

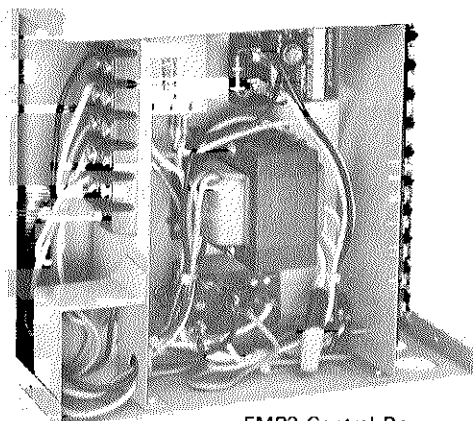


FMP3 FUELMASTER+ T.M. HEAT PUMP SYSTEM FOR USE WITH GAS, OIL AND ELECTRIC FURNACES

Lennox FUELMASTER+ system is covered by United States Patent No. 3,996,998

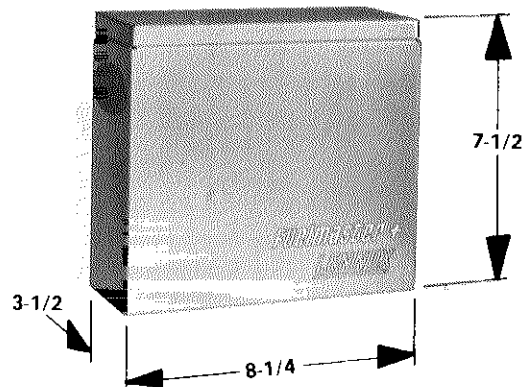
ENGINEERING DATA
HEAT PUMPS
MATCHED REMOTE
SYSTEMS

Page 3
October 1990
Supersedes
May 1989



FMP3 Control Box

DIMENSIONS (inches)



Lennox FUELMASTER+ System Provides All Season Comfort Conditions With Low Operating Costs

The Lennox FUELMASTER+ heat pump system is designed for use with fossil fuel or electric furnaces and may be applied to a new or existing furnace installation. The system consists of a heat pump outdoor unit, indoor coil, refrigeration lines, the exclusive Lennox FMP3 control box and the furnace. The heat pump system is installed as usual with the exception that it is matched to an add-on indoor coil on a furnace rather than the customary blower-coil unit. The FUELMASTER+ control box can be installed indoors in a convenient location near the furnace where wiring connections can be easily made. Terminal strips in the box make wiring connections quick and easy. A blower relay (P-8-3251) is required for the furnace and must be ordered extra. The two stage heating and single stage cooling thermostat controls the system with heat pump operation (primary heat source) off the first stage and furnace operation (supplementary heat source) off the second stage. In heat pump/supplementary electric heat applications, an outdoor thermostat(s) is utilized to cycle the heaters as the outdoor temperature drops. However, in the FUELMASTER+ system, the indoor thermostat controls the supplemental heat (furnace) and the outdoor thermostat is not required.

The FUELMASTER+ heat pump system will provide the heating requirements on mild temperature heating days on demand of the first stage of the thermostat. When the outdoor temperature reaches the "balance point" of the structure (heat loss equals heat pump heating capacity) and the first stage of the thermostat is not satisfied, the second stage will activate the furnace (secondary heat source). On furnace startup a heat relay in the FUELMASTER control box terminates the heat pump operation. When the second stage (furnace operation) of the thermostat is satisfied and the plenum temperature, upstream from the coil, drops below 80°F a thermostat demand will reactivate the heat pump as the heat source until conditions warrant a repeat of cycle for furnace operation. Blower operation is continuous during the heat pump-furnace cycle. When a defrost cycle (heat pump system changes from heating to cooling) is required and the indoor coil is supplying cooling air the FUELMASTER controls will automatically start furnace operation to temper the air, thus avoiding the distribution

of cooling air in the conditioned area. When the supply air temperature reaches 115°F a furnace control thermostat terminates furnace operation preventing excessive plenum temperatures. If after a defrost cycle the air temperature upstream from the coil is above 90°F, a heat pump control thermostat will terminate compressor operation until the plenum temperature has dropped below 80°F. The furnace and heat pump control thermostats are furnished with the FMP3 control box and field installs on the indoor coil. During the cooling season, the FUELMASTER+ heat pump reverses operation with the indoor coil supplying cooling requirements.

The outdoor unit room thermostat is equipped with a service light. For this light to operate properly in a FUELMASTER+ application a pressure switch is required. The switch is furnished with the control box and field installs in the outdoor unit.

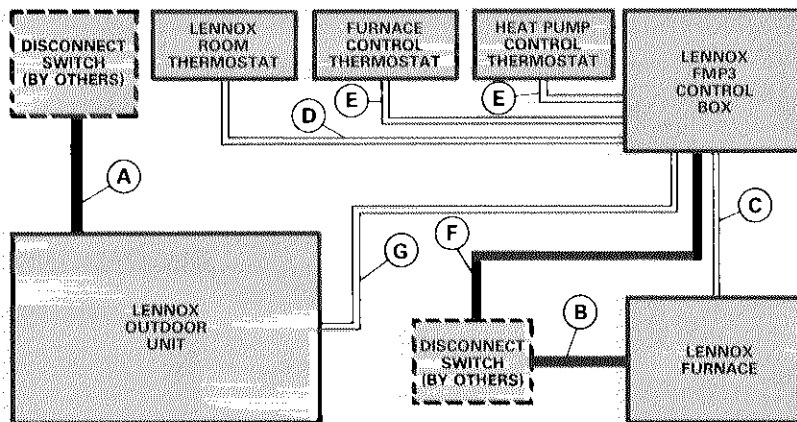
The installation, operation, maintenance and operating efficiency of a FUELMASTER+ heat pump system is unlike those of any other type of comfort system. Because a heat pump requires the same air volume for heating and cooling, the following should be carefully considered before adding a heat pump: furnace air volume capabilities, accurate heating and cooling load calculations, precise air distribution system and diffuser location, insulated air ducts and adequate return air. Home insulation, exposure, design and construction, climate and living habits determine how efficient a heat pump system will be and make every heat pump installation unique. Each job must be carefully calculated.

The FMP3 FUELMASTER control box is furnished with relays, 24 volt transformer and terminal strips factory installed and wired. Mounting holes are provided in the box for installation. Wiring inlet holes are located for ease of wiring entry into the box. Removal of cover permits complete access to interior of box for easy wiring connections.

For complete outdoor unit data see individual bulletins indexed in this tab section. For indoor coil specifications see section Cooling Units — Coils — Blower Coil Units.

Indoor coils require the addition of field installed check and expansion valve kits. Kits must be ordered extra.

FIELD WIRING



- A — Two or Three wire power (See Electrical Data in outdoor unit bulletin for size).
 B — Two wire power (Size to furnace blower motor)
 C — Four wire low voltage (18 ga. minimum)
 D — Eight wire low voltage (18 ga. minimum) — HP18, HP19, HP20 and HP22 Models
 Nine wire low voltage (18 ga. minimum) — HP 21 Models
 E — Two wire low voltage (18 ga. minimum)
 F — Two wire power
 G — Seven wire low voltage (18 ga. minimum) — HP18, HP19, HP20 and HP22 Models
 Eight wire low voltage (18 ga. minimum) — HP 21 Models

Field wiring not furnished —

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

HP18 MODELS ARI RATINGS

Outdoor Unit Model No. ★ARI Stand. 270 SRN (bels)	*ARI Standard 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)	18,400	18,000	10,600	2250	8.60	8.20	1955	6.30	2.70	1625	1.90	CH16-21FF	LB-34792BE
	18,500	18,300	10,500	2185	8.15	8.45	2040	6.05	2.65	1691	1.80	C16-21FF	
	18,800	17,600	10,100	2150	9.50	8.75	1822	6.35	2.85	1513	1.95	CR16-21FF	
HP18-261V (7.8)	24,000	24,200	13,900	2925	8.50	8.20	2605	6.20	2.70	2185	1.84	CH16-31FF	LB-34792BE
	24,200	24,600	14,600	3026	8.20	8.00	2657	5.75	2.70	2229	1.90	C16-31FF CR16-31FF	
HP18-311V (8.0)	27,200	30,600	17,500	3657	8.00	7.65	3232	6.35	2.80	2564	2.00	C16-31FF CR16-31FF	LB-34792BG
	28,000	29,800	16,500	3580	8.40	7.80	3200	6.00	2.70	2490	1.90	CH16-31FF	
HP18-411V HP18-413V (8.0)	36,000	35,400	20,200	4322	8.30	8.35	3779	6.35	2.75	2921	2.00	C16-41FF CR16-41FF	LB-34792BG
	36,400	34,400	20,200	4455	9.00	8.10	3690	6.60	2.70	2950	2.00	CH16-41FF	
HP18-461V (8.2)	39,000	39,000	22,000	4590	8.70	8.50	4085	6.30	2.80	3395	1.90	C16-41FF CR16-41FF	LB-34792BG
	40,000	41,000	23,000	4760	8.70	8.40	4290	6.40	2.80	3550	1.90	CH16-41FF	
HP18-511V HP18-513V (8.2)	45,000	47,000	24,600	5280	9.00	8.50	4710	6.80	2.90	3605	2.00	CH16-51FF	LB-34792BF
	46,000	47,000	26,800	5532	8.80	8.30	5122	6.50	2.70	3912	2.00	C16-51FF CR16-51FF	
HP18-651V HP18-653V (8.2)	59,500	62,500	35,200	7000	9.00	8.50	6145	6.80	2.98	4775	2.16	C16-65 CR16-65	LB-34792BH
	61,500	54,500	32,000	6910	9.60	8.90	5960	7.00	2.68	4595	2.04	CH16-65V	

★ 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 for field installation.

NOTE — Any Lennox furnace with necessary system design requirements is applicable. See individual coil bulletin for coil data and matching Lennox furnaces.

†Furnished as standard with coil.

HP19 MODELS ARI RATINGS

Outdoor Unit Model No. ★ ARI Std. 270 SRN (bels)	*ARI Standard 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.		
HP19-211 (7.2)	19,100	19,200	11,000	1940	11.00	9.90	1820	7.30	3.10	1500	2.14	C16-41FF CR16-41FF	LB-34792BE
	19,600	19,400	11,100	1950	11.20	10.00	1800	7.40	3.16	1500	2.16	CH16-41FF	
HP19-261 (7.4)	25,000	25,200	14,100	2570	10.65	9.70	2330	7.35	3.16	1860	2.22	C16-41FF CR16-41FF	LB-34792BE
	25,600	25,400	14,200	2590	10.80	9.90	2300	7.50	3.22	1840	2.26	CH16-41FF	
HP19-311 (7.9)	30,000	29,000	16,800	2940	11.00	10.20	2810	7.25	3.02	2220	2.22	C16-41FF CR16-41FF	LB-34792BG
	30,200	29,200	16,800	2950	11.10	10.20	2780	7.30	3.08	2220	2.22	C14-26FF	
	30,400	29,000	16,800	2960	11.10	10.30	2800	7.30	3.04	2220	2.22	C16-46FF	
	30,800	29,600	17,000	2980	11.15	10.30	2760	7.45	3.14	2210	2.26	CH16-41FF	
HP19-411 HP19-413 (7.4)	35,400	35,000	20,000	3640	10.50	9.70	3380	7.20	3.04	2640	2.22	C16-51FF CR16-51FF	LB-34792BG
	36,400	35,800	20,600	3670	10.75	9.90	3300	7.60	3.18	2620	2.30	CH16-51FF	
	37,000	36,000	20,400	3620	11.00	10.20	3280	7.65	3.22	2570	2.32	C14-41FF	
HP19-461 HP19-463 (7.4)	41,000	41,500	23,600	4250	10.80	9.70	3960	7.50	3.06	2960	2.34	C16-51FF CR16-51FF	LB-34792BG
	42,000	42,000	24,000	4200	11.10	10.00	3770	7.95	3.26	2880	2.44	C14-41FF	
	42,500	42,500	24,200	4280	11.00	9.90	3830	7.80	3.26	2940	2.42	CH16-51FF	
HP19-511 HP19-513 (7.6)	45,500	46,000	26,600	4800	10.25	9.50	4430	7.50	3.04	3420	2.28	C16-65 CR16-65	LB-34792BF
	47,500	46,000	27,000	4850	10.60	9.80	4310	7.70	3.12	3360	2.36	CH16-65V	
	48,500	49,000	28,400	4880	10.70	9.90	4370	7.90	3.28	3470	2.40	C14-65	
HP19-651 HP19-653 (7.8)	55,000	57,000	34,000	6250	9.80	8.80	5460	7.40	3.06	4150	2.40	C14-65	LB-34792BH
	56,000	57,500	33,000	6260	9.70	8.90	5630	7.25	3.00	4290	2.26	C16-65 CR16-65	
	58,000	57,000	32,200	6360	10.00	9.10	5570	7.00	3.00	4310	2.18	CH16-65V	

★ 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 for field installation.

†Furnished as standard with coil and factory installed.

NOTE — Any Lennox furnace with necessary system design requirements is applicable. See individual coil bulletin for coil data and matching Lennox furnaces.

HP20 MODELS ARI RATINGS

Outdoor Unit Model No. ★ ARI Stand. 270 SRN (bels)	*ARI Standard 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.		
HP20-211 (7.4)	17,500	17,300	10,700	1885	10.25	9.30	1735	6.60	2.94	1570	2.00	C16-21FF CR16-21FF	LB-34792BE
	17,900	17,200	10,500	1930	10.30	9.25	1680	6.70	3.00	1520	2.02	CH16-21FF	
	18,600	17,400	10,700	1905	10.80	9.75	1685	6.75	3.02	1540	2.04	C16-28FF	
HP20-261 (7.6)	23,400	22,800	13,600	2360	10.65	9.90	2225	6.60	3.00	1995	2.00	C16-31FF CR16-31FF	LB-34792BE
	23,400	22,400	13,400	2355	10.65	9.95	2130	6.75	3.08	1955	2.00	CH16-31FF	
HP20-311 (7.6)	27,000	28,200	17,100	3000	9.90	9.00	2805	6.60	2.94	2530	1.98	C16-31FF CR16-31FF	LB-34792BG
	27,600	28,000	17,200	3075	9.90	8.95	2775	6.65	2.96	2505	2.00	CH16-31FF	
	27,600	26,000	15,300	3000	10.05	9.20	2630	6.85	2.90	2360	1.90	C16-41FF CR16-41FF CH16-41FF	
HP20-411 (7.8)	33,000	33,200	20,400	3585	10.15	9.20	3255	6.85	3.00	2930	2.04	C16-41FF CR16-41FF	LB-34792BG
	33,800	33,400	20,600	3625	10.35	9.35	3180	7.00	3.08	2915	2.08	CH16-41FF	
HP20-461 (8.2)	39,000	40,000	25,200	4125	10.35	9.45	4005	6.95	2.94	3525	2.08	C16-41FF CR16-41FF	LB-34792BG
	40,000	40,000	25,000	4175	10.45	9.55	3825	7.10	3.04	3455	2.12	CH16-41FF	

★ 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.

NOTE — Any Lennox furnace with necessary system design requirements is applicable. See individual coil bulletin for coil data and matching Lennox furnaces.

HP21 MODELS 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.		
HP21-411V HP21-413V (7.6)	33,000	34,800	21,400	3495	12.20	9.40	3375	7.85	3.00	2670	2.30	C14-26FF	LB-34792BG
	34,800	35,000	21,400	3690	11.90	9.40	3485	7.55	2.90	2790	2.20	CR16-51FF	
	35,800	35,800	22,000	3735	12.20	9.60	3433	7.80	3.00	2775	2.30	C16-51FF	
	37,200	37,400	22,600	3800	12.55	9.80	3330	8.20	3.00	2750	2.40	CH16-51FF	
HP21-511V HP21-513V (7.6)	37,800	39,000	23,400	3715	12.90	10.20	3445	8.10	3.30	2800	2.40	C16-51FF	LB-34792BF
	38,500	39,500	23,600	3640	13.50	10.60	3345	8.40	3.50	2720	2.50	C14-41FF	
	39,000	40,000	23,600	3775	12.60	10.30	3465	8.35	3.40	2835	2.40	CR16-65	
	40,000	41,000	24,600	3830	13.15	10.40	3410	8.60	3.50	2825	2.60	CH16-51FF	
	41,500	40,500	23,400	3885	13.15	10.70	3460	8.10	3.40	2865	2.40	CH16-65V	
HP21-651V HP21-653V (7.8)	53,500	54,500	31,400	6180	11.25	8.70	5380	7.40	3.00	4180	2.20	C16-65	LB-34792BF
	55,500	54,500	30,600	6300	11.70	8.80	5520	7.00	2.90	4290	2.10	CH16-65V	

★ 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 for field installation.

† Furnished as standard with coil and factory installed.

NOTE — Any Lennox furnace with necessary system design requirements is applicable. See individual coil bulletin for coil data and matching Lennox furnaces.

HP22 MODELS ARI RATINGS

Outdoor Unit Model No. ★ ARI Std. 270 SRN (bels)	*ARI Standard 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.		
HP22-211 (7.4)	19,400	19,500	11,800	1822	11.70	10.65	1786	7.45	3.20	1615	2.14	C16-41FF	LB-34792BE
	19,700	19,700	11,800	1815	11.90	10.85	1750	7.60	3.30	1572	2.20	CH16-41FF	
HP22-261 (7.2)	24,000	24,000	14,800	2197	12.30	10.90	2151	7.65	3.30	1925	2.26	C16-41FF	LB-34792BE
	24,200	24,200	14,900	2202	12.50	11.05	2089	7.90	3.40	1885	2.32	CH16-41FF	
HP22-311 (7.2)	29,800	30,800	19,500	2636	12.55	11.30	2817	8.00	3.20	2428	2.36	C16-41FF	LB-34792BG
	29,800	31,000	19,600	2637	12.60	11.30	2760	8.10	3.30	2403	2.38	C14-26FF	
	30,000	30,800	19,500	2639	12.65	11.40	2800	8.00	3.24	2419	2.36	C16-46FF	
	30,200	31,000	19,600	2643	12.75	11.45	2723	8.20	3.36	2382	2.42	CH16-41FF	
HP22-411 (7.2)	34,600	36,200	22,800	3287	11.90	10.55	3378	7.75	3.14	2957	2.26	C16-51FF	LB-34792BG
	35,200	36,200	22,600	3233	12.30	10.90	3203	8.05	3.32	2844	2.34	C14-41FF	
	35,400	36,800	23,000	3299	12.15	10.75	3182	8.15	3.40	2846	2.36	CH16-51FF	
HP22-461 (7.2)	40,000	41,500	26,800	3819	11.85	10.50	3909	7.70	3.10	3337	2.36	C16-51FF	LB-34792BG
	40,000	41,500	26,600	3747	12.20	10.75	3680	8.10	3.30	3171	2.46	CR16-51FF	
	41,000	42,000	27,000	3836	12.10	10.65	3650	8.20	3.38	3191	2.48	CH16-51FF	

★ 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 for field installation.

† Furnished as standard with coil and factory installed.

NOTE — Any Lennox furnace with necessary system design requirements is applicable. See individual coil bulletin for coil data and matching Lennox furnaces.

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 CH16-21FF 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	600	19,000	1640	.76 .88 1.00	17,900	1750	.78 .91 1.00	16,800	1860	.81 .94 1.00	15,700	1960	.84 .97 1.00			
	675	19,500	1650	.79 .92 1.00	18,300	1760	.82 .95 1.00	17,200	1880	.85 .98 1.00	16,200	1990	.88 1.00 1.00			
67	600	20,400	1670	.59 .70 .81	19,100	1790	.60 .72 .84	17,900	1900	.62 .75 .88	16,600	2010	.64 .78 .91			
	675	20,700	1680	.61 .73 .85	19,500	1800	.63 .76 .89	18,200	1920	.65 .79 .92	16,900	2020	.67 .82 .95			
71	600	21,900	1700	.44 .55 .65	20,500	1830	.44 .56 .67	19,200	1960	.45 .57 .69	17,800	2070	.46 .59 .72			
	675	22,200	1710	.45 .56 .68	20,800	1840	.45 .58 .70	19,400	1970	.46 .60 .73	18,000	2080	.47 .62 .76			

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

HP18-211V COOLING CAPACITY WITH C16-21FF OR CR16-21FF 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	675	19,700	1550	.76 .88 .89	18,600	1680	.78 .89 .89	17,600	1790	.81 .89 .89	16,600	1890	.84 .89 .89			
	750	20,000	1570	.79 .89 .89	19,000	1690	.82 .89 .89	18,000	1810	.85 .89 .89	17,000	1910	.88 .89 .89			
67	675	20,700	1580	.58 .71 .82	19,500	1710	.60 .73 .85	18,300	1820	.62 .75 .88	17,100	1920	.64 .78 .89			
	750	21,000	1590	.61 .74 .86	19,800	1710	.62 .76 .89	18,600	1830	.64 .79 .89	17,400	1930	.66 .82 .89			
71	675	22,100	1610	.43 .54 .66	20,800	1740	.43 .56 .68	19,600	1860	.44 .57 .70	18,300	1960	.45 .59 .73			
	750	22,300	1620	.44 .56 .69	21,000	1750	.44 .58 .71	19,800	1870	.45 .59 .73	18,400	1970	.46 .62 .77			

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

HP18-211V HEATING CAPACITY WITH CH16-21FF 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
600	22,500	1735	16,900	1545	11,300	1330	7900	1085	3900	825
675	22,800	1690	17,100	1500	11,600	1280	8200	1040	4200	780

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

HP18-211V HEATING CAPACITY WITH C16-21FF OR CR16-21FF 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
675	23,400	1790	17,700	1515	12,100	1245	7800	1040	3300	805
750	23,600	1750	17,900	1495	12,200	1240	7900	1035	3300	800

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 (CH16-21FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1690	22,800
60	1640	21,500
55	1595	20,100
50	1550	18,800
47	1520	18,000
45	1500	17,100
40	1445	15,000
35	1390	12,800
30	1355	12,200
25	1280	11,600
20	1225	11,000
17	1195	10,600
15	1170	10,200
10	1105	9200
5	1040	8200
0	975	7200
-5	910	6200
-10	845	5200
-15	780	4200
-20	715	3200

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

HP18-211V HEATING PERFORMANCE at 675 cfm Indoor Coil Air Volume (C16-21FF or CR16-21FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1790	23,400
60	1720	22,000
55	1650	20,700
50	1570	19,300
47	1540	18,300
45	1515	17,700
40	1405	16,500
35	1395	15,200
30	1320	13,800
25	1245	12,100
20	1200	11,100
17	1180	10,500
15	1160	10,000
10	1100	8,900
5	1040	7,800
0	980	6,700
-5	920	5,500
-10	860	4,500
-15	805	3,300
-20	755	2,200

*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.

HP18-211V COOLING CAPACITY WITH C16-28FF INDOOR COIL

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
				Dry Bulb (°F)												
				76 80 84												
63	675	19,800	1630	.75 .89 1.00	18,600	1730	.77 .92 1.00	17,500	1830	.79 .95 1.00	16,300	1920	.81 .98 1.00			
	750	20,200	1640	.77 .92 1.00	19,000	1740	.79 .95 1.00	17,800	1850	.81 .98 1.00	16,800	1940	.83 .99 1.00			
67	675	20,700	1650	.59 .73 .86	19,500	1760	.60 .74 .88	18,300	1860	.61 .76 .91	17,000	1960	.63 .79 .95			
	750	21,100	1660	.60 .74 .89	19,800	1770	.61 .76 .92	18,500	1880	.63 .79 .95	17,200	1970	.63 .81 .98			
71	675	21,500	1670	.44 .57 .70	20,300	1790	.45 .59 .72	19,000	1890	.45 .60 .74	17,700	1990	.46 .61 .76			
	750	21,900	1680	.46 .59 .72	20,600	1800	.45 .60 .74	19,300	1910	.46 .61 .76	17,900	2000	.46 .63 .79			

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

*Does not include deductions for I.D. Blower Motor Heat deductions

HP18-211V HEATING CAPACITY WITH C16-28FF 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
675	22,300	1590	16,700	1400	11,100	1190	7800	960	4000	720
750	22,700	1555	17,100	1365	11,500	1155	8200	925	4400	685

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 (C16-28FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1590	22,300
60	1540	21,000
55	1495	19,700
50	1450	18,400
47	1420	17,600
45	1400	16,700
40	1350	14,500
35	1300	12,300
30	1245	11,700
25	1190	11,100
20	1135	10,500
17	1105	10,100
15	1080	9700
10	1020	8800
5	960	7800
0	900	6900
-5	840	5900
10	780	4900
-15	720	4000
-20	665	3000

*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.

HP18-261V COOLING CAPACITY WITH C16-31FF OR CR16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84				
63	900	25,300	2250	.80	.93	.95	23,900	2370	.83	.95	.95	22,700	2490	.85	.95	.95	21,500	2570	.89	.95	.95				
	1000	25,800	2270	.84	.95	.95	24,600	2400	.86	.95	.95	23,300	2510	.89	.95	.95	22,100	2590	.93	.95	.95				
67	900	26,900	2310	.62	.74	.87	25,400	2440	.63	.77	.89	23,900	2540	.65	.79	.93	22,400	2600	.67	.82	.95				
	1000	27,300	2330	.64	.77	.91	25,800	2450	.65	.80	.94	24,200	2550	.67	.83	.95	22,600	2610	.70	.86	.95				
71	900	28,900	2390	.45	.57	.69	27,300	2510	.46	.58	.71	25,600	2600	.47	.60	.73	23,900	2660	.48	.62	.76				
	1000	29,200	2400	.46	.59	.72	27,600	2520	.47	.61	.74	25,900	2610	.48	.62	.77	24,200	2670	.49	.65	.80				

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

HP18-261V COOLING CAPACITY WITH CH16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	800	24,300	2140	.77	.89	1.00	23,100	2270	.78	.91	1.00	21,800	2430	.81	.94	1.00	20,400	2620	.84	.97	1.00				
	900	24,800	2150	.80	.93	1.00	23,600	2290	.82	.95	1.00	22,300	2470	.85	.98	1.00	21,000	2660	.88	1.00	1.00				
67	800	26,000	2180	.59	.71	.82	24,600	2330	.61	.73	.85	23,100	2490	.62	.75	.88	21,600	2690	.64	.78	.91				
	900	26,400	2200	.61	.74	.86	25,000	2340	.63	.76	.89	23,500	2510	.65	.79	.92	21,900	2700	.67	.82	.96				
71	800	27,800	2240	.44	.55	.66	26,300	2390	.45	.56	.68	24,700	2560	.46	.58	.70	23,000	2770	.46	.59	.72				
	900	28,300	2250	.45	.57	.69	26,700	2400	.46	.58	.71	25,000	2580	.47	.60	.73	23,200	2780	.48	.62	.76				

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

HP18-261V HEATING CAPACITY WITH C16-31FF OR CR16-31FF 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
900	33,500	2485	23,600	2000	16,100	1690	11,100	1440	5200	1150
1000	33,700	2435	23,700	1960	16,200	1650	11,200	1405	5200	1120

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

HP18-261V HEATING CAPACITY WITH CH16-31FF 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
900	31,200	2300	23,000	1960	15,300	1670	10,700	1355	5500	1015
1000	32,100	2275	23,900	1935	16,200	1645	11,700	1330	6400	990

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 (C16-31FF or CR16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2485	33,500
60	2360	31,000
55	2240	28,500
50	2120	26,200
47	2050	24,700
45	2000	23,600
40	1890	21,000
35	1785	18,100
30	1730	17,100
25	1690	16,100
20	1640	15,200
17	1615	14,600
15	1590	14,000
10	1510	12,500
5	1440	11,100
0	1370	9,600
-5	1290	8,200
-10	1220	6,700
-15	1150	5,200
-20	1080	3,800

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

HP18-261V HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (CH16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2300	31,200
60	2210	29,200
55	2125	27,300
50	2040	25,400
47	1990	24,200
45	1960	23,000
40	1890	20,000
35	1820	17,000
30	1745	16,200
25	1670	15,300
20	1600	14,400
17	1555	13,900
15	1520	13,400
10	1440	12,100
5	1355	10,700
0	1270	9,400
-5	1185	8,100
-10	1100	6,800
-15	1015	5,500
-20	935	4,200

*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.

HP18-311V COOLING CAPACITY WITH C16-31FF OR CR16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)							
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)							
				76	80	84			76	80	84			76	80	84	76	80	84		
63	1125	29,200	2740	.82	.96	.97	27,600	2910	.85	.97	.97	26,200	3060	.88	.97	.97	24,700	3170	.91	.97	.97
	1250	29,800	2760	.86	.97	.97	28,300	2940	.88	.97	.97	26,900	3090	.92	.97	.97	25,300	3200	.95	.97	.97
67	1125	30,900	2810	.63	.76	.89	29,200	2980	.65	.79	.92	27,400	3110	.67	.82	.96	25,600	3210	.69	.85	.97
	1250	31,300	2830	.65	.80	.93	29,600	2990	.67	.82	.96	27,800	3130	.69	.85	.97	25,900	3230	.72	.89	.97
71	1125	33,100	2900	.46	.59	.71	31,200	3060	.47	.60	.73	29,300	3190	.48	.62	.76	27,300	3290	.49	.64	.79
	1250	33,500	2910	.47	.61	.74	31,600	3080	.48	.62	.76	29,600	3210	.49	.64	.79	27,500	3300	.50	.67	.83

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

HP18-311V COOLING CAPACITY WITH CH16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	1000	29,100	2590	.81	.93	1.00	27,600	2800	.83	.96	1.00	26,200	3000	.86	.99	1.00	24,500	3180	.89	1.00	1.00				
	1125	29,700	2620	.84	.98	1.00	28,000	2830	.87	1.00	1.00	26,600	3040	.90	1.00	1.00	25,200	3230	.93	1.00	1.00				
67	1000	30,900	2670	.63	.75	.87	29,300	2880	.64	.77	.90	27,500	3080	.66	.80	.93	25,700	3260	.68	.82	.97				
	1125	31,400	2690	.65	.78	.91	29,700	2900	.66	.81	.94	27,900	3100	.68	.83	.98	26,100	3280	.71	.87	1.00				
71	1000	33,100	2750	.46	.58	.70	31,300	2970	.47	.59	.71	29,400	3180	.48	.61	.74	27,500	3360	.49	.63	.77				
	1125	33,600	2770	.47	.60	.73	31,700	2990	.48	.62	.75	29,800	3200	.49	.63	.77	27,800	3380	.50	.65	.81				

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

HP18-311V HEATING CAPACITY WITH C16-31FF OR CR16-31FF 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
1125	42,000	3095	31,000	2550	20,800	2050	15,300	1770	8500	1370
1250	42,300	3035	31,100	2525	20,900	2030	15,400	1750	8600	1355

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

HP18-311V HEATING CAPACITY WITH CH16-31FF 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	38,200	2965	27,400	2565	17,500	2090	11,800	1660	5600	1265
1125	39,200	2905	28,300	2505	18,400	2030	12,800	1600	6500	1200

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 (C16-31FF or CR16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3095	42,000
60	2960	39,300
55	2820	36,500
50	2690	33,700
47	2610	32,100
45	2550	31,000
40	2320	26,800
35	2105	22,600
30	2080	21,700
25	2050	20,800
20	2020	19,900
17	2000	19,400
15	1960	18,700
10	1860	17,000
5	1770	15,300
0	1670	13,600
-5	1570	11,900
-10	1470	10,200
-15	1370	8,500
-20	1280	6,800

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

HP18-311V HEATING PERFORMANCE

at 1125 cfm Indoor Coil Air Volume (CH16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2905	39,200
60	2805	36,600
55	2710	34,000
50	2610	31,400
47	2550	29,800
45	2505	28,300
40	2385	24,600
35	2265	20,800
30	2145	19,600
25	2030	18,400
20	1910	17,200
17	1840	16,500
15	1800	15,900
10	1700	14,300
5	1600	12,800
0	1500	11,200
-5	1400	9600
-10	1300	8100
-15	1200	6500
-20	1100	5000

— 6d — *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 C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	1350	38,200	3330	.75	.86	.91	36,100	3580	.77	.89	.91	33,800	3380	.80	.91	.91	31,700	4260	.83	.91	.91				
	1500	38,900	3360	.77	.90	.91	36,700	3610	.80	.91	.91	34,700	3940	.83	.91	.91	32,500	4330	.87	.91	.91				
67	1350	40,500	3420	.58	.69	.81	38,100	3680	.59	.71	.83	35,600	4000	.61	.74	.87	33,100	4370	.63	.77	.90				
	1500	41,000	3440	.60	.72	.84	38,600	3700	.61	.74	.87	36,100	4020	.63	.77	.90	33,500	4410	.66	.81	.91				
71	1350	43,200	3520	.43	.53	.64	40,700	3800	.43	.55	.66	38,000	4140	.44	.56	.69	35,200	4550	.45	.58	.72				
	1500	43,700	3530	.43	.55	.67	41,100	3820	.44	.57	.69	38,300	4170	.45	.59	.72	35,500	4570	.46	.61	.75				

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

HP18-411V-413V COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	1200	37,900	3400	.77	.89	1.00	35,700	3660	.79	.92	1.00	33,500	3970	.82	.95	1.00	31,100	4350	.85	.98	1.00				
	1350	38,700	3430	.80	.93	1.00	36,600	3700	.83	.96	1.00	34,200	4020	.86	.99	1.00	32,100	4430	.90	1.00	1.00				
67	1200	40,300	3500	.60	.72	.83	37,900	3770	.61	.74	.86	35,400	4100	.63	.76	.89	32,800	4490	.65	.79	.93				
	1350	40,900	3520	.62	.75	.87	38,500	3800	.64	.77	.90	35,900	4140	.66	.80	.94	33,200	4530	.68	.84	.98				
71	1200	43,000	3600	.45	.56	.66	40,400	3900	.45	.57	.68	37,700	4260	.46	.59	.71	34,900	4680	.47	.61	.74				
	1350	43,600	3630	.46	.58	.69	41,000	3930	.46	.59	.72	38,200	4290	.47	.61	.74	35,300	4720	.49	.63	.78				

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

HP18-411V-413V HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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
1350	47,500	3805	35,600	3015	22,800	2250	18,300	1840	10,000	1290
1500	48,100	3750	36,000	2980	23,000	2240	18,500	1830	10,100	1285

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

HP18-411V-413V HEATING CAPACITY WITH CH16-41FF 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
1200	46,100	3580	32,300	2995	21,600	2495	15,200	2000	7500	1520
1350	46,600	3515	32,700	2930	22,100	2430	15,600	1940	8000	1455

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

HP18-411V-413V HEATING PERFORMANCE

at 1350 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3805	47,500
60	3620	44,600
55	3420	41,600
50	3220	38,600
47	3100	37,000
45	3015	35,600
40	2850	33,000
35	2680	30,300
30	2470	26,600
25	2250	22,800
20	2200	21,800
17	2170	21,200
15	2120	20,900
10	1980	20,100
5	1840	18,300
0	1700	16,200
-5	1570	14,200
-10	1430	12,200
-15	1290	10,000
-20	1150	5,300

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

HP18-411V-413V HEATING PERFORMANCE

at 1350 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3515	46,600
60	3370	43,200
55	3220	39,800
50	3070	36,400
47	2980	34,400
45	2930	32,700
40	2810	28,600
35	2685	24,000
30	2555	23,200
25	2430	22,100
20	2305	20,900
17	2225	20,200
15	2180	19,400
10	2060	17,500
5	1940	15,600
0	1815	13,700
-5	1695	11,800
-10	1575	9900
-15	1455	8000
-20	1355	6100

*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, page 9.

HP18-461V COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)							
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)							
				76	80	84			76	80	84			76	80	84	76	80	84		
63	1400	40,700	3580	.78	.89	.98	38,700	3810	.80	.92	1.00	36,600	4100	.82	.94	1.00	34,200	4450	.85	.97	1.00
	1575	41,700	3610	.81	.92	1.00	39,600	3850	.83	.95	1.00	37,400	4150	.85	.97	1.00	35,000	4500	.88	1.00	1.00
67	1400	43,400	3650	.62	.73	.83	41,100	3910	.63	.74	.85	38,800	4210	.65	.76	.88	36,300	4580	.66	.79	.91
	1575	44,300	3680	.64	.75	.86	42,100	3940	.65	.77	.89	39,600	4250	.67	.79	.92	37,000	4630	.68	.82	.95
71	1400	45,700	3720	.47	.58	.68	43,500	3990	.48	.59	.69	41,100	4320	.49	.60	.71	38,600	4730	.49	.62	.73
	1575	46,800	3750	.48	.60	.70	44,400	4030	.49	.61	.72	42,000	4360	.50	.62	.74	39,300	4780	.51	.64	.76

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

HP18-461V COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	1400	41,600	3580	.79	.90	.99	39,500	3820	.81	.92	1.00	37,200	4110	.83	.95	1.00	34,800	4460	.86	.98	1.00				
	1575	42,700	3610	.81	.93	1.00	40,500	3860	.84	.95	1.00	38,100	4160	.86	.98	1.00	35,800	4510	.89	1.00	1.00				
67	1400	44,200	3660	.62	.73	.84	41,900	3910	.64	.75	.86	39,400	4220	.65	.77	.89	36,900	4600	.67	.80	.92				
	1575	45,100	3680	.64	.76	.87	42,700	3940	.65	.78	.89	40,300	4260	.67	.80	.92	37,700	4650	.69	.83	.95				
71	1400	46,900	3730	.48	.58	.68	44,400	4010	.48	.59	.70	42,000	4340	.49	.60	.72	39,300	4750	.50	.62	.74				
	1575	47,900	3750	.48	.60	.71	45,400	4040	.49	.61	.72	42,800	4380	.50	.62	.74	40,000	4800	.51	.64	.77				

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

HP18-461V HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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
1400	49,200	3705	37,100	3225	24,400	2750	17,000	2225	8700	1675
1575	50,100	3625	38,000	3145	25,300	2670	17,900	2145	9600	1595

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

HP18-461V HEATING CAPACITY WITH CH16-41FF 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
1400	51,800	3785	39,000	3280	25,500	2770	17,800	2235	9100	1680
1575	52,700	3705	39,900	3200	26,400	2690	18,700	2155	10,000	1600

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 (C16-41FF OR CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3705	49,200
60	3585	46,400
55	3465	43,500
50	3345	40,700
47	3275	39,000
45	3225	37,100
40	3110	32,200
35	2990	27,400
30	2870	25,900
25	2750	24,400
20	2630	22,900
17	2560	22,000
15	2505	21,200
10	2365	19,100
5	2225	17,000
0	2090	14,900
-5	1950	12,800
-10	1810	10,800
-15	1675	8700
-20	1535	6600

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

HP18-461V HEATING PERFORMANCE

at 1400 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3785	51,800
60	3660	48,800
55	3530	45,800
50	3405	42,800
47	3330	41,000
45	3280	39,000
40	3150	33,800
35	3025	28,700
30	2900	27,100
25	2770	25,500
20	2645	24,000
17	2570	23,000
15	2515	22,100
10	2375	20,000
5	2235	17,800
0	2095	15,600
-5	1960	13,400
-10	1820	11,300
-15	1680	9100
-20	1540	6900

— 6f — *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.

HP18-511V-513V COOLING CAPACITY WITH CH16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	1600	48,200	4110	.78	.90	1.00	45,500	4430	.80	.93	1.00	42,800	4730	.83	.96	1.00	40,100	4990	.86	.99	1.00				
	1800	49,400	4140	.81	.94	1.00	46,400	4470	.84	.97	1.00	43,900	4790	.87	.99	1.00	41,400	5070	.90	1.00	1.00				
67	1600	51,600	4230	.60	.72	.83	48,600	4560	.62	.74	.86	45,600	4870	.63	.77	.89	42,500	5130	.65	.79	.93				
	1800	52,500	4260	.62	.75	.87	49,400	4600	.64	.77	.90	46,300	4910	.66	.80	.94	43,200	5170	.68	.83	.97				
71	1600	55,400	4360	.45	.56	.67	52,300	4710	.45	.57	.69	49,000	5040	.46	.59	.71	45,700	5310	.47	.60	.74				
	1800	56,300	4390	.46	.58	.70	53,000	4740	.46	.59	.72	49,700	5070	.47	.61	.74	46,300	5350	.48	.63	.77				

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

HP18-511V-513V COOLING CAPACITY WITH C16-51FF OR CR16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84				
63	1800	48,100	4100	.78	.90	.96	45,600	4420	.80	.93	.96	42,600	4720	.83	.96	.96	40,300	5000	.86	.96	.96				
	2000	49,100	4130	.81	.94	.96	46,200	4450	.83	.96	.96	43,800	4780	.86	.96	.96	41,400	5060	.90	.96	.96				
67	1800	51,400	4210	.60	.72	.84	48,500	4550	.62	.74	.87	45,400	4860	.63	.77	.90	42,500	5130	.65	.80	.93				
	2000	52,100	4240	.62	.75	.87	49,100	4580	.64	.77	.90	46,100	4890	.65	.80	.94	43,000	5160	.68	.83	.96				
71	1800	55,000	4340	.45	.56	.67	52,000	4690	.45	.57	.69	48,800	5020	.46	.59	.71	45,600	5300	.47	.60	.74				
	2000	55,700	4360	.45	.57	.69	52,600	4720	.46	.59	.72	49,400	5050	.47	.61	.74	46,100	5330	.48	.63	.77				

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

HP18-511V-513V HEATING CAPACITY WITH CH16-51FF 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
1600	62,300	4550	43,700	3870	27,100	3110	18,200	2490	8900	1895
1800	63,200	4450	44,500	3770	28,000	3010	19,000	2390	9700	1795

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

HP18-511V-513V HEATING CAPACITY WITH C16-51FF OR CR16-51FF 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
1800	58,800	4795	44,500	4000	29,200	3160	20,700	2505	10,600	1885
2000	59,400	4690	45,100	3895	29,800	3055	21,300	2400	11,200	1780

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 (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4450	63,200
60	4285	58,700
55	4120	54,200
50	3955	49,700
47	3860	47,000
45	3770	44,500
40	3555	38,400
35	3340	32,200
30	3175	30,100
25	3010	28,000
20	2845	25,900
17	2750	24,600
15	2690	23,700
10	2540	21,300
5	2390	19,000
0	2240	16,700
-5	2095	14,400
-10	1945	12,000
-15	1795	9700
-20	1650	7400

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

HP18-511V-513V HEATING PERFORMANCE at 1800 cfm Indoor Coil Air Volume (C16-51FF OR CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4795	58,800
60	4600	55,500
55	4410	52,200
50	4215	49,000
47	4100	47,000
45	4000	44,500
40	3760	38,300
35	3515	32,100
30	3340	30,600
25	3160	29,200
20	2985	27,700
17	2880	26,800
15	2815	25,800
10	2660	23,300
5	2505	20,700
0	2350	18,200
-5	2195	15,600
-10	2040	13,100
-15	1885	10,600
-20	1730	8000

*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 WITH C16-65 OR CR16-65 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	2250	60,700	5270	.82	.95	1.00	58,000	5660	.83	.97	1.00	55,700	6020	.85	.99	1.00	53,000	6370	.88	1.00	1.00				
	2500	61,900	5320	.84	.98	1.00	58,900	5690	.87	1.00	1.00	56,700	6080	.89	1.00	1.00	54,500	6440	.91	1.00	1.00				
67	2250	64,900	5440	.63	.75	.88	62,000	5820	.64	.77	.90	59,200	6180	.65	.79	.92	56,600	6520	.67	.81	.95				
	2500	65,800	5480	.65	.78	.91	62,900	5850	.66	.80	.94	60,100	6210	.67	.82	.96	57,300	6550	.69	.84	.99				
71	2250	69,800	5620	.47	.58	.70	66,800	6000	.47	.59	.71	63,900	6360	.48	.60	.73	61,100	6690	.48	.61	.75				
	2500	70,700	5660	.47	.60	.73	67,700	6030	.48	.61	.74	64,700	6380	.49	.62	.76	61,800	6710	.49	.64	.78				

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

HP18-651V-653V COOLING CAPACITY WITH CH16-65V 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				76	80	84			76	80	84			76	80	84			76	80	84	76	80	84	
63	2250	64,100	5410	.82	.95	1.00	61,300	5780	.84	.98	1.00	58,300	6140	.86	1.00	1.00	56,000	6500	.89	1.00	1.00				
	2500	65,000	5440	.84	.98	1.00	62,200	5810	.86	1.00	1.00	59,200	6170	.88	1.00	1.00	56,800	6540	.92	1.00	1.00				
67	2250	68,300	5570	.64	.76	.89	65,200	5940	.65	.78	.91	62,200	6300	.66	.80	.93	59,400	6620	.67	.82	.96				
	2500	69,200	5600	.66	.79	.93	66,100	5970	.67	.81	.95	63,100	6330	.68	.83	.98	60,200	6660	.70	.86	1.00				
71	2250	73,100	5740	.47	.59	.71	70,000	6110	.47	.60	.72	67,000	6460	.48	.61	.74	63,900	6780	.49	.62	.76				
	2500	74,100	5770	.48	.61	.74	70,900	6140	.48	.62	.75	67,800	6490	.49	.63	.77	64,700	6810	.50	.65	.79				

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

HP18-651V-653V HEATING CAPACITY WITH C16-65 OR CR16-65 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
2250	79,100	5785	60,600	4855	41,900	3925	27,400	3095	14,000	2325
2500	79,800	5685	61,300	4755	42,700	3825	28,100	2995	14,700	2225

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

HP18-651V-653V HEATING CAPACITY WITH CH16-65V 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
2250	69,000	5365	53,800	4525	38,300	3685	25,600	2915	13,100	2190
2500	69,800	5265	54,500	4425	39,100	3585	26,400	2815	13,800	2090

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 (C16-65 or CR16-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5785	79,100
60	5550	74,500
55	5320	70,000
50	5090	65,400
47	4950	62,700
45	4855	60,600
40	4625	55,300
35	4390	50,100
30	4160	46,000
25	3925	41,900
20	3695	37,900
17	3555	35,400
15	3480	34,100
10	3285	30,700
5	3095	27,400
0	2900	24,000
-5	2710	20,700
-10	2515	17,300
-15	2325	14,000
-20	2135	10,600

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

HP18-651V-653V HEATING PERFORMANCE at 2250 cfm Indoor Coil Air Volume (CH16-65V)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5365	69,000
60	5155	65,300
55	4945	61,600
50	4735	57,800
47	4610	55,600
45	4525	53,800
40	4315	49,300
35	4105	44,800
30	3895	41,600
25	3685	38,300
20	3475	35,100
17	3350	33,200
15	3275	31,900
10	3095	28,800
5	2915	25,600
0	2735	22,500
-5	2555	19,400
-10	2370	16,200
-15	2190	13,100
-20	2010	10,000

*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.

HP19-211 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)									
																	Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85							
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85							
63	675	19,700	1360	.79	.94	1.00	18,500	1470	.81	.97	1.00	17,500	1590	.83	.99	1.00	16,600	1720	.86	1.00	1.00				
	750	20,100	1360	.81	.97	1.00	19,000	1480	.84	.99	1.00	18,100	1610	.86	1.00	1.00	17,100	1740	.89	1.00	1.00				
67	675	20,900	1380	.61	.76	.90	19,700	1500	.62	.78	.93	18,600	1630	.64	.80	.96	17,500	1760	.65	.83	.98				
	750	21,300	1390	.63	.78	.93	20,100	1510	.64	.81	.96	19,000	1640	.66	.83	.99	17,900	1770	.67	.86	1.00				
71	675	22,100	1410	.45	.59	.73	21,000	1530	.45	.61	.75	19,900	1660	.46	.62	.77	18,700	1790	.47	.64	.80				
	750	22,600	1410	.45	.61	.76	21,400	1540	.46	.62	.78	20,200	1670	.47	.64	.81	19,100	1810	.48	.66	.83				

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

HP19-211 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	675	20,100	1360	.79	.94	1.00	19,000	1480	.81	.97	1.00	17,900	1600	.84	.99	1.00	16,900	1730	.87	1.00	1.00
	750	20,600	1370	.81	.97	1.00	19,500	1490	.84	1.00	1.00	18,400	1620	.87	1.00	1.00	17,500	1750	.90	1.00	1.00
67	675	21,500	1390	.61	.76	.90	20,200	1510	.62	.78	.93	19,000	1640	.64	.81	.96	17,900	1770	.65	.84	.99
	750	21,900	1400	.63	.79	.94	20,700	1520	.64	.81	.97	19,500	1650	.66	.84	.99	18,300	1780	.68	.87	1.00
71	675	22,800	1420	.45	.59	.73	21,600	1550	.46	.61	.75	20,400	1680	.46	.62	.78	19,200	1810	.47	.64	.80
	750	23,300	1430	.46	.61	.76	22,000	1560	.46	.62	.78	20,700	1690	.47	.64	.81	19,500	1820	.48	.66	.84

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

HP19-211 HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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
675	24,100	1565	18,500	1345	12,700	1125	8500	920	4300	695
750	24,600	1550	19,000	1330	13,200	1110	9000	905	4800	680

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

HP19-211 HEATING CAPACITY WITH CH16-41FF 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
675	24,400	1540	18,700	1330	12,800	1115	8600	920	4400	690
750	24,900	1530	19,200	1320	13,300	1105	9100	910	4900	680

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

HP19-211 HEATING PERFORMANCE

at 675 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1565	24,100
60	1510	22,700
55	1460	21,400
50	1405	20,000
47	1375	19,200
45	1345	18,500
40	1280	16,600
35	1210	14,800
30	1170	13,700
25	1125	12,700
20	1085	11,600
17	1060	11,000
15	1035	10,600
10	980	9500
5	920	8500
0	865	7500
-5	805	6400
-10	750	5400
-15	695	4300
-20	635	3300

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

HP19-211 HEATING PERFORMANCE

at 675 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1540	24,400
60	1490	23,000
55	1440	21,600
50	1390	20,200
47	1360	19,400
45	1330	18,700
40	1260	16,800
35	1190	15,000
30	1150	13,900
25	1115	12,800
20	1075	11,800
17	1055	11,100
15	1030	10,700
10	975	9600
5	920	8600
0	860	7500
-5	805	6500
-10	745	5400
-15	690	4400
-20	635	3300

*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.

HP19-261 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	900	25,700	1840	.79	.94	1.00	24,400	2000	.81	.97	1.00	22,900	2160	.84	.99	1.00	21,500	2320	.87	1.00	1.00
	1000	26,200	1850	.82	.97	1.00	24,900	2020	.84	.99	1.00	23,600	2190	.87	1.00	1.00	22,200	2360	.90	1.00	1.00
67	900	27,400	1880	.61	.76	.91	25,900	2060	.62	.78	.93	24,400	2240	.64	.81	.96	22,600	2390	.66	.84	.99
	1000	28,000	1910	.63	.79	.94	26,500	2090	.64	.81	.97	24,800	2260	.66	.84	.99	22,900	2420	.68	.88	1.00
71	900	29,100	1950	.45	.60	.73	27,600	2140	.46	.61	.76	25,900	2320	.46	.62	.78	24,000	2480	.47	.65	.82
	1000	29,800	1970	.46	.61	.76	28,100	2160	.46	.63	.78	26,300	2340	.47	.65	.81	24,400	2500	.48	.67	.85

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

HP19-261 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)			
				75	80	85			75	80	85			75	80	85			75	80	85	
63	900	26,200	1850	.80	.95	1.00	24,700	2010	.82	.98	1.00	23,300	2180	.84	1.00	1.00	21,900	2350	.88	1.00	1.00	
	1000	26,700	1860	.82	.98	1.00	25,300	2040	.85	1.00	1.00	24,000	2220	.88	1.00	1.00	22,600	2390	.91	1.00	1.00	
67	900	28,000	1910	.64	.77	.92	26,400	2090	.63	.79	.94	24,800	2260	.64	.82	.97	22,900	2410	.66	.85	1.00	
	1000	28,500	1930	.63	.80	.95	26,900	2110	.64	.82	.98	25,200	2280	.66	.85	1.00	23,400	2440	.69	.89	1.00	
71	900	29,900	1980	.45	.60	.74	28,200	2160	.46	.61	.76	26,400	2340	.46	.63	.79	24,500	2500	.47	.65	.83	
	1000	30,500	2000	.46	.62	.77	28,800	2190	.46	.63	.79	26,900	2370	.47	.65	.83	24,800	2530	.48	.68	.87	

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

HP19-261 HEATING CAPACITY WITH C16-41FF or CR16-41FF 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
900	31,600	2110	24,100	1780	16,400	1440	11,200	1160	5700	875
1000	32,200	2095	24,700	1765	17,000	1425	11,800	1145	6300	860

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

HP19-261 HEATING CAPACITY WITH CH16-41FF 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
900	31,800	2070	24,300	1750	16,600	1425	11,400	1150	5800	865
1000	32,400	2055	24,900	1735	17,200	1410	12,000	1135	6400	850

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

HP19-261 HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2110	31,600
60	2030	29,800
55	1950	28,000
50	1870	26,300
47	1820	25,200
45	1780	24,100
40	1675	21,400
35	1575	18,700
30	1510	17,500
25	1440	16,400
20	1375	15,200
17	1335	14,500
15	1305	14,000
10	1235	12,600
5	1160	11,200
0	1090	9800
-5	1015	8500
-10	945	7100
-15	875	5700
-20	800	4400

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

HP19-261 HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2070	31,800
60	1990	30,000
55	1915	28,200
50	1835	26,500
47	1790	25,400
45	1750	24,300
40	1650	21,600
35	1555	18,900
30	1490	17,700
25	1425	16,600
20	1360	15,400
17	1320	14,700
15	1290	14,100
10	1220	12,800
5	1150	11,400
0	1075	10,000
-5	1005	8600
-10	935	7200
-15	865	5800
-20	790	4400

*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.

HP19-311 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1000	30,500	2170	.76	.90	1.00	28,900	2330	.78	.93	1.00	27,000	2530	.80	.96	1.00	25,100	2760	.83	.99	1.00				
	1100	31,300	2180	.78	.93	1.00	29,500	2350	.80	.95	1.00	27,600	2540	.83	.98	1.00	25,700	2790	.86	1.00	1.00				
67	1000	32,700	2210	.59	.73	.86	30,900	2380	.60	.75	.89	28,900	2600	.62	.77	.92	26,800	2830	.64	.80	.96				
	1100	33,400	2220	.61	.75	.89	31,500	2410	.62	.77	.92	29,400	2620	.63	.80	.95	27,200	2850	.65	.83	.98				
71	1000	34,700	2280	.44	.58	.70	32,800	2470	.45	.59	.72	30,800	2680	.45	.60	.75	28,500	2890	.46	.62	.77				
	1100	35,400	2310	.45	.59	.72	33,400	2500	.45	.60	.74	31,300	2700	.46	.62	.77	29,000	2910	.47	.64	.80				

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

HP19-311 COOLING CAPACITY WITH C14-26FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1000	30,900	2180	.78	.93	1.00	29,100	2340	.80	.96	1.00	27,300	2530	.83	.98	1.00	25,500	2780	.86	1.00	1.00				
	1100	31,600	2190	.80	.96	1.00	29,800	2350	.83	.98	1.00	28,100	2560	.86	1.00	1.00	26,300	2810	.89	1.00	1.00				
67	1000	33,000	2210	.61	.75	.89	31,100	2390	.62	.77	.92	29,100	2610	.63	.80	.95	26,900	2830	.65	.83	.99				
	1100	33,600	2220	.62	.77	.92	31,700	2420	.63	.80	.95	29,600	2630	.65	.83	.98	27,300	2850	.67	.86	1.00				
71	1000	35,000	2290	.44	.59	.72	33,000	2480	.45	.60	.74	30,900	2680	.46	.62	.77	28,700	2900	.47	.64	.80				
	1100	35,700	2320	.45	.60	.75	33,600	2510	.46	.62	.77	31,500	2710	.47	.64	.80	29,100	2910	.48	.66	.84				

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

HP19-311 HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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	36,300	2590	27,900	2190	19,300	1790	13,000	1420	6600	1070
1100	37,000	2570	28,600	2170	20,000	1770	13,700	1400	7300	1050

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

HP19-311 HEATING CAPACITY WITH C14-26FF 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	36,600	2540	28,100	2160	19,400	1780	13,000	1425	6600	1070
1100	37,300	2520	28,800	2140	20,100	1760	13,700	1405	7300	1050

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

HP19-311 HEATING PERFORMANCE

at 1000 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2590	36,300
60	2490	34,300
55	2390	32,200
50	2290	30,200
47	2230	29,000
45	2190	27,900
40	2085	25,200
35	1980	22,500
30	1885	20,900
25	1790	19,300
20	1690	17,800
17	1635	16,800
15	1600	16,200
10	1510	14,600
5	1420	13,000
0	1335	11,400
-5	1245	9800
-10	1155	8200
-15	1070	6600
-20	980	5000

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

HP19-311 HEATING PERFORMANCE

at 1000 cfm Indoor Coil Air Volume (C14-26FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2540	36,600
60	2445	34,500
55	2350	32,500
50	2260	30,400
47	2200	29,200
45	2160	28,100
40	2060	25,400
35	1960	22,600
30	1870	21,000
25	1790	19,400
20	1690	17,800
17	1635	16,800
15	1600	16,200
10	1510	14,600
5	1425	13,000
0	1335	11,400
-5	1245	9800
-10	1160	8200
-15	1070	6600
-20	980	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 section, Page 9.

HP19-311 COOLING CAPACITY WITH C16-46FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1000	30,900	2180	.76	.90	1.00	29,200	2340	.78	.93	1.00	27,300	2530	.80	.96	1.00	25,400	2770	.83	.99	1.00				
	1100	31,700	2190	.78	.93	1.00	29,900	2350	.80	.95	1.00	27,900	2560	.83	.98	1.00	26,000	2800	.86	1.00	1.00				
67	1000	33,100	2210	.59	.73	.86	31,200	2390	.60	.75	.89	29,200	2610	.62	.77	.92	27,000	2840	.64	.80	.96				
	1100	33,700	2230	.61	.75	.89	31,800	2420	.62	.77	.92	29,700	2630	.63	.80	.95	27,500	2850	.65	.83	.98				
71	1000	35,000	2290	.44	.58	.70	33,100	2480	.45	.59	.72	31,000	2690	.46	.60	.75	28,800	2900	.46	.62	.77				
	1100	35,700	2320	.45	.59	.72	33,700	2510	.46	.60	.74	31,600	2710	.46	.62	.77	29,300	2920	.47	.64	.80				

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

HP19-311 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1000	31,500	2190	.76	.91	1.00	29,600	2350	.79	.93	1.00	27,700	2550	.81	.96	1.00	25,600	2780	.84	1.00	1.00				
	1100	32,200	2200	.78	.93	1.00	30,200	2360	.80	.96	1.00	28,300	2570	.83	.99	1.00	26,300	2810	.87	1.00	1.00				
67	1000	33,700	2220	.59	.73	.87	31,700	2420	.61	.75	.89	29,600	2630	.62	.78	.93	27,300	2850	.64	.81	.96				
	1100	34,400	2260	.61	.75	.89	32,200	2450	.62	.78	.92	30,000	2650	.64	.80	.96	27,800	2870	.66	.84	.99				
71	1000	35,900	2330	.44	.58	.72	33,800	2520	.45	.59	.72	31,600	2710	.46	.60	.75	29,300	2920	.46	.62	.78				
	1100	36,500	2360	.45	.59	.73	34,400	2540	.45	.60	.75	32,200	2740	.46	.62	.78	29,800	2930	.47	.64	.81				

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

HP19-311 HEATING CAPACITY WITH C16-46FF 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	36,300	2575	27,900	2180	19,300	1785	13,000	1420	6600	1070
1100	37,000	2555	28,600	2160	20,000	1765	13,700	1400	7300	1050

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

HP19-311 HEATING CAPACITY WITH CH16-41FF 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	37,200	2510	28,500	2140	19,600	1765	13,100	1415	6700	1060
1100	37,900	2490	29,200	2120	20,300	1745	13,800	1395	7400	1040

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

HP19-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (C16-46FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2575	36,300
60	2475	34,300
55	2375	32,200
50	2280	30,200
47	2220	29,000
45	2180	27,900
40	2075	25,200
35	1970	22,500
30	1875	20,900
25	1785	19,300
20	1690	17,800
17	1635	16,800
15	1600	16,200
10	1510	14,600
5	1420	13,000
0	1335	11,400
5	1245	9800
-10	1155	8200
-15	1070	6600
-20	980	5000

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

HP19-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2510	37,200
60	2420	35,100
55	2325	33,000
50	2235	30,900
47	2180	29,600
45	2140	28,500
40	2040	25,700
35	1940	22,900
30	1850	21,300
25	1765	19,600
20	1675	18,000
17	1625	17,000
15	1590	16,400
10	1500	14,700
5	1415	13,100
0	1325	11,500
-5	1240	9900
-10	1150	8300
-15	1060	6700
-20	975	5100

*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.

HP19-411-413 COOLING CAPACITY WITH C16-51FF OR CR16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1300	36,500	2710	.79	.93	1.00	34,100	2900	.81	.96	1.00	32,200	3090	.84	.99	1.00	30,100	3250	.87	1.00	1.00				
	1450	37,200	2730	.81	.96	1.00	35,300	2930	.84	.99	1.00	33,100	3110	.87	1.00	1.00	31,100	3290	.90	1.00	1.00				
67	1300	38,900	2760	.61	.76	.90	36,600	2970	.62	.78	.92	34,300	3150	.64	.80	.90	31,800	3310	.66	.84	.98				
	1450	39,800	2780	.62	.78	.93	37,400	2990	.64	.81	.96	34,900	3170	.66	.84	.98	32,400	3340	.68	.87	1.00				
71	1300	41,400	2820	.45	.59	.73	39,000	3030	.46	.61	.75	36,600	3220	.46	.62	.77	34,100	3390	.47	.64	.81				
	1450	42,300	2840	.46	.61	.75	39,900	3050	.46	.62	.78	37,300	3240	.47	.64	.81	34,800	3410	.48	.66	.84				

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

HP19-411-413 COOLING CAPACITY WITH CH16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1300	37,700	2740	.80	.95	1.00	35,400	2940	.82	.98	1.00	33,200	3120	.85	1.00	1.00	31,200	3290	.88	1.00	1.00				
	1450	38,600	2760	.83	.98	1.00	36,500	2960	.85	1.00	1.00	34,400	3150	.88	1.00	1.00	32,400	3330	.92	1.00	1.00				
67	1300	40,200	2800	.61	.77	.91	37,800	3000	.63	.79	.94	35,400	3180	.64	.82	.97	32,900	3350	.67	.85	1.00				
	1450	41,200	2820	.63	.80	.95	38,700	3020	.65	.82	.98	36,200	3210	.67	.85	1.00	33,600	3370	.69	.89	1.00				
71	1300	43,000	2860	.45	.60	.74	40,400	3060	.46	.61	.76	37,800	3260	.46	.63	.79	35,200	3430	.47	.65	.82				
	1450	43,900	2870	.46	.62	.77	41,200	3080	.47	.63	.79	38,500	3280	.47	.65	.82	35,700	3450	.48	.68	.86				

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

HP19-411-413 HEATING CAPACITY WITH C16-51FF OR CR16-51FF 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
	1300	1450	1300	1450	1300	1450	1300	1450	1300	1450
	44,000	3130	33,500	2625	22,700	2110	15,500	1690	7900	1270
	44,800	3105	34,300	2600	23,500	2085	16,300	1665	8700	1245

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

HP19-411-413 HEATING CAPACITY WITH CH16-51FF 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
	1300	1450	1300	1450	1300	1450	1300	1450	1300	1450
	44,900	3020	34,400	2555	23,600	2080	15,900	1680	8100	1260
	45,800	2995	35,300	2530	24,500	2055	16,800	1655	9000	1235

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

HP19-411-413 HEATING PERFORMANCE

at 1300 cfm Indoor Coil Air Volume (C16-51FF or CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3130	44,000
60	3005	41,500
55	2880	39,000
50	2760	36,500
47	2685	35,000
45	2625	33,500
40	2470	29,800
35	2320	26,000
30	2215	24,300
25	2110	22,700
20	2005	21,000
17	1940	20,000
15	1900	19,200
10	1795	17,400
5	1690	15,500
0	1585	13,600
-5	1480	11,700
-10	1375	9800
-15	1270	7900
-20	1165	6000

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

HP19-411-413 HEATING PERFORMANCE

at 1300 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3020	44,900
60	2905	42,400
55	2790	39,800
50	2680	37,300
47	2610	35,800
45	2555	34,400
40	2410	30,800
35	2270	27,300
30	2175	25,400
25	2080	23,600
20	1985	21,700
17	1930	20,600
15	1890	19,800
10	1785	17,900
5	1680	15,900
0	1575	14,000
-5	1470	12,000
-10	1365	10,100
-15	1260	8100
-20	1160	6200

*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.

HP19-411-413 COOLING CAPACITY WITH C14-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1300	38,200	2750	.81	.96	1.00	36,000	2950	.83	.99	1.00	33,900	3140	.86	1.00	1.00	31,900	3310	.89	1.00	1.00
	1450	39,400	2770	.84	.99	1.00	37,200	2980	.86	1.00	1.00	35,100	3180	.89	1.00	1.00	33,000	3350	.93	1.00	1.00
67	1300	40,700	2810	.62	.78	.92	38,200	3010	.63	.80	.95	35,700	3200	.65	.83	.98	33,200	3360	.67	.86	1.00
	1450	41,600	2820	.64	.81	.96	39,100	3030	.65	.83	.99	36,500	3220	.67	.87	1.00	33,800	3380	.70	.90	1.00
71	1300	43,500	2870	.45	.60	.75	40,900	3080	.46	.62	.77	38,300	3270	.46	.63	.80	35,500	3440	.47	.66	.83
	1450	44,300	2890	.46	.62	.78	41,700	3100	.47	.64	.81	39,000	3290	.47	.68	.84	36,100	3460	.48	.68	.87

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

HP19-461-463 COOLING CAPACITY WITH C16-51FF OR CR16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1400	42,100	3220	.76	.91	1.00	40,000	3440	.78	.93	1.00	37,400	3910	.81	.97	1.00	35,000	4050	.84	.99	1.00				
	1550	43,300	3240	.79	.94	1.00	40,500	3470	.81	.97	1.00	38,400	3750	.84	.99	1.00	35,900	4090	.87	1.00	1.00				
67	1400	44,800	3280	.60	.74	.87	42,400	3520	.61	.76	.90	39,900	3810	.62	.78	.92	37,200	4170	.64	.81	.96				
	1550	45,800	3300	.61	.76	.90	43,300	3540	.62	.78	.93	40,700	3840	.64	.81	.96	37,900	4200	.66	.84	.99				
71	1400	47,500	3340	.45	.58	.71	45,000	3590	.45	.59	.73	42,400	3910	.46	.61	.75	39,600	4290	.46	.62	.78				
	1550	48,500	3360	.45	.60	.73	45,900	3620	.46	.61	.75	43,200	3940	.46	.62	.78	40,300	4330	.47	.64	.81				

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

HP19-411-413 HEATING CAPACITY WITH C14-41FF 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
1300	46,000	3035	35,300	2550	24,200	2060	16,400	1655	8400	1240
1450	46,900	3010	36,200	2525	25,100	2035	17,300	1630	9300	1215

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

HP19-461-463 HEATING CAPACITY WITH C16-51FF OR CR16-51FF 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
1400	52,200	3850	39,900	3175	27,300	2495	18,200	1950	9300	1465
1550	53,200	3820	40,900	3145	28,300	2465	19,200	1920	10,300	1435

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

HP19-411-413 HEATING PERFORMANCE at 1300 cfm Indoor Coil Air Volume (C14-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3035	46,000
60	2915	43,400
55	2800	40,800
50	2680	38,300
47	2610	36,700
45	2550	35,300
40	2405	31,600
35	2260	28,000
30	2160	26,100
25	2060	24,200
20	1960	22,300
17	1900	21,200
15	1860	20,400
10	1755	18,400
5	1655	16,400
0	1550	14,400
-5	1450	12,400
-10	1345	10,400
-15	1240	8400
-20	1140	6400

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

HP19-461-463 HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (C16-51FF or CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3850	52,200
60	3680	49,200
55	3515	46,300
50	3345	43,300
47	3245	41,500
45	3175	39,900
40	2995	36,000
35	2815	32,000
30	2655	29,700
25	2495	27,300
20	2335	25,000
17	2240	23,600
15	2190	22,700
10	2070	20,500
5	1950	18,200
0	1830	16,000
-5	1705	13,800
-10	1585	11,500
-15	1465	9300
-20	1345	7100

*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.

HP19-461-463 COOLING CAPACITY WITH C14-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1400	43,700	3260	.78	.94	1.00	41,400	3490	.81	.96	1.00	39,000	3770	.83	.99	1.00	36,600	4130	.86	1.00	1.00				
	1550	44,800	3280	.81	.97	1.00	42,500	3520	.84	.99	1.00	40,000	3820	.86	1.00	1.00	37,800	4190	.90	1.00	1.00				
67	1400	46,600	3320	.61	.76	.90	44,000	3570	.62	.78	.93	41,300	3870	.63	.81	.96	38,400	4230	.65	.84	.99				
	1550	47,500	3340	.62	.79	.94	44,800	3590	.64	.81	.96	42,000	3900	.65	.84	.99	39,100	4270	.68	.87	1.00				
71	1400	49,600	3380	.45	.59	.73	46,900	3650	.45	.60	.75	44,000	3970	.46	.62	.78	41,000	4360	.47	.64	.81				
	1550	50,500	3400	.45	.61	.76	47,700	3670	.46	.62	.78	45,000	4000	.47	.67	.81	41,600	4400	.48	.66	.85				

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

HP19-461-463 COOLING CAPACITY WITH CH16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1400	43,400	3250	.78	.93	1.00	40,900	3470	.80	.95	1.00	38,400	3750	.82	.98	1.00	36,000	4100	.85	1.00	1.00
	1550	44,400	3270	.80	.96	1.00	41,800	3500	.83	.98	1.00	39,400	3790	.85	1.00	1.00	37,100	4150	.88	1.00	1.00
67	1400	46,100	3310	.60	.75	.89	43,500	3550	.62	.77	.92	40,800	3850	.63	.80	.95	38,200	4210	.65	.82	.98
	1550	47,000	3330	.62	.78	.92	44,300	3580	.63	.80	.95	41,700	3880	.65	.83	.98	38,800	4250	.67	.86	1.00
71	1400	49,000	3370	.45	.59	.72	46,400	3630	.45	.60	.74	43,600	3950	.46	.62	.77	40,600	4340	.46	.63	.80
	1550	50,000	3390	.45	.60	.75	47,200	3660	.46	.62	.77	44,300	3980	.47	.64	.80	41,200	4380	.47	.66	.83

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

HP19-461-463 HEATING CAPACITY WITH C14-41FF 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
1400	53,700	3625	41,300	3020	28,700	2410	19,300	1900	9900	1430
1550	54,700	3595	42,300	2990	29,700	2380	20,300	1870	10,900	1400

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

HP19-461-463 HEATING CAPACITY WITH CH16-51FF 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
1400	53,500	3655	40,900	3050	28,000	2440	18,700	1925	9500	1450
1550	54,500	3625	41,900	3020	29,000	2410	19,700	1895	10,500	1420

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

HP19-461-463 HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (C14-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3625	53,700
60	3475	50,700
55	3325	47,700
50	3175	44,700
47	3085	42,900
45	3020	41,300
40	2855	37,400
35	2695	33,400
30	2555	31,100
25	2410	28,700
20	2270	26,400
17	2185	25,000
15	2135	24,100
10	2020	21,700
5	1900	19,300
0	1785	17,000
-5	1665	14,600
-10	1545	12,200
-15	1430	9900
-20	1310	7500

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

HP19-461-463 HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3655	53,500
60	3505	50,400
55	3355	47,400
50	3205	44,300
47	3115	42,500
45	3050	40,900
40	2885	36,800
35	2725	32,800
30	2585	30,400
25	2440	28,000
20	2300	25,600
17	2215	24,200
15	2165	23,300
10	2045	21,000
5	1925	18,700
0	1805	16,400
-5	1690	14,100
-10	1570	11,800
-15	1450	9500
-20	1330	7300

*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.

HP19-511-513 COOLING CAPACITY WITH C16-65 OR CR16-65 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1600	47,300	3570	.77	.92	1.00	44,800	3810	.79	.94	1.00	41,900	4100	.82	.97	1.00	39,300	4470	.85	1.00	1.00				
	1800	48,600	3600	.80	.95	1.00	45,700	3840	.82	.98	1.00	43,100	4150	.85	1.00	1.00	40,600	4530	.88	1.00	1.00				
67	1600	50,300	3630	.60	.75	.88	47,700	3890	.61	.77	.91	44,800	4210	.63	.79	.94	41,800	4600	.64	.82	.97				
	1800	51,600	3660	.62	.77	.92	48,800	3920	.63	.80	.94	45,800	4250	.65	.82	.97	42,600	4640	.67	.85	1.00				
71	1600	53,400	3690	.45	.59	.72	50,600	3970	.45	.60	.74	47,600	4320	.46	.61	.76	44,400	4730	.46	.63	.79				
	1800	54,700	3720	.45	.60	.75	51,800	4010	.46	.62	.77	48,600	4360	.47	.63	.80	45,300	4780	.47	.66	.83				

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

HP19-511-513 COOLING CAPACITY WITH CH16-65V 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1600	48,700	3600	.77	.92	1.00	46,000	3850	.79	.95	1.00	43,200	4160	.82	.98	1.00	40,400	4530	.85	1.00	1.00				
	1800	49,900	3630	.80	.96	1.00	47,100	3880	.82	.98	1.00	44,500	4200	.85	1.00	1.00	41,900	4600	.89	1.00	1.00				
67	1600	52,300	3670	.60	.74	.88	49,400	3940	.61	.76	.91	46,400	4270	.62	.79	.94	43,100	4670	.64	.82	.97				
	1800	53,500	3690	.61	.77	.92	50,500	3970	.63	.79	.95	47,400	4310	.64	.82	.98	44,000	4710	.66	.86	1.00				
71	1600	55,800	3740	.44	.58	.71	52,700	4030	.45	.59	.74	49,500	4390	.45	.61	.76	46,000	4820	.46	.63	.79				
	1800	57,000	3760	.45	.60	.74	53,800	4060	.45	.61	.77	50,400	4420	.46	.63	.80	46,900	4860	.47	.65	.83				

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

HP19-511-513 HEATING CAPACITY WITH C16-65 OR CR16-65 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
1600	57,600	4150	44,200	3450	30,400	2735	20,600	2185	10,500	1640
1800	58,700	4115	45,300	3415	31,500	2700	21,700	2150	11,600	1605

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

HP19-511-513 HEATING CAPACITY WITH CH16-65V 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
1600	57,400	3990	44,200	3335	30,700	2665	20,900	2135	10,700	1605
1800	58,500	3960	45,300	3305	31,800	2635	22,000	2105	11,800	1575

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

HP19-511-513 HEATING PERFORMANCE

at 1600 cfm Indoor Coil Air Volume (C16-65 or CR16-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4150	57,600
60	3980	54,400
55	3810	51,200
50	3635	47,900
47	3535	46,000
45	3450	44,200
40	3230	39,600
35	3015	35,100
30	2875	32,700
25	2735	30,400
20	2595	28,000
17	2510	26,600
15	2455	25,600
10	2320	23,100
5	2185	20,600
0	2050	18,000
-5	1915	15,500
-10	1775	13,000
-15	1640	10,500
-20	1505	8000

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

HP19-511-513 HEATING PERFORMANCE

at 1600 cfm Indoor Coil Air Volume (CH16-65V)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3990	57,400
60	3830	54,200
55	3670	51,100
50	3510	47,900
47	3415	46,000
45	3335	44,200
40	3130	39,800
35	2925	35,300
30	2795	33,000
25	2665	30,700
20	2535	28,400
17	2455	27,000
15	2400	26,000
10	2270	23,400
5	2135	20,900
0	2005	18,300
-5	1870	15,800
-10	1740	13,200
-15	1605	10,700
20	1475	8100

*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.

HP19-511-513 COOLING CAPACITY WITH C14-65 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1600	49,600	3620	.79	.95	1.00	46,900	3880	.81	.97	1.00	44,200	4190	.84	1.00	1.00	41,500	4580	.87	1.00	1.00
	1800	50,900	3650	.82	.98	1.00	48,400	3910	.85	1.00	1.00	45,700	4250	.88	1.00	1.00	43,000	4660	.91	1.00	1.00
67	1600	52,900	3680	.61	.76	.91	49,900	3960	.62	.78	.94	46,700	4290	.64	.81	.97	43,500	4680	.66	.84	1.00
	1800	54,100	3700	.63	.80	.95	50,900	3980	.64	.82	.98	47,700	4320	.66	.85	1.00	44,400	4730	.68	.88	1.00
71	1600	56,300	3750	.45	.59	.73	53,100	4040	.45	.61	.76	49,800	4400	.46	.62	.78	46,300	4830	.47	.64	.82
	1800	57,400	3770	.46	.62	.77	54,200	4070	.46	.63	.80	50,800	4440	.47	.65	.82	47,100	4870	.48	.67	.86

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

HP19-651-653 COOLING CAPACITY WITH C14-65 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1925	60,100	4860	.77	.92	1.00	56,900	5240	.79	.95	1.00	53,800	5630	.81	.97	1.00	51,000	6050	.84	.99	1.00				
	2150	61,500	4900	.80	.96	1.00	58,300	5290	.82	.98	1.00	55,500	5700	.84	.99	1.00	52,600	6150	.87	1.00	1.00				
67	1925	63,900	4970	.60	.74	.88	60,700	5370	.61	.76	.91	57,400	5800	.61	.78	.93	54,200	6230	.64	.81	.96				
	2150	65,300	5010	.62	.77	.92	62,000	5420	.63	.79	.95	58,600	5850	.64	.82	.97	55,300	6300	.66	.84	.99				
71	1925	68,000	5090	.44	.58	.72	64,800	5520	.45	.59	.73	61,500	5990	.45	.61	.75	58,200	6480	.46	.62	.78				
	2150	69,600	5130	.45	.60	.75	66,500	5580	.46	.64	.76	62,900	6060	.46	.63	.79	59,600	6560	.47	.64	.81				

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

HP19-511-513 HEATING CAPACITY WITH C14-65 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
1600	61,400	4040	47,100	3420	32,400	2790	22,000	2260	11,200	1700
1800	62,600	4010	48,300	3390	33,600	2760	23,200	2230	12,400	1670

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

HP19-651-653 HEATING CAPACITY WITH C14-65 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
1925	72,000	5000	55,400	4185	38,000	3360	27,400	2690	14,000	2020
2150	73,400	4960	56,800	4145	39,400	3320	28,800	2650	15,400	1980

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

HP19-511-513 HEATING PERFORMANCE at 1600 cfm Indoor Coil Air Volume (C14-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	4040	61,400
60	3890	58,000
55	3740	54,500
50	3590	51,100
47	3500	49,000
45	3420	47,100
40	3220	42,200
35	3025	37,400
30	2905	34,900
25	2790	32,400
20	2670	29,900
17	2600	28,400
15	2545	27,300
10	2405	24,600
5	2260	22,000
0	2120	19,300
-5	1980	16,600
-10	1840	13,900
-15	1700	11,200
-20	1560	8500

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

HP19-651-653 HEATING PERFORMANCE at 1925 cfm Indoor Coil Air Volume (C14-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5000	72,000
60	4800	68,200
55	4600	64,300
50	4405	60,500
47	4285	58,200
45	4185	55,400
40	3945	48,300
35	3700	41,300
30	3530	39,700
25	3360	38,000
20	3190	36,400
17	3090	35,400
15	3025	34,100
10	2855	30,700
5	2690	27,400
0	2520	24,000
-5	2355	20,700
-10	2190	17,300
-15	2020	14,000
-20	1855	10,600

*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.

HP19-651-653 COOLING CAPACITY WITH C16-65 OR CR16-65 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1925	58,000	4810	.76	.90	1.00	55,100	5170	.77	.92	1.00	52,200	5550	.79	.95	1.00	49,200	5940	.81	.97	1.00
	2150	59,500	4850	.78	.93	1.00	56,400	5220	.80	.96	1.00	53,400	5610	.82	.98	1.00	50,500	6020	.85	1.00	1.00
67	1925	62,100	4920	.59	.73	.86	59,000	5310	.60	.74	.88	55,900	5720	.61	.76	.91	52,900	6150	.62	.79	.94
	2150	63,500	4960	.60	.75	.89	60,200	5360	.62	.77	.92	57,100	5780	.63	.79	.95	53,900	6220	.64	.82	.97
71	1925	66,100	5040	.44	.57	.70	62,900	5460	.45	.58	.72	59,800	5900	.45	.59	.73	56,600	6380	.45	.61	.76
	2150	67,600	5080	.45	.59	.73	64,400	5510	.45	.60	.74	61,000	5970	.46	.61	.76	57,900	6460	.46	.63	.79

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

HP19-651-653 COOLING CAPACITY WITH CH16-65V 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1925	59,200	4840	.75	.89	1.00	55,900	5200	.77	.92	1.00	52,900	5590	.79	.94	1.00	49,900	5990	.81	.97	1.00				
	2150	60,400	4870	.77	.92	1.00	57,200	5250	.79	.95	1.00	54,100	5640	.81	.97	1.00	51,200	6060	.84	1.00	1.00				
67	1925	63,200	4950	.59	.72	.85	60,100	5350	.60	.74	.87	57,000	5770	.61	.76	.90	53,800	6210	.62	.78	.93				
	2150	64,800	5000	.60	.74	.88	61,500	5400	.61	.76	.91	58,200	5830	.62	.78	.94	55,100	6280	.64	.81	.97				
71	1925	67,400	5070	.44	.57	.69	64,200	5500	.44	.58	.71	61,000	5960	.45	.59	.73	57,900	6450	.45	.60	.75				
	2150	69,100	5120	.45	.58	.72	65,800	5560	.45	.59	.73	62,500	6030	.45	.61	.75	59,300	6540	.46	.62	.77				

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

HP19-651-653 HEATING CAPACITY WITH C16-65 OR CR16-65 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
1925	72,200	5335	54,600	4405	36,200	3460	25,500	2765	13,000	2075
2150	73,600	5290	56,000	4360	37,600	3415	26,900	2720	14,400	2030

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

HP19-651-653 HEATING CAPACITY WITH CH16-65V 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
1925	71,900	5240	54,100	4360	35,500	3460	24,900	2785	12,700	2090
2150	73,300	5200	55,500	4320	36,900	3420	26,300	2745	14,100	2050

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

HP19-651-653 HEATING PERFORMANCE at 1925 cfm Indoor Coil Air Volume (C16-65 or CR16-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5335	72,200
60	5110	68,100
55	4885	64,000
50	4660	60,000
47	4525	57,500
45	4405	54,600
40	4110	47,400
35	3815	40,200
30	3635	38,200
25	3460	36,200
20	3280	34,200
17	3175	33,000
15	3105	31,800
10	2935	28,600
5	2765	25,500
0	2590	22,400
-5	2420	19,300
-10	2250	16,100
-15	2075	13,000
-20	1905	9900

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

HP19-651-653 HEATING PERFORMANCE at 1925 cfm Indoor Coil Air Volume (CH16-65V)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5240	71,900
60	5025	67,800
55	4815	63,600
50	4600	59,500
47	4475	57,000
45	4360	54,100
40	4075	46,900
35	3790	39,600
30	3625	37,500
25	3460	35,500
20	3300	33,400
17	3200	32,200
15	3130	31,000
10	2955	27,900
5	2785	24,900
0	2610	21,800
-5	2440	18,800
-10	2265	15,800
-15	2090	12,700
-20	1920	9700

*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.

HP20-211 COOLING CAPACITY WITH C16-21FF OR CR16-21FF INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor (°F)																			
		85					95					105					115				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	675	18,200	1320	.80	.95	1.00	17,500	1470	.82	.97	1.00	16,800	1660	.84	.99	1.00	16,100	1910	.86	1.00	1.00
	750	18,600	1320	.83	.98	1.00	17,900	1480	.85	1.00	1.00	17,100	1670	.87	1.00	1.00	16,400	1920	.89	1.00	1.00
67	675	19,000	1330	.63	.78	.93	18,300	1490	.64	.80	.94	17,500	1680	.65	.81	.96	16,700	1930	.66	.83	.98
	750	19,300	1330	.64	.81	.96	18,600	1490	.65	.82	.97	17,800	1690	.66	.84	.99	17,000	1940	.68	.87	.00
71	675	19,800	1340	.46	.61	.76	19,100	1500	.46	.62	.77	18,300	1700	.47	.63	.79	17,500	1950	.47	.65	.81
	750	20,100	1350	.47	.63	.79	19,400	1510	.47	.64	.80	18,600	1710	.48	.65	.82	17,800	1970	.48	.67	.84

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

HP20-211 COOLING CAPACITY WITH CH16-21FF INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor (°F)																							
		85						95						105						115					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	675	18,400	1360	.79	.94	1.00	17,700	1520	.80	.96	1.00	17,000	1710	.82	.98	1.00	16,200	1960	.84	.99	1.00				
	750	18,800	1360	.81	.97	1.00	18,100	1520	.83	.99	1.00	17,300	1720	.85	1.00	1.00	16,500	1980	.87	1.00	1.00				
67	675	19,400	1370	.61	.76	.91	18,700	1530	.62	.78	.92	17,900	1740	.63	.80	.95	17,000	1990	.64	.82	.97				
	750	19,700	1380	.63	.79	.94	19,000	1540	.64	.81	.96	18,200	1740	.65	.82	.98	17,300	2000	.66	.85	.99				
71	675	20,500	1390	.45	.60	.74	19,700	1550	.46	.61	.75	18,900	1760	.46	.62	.77	18,100	2030	.47	.63	.79				
	750	20,900	1390	.46	.62	.77	20,100	1560	.47	.63	.78	19,200	1770	.47	.64	.80	18,400	2040	.48	.65	.83				

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

HP20-211 HEATING CAPACITY WITH C16-21FF OR CR16-21FF INDOOR COIL

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
675	21,300	1455	16,500	1340	11,500	1225	8300	1025	4200	770
750	21,500	1415	16,700	1300	11,700	1185	8500	985	4400	730

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

HP20-211 HEATING CAPACITY WITH CH16-21FF 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)
675	21,200	1375	16,400	1275	11,300	1175	8100	985	4100	740
750	21,400	1335	16,600	1235	11,500	1135	8300	945	4300	700

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

HP20-211 HEATING PERFORMANCE

at 675 cfm Indoor Coil Air Volume (C16-21FF or CR16-21FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1455	21,300
60	1425	20,200
55	1395	19,100
50	1365	18,000
47	1350	17,300
45	1340	16,500
40	1310	14,400
35	1280	12,400
30	1250	11,900
25	1225	11,500
20	1195	11,000
17	1180	10,700
15	1155	10,300
10	1090	9300
5	1025	8300
0	965	7300
-5	900	6200
-10	835	5200
-15	770	4200
-20	710	3200

HP20-211 HEATING PERFORMANCE

at 675 cfm Indoor Coil Air Volume (CH16-21FF)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1375	21,200
60	1350	20,100
55	1325	19,000
50	1300	17,900
47	1285	17,200
45	1275	16,400
40	1250	14,300
35	1225	12,300
30	1200	11,800
25	1175	11,300
20	1150	10,800
17	1135	10,500
15	1110	10,100
10	1050	9100
5	985	8100
0	925	7100
-5	865	6100
-10	805	5100
-15	740	4100
-20	680	3200

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

*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.

HP20-211 COOLING CAPACITY WITH C16-28FF INDOOR COIL UNIT

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor (°F)																							
		85						95						105						115					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	675	19,200	1330	.78	.93	1.00	18,500	1490	.80	.95	1.00	17,700	1690	.81	.97	1.00	16,900	1940	.83	.99	1.00				
	750	19,600	1340	.81	.96	1.00	18,900	1500	.82	.98	1.00	18,200	1700	.84	1.00	1.00	17,300	1950	.86	1.00	1.00				
67	675	20,100	1350	.61	.76	.90	19,400	1510	.62	.78	.92	18,600	1710	.63	.79	.95	17,800	1960	.64	.81	.97				
	750	20,500	1350	.63	.78	.94	19,700	1510	.64	.80	.96	18,900	1720	.65	.82	.98	18,100	1980	.66	.84	1.00				
71	675	21,000	1360	.45	.60	.74	20,200	1520	.46	.61	.75	19,400	1730	.46	.62	.77	18,600	1990	.46	.63	.79				
	750	21,300	1360	.46	.62	.76	20,600	1530	.46	.63	.78	19,800	1740	.47	.64	.80	18,900	2010	.47	.65	.82				

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

HP20-261 COOLING CAPACITY WITH C16-31FF OR CR16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	900	24,200	1580	.80	.96	1.00	23,400	1770	.81	.97	1.00	22,300	1970	.83	.99	1.00	21,500	2170	.85	1.00	1.00
	1000	24,700	1590	.83	.98	1.00	23,800	1780	.84	1.00	1.00	22,900	1970	.86	1.00	1.00	22,000	2180	.88	1.00	1.00
67	900	25,700	1600	.62	.77	.92	24,700	1790	.63	.79	.94	23,700	1990	.64	.81	.96	22,600	2190	.65	.83	.98
	1000	26,100	1600	.64	.80	.96	25,100	1790	.65	.82	.98	24,100	1990	.66	.84	.99	22,900	2190	.67	.86	1.00
71	900	27,100	1620	.45	.61	.75	26,200	1810	.46	.62	.76	25,100	2010	.46	.63	.78	24,000	2220	.47	.64	.80
	1000	27,700	1620	.46	.62	.78	26,600	1820	.47	.63	.79	25,500	2020	.47	.65	.81	24,400	2230	.48	.66	.83

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

HP20-211 HEATING CAPACITY WITH C16-28FF INDOOR COIL UNIT

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	85		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)
675	21,400	1390	16,500	1290	11,400	1190	8300	1000	4200	750
750	21,600	1350	16,700	1250	11,600	1150	8500	960	4400	710

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

HP20-261 HEATING CAPACITY WITH C16-31FF OR C16-31FF 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
900	28,300	1740	21,700	1605	14,700	1475	10,500	1240	5400	930
1000	28,600	1680	22,000	1545	15,000	1415	10,800	1180	5700	870

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

HP20-211 HEATING PERFORMANCE at 675 cfm Indoor Coil Air Volume (C16-28FF)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1390	21,400
60	1365	20,300
55	1340	19,200
50	1315	18,100
47	1300	17,400
45	1290	16,500
40	1265	14,400
35	1240	12,200
30	1215	11,800
25	1190	11,400
20	1165	11,000
17	1150	10,700
15	1125	10,300
10	1060	9300
5	1000	8300
0	940	7300
-5	875	6200
-10	815	5200
-15	750	4200
-20	690	3200

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

HP20-261 HEATING PERFORMANCE at 900 cfm Indoor Coil Air Volume (C16-31FF or CR16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1740	28,300
60	1705	26,800
55	1675	25,200
50	1640	23,700
47	1620	22,800
45	1605	21,700
40	1575	18,800
35	1540	16,000
30	1510	15,300
25	1475	14,700
20	1445	14,000
17	1425	13,600
15	1395	13,100
10	1315	11,800
5	1240	10,500
0	1165	9200
-5	1085	7900
-10	1010	6700
-15	930	5400
-20	855	4100

— 6t — *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.

HP20-261 COOLING CAPACITY WITH CH16-31FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	900	24,100	1580	.80	.96	1.00	23,300	1760	.82	.97	1.00	22,300	1960	.83	.99	1.00	21,300	2160	.85	1.00	1.00
	1000	24,600	1580	.83	.99	1.00	23,700	1770	.84	1.00	1.00	22,800	1970	.86	1.00	1.00	21,900	2170	.88	1.00	1.00
67	900	25,700	1590	.62	.78	.92	24,600	1780	.63	.79	.94	23,600	1980	.64	.81	.96	22,500	2180	.65	.83	.98
	1000	26,100	1600	.64	.81	.96	25,100	1790	.65	.82	.97	24,000	1990	.66	.84	.99	23,000	2190	.67	.86	1.00
71	900	27,200	1610	.46	.60	.76	26,100	1810	.46	.61	.77	25,100	2010	.46	.63	.79	24,000	2210	.47	.64	.80
	1000	27,600	1620	.46	.62	.78	26,600	1810	.47	.63	.80	25,500	2020	.47	.65	.81	24,300	2220	.48	.66	.83

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

HP20-311 COOLING CAPACITY WITH C16-31FF OR CR16-31FF INDOOR COIL

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)				Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)				Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)					
																				Dry Bulb (°F)	
				75	80	85	75			80	85	75	80			85	75	80	85	75	80
63	875	27,500	2140	.72	.87	1.00	26,400	2370	.73	.89	1.00	25,300	2650	.75	.91	1.00	24,100	3000	.77	.94	1.00
	1000	28,200	2160	.75	.91	1.00	27,100	2390	.76	.93	1.00	26,000	2670	.78	.96	1.00	24,700	3020	.80	.98	1.00
67	875	29,100	2170	.57	.70	.83	28,000	2410	.57	.71	.85	26,800	2690	.58	.72	.88	25,500	3050	.59	.74	.90
	1000	29,800	2190	.58	.72	.88	28,600	2420	.59	.74	.90	27,400	2710	.60	.76	.92	26,200	3070	.61	.78	.95
71	875	30,600	2210	.43	.55	.67	29,500	2450	.43	.56	.68	28,300	2740	.44	.57	.70	27,100	3100	.44	.58	.71
	1000	31,400	2230	.44	.57	.70	30,300	2470	.44	.58	.71	29,000	2760	.44	.59	.73	27,700	3120	.45	.60	.75

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

HP20-261 HEATING CAPACITY WITH CH16-31FF INDOOR COIL

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
900	27,800	1635	21,300	1510	14,600	1390	10,400	1170	5300	880
1000	28,100	1580	21,600	1455	14,900	1335	10,700	1115	5600	825

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

HP20-311 HEATING CAPACITY WITH C16-31FF OR CR16-31FF INDOOR COIL

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
875	34,400	2470	26,500	2275	18,100	2080	12,800	1755	6300	1345
1000	34,800	2370	26,900	2175	18,500	1980	13,200	1655	6700	1245

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

HP20-261 HEATING PERFORMANCE at 900 cfm Indoor Coil Air Volume (CH16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1635	27,800
60	1605	26,300
55	1575	24,800
50	1545	23,300
47	1525	22,400
45	1510	21,300
40	1480	18,700
35	1450	16,000
30	1420	15,300
25	1390	14,600
20	1360	13,800
17	1345	13,400
15	1315	12,900
10	1245	11,600
5	1170	10,400
0	1095	9100
-5	1025	7800
-10	950	6600
-15	880	5300
-20	805	4000

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

HP20-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (C16-31FF or CR16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2370	34,800
60	2320	33,000
55	2270	31,100
50	2225	29,300
47	2195	28,200
45	2175	26,900
40	2125	23,500
35	2080	20,200
30	2030	19,300
25	1980	18,500
20	1935	17,600
17	1905	17,100
15	1865	16,500
10	1760	14,800
5	1655	13,200
0	1555	11,600
-5	1450	10,000
-10	1350	8400
-15	1245	6700
-20	1145	5100

*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.

HP20-311 COOLING CAPACITY WITH CH16-31FF INDOOR COIL

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	875	27,800	2170	.75	.89	1.00	26,700	2400	.76	.91	1.00	25,500	2680	.78	.93	1.00	24,300	3030	.80	.95	1.00				
	1000	28,600	2180	.78	.93	1.00	27,400	2410	.79	.95	1.00	26,100	2700	.81	.97	1.00	24,900	3060	.83	.99	1.00				
67	875	29,400	2200	.59	.73	.86	28,300	2430	.60	.74	.87	27,000	2730	.61	.75	.89	25,800	3090	.62	.77	.92				
	1000	30,100	2220	.61	.76	.89	28,800	2450	.62	.77	.91	27,600	2750	.63	.79	.94	26,300	3110	.64	.81	.96				
71	875	31,100	2240	.45	.58	.70	29,900	2480	.45	.58	.71	28,700	2780	.45	.59	.73	27,400	3140	.46	.60	.75				
	1000	31,900	2260	.46	.60	.73	30,700	2500	.46	.61	.75	29,300	2790	.46	.62	.76	28,000	3160	.47	.63	.78				

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

HP20-311 COOLING CAPACITY WITH C16-41FF, CR16-41FF OR CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	875	27,100	2020	.75	.89	1.00	26,100	2270	.76	.90	1.00	24,900	2590	.77	.93	1.00	23,800	2990	.79	.95	1.00
	1000	27,900	2030	.77	.92	1.00	26,800	2290	.79	.94	1.00	25,600	2610	.81	.97	1.00	24,400	3010	.83	.99	1.00
67	875	28,800	2040	.59	.72	.85	27,700	2300	.59	.73	.87	26,500	2620	.60	.75	.89	25,200	3040	.61	.77	.91
	1000	29,600	2050	.60	.75	.89	28,400	2310	.61	.76	.91	27,200	2640	.62	.78	.93	25,800	3060	.63	.80	.96
71	875	30,400	2060	.44	.57	.69	29,300	2330	.44	.58	.71	28,000	2660	.45	.59	.72	26,700	3080	.45	.60	.74
	1000	31,200	2080	.45	.59	.72	30,000	2340	.45	.60	.74	28,700	2680	.46	.61	.76	27,300	3100	.46	.62	.78

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

HP20-311 HEATING CAPACITY WITH CH16-31FF INDOOR COIL

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
875	34,000	2400	26,300	2210	18,100	2020	12,900	1705	6400	1305
1000	34,400	2300	26,700	2110	18,500	1920	13,300	1605	6800	1205

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

HP20-311 HEATING CAPACITY WITH C16-41FF, CR16-41FF OR CH16-41FF 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
875	35,000	2220	27,800	2035	20,400	1840	14,400	1575	8600	1200
1000	32,400	2165	25,200	1975	17,800	1785	11,800	1520	6000	1140

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

HP20-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (CH16-31FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2300	34,400
60	2250	32,600
55	2205	30,800
50	2160	29,100
47	2130	28,000
45	2110	26,700
40	2060	23,500
35	2015	20,200
30	1965	19,400
25	1920	18,500
20	1875	17,700
17	1845	17,200
15	1805	16,500
10	1705	14,900
5	1605	13,300
0	1505	11,700
-5	1405	10,000
-10	1305	8400
-15	1205	6800
-20	1105	5200

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

HP20-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (C16-41FF, CR16-41FF or CH16-41FF)

*Outdoor Temperature (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2165	32,400
60	2120	30,600
55	2075	28,800
50	2030	27,100
47	2005	26,000
45	1975	25,200
40	1905	23,100
35	1835	21,000
30	1810	19,400
25	1785	17,800
20	1760	16,300
17	1745	15,300
15	1705	14,700
10	1610	13,300
5	1520	11,800
0	1425	10,400
-5	1330	8900
-10	1235	7500
-15	1140	6000
-20	1045	4600

— 6v — *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.

HP20-411 COOLING CAPACITY WITH C16-41FF OR CR16-41FF INDOOR COIL

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1050	33,000	2550	.75	.89	1.00	31,800	2820	.76	.91	1.00	30,600	3150	.78	.93	1.00	29,300	3550	.80	.95	1.00				
	1200	34,000	2570	.78	.93	1.00	32,700	2840	.79	.95	1.00	31,300	3170	.81	.97	1.00	29,900	3580	.83	.99	1.00				
67	1050	35,000	2590	.59	.73	.86	33,700	2860	.60	.74	.88	32,300	3200	.61	.75	.90	30,900	3610	.62	.77	.92				
	1200	35,800	2610	.61	.76	.90	34,500	2880	.62	.77	.92	33,100	3220	.63	.79	.94	31,600	3630	.64	.81	.96				
71	1050	36,800	2630	.45	.58	.70	35,500	2910	.45	.59	.72	34,100	3250	.45	.60	.73	32,600	3670	.46	.61	.75				
	1200	37,700	2650	.45	.60	.73	36,300	2930	.46	.61	.75	34,900	3280	.46	.62	.77	33,300	3690	.47	.63	.79				

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

HP20-411 COOLING CAPACITY WITH CH16-41FF INDOOR COIL

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1050	33,900	2570	.76	.90	1.00	32,600	2840	.77	.92	1.00	31,200	3170	.79	.94	1.00	29,800	3570	.80	.96	1.00				
	1200	34,700	2590	.79	.94	1.00	33,400	2860	.80	.96	1.00	32,000	3190	.82	.98	1.00	30,600	3600	.84	.99	1.00				
67	1050	35,800	2610	.60	.73	.87	34,500	2890	.60	.75	.88	33,100	3220	.61	.76	.90	31,500	3630	.62	.78	.93				
	1200	36,600	2630	.61	.77	.91	35,200	2910	.62	.78	.93	33,700	3240	.63	.80	.95	32,100	3650	.65	.82	.97				
71	1050	37,900	2660	.45	.58	.71	36,500	2940	.45	.59	.72	35,000	3280	.45	.60	.74	33,400	3690	.46	.61	.76				
	1200	38,800	2680	.46	.60	.74	37,300	2960	.46	.61	.76	35,700	3300	.46	.62	.77	34,100	3720	.47	.63	.80				

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

HP20-411 HEATING CAPACITY WITH C16-41FF OR CR16-41FF INDOOR COIL

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
1050	38,800	2830	30,300	2605	21,500	2385	15,300	2010	7500	1535
1200	39,300	2725	30,800	2500	22,000	2280	15,800	1905	8000	1430

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

HP20-411 HEATING CAPACITY WITH CH16-41FF INDOOR COIL

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
1050	40,600	2705	31,400	2515	21,700	2330	15,400	1975	7600	1510
1200	41,100	2600	31,900	2410	22,200	2225	15,900	1870	8100	1405

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

HP20-411 HEATING PERFORMANCE

at 1200 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2725	39,300
60	2670	37,300
55	2615	35,400
50	2560	33,400
47	2525	32,200
45	2500	30,800
40	2445	27,400
35	2390	23,900
30	2335	22,900
25	2280	22,000
20	2225	21,000
17	2190	20,400
15	2140	19,600
10	2025	17,700
5	1905	15,800
0	1785	13,800
- 5	1670	11,900
- 10	1550	10,000
- 15	1430	8000
- 20	1315	6100

HP20-411 HEATING PERFORMANCE

at 1200 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2600	41,100
60	2550	39,000
55	2505	36,800
50	2460	34,700
47	2430	33,400
45	2410	31,900
40	2365	28,000
35	2320	24,100
30	2270	23,100
25	2225	22,200
20	2180	21,200
17	2150	20,600
15	2105	19,800
10	1985	17,900
5	1870	15,900
0	1755	14,000
- 5	1640	12,000
- 10	1520	10,100
- 15	1405	8100
- 20	1290	6200

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

*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, page 9.

HP20-461 COOLING CAPACITY WITH C16-41FF OR CR16-41FF INDOOR COIL

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
				Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)
				75 80 85			75 80 85			75 80 85			75 80 85
63	1225	39,200	2950	.72 .86 .99	37,600	3250	.73 .88 1.00	36,100	3630	.74 .90 1.00	34,600	4090	.76 .93 1.00
	1400	40,200	2970	.75 .90 1.00	38,700	3270	.76 .92 1.00	37,200	3640	.78 .94 1.00	35,400	4110	.80 .97 1.00
67	1225	41,400	2980	.57 .70 .83	39,900	3290	.58 .71 .85	38,300	3670	.58 .72 .87	36,700	4130	.59 .74 .89
	1400	42,500	3000	.59 .72 .87	40,900	3310	.59 .74 .89	39,300	3690	.60 .75 .91	37,500	4160	.61 .77 .93
71	1225	43,600	3010	.43 .56 .67	42,000	3330	.43 .56 .68	40,400	3710	.44 .57 .70	38,700	4190	.44 .58 .71
	1400	44,700	3030	.44 .57 .70	43,100	3350	.44 .58 .71	41,400	3740	.45 .59 .73	39,700	4210	.45 .60 .75

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

HP20-461 COOLING CAPACITY WITH CH16-41FF INDOOR COIL

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
				Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)
				75 80 85			75 80 85			75 80 85			75 80 85
63	1225	39,600	2940	.73 .88 1.00	38,000	3230	.75 .90 1.00	36,400	3590	.76 .92 1.00	34,800	4030	.78 .94 1.00
	1400	40,700	2950	.76 .92 1.00	39,100	3250	.78 .94 1.00	37,400	3610	.80 .96 1.00	35,700	4060	.82 .98 1.00
67	1225	41,900	2970	.58 .71 .85	40,300	3270	.59 .72 .87	38,700	3630	.59 .74 .89	36,900	4090	.60 .75 .91
	1400	43,000	2980	.60 .74 .89	41,300	3290	.60 .76 .91	39,600	3660	.61 .77 .93	37,700	4110	.63 .80 .95
71	1225	44,300	3010	.44 .56 .69	42,700	3320	.44 .57 .70	41,000	3690	.44 .58 .71	39,200	4150	.45 .59 .73
	1400	45,400	3040	.44 .58 .72	43,700	3340	.45 .59 .73	41,900	3720	.45 .60 .75	40,000	4180	.46 .61 .77

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

HP20-461 HEATING CAPACITY WITH C16-41FF OR CR16-41FF INDOOR COIL

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
1225	48,300	3555	37,600	3225	26,300	2900	18,900	2425	9300	1855
1400	48,900	3435	38,200	3105	26,900	2780	19,500	2305	9900	1735

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

HP20-461 HEATING CAPACITY WITH CH16-41FF INDOOR COIL

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
1225	48,100	3225	37,400	2975	26,100	2725	18,700	2305	9300	1760
1400	48,700	3105	38,000	2855	26,700	2605	19,300	2185	9900	1640

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

HP20-461 HEATING PERFORMANCE

at 1400 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3435	48,900
60	3355	46,400
55	3270	44,000
50	3190	41,500
47	3140	40,000
45	3105	38,200
40	3025	33,600
35	2945	29,000
30	2865	27,900
25	2780	26,900
20	2700	25,800
17	2650	25,200
15	2590	24,200
10	2450	21,900
5	2305	19,500
0	2160	17,100
5	2020	14,700
-10	1875	12,300
-15	1735	9900
20	1590	7600

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

HP20-461 HEATING PERFORMANCE

at 1400 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3105	48,700
60	3040	46,200
55	2980	43,800
50	2915	41,300
47	2880	39,800
45	2855	38,000
40	2790	33,400
35	2730	28,800
30	2670	27,700
25	2605	26,700
20	2545	25,600
17	2510	25,000
15	2455	24,100
10	2320	21,700
5	2185	19,300
0	2050	17,000
5	1915	14,600
-10	1775	12,200
-15	1640	9900
20	1505	7500

- 6x - *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, page 9.

HP21-411V-413V COOLING CAPACITY WITH C14-26FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)											
		75			85			95			105		
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
		Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)		
		75	80	85	75	80	85	75	80	85	75	80	85
63	850	22,700	1120	.82 .98 1.00	21,700	1270	.84 1.00 1.00	20,500	1440	.87 1.00 1.00	19,500	1610	.90 1.00 1.00
	950	23,500	1120	.85 1.00 1.00	22,400	1270	.88 1.00 1.00	21,300	1440	.91 1.00 1.00	20,200	1630	.94 1.00 1.00
67	850	24,200	1110	.63 .79 .94	23,000	1270	.64 .81 .97	21,700	1440	.66 .84 .99	20,300	1630	.68 .87 1.00
	950	24,800	1100	.65 .82 .98	23,400	1260	.66 .85 1.00	22,200	1440	.68 .87 1.00	20,800	1640	.70 .91 1.00
71	850	25,800	1090	.46 .61 .76	24,500	1260	.46 .62 .78	23,300	1440	.47 .64 .81	21,900	1650	.47 .66 .83
	950	26,300	1080	.46 .63 .79	25,100	1250	.47 .65 .82	23,800	1450	.48 .66 .84	22,400	1660	.49 .68 .87

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

HP21-411V-413V COOLING CAPACITY WITH C14-26FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
		Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)		
		75	80	85	75	80	85	75	80	85	75	80	85
63	1000	34,100	2720	.73 .87 .98	32,000	2920	.75 .89 1.00	29,800	3170	.78 .93 1.00	27,800	3480	.80 .96 1.00
	1150	35,300	2750	.76 .91 1.00	33,100	2960	.78 .93 1.00	31,100	3230	.81 .96 1.00	28,900	3550	.84 .99 1.00
67	1000	36,400	2770	.58 .70 .83	34,300	3010	.59 .72 .85	32,200	3290	.60 .74 .88	30,200	3620	.61 .77 .91
	1150	37,700	2820	.59 .73 .87	35,600	3060	.61 .75 .89	33,500	3340	.62 .77 .92	31,300	3720	.63 .80 .95
71	1000	38,700	2860	.44 .56 .68	36,700	3100	.44 .57 .69	34,700	3410	.44 .58 .71	32,800	3840	.45 .59 .73
	1150	40,100	2910	.44 .58 .70	38,100	3160	.45 .59 .72	36,100	3500	.45 .60 .74	34,200	3950	.46 .61 .76

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

HP21-411V-413V HEATING CAPACITY WITH C14-26FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1000	29,200	1500	27,200	1450	25,200	1400	23,200	1350
1150	31,000	1470	29,000	1420	27,000	1370	25,000	1320

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

HP21-411V-413V HEATING CAPACITY WITH C14-26FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1000	43,000	3260	33,600	2795	24,100	2330	16,500	1860	8400	1400
1150	44,500	3170	35,100	2705	25,600	2240	18,000	1770	9900	1310

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

HP21-411V-413V HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (C14-26FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3260	43,000
60	3145	40,700
55	3025	38,400
50	2910	36,200
47	2840	34,800
45	2795	33,600
40	2680	30,500
35	2570	27,400
30	2450	25,700
25	2330	24,100
20	2210	22,400
17	2140	21,400
15	2095	20,600
10	1980	18,600
5	1860	16,500
0	1745	14,500
-5	1630	12,500
-10	1515	10,500
-15	1400	8400
-20	1285	6400

*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.

HP21-411V-413V COOLING CAPACITY WITH CR16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	900	22,000	1130	.80	.96	1.00	21,100	1280	.83	.99	1.00	20,100	1430	.86	1.00	1.00	19,100	1610	.89	1.00	1.00				
	1000	22,600	1130	.83	.99	1.00	21,700	1270	.86	1.00	1.00	20,700	1440	.89	1.00	1.00	19,700	1620	.93	1.00	1.00				
67	900	23,700	1110	.62	.77	.92	22,600	1270	.64	.80	.95	21,400	1440	.65	.83	.98	20,200	1630	.67	.86	1.00				
	1000	24,100	1110	.64	.80	.95	23,100	1270	.65	.82	.98	21,900	1440	.67	.85	1.00	20,600	1630	.69	.89	1.00				
71	900	25,200	1100	.46	.60	.74	24,200	1260	.46	.62	.76	23,100	1440	.46	.63	.79	21,800	1650	.47	.65	.82				
	1000	25,700	1090	.46	.62	.77	24,600	1260	.47	.63	.79	23,500	1440	.47	.65	.82	22,300	1660	.48	.67	.85				

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

HP21-411V-413V COOLING CAPACITY WITH CR16-51FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1300	35,700	2820	.75	.89	1.00	33,400	3060	.78	.93	1.00	31,100	3360	.81	.96	1.00	28,900	3710	.84	.99	1.00				
	1450	36,500	2840	.77	.92	1.00	34,100	3090	.80	.96	1.00	32,000	3400	.83	.99	1.00	30,200	3810	.86	1.00	1.00				
67	1300	38,300	2900	.59	.72	.85	36,300	3170	.61	.74	.88	34,200	3500	.62	.77	.91	32,400	3970	.63	.79	.94				
	1450	39,300	2930	.61	.74	.88	37,300	3200	.62	.76	.91	35,200	3560	.63	.79	.94	33,400	4050	.65	.82	.97				
71	1300	41,100	2990	.44	.57	.69	39,200	3280	.44	.59	.71	37,400	3690	.45	.60	.73	35,800	4230	.45	.61	.75				
	1450	42,100	3020	.45	.59	.71	40,400	3330	.45	.60	.73	38,600	3750	.46	.61	.75	36,800	4320	.46	.62	.77				

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

HP21-411V-413V HEATING CAPACITY WITH CR16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	29,700	1515	27,500	1470	25,400	1425	23,300	1380
1450	31,700	1575	29,500	1530	27,400	1485	25,300	1440

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

HP21-411V-413V HEATING CAPACITY WITH CR16-51FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	43,500	3250	33,800	2795	24,200	2330	16,500	1860	8400	1400
1450	44,000	3220	34,300	2765	24,700	2300	17,000	1830	8900	1370

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

HP21-411V-413V HEATING PERFORMANCE at 1300 cfm Indoor Coil Air Volume (CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3250	43,500
60	3135	41,100
55	3020	38,800
50	2910	36,400
47	2840	35,000
45	2795	33,800
40	2680	30,700
35	2570	27,600
30	2450	25,900
25	2330	24,200
20	2210	22,400
17	2140	21,400
15	2095	20,600
10	1980	18,600
5	1860	16,500
0	1745	14,500
-5	1630	12,500
-10	1515	10,500
-15	1400	8400
-20	1285	6400

*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.

HP21-411V-413V COOLING CAPACITY WITH C16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	900	23,000	1120	.83	.98	1.00	21,800	1270	.86	1.00	1.00	20,700	1440	.88	1.00	1.00	19,600	1620	.91	1.00	1.00				
	1000	23,500	1110	.86	1.00	1.00	22,500	1270	.88	1.00	1.00	21,400	1440	.91	1.00	1.00	20,300	1630	.94	1.00	1.00				
67	900	24,300	1110	.63	.80	.95	23,000	1270	.65	.82	.97	21,700	1440	.66	.85	.99	20,400	1630	.68	.88	1.00				
	1000	24,800	1100	.65	.83	.98	23,500	1260	.67	.86	1.00	22,200	1440	.68	.88	1.00	20,900	1640	.71	.91	1.00				
71	900	25,900	1090	.46	.62	.77	24,700	1260	.47	.63	.79	23,400	1440	.47	.65	.81	22,000	1660	.48	.66	.85				
	1000	26,400	1080	.47	.64	.80	25,200	1250	.47	.65	.82	23,800	1450	.48	.67	.85	22,500	1660	.49	.69	.88				

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

HP21-411V-413V COOLING CAPACITY WITH C16-51FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1300	37,100	2800	.77	.91	1.00	35,000	3030	.79	.94	1.00	32,600	3300	.82	.97	1.00	30,700	3660	.85	1.00	1.00				
	1450	38,200	2830	.79	.94	1.00	35,800	3070	.82	.97	1.00	33,700	3350	.85	.99	1.00	31,800	3760	.88	1.00	1.00				
67	1300	39,600	2890	.60	.74	.88	37,500	3130	.61	.76	.90	35,400	3450	.62	.78	.92	33,400	3680	.64	.80	.95				
	1450	40,600	2920	.61	.76	.91	38,400	3180	.63	.78	.93	36,400	3520	.64	.81	.95	34,300	3960	.66	.83	.98				
71	1300	42,300	2980	.45	.58	.71	40,300	3260	.45	.59	.72	38,400	3640	.46	.60	.74	36,700	4130	.46	.61	.76				
	1450	43,500	3020	.45	.60	.73	41,500	3310	.46	.61	.75	39,600	3700	.46	.62	.77	37,800	4240	.47	.63	.79				

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

HP21-411V-413V HEATING CAPACITY WITH C16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	30,100	1440	27,900	1405	25,800	1370	23,700	1330
1450	31,700	1430	29,500	1395	27,400	1360	25,300	1320

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

HP21-411V-413V HEATING CAPACITY WITH C16-51FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	44,500	3180	34,600	2770	24,800	2395	17,000	1855	8700	1395
1450	46,000	3120	36,100	2710	26,300	2335	18,500	1795	10,200	1335

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

HP21-411V-413V HEATING PERFORMANCE at 1300 cfm Indoor Coil Air Volume (C16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3180	44,500
60	3070	42,100
55	2955	39,700
50	2845	37,300
47	2780	35,800
45	2770	34,600
40	2750	31,500
35	2730	28,400
30	2565	26,600
25	2395	24,800
20	2230	23,100
17	2130	22,000
15	2085	21,200
10	1970	19,100
5	1855	17,000
0	1740	14,900
-5	1625	12,800
-10	1510	10,800
-15	1395	8700
-20	1280	6600

*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.

HP21-411V-413V COOLING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	900	23,800	1110	.83	.99	1.00	22,600	1270	.86	1.00	1.00	21,500	1440	.88	1.00	1.00	20,400	1630	.92	1.00	1.00				
	1000	24,400	1100	.86	1.00	1.00	23,400	1270	.89	1.00	1.00	22,300	1440	.92	1.00	1.00	21,100	1640	.95	1.00	1.00				
67	900	25,200	1100	.63	.81	.96	23,900	1260	.65	.83	.98	22,600	1440	.67	.85	1.00	21,200	1640	.69	.88	1.00				
	1000	25,800	1090	.66	.84	.99	24,500	1260	.67	.86	1.00	23,000	1440	.69	.89	1.00	21,600	1650	.71	.92	1.00				
71	900	26,900	1070	.46	.62	.78	25,600	1250	.46	.63	.80	24,200	1450	.47	.65	.82	22,800	1670	.48	.67	.85				
	1000	27,400	1070	.47	.64	.81	26,100	1250	.47	.66	.83	24,600	1450	.48	.67	.86	23,200	1680	.49	.69	.89				

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

HP21-411V-413V COOLING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1300	38,500	2870	.78	.93	1.00	36,100	3120	.80	.96	1.00	33,700	3420	.83	.99	1.00	31,900	3850	.86	1.00	1.00				
	1450	39,500	2910	.81	.96	1.00	37,000	3160	.83	.99	1.00	35,100	3490	.86	1.00	1.00	33,400	3970	.89	1.00	1.00				
67	1300	41,200	2970	.60	.75	.89	38,900	3240	.61	.77	.91	36,900	3590	.63	.79	.94	34,600	4070	.64	.82	.97				
	1450	42,200	3000	.62	.78	.92	40,100	3280	.63	.80	.94	37,900	3660	.65	.82	.97	35,900	4150	.66	.84	.99				
71	1300	44,400	3060	.45	.58	.72	42,300	3380	.45	.59	.73	40,400	3790	.45	.60	.75	38,500	4370	.46	.62	.77				
	1450	45,600	3100	.45	.60	.74	43,500	3430	.46	.61	.76	41,500	3870	.46	.62	.78	39,700	4480	.47	.64	.79				

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

HP21-411V-413V HEATING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	30,700	1325	28,500	1300	26,300	1275	24,100	1255
1450	32,300	1305	30,100	1280	27,900	1255	25,700	1235

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

HP21-411V-413V HEATING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1300	46,500	3030	36,100	2645	25,600	2260	17,500	1825	8900	1375
1450	47,900	2980	37,500	2595	27,000	2210	18,900	1775	10,300	1325

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

HP21-411V-413V HEATING PERFORMANCE at 1300 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3030	46,500
60	2930	44,000
55	2835	41,400
50	2740	38,900
47	2680	37,400
45	2645	36,100
40	2550	32,700
35	2460	29,400
30	2360	27,500
25	2260	25,600
20	2160	23,700
17	2100	22,600
15	2055	21,700
10	1940	19,600
5	1825	17,500
0	1715	15,300
-5	1600	13,200
-10	1485	11,100
-15	1375	8900
-20	1260	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.

HP21-511V-513V COOLING CAPACITY WITH C16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																			
		75					85					95					105				
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1100	24,900	1110	.88	1.00	1.00	23,800	1270	.90	1.00	1.00	22,700	1450	.93	1.00	1.00	21,600	1650	.97	1.00	1.00
	1200	25,500	1110	.90	1.00	1.00	24,400	1270	.93	1.00	1.00	23,300	1450	.96	1.00	1.00	22,100	1660	.99	1.00	1.00
67	1100	26,000	1100	.67	.86	.99	24,700	1270	.68	.88	1.00	23,400	1450	.70	.90	1.00	22,000	1660	.72	.93	1.00
	1200	26,300	1090	.68	.88	1.00	25,100	1260	.70	.90	1.00	23,800	1450	.72	.93	1.00	22,400	1660	.75	.96	1.00
71	1100	27,600	1070	.48	.65	.83	26,400	1250	.48	.67	.85	25,000	1450	.49	.68	.87	23,600	1680	.50	.71	.90
	1200	28,000	1070	.48	.67	.85	26,700	1250	.49	.69	.87	25,300	1450	.50	.70	.90	23,900	1680	.51	.73	.93

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

HP21-511V-513V COOLING CAPACITY WITH C16-51FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1400	39,000	2700	.77	.92	1.00	36,800	2920	.79	.94	1.00	34,300	3170	.82	.97	1.00	32,400	3540	.85	1.00	1.00				
	1600	40,300	2740	.80	.95	1.00	37,900	2960	.83	.98	1.00	35,800	3250	.85	1.00	1.00	34,000	3640	.88	1.00	1.00				
67	1400	41,700	2780	.60	.74	.88	39,500	3020	.61	.76	.90	37,400	3330	.62	.78	.92	35,400	3730	.64	.80	.95				
	1600	43,000	2820	.62	.77	.91	40,800	3060	.63	.79	.94	38,700	3390	.64	.81	.96	36,600	3820	.66	.84	.98				
71	1400	44,600	2860	.45	.58	.71	42,600	3130	.45	.59	.72	40,700	3490	.46	.60	.74	38,900	3990	.46	.61	.76				
	1600	46,100	2890	.45	.60	.74	44,100	3180	.46	.61	.75	42,200	3580	.46	.62	.77	40,600	4110	.47	.63	.79				

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

HP21-511V-513V HEATING CAPACITY WITH C16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	30,000	1355	28,000	1330	25,900	1305	23,800	1285
1700	33,600	1315	31,600	1290	29,500	1265	27,400	1245

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

HP21-511V-513V HEATING CAPACITY WITH C16-51FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	48,500	3150	37,100	2690	25,200	2210	18,100	1835	9200	1380
1700	50,500	3120	39,100	2660	27,200	2180	20,100	1805	11,200	1350

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

HP21-511V-513V HEATING PERFORMANCE at 1500 cfm Indoor Coil Air Volume (C16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3150	48,500
60	3040	45,900
55	2935	43,200
50	2825	40,600
47	2760	39,000
45	2690	37,100
40	2515	32,200
35	2340	27,400
30	2275	26,300
25	2210	25,200
20	2150	24,100
17	2110	23,400
15	2065	22,500
10	1950	20,300
5	1835	18,100
0	1720	15,900
-5	1610	13,700
-10	1495	11,400
-15	1380	9200
-20	1265	7000

*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.

HP21-511V-513V COOLING CAPACITY WITH C14-41FF INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1050	26,000	1130	.88	1.00	1.00	24,900	1300	.91	1.00	1.00	23,700	1490	.94	1.00	1.00	22,500	1710	.97	1.00	1.00				
	1150	26,700	1120	.92	1.00	1.00	25,600	1290	.94	1.00	1.00	24,300	1490	.97	1.00	1.00	23,100	1720	1.00	1.00	1.00				
67	1050	27,000	1110	.87	.86	1.00	25,600	1290	.68	.88	1.00	24,300	1490	.70	.91	1.00	22,800	1720	.72	.94	1.00				
	1150	27,400	1110	.69	.89	1.00	26,000	1290	.71	.92	1.00	24,700	1490	.73	.94	1.00	23,200	1720	.75	.97	1.00				
71	1050	28,700	1090	.47	.65	.83	27,400	1280	.47	.67	.85	26,000	1500	.48	.69	.88	24,400	1740	.49	.71	.91				
	1150	29,100	1080	.48	.67	.86	27,700	1280	.49	.69	.89	26,300	1500	.50	.71	.92	24,700	1740	.51	.74	.95				

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

HP21-511V-513V COOLING CAPACITY WITH C14-41FF INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1500	41,400	2770	.81	.97	1.00	39,200	3000	.84	.99	1.00	37,300	3310	.86	1.00	1.00	35,500	3740	.89	1.00	1.00
	1700	42,900	2810	.85	.99	1.00	40,900	3060	.87	1.00	1.00	39,100	3400	.90	1.00	1.00	37,400	3860	.93	1.00	1.00
67	1500	44,300	2850	.62	.78	.93	42,100	3110	.63	.80	.95	39,900	3440	.65	.82	.97	37,800	3900	.66	.85	.99
	1700	45,600	2870	.64	.81	.97	43,300	3150	.66	.84	.99	41,200	3510	.67	.86	1.00	39,300	4000	.69	.88	1.00
71	1500	47,900	2930	.45	.60	.75	45,800	3260	.46	.61	.76	43,900	3680	.46	.62	.78	42,200	4230	.46	.63	.80
	1700	49,300	2980	.46	.62	.78	47,200	3330	.47	.63	.80	45,400	3770	.47	.65	.81	43,600	4340	.47	.66	.83

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

HP21-511V-513V HEATING CAPACITY WITH C14-41FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1200	31,300	1300	29,100	1280	26,900	1260	24,700	1240
1400	33,300	1270	31,100	1250	28,900	1230	26,700	1210

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

HP21-511V-513V HEATING CAPACITY WITH C14-41FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1200	49,500	3120	37,600	2670	25,500	2205	18,200	1835	9300	1380
1400	50,500	3050	38,600	2600	26,500	2135	19,200	1765	10,300	1310

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

HP21-511V-513V HEATING PERFORMANCE at 1200 cfm Indoor Coil Air Volume (C14-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3120	49,500
60	3015	46,700
55	2910	43,900
50	2805	41,200
47	2740	39,500
45	2670	37,600
40	2500	32,700
35	2330	27,800
30	2270	26,600
25	2205	25,500
20	2145	24,300
17	2110	23,600
15	2065	22,700
10	1950	20,500
5	1835	18,200
0	1720	16,000
-5	1610	13,800
-10	1495	11,500
-15	1380	9300
-20	1265	7100

*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.

HP21-511V-513V COOLING CAPACITY WITH CR16-65 INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1150	24,800	1140	.87	1.00	1.00	23,700	1310	.90	1.00	1.00	22,900	1490	.94	1.00	1.00	21,900	1700	.98	1.00	1.00				
	1250	25,300	1140	.90	1.00	1.00	24,300	1300	.93	1.00	1.00	23,400	1490	.97	1.00	1.00	22,400	1710	.99	1.00	1.00				
67	1150	25,800	1130	.66	.84	.99	24,500	1300	.68	.87	1.00	23,400	1490	.70	.91	1.00	22,200	1710	.73	.94	1.00				
	1250	26,000	1130	.67	.87	1.00	24,900	1300	.70	.90	1.00	23,800	1490	.72	.93	1.00	22,500	1710	.75	.97	1.00				
71	1150	27,400	1110	.47	.64	.81	26,200	1290	.48	.66	.84	25,100	1490	.49	.68	.87	24,000	1730	.50	.71	.91				
	1250	27,600	1100	.48	.66	.83	26,500	1280	.49	.68	.87	25,500	1500	.49	.70	.90	24,200	1730	.51	.73	.94				

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

HP21-511V-513V COOLING CAPACITY WITH CR16-65 INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1500	39,800	2720	.78	.93	1.00	37,300	2950	.80	.96	1.00	35,300	3230	.83	.99	1.00	33,600	3630	.86	1.00	1.00				
	1700	40,800	2760	.81	.97	1.00	38,600	2990	.83	.99	1.00	36,900	3310	.86	1.00	1.00	35,300	3750	.89	1.00	1.00				
67	1500	42,700	2810	.61	.75	.89	40,700	3060	.62	.77	.91	38,700	3400	.63	.79	.94	36,800	3840	.65	.82	.97				
	1700	44,000	2840	.62	.78	.92	42,000	3110	.64	.80	.95	40,000	3450	.65	.82	.97	38,000	3930	.67	.85	.99				
71	1500	46,000	2890	.45	.59	.72	44,100	3180	.45	.60	.73	42,300	3590	.46	.61	.75	40,700	4140	.46	.62	.77				
	1700	47,400	2920	.46	.60	.74	45,500	3240	.46	.62	.76	43,800	3680	.46	.63	.78	42,300	4260	.47	.64	.80				

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

HP21-511V-513V HEATING CAPACITY WITH CR16-65 INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	31,900	1310	29,700	1295	27,500	1275	25,300	1260
1700	33,900	1250	31,700	1235	29,500	1215	27,300	1200

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

HP21-511V-513V HEATING CAPACITY WITH CR16-65 INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	50,000	3140	38,000	2690	25,600	2225	18,200	1855	9300	1395
1700	51,500	3050	39,500	2600	27,100	2135	19,700	1765	10,800	1305

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

HP21-511V-513V HEATING PERFORMANCE at 1500 cfm Indoor Coil Air Volume (CR16-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3140	50,000
60	3035	47,200
55	2930	44,400
50	2825	41,700
47	2760	40,000
45	2690	38,000
40	2515	33,000
35	2340	28,000
30	2280	26,800
25	2225	25,600
20	2165	24,300
17	2130	23,600
15	2085	22,700
10	1970	20,500
5	1855	18,200
0	1740	16,000
-5	1625	13,800
-10	1510	11,500
-15	1395	9300
-20	1280	7100

*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.

HP21-511V-513V COOLING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation – Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1150	26,300	1160	.91	1.00	1.00	25,100	1330	.94	1.00	1.00	23,800	1540	.97	1.00	1.00	22,600	1760	1.00	1.00	1.00				
	1250	27,000	1150	.94	1.00	1.00	25,700	1330	.97	1.00	1.00	24,400	1540	.99	1.00	1.00	23,100	1770	1.00	1.00	1.00				
67	1150	27,300	1140	.68	.88	1.00	25,700	1330	.70	.91	1.00	24,300	1540	.72	.94	1.00	22,700	1770	.75	.97	1.00				
	1250	27,600	1140	.70	.91	1.00	26,200	1330	.72	.94	1.00	24,600	1540	.75	.97	1.00	23,200	1770	.77	.99	1.00				
71	1150	29,200	1120	.48	.67	.85	27,600	1320	.49	.69	.88	26,100	1540	.50	.71	.91	24,400	1790	.51	.73	.94				
	1250	29,500	1110	.49	.69	.88	28,000	1320	.50	.71	.91	26,400	1540	.51	.73	.94	24,800	1800	.52	.76	.97				

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

HP21-511V-513V COOLING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (High Speed Compressor Operation – High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1500	40,900	2750	.80	.95	1.00	38,400	2970	.82	.98	1.00	36,400	3270	.85	1.00	1.00	34,700	3680	.88	1.00	1.00				
	1700	41,900	2790	.83	.99	1.00	40,000	3030	.86	1.00	1.00	38,200	3360	.88	1.00	1.00	36,400	3800	.92	1.00	1.00				
67	1500	43,700	2830	.62	.77	.91	41,600	3090	.63	.79	.94	39,400	3420	.64	.81	.96	37,400	3850	.66	.83	.98				
	1700	45,100	2860	.64	.80	.95	42,900	3130	.65	.82	.97	40,800	3480	.66	.84	.99	38,700	3970	.68	.87	1.00				
71	1500	47,200	2920	.45	.60	.74	45,200	3220	.46	.61	.75	43,200	3640	.46	.62	.77	41,500	4180	.46	.63	.79				
	1700	48,600	2960	.46	.62	.77	46,600	3290	.46	.63	.78	44,700	3730	.47	.64	.80	43,000	4290	.47	.65	.82				

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

HP21-511V-513V HEATING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	32,300	1245	30,100	1235	27,900	1220	25,700	1210
1700	34,100	1235	31,900	1225	29,700	1210	27,500	1200

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

HP21-511V-513V HEATING CAPACITY WITH CH16-51FF INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	51,500	3040	39,000	2625	26,600	2185	19,000	1825	9700	1375
1700	52,000	3020	39,500	2605	27,100	2165	19,500	1805	10,200	1355

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

HP21-511V-513V HEATING PERFORMANCE at 1500 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3040	51,500
60	2940	48,600
55	2845	45,700
50	2750	42,800
47	2690	41,000
45	2625	39,000
40	2455	34,000
35	2290	29,000
30	2235	27,800
25	2185	26,600
20	2130	25,300
17	2100	24,600
15	2055	23,700
10	1940	21,300
5	1825	19,000
0	1715	16,700
-5	1600	14,400
-10	1485	12,000
-15	1375	9700
-20	1260	7400

*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.

HP21-511V-513V COOLING CAPACITY WITH CH16-65V INDOOR COIL UNIT (Low Speed Compressor Operation – Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)											
		75			85			95			105		
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
		Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)		
		75	80	85	75	80	85	75	80	85	75	80	85
63	1150	26,200	1130	.89	1.00	1.00	1.00	25,100	1300	.92	1.00	1.00	1.00
	1250	26,900	1120	.92	1.00	1.00	1.00	25,700	1290	.94	1.00	1.00	1.00
67	1150	27,300	1110	.67	.86	1.00	1.00	25,900	1290	.69	.89	1.00	1.00
	1250	27,700	1100	.69	.89	1.00	1.00	26,300	1290	.71	.91	1.00	1.00
71	1150	29,000	1080	.47	.65	.84	1.00	27,700	1280	.48	.67	.86	1.00
	1250	29,300	1080	.48	.67	.86	1.00	28,000	1280	.49	.69	.89	1.00

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

HP21-511V-513V COOLING CAPACITY WITH CH16-65V INDOOR COIL UNIT (High Speed Compressor Operation – High Indoor Unit Air Volume)

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
		Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)			Dry Bulb (°F)		
		75	80	85	75	80	85	75	80	85	75	80	85
63	1500	41,600	2830	.78	.94	1.00	1.00	39,200	3090	.81	.96	1.00	1.00
	1700	43,000	2870	.81	.97	1.00	1.00	40,700	3140	.84	.99	1.00	1.00
67	1500	45,300	2920	.60	.75	.89	1.00	43,000	3220	.61	.77	.91	1.00
	1700	46,700	2950	.62	.78	.93	1.00	44,500	3260	.63	.80	.95	1.00
71	1500	49,200	3010	.44	.58	.71	1.00	47,200	3380	.45	.59	.73	1.00
	1700	50,700	3070	.45	.60	.74	1.00	48,900	3460	.45	.61	.75	1.00

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

HP21-511V-513V HEATING CAPACITY WITH CH16-65V INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	32,400	1255	30,100	1245	27,800	1235	25,600	1225
1700	34,000	1245	31,700	1235	29,400	1225	27,200	1215

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

HP21-511V-513V HEATING CAPACITY WITH CH16-65V INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
1500	51,000	3090	38,500	2670	25,500	2225	18,100	1860	9200	1400
1700	51,500	3070	39,000	2650	26,000	2205	18,600	1840	9700	1380

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

HP21-511V-513V HEATING PERFORMANCE at 1500 cfm Indoor Coil Air Volume (CH16-65V)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3090	51,000
60	2990	48,100
55	2895	45,200
50	2800	42,300
47	2740	40,500
45	2670	38,500
40	2500	33,300
35	2330	28,200
30	2275	26,900
25	2225	25,500
20	2170	24,200
17	2140	23,400
15	2095	22,500
10	1980	20,300
5	1860	18,100
0	1745	15,900
-5	1630	13,700
-10	1515	11,400
-15	1400	9200
-20	1285	7000

*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.

HP21-651V-653V COOLING CAPACITY WITH C16-65 OR CR16-65 INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)														
		75			85			95			105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
				Dry Bulb (°F)												
				75 80 85												
63	1600	34,000	1930	.87	1.00	1.00	.90	1.00	1.00	.94	1.00	1.00	.97	1.00	1.00	1.00
	1750	35,000	1920	.90	1.00	1.00	.93	1.00	1.00	.96	1.00	1.00	.99	1.00	1.00	1.00
67	1600	35,800	1920	.66	.84	.99	.68	.87	1.00	.70	.91	1.00	.73	.94	1.00	1.00
	1750	36,400	1920	.68	.87	1.00	.70	.90	1.00	.72	.94	1.00	.75	.97	1.00	1.00
71	1600	38,300	1900	.47	.65	.81	.48	.66	.84	.49	.69	.87	.50	.71	.91	.91
	1750	38,900	1900	.48	.66	.84	.49	.68	.87	.50	.71	.91	.51	.74	.95	.95

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

HP21-651V-653V COOLING CAPACITY WITH C16-65 OR CR16-65 INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)	Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)
				Dry Bulb (°F)												
				75 80 85												
63	2000	54,000	4670	.77	.91	1.00	.79	.94	1.00	.81	.96	1.00	.83	.99	1.00	1.00
	2250	55,400	4710	.79	.95	1.00	.81	.97	1.00	.84	.99	1.00	.86	1.00	1.00	1.00
67	2000	57,800	4790	.60	.74	.87	.61	.76	.90	.62	.78	.92	.63	.80	.95	.95
	2250	59,300	4830	.61	.76	.91	.63	.78	.93	.64	.81	.96	.65	.83	.98	.98
71	2000	61,500	4890	.44	.58	.71	.44	.59	.73	.45	.60	.75	.46	.62	.77	.77
	2250	63,100	4940	.45	.60	.74	.45	.61	.75	.46	.62	.78	.46	.64	.80	.80

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

HP21-651V-653V HEATING CAPACITY WITH C16-65 OR CR16-65 INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
2000	43,100	2175	40,400	2135	37,700	2095	35,000	2055
2250	46,600	2005	43,900	1965	41,200	1925	38,500	1885

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

HP21-651V-653V HEATING CAPACITY WITH C16-65 OR CR16-65 INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
2000	68,500	5070	51,900	4235	34,700	3380	24,300	2750	12,400	2065
2250	70,000	4950	53,400	4115	36,200	3260	25,800	2630	13,900	1945

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

HP21-651V-653V HEATING PERFORMANCE at 2000 cfm Indoor Coil Air Volume (C16-65 or CR16-65)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5070	68,500
60	4870	64,600
55	4670	60,700
50	4470	56,800
47	4350	54,500
45	4235	51,900
40	3945	45,300
35	3660	38,800
30	3520	36,700
25	3380	34,700
20	3245	32,600
17	3160	31,400
15	3090	30,200
10	2920	27,200
5	2750	24,300
0	2580	21,300
-5	2410	18,300
-10	2235	15,400
-15	2065	12,400
-20	1895	9400

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

— 6hh —

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.

HP21-651V-653V COOLING CAPACITY WITH CH16-65V INDOOR COIL UNIT (Low Speed Compressor Operation — Low Indoor Unit Air Volume)

Enter. Wet Bulb (°F)	Total Air Vol. (cfm)	Outdoor Air Temperature Entering Outdoor Coil (°F)																							
		75						85						95						105					
		Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1650	35,700	1920	.89	1.00	1.00	34,000	2150	.92	1.00	1.00	32,300	2390	.95	1.00	1.00	30,400	2640	.98	1.00	1.00				
	1800	36,600	1910	.92	1.00	1.00	34,900	2150	.95	1.00	1.00	33,000	2390	.98	1.00	1.00	31,100	2650	1.00	1.00	1.00				
67	1650	37,400	1910	.67	.86	1.00	35,100	2150	.69	.89	1.00	33,000	2390	.71	.92	1.00	30,800	2640	.74	.96	1.00				
	1800	37,800	1910	.69	.89	1.00	35,700	2140	.71	.92	1.00	33,500	2390	.73	.95	1.00	31,200	2650	.76	.99	1.00				
71	1650	40,000	1890	.47	.65	.83	37,800	2140	.48	.67	.86	35,600	2400	.49	.69	.89	33,100	2670	.50	.72	.93				
	1800	40,500	1890	.48	.67	.86	38,300	2140	.49	.70	.89	35,900	2410	.50	.72	.93	33,500	2670	.51	.75	.97				

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

HP21-651V-653V COOLING CAPACITY WITH CH16-65V INDOOR COIL UNIT (High Speed Compressor Operation — High Indoor Unit Air Volume)

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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	2000	56,300	4740	.76	.91	1.00	53,400	5110	.78	.94	1.00	50,500	5470	.81	.97	1.00	47,600	5830	.83	.99	1.00				
	2250	57,800	4790	.79	.95	1.00	54,900	5160	.81	.97	1.00	51,900	5540	.84	.99	1.00	49,300	5930	.86	1.00	1.00				
67	2000	60,600	4870	.60	.74	.87	57,700	5260	.61	.75	.90	54,600	5660	.62	.77	.92	51,600	6060	.63	.80	.95				
	2250	62,100	4910	.61	.76	.91	59,100	5320	.62	.78	.94	56,000	5720	.64	.80	.96	52,900	6130	.65	.83	.99				
71	2000	64,700	4980	.44	.58	.71	61,700	5410	.45	.59	.72	58,600	5860	.45	.60	.74	55,500	6310	.45	.61	.77				
	2250	66,400	5030	.45	.59	.73	63,300	5470	.45	.61	.75	60,100	5920	.46	.62	.77	56,900	6390	.46	.63	.80				

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

HP21-651V-653V HEATING CAPACITY WITH CH16-65V INDOOR COIL UNIT (Low Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)							
	65		60		55		50	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
2000	44,200	2015	41,300	1990	38,400	1960	35,500	1935
2250	45,700	2285	42,800	2260	39,900	2230	37,000	2205

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

HP21-651V-653V HEATING CAPACITY WITH CH16-65V INDOOR COIL UNIT (High Speed Compressor Operation)

Indoor Coil Air Volume (cfm) 70°F db	Air Temperature Entering Outdoor Coil (°F)									
	65		45		25		5		-15	
	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input	Total Htg. Cap. (Btuh)	Comp. Motor Watts Input
2000	69,000	5200	51,900	4340	34,200	3465	23,700	2820	12,100	2120
2250	69,500	5200	52,400	4340	34,700	3465	24,200	2820	12,600	2120

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

HP21-651V-653V HEATING PERFORMANCE at 2000 cfm Indoor Coil Air Volume (CH16-65V)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	5200	69,000
60	4995	65,000
55	4790	60,900
50	4585	56,900
47	4460	54,500
45	4340	51,900
40	4045	45,200
35	3750	38,600
30	3610	36,400
25	3465	34,200
20	3325	31,900
17	3240	30,600
15	3170	29,400
10	2995	26,500
5	2820	23,700
0	2645	20,800
5	2470	17,900
10	2295	15,000
-15	2120	12,100
-20	1945	9200

*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.

HP22-211 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	700	19,700	1230	.78	.95	1.00	18,900	1360	.80	.97	1.00	18,200	1530	.82	.99	1.00	17,400	1740	.84	1.00	1.00				
	775	20,100	1230	.81	.98	1.00	19,400	1360	.83	1.00	1.00	18,600	1530	.85	1.00	1.00	17,900	1750	.88	1.00	1.00				
67	700	20,900	1230	.61	.76	.91	20,100	1370	.62	.77	.93	19,300	1540	.63	.79	.96	18,400	1750	.64	.81	.98				
	775	21,300	1230	.62	.79	.95	20,500	1370	.63	.80	.97	19,600	1540	.64	.82	.99	18,700	1760	.66	.85	1.00				
71	700	22,100	1240	.45	.59	.73	21,300	1380	.45	.60	.75	20,400	1550	.45	.61	.77	19,500	1770	.46	.62	.79				
	775	22,500	1240	.45	.61	.76	21,600	1380	.46	.62	.78	20,800	1550	.46	.63	.80	19,900	1770	.47	.65	.82				

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

HP22-211 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	700	20,000	1230	.79	.96	1.00	19,300	1360	.81	.98	1.00	18,500	1530	.82	.99	1.00	17,600	1740	.85	1.00	1.00				
	775	20,500	1230	.82	.99	1.00	19,700	1370	.84	1.00	1.00	18,900	1540	.86	1.00	1.00	18,200	1750	.88	1.00	1.00				
67	700	21,300	1230	.61	.76	.92	20,400	1370	.62	.78	.94	19,600	1540	.63	.80	.96	18,600	1760	.64	.82	.99				
	775	21,600	1240	.63	.79	.96	20,800	1370	.64	.81	.98	19,800	1540	.65	.83	1.00	18,900	1760	.66	.86	1.00				
71	700	22,500	1240	.45	.59	.74	21,700	1380	.45	.60	.75	20,800	1550	.45	.61	.77	19,900	1770	.46	.63	.79				
	775	22,900	1240	.45	.61	.77	22,100	1380	.46	.62	.79	21,200	1560	.46	.63	.81	20,200	1780	.47	.65	.83				

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

HP22-211 HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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	775	700	775	700	775	700	775	700	775
	24,100	1440	18,700	1320	13,300	1200	9000	1010	4600	760
	24,300	1415	18,900	1295	13,400	1175	9200	985	4800	735

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

HP22-211 HEATING CAPACITY WITH CH16-41FF 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	775	700	775	700	775	700	775	700	775
	24,300	1400	18,900	1280	13,300	1160	9100	975	4600	735
	24,500	1375	19,100	1255	13,500	1135	9300	950	4800	710

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

HP22-211 HEATING PERFORMANCE

at 700 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1440	24,100
60	1410	22,800
55	1385	21,500
50	1355	20,200
47	1335	19,400
45	1320	18,700
40	1285	17,000
35	1250	15,200
30	1225	14,200
25	1200	13,300
20	1180	12,300
17	1165	11,700
15	1140	11,300
10	1075	10,100
5	1010	9000
0	950	7900
-5	885	6800
-10	825	5700
-15	760	4600
-20	700	3500

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

HP22-211 HEATING PERFORMANCE

at 700 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temp. (Degree F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1400	24,300
60	1370	23,000
55	1340	21,700
50	1315	20,400
47	1295	19,600
45	1280	18,900
40	1245	17,100
35	1210	15,300
30	1185	14,300
25	1160	13,300
20	1135	12,300
17	1125	11,700
15	1100	11,300
10	1040	10,200
5	975	9100
0	915	8000
-5	855	6900
-10	795	5700
-15	735	4600
-20	675	3500

*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.

HP22-261 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	900	24,600	1480	.81	.96	1.00	23,700	1670	.82	.98	1.00	22,700	1860	.84	1.00	1.00	21,800	2050	.86	1.00	1.00				
	1000	25,200	1490	.83	.99	1.00	24,200	1670	.85	1.00	1.00	23,300	1870	.87	1.00	1.00	22,400	2060	.90	1.00	1.00				
67	900	26,100	1500	.62	.78	.93	25,100	1680	.63	.80	.95	24,000	1870	.64	.81	.97	22,900	2070	.66	.84	.99				
	1000	26,600	1500	.64	.81	.97	25,500	1690	.65	.83	.98	24,400	1880	.66	.85	1.00	23,200	2080	.68	.87	1.00				
71	900	27,700	1510	.46	.61	.75	26,600	1700	.46	.62	.77	25,500	1900	.46	.63	.79	24,400	2100	.47	.64	.81				
	1000	28,200	1520	.46	.63	.78	27,100	1710	.47	.64	.80	26,000	1900	.47	.65	.82	24,800	2110	.48	.67	.84				

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

HP22-261 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	900	25,100	1490	.81	.97	1.00	24,100	1670	.83	.99	1.00	23,100	1860	.85	1.00	1.00	22,200	2060	.87	1.00	1.00
	1000	25,700	1490	.84	1.00	1.00	24,700	1680	.86	1.00	1.00	23,800	1870	.88	1.00	1.00	22,800	2070	.91	1.00	1.00
67	900	26,600	1500	.62	.79	.94	25,500	1690	.63	.80	.96	24,400	1880	.65	.82	.98	23,200	2080	.66	.85	1.00
	1000	27,100	1510	.64	.82	.97	26,000	1690	.65	.84	.99	24,800	1890	.67	.86	1.00	23,600	2080	.68	.88	1.00
71	900	28,300	1520	.46	.61	.76	27,200	1710	.46	.62	.78	26,100	1910	.46	.63	.80	24,900	2110	.47	.65	.82
	1000	28,800	1520	.46	.63	.79	27,700	1710	.47	.64	.81	26,500	1910	.47	.66	.83	25,300	2120	.48	.67	.86

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

HP22-261 HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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
900	29,700	1775	23,000	1610	16,000	1435	11,400	1225	5800	920
1000	30,000	1735	23,300	1570	16,300	1395	11,700	1180	6100	880

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

HP22-261 HEATING CAPACITY WITH CH16-41FF 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
900	29,900	1700	23,200	1550	16,100	1390	11,500	1190	5900	895
1000	30,200	1660	23,500	1505	16,400	1350	11,800	1145	6200	850

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

HP22-261 HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1775	29,700
60	1735	28,100
55	1700	26,600
50	1660	25,000
47	1635	24,100
45	1610	23,000
40	1540	20,300
35	1475	17,600
30	1455	16,800
25	1435	16,000
20	1415	15,300
17	1405	14,800
15	1375	14,200
10	1300	12,800
5	1225	11,400
0	1145	10,000
-5	1070	8600
-10	995	7200
-15	920	5800
-20	845	4400

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

HP22-261 HEATING PERFORMANCE

at 900 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	1700	29,900
60	1665	28,300
55	1630	26,800
50	1595	25,200
47	1575	24,300
45	1550	23,200
40	1485	20,500
35	1425	17,700
30	1405	16,900
25	1390	16,100
20	1375	15,400
17	1365	14,900
15	1335	14,300
10	1260	12,900
5	1190	11,500
0	1115	10,100
-5	1040	8700
-10	965	7300
-15	895	5900
-20	820	4500

6kk - *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.

HP22-311 COOLING CAPACITY WITH C16-41FF OR CR16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85	75	80	85	
63	1000	30,000	1860	.77	.92	1.00	28,900	2070	.78	.93	1.00	27,800	2340	.79	.95	1.00	26,600	2670	.81	.97	1.00				
	1100	30,600	1860	.79	.94	1.00	29,500	2080	.80	.96	1.00	28,300	2340	.82	.98	1.00	27,100	2670	.84	.99	1.00				
67	1000	31,800	1870	.60	.74	.88	30,700	2080	.61	.75	.90	29,500	2340	.62	.77	.92	28,300	2680	.63	.79	.94				
	1100	32,400	1870	.61	.76	.91	31,300	2080	.62	.78	.92	30,000	2350	.63	.79	.94	28,700	2680	.64	.81	.97				
71	1000	33,600	1870	.45	.58	.71	32,500	2080	.45	.59	.73	31,300	2350	.45	.60	.74	29,900	2690	.46	.61	.76				
	1100	34,200	1870	.45	.60	.74	33,000	2090	.46	.61	.75	31,800	2350	.46	.62	.77	30,400	2690	.46	.63	.79				

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

HP22-311 COOLING CAPACITY WITH C14-26FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1000	30,200	1860	.79	.94	1.00	29,100	2080	.80	.96	1.00	28,000	2340	.82	.98	1.00	26,800	2670	.84	.99	1.00				
	1100	30,900	1870	.81	.97	1.00	29,800	2080	.83	.99	1.00	28,600	2340	.85	1.00	1.00	27,500	2670	.87	1.00	1.00				
67	1000	32,100	1870	.61	.76	.91	30,900	2080	.62	.78	.93	29,700	2340	.63	.79	.95	28,400	2680	.64	.81	.97				
	1100	32,600	1870	.63	.79	.94	31,400	2080	.64	.80	.96	30,200	2350	.65	.82	.98	28,800	2680	.66	.84	.99				
71	1000	33,900	1870	.45	.60	.74	32,700	2080	.45	.61	.75	31,400	2350	.46	.62	.77	30,000	2690	.46	.63	.79				
	1100	34,400	1870	.45	.61	.76	33,200	2090	.46	.62	.78	31,900	2350	.47	.63	.80	30,500	2690	.47	.65	.82				

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

HP22-311 HEATING CAPACITY WITH C16-41FF OR CR16-41FF 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	37,600	2480	29,800	2200	21,800	1910	15,100	1610	7700
1100	37,900	2430	30,100	2150	22,100	1865	15,400	1560	8000	1160

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

HP22-311 HEATING CAPACITY WITH C14-26FF 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	37,800	2405	29,900	2145	21,800	1880	15,100	1585	7700	1190
1100	38,100	2360	30,200	2100	22,100	1835	15,400	1540	8000	1150

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

HP22-311 HEATING PERFORMANCE

at 1000 cfm Indoor Coil Air Volume (C16-41FF or CR16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2480	37,600
60	2415	35,700
55	2345	33,800
50	2280	31,900
47	2240	30,800
45	2200	29,800
40	2095	27,200
35	1995	24,600
30	1955	23,200
25	1910	21,800
20	1870	20,400
17	1850	19,500
15	1810	18,800
10	1710	16,900
5	1610	15,100
0	1510	13,200
-5	1410	11,400
-10	1310	9500
-15	1210	7700
-20	1110	5900

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

HP22-311 HEATING PERFORMANCE

at 1000 cfm Indoor Coil Air Volume (C14-26FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2405	37,800
60	2340	35,900
55	2280	34,000
50	2220	32,100
47	2185	31,000
45	2145	29,900
40	2050	27,300
35	1950	24,600
30	1915	23,200
25	1880	21,800
20	1845	20,400
17	1825	19,500
15	1785	18,800
10	1685	16,900
5	1585	15,100
0	1485	13,200
-5	1390	11,400
-10	1290	9500
-15	1190	7700
-20	1095	5900

— 6LL — *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.

HP22-311 COOLING CAPACITY WITH C16-46FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1000	30,300	1860	.77	.92	1.00	29,200	2080	.78	.93	1.00	28,100	2340	.80	.95	1.00	26,800	2670	.81	.97	1.00				
	1100	30,900	1870	.79	.94	1.00	29,800	2080	.80	.96	1.00	28,600	2340	.82	.98	1.00	27,400	2670	.84	.99	1.00				
67	1000	32,100	1870	.60	.74	.88	30,900	2080	.61	.76	.90	29,800	2350	.62	.77	.92	28,500	2680	.63	.79	.94				
	1100	32,600	1870	.61	.76	.91	31,500	2080	.62	.78	.92	30,300	2350	.63	.79	.94	29,000	2680	.64	.81	.97				
71	1000	33,900	1870	.45	.58	.72	32,700	2080	.45	.59	.73	31,500	2350	.45	.60	.74	30,200	2690	.46	.61	.76				
	1100	34,400	1870	.45	.60	.74	33,300	2090	.46	.61	.75	32,000	2350	.46	.62	.77	30,700	2690	.47	.63	.79				

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

HP22-311 COOLING CAPACITY WITH CH16-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1000	30,700	1870	.77	.92	1.00	29,600	2080	.79	.94	1.00	28,300	2340	.80	.96	1.00	27,100	2670	.82	.98	1.00
	1100	31,400	1870	.79	.95	1.00	30,100	2080	.81	.97	1.00	28,900	2340	.83	.98	1.00	27,700	2680	.85	1.00	1.00
67	1000	32,600	1870	.60	.75	.88	31,400	2080	.61	.76	.90	30,100	2350	.62	.77	.92	28,800	2680	.63	.79	.95
	1100	33,200	1870	.61	.77	.91	31,900	2080	.62	.78	.93	30,600	2350	.63	.80	.95	29,200	2690	.65	.82	.98
71	1000	34,600	1870	.45	.58	.72	33,400	2090	.45	.59	.73	32,100	2360	.45	.60	.75	30,600	2690	.46	.61	.77
	1100	35,200	1870	.45	.60	.74	33,900	2090	.46	.61	.76	32,600	2360	.46	.62	.78	31,100	2690	.47	.63	.80

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

HP22-311 HEATING CAPACITY WITH C16-46FF 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	37,600	2475	29,800	2185	21,800	1900	15,100	1600	7700	1200
1100	38,000	2430	30,200	2140	22,200	1855	15,500	1555	8100	1155

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

HP22-311 HEATING CAPACITY WITH CH16-41FF 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	39,500	2405	29,800	2105	21,400	1840	15,200	1570	7700	1180
1100	39,900	2365	30,200	2065	21,800	1800	15,600	1525	8100	1135

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

HP22-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (C16-46FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2475	37,600
60	2405	35,700
55	2335	33,800
50	2265	31,900
47	2225	30,800
45	2185	29,800
40	2080	27,200
35	1980	24,600
30	1940	23,200
25	1900	21,800
20	1860	20,400
17	1840	19,500
15	1800	18,800
10	1700	16,900
5	1600	15,100
0	1500	13,200
-5	1400	11,400
-10	1300	9500
-15	1200	7700
-20	1105	5900

HP22-311 HEATING PERFORMANCE at 1000 cfm Indoor Coil Air Volume (CH16-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2405	39,500
60	2330	37,100
55	2260	34,800
50	2190	32,400
47	2150	31,000
45	2105	29,800
40	1995	26,700
35	1890	23,600
30	1865	22,500
25	1840	21,400
20	1815	20,300
17	1800	19,600
15	1765	18,900
10	1665	17,000
5	1570	15,200
0	1470	13,300
-5	1375	11,400
-10	1275	9600
-15	1180	7700
-20	1080	5900

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

— 6mm —

*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.

HP22-411 COOLING CAPACITY WITH C16-51FF OR CR16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1300	35,500	2400	.80	.95	1.00	34,100	2680	.81	.97	1.00	32,900	3030	.83	.98	1.00	31,600	3460	.85	1.00	1.00
	1450	36,200	2400	.83	.98	1.00	35,100	2680	.84	.99	1.00	33,700	3030	.86	1.00	1.00	32,500	3470	.88	1.00	1.00
67	1300	37,400	2410	.62	.77	.92	36,100	2690	.63	.79	.93	34,800	3040	.64	.80	.95	33,400	3480	.65	.82	.97
	1450	38,100	2420	.64	.80	.95	36,800	2700	.65	.82	.97	35,400	3050	.66	.84	.98	33,900	3490	.67	.86	1.00
71	1300	39,500	2430	.45	.60	.75	38,300	2710	.46	.61	.76	36,900	3070	.46	.62	.78	35,500	3520	.47	.63	.79
	1450	40,200	2430	.46	.62	.78	39,000	2720	.47	.63	.79	37,600	3080	.47	.64	.81	36,200	3530	.48	.65	.83

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

HP22-411 COOLING CAPACITY WITH C14-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)		
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)		
				75	80	85			75	80	85			75	80	85			75	80	85
63	1150	36,000	2400	.79	.94	1.00	34,700	2680	.80	.96	1.00	33,300	3030	.82	.98	1.00	32,000	3470	.84	.99	1.00
	1300	36,900	2410	.82	.98	1.00	35,600	2690	.84	.99	1.00	34,400	3040	.85	1.00	1.00	33,200	3480	.87	1.00	1.00
67	1150	38,100	2420	.61	.76	.91	36,700	2700	.62	.77	.92	35,300	3050	.63	.79	.94	33,800	3490	.64	.81	.96
	1300	38,900	2420	.63	.80	.95	37,500	2700	.64	.81	.97	36,100	3060	.65	.83	.98	34,600	3500	.66	.85	1.00
71	1150	40,500	2430	.45	.59	.73	39,100	2720	.45	.60	.75	37,700	3080	.45	.61	.76	36,200	3530	.46	.62	.78
	1300	41,400	2440	.46	.62	.77	40,000	2730	.46	.62	.79	38,500	3090	.46	.64	.80	37,000	3550	.47	.65	.82

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

HP22-411 HEATING CAPACITY WITH C16-51FF OR CR16-51FF 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
1300	44,500	2950	34,900	2645	25,400	2335	17,600	1970	9000	1480
1450	44,900	2890	35,300	2590	25,800	2275	18,000	1915	9400	1425

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

HP22-411 HEATING CAPACITY WITH C14-41FF 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
1150	44,500	2795	34,900	2535	25,300	2265	17,500	1925	8900	1445
1300	45,200	2795	35,600	2535	26,000	2265	18,200	1925	9600	1445

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

HP22-411 HEATING PERFORMANCE

at 1300 cfm Indoor Coil Air Volume (C16-51FF or CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2950	44,500
60	2875	42,200
55	2805	39,900
50	2735	37,600
47	2695	36,200
45	2645	34,900
40	2530	31,800
35	2420	28,600
30	2375	27,000
25	2335	25,400
20	2290	23,800
17	2265	22,800
15	2215	21,900
10	2095	19,800
5	1970	17,600
0	1850	15,500
-5	1725	13,300
-10	1605	11,200
-15	1480	9000
20	1360	6800

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

HP22-411 HEATING PERFORMANCE

at 1150 cfm Indoor Coil Air Volume (C14-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2795	44,500
60	2735	42,200
55	2675	39,900
50	2615	37,600
47	2575	36,200
45	2535	34,900
40	2435	31,800
35	2330	28,600
30	2300	26,900
25	2265	25,300
20	2230	23,600
17	2215	22,600
15	2165	21,700
10	2045	19,600
5	1925	17,500
0	1805	15,300
-5	1685	13,200
-10	1565	11,100
-15	1445	8900
20	1325	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 section, Page 9.

HP22-411 COOLING CAPACITY WITH CH16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1300	36,600	2410	.81	.97	1.00	35,200	2680	.83	.98	1.00	33,800	3030	.84	1.00	1.00	32,500	3470	.86	1.00	1.00				
	1450	37,400	2410	.84	1.00	1.00	36,100	2690	.86	1.00	1.00	34,900	3040	.88	1.00	1.00	33,700	3490	.90	1.00	1.00				
67	1300	38,700	2420	.62	.79	.94	37,300	2700	.63	.80	.95	35,800	3050	.64	.82	.97	34,300	3500	.66	.84	.99				
	1450	39,400	2420	.64	.82	.98	38,000	2710	.65	.83	.99	36,600	3060	.67	.85	1.00	35,000	3510	.68	.87	1.00				
71	1300	40,900	2430	.46	.61	.76	39,500	2720	.46	.62	.78	38,100	3080	.46	.63	.79	36,600	3540	.47	.64	.81				
	1450	41,700	2440	.47	.63	.79	40,200	2730	.47	.64	.81	38,700	3090	.47	.65	.83	37,200	3550	.48	.67	.84				

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

HP22-461 COOLING CAPACITY WITH C16-51FF OR CR16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1400	41,600	2780	.77	.92	1.00	40,200	3090	.79	.94	1.00	38,600	3480	.80	.96	1.00	36,800	3960	.82	.98	1.00				
	1550	42,600	2790	.80	.95	1.00	40,800	3100	.81	.97	1.00	39,400	3490	.83	.98	1.00	37,700	3980	.85	1.00	1.00				
67	1400	44,000	2810	.60	.75	.89	42,500	3130	.61	.76	.90	40,800	3520	.62	.78	.92	39,100	4010	.63	.79	.94				
	1550	44,900	2820	.62	.77	.92	43,300	3140	.63	.79	.93	41,600	3540	.64	.80	.90	39,800	4030	.65	.82	.97				
71	1400	46,400	2850	.45	.59	.72	44,900	3170	.45	.60	.74	43,200	3570	.46	.61	.75	41,500	4070	.46	.62	.77				
	1550	47,300	2860	.46	.60	.75	45,700	3180	.46	.61	.76	44,000	3590	.46	.62	.78	42,300	4090	.47	.64	.80				

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

HP22-411 HEATING CAPACITY WITH CH16-51FF 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
1300	45,000	2700	35,500	2455	25,700	2200	17,800	1875	9100	1410
1450	45,300	2655	35,800	2415	26,000	2160	18,100	1830	9400	1365

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

HP22-461 HEATING CAPACITY WITH C16-51FF OR CR16-51FF 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
1400	50,200	3540	39,900	3140	29,100	2730	20,700	2275	10,600	1710
1550	50,600	3460	40,300	3060	29,500	2655	21,100	2195	11,000	1630

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

HP22-411 HEATING PERFORMANCE at 1300 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	2700	45,000
60	2645	42,700
55	2585	40,400
50	2530	38,200
47	2495	36,800
45	2455	35,500
40	2360	32,300
35	2260	29,000
30	2230	27,300
25	2200	25,700
20	2175	24,000
17	2155	23,000
15	2110	22,100
10	1990	20,000
5	1875	17,800
0	1760	15,600
-5	1645	13,400
-10	1525	11,300
-15	1410	9100
-20	1295	6900

HP22-461 HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (C16-51FF or CR16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3540	50,200
60	3445	47,800
55	3345	45,400
50	3250	43,000
47	3195	41,500
45	3140	39,900
40	3010	36,000
35	2880	32,000
30	2805	30,600
25	2730	29,100
20	2660	27,700
17	2615	26,800
15	2560	25,800
10	2420	23,300
5	2275	20,700
0	2135	18,200
-5	1995	15,600
-10	1850	13,100
-15	1710	10,600
-20	1570	8000

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

*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.

HP22-461 COOLING CAPACITY WITH C14-41FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85			75	80	85			75	80	85				
63	1200	41,800	2780	.76	.90	1.00	40,200	3090	.77	.92	1.00	38,500	3480	.78	.94	1.00	36,800	3960	.80	.96	1.00				
	1350	42,800	2790	.79	.94	1.00	41,200	3110	.80	.96	1.00	39,600	3500	.82	.98	1.00	38,000	3980	.84	.99	1.00				
67	1200	44,300	2810	.59	.73	.87	42,700	3130	.60	.74	.88	41,000	3530	.61	.76	.90	39,200	4020	.62	.77	.93				
	1350	45,400	2830	.61	.76	.91	43,700	3150	.62	.77	.93	41,900	3540	.63	.79	.95	40,100	4030	.64	.81	.97				
71	1200	47,000	2850	.44	.57	.70	45,400	3180	.44	.58	.72	43,600	3580	.45	.59	.73	41,800	4080	.45	.60	.75				
	1350	48,100	2870	.45	.59	.74	46,400	3200	.45	.60	.75	44,600	3600	.45	.61	.77	42,700	4100	.46	.62	.78				

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

HP22-461 HEATING CAPACITY WITH C14-41FF 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
1200	50,500	3345	39,900	2990	29,100	2625	20,600	2195	10,500	1650
1350	51,000	3300	40,400	2945	29,600	2580	21,100	2150	11,000	1605

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

HP22-461 HEATING PERFORMANCE at 1200 cfm Indoor Coil Air Volume (C14-41FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3345	50,500
60	3260	48,000
55	3175	45,500
50	3090	43,000
47	3035	41,500
45	2990	39,900
40	2870	36,000
35	2755	32,000
30	2690	30,500
25	2625	29,100
20	2560	27,600
17	2525	26,700
15	2470	25,700
10	2330	23,200
5	2195	20,600
0	2060	18,100
-5	1920	15,600
-10	1785	13,100
-15	1650	10,500
-20	1515	8000

*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.

HP22-461 COOLING CAPACITY WITH CH16-51FF 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)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)			Total Cool Cap. (Btuh)	Comp. Motor Watts Input	Sensible To Total Ratio (S/T)						
				Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)					Dry Bulb (°F)						
				75	80	85			75	80	85	75		80	85	75	80		85	75	80	85			
63	1400	42,600	2790	.79	.94	1.00	41,100	3100	.80	.96	1.00	39,400	3490	.82	.98	1.00	37,800	3980	.84	.99	1.00				
	1550	43,600	2800	.81	.97	1.00	41,900	3120	.83	.99	1.00	40,300	3510	.85	1.00	1.00	38,700	4000	.87	1.00	1.00				
67	1400	45,200	2830	.61	.76	.90	43,500	3150	.62	.78	.93	41,700	3540	.63	.79	.95	39,900	4030	.64	.81	.97				
	1550	46,000	2840	.63	.79	.94	44,400	3160	.64	.81	.96	42,400	3560	.65	.82	.98	40,700	4050	.66	.84	1.00				
71	1400	47,900	2870	.45	.60	.74	46,200	3190	.45	.60	.75	44,400	3600	.46	.61	.77	42,600	4100	.46	.63	.79				
	1550	48,800	2880	.46	.61	.77	47,000	3210	.46	.62	.78	45,200	3620	.46	.63	.80	43,200	4120	.47	.65	.82				

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

HP22-461 HEATING CAPACITY WITH CH16-51FF 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
1400	51,100	3215	40,400	2890	29,400	2560	20,900	2150	10,700	1615
1550	51,600	3150	40,900	2830	29,900	2495	21,400	2085	11,200	1555

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

HP22-461 HEATING PERFORMANCE at 1400 cfm Indoor Coil Air Volume (CH16-51FF)

*Outdoor Temperature (°F)	Compressor Motor Watts Input	Total Output (Btuh)
65	3215	51,100
60	3135	48,600
55	3060	46,000
50	2980	43,500
47	2935	42,000
45	2890	40,400
40	2780	36,400
35	2670	32,400
30	2615	30,900
25	2560	29,400
20	2505	27,900
17	2470	27,000
15	2415	26,000
10	2285	23,400
5	2150	20,900
0	2015	18,300
- 5	1880	15,800
- 10	1750	13,200
15	1615	10,700
- 20	1480	8100

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