	19,700	1930	3.0	10,200	1430

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

12HPB42 — HEATING CAPACITY — CR26-48N/W-F

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	
590	1250	13.7	46,900	2845	10.6	36,300	2635	7.2	24,600	2410	5.6	19,100	2085	2.8	9600	1585
660	1400	13.9	47,300	2765	10.7	36,600	2555	7.3	25,000	2330	5.7	19,500	2005	2.9	9900	1505
730	1550	13.9	47,500	2755	10.8	36,900	2545	7.4	25,200	2325	5.8	19,700	1995	3.0	10,200	1500

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

12HPB42 — HEATING PERFORMANCE CR26-36-N/W-F at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2840	47,300	13.9
60	16	2785	45,000	13.2
55	13	2730	42,700	12.5
50	10	2675	40,400	11.8
47	8	2640	39,000	11.4
45	7	2600	36,600	10.7
40	4	2500	30,600	9.0
35	2	2400	24,700	7.2
30	-1	2375	24,800	7.3
25	-4	2350	25,000	7.3
20	-7	2325	25,100	7.4
17	-8	2310	25,200	7.4
15	-9	2260	24,200	7.1
10	-12	2135	21,900	6.4
5	-15	2010	19,500	5.7
0	-18	1885	17,100	5.0
-5	-21	1760	14,700	4.3
-10	-23	1635	12,300	3.6
-15	-26	1510	9900	2.9
-20	-29	1385	7600	2.2

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

12HPB42 — HEATING PERFORMANCE CR26-48N/W-F at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2765	47,300	13.9
60	16	2715	45,000	13.2
55	13	2665	42,700	12.5
50	10	2620	40,400	11.8
47	8	2590	39,000	11.4
45	7	2555	36,600	10.7
40	4	2460	30,700	9.0
35	2	2370	24,700	7.2
30	-1	2350	24,800	7.3
25	-4	2330	25,000	7.3
20	-7	2315	25,100	7.4
17	-8	2300	25,200	7.4
15	-9	2250	24,200	7.1
10	-12	2125	21,900	6.4
5	-15	2005	19,500	5.7
0	-18	1880	17,100	5.0
-5	-21	1755	14,700	4.3
-10	-23	1630	12,300	3.6
-15	-26	1505	9900	2.9
-20	-29	1380	7600	2.2

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

HEATING AND COOLING RATINGS — 3.5 TON

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

12HPB42 — COOLING CAPACITY — CH23-51

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		
	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	12.0	40,800	2810	.75	.89	1.00	11.5	39,300	3170	.76	.91	1.00	11.0	37,700	3570	.77	.92	1.00	10.6	36,100	4020	.79	.94	1.00
	660	1400	12.2	41,500	2820	.78	.93	1.00	11.7	40,000	3170	.79	.94	1.00	11.3	38,500	3580	.81	.96	1.00	10.8	36,900	4030	.82	.98	1.00
	730	1550	12.4	42,200	2820	.80	.96	1.00	12.0	40,800	3180	.82	.97	1.00	11.5	39,200	3580	.84	.99	1.00	11.0	37,700	4040	.86	1.00	1.00
67°F (19.4°C)	590	1250	12.7	43,200	2830	.58	.72	.86	12.2	41,600	3190	.59	.74	.88	11.7	39,900	3600	.60	.75	.89	11.2	38,200	4050	.61	.77	.91
	660	1400	12.9	43,900	2840	.60	.75	.90	12.4	42,200	3200	.61	.77	.91	11.9	40,600	3600	.62	.78	.93	11.4	38,800	4050	.63	.80	.95
	730	1550	13.0	44,400	2840	.62	.78	.93	12.5	42,800	3200	.62	.80	.95	12.0	41,000	3610	.64	.81	.96	11.5	39,300	4060	.65	.83	.98
71°F (21.7°C)	590	1250	13.5	46,000	2850	.43	.57	.70	13.0	44,400	3210	.43	.57	.71	12.5	42,600	3620	.44	.58	.73	11.9	40,700	4080	.44	.59	.74
	660	1400	13.7	46,700	2860	.44	.58	.73	13.2	45,000	3220	.44	.59	.74	12.6	43,100	3630	.44	.60	.76	12.1	41,300	4080	.45	.61	.78
	730	1550	13.8	47,200	2870	.44	.60	.76	13.3	45,500	3230	.45	.61	.78	12.8	43,600	3630	.45	.62	.79	12.2	41,700	4090	.46	.64	.81

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

12HPB42 — CH33-36A/B-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	37.7	11.0	2.77	.73	.87	.98	36.5	10.7	3.13	.74	.88	.99	35.1	10.3	3.54	.75	.90	1.00	33.7	9.9	4.00	.76	.91	1.00
	1400	660	38.7	11.3	2.78	.76	.91	1.00	37.4	11.0	3.14	.77	.92	1.00	36.0	10.6	3.55	.79	.94	1.00	34.6	10.1	4.01	.80	.96	1.00
	1600	755	39.5	11.6	2.78	.80	.95	1.00	38.2	11.2	3.15	.81	.96	1.00	36.8	10.8	3.56	.83	.97	1.00	35.4	10.4	4.02	.84	.99	1.00
67°F (19°C)	1200	565	40.2	11.8	2.78	.57	.70	.84	38.8	11.4	3.15	.57	.71	.85	37.3	10.9	3.55	.58	.73	.87	35.8	10.5	4.02	.59	.74	.88
	1400	660	40.9	12.0	2.79	.59	.74	.88	39.5	11.6	3.15	.60	.75	.90	38.0	11.1	3.56	.61	.77	.91	36.4	10.7	4.03	.62	.78	.93
	1600	755	41.6	12.2	2.80	.61	.77	.92	40.1	11.8	3.16	.62	.79	.94	38.6	11.3	3.57	.63	.80	.95	37.0	10.8	4.03	.64	.82	.97
71°F (22°C)	1200	565	42.7	12.5	2.81	.43	.55	.68	41.3	12.1	3.17	.43	.56	.69	39.8	11.7	3.59	.43	.57	.70	38.2	11.2	4.05	.43	.57	.72
	1400	660	43.6	12.8	2.82	.43	.57	.71	42.1	12.3	3.18	.43	.58	.73	40.5	11.9	3.59	.44	.59	.74	38.8	11.4	4.05	.44	.60	.76
	1600	755	44.2	13.0	2.82	.44	.60	.75	42.7	12.5	3.19	.44	.60	.76	41.0	12.0	3.60	.45	.61	.78	39.3	11.5	4.06	.45	.63	.80

12HPB42 — HEATING CAPACITY — CH23-51

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	
590	1250	13.6	46,500	2895	10.6	36,300	2670	7.4	25,200	2430	5.7	19,500	2205	2.9	9,800	1625
660	1400	13.7	46,800	2825	10.7	36,600	2600	7.5	25,500	2360	5.8	19,800	2135	3.0	10,100	1555
730	1550	13.8	47,100	2745	10.8	36,900	2520	7.6	25,800	2280	5.9	20,100	2055	3.0	10,400	1475

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

12HPB42 - CH33-36A/B-2F HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil											
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1200	565	45.5	13.3	3.04	35.5	10.4	2.85	24.5	7.2	2.66	19.5	5.7	2.40	9.7	2.8	1.78
1400	660	45.9	13.5	2.91	35.9	10.5	2.72	24.9	7.3	2.53	19.9	5.8	2.27	10.1	3.0	1.65
1600	755	46.3	13.6	2.82	36.3	10.6	2.63	25.3	7.4	2.44	20.3	5.9	2.18	10.5	3.1	1.56

12HPB42 — HEATING PERFORMANCE CH23-51 at 1400 cfm (661 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	2825	46,800	13.7
60	16	2775	44,600	13.1
55	13	2725	42,400	12.4
50	10	2675	40,100	11.8
47	8	2645	38,800	11.4
45	7	2600	36,600	10.7
40	4	2485	31,100	9.1
35	2	2370	25,600	7.5
30	-1	2365	25,500	7.5
25	-4	2360	25,500	7.5
20	-7	2355	25,400	7.4
17	-8	2350	25,400	7.4
15	-9	2330	24,500	7.2
10	-12	2280	22,300	6.5
5	-15	2135	19,800	5.8
0	-18	1990	17,400	5.1
-5	-21	1845	14,900	4.4
-10	-23	1700	12,500	3.7
-15	-26	1555	10,100	3.0
-20	-29	1410	7,600	2.2

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

12HPB42 - CH33-36A/B-2F HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.91	45.9	13.5
60	16	2.86	43.7	12.8
55	13	2.82	41.6	12.2
50	10	2.77	39.5	11.6
47	8	2.75	38.2	11.2
45	7	2.72	35.9	10.5
40	4	2.66	30.1	8.8
35	2	2.59	24.3	7.1
30	-1	2.56	24.6	7.2
25	-4	2.53	24.9	7.3
20	-7	2.50	25.2	7.4
17	-8	2.49	25.4	7.4
15	-9	2.47	24.5	7.2
10	-12	2.42	22.4	6.6
5	-15	2.27	19.9	5.8
0	-18	2.11	17.5	5.1
-5	-21	1.96	15.0	4.4
-10	-23	1.80	12.5	3.7
-15	-26	1.65	10.1	3.0
-20	-29	1.49	7.6	2.2

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

12HPB48 — COOLING CAPACITY — CB28UH-042 - CB29M-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	685	1450	14.0	47,600	3130	.74	.88	.99	13.5	46,000	3530	.75	.90	1.00	13.0	44,200	4000	.77	.92	1.00	12.4	42,400	4520	.78	.93	1.00
	730	1550	14.1	48,100	3140	.76	.90	1.00	13.6	46,500	3540	.77	.92	1.00	13.1	44,700	4000	.78	.94	1.00	12.6	42,900	4530	.80	.95	1.00
	780	1650	14.2	48,600	3140	.77	.92	1.00	13.7	46,900	3540	.79	.94	1.00	13.2	45,200	4000	.80	.95	1.00	12.7	43,300	4530	.82	.97	1.00
67°F (19.4°C)	685	1450	14.8	50,500	3160	.58	.72	.85	14.3	48,700	3560	.58	.73	.87	13.7	46,900	4020	.59	.74	.89	13.2	44,900	4550	.60	.76	.90
	730	1550	14.9	51,000	3160	.59	.73	.87	14.4	49,200	3570	.59	.75	.89	13.9	47,300	4030	.60	.76	.91	13.3	45,300	4550	.61	.78	.93
	780	1650	15.1	51,400	3170	.60	.75	.89	14.5	49,600	3570	.60	.76	.91	14.0	47,600	4030	.61	.78	.93	13.4	45,600	4560	.62	.80	.94
71°F (21.7°C)	685	1450	15.8	53,900	3190	.43	.56	.69	15.2	52,000	3600	.43	.57	.71	14.7	50,000	4060	.43	.58	.72	14.0	47,900	4580	.44	.59	.73
	730	1550	15.9	54,300	3200	.43	.57	.71	15.4	52,400	3600	.44	.58	.72	14.8	50,400	4070	.44	.59	.74	14.2	48,300	4580	.44	.60	.75
	780	1650	16.0	54,700	3200	.44	.58	.73	15.5	52,800	3610	.44	.59	.74	14.9	50,700	4070	.44	.60	.75	14.2	48,600	4590	.45	.61	.77

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

12HPB48 — COOLING CAPACITY — CB28UH-048 - CB29M-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		
	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	13.8	47,100	3120	.72	.85	.97	13.3	45,500	3520	.73	.87	.98	12.8	43,700	3980	.74	.88	.99	12.3	41,900	4500	.76	.90	1.00
	685	1450	14.1	48,000	3120	.74	.88	.99	13.6	46,400	3520	.75	.90	1.00	13.1	44,600	3980	.77	.92	1.00	12.5	42,700	4500	.78	.93	1.00
	755	1600	14.3	48,800	3130	.76	.91	1.00	13.8	47,100	3530	.78	.93	1.00	13.3	45,300	3990	.79	.94	1.00	12.7	43,400	4510	.81	.96	1.00
67°F (19.4°C)	615	1300	14.7	50,200	3140	.56	.69	.82	14.2	48,400	3550	.57	.70	.83	13.7	46,600	4000	.58	.72	.85	13.1	44,600	4520	.58	.73	.87
	685	1450	14.9	51,000	3150	.58	.72	.85	14.4	49,200	3550	.58	.73	.87	13.9	47,300	4010	.59	.74	.88	13.3	45,300	4530	.60	.76	.90
	755	1600	15.2	51,700	3160	.59	.74	.88	14.6	49,900	3560	.60	.75	.90	14.0	47,900	4020	.61	.77	.92	13.4	45,800	4540	.62	.79	.93
71°F (21.7°C)	615	1300	15.7	53,600	3180	.42	.55	.67	15.2	51,700	3580	.43	.55	.68	14.6	49,700	4040	.43	.56	.69	14.0	47,700	4560	.43	.57	.70
	685	1450	15.9	54,400	3190	.43	.56	.69	15.4	52,500	3590	.43	.57	.70	14.8	50,400	4050	.43	.58	.72	14.2	48,300	4570	.44	.59	.73
	755	1600	16.1	55,100	3190	.43	.58	.72	15.6	53,200	3600	.44	.58	.73	14.9	51,000	4060	.44	.59	.74	14.3	48,900	4580	.44	.60	.76

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

12HPB48 — HEATING CAPACITY — CB28UH-042 - CB29M-46

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	16.4	56,100	3810	12.8	43,600	3475	8.9	30,200	3110	6.5	22,200	2805	3.3	11,300	2070
730	1550	16.5	56,200	3740	12.8	43,700	3405	8.9	30,300	3040	6.5	22,300	2735	3.3	11,400	2000
780	1650	16.5	56,400	3685	12.9	43,900	3350	8.9	30,500	2985	6.6	22,500	2680	3.4	11,600	1945

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

12HPB48 — HEATING CAPACITY — CB28UH-048 - CB29M-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	
615	1300	16.4	55,900	3895	12.7	43,400	3555	8.8	30,000	3180	6.4	22,000	2890	3.3	11,100	2150
685	1450	16.5	56,200	3760	12.8	43,700	3420	8.9	30,300	3045	6.5	22,300	2755	3.3	11,400	2015
755	1600	16.6	56,700	3665	13.0	44,200	3325	9.0	30,800	2950	6.7	22,800	2660	3.5	11,900	1920

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

12HPB48 — HEATING PERFORMANCE
CB28UH-042 - CB29M-46 at 1550 cfm (732 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3740	56,200	16.5
60	16	3665	53,400	15.6
55	13	3590	50,500	14.8
50	10	3520	47,700	14.0
47	8	3475	46,000	13.5
45	7	3405	43,700	12.8
40	4	3230	37,800	11.1
35	2	3060	31,900	9.3
30	-1	3050	31,100	9.1
25	-4	3040	30,300	8.9
20	-7	3030	29,500	8.6
17	-8	3025	29,000	8.5
15	-9	2995	27,900	8.2
10	-12	2920	25,000	7.3
5	-15	2735	22,300	6.5
0	-18	2555	19,600	5.7
-5	-21	2370	16,900	5.0
-10	-23	2185	14,100	4.1
-15	-26	2000	11,400	3.3
-20	-29	1815	8,700	2.5

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

12HPB48 — HEATING PERFORMANCE
CB28UH-048 - CB29M-51 at 1450 cfm (685 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3760	56,200	16.5
60	16	3685	53,400	15.6
55	13	3610	50,500	14.8
50	10	3540	47,700	14.0
47	8	3495	46,000	13.5
45	7	3420	43,700	12.8
40	4	3230	37,800	11.1
35	2	3045	31,900	9.3
30	-1	3045	31,100	9.1
25	-4	3045	30,300	8.9
20	-7	3045	29,500	8.6
17	-8	3045	29,000	8.5
15	-9	3015	27,900	8.2
10	-12	2940	25,000	7.3
5	-15	2755	22,300	6.5
0	-18	2570	19,600	5.7
-5	-21	2385	16,900	5.0
-10	-23	2200	14,100	4.1
-15	-26	2015	11,400	3.3
-20	-29	1830	8,700	2.5

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

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

12HPB48 — COOLING CAPACITY — CB30M-46 - CB30U-41/46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	590	1250	13.3	45,300	3090	.71	.84	.96	12.8	43,700	3490	.72	.86	.97	12.3	42,000	3940	.73	.87	.98	11.8	40,300	4470	.75	.89	1.00
	660	1400	13.5	46,200	3090	.73	.87	.98	13.1	44,600	3490	.75	.89	.99	12.6	42,900	3950	.76	.90	1.00	12.0	41,100	4460	.77	.92	1.00
	730	1550	13.8	47,000	3100	.76	.90	1.00	13.3	45,400	3500	.77	.92	1.00	12.8	43,600	3960	.78	.94	1.00	12.3	41,800	4470	.80	.95	1.00
67°F (19.4°C)	590	1250	14.2	48,300	3110	.56	.69	.81	13.7	46,600	3510	.57	.70	.82	13.1	44,800	3970	.57	.71	.84	12.6	42,900	4480	.58	.72	.86
	660	1400	14.4	49,200	3120	.57	.71	.84	13.9	47,400	3520	.58	.72	.86	13.4	45,600	3970	.59	.73	.87	12.8	43,700	4490	.59	.75	.89
	730	1550	14.6	49,900	3130	.59	.73	.87	14.1	48,100	3530	.59	.75	.89	13.5	46,200	3980	.60	.76	.91	13.0	44,200	4500	.61	.78	.92
71°F (21.7°C)	590	1250	15.1	51,600	3150	.42	.54	.66	14.6	49,800	3550	.43	.55	.67	14.0	47,900	4010	.43	.55	.68	13.5	45,900	4520	.43	.56	.69
	660	1400	15.4	52,400	3160	.43	.56	.68	14.8	50,600	3560	.43	.56	.69	14.3	48,700	4020	.43	.57	.71	13.7	46,600	4530	.44	.58	.72
	730	1550	15.6	53,100	3170	.43	.57	.71	15.0	51,300	3570	.43	.58	.72	14.4	49,300	4020	.44	.59	.74	13.8	47,200	4540	.44	.60	.75

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

12HPB48 — COOLING CAPACITY — CB28UH-060 - CB29M-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		
	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	14.0	47,600	3130	.73	.87	.99	13.5	45,900	3520	.75	.89	.99	13.0	44,200	3980	.76	.90	1.00	12.4	42,300	4500	.77	.92	1.00
	755	1600	14.3	48,700	3130	.76	.91	1.00	13.8	47,000	3530	.78	.93	1.00	13.2	45,200	3990	.79	.94	1.00	12.7	43,300	4510	.81	.96	1.00
	850	1800	14.5	49,600	3140	.79	.95	1.00	14.0	47,900	3540	.81	.96	1.00	13.5	46,100	4000	.83	.98	1.00	13.0	44,300	4520	.84	.99	1.00
67°F (19.4°C)	660	1400	14.8	50,600	3150	.57	.71	.84	14.3	48,800	3550	.58	.72	.86	13.7	46,900	4010	.59	.73	.87	13.2	45,000	4530	.59	.75	.89
	755	1600	15.1	51,600	3160	.59	.74	.88	14.6	49,700	3560	.60	.75	.90	14.0	47,700	4020	.61	.77	.92	13.4	45,700	4540	.62	.79	.93
	850	1800	15.3	52,300	3170	.61	.77	.92	14.8	50,400	3570	.62	.79	.93	14.2	48,400	4030	.63	.80	.95	13.6	46,300	4550	.64	.82	.97
71°F (21.7°C)	660	1400	15.8	54,000	3190	.43	.56	.68	15.3	52,100	3590	.43	.56	.69	14.7	50,100	4050	.43	.57	.71	14.1	48,000	4570	.44	.58	.72
	755	1600	16.1	54,900	3200	.43	.58	.72	15.5	53,000	3600	.44	.58	.73	14.9	50,900	4060	.44	.59	.74	14.3	48,800	4580	.44	.60	.76
	850	1800	16.3	55,700	3210	.44	.60	.75	15.7	53,700	3610	.44	.60	.76	15.1	51,500	4070	.45	.61	.78	14.4	49,300	4590	.45	.63	.80

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

12HPB48 — HEATING CAPACITY — CB30M-46 - CB30U-41/46

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	
590	1250	16.4	56,000	3980	12.7	43,300	3580	8.8	29,900	3145	6.4	21,800	2860	3.2	11,000	2130
660	1400	16.5	56,300	3855	12.8	43,600	3455	8.9	30,200	3020	6.5	22,100	2735	3.3	11,300	2005
730	1550	16.6	56,700	3755	12.9	44,000	3355	9.0	30,600	2920	6.6	22,500	2635	3.4	11,700	1905

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

12HPB48 — HEATING CAPACITY — CB28UH-060 - CB29M-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	
660	1400	16.3	55,600	3855	12.6	43,100	3515	8.7	29,700	3140	6.4	21,700	2855	3.2	10,800	2125
755	1600	16.5	56,200	3715	12.8	43,700	3375	8.9	30,300	3000	6.5	22,300	2715	3.3	11,400	1985
850	1800	16.7	57,100	3615	13.1	44,600	3275	9.1	31,200	2900	6.8	23,200	2615	3.6	12,300	1885

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

12HPB48 — HEATING PERFORMANCE
CB30M-46 - CB30U-41/46 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3855	56,300	16.5
60	16	3770	53,500	15.7
55	13	3685	50,600	14.8
50	10	3600	47,700	14.0
47	8	3550	46,000	13.5
45	7	3455	43,600	12.8
40	4	3225	37,800	11.1
35	2	2995	31,900	9.3
30	-1	3005	31,000	9.1
25	-4	3020	30,200	8.9
20	-7	3030	29,300	8.6
17	-8	3035	28,800	8.4
15	-9	3000	27,700	8.1
10	-12	2915	24,800	7.3
5	-15	2735	22,100	6.5
0	-18	2550	19,400	5.7
-5	-21	2370	16,700	4.9
-10	-23	2185	14,000	4.1
-15	-26	2005	11,300	3.3
-20	-29	1820	8,600	2.5

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

12HPB48 — HEATING PERFORMANCE
CB28UH-060 - CB29M-65 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3715	56,200	16.5
60	16	3640	53,400	15.6
55	13	3565	50,500	14.8
50	10	3495	47,700	14.0
47	8	3450	46,000	13.5
45	7	3375	43,700	12.8
40	4	3185	37,800	11.1
35	2	3000	31,900	9.3
30	-1	3000	31,100	9.1
25	-4	3000	30,300	8.9
20	-7	3000	29,500	8.6
17	-8	3000	29,000	8.5
15	-9	2970	27,900	8.2
10	-12	2895	25,000	7.3
5	-15	2715	22,300	6.5
0	-18	2530	19,600	5.7
-5	-21	2350	16,900	5.0
-10	-23	2165	14,100	4.1
-15	-26	1985	11,400	3.3
-20	-29	1800	8,700	2.5

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

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

12HPB48 — COOLING CAPACITY — CB30M-51 - CB30U-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		
	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	14.2	48,400	3130	.73	.87	.99	13.7	46,600	3530	.74	.89	1.00	13.1	44,800	3980	.76	.90	1.00	12.5	42,800	4490	.77	.92	1.00
	755	1600	14.5	49,500	3140	.76	.91	1.00	14.0	47,700	3540	.78	.93	1.00	13.4	45,800	3990	.79	.95	1.00	12.9	43,900	4510	.81	.96	1.00
	850	1800	14.8	50,500	3150	.79	.95	1.00	14.3	48,700	3550	.81	.96	1.00	13.7	46,800	4000	.82	.98	1.00	13.2	44,900	4520	.84	.99	1.00
67°F (19.4°C)	660	1400	15.1	51,500	3160	.57	.70	.84	14.6	49,700	3560	.58	.72	.85	14.0	47,700	4010	.58	.73	.87	13.4	45,600	4530	.59	.74	.89
	755	1600	15.4	52,600	3170	.59	.74	.88	14.8	50,600	3570	.60	.75	.90	14.2	48,600	4020	.61	.77	.91	13.6	46,400	4540	.62	.78	.93
	850	1800	15.6	53,400	3180	.61	.77	.92	15.1	51,400	3580	.62	.78	.94	14.4	49,300	4030	.63	.80	.95	13.8	47,100	4550	.64	.82	.97
71°F (21.7°C)	660	1400	16.1	55,100	3200	.43	.55	.68	15.6	53,100	3600	.43	.56	.69	14.9	51,000	4060	.43	.57	.70	14.3	48,800	4580	.43	.58	.72
	755	1600	16.4	56,100	3210	.43	.57	.71	15.8	54,000	3620	.44	.58	.73	15.2	51,800	4070	.44	.59	.74	14.5	49,600	4590	.44	.60	.76
	850	1800	16.7	56,900	3220	.44	.59	.75	16.1	54,800	3630	.44	.60	.76	15.4	52,500	4080	.45	.61	.78	14.7	50,200	4600	.45	.63	.80

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

12HPB48 — COOLING CAPACITY — CB30M-65 - CB30U-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		
	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	14.2	48,400	3140	.73	.87	.99	13.7	46,700	3540	.74	.88	1.00	13.1	44,800	4000	.76	.90	1.00	12.6	42,900	4520	.77	.92	1.00
	755	1600	14.5	49,600	3150	.76	.91	1.00	14.0	47,800	3550	.77	.93	1.00	13.5	45,900	4010	.79	.95	1.00	12.9	43,900	4530	.81	.96	1.00
	850	1800	14.8	50,600	3160	.79	.95	1.00	14.3	48,700	3560	.81	.96	1.00	13.7	46,800	4020	.82	.98	1.00	13.2	44,900	4540	.84	.99	1.00
67°F (19.4°C)	660	1400	15.1	51,600	3180	.57	.70	.84	14.6	49,700	3580	.58	.72	.85	14.0	47,700	4030	.58	.73	.87	13.4	45,700	4550	.59	.74	.89
	755	1600	15.4	52,700	3190	.59	.74	.88	14.9	50,700	3590	.60	.75	.89	14.2	48,600	4050	.60	.77	.91	13.6	46,500	4560	.62	.78	.93
	850	1800	15.7	53,500	3200	.61	.77	.92	15.1	51,500	3600	.62	.78	.93	14.5	49,400	4050	.63	.80	.95	13.8	47,200	4570	.64	.82	.97
71°F (21.7°C)	660	1400	16.2	55,200	3220	.43	.55	.68	15.6	53,200	3620	.43	.56	.69	14.9	51,000	4080	.43	.57	.70	14.3	48,900	4600	.43	.58	.72
	755	1600	16.5	56,200	3230	.43	.57	.71	15.9	54,100	3630	.44	.58	.73	15.2	51,900	4090	.44	.59	.74	14.6	49,700	4610	.44	.60	.76
	850	1800	16.7	57,000	3240	.44	.59	.74	16.1	54,900	3650	.44	.60	.76	15.4	52,600	4110	.45	.61	.78	14.7	50,300	4620	.45	.63	.80

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

12HPB48 — HEATING CAPACITY — CB30M-51 - CB30U-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	
660	1400	16.4	55,900	3700	12.7	43,300	3435	8.8	30,000	3140	6.4	22,000	2870	3.3	11,100	2120
755	1600	16.5	56,200	3580	12.8	43,600	3315	8.9	30,300	3020	6.5	22,300	2750	3.3	11,400	2000
850	1800	16.5	56,400	3485	12.8	43,800	3220	8.9	30,500	2925	6.6	22,500	2655	3.4	11,600	1905

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

12HPB48 — HEATING CAPACITY — CB30M-65 - CB30U-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	
660	1400	16.4	56,100	3670	12.8	43,600	3405	8.9	30,200	3110	6.5	22,200	2845	3.3	11,300	2100
755	1600	16.5	56,200	3550	12.8	43,700	3285	8.9	30,300	2990	6.5	22,300	2725	3.3	11,400	1980
850	1800	16.6	56,500	3460	12.9	44,000	3195	9.0	30,600	2900	6.6	22,600	2635	3.4	11,700	1890

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

12HPB48 — HEATING PERFORMANCE
CB30M-51 - CB30U-51 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3580	56,200	16.5
60	16	3525	53,400	15.6
55	13	3465	50,500	14.8
50	10	3405	47,700	14.0
47	8	3370	46,000	13.5
45	7	3315	43,600	12.8
40	4	3170	37,800	11.1
35	2	3020	31,900	9.3
30	-1	3020	31,100	9.1
25	-4	3020	30,300	8.9
20	-7	3020	29,500	8.6
17	-8	3020	29,000	8.5
15	-9	3000	27,900	8.2
10	-12	2940	25,000	7.3
5	-15	2750	22,300	6.5
0	-18	2565	19,600	5.7
-5	-21	2375	16,900	5.0
-10	-23	2190	14,100	4.1
-15	-26	2000	11,400	3.3
-20	-29	1815	8,700	2.5

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

12HPB48 — HEATING PERFORMANCE
CB30M-65 - CB30U-65 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3550	56,200	16.5
60	16	3495	53,400	15.6
55	13	3435	50,500	14.8
50	10	3375	47,700	14.0
47	8	3340	46,000	13.5
45	7	3285	43,700	12.8
40	4	3140	37,800	11.1
35	2	2990	31,900	9.3
30	-1	2990	31,100	9.1
25	-4	2990	30,300	8.9
20	-7	2990	29,500	8.6
17	-8	2990	29,000	8.5
15	-9	2970	27,900	8.2
10	-12	2910	25,000	7.3
5	-15	2725	22,300	6.5
0	-18	2540	19,600	5.7
-5	-21	2355	16,900	5.0
-10	-23	2165	14,100	4.1
-15	-26	1980	11,400	3.3
-20	-29	1795	8,700	2.5

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

HEATING AND COOLING RATINGS — 4 TON

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

12HPB48 — COOLING CAPACITY — CB31MV-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		
	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)	670	1425	14.2	48,300	3130	.74	.88	.99	13.7	46,600	3520	.75	.89	1.00	13.1	44,700	3980	.76	.91	1.00	12.5	42,800	4490	.78	.93	1.00
	765	1625	14.4	49,300	3140	.77	.92	1.00	13.9	47,500	3530	.78	.93	1.00	13.4	45,600	3990	.79	.95	1.00	12.8	43,700	4510	.81	.97	1.00
	850	1805	14.7	50,200	3140	.79	.95	1.00	14.2	48,400	3540	.81	.96	1.00	13.6	46,500	4000	.82	.98	1.00	13.1	44,600	4510	.84	1.00	1.00
67°F (19.4°C)	670	1425	15.1	51,500	3160	.57	.71	.85	14.5	49,600	3560	.58	.72	.86	14.0	47,600	4010	.59	.74	.88	13.3	45,500	4530	.60	.75	.90
	765	1625	15.4	52,400	3170	.59	.74	.88	14.8	50,400	3570	.60	.75	.90	14.2	48,300	4020	.61	.77	.92	13.5	46,200	4540	.62	.79	.94
	850	1805	15.6	53,100	3180	.61	.77	.92	15.0	51,100	3580	.62	.78	.94	14.4	49,000	4030	.63	.80	.95	13.7	46,800	4540	.64	.82	.97
71°F (21.7°C)	670	1425	16.1	55,000	3200	.43	.56	.69	15.5	53,000	3600	.43	.56	.70	14.9	50,900	4060	.43	.57	.71	14.3	48,700	4570	.44	.58	.73
	765	1625	16.4	55,800	3210	.43	.58	.72	15.8	53,800	3610	.44	.58	.73	15.1	51,600	4070	.44	.59	.75	14.5	49,400	4590	.44	.60	.76
	850	1805	16.6	56,600	3220	.44	.59	.75	16.0	54,500	3620	.44	.60	.76	15.3	52,200	4080	.45	.61	.78	14.6	49,900	4600	.45	.63	.80

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

12HPB48 — COOLING CAPACITY — CB31MV-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		
	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)	670	1425	14.2	48,400	3190	.74	.88	.99	13.7	46,600	3590	.75	.89	1.00	13.1	44,800	4060	.76	.91	1.00	12.6	42,900	4580	.78	.93	1.00
	765	1625	14.5	49,400	3200	.77	.92	1.00	14.0	47,600	3610	.78	.93	1.00	13.4	45,700	4070	.79	.95	1.00	12.8	43,800	4600	.81	.97	1.00
	850	1805	14.7	50,300	3210	.79	.95	1.00	14.2	48,400	3620	.81	.96	1.00	13.7	46,600	4080	.83	.98	1.00	13.1	44,700	4610	.84	1.00	1.00
67°F (19.4°C)	670	1425	15.1	51,500	3220	.57	.71	.85	14.5	49,600	3630	.58	.72	.86	14.0	47,600	4090	.59	.74	.88	13.4	45,600	4620	.60	.75	.90
	765	1625	15.4	52,400	3230	.59	.74	.88	14.8	50,400	3640	.60	.75	.90	14.2	48,400	4110	.61	.77	.92	13.6	46,300	4630	.62	.79	.94
	850	1805	15.6	53,100	3240	.61	.77	.92	15.0	51,100	3650	.62	.78	.94	14.4	49,100	4110	.63	.80	.95	13.7	46,900	4640	.64	.82	.97
71°F (21.7°C)	670	1425	16.1	55,000	3270	.43	.56	.69	15.6	53,100	3680	.43	.56	.70	14.9	50,900	4140	.43	.57	.71	14.3	48,800	4670	.44	.58	.73
	765	1625	16.4	55,900	3280	.43	.58	.72	15.8	53,900	3690	.44	.58	.73	15.2	51,700	4150	.44	.59	.75	14.5	49,400	4680	.44	.60	.76
	850	1805	16.6	56,600	3290	.44	.59	.75	16.0	54,500	3700	.44	.60	.76	15.3	52,300	4160	.45	.61	.78	14.7	50,000	4690	.45	.63	.80

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

12HPB48 — HEATING CAPACITY — CB31MV-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	
675	1425	16.4	56,000	3705	12.7	43,300	3450	8.8	29,900	3180	6.4	21,800	2860	3.2	11,000	2115
765	1625	16.5	56,300	3585	12.8	43,600	3330	8.9	30,200	3060	6.5	22,100	2740	3.3	11,300	1995
850	1805	16.6	56,600	3500	12.9	43,900	3245	8.9	30,500	2975	6.6	22,400	2655	3.4	11,600	1910

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

12HPB48 — HEATING CAPACITY — CB31MV-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	
675	1425	16.4	55,800	3725	12.7	43,300	3470	8.8	29,900	3200	6.4	21,900	2880	3.2	11,000	2125
765	1625	16.5	56,200	3610	12.8	43,700	3355	8.9	30,300	3085	6.5	22,300	2765	3.3	11,400	2010
850	1805	16.6	56,500	3525	12.9	44,000	3270	9.0	30,600	3000	6.6	22,600	2680	3.4	11,700	1925

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

12HPB48 — HEATING PERFORMANCE CB31MV-51 at 1625 cfm (765 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3585	56,300	16.5
60	16	3525	53,500	15.7
55	13	3465	50,600	14.8
50	10	3405	47,700	14.0
47	8	3370	46,000	13.5
45	7	3330	43,600	12.8
40	4	3225	37,800	11.1
35	2	3120	31,900	9.3
30	-1	3090	31,000	9.1
25	-4	3060	30,200	8.9
20	-7	3030	29,300	8.6
17	-8	3010	28,800	8.4
15	-9	2985	27,700	8.1
10	-12	2925	24,800	7.3
5	-15	2740	22,100	6.5
0	-18	2555	19,400	5.7
-5	-21	2365	16,700	4.9
-10	-23	2180	14,000	4.1
-15	-26	1995	11,300	3.3
-20	-29	1805	8,600	2.5

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

12HPB48 — HEATING PERFORMANCE CB31MV-65 at 1625 cfm (767 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3610	56,200	16.5
60	16	3550	53,400	15.6
55	13	3490	50,500	14.8
50	10	3430	47,700	14.0
47	8	3395	46,000	13.5
45	7	3355	43,700	12.8
40	4	3250	37,800	11.1
35	2	3145	31,900	9.3
30	-1	3115	31,100	9.1
25	-4	3085	30,300	8.9
20	-7	3055	29,500	8.6
17	-8	3035	29,000	8.5
15	-9	3015	27,900	8.2
10	-12	2955	25,000	7.3
5	-15	2765	22,300	6.5
0	-18	2575	19,600	5.7
-5	-21	2390	16,900	5.0
-10	-23	2200	14,100	4.1
-15	-26	2010	11,400	3.3
-20	-29	1820	8,700	2.5

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

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

12HPB48 — 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) 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	80°F 27°C	85°F 29°C
63°F (17.2°C)	660	1400	13.6	46,400	2990	.74	.89	1.00	13.1	44,700	3380	.76	.90	1.00	12.6	43,000	3810	.77	.92	1.00	12.0	41,100	4310	.78	.94	1.00
	755	1600	13.9	47,500	3000	.78	.93	1.00	13.4	45,800	3380	.79	.94	1.00	12.9	44,000	3820	.80	.96	1.00	12.3	42,100	4320	.82	.98	1.00
	850	1800	14.2	48,400	3010	.81	.96	1.00	13.7	46,700	3390	.82	.98	1.00	13.2	44,900	3830	.84	1.00	1.00	12.6	43,100	4330	.86	1.00	1.00
67°F (19.4°C)	660	1400	14.5	49,400	3020	.58	.72	.85	14.0	47,600	3410	.59	.73	.87	13.4	45,700	3840	.60	.74	.88	12.8	43,700	4340	.61	.76	.90
	755	1600	14.7	50,300	3030	.60	.75	.89	14.2	48,500	3420	.61	.76	.91	13.7	46,600	3850	.62	.78	.93	13.1	44,600	4350	.63	.80	.95
	850	1800	15.0	51,200	3040	.62	.78	.93	14.4	49,300	3430	.63	.80	.95	13.9	47,300	3860	.64	.81	.97	13.2	45,200	4360	.65	.83	.99
71°F (21.7°C)	660	1400	15.4	52,700	3060	.44	.56	.69	14.9	50,800	3450	.44	.57	.70	14.3	48,800	3880	.44	.58	.72	13.7	46,800	4380	.44	.59	.73
	755	1600	15.7	53,700	3070	.44	.58	.73	15.2	51,700	3460	.45	.59	.74	14.6	49,700	3900	.45	.60	.75	14.0	47,600	4390	.45	.61	.77
	850	1800	15.9	54,400	3080	.45	.60	.76	15.4	52,500	3470	.45	.61	.77	14.7	50,300	3910	.46	.62	.79	14.1	48,200	4400	.46	.64	.81

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

12HPB48 — COOLING CAPACITY — C26-46

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	660	1400	14.1	48,000	2990	.75	.89	1.00	13.6	46,300	3370	.76	.91	1.00	13.0	44,500	3800	.78	.93	1.00	12.5	42,600	4300	.79	.95	1.00
	755	1600	14.4	49,100	3000	.79	.94	1.00	13.9	47,300	3380	.80	.95	1.00	13.3	45,500	3820	.81	.97	1.00	12.8	43,600	4310	.83	.99	1.00
	850	1800	14.7	50,000	3010	.82	.97	1.00	14.2	48,300	3390	.83	.99	1.00	13.6	46,500	3830	.85	1.00	1.00	13.1	44,600	4320	.87	1.00	1.00
67°F (19.4°C)	660	1400	14.9	50,900	3020	.59	.73	.86	14.4	49,100	3400	.59	.74	.88	13.8	47,200	3840	.60	.75	.89	13.2	45,200	4330	.61	.77	.91
	755	1600	15.2	51,900	3020	.61	.76	.91	14.7	50,000	3410	.61	.77	.92	14.1	48,000	3850	.62	.79	.94	13.5	45,900	4340	.63	.81	.96
	850	1800	15.4	52,700	3030	.63	.79	.94	14.9	50,700	3420	.64	.81	.96	14.3	48,700	3860	.65	.83	.98	13.7	46,600	4350	.66	.84	1.00
71°F (21.7°C)	660	1400	15.9	54,300	3050	.44	.57	.70	15.3	52,300	3440	.44	.58	.71	14.7	50,300	3870	.44	.59	.73	14.1	48,200	4370	.45	.60	.74
	755	1600	16.2	55,200	3060	.45	.59	.74	15.6	53,200	3450	.45	.60	.75	15.0	51,100	3880	.45	.61	.77	14.3	48,900	4380	.46	.62	.78
	850	1800	16.4	55,900	3070	.45	.61	.77	15.8	53,900	3460	.46	.62	.79	15.2	51,800	3890	.46	.63	.80	14.5	49,600	4390	.47	.65	.82

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

12HPB48 — 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
L/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
660	1400	16.3	55,700	3425	12.7	43,200	3140	8.8	29,900	2845	6.4	21,900	2425	3.2	10,900	1855
755	1600	16.5	56,200	3305	12.8	43,700	3020	8.9	30,400	2725	6.6	22,400	2305	3.3	11,400	1735
850	1800	16.6	56,700	3180	13.0	44,200	2900	9.1	31,000	2605	6.7	22,900	2185	3.5	12,000	1615

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

12HPB48 — HEATING CAPACITY — C26-46

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	
565	1200	16.1	55,000	3760	12.5	42,600	3430	8.6	29,400	3090	6.3	21,500	2635	3.1	10,600	2025
660	1400	16.3	55,600	3580	12.7	43,200	3250	8.8	30,000	2915	6.5	22,100	2455	3.3	11,300	1845
755	1600	16.4	55,900	3400	12.7	43,400	3070	8.9	30,300	2735	6.5	22,300	2275	3.4	11,500	1665

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

12HPB48 — HEATING PERFORMANCE CVP10-51/EC10Q4 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3305	56,200	16.5
60	16	3235	53,400	15.6
55	13	3165	50,500	14.8
50	10	3100	47,700	14.0
47	8	3060	46,000	13.5
45	7	3020	43,700	12.8
40	4	2920	38,000	11.1
35	2	2820	32,200	9.4
30	-1	2775	31,300	9.2
25	-4	2725	30,400	8.9
20	-7	2680	29,500	8.6
17	-8	2650	29,000	8.5
15	-9	2595	27,900	8.2
10	-12	2450	25,200	7.4
5	-15	2305	22,400	6.6
0	-18	2165	19,700	5.8
-5	-21	2020	16,900	5.0
-10	-23	1875	14,200	4.2
-15	-26	1735	11,400	3.3
-20	-29	1590	8700	2.5

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

12HPB48 — HEATING PERFORMANCE C26-46 at 1400 cfm (660 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3580	55,600	16.3
60	16	3500	52,800	15.5
55	13	3425	50,000	14.7
50	10	3345	47,200	13.8
47	8	3295	45,500	13.3
45	7	3250	43,200	12.7
40	4	3140	37,500	11.0
35	2	3025	31,800	9.3
30	-1	2970	30,900	9.1
25	-4	2915	30,000	8.8
20	-7	2855	29,100	8.5
17	-8	2825	28,600	8.4
15	-9	2760	27,500	8.1
10	-12	2610	24,800	7.3
5	-15	2455	22,100	6.5
0	-18	2305	19,400	5.7
-5	-21	2150	16,700	4.9
-10	-23	2000	14,000	4.1
-15	-26	1845	11,300	3.3
-20	-29	1695	8600	2.5

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

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

12HPB48 — COOLING CAPACITY — C26-51

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		
	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	3000	.75	.89	1.00	13.4	45,700	3380	.76	.91	1.00	12.9	43,900	3820	.77	.92	1.00	12.3	42,000	4310	.79	.94	1.00
	755	1600	14.2	48,500	3010	.78	.93	1.00	13.7	46,700	3390	.80	.95	1.00	13.2	44,900	3830	.81	.97	1.00	12.6	43,000	4330	.83	.99	1.00
	850	1800	14.5	49,500	3020	.81	.97	1.00	14.0	47,700	3400	.83	.99	1.00	13.5	45,900	3840	.85	1.00	1.00	12.9	44,000	4340	.86	1.00	1.00
67°F (19.4°C)	660	1400	14.8	50,400	3030	.59	.72	.86	14.2	48,500	3420	.59	.74	.87	13.7	46,600	3850	.60	.75	.89	13.1	44,600	4350	.61	.76	.91
	755	1600	15.1	51,400	3040	.61	.76	.90	14.5	49,500	3430	.61	.77	.92	13.9	47,500	3860	.62	.79	.94	13.3	45,400	4360	.63	.80	.96
	850	1800	15.3	52,200	3050	.62	.79	.94	14.7	50,200	3430	.63	.81	.96	14.1	48,200	3870	.64	.82	.98	13.5	46,100	4370	.66	.84	1.00
71°F (21.7°C)	660	1400	15.7	53,700	3070	.44	.57	.70	15.2	51,800	3460	.44	.58	.71	14.6	49,800	3890	.44	.58	.72	14.0	47,600	4390	.45	.59	.74
	755	1600	16.0	54,700	3080	.45	.59	.73	15.4	52,700	3470	.45	.60	.75	14.8	50,600	3910	.45	.61	.76	14.2	48,400	4400	.46	.62	.78
	850	1800	16.3	55,500	3090	.45	.61	.77	15.7	53,500	3480	.46	.62	.78	15.0	51,300	3920	.46	.63	.80	14.4	49,000	4410	.46	.64	.82

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

12HPB48 — C33-48B/C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.4	13.6	2.96	.72	.86	.98	44.7	13.1	3.34	.74	.88	.99	43.0	12.6	3.78	.75	.89	1.00	41.2	12.1	4.29	.76	.91	1.00
	1600	755	47.4	13.9	2.97	.75	.90	1.00	45.7	13.4	3.35	.76	.91	1.00	44.0	12.9	3.80	.78	.93	1.00	42.2	12.4	4.29	.80	.95	1.00
	1800	850	48.3	14.2	2.98	.78	.93	1.00	46.6	13.7	3.37	.80	.95	1.00	44.8	13.1	3.80	.81	.96	1.00	43.1	12.6	4.30	.83	.98	1.00
67°F (19°C)	1400	660	49.4	14.5	2.99	.57	.70	.83	47.7	14.0	3.37	.57	.71	.84	45.8	13.4	3.80	.58	.72	.86	43.9	12.9	4.30	.59	.74	.88
	1600	755	50.3	14.7	3.00	.58	.73	.87	48.5	14.2	3.38	.59	.74	.89	46.6	13.7	3.81	.60	.76	.90	44.6	13.1	4.32	.61	.77	.92
	1800	850	51.1	15.0	3.00	.60	.76	.90	49.2	14.4	3.38	.61	.77	.92	47.3	13.9	3.82	.62	.79	.94	45.3	13.3	4.32	.63	.81	.96
71°F (22°C)	1400	660	52.7	15.4	3.02	.43	.55	.67	50.9	14.9	3.40	.43	.56	.68	48.9	14.3	3.84	.43	.56	.70	46.9	13.7	4.34	.43	.57	.71
	1600	755	53.6	15.7	3.03	.43	.57	.71	51.7	15.2	3.41	.44	.58	.72	49.7	14.6	3.85	.44	.59	.73	47.7	14.0	4.35	.44	.59	.75
	1800	850	54.4	15.9	3.04	.44	.59	.74	52.4	15.4	3.42	.44	.60	.75	50.4	14.8	3.86	.44	.61	.76	48.3	14.2	4.36	.45	.61	.78

12HPB48 — HEATING CAPACITY — C26-51

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	
660	1400	16.3	55,600	3500	12.6	43,100	3220	8.7	29,800	2935	6.4	21,800	2505	3.2	10,800	1915
755	1600	16.5	56,200	3375	12.8	43,700	3100	8.9	30,400	2810	6.6	22,400	2385	3.3	11,400	1790
850	1800	16.5	56,400	3255	12.8	43,800	2975	8.9	30,500	2690	6.6	22,600	2265	3.4	11,600	1670

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

12HPB48 - C33-48B/C - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	47.4	13.9	3.60	36.6	10.7	3.37	25.0	7.3	3.13	18.6	5.5	2.85	9.4	2.8	2.11
1600	755	47.7	14.0	3.46	36.9	10.8	3.23	25.3	7.4	2.99	18.9	5.5	2.71	9.7	2.8	1.97
1800	850	48.0	14.1	3.36	37.2	10.9	3.13	25.6	7.5	2.89	19.2	5.6	2.61	10.0	2.9	1.87

12HPB48 — HEATING PERFORMANCE C26-51 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3375	56,200	16.5
60	16	3310	53,400	15.6
55	13	3245	50,500	14.8
50	10	3175	47,700	14.0
47	8	3140	46,000	13.5
45	7	3100	43,700	12.8
40	4	3000	37,900	11.1
35	2	2900	32,100	9.4
30	-1	2855	31,300	9.2
25	-4	2810	30,400	8.9
20	-7	2765	29,500	8.6
17	-8	2740	29,000	8.5
15	-9	2680	27,900	8.2
10	-12	2535	25,200	7.4
5	-15	2385	22,400	6.6
0	-18	2235	19,700	5.8
-5	-21	2090	16,900	5.0
-10	-23	1940	14,200	4.2
-15	-26	1790	11,400	3.3
-20	-29	1645	8700	2.5

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

12HPB48 - C33-48B/C - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.46	47.7	14.0
60	16	3.41	45.3	13.3
55	13	3.36	42.9	12.6
50	10	3.31	40.4	11.8
47	8	3.27	39.0	11.4
45	7	3.23	36.9	10.8
40	4	3.13	31.5	9.2
35	2	3.03	26.1	7.6
30	-1	3.01	25.7	7.5
25	-4	2.99	25.3	7.4
20	-7	2.98	24.8	7.3
17	-8	2.97	24.6	7.2
15	-9	2.95	23.6	6.9
10	-12	2.89	21.2	6.2
5	-15	2.71	18.9	5.5
0	-18	2.52	16.6	4.9
-5	-21	2.34	14.3	4.2
-10	-23	2.15	12.0	3.5
-15	-26	1.97	9.7	2.8
-20	-29	1.78	7.4	2.2

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

12HPB48 — COOLING CAPACITY — C26-65EAP - CH23-68

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	565	1200	13.9	47,300	3000	.72	.84	.96	13.4	45,600	3370	.72	.86	.98	12.8	43,800	3810	.74	.87	1.00	12.3	41,900	4310	.75	.89	1.00
	660	1400	14.3	48,700	3010	.74	.89	1.00	13.7	46,900	3390	.76	.90	1.00	13.2	45,000	3830	.77	.92	1.00	12.6	43,100	4320	.79	.94	1.00
	755	1600	14.6	49,800	3020	.78	.93	1.00	14.1	48,000	3400	.79	.94	1.00	13.5	46,100	3840	.81	.96	1.00	12.9	44,100	4330	.82	.98	1.00
67°F (19.4°C)	565	1200	14.8	50,600	3030	.57	.69	.81	14.3	48,800	3410	.57	.70	.82	13.7	46,800	3850	.58	.71	.84	13.1	44,800	4340	.58	.72	.85
	660	1400	15.2	51,900	3040	.58	.72	.85	14.7	50,000	3430	.59	.73	.87	14.1	48,000	3860	.60	.74	.88	13.5	45,900	4350	.61	.76	.91
	755	1600	15.5	52,900	3050	.60	.75	.89	14.9	51,000	3440	.61	.76	.91	14.3	48,900	3870	.62	.78	.93	13.7	46,700	4370	.63	.80	.95
71°F (21.7°C)	565	1200	15.9	54,100	3070	.43	.55	.66	15.3	52,100	3450	.43	.55	.67	14.7	50,100	3890	.44	.56	.68	14.1	48,000	4390	.44	.57	.69
	660	1400	16.2	55,400	3080	.44	.56	.69	15.6	53,400	3470	.44	.57	.70	15.0	51,300	3910	.44	.58	.72	14.4	49,100	4400	.44	.59	.73
	755	1600	16.5	56,400	3100	.44	.59	.73	15.9	54,400	3480	.45	.59	.74	15.3	52,200	3920	.45	.60	.75	14.6	49,900	4420	.45	.61	.77

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

12HPB48 — C33-50/60C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.8	13.7	2.97	.72	.86	.98	45.1	13.2	3.35	.73	.88	.99	43.3	12.7	3.80	.75	.89	1.00	41.5	12.2	4.30	.76	.91	1.00
	1600	755	47.8	14.0	2.98	.75	.90	1.00	46.1	13.5	3.37	.76	.92	1.00	44.3	13.0	3.80	.78	.93	1.00	42.5	12.5	4.30	.79	.95	1.00
	1800	850	48.8	14.3	2.99	.78	.93	1.00	47.0	13.8	3.38	.79	.95	1.00	45.2	13.2	3.81	.81	.96	1.00	43.4	12.7	4.31	.83	.98	1.00
67°F (19°C)	1400	660	49.9	14.6	3.00	.57	.70	.83	48.1	14.1	3.38	.57	.71	.84	46.2	13.5	3.82	.58	.72	.86	44.2	13.0	4.32	.59	.74	.88
	1600	755	50.9	14.9	3.01	.58	.73	.87	49.0	14.4	3.39	.59	.74	.88	47.0	13.8	3.83	.60	.76	.90	45.0	13.2	4.33	.61	.77	.92
	1800	850	51.6	15.1	3.02	.60	.76	.90	49.7	14.6	3.40	.61	.77	.92	47.7	14.0	3.84	.62	.79	.94	45.7	13.4	4.33	.63	.81	.96
71°F (22°C)	1400	660	53.3	15.6	3.03	.43	.55	.67	51.4	15.1	3.42	.43	.55	.68	49.4	14.5	3.86	.43	.56	.69	47.3	13.9	4.36	.43	.57	.71
	1600	755	54.2	15.9	3.04	.43	.57	.70	52.3	15.3	3.43	.43	.57	.72	50.2	14.7	3.87	.44	.58	.73	48.1	14.1	4.37	.44	.59	.75
	1800	850	55.0	16.1	3.05	.44	.59	.73	53.0	15.5	3.44	.44	.59	.75	50.9	14.9	3.88	.44	.60	.76	48.7	14.3	4.37	.45	.62	.78

12HPB48 — HEATING CAPACITY — C26-65EAP - CH23-68

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	
660	1400	16.3	55,700	3345	12.7	43,200	3105	8.8	29,900	2855	6.4	21,900	2450	3.2	10,900	1870
755	1600	16.5	56,200	3220	12.8	43,700	2980	8.9	30,400	2730	6.6	22,400	2325	3.3	11,400	1750
850	1800	16.6	56,700	3095	13.0	44,200	2855	9.1	30,900	2605	6.7	22,900	2205	3.5	11,900	1625

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

12HPB48 - C33-50/60C - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	47.3	13.9	3.48	36.5	10.7	3.31	25.0	7.3	3.13	18.6	5.5	2.88	9.4	2.8	2.12
1600	755	47.6	14.0	3.34	36.8	10.8	3.17	25.3	7.4	2.99	18.9	5.5	2.74	9.7	2.8	1.98
1800	850	47.9	14.0	3.24	37.1	10.9	3.07	25.6	7.5	2.89	19.2	5.6	2.64	10.0	2.9	1.88

12HPB48 — HEATING PERFORMANCE C26-65EAP - CH23-68 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3220	56,200	16.5
60	16	3165	53,400	15.6
55	13	3105	50,500	14.8
50	10	3050	47,700	14.0
47	8	3015	46,000	13.5
45	7	2980	43,700	12.8
40	4	2890	38,000	11.1
35	2	2805	32,200	9.4
30	-1	2765	31,300	9.2
25	-4	2730	30,400	8.9
20	-7	2695	29,500	8.6
17	-8	2675	29,000	8.5
15	-9	2615	27,900	8.2
10	-12	2470	25,200	7.4
5	-15	2325	22,400	6.6
0	-18	2180	19,700	5.8
-5	-21	2040	16,900	5.0
-10	-23	1895	14,200	4.2
-15	-26	1750	11,400	3.3
-20	-29	1605	8700	2.5

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

12HPB48 - C33-50/60C - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.34	47.6	14.0
60	16	3.30	45.2	13.2
55	13	3.27	42.8	12.5
50	10	3.23	40.4	11.8
47	8	3.21	39.0	11.4
45	7	3.17	36.8	10.8
40	4	3.08	31.5	9.2
35	2	3.00	26.2	7.7
30	-1	2.99	25.7	7.5
25	-4	2.99	25.3	7.4
20	-7	2.98	24.8	7.3
17	-8	2.98	24.6	7.2
15	-9	2.96	23.6	6.9
10	-12	2.92	21.2	6.2
5	-15	2.74	18.9	5.5
0	-18	2.55	16.6	4.9
-5	-21	2.36	14.3	4.2
-10	-23	2.17	12.0	3.5
-15	-26	1.98	9.7	2.8
-20	-29	1.79	7.4	2.2

HEATING AND COOLING RATINGS — 4 TON

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

12HPB48 — COOLING CAPACITY — CR26-48N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	660	1400	13.9	47,400	2990	.75	.89	1.00	13.4	45,800	3370	.76	.90	1.00	12.9	44,000	3800	.77	.92	1.00	12.3	42,100	4300	.79	.94	1.00
	755	1600	14.2	48,500	2990	.78	.93	1.00	13.7	46,800	3380	.79	.95	1.00	13.2	45,000	3810	.81	.96	1.00	12.6	43,100	4310	.82	.98	1.00
	850	1800	14.5	49,400	3000	.81	.97	1.00	14.0	47,700	3380	.82	.98	1.00	13.5	45,900	3820	.84	1.00	1.00	12.9	44,000	4320	.86	1.00	1.00
67°F (19.4°C)	660	1400	14.8	50,400	3010	.59	.72	.86	14.2	48,600	3400	.59	.73	.87	13.7	46,700	3830	.60	.75	.89	13.1	44,800	4320	.61	.76	.91
	755	1600	15.0	51,300	3020	.60	.75	.90	14.5	49,500	3400	.61	.77	.91	13.9	47,500	3840	.62	.78	.93	13.3	45,500	4340	.63	.80	.95
	850	1800	15.3	52,100	3030	.62	.79	.94	14.7	50,200	3410	.63	.80	.95	14.1	48,200	3850	.64	.82	.97	13.5	46,100	4350	.65	.84	.99
71°F (21.7°C)	660	1400	15.7	53,700	3050	.44	.57	.70	15.2	51,800	3430	.44	.57	.71	14.6	49,800	3870	.44	.58	.72	14.0	47,700	4370	.45	.59	.74
	755	1600	16.0	54,700	3060	.44	.59	.73	15.5	52,800	3440	.45	.60	.74	14.9	50,700	3880	.45	.60	.76	14.2	48,500	4380	.45	.62	.78
	850	1800	16.2	55,400	3070	.45	.61	.76	15.6	53,400	3450	.45	.62	.78	15.0	51,300	3890	.46	.63	.79	14.4	49,100	4380	.46	.64	.81

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

12HPB48 — COOLING CAPACITY — CR26-60N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	660	1400	14.0	47,800	3000	.75	.89	1.00	13.5	46,100	3380	.76	.90	1.00	13.0	44,300	3810	.77	.92	1.00	12.4	42,400	4310	.79	.94	1.00
	755	1600	14.3	48,900	3010	.78	.93	1.00	13.8	47,100	3390	.79	.95	1.00	13.3	45,300	3830	.81	.96	1.00	12.7	43,400	4320	.82	.98	1.00
	850	1800	14.6	49,900	3020	.81	.97	1.00	14.1	48,100	3400	.82	.98	1.00	13.5	46,200	3840	.84	1.00	1.00	13.0	44,300	4330	.86	1.00	1.00
67°F (19.4°C)	660	1400	14.9	50,900	3030	.58	.72	.85	14.4	49,000	3410	.59	.73	.87	13.8	47,100	3850	.60	.75	.89	13.2	45,100	4340	.61	.76	.91
	755	1600	15.2	51,900	3040	.60	.75	.90	14.7	50,000	3420	.61	.77	.91	14.1	48,000	3860	.62	.78	.93	13.5	45,900	4350	.63	.80	.95
	850	1800	15.4	52,700	3050	.62	.78	.94	14.9	50,700	3430	.63	.80	.95	14.3	48,700	3870	.64	.82	.97	13.6	46,500	4360	.65	.84	.99
71°F (21.7°C)	660	1400	15.9	54,300	3070	.44	.57	.69	15.4	52,400	3450	.44	.57	.71	14.7	50,300	3890	.44	.58	.72	14.1	48,200	4390	.45	.59	.73
	755	1600	16.2	55,300	3080	.44	.59	.73	15.6	53,300	3460	.45	.59	.74	15.0	51,100	3900	.45	.60	.76	14.3	48,900	4400	.45	.61	.77
	850	1800	16.4	56,000	3090	.45	.61	.76	15.8	54,000	3470	.45	.62	.78	15.2	51,800	3910	.46	.63	.79	14.5	49,500	4410	.46	.64	.81

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

12HPB48 — HEATING CAPACITY — CR26-48N/W-F

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	
660	1400	16.3	55,600	3450	12.6	43,000	3160	8.7	29,700	2865	6.4	21,800	2440	3.2	10,900	1865
755	1600	16.5	56,200	3335	12.8	43,600	3045	8.9	30,200	2750	6.6	22,400	2325	3.3	11,400	1750
850	1800	16.6	56,500	3225	12.9	43,900	2935	9.0	30,600	2640	6.7	22,700	2215	3.5	11,800	1635

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

12HPB48 — HEATING CAPACITY — CR26-60N/W-F

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	
660	1400	16.3	55,700	3345	12.7	43,200	3080	8.8	30,000	2810	6.4	21,900	2400	3.2	11,000	1835
755	1600	16.5	56,200	3225	12.8	43,700	2960	8.9	30,400	2690	6.6	22,400	2280	3.3	11,400	1715
850	1800	16.6	56,600	3105	12.9	44,100	2840	9.1	30,900	2570	6.7	22,800	2160	3.5	11,900	1595

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

12HPB48 — HEATING PERFORMANCE
CR26-48N-W-F at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3335	56,200	16.5
60	16	3265	53,400	15.6
55	13	3200	50,500	14.8
50	10	3130	47,700	14.0
47	8	3090	46,000	13.5
45	7	3045	43,600	12.8
40	4	2945	37,700	11.0
35	2	2845	31,800	9.3
30	-1	2800	31,000	9.1
25	-4	2750	30,200	8.9
20	-7	2705	29,500	8.6
17	-8	2675	29,000	8.5
15	-9	2615	27,900	8.2
10	-12	2470	25,200	7.4
5	-15	2325	22,400	6.6
0	-18	2185	19,700	5.8
-5	-21	2040	16,900	5.0
-10	-23	1895	14,200	4.2
-15	-26	1750	11,400	3.3
-20	-29	1605	8700	2.5

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

12HPB48 — HEATING PERFORMANCE
CR26-60N/W-F at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3225	56,200	16.5
60	16	3165	53,400	15.6
55	13	3100	50,500	14.8
50	10	3035	47,700	14.0
47	8	3000	46,000	13.5
45	7	2960	43,700	12.8
40	4	2870	38,000	11.1
35	2	2775	32,200	9.4
30	-1	2730	31,300	9.2
25	-4	2690	30,400	8.9
20	-7	2650	29,500	8.6
17	-8	2625	29,000	8.5
15	-9	2565	27,900	8.2
10	-12	2425	25,200	7.4
5	-15	2280	22,400	6.6
0	-18	2140	19,700	5.8
-5	-21	2000	16,900	5.0
-10	-23	1855	14,200	4.2
-15	-26	1715	11,400	3.3
-20	-29	1575	8700	2.5

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

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

12HPB48 — CH33-44B-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	45.8	13.4	2.95	.72	.86	.97	44.2	13.0	3.33	.73	.88	.99	42.4	12.4	3.77	.75	.89	1.00	40.7	11.9	4.26	.76	.91	1.00
	1600	755	46.9	13.7	2.96	.75	.90	1.00	45.2	13.2	3.34	.76	.91	1.00	43.4	12.7	3.78	.78	.93	1.00	41.6	12.2	4.27	.80	.95	1.00
	1800	850	47.8	14.0	2.97	.78	.93	1.00	46.1	13.5	3.35	.79	.95	1.00	44.3	13.0	3.78	.81	.96	1.00	42.5	12.5	4.28	.83	.98	1.00
67°F (19°C)	1400	660	48.9	14.3	2.98	.57	.70	.83	47.1	13.8	3.36	.57	.71	.84	45.2	13.2	3.79	.58	.72	.86	43.3	12.7	4.29	.59	.74	.88
	1600	755	49.8	14.6	2.99	.58	.73	.87	48.0	14.1	3.37	.59	.74	.88	46.0	13.5	3.81	.60	.75	.90	44.1	12.9	4.30	.61	.77	.92
	1800	850	50.6	14.8	3.00	.60	.76	.90	48.7	14.3	3.38	.61	.77	.92	46.7	13.7	3.81	.62	.79	.94	44.7	13.1	4.30	.63	.81	.96
71°F (22°C)	1400	660	52.2	15.3	3.01	.43	.55	.67	50.3	14.7	3.39	.43	.55	.68	48.3	14.2	3.83	.43	.56	.70	46.3	13.6	4.33	.43	.57	.71
	1600	755	53.1	15.6	3.02	.43	.57	.70	51.2	15.0	3.41	.43	.57	.71	49.2	14.4	3.84	.44	.58	.73	47.1	13.8	4.34	.44	.59	.75
	1800	850	53.9	15.8	3.03	.44	.59	.73	51.9	15.2	3.42	.44	.59	.75	49.8	14.6	3.85	.44	.60	.77	47.7	14.0	4.34	.45	.62	.78

12HPB48 — COOLING CAPACITY — CH23-51

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		
	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	3020	.74	.88	.99	13.2	45,000	3400	.75	.90	1.00	12.7	43,300	3840	.76	.91	1.00	12.2	41,500	4350	.78	.93	1.00
	755	1600	14.0	47,600	3020	.77	.92	1.00	13.5	46,000	3410	.79	.94	1.00	13.0	44,300	3850	.80	.95	1.00	12.5	42,500	4360	.82	.97	1.00
	850	1800	14.2	48,600	3030	.80	.96	1.00	13.7	46,900	3420	.82	.97	1.00	13.2	45,200	3860	.83	.98	1.00	12.7	43,400	4370	.85	.99	1.00
67°F (19.4°C)	660	1400	14.5	49,500	3040	.58	.71	.85	14.0	47,700	3430	.58	.73	.86	13.5	45,900	3870	.59	.74	.88	12.9	43,900	4380	.60	.76	.90
	755	1600	14.7	50,300	3050	.60	.75	.89	14.2	48,500	3440	.60	.76	.91	13.7	46,600	3880	.61	.78	.92	13.1	44,700	4390	.62	.79	.94
	850	1800	15.0	51,100	3060	.61	.78	.93	14.4	49,200	3450	.62	.80	.94	13.9	47,300	3890	.63	.81	.96	13.3	45,300	4400	.65	.83	.98
71°F (21.7°C)	660	1400	15.4	52,700	3070	.43	.56	.69	14.9	50,900	3460	.43	.57	.70	14.3	48,900	3910	.43	.58	.72	13.7	46,800	4410	.44	.58	.73
	755	1600	15.7	53,600	3080	.44	.58	.73	15.2	51,700	3470	.44	.59	.74	14.5	49,600	3920	.44	.60	.75	14.0	47,600	4420	.45	.61	.77
	850	1800	15.9	54,300	3090	.44	.60	.76	15.4	52,400	3480	.45	.61	.77	14.7	50,300	3930	.45	.62	.79	14.1	48,100	4430	.46	.63	.81

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

12HPB48 - CH33-44B-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	47.5	13.9	3.49	36.6	10.7	3.26	24.9	7.3	3.02	18.4	5.4	2.72	9.3	2.7	2.01
1600	755	47.8	14.0	3.37	36.9	10.8	3.14	25.2	7.4	2.90	18.7	5.5	2.60	9.6	2.8	1.89
1800	850	48.1	14.1	3.26	37.2	10.9	3.03	25.5	7.5	2.79	19.0	5.6	2.49	9.9	2.9	1.78

12HPB48 — HEATING CAPACITY — CH23-51

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	
660	1400	16.0	54,600	3270	12.2	41,500	3015	8.1	27,600	2750	5.7	19,300	2455	2.9	9,900	1820
755	1600	16.1	54,800	3160	12.2	41,700	2905	8.1	27,800	2640	5.7	19,500	2345	3.0	10,100	1710
850	1800	16.1	55,100	3075	12.3	42,000	2820	8.2	28,100	2555	5.8	19,800	2260	3.0	10,400	1625

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

12HPB48 - CH33-44B-2F - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.37	47.8	14.0
60	16	3.32	45.4	13.3
55	13	3.26	42.9	12.6
50	10	3.21	40.5	11.9
47	8	3.17	39.0	11.4
45	7	3.14	36.9	10.8
40	4	3.05	31.5	9.2
35	2	2.96	26.2	7.7
30	-1	2.93	25.7	7.5
25	-4	2.90	25.2	7.4
20	-7	2.87	24.7	7.2
17	-8	2.85	24.4	7.2
15	-9	2.83	23.4	6.9
10	-12	2.77	21.0	6.2
5	-15	2.60	18.7	5.5
0	-18	2.42	16.4	4.8
-5	-21	2.24	14.2	4.2
-10	-23	2.06	11.9	3.5
-15	-26	1.89	9.6	2.8
-20	-29	1.71	7.3	2.1

12HPB48 HEATING PERFORMANCE CH23-51 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3160	54,800	16.1
60	16	3100	51,800	15.2
55	13	3040	48,800	14.3
50	10	2980	45,800	13.4
47	8	2945	44,000	12.9
45	7	2905	41,700	12.2
40	4	2805	35,800	10.5
35	2	2705	30,000	8.8
30	-1	2670	28,900	8.5
25	-4	2640	27,800	8.1
20	-7	2605	26,700	7.8
17	-8	2585	26,000	7.6
15	-9	2560	24,800	7.3
10	-12	2500	21,800	6.4
5	-15	2345	19,500	5.7
0	-18	2185	17,100	5.0
-5	-21	2025	14,800	4.3
-10	-23	1870	12,500	3.7
-15	-26	1710	10,100	3.0
-20	-29	1550	7,800	2.3

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

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

12HPB48 — CH33-48C-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.8	13.7	2.96	.72	.86	.97	45.1	13.2	3.34	.73	.87	.99	43.3	12.7	3.78	.74	.89	1.00	41.5	12.2	4.28	.75	.91	1.00
	1600	755	47.9	14.0	2.97	.74	.89	1.00	46.1	13.5	3.35	.76	.91	1.00	44.3	13.0	3.79	.77	.93	1.00	42.5	12.5	4.28	.79	.95	1.00
	1800	850	48.8	14.3	2.98	.77	.93	1.00	47.1	13.8	3.36	.79	.94	1.00	45.3	13.3	3.79	.81	.96	1.00	43.4	12.7	4.29	.82	.98	1.00
67°F (19°C)	1400	660	49.9	14.6	2.99	.56	.69	.82	48.1	14.1	3.37	.57	.70	.84	46.2	13.5	3.81	.57	.71	.85	44.2	13.0	4.30	.58	.73	.87
	1600	755	50.9	14.9	3.00	.58	.72	.86	49.0	14.4	3.38	.58	.73	.88	47.0	13.8	3.82	.59	.75	.90	45.0	13.2	4.32	.60	.76	.92
	1800	850	51.6	15.1	3.01	.59	.75	.90	49.7	14.6	3.39	.60	.77	.92	47.7	14.0	3.83	.61	.78	.94	45.7	13.4	4.31	.62	.80	.95
71°F (22°C)	1400	660	53.3	15.6	3.02	.42	.54	.66	51.4	15.1	3.41	.42	.55	.68	49.4	14.5	3.84	.42	.56	.69	47.3	13.9	4.34	.43	.57	.70
	1600	755	54.3	15.9	3.03	.43	.56	.69	52.3	15.3	3.42	.43	.57	.71	50.2	14.7	3.86	.43	.58	.72	48.1	14.1	4.35	.44	.59	.74
	1800	850	55.1	16.1	3.04	.43	.58	.73	53.0	15.5	3.43	.44	.59	.74	50.9	14.9	3.87	.44	.60	.76	48.8	14.3	4.35	.44	.61	.77

12HPB48 — COOLING CAPACITY — CH23-65

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		
	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	13.8	47,000	3010	.74	.88	.99	13.3	45,300	3400	.75	.89	1.00	12.7	43,500	3840	.76	.91	1.00	12.2	41,700	4340	.78	.93	1.00
	755	1600	14.1	48,000	3020	.77	.92	1.00	13.6	46,300	3410	.78	.93	1.00	13.1	44,600	3850	.80	.95	1.00	12.5	42,700	4350	.81	.97	1.00
	850	1800	14.4	49,000	3030	.80	.95	1.00	13.9	47,300	3420	.82	.97	1.00	13.3	45,500	3860	.83	.98	1.00	12.8	43,700	4360	.85	1.00	1.00
67°F (19.4°C)	660	1400	14.6	49,900	3040	.57	.71	.84	14.1	48,100	3430	.58	.72	.86	13.5	46,200	3860	.59	.74	.88	13.0	44,200	4370	.60	.75	.90
	755	1600	14.9	50,800	3050	.59	.75	.89	14.4	49,000	3440	.60	.76	.90	13.8	47,000	3880	.61	.77	.92	13.2	45,000	4380	.62	.79	.94
	850	1800	15.1	51,600	3060	.61	.78	.93	14.6	49,700	3450	.62	.79	.94	14.0	47,700	3890	.63	.81	.96	13.4	45,700	4390	.64	.83	.98
71°F (21.7°C)	660	1400	15.6	53,200	3070	.43	.56	.69	15.0	51,300	3460	.43	.56	.70	14.4	49,300	3910	.43	.57	.71	13.8	47,200	4410	.44	.58	.73
	755	1600	15.9	54,100	3090	.43	.58	.72	15.3	52,200	3480	.44	.59	.73	14.7	50,100	3920	.44	.60	.75	14.1	48,000	4420	.45	.61	.77
	850	1800	16.1	54,900	3100	.44	.60	.76	15.5	52,900	3490	.45	.61	.77	14.9	50,800	3930	.45	.62	.79	14.2	48,600	4430	.45	.63	.81

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

12HPB48 - CH33-48C-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	47.4	13.9	3.52	36.6	10.7	3.32	25.0	7.3	3.12	18.6	5.5	2.86	9.4	2.8	2.11
1600	755	47.7	14.0	3.38	36.9	10.8	3.19	25.3	7.4	2.98	18.9	5.5	2.72	9.7	2.8	1.97
1800	850	48.0	14.1	3.28	37.2	10.9	3.09	25.6	7.5	2.88	19.2	5.6	2.62	10.0	2.9	1.87

12HPB48 — HEATING CAPACITY — CH23-65

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	
660	1400	16.2	55,300	3180	12.3	41,800	2975	8.1	27,600	2760	5.6	19,100	2500	2.9	9,800	1845
755	1600	16.3	55,600	3075	12.3	42,100	2870	8.2	27,900	2655	5.7	19,400	2395	3.0	10,100	1740
850	1800	16.3	55,600	2955	12.3	42,100	2750	8.2	27,900	2535	5.7	19,400	2275	3.0	10,100	1620

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

12HPB48 - CH33-48C-2F - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.38	47.7	14.0
60	16	3.34	45.3	13.3
55	13	3.30	42.8	12.5
50	10	3.25	40.4	11.8
47	8	3.23	39.0	11.4
45	7	3.19	36.9	10.8
40	4	3.09	31.5	9.2
35	2	3.00	26.1	7.6
30	-1	2.99	25.7	7.5
25	-4	2.98	25.3	7.4
20	-7	2.98	24.8	7.3
17	-8	2.97	24.6	7.2
15	-9	2.95	23.6	6.9
10	-12	2.91	21.2	6.2
5	-15	2.72	18.9	5.5
0	-18	2.54	16.6	4.9
-5	-21	2.35	14.3	4.2
-10	-23	2.16	12.0	3.5
-15	-26	1.97	9.7	2.8
-20	-29	1.78	7.4	2.2

12HPB48 HEATING PERFORMANCE CH23-65 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	3075	55,600	16.3
60	16	3025	52,500	15.4
55	13	2980	49,400	14.5
50	10	2935	46,400	13.6
47	8	2905	44,500	13.0
45	7	2870	42,100	12.3
40	4	2785	36,200	10.6
35	2	2695	30,200	8.9
30	-1	2675	29,100	8.5
25	-4	2655	27,900	8.2
20	-7	2640	26,700	7.8
17	-8	2625	26,000	7.6
15	-9	2605	24,800	7.3
10	-12	2560	21,700	6.4
5	-15	2395	19,400	5.7
0	-18	2230	17,100	5.0
-5	-21	2070	14,700	4.3
-10	-23	1905	12,400	3.6
-15	-26	1740	10,100	3.0
-20	-29	1575	7,800	2.3

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

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

12HPB48 — CH33-60D-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	46.3	13.6	2.96	.72	.85	.98	44.6	13.1	3.34	.73	.87	.99	42.8	12.5	3.77	.74	.89	1.00	41.1	12.0	4.27	.76	.91	1.00
	1600	755	47.4	13.9	2.97	.74	.89	1.00	45.6	13.4	3.35	.76	.91	1.00	43.9	12.9	3.78	.77	.93	1.00	42.0	12.3	4.28	.79	.95	1.00
	1800	850	48.3	14.2	2.98	.77	.93	1.00	46.6	13.7	3.36	.79	.95	1.00	44.8	13.1	3.79	.80	.96	1.00	42.9	12.6	4.28	.82	.98	1.00
67°F (19°C)	1400	660	49.4	14.5	2.99	.56	.69	.82	47.6	14.0	3.37	.57	.70	.84	45.7	13.4	3.81	.57	.71	.85	43.8	12.8	4.30	.58	.73	.87
	1600	755	50.4	14.8	3.00	.58	.72	.86	48.5	14.2	3.38	.58	.73	.88	46.5	13.6	3.82	.59	.75	.90	44.6	13.1	4.30	.60	.76	.92
	1800	850	51.2	15.0	3.01	.59	.75	.90	49.2	14.4	3.39	.60	.77	.92	47.2	13.8	3.82	.61	.78	.94	45.2	13.2	4.31	.62	.80	.95
71°F (22°C)	1400	660	52.8	15.5	3.02	.42	.54	.66	50.9	14.9	3.41	.42	.55	.67	48.8	14.3	3.84	.43	.56	.69	46.8	13.7	4.34	.43	.56	.70
	1600	755	53.8	15.8	3.03	.43	.56	.69	51.8	15.2	3.42	.43	.57	.71	49.7	14.6	3.86	.43	.58	.72	47.6	14.0	4.34	.44	.59	.74
	1800	850	54.6	16.0	3.04	.43	.58	.73	52.5	15.4	3.43	.44	.59	.74	50.4	14.8	3.86	.44	.60	.76	48.3	14.2	4.35	.44	.61	.77

12HPB60 — COOLING CAPACITY — CB28UH-048 - CB29M-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		
	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)	825	1750	16.6	56,500	3990	.74	.88	.99	16.0	54,600	4510	.75	.90	1.00	15.4	52,700	5090	.76	.91	1.00	14.8	50,600	5750	.78	.93	1.00
	850	1800	16.6	56,700	4000	.75	.89	.99	16.1	54,900	4510	.76	.90	1.00	15.5	52,900	5100	.77	.92	1.00	14.9	50,800	5750	.79	.94	1.00
	875	1850	16.7	57,000	4000	.75	.90	1.00	16.1	55,100	4520	.76	.91	1.00	15.6	53,200	5100	.78	.93	1.00	14.9	51,000	5750	.79	.94	1.00
67°F (19.4°C)	825	1750	17.6	59,900	4030	.58	.72	.85	17.0	57,900	4540	.58	.73	.86	16.4	55,800	5130	.59	.74	.88	15.7	53,500	5780	.60	.75	.90
	850	1800	17.6	60,100	4030	.58	.72	.86	17.0	58,100	4550	.59	.73	.87	16.4	56,000	5130	.59	.75	.89	15.7	53,700	5780	.60	.76	.91
	875	1850	17.7	60,300	4030	.58	.73	.87	17.1	58,300	4550	.59	.74	.88	16.5	56,200	5130	.60	.75	.90	15.8	53,900	5780	.61	.77	.92
71°F (21.7°C)	825	1750	18.7	63,800	4060	.43	.56	.69	18.1	61,600	4580	.43	.57	.70	17.4	59,400	5170	.43	.57	.72	16.7	57,000	5820	.44	.58	.73
	850	1800	18.7	63,900	4070	.43	.56	.70	18.1	61,900	4580	.43	.57	.71	17.5	59,600	5170	.44	.58	.72	16.8	57,200	5820	.44	.59	.74
	875	1850	18.8	64,100	4070	.43	.57	.71	18.2	62,100	4580	.43	.58	.72	17.5	59,800	5170	.44	.58	.73	16.8	57,400	5820	.44	.59	.75

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

12HPB48 - CH33-60D-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	47.4	13.9	3.45	36.6	10.7	3.29	25.0	7.3	3.12	18.6	5.5	2.88	9.4	2.8	2.12
1600	755	47.7	14.0	3.31	36.9	10.8	3.15	25.3	7.4	2.98	18.9	5.5	2.74	9.7	2.8	1.98
1800	850	48.0	14.1	3.22	37.2	10.9	3.06	25.6	7.5	2.89	19.2	5.6	2.65	10.0	2.9	1.89

12HPB60 — HEATING CAPACITY — CB28UH-048 - CB29M-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	
825	1750	19.5	66,500	5025	15.2	51,800	4370	10.6	36,300	3680	7.7	26,400	3170	4.0	13,500	2365
850	1800	19.5	66,600	4990	15.2	51,900	4335	10.7	36,400	3645	7.8	26,500	3135	4.0	13,600	2330
875	1850	19.5	66,700	4950	15.2	52,000	4295	10.7	36,500	3605	7.8	26,600	3095	4.0	13,700	2290

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

12HPB48 - CH33-60D-2F - HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	3.31	47.7	14.0
60	16	3.27	45.2	13.2
55	13	3.24	42.8	12.5
50	10	3.20	40.4	11.8
47	8	3.18	39.0	11.4
45	7	3.15	36.9	10.8
40	4	3.07	31.5	9.2
35	2	2.98	26.2	7.7
30	-1	2.98	25.7	7.5
25	-4	2.98	25.3	7.4
20	-7	2.98	24.8	7.3
17	-8	2.98	24.6	7.2
15	-9	2.96	23.6	6.9
10	-12	2.93	21.2	6.2
5	-15	2.74	18.9	5.5
0	-18	2.55	16.6	4.9
-5	-21	2.36	14.3	4.2
-10	-23	2.17	12.0	3.5
-15	-26	1.98	9.7	2.8
-20	-29	1.79	7.4	2.2

12HPB60 — HEATING PERFORMANCE CB28UH-048 - CB29M-51 at 1800 cfm (850 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4990	66,600	19.5
60	16	4840	63,200	18.5
55	13	4690	59,900	17.6
50	10	4540	56,500	16.6
47	8	4450	54,500	16.0
45	7	4335	51,900	15.2
40	4	4055	45,400	13.3
35	2	3775	38,900	11.4
30	-1	3710	37,700	11.0
25	-4	3645	36,400	10.7
20	-7	3585	35,200	10.3
17	-8	3545	34,400	10.1
15	-9	3485	33,100	9.7
10	-12	3335	29,700	8.7
5	-15	3135	26,500	7.8
0	-18	2930	23,200	6.8
-5	-21	2730	20,000	5.9
-10	-23	2530	16,800	4.9
-15	-26	2330	13,600	4.0
-20	-29	2125	10,300	3.0

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

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

12HPB60 — COOLING CAPACITY — CB28UH-060 - CB29M-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		
	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	16.2	55,400	3980	.72	.86	.97	15.7	53,600	4490	.73	.87	.98	15.2	51,800	5070	.74	.88	.99	14.5	49,600	5720	.76	.90	1.00
	850	1800	16.6	56,500	3980	.75	.89	.99	16.0	54,700	4500	.76	.90	1.00	15.4	52,700	5080	.77	.92	1.00	14.8	50,600	5730	.79	.94	1.00
	945	2000	16.8	57,400	3990	.77	.92	1.00	16.3	55,600	4510	.78	.93	1.00	15.7	53,600	5090	.80	.95	1.00	15.1	51,500	5740	.81	.97	1.00
67°F (19.4°C)	755	1600	17.3	58,900	4010	.57	.70	.82	16.7	57,000	4520	.57	.71	.84	16.1	54,900	5100	.58	.72	.85	15.4	52,700	5760	.59	.73	.87
	850	1800	17.5	59,800	4020	.58	.72	.86	17.0	57,900	4530	.59	.73	.87	16.4	55,800	5120	.59	.75	.89	15.7	53,500	5770	.60	.76	.91
	945	2000	17.8	60,600	4020	.60	.75	.89	17.2	58,600	4540	.60	.76	.91	16.6	56,500	5120	.61	.78	.92	15.9	54,100	5770	.62	.79	.94
71°F (21.7°C)	755	1600	18.4	62,700	4040	.43	.55	.67	17.8	60,700	4560	.43	.55	.68	17.1	58,500	5140	.43	.56	.69	16.5	56,200	5790	.43	.57	.71
	850	1800	18.7	63,700	4060	.43	.56	.70	18.1	61,600	4570	.43	.57	.71	17.4	59,400	5150	.44	.58	.72	16.7	57,000	5810	.44	.59	.74
	945	2000	18.9	64,400	4060	.44	.58	.73	18.3	62,300	4580	.44	.59	.74	17.6	60,000	5160	.44	.60	.75	16.9	57,600	5810	.45	.61	.77

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

12HPB60 — COOLING CAPACITY — CB30M-51 - CB30U-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		
	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	16.0	54,600	3960	.69	.82	.93	15.4	52,700	4460	.70	.83	.95	14.9	50,800	5040	.71	.84	.96	14.3	48,700	5680	.72	.86	.98
	755	1600	16.4	55,900	3970	.72	.85	.97	15.8	54,000	4480	.73	.87	.98	15.2	52,000	5060	.74	.88	.99	14.6	49,900	5690	.75	.90	1.00
	850	1800	16.7	57,100	3980	.74	.89	1.00	16.2	55,200	4490	.76	.90	1.00	15.6	53,100	5070	.77	.92	1.00	14.9	50,900	5710	.78	.94	1.00
67°F (19.4°C)	660	1400	17.1	58,300	3990	.55	.67	.78	16.5	56,300	4500	.56	.68	.80	15.9	54,300	5080	.56	.69	.81	15.3	52,100	5720	.57	.70	.82
	755	1600	17.4	59,500	4010	.56	.69	.82	16.9	57,500	4510	.57	.70	.83	16.2	55,400	5090	.58	.71	.85	15.6	53,100	5730	.58	.73	.87
	850	1800	17.8	60,600	4010	.58	.72	.85	17.1	58,500	4530	.58	.73	.87	16.5	56,300	5100	.59	.74	.89	15.8	53,900	5750	.60	.76	.91
71°F (21.7°C)	660	1400	18.2	62,200	4030	.42	.53	.64	17.6	60,200	4540	.42	.54	.65	17.0	58,000	5120	.42	.54	.66	16.3	55,700	5770	.43	.55	.67
	755	1600	18.6	63,500	4050	.42	.55	.67	18.0	61,400	4550	.43	.55	.68	17.3	59,100	5130	.43	.56	.69	16.6	56,700	5780	.43	.57	.70
	850	1800	18.9	64,600	4050	.43	.56	.69	18.3	62,400	4560	.43	.57	.71	17.6	60,000	5140	.43	.58	.72	16.9	57,600	5790	.44	.59	.73

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

12HPB60 — HEATING CAPACITY — CB28UH-060 - CB29M-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	19.3	65,800	5030	14.9	51,000	4355	10.4	35,400	3635	7.4	25,400	3125	3.7	12,600	2320
850	1800	19.5	66,700	5050	15.2	51,900	4375	10.6	36,300	3655	7.7	26,300	3145	4.0	13,500	2340
945	2000	19.8	67,400	5065	15.4	52,600	4390	10.8	37,000	3670	7.9	27,000	3160	4.2	14,200	2355

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

12HPB60 — HEATING CAPACITY — CB30M-51 - CB30U-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	
660	1400	19.1	65,300	5090	14.8	50,500	4490	10.2	34,900	3845	7.3	25,000	3410	3.7	12,600	2575
755	1600	19.3	65,700	4890	14.9	50,900	4290	10.3	35,300	3645	7.4	25,400	3210	3.8	13,000	2375
850	1800	19.4	66,300	4755	15.1	51,500	4155	10.5	35,900	3510	7.6	26,000	3075	4.0	13,600	2240

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

12HPB60 — HEATING PERFORMANCE CB28UH-060 - CB29M-65 at 1800 cfm (850 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	5050	66,700	19.5
60	16	4895	63,300	18.6
55	13	4740	59,900	17.6
50	10	4585	56,500	16.6
47	8	4495	54,500	16.0
45	7	4375	51,900	15.2
40	4	4075	45,400	13.3
35	2	3775	38,900	11.4
30	-1	3715	37,600	11.0
25	-4	3655	36,300	10.6
20	-7	3600	35,000	10.3
17	-8	3560	34,200	10.0
15	-9	3500	32,800	9.6
10	-12	3345	29,500	8.6
5	-15	3145	26,300	7.7
0	-18	2940	23,100	6.8
-5	-21	2740	19,900	5.8
-10	-23	2540	16,700	4.9
-15	-26	2340	13,500	4.0
-20	-29	2135	10,300	3.0

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

12HPB60 — HEATING PERFORMANCE CB30M-51 - CB30U-51 at 1600 cfm (755 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4890	65,700	19.3
60	16	4760	62,300	18.3
55	13	4625	58,900	17.3
50	10	4490	55,500	16.3
47	8	4410	53,500	15.7
45	7	4290	50,900	14.9
40	4	3995	44,500	13.0
35	2	3695	38,000	11.1
30	-1	3670	36,700	10.8
25	-4	3645	35,300	10.3
20	-7	3620	34,000	10.0
17	-8	3605	33,200	9.7
15	-9	3555	31,800	9.3
10	-12	3420	28,500	8.4
5	-15	3210	25,400	7.4
0	-18	3000	22,300	6.5
-5	-21	2790	19,200	5.6
-10	-23	2585	16,100	4.7
-15	-26	2375	13,000	3.8
-20	-29	2165	10,000	2.9

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

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

12HPB60 — COOLING CAPACITY — CB31MV-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		
	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)	670	1425	16.0	54,600	3960	.70	.83	.94	15.5	52,800	4460	.71	.84	.95	14.9	50,800	5040	.72	.85	.97	14.3	48,700	5680	.73	.87	.99
	765	1625	16.4	55,800	3960	.72	.86	.97	15.8	53,900	4480	.73	.87	.99	15.2	51,900	5050	.74	.89	1.00	14.6	49,800	5690	.76	.90	1.00
	850	1805	16.6	56,800	3980	.74	.89	1.00	16.1	54,900	4480	.76	.90	1.00	15.5	52,800	5060	.77	.92	1.00	14.9	50,700	5700	.78	.94	1.00
67°F (19.4°C)	670	1425	17.1	58,300	3990	.55	.67	.79	16.5	56,300	4500	.56	.68	.80	15.9	54,200	5080	.56	.69	.82	15.2	52,000	5720	.57	.70	.83
	765	1625	17.4	59,400	4000	.57	.70	.82	16.8	57,400	4510	.57	.71	.84	16.2	55,200	5090	.58	.72	.85	15.5	52,900	5730	.59	.73	.87
	850	1805	17.7	60,300	4010	.58	.72	.86	17.1	58,200	4520	.59	.73	.87	16.4	56,100	5100	.59	.74	.89	15.7	53,700	5740	.60	.76	.91
71°F (21.7°C)	670	1425	18.2	62,200	4030	.42	.54	.65	17.6	60,100	4540	.42	.54	.66	17.0	57,900	5120	.42	.55	.67	16.3	55,600	5760	.43	.55	.68
	765	1625	18.6	63,300	4040	.43	.55	.67	17.9	61,200	4550	.43	.55	.68	17.3	58,900	5130	.43	.56	.69	16.6	56,500	5770	.43	.57	.71
	850	1805	18.8	64,200	4050	.43	.56	.69	18.2	62,100	4560	.43	.57	.71	17.5	59,700	5140	.43	.58	.72	16.8	57,300	5780	.44	.59	.74

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

12HPB60 — COOLING CAPACITY — CB30M-65 - CB30U-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		
	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)	780	1650	16.9	57,600	4010	.72	.86	.97	16.3	55,700	4520	.73	.87	.98	15.7	53,600	5100	.74	.88	.99	15.1	51,400	5750	.76	.90	1.00
	850	1800	17.1	58,500	4010	.74	.88	.99	16.6	56,500	4530	.75	.89	1.00	15.9	54,400	5110	.76	.91	1.00	15.3	52,200	5760	.78	.93	1.00
	920	1950	17.3	59,200	4030	.76	.90	1.00	16.8	57,200	4540	.77	.92	1.00	16.1	55,100	5120	.78	.94	1.00	15.5	52,900	5770	.80	.95	1.00
67°F (19.4°C)	780	1650	18.0	61,300	4050	.57	.69	.82	17.3	59,200	4560	.57	.70	.84	16.7	57,000	5140	.58	.72	.85	16.0	54,600	5790	.58	.73	.87
	850	1800	18.2	62,100	4050	.58	.71	.85	17.6	59,900	4570	.58	.72	.86	16.9	57,700	5150	.59	.74	.88	16.2	55,300	5800	.60	.75	.90
	920	1950	18.4	62,700	4060	.59	.73	.87	17.8	60,600	4570	.59	.75	.89	17.1	58,300	5160	.60	.76	.91	16.4	55,800	5810	.61	.78	.92
71°F (21.7°C)	780	1650	19.1	65,300	4080	.43	.55	.67	18.5	63,100	4600	.43	.55	.68	17.8	60,800	5180	.43	.56	.69	17.1	58,300	5830	.43	.57	.71
	850	1800	19.4	66,100	4090	.43	.56	.69	18.7	63,900	4610	.43	.57	.70	18.0	61,400	5190	.43	.57	.71	17.3	58,900	5840	.44	.58	.73
	920	1950	19.6	66,800	4100	.43	.57	.71	18.9	64,500	4610	.43	.58	.72	18.2	62,000	5200	.44	.59	.74	17.4	59,500	5850	.44	.60	.75

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

12HPB60 — HEATING CAPACITY — CB31MV-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	
675	1425	19.1	65,200	4750	14.7	50,300	4255	10.1	34,600	3760	7.2	24,600	3210	3.6	12,400	2415
765	1625	19.3	65,800	4575	14.9	50,900	4080	10.3	35,200	3585	7.4	25,200	3035	3.8	13,000	2240
850	1805	19.5	66,400	4445	15.1	51,500	3950	10.5	35,800	3455	7.6	25,800	2905	4.0	13,600	2110

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

12HPB60 — HEATING CAPACITY — CB30M-65 - CB30U-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	
780	1650	19.3	65,800	4825	14.9	51,000	4220	10.3	35,300	3570	7.4	25,300	3165	3.8	12,800	2380
850	1800	19.4	66,200	4685	15.1	51,400	4080	10.5	35,700	3430	7.5	25,700	3025	3.9	13,200	2240
920	1950	19.6	66,800	4700	15.2	52,000	4095	10.6	36,300	3445	7.7	26,300	3040	4.0	13,800	2255

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

12HPB60 — HEATING PERFORMANCE
CB31MV-51 at 1625 cfm (765 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4575	65,800	19.3
60	16	4450	62,400	18.3
55	13	4330	59,000	17.3
50	10	4205	55,600	16.3
47	8	4135	53,500	15.7
45	7	4080	50,900	14.9
40	4	3945	44,400	13.0
35	2	3815	38,000	11.1
30	-1	3700	36,600	10.7
25	-4	3585	35,200	10.3
20	-7	3470	33,800	9.9
17	-8	3405	33,000	9.7
15	-9	3355	31,600	9.3
10	-12	3230	28,200	8.3
5	-15	3035	25,200	7.4
0	-18	2835	22,100	6.5
-5	-21	2635	19,100	5.6
-10	-23	2440	16,000	4.7
-15	-26	2240	13,000	3.8
-20	-29	2040	9,900	2.9

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

12HPB60 — HEATING PERFORMANCE
CB30M-65 - CB30U65 at 1800 cfm (850 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4685	66,200	19.4
60	16	4550	62,800	18.4
55	13	4415	59,400	17.4
50	10	4285	56,000	16.4
47	8	4205	54,000	15.8
45	7	4080	51,400	15.1
40	4	3770	44,900	13.2
35	2	3460	38,400	11.3
30	-1	3445	37,100	10.9
25	-4	3430	35,700	10.5
20	-7	3415	34,400	10.1
17	-8	3405	33,600	9.8
15	-9	3350	32,200	9.4
10	-12	3220	28,800	8.4
5	-15	3025	25,700	7.5
0	-18	2825	22,600	6.6
-5	-21	2630	19,500	5.7
-10	-23	2435	16,300	4.8
-15	-26	2240	13,200	3.9
-20	-29	2045	10,100	3.0

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

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

12HPB60 — COOLING CAPACITY — CB31MV-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		
	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)	670	1425	16.6	56,500	4120	.70	.82	.93	16.0	54,600	4640	.71	.83	.95	15.4	52,600	5240	.71	.85	.96	14.8	50,500	5910	.73	.86	.98
	765	1625	16.9	57,700	4120	.72	.85	.97	16.4	55,800	4650	.73	.86	.98	15.7	53,700	5250	.74	.88	.99	15.1	51,500	5920	.75	.90	1.00
	850	1805	17.2	58,800	4130	.74	.88	.99	16.6	56,800	4660	.75	.90	1.00	16.0	54,700	5260	.76	.91	1.00	15.4	52,400	5930	.78	.93	1.00
67°F (19.4°C)	670	1425	17.7	60,300	4150	.55	.67	.79	17.1	58,200	4680	.56	.68	.80	16.4	56,100	5280	.56	.69	.81	15.8	53,800	5950	.57	.70	.83
	765	1625	18.0	61,400	4170	.56	.69	.82	17.4	59,300	4690	.57	.70	.83	16.8	57,200	5290	.58	.71	.85	16.1	54,800	5960	.58	.73	.86
	850	1805	18.3	62,300	4180	.58	.72	.85	17.6	60,200	4700	.58	.73	.86	17.0	58,000	5300	.59	.74	.88	16.3	55,500	5970	.60	.75	.90
71°F (21.7°C)	670	1425	18.8	64,300	4190	.42	.53	.64	18.2	62,100	4720	.42	.54	.65	17.6	59,900	5320	.43	.54	.66	16.9	57,500	5990	.43	.55	.67
	765	1625	19.2	65,400	4210	.42	.55	.67	18.6	63,300	4730	.43	.55	.68	17.8	60,900	5330	.43	.56	.69	17.1	58,400	6000	.43	.57	.70
	850	1805	19.5	66,400	4210	.43	.56	.69	18.8	64,200	4740	.43	.57	.70	18.1	61,700	5340	.43	.57	.71	17.3	59,200	6010	.44	.58	.73

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

12HPB60 — 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) 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	80°F 27°C	85°F 29°C
63°F (17.2°C)	850	1800	16.1	54,900	3780	.74	.88	.99	15.5	53,000	4260	.75	.90	1.00	15.0	51,100	4810	.76	.91	1.00	14.4	49,000	5420	.78	.93	1.00
	945	2000	16.4	55,800	3790	.76	.91	1.00	15.8	54,000	4270	.78	.93	1.00	15.2	52,000	4820	.79	.94	1.00	14.6	49,900	5430	.81	.96	1.00
	1040	2200	16.6	56,700	3790	.79	.94	1.00	16.1	54,800	4280	.80	.96	1.00	15.5	52,900	4830	.82	.97	1.00	14.9	50,800	5440	.83	.99	1.00
67°F (19.4°C)	850	1800	17.1	58,200	3810	.58	.72	.85	16.5	56,200	4290	.58	.73	.86	15.9	54,100	4840	.59	.74	.88	15.2	51,900	5460	.60	.75	.90
	945	2000	17.3	59,000	3810	.59	.74	.88	16.7	57,000	4300	.60	.75	.90	16.1	54,900	4850	.61	.77	.91	15.4	52,600	5460	.62	.78	.93
	1040	2200	17.5	59,700	3820	.61	.77	.91	16.9	57,700	4310	.61	.78	.93	16.3	55,500	4850	.62	.80	.95	15.6	53,200	5470	.63	.81	.96
71°F (21.7°C)	850	1800	18.1	61,900	3850	.43	.56	.69	17.6	59,900	4330	.43	.57	.70	16.9	57,600	4880	.43	.57	.71	16.2	55,300	5490	.44	.58	.73
	945	2000	18.4	62,700	3850	.43	.58	.72	17.8	60,600	4340	.44	.58	.73	17.1	58,400	4890	.44	.59	.74	16.4	56,000	5500	.44	.60	.76
	1040	2200	18.6	63,400	3860	.44	.59	.74	18.0	61,300	4340	.44	.60	.76	17.3	59,000	4890	.45	.61	.77	16.6	56,500	5510	.45	.62	.79

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

12HPB60 — HEATING CAPACITY — CB31MV-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	
675	1425	19.3	65,800	5080	14.9	50,800	4520	10.3	35,000	3955	7.3	24,900	3345	3.7	12,500	2500
765	1625	19.5	66,400	4975	15.1	51,400	4415	10.4	35,600	3850	7.5	25,500	3240	3.8	13,100	2395
850	1805	19.7	67,100	4885	15.3	52,100	4325	10.6	36,300	3760	7.7	26,200	3150	4.0	13,800	2305

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

12HPB60 — 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
L/s	cfm	kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh		kW	Btuh	
850	1800	18.8	64,200	4285	14.8	50,400	3920	10.5	35,700	3560	7.6	26,100	2995	3.8	12,800	2270
945	2000	19.1	65,300	4200	15.1	51,500	3840	10.8	36,800	3475	8.0	27,200	2910	4.1	13,900	2185
***	2200	19.6	66,800	4115	15.5	52,900	3755	11.2	38,200	3390	8.4	28,700	2825	4.5	15,400	2100

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

12HPB60 — HEATING PERFORMANCE CB31MV-65 at 1625 cfm (765 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4975	66,400	19.5
60	16	4835	62,900	18.4
55	13	4695	59,500	17.4
50	10	4555	56,100	16.4
47	8	4475	54,000	15.8
45	7	4415	51,400	15.1
40	4	4265	44,900	13.2
35	2	4110	38,300	11.2
30	-1	3980	37,000	10.8
25	-4	3850	35,600	10.4
20	-7	3720	34,200	10.0
17	-8	3645	33,400	9.8
15	-9	3590	32,000	9.4
10	-12	3450	28,600	8.4
5	-15	3240	25,500	7.5
0	-18	3030	22,400	6.6
-5	-21	2815	19,300	5.7
-10	-23	2605	16,200	4.7
-15	-26	2395	13,100	3.8
-20	-29	2185	10,000	2.9

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

12HPB60 — HEATING PERFORMANCE CVP10-65/EC10Q5 at 2000 cfm (945 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4200	65,300	19.1
60	16	4110	62,100	18.2
55	13	4020	59,000	17.3
50	10	3930	55,900	16.4
47	8	3880	54,000	15.8
45	7	3840	51,500	15.1
40	4	3740	45,100	13.2
35	2	3640	38,700	11.3
30	-1	3560	37,800	11.1
25	-4	3475	36,800	10.8
20	-7	3390	35,800	10.5
17	-8	3345	35,200	10.3
15	-9	3270	33,900	9.9
10	-12	3090	30,500	8.9
5	-15	2910	27,200	8.0
0	-18	2730	23,900	7.0
-5	-21	2545	20,500	6.0
-10	-23	2365	17,200	5.0
-15	-26	2185	13,900	4.1
-20	-29	2005	10,600	3.1

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

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

12HPB60 — COOLING CAPACITY — C26-51

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		
	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)	730	1550	16.0	54,600	3780	.72	.85	.96	15.5	52,800	4260	.72	.86	.97	14.9	50,900	4810	.73	.87	.99	14.3	48,800	5410	.75	.89	1.00
	825	1750	16.4	55,800	3780	.74	.88	.99	15.8	54,000	4270	.75	.89	1.00	15.2	52,000	4820	.76	.91	1.00	14.6	49,900	5430	.78	.93	1.00
	920	1950	16.6	56,800	3790	.77	.91	1.00	16.1	54,900	4280	.78	.93	1.00	15.5	52,900	4830	.79	.94	1.00	14.9	50,800	5440	.81	.96	1.00
67°F (19.4°C)	730	1550	17.0	58,100	3800	.56	.69	.81	16.5	56,200	4290	.57	.70	.83	15.9	54,100	4840	.57	.71	.84	15.2	51,900	5450	.58	.72	.86
	825	1750	17.3	59,100	3810	.58	.72	.85	16.8	57,200	4300	.58	.73	.86	16.1	55,000	4850	.59	.74	.88	15.4	52,700	5460	.60	.75	.90
	920	1950	17.6	60,100	3820	.59	.74	.88	17.0	58,000	4310	.60	.75	.90	16.4	55,800	4860	.61	.77	.92	15.7	53,500	5470	.62	.78	.93
71°F (21.7°C)	730	1550	18.1	61,900	3840	.43	.54	.66	17.5	59,800	4330	.43	.55	.67	16.9	57,700	4880	.43	.56	.68	16.2	55,300	5490	.43	.56	.70
	825	1750	18.4	62,900	3850	.43	.56	.69	17.8	60,800	4340	.43	.57	.70	17.2	58,600	4890	.43	.57	.71	16.5	56,200	5500	.44	.58	.73
	920	1950	18.7	63,800	3860	.44	.58	.72	18.1	61,700	4340	.44	.58	.73	17.4	59,300	4900	.44	.59	.75	16.7	56,900	5510	.44	.60	.76

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

12HPB60 — C33-50/60C COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1800	850	55.2	16.2	4.03	.74	.88	.99	53.4	15.6	4.55	.75	.89	.99	51.5	15.1	5.14	.76	.90	1.00	49.4	14.5	5.80	.77	.92	1.00
	2000	945	56.1	16.4	4.04	.76	.91	1.00	54.3	15.9	4.56	.77	.92	1.00	52.4	15.4	5.16	.78	.94	1.00	50.3	14.7	5.81	.80	.95	1.00
	2200	1040	57.0	16.7	4.05	.78	.93	1.00	55.1	16.1	4.57	.79	.95	1.00	53.2	15.6	5.16	.81	.96	1.00	51.1	15.0	5.81	.83	.98	1.00
67°F (19°C)	1800	850	58.7	17.2	4.06	.57	.71	.84	56.7	16.6	4.58	.58	.72	.86	54.6	16.0	5.17	.59	.73	.87	52.4	15.4	5.83	.59	.75	.89
	2000	945	59.5	17.4	4.07	.59	.73	.88	57.5	16.9	4.59	.59	.75	.89	55.4	16.2	5.18	.60	.76	.91	53.1	15.6	5.83	.61	.78	.92
	2200	1040	60.1	17.6	4.07	.60	.76	.91	58.1	17.0	4.59	.61	.77	.92	56.0	16.4	5.19	.62	.79	.94	53.7	15.7	5.85	.63	.80	.95
71°F (22°C)	1800	850	62.5	18.3	4.10	.43	.56	.68	60.4	17.7	4.62	.43	.56	.70	58.2	17.1	5.21	.43	.57	.71	56.0	16.4	5.86	.44	.58	.72
	2000	945	63.3	18.6	4.10	.43	.57	.71	61.2	17.9	4.63	.43	.58	.72	59.0	17.3	5.22	.44	.59	.74	56.6	16.6	5.87	.44	.60	.75
	2200	1040	64.0	18.8	4.11	.44	.59	.74	61.8	18.1	4.64	.44	.60	.75	59.6	17.5	5.22	.44	.60	.76	57.2	16.8	5.88	.45	.62	.78

12HPB60 — HEATING CAPACITY — C26-51

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	
730	1550	18.9	64,400	4635	14.8	50,600	4225	10.6	36,000	3815	7.8	26,600	3215	3.9	13,400	2455
825	1750	19.0	64,700	4460	14.9	51,000	4055	10.6	36,300	3645	7.9	26,900	3040	4.0	13,700	2285
920	1950	19.1	65,200	4290	15.1	51,500	3880	10.8	36,800	3470	8.0	27,400	2870	4.2	14,200	2110

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

12HPB60 - C33-50/60C - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil											
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1800	850	64.9	19.0	4.71	50.8	14.9	4.26	35.8	10.5	3.78	26.9	7.9	3.35	13.5	4.0	2.49
2000	945	65.3	19.1	4.58	51.2	15.0	4.13	36.2	10.6	3.65	27.3	8.0	3.21	13.9	4.1	2.36
2200	1040	65.7	19.3	4.46	51.6	15.1	4.01	36.6	10.7	3.53	27.7	8.1	3.10	14.3	4.2	2.24

12HPB60 — HEATING PERFORMANCE C26-51 at 1750 cfm (825 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4460	64,700	19.0
60	16	4360	61,600	18.1
55	13	4260	58,500	17.1
50	10	4160	55,400	16.2
47	8	4100	53,500	15.7
45	7	4055	51,000	14.9
40	4	3945	44,600	13.1
35	2	3835	38,300	11.2
30	-1	3740	37,300	10.9
25	-4	3645	36,300	10.6
20	-7	3550	35,400	10.4
17	-8	3495	34,800	10.2
15	-9	3420	33,500	9.8
10	-12	3230	30,200	8.9
5	-15	3040	26,900	7.9
0	-18	2850	23,600	6.9
-5	-21	2665	20,300	5.9
-10	-23	2475	17,000	5.0
-15	-26	2285	13,700	4.0
-20	-29	2095	10,400	3.0

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

12HPB60 - C33-50/60C - HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	4.58	65.3	19.1
60	16	4.47	62.1	18.2
55	13	4.37	59.0	17.3
50	10	4.27	55.8	16.4
47	8	4.20	54.0	15.8
45	7	4.13	51.2	15.0
40	4	3.93	44.4	13.0
35	2	3.74	37.6	11.0
30	-1	3.70	36.9	10.8
25	-4	3.65	36.2	10.6
20	-7	3.60	35.5	10.4
17	-8	3.57	35.1	10.3
15	-9	3.53	33.8	9.9
10	-12	3.43	30.6	9.0
5	-15	3.21	27.3	8.0
0	-18	3.00	23.9	7.0
-5	-21	2.79	20.6	6.0
-10	-23	2.57	17.2	5.0
-15	-26	2.36	13.9	4.1
-20	-29	2.15	10.5	3.1

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

12HPB60 — COOLING CAPACITY — C26-65EAP - CH23-68

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	730	1550	16.7	57,000	3780	.71	.84	.96	16.1	55,100	4260	.72	.85	.97	15.5	53,000	4810	.73	.87	.98	14.9	50,800	5430	.74	.88	1.00
	825	1750	17.1	58,200	3790	.73	.87	.99	16.5	56,300	4280	.74	.89	1.00	15.9	54,200	4820	.76	.90	1.00	15.2	51,900	5440	.77	.92	1.00
	920	1950	17.4	59,300	3800	.76	.91	1.00	16.8	57,200	4290	.77	.92	1.00	16.1	55,100	4840	.78	.94	1.00	15.5	52,900	5450	.80	.96	1.00
67°F (19.4°C)	730	1550	17.8	60,700	3820	.56	.68	.81	17.2	58,700	4300	.56	.69	.82	16.6	56,500	4850	.57	.70	.83	15.9	54,200	5460	.58	.72	.85
	825	1750	18.1	61,800	3830	.57	.71	.84	17.5	59,700	4310	.58	.72	.85	16.9	57,500	4860	.59	.73	.87	16.1	55,100	5470	.59	.75	.89
	920	1950	18.4	62,800	3830	.59	.73	.87	17.8	60,600	4320	.59	.75	.89	17.1	58,300	4870	.60	.76	.91	16.4	55,800	5480	.61	.78	.93
71°F (21.7°C)	730	1550	19.0	64,700	3860	.43	.54	.66	18.3	62,600	4340	.43	.55	.67	17.6	60,200	4890	.43	.55	.68	16.9	57,800	5500	.43	.56	.69
	825	1750	19.3	65,900	3870	.43	.56	.68	18.7	63,700	4350	.43	.56	.69	18.0	61,300	4900	.43	.57	.71	17.2	58,700	5510	.44	.58	.72
	920	1950	19.6	66,800	3870	.43	.57	.71	18.9	64,500	4360	.44	.58	.72	18.2	62,100	4910	.44	.59	.74	17.4	59,500	5520	.44	.60	.75

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

12HPB60 — C33-60D COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																					
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1800	850	55.2	16.2	4.03	.74	.88	1.00	53.3	15.6	4.55	.75	.90	1.00	51.4	15.1	5.15	.76	.91	1.00	49.4	14.5	5.80	.78	.93	1.00
	2000	945	56.1	16.4	4.04	.77	.91	1.00	54.3	15.9	4.56	.78	.93	1.00	52.3	15.3	5.15	.79	.94	1.00	50.3	14.7	5.80	.81	.96	1.00
	2200	1040	57.0	16.7	4.05	.79	.94	1.00	55.1	16.1	4.57	.80	.96	1.00	53.2	15.6	5.16	.82	.97	1.00	51.1	15.0	5.81	.83	.99	1.00
67°F (19°C)	1800	850	58.7	17.2	4.06	.58	.72	.85	56.7	16.6	4.58	.58	.73	.86	54.6	16.0	5.17	.59	.74	.88	52.4	15.4	5.83	.60	.75	.90
	2000	945	59.5	17.4	4.07	.59	.74	.88	57.5	16.9	4.59	.60	.75	.90	55.3	16.2	5.18	.61	.77	.92	53.1	15.6	5.84	.62	.78	.93
	2200	1040	60.2	17.6	4.08	.61	.77	.91	58.1	17.0	4.60	.61	.78	.93	55.9	16.4	5.19	.62	.79	.95	53.7	15.7	5.85	.63	.81	.96
71°F (22°C)	1800	850	62.5	18.3	4.10	.43	.56	.69	60.4	17.7	4.62	.43	.57	.70	58.2	17.1	5.21	.44	.58	.71	55.9	16.4	5.87	.44	.59	.73
	2000	945	63.3	18.6	4.11	.44	.58	.72	61.2	17.9	4.63	.44	.58	.73	59.0	17.3	5.22	.44	.59	.74	56.6	16.6	5.88	.45	.60	.76
	2200	1040	64.0	18.8	4.12	.44	.59	.74	61.9	18.1	4.64	.45	.60	.76	59.5	17.4	5.23	.45	.61	.77	57.2	16.8	5.89	.45	.62	.79

12HPB60 — HEATING CAPACITY — C26-65EAP - CH23-68

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	
730	1550	19.0	64,800	4435	14.9	50,700	4070	10.5	35,700	3700	7.7	26,200	3120	3.8	13,100	2385
825	1750	19.2	65,500	4275	15.1	51,400	3905	10.6	36,300	3535	7.9	26,900	2960	4.0	13,700	2225
920	1950	19.3	65,900	4110	15.2	51,700	3740	10.8	36,700	3370	8.0	27,200	2795	4.1	14,100	2060

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

12HPB60 - C33-60D - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1800	850	64.8	19.0	4.62	50.9	14.9	4.20	35.9	10.5	3.75	27.2	8.0	3.34	13.6	4.0	2.49
2000	945	65.2	19.1	4.47	51.3	15.0	4.05	36.3	10.6	3.60	27.6	8.1	3.19	14.0	4.1	2.34
2200	1040	65.6	19.2	4.36	51.7	15.2	3.94	36.7	10.8	3.49	28.0	8.2	3.08	14.4	4.2	2.23

12HPB60 — HEATING PERFORMANCE C26-65EAP - CH23-68 at 1750 cfm (825 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4275	65,500	19.2
60	16	4180	62,300	18.3
55	13	4090	59,100	17.3
50	10	4000	55,900	16.4
47	8	3945	54,000	15.8
45	7	3905	51,400	15.1
40	4	3805	44,800	13.1
35	2	3705	38,300	11.2
30	-1	3620	37,300	10.9
25	-4	3535	36,300	10.6
20	-7	3450	35,400	10.4
17	-8	3400	34,800	10.2
15	-9	3325	33,500	9.8
10	-12	3140	30,200	8.9
5	-15	2960	26,900	7.9
0	-18	2775	23,600	6.9
-5	-21	2590	20,300	5.9
-10	-23	2405	17,000	5.0
-15	-26	2225	13,700	4.0
-20	-29	2040	10,400	3.0

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

12HPB60 - C33-60D - HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	4.47	65.2	19.1
60	16	4.38	62.1	18.2
55	13	4.28	59.0	17.3
50	10	4.18	55.9	16.4
47	8	4.12	54.0	15.8
45	7	4.05	51.3	15.0
40	4	3.87	44.4	13.0
35	2	3.69	37.6	11.0
30	-1	3.65	36.9	10.8
25	-4	3.60	36.3	10.6
20	-7	3.56	35.7	10.5
17	-8	3.54	35.3	10.3
15	-9	3.50	34.1	10.0
10	-12	3.40	31.0	9.1
5	-15	3.19	27.6	8.1
0	-18	2.97	24.2	7.1
-5	-21	2.76	20.8	6.1
-10	-23	2.55	17.4	5.1
-15	-26	2.34	14.0	4.1
-20	-29	2.12	10.6	3.1

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

12HPB60 — COOLING CAPACITY — CR26-48N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	710	1500	16.0	54,500	3750	.71	.84	.95	15.4	52,700	4230	.72	.85	.96	14.9	50,800	4780	.73	.86	.98	14.3	48,800	5390	.74	.88	.99
	800	1700	16.3	55,700	3760	.73	.87	.98	15.8	53,900	4240	.74	.88	.99	15.2	51,900	4790	.75	.90	1.00	14.6	49,800	5400	.77	.91	1.00
	895	1900	16.6	56,600	3770	.76	.90	1.00	16.1	54,800	4250	.77	.91	1.00	15.5	52,800	4800	.78	.93	1.00	14.9	50,700	5410	.80	.95	1.00
67°F (19.4°C)	710	1500	17.0	58,000	3780	.56	.68	.80	16.4	56,100	4260	.56	.69	.82	15.9	54,100	4810	.57	.70	.83	15.2	51,900	5430	.58	.71	.85
	800	1700	17.3	59,000	3790	.57	.71	.84	16.7	57,100	4280	.58	.72	.85	16.1	55,000	4820	.58	.73	.87	15.5	52,800	5440	.59	.74	.88
	895	1900	17.6	59,900	3800	.59	.73	.87	17.0	57,900	4280	.59	.74	.89	16.4	55,800	4830	.60	.76	.90	15.7	53,500	5450	.61	.77	.92
71°F (21.7°C)	710	1500	18.1	61,700	3810	.42	.54	.66	17.5	59,700	4300	.42	.54	.66	16.9	57,600	4850	.43	.55	.67	16.2	55,300	5470	.43	.56	.69
	800	1700	18.4	62,800	3830	.43	.55	.68	17.8	60,700	4310	.43	.56	.69	17.1	58,500	4860	.43	.57	.70	16.5	56,200	5480	.43	.58	.72
	895	1900	18.6	63,600	3840	.43	.57	.71	18.1	61,600	4320	.44	.58	.72	17.4	59,300	4870	.44	.59	.73	16.7	56,900	5480	.44	.60	.75

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

12HPB60 — COOLING CAPACITY — CR26-60N/W-F

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	80°F 27°C	85°F 29°C
63°F (17.2°C)	850	1800	16.8	57,300	3780	.74	.88	.99	16.2	55,400	4260	.75	.90	1.00	15.6	53,300	4820	.76	.91	1.00	15.0	51,100	5430	.78	.93	1.00
	945	2000	17.1	58,200	3790	.77	.91	1.00	16.5	56,300	4280	.78	.93	1.00	15.9	54,200	4830	.79	.95	1.00	15.3	52,100	5440	.81	.96	1.00
	1040	2200	17.3	59,100	3800	.79	.94	1.00	16.7	57,100	4280	.80	.96	1.00	16.1	55,100	4830	.82	.97	1.00	15.5	52,900	5440	.84	.99	1.00
67°F (19.4°C)	850	1800	17.8	60,700	3810	.58	.72	.85	17.2	58,700	4300	.58	.73	.87	16.6	56,500	4850	.59	.74	.88	15.9	54,100	5460	.60	.76	.90
	945	2000	18.1	61,600	3820	.59	.74	.88	17.4	59,500	4310	.60	.75	.90	16.8	57,200	4860	.61	.77	.92	16.1	54,800	5470	.62	.79	.94
	1040	2200	18.3	62,300	3830	.61	.77	.91	17.6	60,100	4310	.61	.78	.93	17.0	57,900	4860	.62	.80	.95	16.2	55,400	5470	.63	.81	.96
71°F (21.7°C)	850	1800	18.9	64,600	3850	.43	.56	.69	18.3	62,500	4340	.43	.57	.70	17.6	60,100	4890	.43	.58	.72	16.9	57,700	5500	.44	.58	.73
	945	2000	19.2	65,400	3860	.44	.58	.72	18.5	63,200	4340	.44	.58	.73	17.8	60,800	4890	.44	.59	.75	17.1	58,400	5510	.44	.60	.76
	1040	2200	19.4	66,100	3870	.44	.59	.75	18.7	63,900	4350	.44	.60	.76	18.0	61,400	4900	.45	.61	.77	17.3	58,900	5510	.45	.62	.79

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

12HPB60 — HEATING CAPACITY — CR26-48N/W-F

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	
705	1500	18.8	64,300	4660	14.8	50,600	4220	10.5	35,900	3780	7.8	26,500	3165	3.9	13,300	2420
800	1700	19.0	64,700	4505	14.9	51,000	4065	10.6	36,300	3620	7.9	26,900	3010	4.0	13,700	2260
895	1900	19.1	65,200	4345	15.1	51,400	3905	10.8	36,800	3465	8.0	27,400	2850	4.2	14,200	2100

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

12HPB60 — HEATING CAPACITY — CR26-60N/W-F

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	
850	1800	19.2	65,500	4225	15.0	51,300	3880	10.6	36,200	3535	7.8	26,600	2980	3.9	13,300	2265
945	2000	19.4	66,100	4115	15.2	51,900	3770	10.8	36,800	3425	8.0	27,200	2870	4.1	13,900	2160
***	2200	19.4	66,300	4005	15.3	52,100	3665	10.8	37,000	3320	8.0	27,400	2765	4.1	14,100	2050

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

12HPB60 — HEATING PERFORMANCE CR26-48N/W-F at 1700 cfm (800 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4505	64,700	19.0
60	16	4395	61,600	18.1
55	13	4285	58,500	17.1
50	10	4175	55,400	16.2
47	8	4110	53,500	15.7
45	7	4065	51,000	14.9
40	4	3945	44,600	13.1
35	2	3825	38,300	11.2
30	-1	3725	37,300	10.9
25	-4	3620	36,300	10.6
20	-7	3520	35,400	10.4
17	-8	3460	34,800	10.2
15	-9	3385	33,500	9.8
10	-12	3195	30,200	8.9
5	-15	3010	26,900	7.9
0	-18	2820	23,600	6.9
-5	-21	2635	20,300	5.9
-10	-23	2450	17,000	5.0
-15	-26	2260	13,700	4.0
-20	-29	2075	10,400	3.0

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

12HPB60 — HEATING PERFORMANCE CR26-60N/W-F at 2000 cfm (945 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4115	66,100	19.4
60	16	4030	62,900	18.4
55	13	3945	59,600	17.5
50	10	3860	56,400	16.5
47	8	3810	54,500	16.0
45	7	3770	51,900	15.2
40	4	3680	45,300	13.3
35	2	3585	38,800	11.4
30	-1	3505	37,800	11.1
25	-4	3425	36,800	10.8
20	-7	3350	35,800	10.5
17	-8	3300	35,200	10.3
15	-9	3230	33,900	9.9
10	-12	3050	30,500	8.9
5	-15	2870	27,200	8.0
0	-18	2695	23,900	7.0
-5	-21	2515	20,500	6.0
-10	-23	2335	17,200	5.0
-15	-26	2160	13,900	4.1
-20	-29	1980	10,600	3.1

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

HEATING AND COOLING RATINGS — 5 TON

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

12HPB60 — CH33-48C-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1800	850	54.7	16.0	4.02	.73	.88	.99	52.9	15.5	4.54	.75	.89	.99	51.0	14.9	5.13	.76	.91	1.00	49.0	14.4	5.79	.77	.92	1.00
	2000	945	55.6	16.3	4.03	.76	.91	1.00	53.8	15.8	4.55	.77	.92	1.00	51.9	15.2	5.15	.78	.94	1.00	49.9	14.6	5.80	.80	.95	1.00
	2200	1040	56.5	16.6	4.04	.78	.93	1.00	54.7	16.0	4.56	.79	.95	1.00	52.7	15.4	5.15	.81	.96	1.00	50.7	14.9	5.80	.83	.98	1.00
67°F (19°C)	1800	850	58.2	17.1	4.05	.57	.71	.84	56.2	16.5	4.57	.58	.72	.86	54.2	15.9	5.16	.59	.73	.87	52.0	15.2	5.82	.59	.75	.89
	2000	945	59.0	17.3	4.06	.59	.73	.88	57.0	16.7	4.58	.59	.75	.89	54.9	16.1	5.17	.60	.76	.91	52.7	15.4	5.82	.61	.78	.92
	2200	1040	59.6	17.5	4.06	.60	.76	.91	57.6	16.9	4.59	.61	.77	.92	55.5	16.3	5.18	.62	.79	.94	53.2	15.6	5.84	.63	.80	.95
71°F (22°C)	1800	850	61.9	18.1	4.09	.43	.56	.68	59.9	17.6	4.61	.43	.56	.70	57.7	16.9	5.20	.43	.57	.71	55.5	16.3	5.85	.43	.58	.72
	2000	945	62.7	18.4	4.10	.43	.57	.71	60.7	17.8	4.62	.43	.58	.72	58.4	17.1	5.21	.44	.59	.74	56.1	16.4	5.86	.44	.60	.75
	2200	1040	63.4	18.6	4.10	.44	.59	.74	61.3	18.0	4.63	.44	.60	.75	59.0	17.3	5.21	.44	.61	.76	56.7	16.6	5.88	.45	.61	.78

12HPB60 — COOLING CAPACITY — CH23-65

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		
	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)	850	1800	16.1	55,100	3980	.75	.90	1.00	15.6	53,200	4500	.76	.91	1.00	15.0	51,300	5080	.78	.93	1.00	14.4	49,300	5720	.79	.94	1.00
	945	2000	16.4	56,000	3990	.78	.93	1.00	15.9	54,200	4510	.79	.94	1.00	15.3	52,200	5090	.81	.96	1.00	14.7	50,200	5730	.82	.97	1.00
	1040	2200	16.7	56,900	4000	.80	.96	1.00	16.1	55,000	4510	.82	.97	1.00	15.6	53,100	5090	.83	.98	1.00	15.0	51,100	5740	.85	.99	1.00
67°F (19.4°C)	850	1800	17.1	58,200	4010	.58	.73	.86	16.5	56,300	4530	.59	.74	.88	15.9	54,200	5110	.60	.75	.90	15.2	52,000	5760	.61	.77	.91
	945	2000	17.3	59,000	4020	.60	.76	.90	16.7	57,000	4540	.61	.77	.91	16.1	54,900	5110	.62	.78	.93	15.4	52,600	5770	.63	.80	.95
	1040	2200	17.5	59,700	4030	.62	.78	.93	16.9	57,700	4540	.62	.80	.94	16.3	55,500	5120	.63	.81	.96	15.6	53,300	5770	.64	.83	.98
71°F (21.7°C)	850	1800	18.2	62,000	4050	.43	.57	.70	17.6	59,900	4570	.43	.58	.72	16.9	57,700	5150	.44	.58	.73	16.2	55,400	5800	.44	.59	.74
	945	2000	18.4	62,700	4060	.44	.59	.73	17.8	60,600	4570	.44	.59	.75	17.1	58,400	5160	.44	.60	.76	16.4	56,000	5810	.45	.61	.78
	1040	2200	18.6	63,300	4070	.44	.60	.76	17.9	61,200	4580	.45	.61	.77	17.3	58,900	5160	.45	.62	.79	16.6	56,500	5810	.46	.63	.81

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

12HPB60 - CH33-48C-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1800	850	64.9	19.0	4.74	50.8	14.9	4.29	35.8	10.5	3.81	26.9	7.9	3.37	13.5	4.0	2.51
2000	945	65.3	19.1	4.60	51.2	15.0	4.14	36.2	10.6	3.67	27.3	8.0	3.22	13.9	4.1	2.37
2200	1040	65.6	19.2	4.47	51.5	15.1	4.02	36.5	10.7	3.54	27.6	8.1	3.10	14.2	4.2	2.24

12HPB60 — HEATING CAPACITY — CH23-65

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	
850	1800	18.9	64,600	4290	14.9	50,700	3930	10.6	36,000	3570	7.8	26,500	3115	3.9	13,300	2310
945	2000	19.0	64,900	4175	14.9	51,000	3815	10.6	36,300	3455	7.9	26,800	3000	4.0	13,600	2195
1040	2200	19.1	65,300	4080	15.1	51,400	3720	10.8	36,700	3360	8.0	27,200	2905	4.1	14,000	2100

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

12HPB60 - CH33-48C-2F - HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	4.60	65.3	19.1
60	16	4.49	62.1	18.2
55	13	4.39	59.0	17.3
50	10	4.28	55.8	16.4
47	8	4.22	53.9	15.8
45	7	4.14	51.2	15.0
40	4	3.96	44.4	13.0
35	2	3.77	37.5	11.0
30	-1	3.72	36.8	10.8
25	-4	3.67	36.2	10.6
20	-7	3.61	35.5	10.4
17	-8	3.58	35.0	10.3
15	-9	3.54	33.8	9.9
10	-12	3.44	30.6	9.0
5	-15	3.22	27.3	8.0
0	-18	3.01	23.9	7.0
-5	-21	2.79	20.6	6.0
-10	-23	2.58	17.2	5.0
-15	-26	2.37	13.9	4.1
-20	-29	2.15	10.5	3.1

12HPB60 HEATING PERFORMANCE CH23-65 at 2000 cfm (945 L/s)

*Outdoor Temperature		Compressor Motor Watts Input	Total Output	
°F	°C		Btuh	kW
65	18	4175	64,900	19.0
60	16	4085	61,700	18.1
55	13	3995	58,600	17.2
50	10	3910	55,400	16.2
47	8	3855	53,500	15.7
45	7	3815	51,000	14.9
40	4	3715	44,700	13.1
35	2	3615	38,500	11.3
30	-1	3535	37,400	11.0
25	-4	3455	36,300	10.6
20	-7	3375	35,200	10.3
17	-8	3325	34,500	10.1
15	-9	3290	33,200	9.7
10	-12	3200	30,100	8.8
5	-15	3000	26,800	7.9
0	-18	2800	23,500	6.9
-5	-21	2600	20,200	5.9
-10	-23	2395	16,900	5.0
-15	-26	2195	13,600	4.0
-20	-29	1995	10,400	3.0

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

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

12HPB60 — CH33-60D-2F COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	L/s	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1800	850	54.7	16.0	4.02	.73	.87	.99	52.9	15.5	4.54	.74	.88	.99	51.0	14.9	5.13	.75	.90	1.00	48.9	14.3	5.78	.76	.92	1.00
	2000	945	55.6	16.3	4.03	.75	.90	1.00	53.8	15.8	4.55	.76	.92	1.00	51.9	15.2	5.14	.78	.93	1.00	49.8	14.6	5.79	.79	.95	1.00
	2200	1040	56.5	16.6	4.04	.78	.93	1.00	54.6	16.0	4.56	.79	.95	1.00	52.7	15.4	5.14	.80	.96	1.00	50.7	14.9	5.79	.82	.98	1.00
67°F (19°C)	1800	850	58.2	17.1	4.05	.57	.70	.84	56.2	16.5	4.57	.57	.71	.85	54.1	15.9	5.16	.58	.73	.87	51.9	15.2	5.82	.59	.74	.89
	2000	945	59.0	17.3	4.06	.58	.73	.87	57.0	16.7	4.58	.59	.74	.89	54.9	16.1	5.17	.60	.75	.90	52.6	15.4	5.82	.60	.77	.92
	2200	1040	59.7	17.5	4.06	.59	.75	.90	57.6	16.9	4.58	.60	.77	.92	55.5	16.3	5.18	.61	.78	.94	53.2	15.6	5.83	.62	.80	.95
71°F (22°C)	1800	850	62.0	18.2	4.09	.42	.55	.68	59.9	17.6	4.61	.42	.56	.69	57.7	16.9	5.20	.43	.56	.70	55.4	16.2	5.85	.43	.57	.71
	2000	945	62.8	18.4	4.10	.43	.57	.70	60.7	17.8	4.61	.43	.57	.71	58.5	17.1	5.20	.43	.58	.73	56.1	16.4	5.86	.44	.59	.74
	2200	1040	63.5	18.6	4.10	.43	.58	.73	61.3	18.0	4.62	.44	.59	.74	59.1	17.3	5.21	.44	.60	.76	56.7	16.6	5.87	.44	.61	.77

12HPB60 - CH33-60D-2F - HEATING CAPACITY

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
		Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input	Total Heating Capacity		Comp. Motor kW Input
cfm	L/s	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1800	850	64.9	19.0	4.64	50.8	14.9	4.21	35.8	10.5	3.77	26.9	7.9	3.35	13.5	4.0	2.49
2000	945	65.3	19.1	4.49	51.2	15.0	4.06	36.2	10.6	3.62	27.3	8.0	3.20	13.9	4.1	2.34
2200	1040	65.7	19.3	4.38	51.6	15.1	3.95	36.6	10.7	3.51	27.7	8.1	3.09	14.3	4.2	2.23

12HPB60 - CH33-60D-2F - HEATING PERFORMANCE at 2000 cfm (945 L/s) Indoor Coil Air Volume

*Outdoor Temperature		Compressor Motor kW Input	Total Output	
°F	°C		kBtuh	kW
65	18	4.49	65.3	19.1
60	16	4.39	62.2	18.2
55	13	4.29	59.0	17.3
50	10	4.19	55.9	16.4
47	8	4.14	54.0	15.8
45	7	4.06	51.2	15.0
40	4	3.88	44.4	13.0
35	2	3.70	37.6	11.0
30	-1	3.66	36.9	10.8
25	-4	3.62	36.2	10.6
20	-7	3.57	35.5	10.4
17	-8	3.55	35.0	10.3
15	-9	3.51	33.8	9.9
10	-12	3.41	30.6	9.0
5	-15	3.20	27.3	8.0
0	-18	2.98	23.9	7.0
-5	-21	2.77	20.6	6.0
-10	-23	2.56	17.2	5.0
-15	-26	2.34	13.9	4.1
-20	-29	2.13	10.5	3.1