LENNOX

HP18 SERIES
HEAT PUMP OUTDOOR UNITS
*18,000 to 62,000 Btuh Cooling Capacity
*17,200 to 61,500 Btuh Heating Capacity

*ARI Standard 210/240 and DOE Certified Ratings

Lennox HP18 Series Heat Pump Systems Provide Low Cost Installation With High Heating-Cooling Efficiency

The HP18 series outdoor units with matching indoor units are designed for builder type applications in apartments, hotels, motels, condominiums, new single family housing or retrofits. HP18 units have SEER's of up to 10.20 with a cooling capacity range of 18,000 to 62,000 Btuh and a COP rating of up to 3.08 with a heating capacity range of 17,200 to 61,500 Btuh. Matching blower-powered indoor units with optional supplemental electric heat are available to provide selective sizing and installation versatility. See ARI Ratings table. For Fuelmaster +™ applications and complete data on indoor units see individual bulletins indexed in this section.

Weather resistant cabinet is constructed of galvanized steel with a baked-on outdoor enamel paint finish for maximum protection from rust and corrosion. Extra large four sided wraparound coil with durable copper tubing and ripple-edged aluminum fins provides maximum efficiency. Powerful direct drive fan with totally enclosed motor draws air thru the entire coil and discharges it up and away from shrubs and lawn. Rugged, PVC coated steel wire condenser fan and coil guards are furnished. Compressor is protected from excessive current and temperatures. Electrical control box is located for easy access. Service valves and refrigerant line connections are externally located. Available as options to be ordered extra are; thermostat, refrigerant line sets and unit mounting bases.

Outdoor units are shipped completely factory assembled, piped and wired. Each unit is test operated at the factory to ensure proper operation. The installer has only to set outdoor unit in the desired location, connect refrigerant lines and make electrical connections.

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

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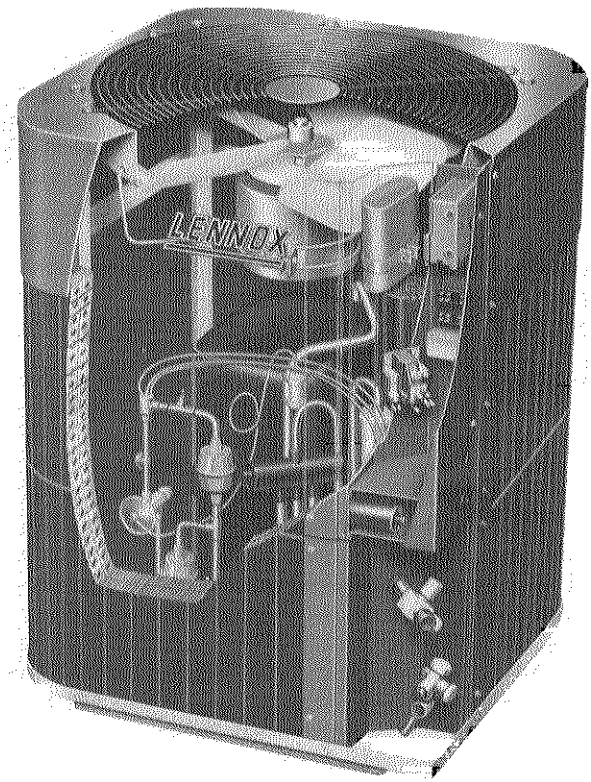
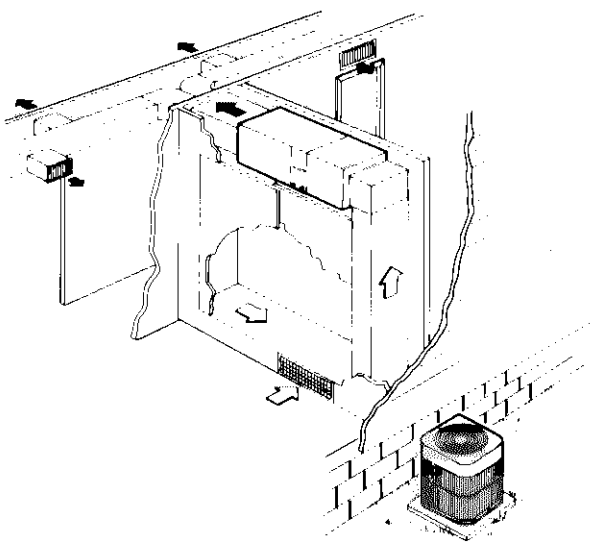
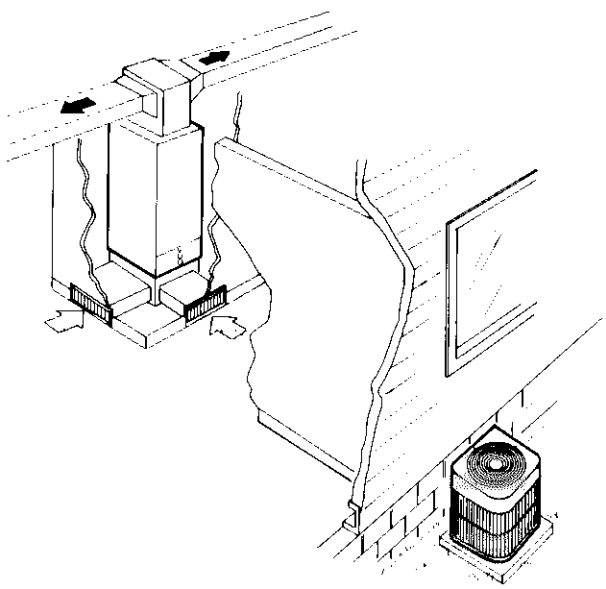


Typical Applications





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

FEATURES

Weather Resistant Cabinet — Heavy gauge galvanized steel cabinet is subject to a five station metal wash process. This preparation process results in a perfect bonding surface for the finish coat of baked-on enamel. The outdoor enamel paint finish gives the cabinet long lasting protection from the weather. Drainage holes are furnished in the base and base channels for moisture removal. Heavy duty channels under the base raise the unit off the mounting surface away from the damaging moisture.

Accessible Control Box — Conveniently located for easy access. All controls are pre-wired at the factory.

Dependable Compressor — Rugged and reliable compressor is hermetically sealed, suction cooled and overload protected. Internally protected from excessive current and temperature. Operates efficiently at low outdoor temperatures during heating mode. Strategically located discharge muffler reduces sound level. A crankcase heater is furnished and provides proper lubrication and protection from slugging. Running gear is spring mounted within sealed housing. In addition, compressor is installed on resilient rubber mounts in the unit, assuring quiet and vibration free operation.

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

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

Refrigerant Line Connections, Electrical Inlets and Service Valves — Vapor and liquid line connections are located outside of the cabinet and are made with sweat connections. Brass service valves prevent corrosion and provide access to refrigerant system. Drier with internal check valve and strainer are factory installed in the liquid line. One-shot vapor valve, liquid line service valve and gauge ports are accessible outside of the cabinet. A field installed thermometer well is furnished. A sight glass is furnished and factory installed. Refrigerant line connections, valves and field wiring inlets are all conveniently located in one central area of the cabinet. See dimension drawing.

Defrost Control — A clock timer defrost control is furnished as standard equipment. It gives a defrost cycle (if needed) for every 45 or 90 minutes (adjustable) of compressor "on" time. A sensing element mounted on the outdoor coil determines when the defrost cycle is required. Defrost pressure switch on the liquid line terminates cycle.

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

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

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

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

Suction Line Accumulator (HP18-461V, 510V, 650V models only) — Factory installed and piped. Traps and prevents large amounts of liquid refrigerant from flooding directly into the compressor and causing damage on start-ups and refrigerant cycle change.

Thermostat (Optional) — Thermostat is not furnished with the unit and must be ordered extra. See Accessories Section, Page 13 and the Lennox Price Book for selection.

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

Mounting Base (Optional) — Rugged mounting base provides permanent foundation for outdoor units. High density polyethylene structural material is lightweight, sturdy, sound absorbing and will withstand the rigors of the sun, heat, cold, moisture, oil and refrigerant. Will not mildew or rot. Can be shipped singly or in packages of 6 to a carton. HP18-211V-261V-311V-410V models use the MB1-22 base (99C78) 22-1/4" x 22-1/4" x 3" shipping weight 10 lbs. HP18-461V thru -650V models use the MB1-32 base (83C83) 32" x 34" x 3" shipping weight 15 lbs.

Outdoor Thermostat Kit (Optional) — An outdoor thermostat can be used to lock out some of the electric heating elements on indoor units where two stage control is applicable. Outdoor thermostat maintains the heating load on the low power input as long as possible before allowing the full power load to come on the line. Thermostat kit (LB-29740BA) and mounting box (M-1595) must be ordered extra.

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

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

Equipment Warranty — The compressor has a limited warranty for a full five years. All other components have a limited warranty for one year. Refer to Lennox Equipment Limited Warranty included with the unit for details.

ARI RATINGS

Outdoor Unit Model No. ★ARI Std. 270 SRN (bels)	†ARI Standard 210/240 Ratings											Indoor Unit	•Check and Expansion Valve Kit
	Cooling Capacity (Btuh)	High Temp. Htg. Cap. (Btuh)	Low Temp. Htg. Cap. (Btuh)	Total Unit Cooling Watts	SEER (Btuh/ Watt)	EER (Btuh/ Watt)	Total Unit High Temp. Htg. Watts	*HSPF	High Temp. Htg. C.O.P.	Total Unit Low Temp. Htg. Watts	Low Temp. Htg. C.O.P.		
HP18-211V (7.8)	18,000	17,200	10,000	2140	8.60	8.40	1825	6.25	2.76	1515	1.92	CB18-21 CBS18-21	LB-34792BE
HP18-261V (7.8)	24,000	23,800	13,700	2727	9.70	8.80	2438	6.45	2.86	1987	2.02	CB19-26 CBH19-26	LB 34792BE
	24,600	24,800	14,000	2930	8.50	8.40	2680	6.10	2.70	2160	1.90	CB18-26 CBS18-26	
HP18-311V (8.0)	27,800	28,600	16,800	3270	8.90	8.50	2972	6.55	2.82	2367	2.08	CB19-26 CBH19-26	LB-34792BG
	29,400	29,800	16,500	3630	8.10	8.10	3100	6.20	2.82	2515	1.92	CB18-31 CBS18-31	
HP18-411V HP18-413V (8.0)	35,400	35,600	19,000	4355	8.40	8.15	3750	6.40	2.80	2820	1.94	CB18-41	LB-34792BG
	36,000	35,600	20,400	4235	9.70	8.50	3501	6.80	2.98	2793	2.14	CB19-41 CBH19-41	
	36,600	35,400	18,700	4200	9.00	8.90	3520	6.80	2.96	2600	2.12	CB21-41 CBH21-41	
	36,000	36,000	19,400	4320	8.55	8.35	3750	6.50	2.80	2840	2.00	CBS18-41	
HP18 461V (8.2)	39,600	39,600	21,800	4620	9.40	8.60	4185	6.30	2.78	3295	1.94	CB21-41 CBH21-41	LB-34792BG
	41,500	41,500	23,000	5000	8.60	8.30	4345	6.30	2.80	3450	1.90	CB18-51 CBS18 51	
	42,500	41,500	23,000	4775	9.50	8.90	4137	6.80	2.94	3272	2.06	CB19-41 CBH19 41	
	44,000	41,000	22,600	4888	10.20	9.00	4143	6.80	2.90	3215	2.06	CB19 51 CBH19-51	
	44,500	41,500	22,800	4670	10.20	9.00	4240	6.80	3.00	3470	2.00	CB21-51 CBH21-51	
HP18-511V HP18-513V (8.2)	46,500	48,500	27,000	5645	8.70	8.20	5035	6.60	2.80	3950	2.00	CB18-51 CBS18-51	LB-34792BF
	48,500	48,000	25,400	5574	9.80	8.70	4689	6.95	3.00	3649	2.04	CB19-51 CBH19-51	
	49,000	46,500	25,800	5565	9.65	9.00	4805	6.80	2.84	3690	2.04	CB21-51 CBH21-51	
HP18-651V HP18-653V (8.2)	60,000	58,500	33,800	6825	10.00	9.10	5580	7.55	3.08	4270	2.32	CB21-65 CBH21-65	LB-34792BH
	61,500	61,500	37,000	7243	9.40	8.50	6143	6.90	2.94	4913	2.20	CB18-65 CBS18-65	
	62,000	59,500	34,400	6966	10.00	8.90	5736	7.50	3.04	4421	2.28	CB19-65 CBH19-65	

★Sound Rating Number in accordance with ARI Standard 270.
†Rated in accordance with ARI Standard 210/240 and DOE with 25 ft. of connecting refrigerant lines;
Cooling Ratings — 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.
High Temperature Heating Ratings — 47°F db/43°F wb outdoor air temperature and 70°F db entering indoor coil air.
Low Temperature Heating Ratings — 17°F db/15°F wb outdoor air temperature and 70°F db entering indoor coil air.
*Heating Seasonal Performance Factor.
•Kit must be ordered extra and field installed.

SPECIFICATIONS

Model No.		HP18-211V	HP18-261V	HP18-311V	HP18-411V HP18-413V	HP18-461V	HP18-511V HP18-513V	HP18-651V HP18-653V
Outdoor Coil	Net face area (sq. ft.)	9.24	6.46	7.39	9.24	11.39	13.67	18.22
	Tube diameter (in.) & No. of rows	3/8 — 1	3/8 — 2	3/8 — 2	3/8 — 2	3/8 — 2	3/8 — 2	3/8 — 2
	Fins per inch	20	20	20	20	18	20	20
Outdoor Fan	Diameter (in.) & No. of blades	18 — 4	18 — 4	18 — 4	18 — 4	22 — 4	22 — 4	22 — 4
	Motor hp	1/6	1/6	1/6	1/6	1/3	1/3	1/3
	Cfm	1900	2200	2400	2600	3800	3900	3970
	Rpm	1170	1040	1040	1060	1060	1060	1090
	Watts	150	250	250	260	400	395	385
Refrigerant-22 (charge furnished)		4 lbs. 5 oz.	5 lbs. 9 oz.	6 lbs. 1 oz.	6 lbs. 15 oz.	9 lbs. 5 oz.	12 lbs.	15 lbs. 3 oz.
Liquid line connection o.d. (in.) (sweat)		5/16	5/16	3/8	3/8	3/8	3/8	1/2
Vapor line connection o.d. (in.) (sweat)		5/8	5/8	3/4	3/4	7/8	7/8	1-1/8
Shipping weight (lbs.)		142	158	169	186	248	248	276
Number of packages in shipment		1	1	1	1	1	1	1

ELECTRICAL DATA

Model No.		HP18-211V	HP18-261V	HP18-311V	HP18-411V	HP18-413V
Line voltage data		208/230V 60hz/1ph.	208/230V 60hz/1ph.	208/230V 60hz/1ph.	208/230V 60hz/1ph.	208/230V 60hz/3ph.
Compressor	Rated load amps	10.5	12.6	15.4	19.8	11.6
	Power factor	.95	.96	.95	.94	.89
	Locked rotor amps	42.0	59.0	69.0	95.0	73.4
Outdoor Fan Motor	Full load amps	1.2	1.2	1.2	1.2	1.2
	Locked rotor amps	2.2	2.2	2.2	2.2	2.2
Recommended maximum fuse size or circuit breaker size (amps)		20	25	35	45	25
*Minimum Circuit ampacity		14.3	17.0	20.5	26.9	16.4

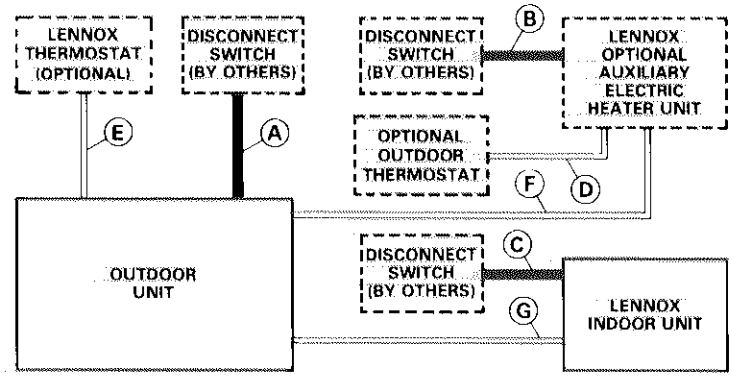
* Refer to National Electric Code manual to determine wire, fuse and disconnect size requirements.
NOTE Extremes of operating range are plus 10% and minus 5% of line voltage.

ELECTRICAL DATA

Model No.		HP18-461V	HP18-511V	HP18-513V		HP18-651V	HP18-653V	
Line voltage data		208/230V 60hz/1ph.	208/230V 60hz/1ph.	208/230V 60hz/3ph.	†460V 60hz/3ph.	208/230V 60hz/1ph.	208/230V 60hz/3ph.	†460V 60hz/3ph.
Compressor	Rated load amps	21.2	23.8	15.1	7.4	31.0	21.6	10.3
	Power factor	.96	.96	.90	.90	.96	.93	.93
	Locked rotor amps	108.0	114.0	84.0	42.0	178.0	124.0	62.0
Outdoor Fan Motor	Full load amps	2.0	2.0	2.0	1.1	2.0	2.0	1.1
	Locked rotor amps	4.5	4.5	4.5	2.3	4.5	4.5	2.3
Recommended maximum fuse size or circuit breaker size (amps)		45	50	35	15	60	50	20
*Minimum Circuit ampacity		28.9	31.8	21.1	10.4	41.0	29.0	14.9

* Refer to National Electric Code manual to determine wire, fuse and disconnect size requirements.
NOTE Extremes of operating range are plus 10% and minus 5% of line voltage. 460 volt models are plus and minus 10% of line voltage.
† Built to order. Allow 120 days lead time.

FIELD WIRING



A — Two or Three wire power (see Electrical Table)
B — Two or Three wire power (size to heater capacity)
C — Two or Three wire power (size to indoor coil blower motor)
D — Two wire low voltage (18 ga. minimum)
E — Six wire low voltage (18 ga. minimum) with Electric Heat
Eight wire low voltage with Optional Outdoor Thermostat
F — Four wire low voltage (18 ga. minimum)
G — Three wire low voltage (18 ga. minimum)

— Field wiring not furnished —

NOTE All wiring to conform to NEC and local electrical codes.

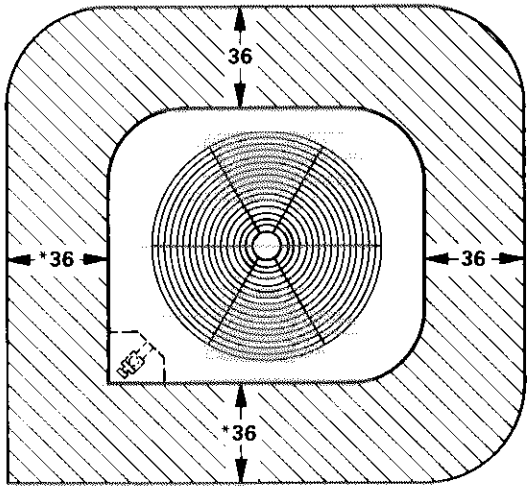
REFRIGERANT LINE KITS

Outdoor Unit Model No.	Line Set Model No.	Length of Lines (ft.)	Liquid Line (o.d. in.)	Vapor Line (o.d. in.)
HP18-211V HP18-261V	L10-21-20	20	5/16	5/8
	L10-21-25	25		
	L10-21-35	35		
	L10-21-50	50		
HP18-311V HP18-410V	L10-41-20	20	3/8	3/4
	L10-41-30	30		
	L10-41-40	40		
	L10-41-50	50		
HP18-461V HP18-510V	L10-65-30	30	3/8	7/8
	L10-65-40	40		
	L10-65-50	50		
HP18-650V	*Not Available	----	----	----

*Field fabricate.

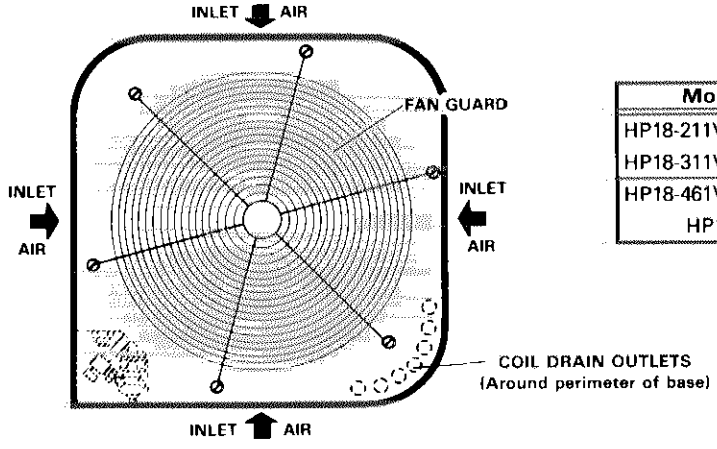
NOTE – Refrigerant lines must not exceed 50 ft. in any installations. If longer length lines are required, contact your Lennox Division Service Manager.

INSTALLATION CLEARANCES (inches)



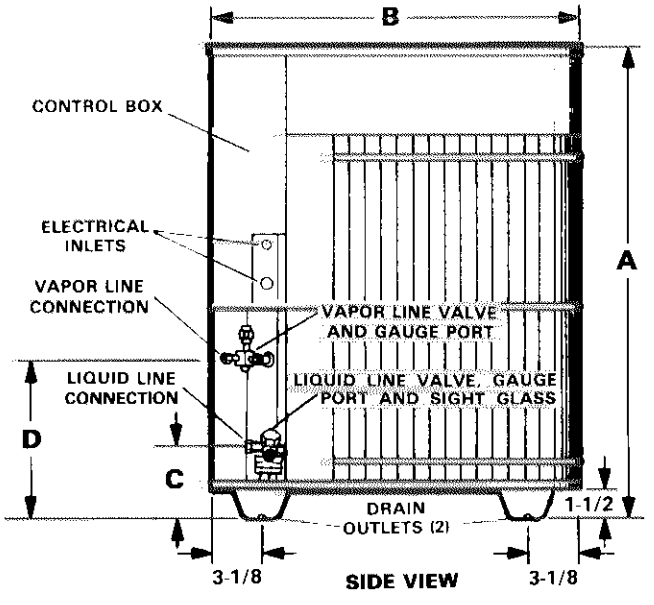
NOTE – 48 inch clearance required on top of unit.
*NOTE – One side must be 36 inches for service. Two of the remaining sides may be 12 inches.

DIMENSIONS (inches)

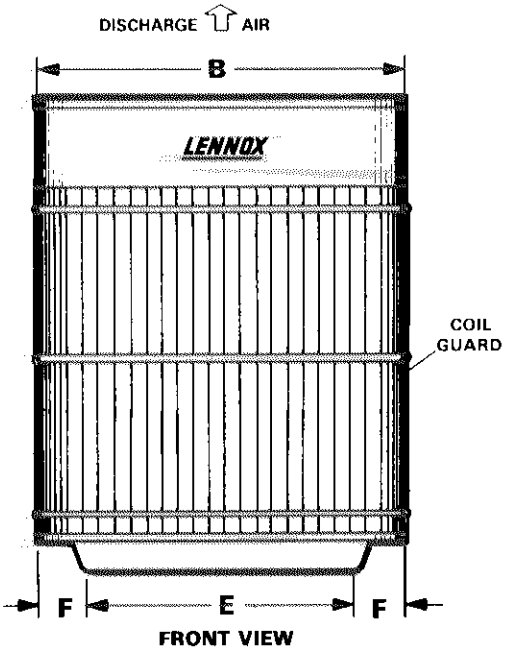


TOP VIEW

Model No.	A	B	C	D	E	F
HP18-211V,HP18-261V HP18-311V,HP18-410V	28-3/4	22-1/4	2-1/8	7-1/2	15	3-5/8
HP18-461V,HP18-510V HP18-650V	33-9/16	28-13/16	4-9/16	9-5/16	18-1/16	5-3/8



SIDE VIEW



FRONT VIEW

RATINGS

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

HP18-211V COOLING CAPACITY WITH CB18-21 OR CBS18-21 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85				95				105				115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	600	18,300	1640	.79	.91	1.00	17,200	1740	.82	.95	1.00	16,000	1840	.84	.98	1.00	15,100	1930	.88	1.00	1.00
	675	18,700	1650	.82	.96	1.00	17,500	1760	.85	.98	1.00	16,600	1860	.88	1.00	1.00	15,600	1960	.92	1.00	1.00
	750	19,000	1660	.86	.99	1.00	18,000	1770	.89	1.00	1.00	17,000	1880	.92	1.00	1.00	16,000	1980	.97	1.00	1.00
67	600	19,500	1670	.61	.73	.85	18,300	1780	.63	.76	.88	17,100	1890	.65	.78	.91	15,900	1980	.67	.81	.96
	675	19,900	1680	.63	.76	.89	18,600	1790	.65	.79	.92	17,400	1900	.67	.82	.96	16,100	1990	.70	.86	1.00
	750	20,100	1690	.66	.80	.93	18,900	1800	.67	.83	.97	17,600	1910	.70	.86	1.00	16,300	2010	.73	.90	1.00
71	600	21,000	1710	.45	.57	.68	19,700	1830	.46	.58	.70	18,300	1940	.47	.60	.73	17,000	2040	.48	.62	.76
	675	21,300	1720	.46	.59	.71	19,900	1840	.47	.60	.73	18,600	1950	.48	.62	.76	17,200	2050	.49	.65	.80
	750	21,500	1730	.47	.61	.74	20,100	1850	.48	.63	.77	18,800	1960	.49	.65	.80	17,400	2060	.51	.67	.84

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

HP18-261V COOLING CAPACITY WITH CB19-26 OR CBH19-26 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85				95				105				115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	700	23,400	2100	.75	.88	.99	22,200	2230	.77	.90	1.00	21,000	2340	.79	.93	1.00	19,700	2430	.82	.97	1.00
	800	24,200	2140	.78	.92	1.00	22,900	2270	.81	.95	1.00	21,700	2370	.84	.98	1.00	20,400	2450	.87	1.00	1.00
	900	24,800	2170	.82	.96	1.00	23,600	2290	.85	.98	1.00	22,300	2400	.88	1.00	1.00	21,100	2480	.91	1.00	1.00
67	700	25,000	2170	.59	.69	.80	23,700	2300	.60	.71	.83	22,400	2400	.61	.73	.86	21,000	2480	.63	.75	.89
	800	25,700	2200	.61	.72	.85	24,400	2330	.62	.74	.87	23,000	2430	.64	.77	.91	21,500	2500	.65	.80	.94
	900	26,300	2230	.63	.75	.89	24,900	2350	.64	.78	.92	23,400	2440	.66	.81	.95	21,900	2510	.68	.84	.99
71	700	26,500	2230	.45	.55	.64	25,100	2360	.45	.56	.66	23,700	2450	.46	.57	.68	22,300	2520	.47	.58	.70
	800	27,300	2260	.46	.57	.67	25,800	2380	.46	.58	.69	24,400	2480	.47	.59	.71	22,800	2540	.48	.61	.73
	900	27,900	2290	.47	.58	.70	26,400	2400	.47	.60	.72	24,900	2500	.48	.61	.74	23,200	2560	.49	.63	.77

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

HP18-211V HEATING CAPACITY WITH CB18-21 OR CBS18-21 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		–15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
600	21,000	1670	15,900	1465	10,400	1255	7200	1025	3400	775
675	21,500	1655	16,400	1450	10,900	1240	7700	1010	3900	760
750	22,100	1635	17,000	1430	11,500	1220	8300	990	4500	740

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

HP18-261V HEATING CAPACITY WITH CB19-26 OR CBH19-26 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
700	29,200	2385	21,900	1965	14,100	1655	10,000	1340	4800	1020
800	29,900	2340	22,500	1920	14,800	1610	10,600	1295	5400	970
900	30,200	2295	22,900	1875	15,100	1565	11,000	1250	5800	925

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

HP18-211V HEATING PERFORMANCE at 675 cfm Indoor Coil Air Volume (CB18-21 or CBS18-21)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1655	21,500
60	1605	20,300
55	1550	19,100
50	1500	17,900
47	1470	17,200
45	1450	16,400
40	1395	14,200
35	1340	12,100
30	1290	11,500
25	1240	10,900
20	1190	10,400
17	1160	10,000
15	1135	9600
10	1070	8700
5	1010	7700
0	945	6800
–5	885	5800
–10	820	4900
–15	760	3900
–20	695	3000

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-261V HEATING PERFORMANCE at 800 cfm Indoor Coil Air Volume (CB19-26 or CBH19-26)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2340	29,900
60	2230	28,200
55	2125	26,500
50	2015	24,800
47	1950	23,800
45	1920	22,500
40	1840	19,300
35	1765	16,100
30	1685	15,400
25	1610	14,800
20	1535	14,100
17	1485	13,700
15	1455	13,200
10	1375	11,900
5	1295	10,600
0	1215	9300
–5	1135	8000
10	1050	6700
–15	970	5400
20	890	4100

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

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

HP18-261V COOLING CAPACITY WITH CB18-26 OR CBS18-26 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																		
		85					95					105					115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	800	24,800	2150	.77	.89	1.00	23,600	2290	.79	.91	1.00	22,300	2450	.81	.95	1.00	20,900	2650	.84	.98	1.00
	900	25,400	2170	.80	.93	1.00	24,000	2310	.83	.96	1.00	22,800	2480	.85	.99	1.00	21,500	2680	.89	1.00	1.00
	1000	25,900	2180	.84	.97	1.00	24,700	2330	.86	.99	1.00	23,400	2510	.89	1.00	1.00	22,000	2710	.93	1.00	1.00
67	800	26,500	2200	.60	.71	.83	25,100	2340	.61	.73	.85	23,600	2510	.63	.76	.88	22,000	2710	.64	.78	.92
	900	27,000	2210	.62	.74	.87	25,500	2360	.63	.77	.90	23,900	2530	.65	.79	.93	22,300	2730	.67	.83	.97
	1000	27,400	2220	.64	.78	.91	25,800	2370	.66	.80	.94	24,200	2540	.68	.83	.97	22,500	2740	.70	.87	1.00
71	800	28,400	2250	.44	.55	.66	26,800	2400	.45	.56	.68	25,100	2580	.46	.58	.70	23,400	2790	.47	.60	.73
	900	28,800	2260	.45	.57	.69	27,200	2410	.46	.59	.71	25,400	2590	.47	.60	.74	23,600	2800	.48	.63	.77
	1000	29,200	2270	.46	.59	.72	27,500	2420	.47	.61	.75	25,700	2600	.48	.63	.77	23,800	2810	.49	.65	.81

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

HP18-311V COOLING CAPACITY WITH CB19-26 OR CBH19-26 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																		
		85					95					105					115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	800	27,900	2510	.73	.85	.96	26,500	2730	.75	.88	.99	25,000	2930	.77	.91	1.00	23,500	3120	.80	.94	1.00
	900	28,700	2540	.76	.89	1.00	27,200	2760	.78	.92	1.00	25,700	2970	.81	.95	1.00	24,200	3150	.84	.98	1.00
	1000	29,400	2570	.79	.92	1.00	27,900	2790	.81	.95	1.00	26,400	3000	.84	.98	1.00	24,800	3190	.87	1.00	1.00
67	800	29,700	2580	.58	.67	.78	28,200	2800	.59	.69	.80	26,700	3010	.60	.71	.83	25,000	3210	.61	.73	.87
	900	30,500	2610	.59	.70	.82	29,000	2830	.60	.71	.84	27,300	3050	.62	.74	.87	25,600	3240	.63	.77	.91
	1000	31,200	2630	.61	.72	.85	29,600	2860	.62	.74	.88	27,900	3070	.63	.77	.91	26,000	3270	.65	.80	.95
71	800	31,400	2640	.44	.53	.63	29,900	2870	.44	.54	.64	28,300	3090	.45	.55	.66	26,500	3290	.46	.57	.68
	900	32,300	2670	.45	.55	.65	30,700	2910	.45	.56	.66	28,900	3130	.46	.57	.68	27,100	3320	.47	.59	.71
	1000	33,000	2700	.46	.56	.67	31,300	2930	.46	.58	.69	29,500	3150	.47	.59	.71	27,600	3350	.48	.61	.74

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

HP18-261V HEATING CAPACITY WITH CB18-26 OR CBS18-26 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		– 15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
800	30,300	2425	22,500	2080	14,300	1710	9800	1405	4500	1070
900	31,300	2370	23,500	2025	15,300	1655	10,800	1350	5500	1015
1000	32,000	2340	24,200	1995	16,000	1625	11,500	1320	6200	985

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

HP18-311V HEATING CAPACITY WITH CB19-26 OR CBH19-26 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		– 15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
800	35,100	2885	26,700	2480	17,800	2075	12,500	1670	6100	1275
900	35,600	2805	27,200	2395	18,300	1990	13,000	1585	6600	1190
1000	36,000	2735	27,600	2330	18,700	1920	13,300	1520	7000	1125

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

HP18-261V HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (CB18-26 or CBS18-26)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2370	31,300
60	2285	29,500
55	2205	27,700
50	2120	25,900
47	2070	24,800
45	2025	23,500
40	1905	20,200
35	1790	16,900
30	1725	16,100
25	1655	15,300
20	1590	14,500
17	1550	14,000
15	1515	13,500
10	1430	12,100
5	1350	10,800
0	1265	9500
– 5	1180	8200
– 10	1095	6800
– 15	1015	5500
– 20	930	4200

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-311V HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (CB19-26 or CBH19-26)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2805	35,600
60	2700	33,700
55	2600	31,700
50	2495	29,800
47	2435	28,600
45	2395	27,200
40	2295	23,700
35	2200	20,300
30	2095	19,300
25	1990	18,300
20	1885	17,400
17	1825	16,800
15	1785	16,100
10	1685	14,600
5	1585	13,000
0	1490	11,400
– 5	1390	9800
10	1290	8200
– 15	1190	6600
– 20	1095	5000

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

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

HP18-311V COOLING CAPACITY WITH CB18-31 OR CBS18-31 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1000	30,100	2680	.77	.89	1.00	28,600	2900	.79	.92	1.00	26,700	3100	.82	.96	1.00	25,300	3280	.85	.99	1.00
	1125	30,800	2700	.81	.94	1.00	29,100	2920	.83	.96	1.00	27,600	3140	.86	1.00	1.00	26,100	3330	.89	1.00	1.00
	1250	31,400	2730	.84	.97	1.00	29,900	2960	.87	1.00	1.00	28,300	3180	.90	1.00	1.00	26,700	3370	.93	1.00	1.00
67	1000	32,100	2760	.60	.72	.83	30,400	2980	.61	.74	.86	28,500	3190	.63	.76	.89	26,600	3360	.65	.79	.92
	1125	32,700	2780	.62	.75	.87	30,800	3000	.63	.77	.90	28,900	3210	.65	.80	.94	27,000	3390	.68	.83	.97
	1250	33,100	2790	.64	.78	.91	31,200	3020	.66	.80	.94	29,300	3220	.68	.83	.97	27,300	3410	.70	.87	1.00
71	1000	34,400	2840	.44	.55	.66	32,500	3070	.45	.57	.68	30,500	3280	.46	.58	.71	28,400	3470	.47	.60	.73
	1125	34,900	2860	.45	.57	.69	32,900	3090	.46	.59	.72	30,900	3300	.47	.61	.74	28,700	3490	.48	.63	.77
	1250	35,300	2870	.46	.59	.73	33,300	3100	.47	.61	.75	31,200	3320	.48	.63	.78	29,000	3500	.49	.65	.81

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

HP18-411V-413V COOLING CAPACITY WITH CB18-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1000	35,300	3280	.75	.86	.96	33,300	3530	.77	.88	.99	31,300	3750	.79	.91	1.00	29,300	3930	.81	.94	1.00
	1250	36,800	3350	.80	.93	1.00	34,800	3600	.83	.96	1.00	32,800	3820	.85	.99	1.00	30,600	4020	.89	1.00	1.00
67	1000	37,800	3390	.59	.69	.79	35,700	3640	.60	.71	.82	33,500	3870	.61	.73	.84	31,200	4060	.63	.76	.88
	1250	39,100	3440	.62	.75	.87	36,800	3700	.64	.77	.89	34,500	3930	.66	.79	.93	32,100	4120	.68	.83	.97
71	1000	40,400	3500	.45	.55	.64	38,200	3760	.45	.56	.66	35,800	4000	.46	.57	.68	33,400	4200	.47	.58	.70
	1250	41,700	3550	.46	.58	.69	39,300	3820	.47	.59	.71	36,800	4050	.48	.61	.74	34,200	4250	.49	.63	.77

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

HP18-311V HEATING CAPACITY WITH CB18-31 OR CBS18-31 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1000	37,800	2865	27,100	2420	16,600	1935	11,900	1625	5600	1235
1125	38,700	2815	27,900	2375	17,500	1885	12,800	1580	6500	1185
1250	39,400	2780	28,600	2335	18,200	1850	13,500	1540	7200	1150

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

HP18-411V-413V HEATING CAPACITY WITH CB18-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		-15	
	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input
1000	44,400	3630	33,600	2980	22,700	2355	12,700	1745	5700	1230
1250	45,600	3580	34,600	2940	23,400	2320	13,200	1720	6000	1210

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

HP18-311V HEATING PERFORMANCE at 1125 cfm Indoor Coil Air Volume (CB18-31 or CBS18-31)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2815	38,700
60	2715	36,200
55	2615	33,800
50	2515	31,300
47	2455	29,800
45	2375	27,900
40	2175	23,300
35	1975	18,600
30	1930	18,000
25	1885	17,500
20	1840	16,900
17	1815	16,500
15	1775	15,900
10	1675	14,300
5	1580	12,800
0	1480	11,200
– 5	1385	9600
– 10	1285	8100
– 15	1185	6500
– 20	1090	5000

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-411V-413V HEATING PERFORMANCE at 1250 cfm Indoor Coil Air Volume (CB18-41)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3580	45,600
60	3420	43,200
55	3255	40,300
50	3100	37,400
47	3000	35,600
45	2940	34,600
40	2780	31,800
35	2625	29,000
30	2470	26,200
25	2320	23,400
20	2165	20,900
17	2075	19,000
15	2015	18,100
10	1860	15,600
5	1720	13,200
0	1580	11,100
-5	1450	9200
-10	1325	7600
-15	1210	6000
-20	1105	4700

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°.

RATINGS

NOTE – To determine Sensible Capacity, Leaving Wet Bulb and Dry Bulb temperatures not shown in the tables see Miscellaneous Engineering Data section, Page 9.

HP18-411V-413V COOLING CAPACITY WITH CB19-41 OR CBH19-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1050	36,200	3280	.74	.86	.97	34,400	3510	.76	.89	.99	32,300	3800	.79	.92	1.00	30,200	4140	.82	.95	1.00
	1200	37,500	3320	.77	.90	1.00	35,400	3570	.80	.93	1.00	33,300	3860	.83	.96	1.00	31,200	4220	.86	.99	1.00
	1350	38,500	3360	.81	.94	1.00	36,400	3610	.84	.97	1.00	34,200	3920	.87	.99	1.00	32,100	4300	.90	1.00	1.00
67	1050	38,500	3360	.59	.69	.79	36,500	3610	.60	.70	.82	34,300	3910	.61	.72	.85	32,000	4290	.63	.75	.89
	1200	39,700	3400	.60	.72	.84	37,500	3660	.62	.73	.86	35,200	3980	.63	.76	.90	32,800	4360	.65	.80	.93
	1350	40,600	3430	.62	.74	.87	38,300	3700	.64	.77	.90	35,900	4020	.66	.80	.94	33,400	4420	.68	.84	.97
71	1050	40,700	3440	.45	.54	.64	38,600	3710	.45	.55	.65	36,300	4050	.46	.57	.67	34,000	4460	.46	.58	.69
	1200	41,900	3480	.46	.56	.67	39,700	3760	.46	.57	.68	37,300	4110	.47	.59	.70	34,800	4530	.48	.61	.73
	1350	42,900	3510	.47	.58	.69	40,500	3800	.47	.59	.71	38,100	4160	.48	.61	.74	35,500	4580	.49	.63	.77

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

HP18-411V-413V COOLING CAPACITY WITH CB21-41 OR CBH21-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	900	35,400	3270	.73	.83	.92	33,500	3500	.75	.85	.95	31,500	3790	.76	.87	.97	29,400	4120	.79	.90	1.00
	1100	37,100	3340	.77	.88	.98	35,100	3580	.79	.90	1.00	33,000	3880	.81	.93	1.00	30,700	4250	.84	.97	1.00
	1300	38,500	3390	.81	.93	1.00	36,400	3650	.83	.95	1.00	34,200	3960	.86	.98	1.00	32,000	4350	.89	1.00	1.00
67	900	37,500	3350	.58	.68	.77	35,500	3610	.59	.69	.79	33,500	3910	.61	.71	.81	31,300	4280	.62	.73	.84
	1100	39,300	3420	.61	.72	.82	37,200	3690	.62	.73	.84	35,000	4010	.63	.75	.87	32,700	4400	.65	.78	.90
	1300	40,800	3470	.64	.75	.87	38,500	3750	.65	.77	.89	36,200	4090	.67	.80	.92	33,700	4490	.69	.83	.96
71	900	39,500	3430	.45	.54	.63	37,500	3700	.46	.55	.64	35,400	4040	.46	.56	.66	33,100	4440	.47	.57	.68
	1100	41,600	3500	.46	.57	.67	39,300	3790	.47	.58	.68	37,000	4140	.48	.59	.70	34,600	4570	.48	.61	.73
	1300	43,100	3550	.48	.59	.70	40,800	3850	.48	.60	.72	38,200	4220	.49	.62	.74	35,600	4660	.50	.64	.77

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

HP18-411V-413V HEATING CAPACITY WITH CB19-41 OR CBH19-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1050	43,800	3450	33,000	2945	21,600	2440	14,900	1960	7200	1495
1200	44,700	3360	33,900	2855	22,500	2350	15,800	1870	8100	1405
1350	45,500	3295	34,600	2790	23,200	2285	16,500	1805	8800	1340

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

HP18-411V-413V HEATING CAPACITY WITH CB21-41 OR CBH21-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		−15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
900	44,300	3670	32,400	2955	20,100	2320	13,300	1835	6200	1380
1050	45,500	3670	33,600	2955	21,300	2320	14,500	1835	7400	1380
1200	46,400	3515	34,500	2800	22,200	2165	15,400	1680	8300	1225

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

HP18-411V-413V HEATING PERFORMANCE at 1200 cfm Indoor Coil Air Volume (CB19-41 or CBH19-41)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3360	44,700
60	3235	42,200
55	3110	39,700
50	2985	37,100
47	2910	35,600
45	2855	33,900
40	2730	29,500
35	2605	25,100
30	2480	23,800
25	2350	22,500
20	2225	21,200
17	2150	20,400
15	2105	19,700
10	1990	17,700
5	1870	15,800
0	1755	13,900
−5	1640	11,900
10	1525	10,000
−15	1405	8100
−20	1290	6100

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-411V-413V HEATING PERFORMANCE at 1050 cfm Indoor Coil Air Volume (CB21-41 OR CBH21-41)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3670	45,500
60	3490	42,700
55	3315	39,900
50	3135	37,100
47	3030	35,400
45	2955	33,600
40	2765	29,000
35	2580	24,500
30	2450	22,900
25	2320	21,300
20	2190	19,700
17	2110	18,700
15	2065	18,000
10	1950	16,200
5	1835	14,500
0	1720	12,700
−5	1610	10,900
10	1495	9100
−15	1380	7400
20	1265	5600

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

NOTE – To determine Sensible Capacity, Leaving Wet Bulb and Dry Bulb temperatures not shown in the tables see Miscellaneous Engineering Data section, Page 9.

HP18-411V-413V COOLING CAPACITY WITH CBS18-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																		
		85					95				105				115					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1000	35,500	3160	.74	.85	.95	33,500	3390	.76	.87	.98	31,500	3600	.78	.90	1.00	29,500	3780	.81	.93	1.00
	1250	37,000	3220	.79	.92	1.00	35,000	3460	.82	.95	1.00	32,900	3670	.84	.98	1.00	30,700	3860	.88	1.00	1.00
67	1000	38,100	3260	.59	.69	.79	35,900	3500	.60	.70	.81	33,700	3720	.61	.72	.84	31,500	3900	.62	.75	.87
	1250	39,400	3310	.62	.74	.85	37,100	3560	.63	.76	.88	34,800	3780	.65	.78	.91	32,400	3960	.67	.81	.95
71	1000	40,800	3370	.45	.54	.64	38,500	3620	.45	.55	.65	36,100	3850	.46	.56	.67	33,700	4040	.46	.58	.69
	1250	42,100	3420	.46	.57	.68	39,700	3670	.47	.59	.70	37,100	3900	.47	.60	.73	34,600	4090	.48	.62	.76

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

HP18-461V COOLING CAPACITY WITH CB21-41 OR CBH21-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																		
		85					95				105				115					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	900	38,000	3580	.71	.80	.88	36,100	3830	.72	.81	.91	34,100	4120	.73	.83	.93	31,900	4490	.75	.86	.96
	1075	40,000	3640	.74	.83	.93	38,000	3900	.75	.85	.95	35,700	4210	.77	.88	.98	33,400	4590	.79	.91	1.00
	1250	41,500	3690	.76	.87	.97	39,400	3950	.78	.90	.99	37,000	4270	.81	.92	1.00	34,500	4670	.83	.96	1.00
67	900	40,400	3650	.57	.66	.74	38,500	3920	.58	.67	.75	36,300	4240	.59	.68	.77	34,000	4620	.60	.70	.80
	1075	42,600	3720	.59	.68	.77	40,300	3990	.60	.70	.79	38,000	4320	.61	.71	.82	35,600	4730	.62	.74	.85
	1250	44,200	3760	.61	.71	.81	41,800	4040	.62	.73	.84	39,400	4390	.63	.75	.86	36,800	4810	.65	.77	.89
71	900	42,800	3720	.45	.53	.61	40,700	4000	.45	.54	.62	38,500	4340	.45	.54	.63	36,100	4770	.46	.55	.65
	1075	45,000	3790	.45	.55	.63	42,700	4080	.46	.56	.65	40,300	4440	.46	.56	.66	37,700	4880	.47	.58	.68
	1250	46,600	3830	.46	.56	.66	44,300	4140	.47	.57	.67	41,700	4510	.47	.59	.69	39,000	4970	.48	.60	.72

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

HP18-411V-413V HEATING CAPACITY WITH CBS18-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input	Total Heating Capacity (Btuh)	Comp. Motor Watts Input
1000	45,200	3570	34,000	2925	23,100	2320	13,100	1715	6100	1200
1250	46,400	3520	35,000	2885	23,800	2285	13,600	1690	6400	1180

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

HP18-461V HEATING CAPACITY WITH CB21-41 OR CBH21-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
900	49,100	4225	36,100	3495	22,600	2755	15,600	2180	7300	1605
1075	50,400	4345	37,400	3620	23,900	2880	16,900	2300	8600	1730
1250	51,600	3960	38,600	3235	25,100	2495	18,100	1915	9800	1340

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

HP18-411V-413V HEATING PERFORMANCE at 1250 cfm Indoor Coil Air Volume (CBS18-41)

*Outdoor Temperature (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3520	46,400
60	3355	43,600
55	3195	40,700
50	3040	37,800
47	2940	36,000
45	2885	35,000
40	2735	32,200
35	2585	29,400
30	2435	26,600
25	2285	23,800
20	2135	21,100
17	2045	19,400
15	1985	18,500
10	1835	16,000
5	1690	13,600
0	1550	11,500
-5	1420	9,600
-10	1295	8,000
-15	1180	6,400
-20	1075	4,900

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-461V HEATING PERFORMANCE at 1075 cfm Indoor Coil Air Volume (CB21-41 OR CBH21-41)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4345	50,400
60	4170	47,400
55	3990	44,400
50	3815	41,400
47	3710	39,600
45	3620	37,400
40	3395	32,000
35	3175	26,500
30	3025	25,200
25	2880	23,900
20	2730	22,600
17	2645	21,800
15	2585	21,000
10	2440	18,900
5	2300	16,900
0	2155	14,800
-5	2015	12,700
-10	1870	10,700
-15	1730	8600
-20	1585	6500

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

NOTE – To determine Sensible Capacity, Leaving Wet Bulb and Dry Bulb temperatures not shown in the tables see Miscellaneous Engineering Data section, Page 9.

HP18-461V COOLING CAPACITY WITH CB18-51 OR CBS18-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1225	41,700	3500	.74	.85	.96	39,600	3740	.76	.88	.98	37,300	4020	.78	.91	1.00	34,900	4360	.81	.94	1.00
	1400	43,000	3540	.77	.89	.99	40,800	3780	.79	.92	1.00	38,300	4070	.82	.95	1.00	35,900	4420	.85	.98	1.00
	1575	44,000	3570	.80	.93	1.00	41,700	3810	.83	.95	1.00	39,400	4110	.85	.98	1.00	36,900	4470	.89	1.00	1.00
67	1225	44,400	3580	.59	.69	.79	42,100	3830	.60	.71	.81	39,700	4130	.62	.73	.84	37,200	4500	.63	.75	.87
	1400	45,600	3610	.61	.72	.83	43,300	3870	.62	.74	.85	40,700	4180	.64	.76	.88	38,000	4560	.65	.79	.92
	1575	46,700	3640	.63	.74	.86	44,100	3900	.64	.77	.89	41,500	4220	.66	.79	.92	38,900	4610	.68	.82	.95
71	1225	47,100	3650	.46	.55	.64	44,700	3920	.46	.56	.66	42,200	4250	.47	.57	.67	39,600	4650	.47	.59	.69
	1400	48,400	3680	.47	.57	.67	45,900	3960	.47	.58	.68	43,400	4300	.48	.59	.70	40,500	4710	.49	.61	.73
	1575	49,400	3710	.47	.59	.69	46,800	3990	.48	.60	.71	44,200	4340	.49	.61	.73	41,300	4760	.50	.63	.76

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

HP18-461V COOLING CAPACITY WITH CB19-41 OR CBH19-41 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1200	41,800	3620	.73	.85	.96	39,700	3870	.75	.88	.98	37,500	4180	.77	.91	1.00	35,000	4540	.81	.94	1.00
	1325	42,900	3650	.76	.88	.98	40,700	3910	.78	.91	1.00	38,200	4220	.81	.94	1.00	35,900	4600	.84	.97	1.00
	1450	43,800	3680	.78	.91	1.00	41,500	3940	.80	.94	1.00	39,100	4260	.84	.96	1.00	36,600	4650	.87	1.00	1.00
67	1200	44,500	3700	.58	.68	.78	42,200	3960	.59	.69	.81	39,800	4290	.60	.71	.84	37,200	4680	.62	.74	.87
	1325	45,600	3730	.59	.70	.81	43,100	4000	.60	.71	.84	40,600	4330	.62	.74	.87	37,900	4730	.63	.77	.91
	1450	46,400	3750	.60	.72	.84	43,900	4020	.62	.74	.87	41,300	4360	.63	.77	.90	38,500	4770	.65	.80	.94
71	1200	47,100	3770	.44	.54	.63	44,700	4050	.45	.55	.64	42,200	4400	.45	.56	.66	39,500	4840	.46	.57	.68
	1325	48,100	3800	.45	.55	.65	45,700	4090	.45	.56	.66	43,000	4450	.46	.57	.68	40,300	4890	.47	.59	.71
	1450	49,000	3820	.45	.56	.67	46,500	4120	.46	.57	.68	43,900	4480	.47	.59	.70	41,000	4930	.48	.60	.73

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

HP18-461V HEATING CAPACITY WITH CB18-51 OR CBS18-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		– 15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1225	51,500	3875	38,300	3260	24,600	2645	16,700	2105	8000	1610
1400	52,600	3760	39,400	3145	25,700	2530	17,800	1990	9100	1495
1575	53,500	3680	40,300	3065	26,600	2450	18,700	1910	10,000	1415

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

HP18-461V HEATING CAPACITY WITH CB19-41 OR CBH19-41 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		– 15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1200	51,700	4100	38,500	3465	24,800	2830	16,900	2260	8100	1725
1325	52,700	3990	39,500	3360	25,800	2725	17,900	2155	9100	1620
1450	53,100	3960	39,900	3325	26,200	2690	18,200	2120	9500	1585

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

HP18-461V HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (CB18-51 or CBS18-51)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3760	52,600
60	3605	49,500
55	3450	46,400
50	3295	43,400
47	3205	41,500
45	3145	39,400
40	2990	34,200
35	2835	29,000
30	2680	27,300
25	2530	25,700
20	2375	24,000
17	2285	23,000
15	2235	22,100
10	2110	20,000
5	1990	17,800
0	1865	15,600
– 5	1740	13,400
– 10	1620	11,300
– 15	1495	9100
– 20	1370	6900

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-461V HEATING PERFORMANCE at 1325 cfm Indoor Coil Air Volume (CB19-41 or CBH19-41)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3990	52,700
60	3835	49,600
55	3675	46,500
50	3520	43,500
47	3425	41,600
45	3360	39,500
40	3195	34,400
35	3035	29,200
30	2880	27,500
25	2725	25,800
20	2570	24,100
17	2475	23,100
15	2420	22,200
10	2290	20,000
5	2155	17,900
0	2020	15,700
– 5	1885	13,500
– 10	1755	11,300
15	1620	9100
– 20	1485	6900

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

NOTE – To determine Sensible Capacity, Leaving Wet Bulb and Dry Bulb temperatures not shown in the tables see Miscellaneous Engineering Data section, Page 9.

HP18-461V COOLING CAPACITY WITH CB19-51 OR CBH19-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)															
		85				95				105				115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1225	43,500	3640	.74	.86	.97	41,200	3900	.76	.88	.99	38,700	4220	.78	.92	1.00	36,100	4600	.81	.95	1.00
	1400	44,900	3680	.77	.90	1.00	42,500	3950	.80	.93	1.00	39,900	4280	.83	.96	1.00	37,500	4680	.86	1.00	1.00
	1575	46,000	3720	.81	.94	1.00	43,600	3990	.83	.97	1.00	41,200	4330	.87	1.00	1.00	38,700	4760	.90	1.00	1.00
67	1225	46,100	3720	.58	.68	.79	43,700	3990	.59	.70	.82	41,100	4330	.61	.72	.85	38,400	4740	.62	.75	.88
	1400	47,500	3760	.60	.71	.83	45,000	4040	.62	.73	.86	42,300	4390	.63	.76	.89	39,400	4810	.65	.79	.93
	1575	48,600	3790	.62	.74	.87	46,000	4080	.64	.77	.90	43,200	4430	.65	.80	.94	40,300	4860	.67	.83	.97
71	1225	48,800	3790	.44	.54	.64	46,300	4090	.45	.55	.65	43,700	4450	.46	.56	.67	40,800	4900	.46	.58	.69
	1400	50,200	3830	.45	.56	.66	47,600	4130	.46	.57	.68	44,800	4510	.47	.59	.70	41,800	4970	.48	.60	.73
	1575	51,400	3860	.46	.58	.69	48,700	4170	.47	.59	.71	45,800	4550	.48	.61	.73	42,700	5020	.49	.63	.76

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

HP18-461V COOLING CAPACITY WITH CB21-51 OR CBH21-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)															
		85				95				105				115			
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F)		
				76	80	84			76	80	84			76	80	84			76	80	84
63	1450	44,600	3790	.79	.91	1.00	42,200	4070	.81	.94	1.00	39,500	4420	.84	.97	1.00	37,000	4850	.87	1.00	1.00
	1600	45,700	3820	.82	.94	1.00	43,000	4110	.84	.97	1.00	40,500	4470	.87	1.00	1.00	38,000	4920	.91	1.00	1.00
	1750	46,500	3850	.84	.97	1.00	44,000	4140	.87	1.00	1.00	41,400	4520	.90	1.00	1.00	39,000	4990	.94	1.00	1.00
67	1450	47,500	3870	.62	.74	.85	44,900	4180	.64	.76	.87	42,100	4550	.65	.78	.91	39,200	5000	.67	.81	.94
	1600	48,500	3890	.64	.76	.88	45,800	4210	.65	.78	.91	42,900	4590	.67	.81	.94	39,800	5050	.69	.84	.98
	1750	49,300	3920	.66	.78	.91	46,500	4240	.67	.81	.94	43,500	4620	.69	.84	.97	40,300	5090	.72	.88	1.00
71	1450	50,100	3940	.47	.58	.68	47,400	4270	.48	.59	.70	44,500	4670	.48	.61	.73	41,400	5160	.49	.63	.75
	1600	51,200	3970	.48	.59	.71	48,300	4310	.48	.61	.73	45,300	4720	.49	.62	.75	42,100	5210	.50	.65	.78
	1750	52,000	3990	.49	.61	.73	49,100	4340	.49	.62	.75	46,000	4750	.50	.64	.78	42,700	5260	.52	.67	.81

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

HP18-461V HEATING CAPACITY WITH CB19-51 OR CBH19-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1225	50,900	3930	38,000	3330	24,700	2740	16,300	2175	7800	1660
1400	52,100	3820	39,200	3225	25,800	2630	17,500	2065	8900	1555
1575	53,400	3740	40,500	3145	27,100	2550	18,800	1985	10,200	1475

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

HP18-461V HEATING CAPACITY WITH CB21-51 OR CBH21-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		– 15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1550	51,600	3880	38,500	3480	24,900	3055	16,700	2585	8100	1980
1700	52,500	3730	39,400	3330	25,800	2905	17,600	2435	9000	1830
1850	53,400	3805	40,300	3400	26,700	2975	18,500	2510	9900	1905

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

HP18-461V HEATING PERFORMANCE
at 1400 cfm Indoor Coil Air Volume (CB19-51 or CBH19-51)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3820	52,100
60	3670	49,000
55	3520	46,000
50	3370	42,900
47	3280	41,100
45	3225	39,200
40	3090	34,500
35	2955	29,900
30	2790	27,900
25	2630	25,800
20	2470	23,800
17	2375	22,600
15	2325	21,800
10	2195	19,600
5	2065	17,500
0	1940	15,300
–5	1810	13,200
–10	1680	11,100
–15	1555	8900
–20	1425	6800

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-461V HEATING PERFORMANCE
at 1700 cfm Indoor Coil Air Volume (CB21-51 OR CBH21-51)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3730	52,500
60	3635	49,400
55	3540	46,300
50	3445	43,300
47	3390	41,400
45	3330	39,400
40	3180	34,500
35	3035	29,600
30	2970	27,700
25	2905	25,800
20	2840	23,900
17	2800	22,800
15	2740	21,900
10	2590	19,800
5	2435	17,600
0	2285	15,500
–5	2135	13,300
–10	1980	11,200
–15	1830	9000
–20	1680	6800

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

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

HP18-511V-513V COOLING CAPACITY WITH CB18-51 OR CBS18-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1600	47,600	4040	.78	.90	1.00	44,900	4360	.80	.92	1.00	42,200	4640	.82	.96	1.00	39,500	4910	.86	1.00	1.00
	1800	48,700	4070	.81	.94	1.00	45,600	4390	.83	.97	1.00	43,200	4700	.86	.99	1.00	40,800	4980	.90	1.00	1.00
	2000	49,400	4100	.84	.97	1.00	47,000	4400	.87	1.00	1.00	44,400	4760	.90	1.00	1.00	41,900	5040	.94	1.00	1.00
67	1600	50,800	4150	.60	.72	.83	47,900	4480	.62	.74	.86	44,900	4780	.63	.76	.89	41,900	5040	.65	.79	.93
	1800	51,700	4180	.62	.75	.87	48,700	4520	.64	.77	.90	45,600	4820	.66	.80	.94	42,500	5080	.68	.83	.98
	2000	52,400	4210	.64	.79	.91	49,400	4540	.66	.81	.94	46,200	4850	.68	.84	.97	43,100	5110	.71	.87	1.00
71	1600	54,600	4280	.45	.56	.67	51,500	4630	.45	.57	.68	48,200	4940	.46	.58	.71	44,900	5220	.47	.60	.73
	1800	55,400	4310	.46	.58	.69	52,200	4660	.46	.59	.72	48,900	4980	.47	.61	.74	45,500	5250	.48	.63	.77
	2000	56,000	4330	.47	.60	.72	52,700	4680	.47	.61	.75	49,400	5000	.48	.63	.78	46,000	5280	.50	.65	.81

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

HP18-511V-513V COOLING CAPACITY WITH CB19-51 OR CBH19-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1400	48,100	4050	.75	.87	.98	45,400	4290	.77	.90	1.00	42,600	4520	.80	.93	1.00	39,800	4720	.83	.97	1.00
	1600	49,700	4110	.79	.91	1.00	46,800	4360	.81	.95	1.00	44,000	4590	.84	.97	1.00	41,300	4800	.88	1.00	1.00
	1800	51,000	4160	.82	.95	1.00	48,100	4420	.85	.98	1.00	45,300	4650	.88	1.00	1.00	42,700	4890	.92	1.00	1.00
67	1400	51,000	4170	.59	.70	.80	48,200	4420	.61	.72	.83	45,300	4650	.62	.74	.86	42,400	4870	.64	.76	.90
	1600	52,500	4220	.61	.73	.85	49,600	4480	.63	.75	.88	46,600	4720	.64	.77	.91	43,400	4940	.66	.81	.94
	1800	53,700	4270	.63	.76	.89	50,700	4530	.65	.78	.92	47,500	4770	.67	.81	.95	44,400	4990	.69	.85	.98
71	1400	53,900	4270	.45	.55	.65	51,100	4540	.46	.56	.66	48,100	4800	.46	.58	.68	45,100	5040	.47	.59	.71
	1600	55,500	4330	.46	.57	.68	52,500	4600	.47	.58	.69	49,500	4860	.48	.60	.72	46,300	5110	.48	.61	.74
	1800	56,800	4370	.47	.59	.70	53,600	4650	.48	.60	.72	50,500	4920	.49	.62	.75	47,400	5170	.50	.64	.78

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

HP18-511V-513V HEATING CAPACITY WITH CB18-51 OR CBS18-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		–15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1600	60,800	4625	45,300	3900	29,300	3170	20,100	2515	9900	1920
1800	61,600	4510	46,100	3785	30,100	3055	20,900	2400	10,700	1805
2000	62,400	4410	46,900	3685	30,900	2955	21,700	2300	11,500	1705

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

HP18-511V-513V HEATING CAPACITY WITH CB19-51 OR CBH19-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		–15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1400	60,300	4480	44,200	3725	27,300	2970	18,100	2330	8500	1775
1600	61,900	4385	45,700	3630	28,900	2875	19,600	2235	10,000	1680
1800	62,700	4305	46,500	3550	29,700	2795	20,500	2155	10,800	1600

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

HP18-511V-513V HEATING PERFORMANCE at 1800 cfm Indoor Coil Air Volume (CB18-51 or CBS18-51)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4510	61,600
60	4330	58,000
55	4150	54,300
50	3970	50,700
47	3860	48,500
45	3785	46,100
40	3605	40,000
35	3420	33,900
30	3235	32,000
25	3055	30,100
20	2870	28,200
17	2760	27,000
15	2700	26,000
10	2550	23,400
5	2400	20,900
0	2250	18,300
–5	2105	15,800
10	1955	13,200
–15	1805	10,700
20	1655	8100

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-511V-513V HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (CB19-51 or CBH19-51)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4385	61,900
60	4195	58,100
55	4005	54,300
50	3820	50,500
47	3705	48,200
45	3630	45,700
40	3445	39,500
35	3260	33,200
30	3065	31,100
25	2875	28,900
20	2685	26,700
17	2570	25,400
15	2515	24,500
10	2375	22,100
5	2235	19,600
0	2095	17,200
5	1955	14,800
10	1820	12,400
–15	1680	10,000
20	1540	7600

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

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

HP18-511V-513V COOLING CAPACITY WITH CB21-51 OR CBH21-51 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1550	49,600	4300	.78	.90	1.00	46,800	4560	.81	.93	1.00	43,900	4800	.83	.96	1.00	41,100	5020	.86	.99	1.00
	1700	50,700	4340	.81	.93	1.00	47,800	4600	.83	.96	1.00	45,000	4850	.86	.98	1.00	42,100	5080	.89	1.00	1.00
	1850	51,700	4380	.83	.95	1.00	48,600	4640	.86	.98	1.00	45,800	4890	.88	1.00	1.00	43,200	5150	.92	1.00	1.00
67	1550	52,700	4410	.62	.73	.84	49,700	4690	.63	.75	.86	46,700	4940	.65	.77	.89	43,600	5190	.66	.80	.92
	1700	53,700	4450	.63	.75	.87	50,700	4730	.65	.77	.89	47,600	4990	.66	.80	.92	44,400	5240	.68	.83	.96
	1850	54,700	4490	.65	.77	.89	51,600	4770	.66	.79	.92	48,300	5040	.68	.82	.95	45,200	5280	.70	.85	.98
71	1550	55,500	4520	.47	.58	.68	52,500	4820	.48	.59	.70	49,500	5100	.48	.60	.72	46,400	5370	.49	.62	.74
	1700	56,600	4560	.48	.59	.70	53,500	4860	.48	.60	.72	50,400	5150	.49	.62	.74	47,300	5420	.50	.63	.77
	1850	57,700	4600	.48	.60	.72	54,400	4900	.49	.62	.74	51,200	5190	.50	.63	.76	48,000	5470	.51	.65	.79

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

HP18-651V-653V COOLING CAPACITY WITH CB21-65 OR CBH21-65 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1500	59,000	5290	.73	.82	.92	55,900	5630	.74	.84	.94	53,100	5970	.76	.86	.96	50,100	6300	.77	.89	.99
	1750	61,300	5400	.75	.86	.96	58,100	5740	.77	.88	.98	55,100	6080	.79	.91	1.00	52,000	6440	.81	.93	1.00
	2000	63,100	5490	.78	.90	.99	60,100	5830	.80	.92	1.00	56,700	6200	.82	.95	1.00	53,300	6550	.85	.98	1.00
67	1500	62,400	5450	.58	.68	.76	59,400	5810	.59	.69	.78	56,400	6180	.60	.70	.80	53,400	6550	.61	.72	.82
	1750	64,800	5570	.60	.70	.80	61,700	5940	.61	.72	.82	58,400	6310	.62	.73	.84	55,200	6680	.63	.75	.87
	2000	67,000	5660	.62	.73	.83	63,500	6040	.63	.75	.86	59,900	6420	.64	.77	.88	56,500	6790	.66	.79	.91
71	1500	65,800	5610	.46	.54	.63	62,700	6000	.46	.55	.64	59,600	6380	.46	.56	.65	56,400	6770	.46	.57	.67
	1750	68,200	5740	.46	.56	.65	64,900	6130	.47	.57	.67	61,600	6520	.47	.58	.68	58,200	6910	.48	.59	.70
	2000	70,300	5830	.47	.58	.68	66,700	6230	.47	.59	.69	63,100	6620	.48	.60	.71	59,600	7010	.49	.61	.73

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

HP18-511V-513V HEATING CAPACITY WITH CB21-51 OR CBH21-51 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1450	57,700	4735	43,300	3990	28,100	3240	18,900	2600	9200	1965
1600	58,700	4685	44,300	3940	29,100	3190	19,900	2550	10,200	1915
1750	59,600	4645	45,200	3900	30,000	3150	20,800	2510	11,100	1875

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

HP18-651V-653V HEATING CAPACITY WITH CB21-65 OR CBH21-65 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1400	71,500	5730	54,300	4835	36,400	3925	24,400	3180	11,600	2425
1600	73,200	5605	56,000	4710	38,100	3795	26,100	3055	13,300	2295
1800	74,700	5505	57,500	4610	39,600	3700	27,600	2955	14,800	2195

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

HP18-511V-513V HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (CB21-51 OR CBH21-51)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4685	58,700
60	4500	55,300
55	4320	51,900
50	4135	48,500
47	4025	46,500
45	3940	44,300
40	3730	38,800
35	3515	33,300
30	3350	31,200
25	3190	29,100
20	3025	27,100
17	2930	25,800
15	2865	24,800
10	2705	22,400
5	2550	19,900
0	2390	17,500
-5	2230	15,100
-10	2075	12,600
-15	1915	10,200
-20	1755	7700

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-651V-653V HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (CB21-65 OR CBH21-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5605	73,200
60	5385	69,100
55	5165	65,000
50	4950	61,000
47	4820	58,500
45	4710	56,000
40	4435	49,800
35	4160	43,500
30	3980	40,800
25	3795	38,100
20	3615	35,400
17	3510	33,800
15	3435	32,500
10	3245	29,300
5	3055	26,100
0	2865	22,900
-5	2675	19,700
-10	2485	16,500
-15	2295	13,300
-20	2105	10,100

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

RATINGS

NOTE To determine Sensible Capacity, Leaving Wet Bulb and Dry Bulb temperatures not shown in the tables, see Miscellaneous Engineering Data section, Page 9.

HP18-651V-653V COOLING CAPACITY WITH CB18-65 OR CBS18-65 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	2000	62,700	5350	.80	.93	1.00	59,900	5730	.82	.95	1.00	57,300	6100	.84	.98	1.00	54,500	6440	.86	1.00	1.00
	2250	64,100	5410	.84	.97	1.00	60,900	5780	.86	1.00	1.00	58,700	6160	.88	1.00	1.00	56,400	6510	.91	1.00	1.00
	2500	65,300	5460	.88	1.00	1.00	62,800	5850	.90	1.00	1.00	60,400	6230	.92	1.00	1.00	58,100	6570	.95	1.00	1.00
67	2000	66,700	5510	.62	.75	.86	63,800	5890	.64	.76	.88	60,900	6250	.65	.78	.91	58,200	6580	.66	.80	.93
	2250	67,900	5550	.65	.78	.91	64,900	5930	.66	.80	.93	62,000	6290	.67	.82	.95	59,100	6620	.69	.84	.98
	2500	68,800	5590	.67	.81	.95	65,900	5960	.68	.83	.97	62,900	6320	.70	.85	1.00	60,000	6650	.72	.88	1.00
71	2000	71,500	5680	.46	.58	.69	68,500	6060	.47	.59	.71	65,500	6410	.47	.60	.72	62,500	6740	.48	.61	.74
	2250	72,500	5720	.47	.60	.72	69,500	6090	.48	.61	.74	66,400	6440	.49	.62	.76	63,400	6770	.49	.64	.78
	2500	73,400	5750	.48	.62	.76	70,300	6120	.49	.63	.77	67,100	6470	.50	.65	.79	64,100	6790	.51	.66	.81

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

HP18-651V-653V COOLING CAPACITY WITH CB19-65 OR CBH19-65 INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F) 85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T) Dry Bulb (°F) 76	80	84
63	1750	62,700	5470	.75	.86	.96	59,400	5820	.77	.88	.98	56,300	6160	.79	.91	1.00	53,200	6520	.81	.93	1.00
	2000	64,600	5560	.78	.90	1.00	61,500	5910	.80	.92	1.00	58,000	6280	.82	.95	1.00	54,500	6630	.85	.98	1.00
	2250	65,900	5630	.81	.93	1.00	62,800	6000	.83	.96	1.00	59,300	6370	.86	.98	1.00	56,000	6740	.88	1.00	1.00
67	1750	66,300	5640	.60	.70	.80	63,200	6020	.61	.72	.82	59,800	6400	.62	.73	.84	56,500	6770	.63	.75	.87
	2000	68,600	5740	.62	.73	.84	64,900	6130	.63	.74	.86	61,400	6510	.64	.76	.89	57,900	6880	.66	.79	.91
	2250	70,200	5820	.64	.75	.87	66,500	6210	.65	.77	.90	62,700	6600	.66	.80	.92	59,200	6970	.68	.82	.95
71	1750	70,000	5820	.46	.56	.65	66,600	6210	.46	.57	.67	63,200	6610	.47	.58	.68	59,600	7010	.48	.59	.70
	2000	72,000	5920	.47	.58	.68	68,400	6320	.48	.58	.69	64,800	6720	.54	.60	.71	61,200	7110	.49	.61	.73
	2250	73,600	6000	.48	.59	.70	69,900	6400	.49	.61	.72	66,100	6800	.49	.62	.74	62,300	7200	.50	.63	.76

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

HP18-651V-653V HEATING CAPACITY WITH CB18-65 OR CBS18-65 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
2000	75,900	5645	58,900	4790	41,500	3950	27,600	3160	13,500	2400
2250	76,900	5480	59,900	4650	42,700	3815	28,800	3030	14,700	2280
2500	77,900	5320	60,900	4515	43,900	3685	30,000	2900	16,000	2160

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

HP18-651V-653V HEATING CAPACITY WITH CB19-65 OR CBH19-65 INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F) 65		45		25		5		15	
	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)	Total Htg. Cap. (Btuh)	Comp. Mtr. Input (W)
1750	74,400	5515	55,800	4730	36,100	3880	25,300	3050	12,000	2320
2000	76,300	5400	57,600	4615	38,000	3765	27,200	2935	13,900	2205
2250	77,400	5295	58,700	4510	39,100	3660	28,300	2830	15,000	2100

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

HP18-651V-653V HEATING PERFORMANCE at 2250 cfm Indoor Coil Air Volume (CB18-65 or CBS18-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5480	76,900
60	5275	72,700
55	5065	68,600
50	4855	64,500
47	4735	62,000
45	4650	59,900
40	4440	54,700
35	4235	49,500
30	4025	46,100
25	3815	42,700
20	3610	39,300
17	3485	37,200
15	3410	35,800
10	3220	32,300
5	3030	28,800
0	2845	25,200
-5	2655	21,700
10	2465	18,200
15	2280	14,700
-20	2090	11,200

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.

HP18-651V-653V HEATING PERFORMANCE at 2000 cfm Indoor Coil Air Volume (CB19-65 or CBH19-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5400	76,300
60	5205	72,000
55	5005	67,700
50	4805	63,400
47	4690	60,800
45	4615	57,600
40	4435	49,600
35	4250	41,500
30	4010	39,700
25	3765	38,000
20	3520	36,200
17	3375	35,100
15	3300	33,800
10	3120	30,500
5	2935	27,200
0	2755	23,800
-5	2570	20,500
10	2390	17,200
-15	2205	13,900
20	2025	10,500

*Outdoor temperature at 70% relative humidity. Indoor temperature at 70°F.