



ENGINEERING DATA

Expanded Rating Tables

Bulletin No. 210473R  
July 2006

NOTE - This Document is Only Available in Electronic Form!

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section. Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

[CB29M-41]

**COOLING CAPACITY - HP29-036 with**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	33.4	9.8	2740	.73	.87	.98	32.3	9.5	3050	.74	.89	.99	31.1	9.1	3410	.76	.90	1.0	29.8	8.7	3820	.77	.92	1.0
	1200	565	34.5	10.1	2760	.77	.92	1.0	33.3	9.8	3070	.79	.94	1.0	32.0	9.4	3430	.8	.96	1.0	30.8	9.0	3840	.82	.97	1.0
	1400	660	35.4	10.4	2770	.81	.97	1.0	34.2	10.0	3080	.83	.98	1.0	32.9	9.6	3440	.85	.99	1.0	31.7	9.3	3850	.86	1.0	1.0
67°F (19°C)	1000	470	35.6	10.4	2770	.57	.71	.84	34.4	10.1	3080	.58	.72	.86	33.1	9.7	3440	.59	.73	.87	31.7	9.3	3850	.59	.74	.89
	1200	565	36.5	10.7	2780	.6	.75	.89	35.2	10.3	3090	.61	.76	.91	33.8	9.9	3450	.61	.78	.93	32.4	9.5	3860	.62	.80	.95
	1400	660	37.2	10.9	2790	.62	.79	.94	35.9	10.5	3100	.63	.81	.96	34.5	10.1	3460	.64	.82	.97	33.0	9.7	3870	.65	.84	.99
71°F (22°C)	1000	470	38.1	11.2	2800	.43	.55	.68	36.7	10.8	3120	.43	.56	.69	35.4	10.4	3480	.43	.57	.71	33.9	9.9	3890	.43	.58	.72
	1200	565	39.0	11.4	2810	.44	.58	.73	37.6	11.0	3130	.44	.59	.74	36.2	10.6	3490	.44	.60	.76	34.6	10.1	3900	.45	.61	.77
	1400	660	39.6	11.6	2820	.45	.61	.77	38.2	11.2	3140	.45	.62	.79	36.7	10.8	3500	.45	.63	.80	35.2	10.3	3910	.46	.64	.82

**HEATING CAPACITY - HP29-036 with**

[CB29M-41]

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1000	470	46.0	13.5	3480	36.2	10.6	3155	26.0	7.6	2825	18.1	5.3	2450	8.9	2.6	1835
1200	565	46.6	13.7	3350	36.8	10.8	3025	26.6	7.8	2695	18.7	5.5	2320	9.5	2.8	1705
1400	660	47.0	13.8	3255	37.2	10.9	2930	27.0	7.9	2600	19.1	5.6	2225	9.9	2.9	1610

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

[CB29M-41]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3350	46.6	13.7
60	16	3270	44.3	13.0
55	13	3190	41.9	12.3
50	10	3110	39.6	11.6
47	8	3060	38.2	11.2
45	7	3025	36.8	10.8
40	4	2930	33.2	9.7
35	2	2835	29.7	8.7
30	-1	2765	28.1	8.2
25	-4	2695	26.6	7.8
20	-7	2625	25.1	7.4
17	-8	2585	24.2	7.1
15	-9	2550	23.3	6.8
10	-12	2470	20.9	6.1
5	-15	2320	18.7	5.5
0	-18	2165	16.4	4.8
-5	-21	2010	14.1	4.1
-10	-23	1855	11.8	3.5
-15	-26	1705	9.5	2.8
-20	-29	1550	7.3	2.1

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**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-036 with**

**[CB30M-31] [CB30U-31]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	950	450	34.1	10.0	2760	.72	.86	.97	32.9	9.6	3070	.73	.87	.99	31.6	9.3	3420	.74	.89	1.0	30.3	8.9	3830	.76	.90	1.0
	1100	520	35.0	10.3	2770	.75	.90	1.0	33.8	9.9	3080	.76	.91	1.0	32.5	9.5	3440	.78	.93	1.0	31.1	9.1	3850	.79	.95	1.0
	1250	590	35.8	10.5	2780	.78	.94	1.0	34.5	10.1	3100	.8	.95	1.0	33.2	9.7	3460	.81	.97	1.0	31.8	9.3	3860	.83	.99	1.0
67°F (19°C)	950	450	36.5	10.7	2790	.56	.69	.82	35.2	10.3	3110	.57	.70	.83	33.8	9.9	3460	.58	.72	.85	32.3	9.5	3870	.59	.73	.87
	1100	520	37.3	10.9	2800	.58	.73	.86	35.9	10.5	3120	.59	.74	.88	34.5	10.1	3480	.6	.75	.90	33.0	9.7	3880	.61	.77	.92
	1250	590	38.0	11.1	2810	.6	.76	.90	36.6	10.7	3130	.61	.77	.92	35.1	10.3	3480	.62	.79	.94	33.5	9.8	3900	.63	.81	.96
71°F (22°C)	950	450	39.1	11.5	2830	.42	.54	.66	37.7	11.0	3150	.43	.55	.68	36.2	10.6	3510	.43	.56	.69	34.7	10.2	3920	.43	.57	.70
	1100	520	39.9	11.7	2840	.43	.57	.70	38.5	11.3	3160	.43	.57	.71	36.9	10.8	3520	.44	.58	.73	35.3	10.3	3930	.44	.59	.75
	1250	590	40.6	11.9	2850	.44	.59	.73	39.1	11.5	3170	.44	.59	.75	37.5	11.0	3530	.45	.61	.77	35.8	10.5	3940	.45	.62	.78

**COOLING CAPACITY - HP29-036 with**

**[CB29M-46]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
71°F (22°C)	1000	470	34.8	10.2	2760	.73	.87	.98	33.5	9.8	3070	.74	.88	1.0	32.2	9.4	3420	.75	.90	1.0	30.8	9.0	3840	.77	.92	1.0
	1200	565	35.9	10.5	2780	.77	.92	1.0	34.6	10.1	3090	.79	.94	1.0	33.2	9.7	3450	.80	.96	1.0	31.8	9.3	3850	.82	.97	1.0
	1400	660	36.8	10.8	2790	.82	.97	1.0	35.5	10.4	3100	.83	.98	1.0	34.2	10.0	3460	.85	.99	1.0	32.9	9.6	3870	.87	1.0	1.0
67°F (19°C)	1000	470	37.1	10.9	2790	.57	.70	.83	35.8	10.5	3100	.58	.72	.85	34.3	10.1	3460	.58	.73	.87	32.8	9.6	3870	.59	.74	.89
	1200	565	38.1	11.2	2800	.6	.75	.89	36.7	10.8	3120	.60	.76	.91	35.2	10.3	3480	.61	.78	.93	33.6	9.8	3890	.62	.79	.95
	1400	660	38.8	11.4	2820	.62	.79	.94	37.4	11.0	3130	.63	.80	.96	35.9	10.5	3490	.64	.82	.97	34.3	10.1	3900	.65	.84	.99
71°F (22°C)	1000	470	39.7	11.6	2830	.43	.55	.68	38.3	11.2	3140	.43	.56	.69	36.8	10.8	3500	.43	.57	.70	35.2	10.3	3910	.43	.58	.72
	1200	565	40.7	11.9	2840	.43	.58	.72	39.2	11.5	3160	.44	.59	.74	37.6	11.0	3520	.44	.60	.75	36.0	10.6	3930	.44	.61	.77
	1400	660	41.4	12.1	2850	.44	.61	.77	39.9	11.7	3170	.45	.62	.78	38.2	11.2	3530	.45	.63	.80	36.6	10.7	3940	.46	.64	.82

**HEATING CAPACITY - HP29-036 with**

**[CB30M-31] [CB30U-31]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input		
950	450	40.6	11.9	2910	32.6	9.6	2670	24.3	7.1	2425	17.5	5.1	2130	8.7	2.5	1585				
1100	520	41.0	12.0	2800	33.0	9.7	2560	24.7	7.2	2315	17.9	5.2	2020	9.1	2.7	1475				
1250	590	41.4	12.1	2725	33.4	9.8	2485	25.1	7.4	2240	18.3	5.4	1945	9.5	2.8	1400				

**HEATING CAPACITY - HP29-036 with**

**[CB29M-46]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input		
1000	470	40.4	11.8	2.87	32.5	9.5	2.64	24.3	7.1	2.41	17.6	5.2	2.12	8.5	2.5	1.58				
1200	565	41.1	12.0	2.77	33.2	9.7	2.55	25.0	7.3	2.32	18.3	5.4	2.03	9.2	2.7	1.48				
1400	660	41.4	12.1	2.65	33.5	9.8	2.43	25.3	7.4	2.20	18.6	5.5	1.91	9.5	2.8	1.36				

**HEATING PERFORMANCE at 1100 cfm (520 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB30U-31] [CB30M-31]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2800	41.0	12.0
60	16	2740	39.1	11.5
55	13	2680	37.2	10.9
50	10	2620	35.3	10.3
47	8	2585	34.2	10.0
45	7	2560	33.0	9.7
40	4	2490	30.0	8.8
35	2	2415	27.0	7.9
30	-1	2365	25.8	7.6
25	-4	2315	24.7	7.2
20	-7	2265	23.5	6.9
17	-8	2235	22.8	6.7
15	-9	2210	22.0	6.4
10	-12	2155	20.1	5.9
5	-15	2020	17.9	5.2
0	-18	1880	15.7	4.6
-5	-21	1745	13.5	4.0
-10	-23	1610	11.3	3.3
-15	-26	1475	9.1	2.7
-20	-29	1340	6.8	2.0

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB29M-46]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2.77	41.1	12.0
60	16	2.72	39.3	11.5
55	13	2.66	37.4	11.0
50	10	2.61	35.5	10.4
47	8	2.57	34.4	10.1
45	7	2.55	33.2	9.7
40	4	2.48	30.2	8.9
35	2	2.41	27.2	8.0
30	-1	2.36	26.1	7.6
25	-4	2.32	25.0	7.3
20	-7	2.27	23.9	7.0
17	-8	2.24	23.2	6.8
15	-9	2.22	22.5	6.6
10	-12	2.17	20.6	6.0
5	-15	2.03	18.3	5.4
0	-18	1.89	16.0	4.7
-5	-21	1.76	13.8	4.0
-10	-23	1.62	11.5	3.4
-15	-26	1.48	9.2	2.7
-20	-29	1.35	7.0	2.1

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-036 with**

**[CB29M-51]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	35.0	10.3	2780	.73	.87	.99	33.7	9.9	3090	.74	.88	.99	32.4	9.5	3440	.75	.90	1.0	31.0	9.1	3860	.77	.92	1.0
	1200	565	36.2	10.6	2790	.77	.92	1.0	34.8	10.2	3110	.79	.94	1.0	33.5	9.8	3470	.80	.96	1.0	32.1	9.4	3870	.82	.98	1.0
	1400	660	37.1	10.9	2810	.81	.97	1.0	35.8	10.5	3120	.83	.98	1.0	34.5	10.1	3480	.85	.99	1.0	33.1	9.7	3890	.86	1.0	1.0
67°F (19°C)	1000	470	37.4	11.0	2810	.57	.70	.83	36.0	10.6	3130	.57	.71	.85	34.6	10.1	3480	.58	.73	.87	33.1	9.7	3890	.59	.74	.89
	1200	565	38.4	11.3	2830	.59	.75	.89	37.0	10.8	3140	.60	.76	.91	35.5	10.4	3500	.61	.77	.93	33.9	9.9	3920	.62	.79	.95
	1400	660	39.2	11.5	2840	.62	.79	.94	37.7	11.0	3150	.63	.81	.96	36.2	10.6	3510	.64	.82	.97	34.6	10.1	3920	.65	.84	.99
71°F (22°C)	1000	470	40.1	11.8	2850	.43	.55	.68	38.6	11.3	3170	.43	.56	.69	37.1	10.9	3530	.43	.57	.70	35.5	10.4	3940	.43	.57	.72
	1200	565	41.1	12.0	2860	.44	.58	.72	39.6	11.6	3180	.44	.59	.73	37.9	11.1	3540	.44	.60	.75	36.3	10.6	3960	.45	.61	.77
	1400	660	41.8	12.3	2870	.44	.61	.77	40.2	11.8	3190	.45	.62	.78	38.6	11.3	3560	.45	.63	.80	36.9	10.8	3970	.46	.64	.82

**COOLING CAPACITY - HP29-036 with**

**[CB30M-41] [CB30U-41/46]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	34.8	10.2	2780	.73	.86	.98	33.5	9.8	3100	.74	.88	.99	32.2	9.4	3450	.75	.90	1.0	30.8	9.0	3870	.77	.92	1.0
	1200	565	35.9	10.5	2800	.77	.92	1.0	34.6	10.1	3120	.78	.94	1.0	33.2	9.7	3480	.8	.96	1.0	31.8	9.3	3890	.82	.98	1.0
	1400	660	36.9	10.8	2820	.81	.97	1.0	35.6	10.4	3130	.83	.98	1.0	34.3	10.1	3490	.85	.99	1.0	32.9	9.6	3910	.87	1.0	1.0
67°F (19°C)	1000	470	37.2	10.9	2820	.57	.70	.83	35.8	10.5	3130	.58	.71	.85	34.3	10.1	3490	.58	.73	.86	32.8	9.6	3910	.59	.74	.88
	1200	565	38.2	11.2	2830	.59	.75	.89	36.7	10.8	3150	.6	.76	.91	35.2	10.3	3510	.61	.78	.93	33.7	9.9	3930	.62	.79	.94
	1400	660	38.9	11.4	2840	.62	.79	.94	37.4	11.0	3160	.63	.81	.96	35.9	10.5	3520	.64	.82	.98	34.3	10.1	3940	.65	.84	.99
71°F (22°C)	1000	470	39.8	11.7	2860	.43	.55	.68	38.3	11.2	3180	.43	.56	.69	36.8	10.8	3540	.43	.57	.70	35.2	10.3	3950	.43	.58	.72
	1200	565	40.8	12.0	2870	.43	.58	.72	39.3	11.5	3190	.44	.59	.74	37.7	11.0	3550	.44	.60	.75	36.0	10.6	3970	.44	.61	.77
	1400	660	41.5	12.2	2880	.45	.61	.77	40.0	11.7	3200	.45	.62	.78	38.3	11.2	3570	.45	.63	.80	36.6	10.7	3980	.46	.64	.82

**HEATING CAPACITY - HP29-036 with**

**[CB29M-51]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input			
1000	470	41.0	12.0	2905	33.0	9.7	2680	24.6	7.2	2455	17.8	5.2	2165	8.6	2.5	1615				
1200	565	41.8	12.3	2775	33.8	9.9	2550	25.4	7.4	2325	18.6	5.5	2035	9.4	2.8	1485				
1400	660	42.3	12.4	2685	34.3	10.1	2460	25.9	7.6	2235	19.1	5.6	1945	9.9	2.9	1395				

**HEATING CAPACITY - HP29-036 with**

**[CB30M-41] [CB30U-41/46]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input			
1000	470	40.7	11.9	2850	32.7	9.6	2640	24.3	7.1	2430	17.6	5.2	2150	8.6	2.5	1600				
1200	565	41.2	12.1	2730	33.2	9.7	2520	24.8	7.3	2310	18.1	5.3	2030	9.1	2.7	1480				
1400	660	41.7	12.2	2650	33.7	9.9	2440	25.3	7.4	2230	18.6	5.5	1950	9.6	2.8	1400				

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB29M-51]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2775	41.8	12.3
60	16	2720	39.9	11.7
55	13	2665	38.0	11.1
50	10	2610	36.1	10.6
47	8	2580	35.0	10.3
45	7	2550	33.8	9.9
40	4	2485	30.7	9.0
35	2	2415	27.7	8.1
30	-1	2370	26.6	7.8
25	-4	2325	25.4	7.4
20	-7	2280	24.3	7.1
17	-8	2250	23.6	6.9
15	-9	2230	22.8	6.7
10	-12	2175	20.9	6.1
5	-15	2035	18.6	5.5
0	-18	1900	16.3	4.8
-5	-21	1760	14.0	4.1
-10	-23	1625	11.7	3.4
-15	-26	1485	9.4	2.8
-20	-29	1350	7.1	2.1

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB30M-41] [CB30U-41/46]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2730	41.2	12.1
60	16	2680	39.3	11.5
55	13	2630	37.4	11.0
50	10	2580	35.5	10.4
47	8	2545	34.4	10.1
45	7	2520	33.2	9.7
40	4	2460	30.2	8.9
35	2	2395	27.2	8.0
30	-1	2350	26.0	7.6
25	-4	2310	24.8	7.3
20	-7	2265	23.7	6.9
17	-8	2240	23.0	6.7
15	-9	2220	22.2	6.5
10	-12	2170	20.3	5.9
5	-15	2030	18.1	5.3
0	-18	1895	15.9	4.7
-5	-21	1755	13.6	4.0
-10	-23	1620	11.4	3.3
-15	-26	1480	9.1	2.7
-20	-29	1345	6.9	2.0

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-036 with**

**[CB30M-46]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	34.8	10.2	2810	.73	.87	.99	33.5	9.8	3130	.74	.88	.99	32.2	9.4	3490	.75	.90	1.0	30.8	9.0	3900	.77	.92	1.0
	1200	565	36.0	10.6	2830	.77	.92	1.0	34.7	10.2	3150	.79	.94	1.0	33.3	9.8	3510	.8	.96	1.0	31.9	9.3	3920	.82	.97	1.0
	1400	660	37.0	10.8	2840	.81	.97	1.0	35.7	10.5	3160	.83	.98	1.0	34.3	10.1	3520	.85	1.0	1.0	33.0	9.7	3940	.87	1.0	1.0
67°F (19°C)	1000	470	37.2	10.9	2840	.57	.70	.83	35.9	10.5	3160	.57	.71	.85	34.4	10.1	3530	.58	.73	.86	32.9	9.6	3940	.59	.74	.89
	1200	565	38.2	11.2	2860	.59	.75	.89	36.8	10.8	3180	.6	.76	.91	35.3	10.3	3540	.61	.78	.93	33.7	9.9	3960	.62	.80	.95
	1400	660	39.0	11.4	2870	.62	.79	.94	37.5	11.0	3190	.63	.81	.96	36.0	10.6	3560	.64	.82	.98	34.4	10.1	3970	.65	.84	.99
71°F (22°C)	1000	470	39.9	11.7	2880	.43	.55	.67	38.4	11.3	3210	.43	.56	.69	36.9	10.8	3570	.43	.57	.70	35.3	10.3	3980	.43	.58	.72
	1200	565	40.9	12.0	2900	.44	.58	.72	39.4	11.5	3220	.44	.59	.73	37.7	11.0	3590	.44	.60	.75	36.1	10.6	4010	.45	.61	.77
	1400	660	41.6	12.2	2910	.44	.61	.76	40.0	11.7	3230	.45	.62	.78	38.4	11.3	3600	.45	.63	.80	36.7	10.8	4020	.46	.64	.82

**COOLING CAPACITY - HP29-036 with**

**[CB31MV-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1135	535	35.0	10.3	2840	.76	.91	1.0	33.7	9.9	3160	.77	.92	1.0	32.4	9.5	3520	.79	.94	1.0	31.0	9.1	3940	.8	.96	1.0
	1275	600	35.7	10.5	2850	.79	.94	1.0	34.4	10.1	3170	.8	.96	1.0	33.1	9.7	3530	.82	.97	1.0	31.7	9.3	3950	.84	.99	1.0
	1525	720	36.8	10.8	2870	.84	.99	1.0	35.6	10.4	3190	.85	1.0	1.0	34.4	10.1	3550	.87	1.0	1.0	33.0	9.7	3980	.89	1.0	1.0
67°F (19°C)	1135	535	37.2	10.9	2870	.59	.73	.87	35.8	10.5	3190	.59	.75	.89	34.4	10.1	3550	.6	.76	.91	32.9	9.6	3980	.61	.78	.93
	1275	600	37.8	11.1	2880	.6	.76	.91	36.4	10.7	3200	.61	.78	.93	34.9	10.2	3570	.62	.79	.95	33.3	9.8	3990	.63	.81	.97
	1525	720	38.7	11.3	2890	.63	.82	.97	37.2	10.9	3220	.65	.83	.98	35.7	10.5	3580	.66	.85	.99	34.1	10.0	4000	.67	.87	1.0
71°F (22°C)	1135	535	39.8	11.7	2910	.43	.57	.71	38.4	11.3	3230	.43	.58	.72	36.8	10.8	3600	.44	.59	.74	35.2	10.3	4020	.44	.60	.75
	1275	600	40.4	11.8	2920	.44	.59	.74	38.9	11.4	3240	.44	.60	.75	37.3	10.9	3610	.45	.61	.77	35.7	10.5	4040	.45	.62	.79
	1525	720	41.2	12.1	2930	.45	.62	.79	39.6	11.6	3260	.46	.64	.81	38.0	11.1	3630	.46	.65	.83	36.3	10.6	4050	.47	.66	.85

**HEATING CAPACITY - HP29-036 with**

**[CB30M-46]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil														
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input
1000	470	2850	32.7	9.6	2640	24.3	7.1	2430	17.6	5.2	2150	8.6	2.5	1600	
1200	565	2730	33.2	9.7	2520	24.8	7.3	2310	18.1	5.3	2030	9.1	2.7	1480	
1400	660	2650	33.7	9.9	2440	25.3	7.4	2230	18.6	5.5	1950	9.6	2.8	1400	

**HEATING CAPACITY - HP29-036 with**

**[CB31MV-41]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil														
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input
1135	535	2780	32.6	9.6	2560	24.3	7.1	2340	17.5	5.1	2055	8.7	2.5	1520	
1275	600	2710	33.0	9.7	2490	24.7	7.2	2270	17.9	5.2	1985	9.1	2.7	1450	
1400	660	2725	33.5	9.8	2505	25.2	7.4	2285	18.4	5.4	2000	9.6	2.8	1465	

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB30M-46]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2730	41.2	12.1
60	16	2680	39.3	11.5
55	13	2630	37.4	11.0
50	10	2580	35.5	10.4
47	8	2545	34.4	10.1
45	7	2520	33.2	9.7
40	4	2460	30.2	8.9
35	2	2395	27.2	8.0
30	-1	2350	26.0	7.6
25	-4	2310	24.8	7.3
20	-7	2265	23.7	6.9
17	-8	2240	23.0	6.7
15	-9	2220	22.2	6.5
10	-12	2170	20.3	5.9
5	-15	2030	18.1	5.3
0	-18	1895	15.9	4.7
-5	-21	1755	13.6	4.0
-10	-23	1620	11.4	3.3
-15	-26	1480	9.1	2.7
-20	-29	1345	6.9	2.0

**HEATING PERFORMANCE at 1275 cfm (600 L/s) Indoor Coil Air Volume HP29-036 with**

**[CB31MV-41]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2710	41.0	12.0
60	16	2660	39.1	11.5
55	13	2605	37.2	10.9
50	10	2550	35.3	10.3
47	8	2520	34.2	10.0
45	7	2490	33.0	9.7
40	4	2425	30.0	8.8
35	2	2360	27.0	7.9
30	-1	2315	25.8	7.6
25	-4	2270	24.7	7.2
20	-7	2220	23.5	6.9
17	-8	2195	22.8	6.7
15	-9	2170	22.0	6.4
10	-12	2120	20.1	5.9
5	-15	1985	17.9	5.2
0	-18	1850	15.7	4.6
-5	-21	1715	13.5	4.0
-10	-23	1585	11.3	3.3
-15	-26	1450	9.1	2.7
-20	-29	1315	6.8	2.0

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**UP-FLOW INDOOR COILS**

**COOLING CAPACITY - HP29-036 with**

**[C33-36A/B/C]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	700	330	31.3	9.2	2730	.67	.78	.89	30.2	8.9	3040	.68	.79	.90	29.1	8.5	3400	.69	.80	.91	27.8	8.1	3800	.69	.82	.93
	900	425	33.0	9.7	2760	.71	.84	.96	31.8	9.3	3070	.72	.86	.97	30.6	9.0	3420	.73	.87	.98	29.3	8.6	3830	.74	.89	1.0
	1100	520	34.3	10.1	2780	.75	.90	1.0	33.0	9.7	3090	.76	.91	1.0	31.7	9.3	3450	.78	.93	1.0	30.4	8.9	3860	.79	.95	1.0
67°F (19°C)	700	330	33.7	9.9	2770	.54	.64	.74	32.5	9.5	3080	.54	.65	.75	31.3	9.2	3440	.54	.65	.76	30.0	8.8	3840	.55	.66	.78
	900	425	35.4	10.4	2790	.56	.68	.81	34.1	10.0	3110	.56	.69	.82	32.8	9.6	3460	.57	.70	.83	31.3	9.2	3870	.58	.72	.85
	1100	520	36.6	10.7	2810	.58	.72	.86	35.2	10.3	3130	.59	.74	.88	33.8	9.9	3480	.6	.75	.90	32.3	9.5	3890	.61	.77	.92
71°F (22°C)	700	330	36.2	10.6	2800	.42	.51	.61	34.9	10.2	3120	.42	.52	.62	33.6	9.8	3480	.42	.52	.63	32.2	9.4	3890	.42	.53	.64
	900	425	37.9	11.1	2830	.42	.54	.65	36.6	10.7	3150	.42	.54	.66	35.2	10.3	3510	.43	.55	.67	33.6	9.8	3920	.43	.56	.69
	1100	520	39.1	11.5	2850	.43	.57	.70	37.7	11.0	3170	.43	.57	.71	36.2	10.6	3530	.44	.58	.73	34.6	10.1	3940	.44	.59	.74

**COOLING CAPACITY - HP29-036 with**

**[C33-38A/B]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	33.7	9.9	2820	.69	.81	.92	32.5	9.5	3140	.70	.82	.94	31.3	9.2	3510	.71	.84	.95	30.0	8.8	3920	.72	.85	.97
	1000	470	35.2	10.3	2840	.73	.87	.98	33.9	9.9	3160	.74	.88	.99	32.6	9.6	3530	.75	.90	1.0	31.2	9.1	3960	.77	.92	1.0
	1200	565	36.3	10.6	2860	.77	.92	1.0	35.0	10.3	3180	.79	.94	1.0	33.7	9.9	3550	.8	.96	1.0	32.3	9.5	3970	.82	.97	1.0
67°F (19°C)	800	380	36.2	10.6	2860	.55	.66	.77	34.9	10.2	3180	.55	.67	.79	33.5	9.8	3550	.56	.68	.80	32.1	9.4	3970	.56	.69	.82
	1000	470	37.6	11.0	2880	.57	.70	.83	36.2	10.6	3200	.58	.72	.85	34.8	10.2	3570	.58	.73	.87	33.3	9.8	3990	.59	.74	.88
	1200	565	38.6	11.3	2890	.59	.75	.89	37.2	10.9	3220	.6	.76	.91	35.7	10.5	3590	.61	.78	.93	34.1	10.0	4010	.62	.79	.94
71°F (22°C)	800	380	38.8	11.4	2890	.42	.53	.63	37.4	11.0	3220	.42	.53	.64	36.0	10.6	3590	.42	.54	.65	34.5	10.1	4010	.42	.54	.66
	1000	470	40.2	11.8	2910	.43	.55	.68	38.8	11.4	3240	.43	.56	.69	37.3	10.9	3610	.43	.57	.70	35.7	10.5	4040	.43	.57	.72
	1200	565	41.3	12.1	2930	.44	.58	.72	39.7	11.6	3260	.44	.59	.74	38.1	11.2	3630	.44	.60	.75	36.4	10.7	4050	.44	.61	.77

**HEATING CAPACITY - HP29-036 with**

**[C33-36A/B/C]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input			
700	330	39.2	11.5	3445	31.4	9.2	3095	23.4	6.9	2740	16.8	4.9	2355	8.1	2.4	1810				
900	425	40.0	11.7	3185	32.2	9.4	2835	24.2	7.1	2480	17.6	5.2	2095	8.9	2.6	1550				
1100	520	40.6	11.9	3030	32.8	9.6	2680	24.8	7.3	2325	18.2	5.3	1940	9.5	2.8	1395				

**HEATING CAPACITY - HP29-036 with**

**[C33-38A/B]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	cfm	L/s	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input			
800	380	40.5	11.9	3060	32.6	9.6	2840	24.4	7.2	2615	17.7	5.2	2320	8.6	2.5	1745				
1000	470	41.1	12.0	2865	33.2	9.7	2645	25.0	7.3	2420	18.3	5.4	2125	9.2	2.7	1550				
1200	565	41.6	12.2	2740	33.7	9.9	2520	25.5	7.5	2295	18.8	5.5	2000	9.7	2.8	1425				

**HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume HP29-036 [C33-36A/B/C]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3185	40.0	11.7
60	16	3100	38.2	11.2
55	13	3010	36.3	10.6
50	10	2925	34.5	10.1
47	8	2875	33.4	9.8
45	7	2835	32.2	9.4
40	4	2735	29.3	8.6
35	2	2635	26.4	7.7
30	-1	2555	25.3	7.4
25	-4	2480	24.2	7.1
20	-7	2400	23.1	6.8
17	-8	2355	22.4	6.6
15	-9	2320	21.7	6.4
10	-12	2235	19.8	5.8
5	-15	2095	17.6	5.2
0	-18	1960	15.5	4.5
-5	-21	1825	13.3	3.9
-10	-23	1685	11.1	3.3
-15	-26	1550	8.9	2.6
-20	-29	1415	6.7	2.0

**HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume HP29-036 with [C33-38A/B]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2865	41.1	12.0
60	16	2810	39.3	11.5
55	13	2755	37.4	11.0
50	10	2705	35.5	10.4
47	8	2670	34.4	10.1
45	7	2645	33.2	9.7
40	4	2575	30.2	8.9
35	2	2510	27.2	8.0
30	-1	2465	26.1	7.6
25	-4	2420	25.0	7.3
20	-7	2370	23.9	7.0
17	-8	2345	23.2	6.8
15	-9	2325	22.5	6.6
10	-12	2270	20.6	6.0
5	-15	2125	18.3	5.4
0	-18	1980	16.0	4.7
-5	-21	1840	13.8	4.0
-10	-23	1695	11.5	3.4
-15	-26	1550	9.2	2.7
-20	-29	1405	7.0	2.1

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**UP-FLOW INDOOR COILS**

**COOLING CAPACITY - HP29-036 with**

[C33-44C]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb				
				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C		
cfm	L/s	kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				
63°F (17°C)	1000	470	35.1	10.3	2830	.73	.87	.99	33.9	9.9	3140	.74	.88	1.0	32.5	9.5	3510	.76	.90	1.0	31.1	9.1	3920	.77	.92	1.0
	1200	565	36.3	10.6	2840	.78	.93	1.0	35.0	10.3	3170	.79	.94	1.0	33.6	9.8	3530	.80	.96	1.0	32.2	9.4	3940	.82	.98	1.0
	1400	660	37.4	11.0	2860	.82	.97	1.0	36.1	10.6	3180	.84	.99	1.0	34.8	10.2	3540	.85	1.0	1.0	33.4	9.8	3960	.87	1.0	1.0
67°F (19°C)	1000	470	37.5	11.0	2860	.57	.70	.83	36.2	10.6	3180	.58	.72	.85	34.7	10.2	3550	.59	.73	.87	33.2	9.7	3960	.6	.74	.89
	1200	565	38.6	11.3	2880	.6	.75	.89	37.1	10.9	3200	.61	.77	.91	35.6	10.4	3560	.61	.78	.93	34.0	10.0	3980	.62	.80	.95
	1400	660	39.4	11.5	2890	.62	.79	.95	37.9	11.1	3210	.63	.81	.96	36.3	10.6	3580	.64	.83	.98	34.7	10.2	3990	.66	.85	.99
71°F (22°C)	1000	470	40.2	11.8	2900	.43	.55	.68	38.7	11.3	3220	.43	.56	.69	37.2	10.9	3590	.43	.57	.70	35.6	10.4	4010	.43	.58	.72
	1200	565	41.3	12.1	2920	.44	.58	.72	39.7	11.6	3240	.44	.59	.74	38.1	11.2	3610	.44	.60	.76	36.4	10.7	4030	.45	.61	.77
	1400	660	42.0	12.3	2930	.45	.61	.77	40.4	11.8	3250	.45	.62	.79	38.8	11.4	3620	.45	.63	.80	37.0	10.8	4040	.46	.65	.83

**HEATING CAPACITY - HP29-036 with**

[C33-44C]

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
kBtuh	kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	
1000	470	40.6	11.9	2910	32.7	9.6	2690	24.5	7.2	2465	17.8	5.2	2175	8.7	2.5	1620	8.7	2.5	1620	
1200	565	41.1	12.0	2790	33.2	9.7	2570	25.0	7.3	2345	18.3	5.4	2055	9.2	2.7	1500	9.2	2.7	1500	
1400	660	41.6	12.2	2705	33.7	9.9	2485	25.5	7.5	2260	18.8	5.5	1970	9.7	2.8	1415	9.7	2.8	1415	

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

[C33-44C]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2790	41.1	12.0
60	16	2740	39.3	11.5
55	13	2685	37.4	11.0
50	10	2630	35.5	10.4
47	8	2595	34.4	10.1
45	7	2570	33.2	9.7
40	4	2505	30.2	8.9
35	2	2435	27.2	8.0
30	-1	2390	26.1	7.6
25	-4	2345	25.0	7.3
20	-7	2300	23.9	7.0
17	-8	2270	23.2	6.8
15	-9	2250	22.4	6.6
10	-12	2195	20.6	6.0
5	-15	2055	18.3	5.4
0	-18	1920	16.0	4.7
-5	-21	1780	13.8	4.0
-10	-23	1640	11.5	3.4
-15	-26	1500	9.2	2.7
-20	-29	1365	7.0	2.1

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**DOWN-FLOW INDOOR COILS**  
[CR33-24A/B-F] [CR33-36A-F]

**COOLING CAPACITY - HP29-036 with**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	700	330	31.3	9.2	2730	.67	.78	.89	30.2	8.9	3040	.68	.79	.90	29.1	8.5	3400	.69	.80	.91	27.8	8.1	3800	.69	.82	.93
	900	425	33.0	9.7	2760	.71	.84	.96	31.8	9.3	3070	.72	.86	.97	30.6	9.0	3420	.73	.87	.98	29.3	8.6	3830	.74	.89	1.0
	1100	520	34.3	10.1	2780	.75	.90	1.0	33.0	9.7	3090	.76	.91	1.0	31.7	9.3	3450	.78	.93	1.0	30.4	8.9	3860	.79	.95	1.0
67°F (19°C)	700	330	33.7	9.9	2770	.54	.64	.74	32.5	9.5	3080	.54	.65	.75	31.3	9.2	3440	.54	.65	.76	30.0	8.8	3840	.55	.66	.78
	900	425	35.4	10.4	2790	.56	.68	.81	34.1	10.0	3110	.56	.69	.82	32.8	9.6	3460	.57	.70	.83	31.3	9.2	3870	.58	.72	.85
	1100	520	36.6	10.7	2810	.58	.72	.86	35.2	10.3	3130	.59	.74	.88	33.8	9.9	3480	.6	.75	.90	32.3	9.5	3890	.61	.77	.92
71°F (22°C)	700	330	36.2	10.6	2800	.42	.51	.61	34.9	10.2	3120	.42	.52	.62	33.6	9.8	3480	.42	.52	.63	32.2	9.4	3890	.42	.53	.64
	900	425	37.9	11.1	2830	.42	.54	.65	36.6	10.7	3150	.42	.54	.66	35.2	10.3	3510	.43	.55	.67	33.6	9.8	3920	.43	.56	.69
	1100	520	39.1	11.5	2850	.43	.57	.70	37.7	11.0	3170	.43	.57	.71	36.2	10.6	3530	.44	.58	.73	34.6	10.1	3940	.44	.59	.74

**COOLING CAPACITY - HP29-036 with**

[CR33-36B/C-F]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	33.7	9.9	2820	.69	.81	.92	32.5	9.5	3140	.7	.82	.94	31.3	9.2	3510	.71	.84	.95	30.0	8.8	3920	.72	.85	.97
	1000	470	35.2	10.3	2840	.73	.87	.98	33.9	9.9	3160	.74	.88	.99	32.6	9.6	3530	.75	.90	1.0	31.2	9.1	3960	.77	.92	1.0
	1200	565	36.3	10.6	2860	.77	.92	1.0	35.0	10.3	3180	.79	.94	1.0	33.7	9.9	3550	.8	.96	1.0	32.3	9.5	3970	.82	.97	1.0
67°F (19°C)	800	380	36.2	10.6	2860	.55	.66	.77	34.9	10.2	3180	.55	.67	.79	33.5	9.8	3550	.56	.68	.80	32.1	9.4	3970	.56	.69	.82
	1000	470	37.6	11.0	2880	.57	.70	.83	36.2	10.6	3200	.58	.72	.85	34.8	10.2	3570	.58	.73	.87	33.3	9.8	3990	.59	.74	.88
	1200	565	38.6	11.3	2890	.59	.75	.89	37.2	10.9	3220	.6	.76	.91	35.7	10.5	3590	.61	.78	.93	34.1	10.0	4010	.62	.79	.94
71°F (22°C)	800	380	38.8	11.4	2890	.42	.53	.63	37.4	11.0	3220	.42	.53	.64	36.0	10.6	3590	.42	.54	.65	34.5	10.1	4010	.42	.54	.66
	1000	470	40.2	11.8	2910	.43	.55	.68	38.8	11.4	3240	.43	.56	.69	37.3	10.9	3610	.43	.57	.70	35.7	10.5	4040	.43	.57	.72
	1200	565	41.3	12.1	2930	.44	.58	.72	39.7	11.6	3260	.44	.59	.74	38.1	11.2	3630	.44	.60	.75	36.4	10.7	4050	.44	.61	.77

**HEATING CAPACITY - HP29-036 with**

[CR33-24A/B-F] [CR33-36A-F]

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
			Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW
700	330	39.2	11.5			3445			31.4			9.2			3095		
900	425	40.0	11.7	3185	32.2	9.4	2835	24.2	7.1	2480	17.6	5.2	2095	8.9	2.6	1550	
1100	520	40.6	11.9	3030	32.8	9.6	2680	24.8	7.3	2325	18.2	5.3	1940	9.5	2.8	1395	

**HEATING CAPACITY - HP29-036 with**

[CR33-36B/C-F]

Indoor Coil Air Volume 70°F db (21°C db)	Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
			Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW
800	380	40.5	11.9			3060			32.6			9.6			2840		
1000	470	41.1	12.0	2865	33.2	9.7	2645	25.0	7.3	2420	18.3	5.4	2125	9.2	2.7	1550	
1200	565	41.6	12.2	2740	33.7	9.9	2520	25.5	7.5	2295	18.8	5.5	2000	9.7	2.8	1425	

**HEATING PERFORMANCE at 900 cfm (425 L/s) Indoor Coil Air Volume HP29-036**

[CR33-36A-F]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3185	40.0	11.7
60	16	3100	38.2	11.2
55	13	3010	36.3	10.6
50	10	2925	34.5	10.1
47	8	2875	33.4	9.8
45	7	2835	32.2	9.4
40	4	2735	29.3	8.6
35	2	2635	26.4	7.7
30	-1	2555	25.3	7.4
25	-4	2480	24.2	7.1
20	-7	2400	23.1	6.8
17	-8	2355	22.4	6.6
15	-9	2320	21.7	6.4
10	-12	2235	19.8	5.8
5	-15	2095	17.6	5.2
0	-18	1960	15.5	4.5
-5	-21	1825	13.3	3.9
-10	-23	1685	11.1	3.3
-15	-26	1550	8.9	2.6
-20	-29	1415	6.7	2.0

**HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume HP29-036 with**

[CR33-36B/C-F]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2865	41.1	12.0
60	16	2810	39.3	11.5
55	13	2755	37.4	11.0
50	10	2705	35.5	10.4
47	8	2670	34.4	10.1
45	7	2645	33.2	9.7
40	4	2575	30.2	8.9
35	2	2510	27.2	8.0
30	-1	2465	26.1	7.6
25	-4	2420	25.0	7.3
20	-7	2370	23.9	7.0
17	-8	2345	23.2	6.8
15	-9	2325	22.5	6.6
10	-12	2270	20.6	6.0
5	-15	2125	18.3	5.4
0	-18	1980	16.0	4.7
-5	-21	1840	13.8	4.0
-10	-23	1695	11.5	3.4
-15	-26	1550	9.2	2.7
-20	-29	1405	7.0	2.1

**RATINGS**

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**DOWN-FLOW INDOOR COILS**  
**[CR33-48B/C-F]**

**COOLING CAPACITY - HP29-036 with**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	35.1	10.3	2830	.73	.87	.99	33.9	9.9	3140	.74	.88	1.0	32.5	9.5	3510	.76	.90	1.0	31.1	9.1	3920	.77	.92	1.0
	1200	565	36.3	10.6	2840	.78	.93	1.0	35.0	10.3	3170	.79	.94	1.0	33.6	9.8	3530	.8	.96	1.0	32.2	9.4	3940	.82	.98	1.0
	1400	660	37.4	11.0	2860	.82	.97	1.0	36.1	10.6	3180	.84	.99	1.0	34.8	10.2	3540	.85	1.0	1.0	33.4	9.8	3960	.87	1.0	1.0
67°F (19°C)	1000	470	37.5	11.0	2860	.57	.70	.83	36.2	10.6	3180	.58	.72	.85	34.7	10.2	3550	.59	.73	.87	33.2	9.7	3960	.6	.74	.89
	1200	565	38.6	11.3	2880	.6	.75	.89	37.1	10.9	3200	.6	.77	.91	35.6	10.4	3560	.61	.78	.93	34.0	10.0	3980	.62	.80	.95
	1400	660	39.4	11.5	2890	.62	.79	.95	37.9	11.1	3210	.63	.81	.96	36.3	10.6	3580	.64	.83	.98	34.7	10.2	3990	.66	.85	.99
71°F (22°C)	1000	470	40.2	11.8	2900	.43	.55	.68	38.7	11.3	3220	.43	.56	.69	37.2	10.9	3590	.43	.57	.70	35.6	10.4	4010	.43	.58	.72
	1200	565	41.3	12.1	2920	.44	.58	.72	39.7	11.6	3240	.44	.59	.74	38.1	11.2	3610	.44	.60	.76	36.4	10.7	4030	.45	.61	.77
	1400	660	42.0	12.3	2930	.45	.61	.77	40.4	11.8	3250	.45	.62	.79	38.8	11.4	3620	.45	.63	.80	37.0	10.8	4040	.46	.65	.83

**HEATING CAPACITY - HP29-036 with**

**[CR33-48B/C-F]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																	
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)	
	cfm	L/s	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	Total Heating Capacity kBtuh	kW	Comp. Motor W Input	
1000	470	40.6	11.9	2910	32.7	9.6	2690	24.5	7.2	2465	17.8	5.2	2175	8.7	2.5	1620		
1200	565	41.1	12.0	2790	33.2	9.7	2570	25.0	7.3	2345	18.3	5.4	2055	9.2	2.7	1500		
1400	660	41.6	12.2	2705	33.7	9.9	2485	25.5	7.5	2260	18.8	5.5	1970	9.7	2.8	1415		

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with**

**[CR33-48B/C-F]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	2790	41.1	12.0
60	16	2740	39.3	11.5
55	13	2685	37.4	11.0
50	10	2630	35.5	10.4
47	8	2595	34.4	10.1
45	7	2570	33.2	9.7
40	4	2505	30.2	8.9
35	2	2435	27.2	8.0
30	-1	2390	26.1	7.6
25	-4	2345	25.0	7.3
20	-7	2300	23.9	7.0
17	-8	2270	23.2	6.8
15	-9	2250	22.4	6.6
10	-12	2195	20.6	6.0
5	-15	2055	18.3	5.4
0	-18	1920	16.0	4.7
-5	-21	1780	13.8	4.0
-10	-23	1640	11.5	3.4
-15	-26	1500	9.2	2.7
-20	-29	1365	7.0	2.1



# RATINGS

**3 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

## HORIZONTAL INDOOR COILS

### COOLING CAPACITY - HP29-036 with

[CH23-41] [CH33-42B-F]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
cfm	L/s	kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				
63°F (17°C)	1000	470	34.7	10.2	2760	.74	.87	.99	33.4	9.8	3080	.75	.89	.99	32.1	9.4	3430	.76	.91	1.0	30.8	9.0	3840	.77	.93	1.0
	1200	565	35.8	10.5	2780	.78	.93	1.0	34.5	10.1	3100	.79	.94	1.0	33.2	9.7	3460	.81	.96	1.0	31.9	9.3	3860	.82	.98	1.0
	1400	660	36.8	10.8	2800	.82	.98	1.0	35.5	10.4	3110	.84	.99	1.0	34.2	10.0	3470	.86	1.0	1.0	32.9	9.6	3880	.87	1.0	1.0
67°F (19°C)	1000	470	36.9	10.8	2800	.57	.71	.84	35.6	10.4	3110	.58	.72	.85	34.2	10.0	3470	.59	.73	.87	32.7	9.6	3880	.6	.75	.89
	1200	565	37.9	11.1	2810	.6	.75	.90	36.5	10.7	3120	.61	.77	.91	35.0	10.3	3480	.62	.79	.93	33.5	9.8	3890	.63	.80	.95
	1400	660	38.7	11.3	2820	.63	.80	.95	37.2	10.9	3140	.64	.82	.97	35.7	10.5	3490	.65	.83	.98	34.2	10.0	3910	.66	.85	.99
71°F (22°C)	1000	470	39.5	11.6	2830	.43	.55	.68	38.1	11.2	3150	.43	.56	.70	36.6	10.7	3510	.43	.57	.71	35.0	10.3	3920	.44	.58	.72
	1200	565	40.5	11.9	2840	.44	.58	.73	39.0	11.4	3160	.44	.59	.74	37.4	11.0	3520	.44	.60	.76	35.8	10.5	3940	.45	.61	.78
	1400	660	41.2	12.1	2850	.45	.61	.78	39.7	11.6	3170	.45	.62	.79	38.0	11.1	3540	.45	.64	.81	36.4	10.7	3950	.46	.65	.83

### COOLING CAPACITY - HP29-036 with

[CH33-36A/B/C-F]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
						75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C
cfm	L/s	kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				
63°F (17°C)	1000	470	31.7	9.3	2.73	.72	.86	.97	30.6	9.0	3.05	.73	.87	.98	29.5	8.6	3.41	.74	.89	.99	28.4	8.3	3.83	.76	.90	1.00
	1200	565	32.7	9.6	2.75	.76	.91	1.00	31.6	9.3	3.07	.77	.92	1.00	30.5	8.9	3.43	.78	.94	1.00	29.3	8.6	3.85	.80	.96	1.00
	1400	660	33.5	9.8	2.76	.80	.95	1.00	32.4	9.5	3.08	.81	.97	1.00	31.3	9.2	3.45	.83	.98	1.00	30.1	8.8	3.87	.85	.99	1.00
67°F (19°C)	1000	470	33.9	9.9	2.76	.57	.70	.82	32.7	9.6	3.08	.57	.71	.84	31.5	9.2	3.44	.58	.72	.85	30.3	8.9	3.86	.58	.73	.87
	1200	565	34.8	10.2	2.78	.59	.74	.88	33.6	9.8	3.10	.60	.75	.89	32.3	9.5	3.46	.60	.76	.91	31.0	9.1	3.88	.61	.78	.93
	1400	660	35.4	10.4	2.79	.61	.78	.92	34.2	10.0	3.11	.62	.79	.94	32.9	9.6	3.47	.63	.81	.96	31.6	9.3	3.89	.64	.82	.97
71°F (22°C)	1000	470	36.2	10.6	2.80	.43	.55	.67	35.0	10.3	3.12	.43	.55	.68	33.8	9.9	3.48	.43	.56	.69	32.5	9.5	3.90	.43	.57	.70
	1200	565	37.1	10.9	2.81	.43	.57	.71	35.9	10.5	3.13	.43	.58	.72	34.6	10.1	3.50	.44	.59	.74	33.2	9.7	3.92	.44	.60	.75
	1400	660	37.8	11.1	2.82	.44	.60	.75	36.5	10.7	3.14	.44	.61	.77	35.2	10.3	3.51	.45	.61	.78	33.8	9.9	3.93	.45	.63	.80

### HEATING CAPACITY - HP29-036 with

[CH33-36A/B/C-F]

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil																		
		65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)										
cfm	L/s	Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input				
		kBtuh	kW	Input		kBtuh	kW	Input		kBtuh	kW	Input		kBtuh	kW	Input		kBtuh	kW	Input
1000	470	40.2	11.8	2.95	33.1	9.7	2.73	26.3	7.7	2.50	17.7	5.2	2.19	8.6	2.5	1.63				
1200	565	40.8	12.0	2.82	33.7	9.9	2.60	26.9	7.9	2.37	18.3	5.4	2.06	9.2	2.7	1.50				
1400	660	41.2	12.1	2.73	34.1	10.0	2.51	27.3	8.0	2.28	18.7	5.5	1.97	9.6	2.8	1.41				

### HEATING CAPACITY - HP29-036 with

[CH23-41] [CH33-42B-F]

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil															
		65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)							
cfm	L/s	Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input		Total Heating Capacity		Comp. Motor W Input	
		kBtuh	kW	Input		kBtuh	kW	Input		kBtuh	kW	Input		kBtuh	kW	Input	
1000	470	40.6	11.9	2915	32.7	9.6	2695	24.5	7.2	2470	17.8	5.2	2180	8.7	2.5	1625	
1200	565	41.1	12.0	2790	33.2	9.7	2570	25.0	7.3	2345	18.3	5.4	2055	9.2	2.7	1500	
1400	660	41.6	12.2	2710	33.7	9.9	2490	25.5	7.5	2265	18.8	5.5	1975	9.7	2.8	1420	

### HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with

[CH33-36A/B/C]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	2.82	40.8	12.0	
60	16	2.77	38.9	11.4	
55	13	2.71	37.1	10.9	
50	10	2.65	35.3	10.3	
47	8	2.62	34.2	10.0	
45	7	2.60	33.7	9.9	
40	4	2.55	32.6	9.6	
35	2	2.50	31.6	9.3	
30	-1	2.44	29.2	8.6	
25	-4	2.37	26.9	7.9	
20	-7	2.31	24.6	7.2	
17	-8	2.27	23.2	6.8	
15	-9	2.25	22.5	6.6	
10	-12	2.19	20.6	6.0	
5	-15	2.06	18.3	5.4	
0	-18	1.92	16.1	4.7	
-5	-21	1.78	13.8	4.0	
-10	-23	1.64	11.5	3.4	
-15	-26	1.50	9.2	2.7	
-20	-29	1.37	7.0	2.1	

### HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-036 with

[CH23-41] [CH33-42B-F]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	2790	41.1	12.0	
60	16	2740	39.3	11.5	
55	13	2685	37.4	11.0	
50	10	2630	35.5	10.4	
47	8	2595	34.4	10.1	
45	7	2570	33.2	9.7	
40	4	2505	30.2	8.9	
35	2	2435	27.2	8.0	
30	-1	2390	26.1	7.6	
25	-4	2345	25.0	7.6	
20	-7	2300	23.9	7.0	
17	-8	2270	23.2	6.8	
15	-9	2250	22.5	6.6	
10	-12	2195	20.3	6.0	
5	-15	2055	18.3	5.4	
0	-18	1920	16.0	4.7	
-5	-21	1780	13.8	4.0	
-10	-23	1640	11.5	3.4	
-15	-26	1500	9.2	2.7	
-20	-29	1365	7.0	2.1	

**RATINGS**

**3.5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-042 with**

**[CB29M-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1250	590	38.8	11.4	3160	.75	.90	1.0	37.5	11.0	3520	.76	.91	1.0	36.2	10.6	3940	.78	.93	1.0	34.8	10.2	4420	.79	.94	1.0
	1350	635	39.3	11.5	3170	.77	.92	1.0	38.0	11.1	3530	.78	.93	1.0	36.7	10.8	3950	.8	.95	1.0	35.2	10.3	4420	.81	.97	1.0
	1450	685	39.7	11.6	3180	.79	.94	1.0	38.5	11.3	3540	.8	.95	1.0	37.1	10.9	3950	.82	.96	1.0	35.6	10.4	4430	.83	.98	1.0
67°F (19°C)	1250	590	41.2	12.1	3190	.58	.73	.86	39.8	11.7	3560	.59	.74	.88	38.3	11.2	3970	.6	.75	.90	36.7	10.8	4450	.61	.77	.91
	1350	635	41.6	12.2	3200	.59	.75	.89	40.2	11.8	3560	.6	.76	.90	38.7	11.3	3980	.61	.77	.92	37.1	10.9	4450	.62	.79	.94
	1450	685	41.9	12.3	3200	.61	.77	.91	40.5	11.9	3570	.61	.78	.93	39.0	11.4	3980	.62	.79	.94	37.4	11.0	4460	.63	.81	.96
71°F (22°C)	1250	590	43.9	12.9	3230	.43	.57	.70	42.4	12.4	3600	.43	.58	.71	40.9	12.0	4010	.44	.58	.73	39.2	11.5	4490	.44	.59	.74
	1350	635	44.3	13.0	3240	.44	.58	.72	42.8	12.5	3600	.44	.59	.74	41.2	12.1	4020	.44	.60	.75	39.6	11.6	4500	.44	.61	.77
	1450	685	44.7	13.1	3240	.44	.59	.74	43.2	12.7	3610	.44	.60	.76	41.6	12.2	4030	.44	.61	.77	39.8	11.7	4500	.45	.62	.79

**COOLING CAPACITY - HP29-042 with**

**[CB29M-46]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1125	530	39.2	11.5	3140	.73	.86	.98	37.9	11.1	3500	.74	.88	.99	36.4	10.7	3910	.75	.89	1.0	34.9	10.2	4380	.77	.91	1.0
	1325	625	40.3	11.8	3160	.76	.91	1.0	38.9	11.4	3520	.77	.93	1.0	37.5	11.0	3930	.79	.94	1.0	35.9	10.5	4400	.81	.96	1.0
	1525	720	41.3	12.1	3180	.8	.95	1.0	39.9	11.7	3540	.81	.96	1.0	38.4	11.3	3950	.83	.98	1.0	36.9	10.8	4410	.85	.99	1.0
67°F (19°C)	1125	530	41.8	12.3	3180	.57	.70	.83	40.4	11.8	3540	.57	.71	.84	38.8	11.4	3950	.58	.72	.86	37.2	10.9	4420	.59	.74	.88
	1325	625	42.8	12.5	3200	.59	.74	.88	41.3	12.1	3560	.6	.75	.89	39.7	11.6	3970	.6	.77	.91	38.0	11.1	4430	.61	.78	.93
	1525	720	43.5	12.7	3210	.61	.78	.92	42.0	12.3	3570	.62	.79	.94	40.4	11.8	3980	.63	.80	.96	38.6	11.3	4450	.64	.83	.97
71°F (22°C)	1125	530	44.7	13.1	3220	.43	.55	.67	43.2	12.7	3590	.43	.56	.68	41.5	12.2	4000	.43	.56	.70	39.8	11.7	4470	.43	.57	.71
	1325	625	45.7	13.4	3240	.43	.57	.71	44.1	12.9	3610	.44	.58	.73	42.4	12.4	4020	.44	.59	.74	40.6	11.9	4490	.44	.60	.76
	1525	720	46.5	13.6	3250	.44	.60	.75	44.8	13.1	3620	.44	.61	.77	43.0	12.6	4030	.45	.62	.78	41.1	12.0	4500	.45	.63	.80

**HEATING CAPACITY - HP29-042 with**

**[CB29M-41]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Heating Capacity		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
			kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input		
1250	590	48.9	14.3	3565	38.9	11.4	3245	28.8	8.4	2910	19.8	5.8	2545	10.0	2.9	1880						
1350	635	49.2	14.4	3500	39.2	11.5	3180	29.1	8.5	2845	20.1	5.9	2485	10.3	3.0	1815						
1500	710	49.6	14.5	3440	39.6	11.6	3120	29.5	8.6	2785	20.5	6.0	2425	10.7	3.1	1755						

**HEATING CAPACITY - HP29-042 with**

**[CB29M-46]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Heating Capacity		Air Temperature Entering Outdoor Coil																			
			65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
			kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input	kBtuh	kW	Comp. Motor W Input		
1200	565	48.7	14.3	3580	38.9	11.4	3290	28.8	8.4	2990	20.0	5.9	2650	10.0	2.9	1960						
1350	635	49.1	14.4	3480	39.3	11.5	3190	29.2	8.6	2890	20.4	6.0	2550	10.4	3.0	1860						
1500	710	49.7	14.6	3400	39.9	11.7	3110	29.8	8.7	2810	21.0	6.2	2470	11.0	3.2	1780						

**HEATING PERFORMANCE AT 1350 cfm (635 L/s) Indoor Coil Air Volume HP29-042 with**

**[CB29M-46]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18		3480	49.1	14.4
60	16		3410	46.7	13.7
55	13		3340	44.3	13.0
50	10		3275	41.9	12.3
47	8		3230	40.5	11.9
45	7		3190	39.3	11.5
40	4		3090	36.1	10.6
35	2		2990	33.0	9.7
30	-1		2940	31.1	9.1
25	-4		2890	29.2	8.6
20	-7		2845	27.3	8.0
17	-8		2815	26.2	7.7
15	-9		2790	25.2	7.4
10	-12		2720	22.9	6.7
5	-15		2550	20.4	6.0
0	-18		2375	17.9	5.2
-5	-21		2205	15.4	4.5
-10	-23		2035	12.9	3.8
-15	-26		1860	10.4	3.0
-20	-29		1690	7.9	2.3

**HEATING PERFORMANCE AT 1350 cfm (635 L/s) Indoor Coil Air Volume HP29-042 with**

**[CB29M-41]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18		3505	49.2	14.4
60	16		3430	46.8	13.7
55	13		3350	44.4	13.0
50	10		3270	42.0	12.3
47	8		3225	40.5	1.9
45	7		3180	39.2	11.5
40	4		3070	36.1	10.6
35	2		2960	33.0	9.7
30	-1		2900	31.0	9.1
25	-4		2845	29.1	8.5
20	-7		2785	27.2	8.0
17	-8		2755	26.0	7.6
15	-9		2720	25.0	7.3
10	-12		2645	22.6	6.6
5	-15		2480	20.1	5.9
0	-18		2315	17.7	5.2
-5	-21		2145	15.2	4.5
-10	-23		1980	12.7	3.7
-15	-26		1815	10.3	3.0
-20	-29		1650	7.8	2.3

# RATINGS

# 3.5 TON

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

## AIR HANDLERS

### COOLING CAPACITY - HP29-042 with

[CB30M-41]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)					95°F (35°C)					105°F (41°C)					115°F (46°C)								
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1050	495	38.1	11.2	3040	.71	.84	.96	36.8	10.8	3390	.72	.86	.97	35.4	10.4	3780	.73	.87	.99	33.9	9.9	4230	.74	.89	1.0
	1250	590	39.3	11.5	3060	.75	.89	1.0	38.0	11.1	3410	.76	.91	1.0	36.5	10.7	3810	.77	.93	1.0	35.0	10.3	4260	.79	.94	1.0
	1450	685	40.3	11.8	3080	.78	.94	1.0	38.9	11.4	3430	.8	.95	1.0	37.5	11.0	3830	.81	.97	1.0	35.9	10.5	4270	.83	.99	1.0
67°F (19°C)	1050	495	40.8	12.0	3080	.56	.68	.81	39.3	11.5	3430	.56	.69	.82	37.8	11.1	3830	.57	.71	.84	36.2	10.6	4280	.58	.72	.86
	1250	590	41.8	12.3	3100	.58	.72	.86	40.4	11.8	3450	.59	.73	.87	38.8	11.4	3840	.6	.75	.89	37.1	10.9	4300	.6	.77	.91
	1450	685	42.7	12.5	3110	.6	.76	.91	41.2	12.1	3460	.61	.77	.92	39.5	11.6	3860	.62	.79	.94	37.8	11.1	4310	.63	.81	.96
71°F (22°C)	1050	495	43.6	12.8	3120	.42	.54	.66	42.1	12.3	3480	.43	.55	.67	40.5	11.9	3870	.43	.55	.68	38.8	11.4	4330	.43	.56	.69
	1250	590	44.7	13.1	3140	.43	.56	.70	43.2	12.7	3490	.43	.57	.71	41.5	12.2	3890	.44	.58	.72	39.7	11.6	4340	.44	.59	.74
	1450	685	45.6	13.4	3150	.44	.59	.74	43.9	12.9	3510	.44	.60	.75	42.2	12.4	3900	.45	.61	.77	40.3	11.8	4360	.45	.62	.78

### COOLING CAPACITY - HP29-042 with

[CB29M-51] [CB29M-65]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)					95°F (35°C)					105°F (41°C)					115°F (46°C)								
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	40.1	11.8	3160	.74	.88	.99	38.7	11.3	3520	.75	.90	1.0	37.3	10.9	3930	.76	.91	1.0	35.7	10.5	4400	.78	.93	1.0
	1400	660	41.2	12.1	3180	.78	.93	1.0	39.8	11.7	3540	.79	.94	1.0	38.3	11.2	3950	.8	.96	1.0	36.7	10.8	4420	.82	.98	1.0
	1600	755	42.2	12.4	3200	.81	.96	1.0	40.7	11.9	3560	.83	.98	1.0	39.3	11.5	3970	.84	.99	1.0	37.7	11.0	4430	.86	1.0	1.0
67°F (19°C)	1200	565	42.8	12.5	3200	.57	.71	.85	41.2	12.1	3570	.58	.73	.86	39.7	11.6	3980	.59	.74	.88	37.9	11.1	4440	.6	.75	.90
	1400	660	43.7	12.8	3220	.6	.75	.90	42.1	12.3	3580	.61	.76	.91	40.5	11.9	3990	.61	.78	.93	38.7	11.3	4460	.62	.80	.95
	1600	755	44.4	13.0	3230	.62	.79	.94	42.8	12.5	3590	.63	.80	.95	41.1	12.0	4000	.64	.82	.97	39.3	11.5	4470	.65	.84	.99
71°F (22°C)	1200	565	45.8	13.4	3250	.43	.56	.69	44.1	12.9	3610	.43	.56	.70	42.4	12.4	4030	.43	.57	.71	40.6	11.9	4490	.44	.58	.73
	1400	660	46.7	13.7	3260	.44	.58	.73	45.0	13.2	3630	.44	.59	.74	43.2	12.7	4040	.44	.60	.76	41.3	12.1	4510	.45	.61	.77
	1600	755	47.4	13.9	3270	.45	.61	.77	45.7	13.4	3640	.45	.61	.78	43.8	12.8	4060	.45	.63	.80	41.9	12.3	4530	.46	.64	.82

### HEATING CAPACITY - HP29-042 with

[CB29M-51] [CB29M-65]

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1200	565	49.4	14.5	3435	39.3	11.5	3220	29.1	8.5	2995	20.1	5.9	2700	10.0	2.9	2000
1400	660	49.8	14.6	3305	39.7	11.6	3090	29.5	8.6	2865	20.5	6.0	2570	10.4	3.0	1870
1600	755	50.5	14.8	3210	40.4	11.8	2995	30.2	8.9	2770	21.2	6.2	2475	11.1	3.3	1775

### HEATING CAPACITY - HP29-042 with

[CB30M-41]

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1100	520	48.7	14.3	3495	38.7	11.3	3195	28.6	8.4	2890	19.6	5.7	2545	9.8	2.9	1895
1275	600	49.2	14.4	3365	39.2	11.5	3065	29.1	8.5	2760	20.1	5.9	2415	10.3	3.0	1765
1450	685	49.7	14.6	3265	39.7	11.6	2965	29.6	8.7	2660	20.6	6.0	2315	10.8	3.2	1665

### HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume HP29-042 with

[CB29M-51] [CB29M-65]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C			kBtuh	kW
65	18	3305		49.8	14.6
60	16	3255		47.3	13.9
55	13	3205		44.9	13.2
50	10	3150		42.5	12.5
47	8	3120		41.0	12.0
45	7	3090		39.7	11.6
40	4	3005		36.6	10.7
35	2	2925		33.4	9.8
30	-1	2895		31.5	9.2
25	-4	2865		29.5	8.6
20	-7	2835		27.6	8.1
17	-8	2820		26.4	7.7
15	-9	2800		25.4	7.4
10	-12	2750		23.0	6.7
5	-15	2570		20.5	6.0
0	-18	2395		18.0	5.3
-5	-21	2220		15.5	4.5
-10	-23	2045		12.9	3.8
-15	-26	1870		10.4	3.0
-20	-29	1690		7.9	2.3

### HEATING PERFORMANCE at 1275 cfm (600 L/s) Indoor Coil Air Volume HP29-042 with

[CB30M-41]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C			kBtuh	kW
65	18	3365		49.2	14.4
60	16	3295		46.8	13.7
55	13	3225		44.4	13.0
50	10	3150		42.0	12.3
47	8	3110		40.5	11.9
45	7	3065		39.2	11.5
40	4	2965		36.1	10.6
35	2	2865		33.0	9.7
30	-1	2810		31.0	9.1
25	-4	2760		29.1	8.5
20	-7	2705		27.2	8.0
17	-8	2675		26.0	7.6
15	-9	2645		25.0	7.3
10	-12	2575		22.6	6.6
5	-15	2415		20.1	5.9
0	-18	2250		17.7	5.2
-5	-21	2090		15.2	4.5
-10	-23	1930		12.7	3.7
-15	-26	1765		10.3	3.0
-20	-29	1605		7.8	2.3

# RATINGS

# 3.5 TON

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

## AIR HANDLERS

### COOLING CAPACITY - HP29-042 with

[CB30M-46] [CB30U-41/46]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1100	520	39.3	11.5	3150	.72	.85	.97	37.9	11.1	3510	.73	.87	.98	36.5	10.7	3910	.74	.88	.99	34.9	10.2	4380	.76	.91	1.0
	1275	600	40.3	11.8	3160	.75	.90	1.0	38.9	11.4	3520	.76	.92	1.0	37.4	11.0	3940	.78	.93	1.0	35.9	10.5	4400	.79	.95	1.0
	1450	685	41.2	12.1	3180	.78	.94	1.0	39.8	11.7	3540	.8	.95	1.0	38.3	11.2	3950	.81	.97	1.0	36.7	10.8	4410	.83	.99	1.0
67°F (19°C)	1100	520	42.0	12.3	3190	.57	.69	.82	40.5	11.9	3550	.57	.70	.83	38.9	11.4	3960	.58	.72	.85	37.2	10.9	4430	.58	.73	.87
	1275	600	42.9	12.6	3200	.58	.73	.87	41.3	12.1	3570	.59	.74	.88	39.7	11.6	3970	.6	.76	.90	38.0	11.1	4440	.61	.77	.92
	1450	685	43.6	12.8	3210	.6	.76	.91	42.1	12.3	3580	.61	.77	.92	40.4	11.8	3990	.62	.79	.94	38.6	11.3	4450	.63	.81	.96
71°F (22°C)	1100	520	44.9	13.2	3230	.43	.55	.67	43.3	12.7	3600	.43	.55	.68	41.7	12.2	4010	.43	.56	.69	39.9	11.7	4480	.43	.57	.70
	1275	600	45.8	13.4	3250	.43	.57	.70	44.2	13.0	3610	.43	.57	.71	42.5	12.5	4030	.44	.58	.73	40.6	11.9	4490	.44	.59	.75
	1450	685	46.6	13.7	3260	.44	.59	.74	44.9	13.2	3630	.44	.60	.75	43.1	12.6	4030	.45	.61	.77	41.2	12.1	4510	.45	.62	.78

### COOLING CAPACITY - HP29-042 with

[CB30M-51] [CB30U-51]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtu/h	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	40.2	11.8	3180	.74	.88	1.0	38.8	11.4	3550	.75	.89	1.0	37.2	10.9	3950	.76	.91	1.0	35.6	10.4	4420	.77	.93	1.0
	1400	660	41.3	12.1	3200	.77	.93	1.0	39.9	11.7	3570	.79	.94	1.0	38.3	11.2	3970	.8	.96	1.0	36.6	10.7	4450	.82	.98	1.0
	1600	755	42.3	12.4	3220	.81	.97	1.0	40.8	12.0	3580	.83	.98	1.0	39.3	11.5	4000	.84	.99	1.0	37.8	11.1	4460	.86	1.0	1.0
67°F (19°C)	1200	565	43.0	12.6	3230	.57	.71	.84	41.4	12.1	3590	.58	.72	.86	39.7	11.6	4010	.59	.74	.88	38.0	11.1	4470	.6	.75	.90
	1400	660	43.9	12.9	3250	.59	.75	.89	42.3	12.4	3610	.6	.76	.91	40.6	11.9	4020	.61	.78	.93	38.8	11.4	4490	.62	.80	.95
	1600	755	44.7	13.1	3260	.62	.79	.94	43.1	12.6	3620	.63	.80	.96	41.3	12.1	4040	.64	.82	.97	39.4	11.5	4500	.65	.84	.99
71°F (22°C)	1200	565	46.0	13.5	3280	.43	.55	.68	44.3	13.0	3650	.43	.56	.70	42.5	12.5	4060	.43	.57	.71	40.7	11.9	4530	.43	.58	.72
	1400	660	47.0	13.8	3290	.44	.58	.72	45.2	13.2	3660	.44	.59	.74	43.4	12.7	4080	.44	.60	.75	41.4	12.1	4550	.45	.61	.77
	1600	755	47.8	14.0	3310	.44	.60	.76	46.0	13.5	3680	.45	.61	.78	44.1	12.9	4090	.45	.63	.80	42.0	12.3	4560	.46	.64	.82

### HEATING CAPACITY - HP29-042 with

[CB30M-46] [CB30U-41/46]

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil															
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
			Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input				
cfm	L/s	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	W Input
1100	520	48.7	14.3	3495	38.7	11.3	3195	28.6	8.4	2890	19.6	5.7	2545	9.8	2.9	1895		
1275	600	49.2	14.4	3365	39.2	11.5	3065	29.1	8.5	2760	20.1	5.9	2415	10.3	3.0	1765		
1450	685	49.7	14.6	3265	39.7	11.6	2965	29.6	8.7	2660	20.6	6.0	2315	10.8	3.2	1665		

### HEATING CAPACITY - HP29-042 with

[CB30M-51] [CB30U-51]

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil															
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
			Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input				
cfm	L/s	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	kW	W Input
1200	565	47.2	13.8	3600	37.4	11.0	3260	27.3	8.0	2915	18.5	5.4	2545	9.3	2.7	1905		
1400	660	47.6	14.0	3475	37.8	11.1	3135	27.7	8.1	2790	18.9	5.5	2420	9.7	2.8	1780		
1600	755	48.0	14.1	3385	38.2	11.2	3045	28.1	8.2	2700	19.3	5.7	2330	10.1	3.0	1690		

### HEATING PERFORMANCE at 1275 cfm (600 L/s) Indoor Coil Air Volume HP29-042 with

[CB30M-46] [CB30U-41/46]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kW		kBtu/h	kW
65	18	3365		49.2	14.4
60	16	3295		46.8	13.7
55	13	3225		44.4	13.0
50	10	3150		42.0	12.3
47	8	3110		40.5	11.9
45	7	3065		39.2	11.5
40	4	2965		36.1	10.6
35	2	2865		33.0	9.7
30	-1	2810		31.0	9.1
25	-4	2760		29.1	8.5
20	-7	2705		27.2	8.0
17	-8	2675		26.0	7.6
15	-9	2645		25.0	7.3
10	-12	2575		22.6	6.6
5	-15	2415		20.1	5.9
0	-18	2250		17.7	5.2
-5	-21	2090		15.2	4.5
-10	-23	1930		12.7	3.7
-15	-26	1765		10.3	3.0
-20	-29	1605		7.8	2.3

### HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume HP29-042 with

[CB30M-51] [CB30U-51]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kW		kBtu/h	kW
65	18	3475		47.6	14.0
60	16	3395		45.2	13.2
55	13	3310		42.8	12.5
50	10	3230		40.4	11.8
47	8	3180		39.0	11.4
45	7	3135		37.8	11.1
40	4	3025		34.7	10.2
35	2	2915		31.6	9.3
30	-1	2850		29.6	8.7
25	-4	2790		27.7	8.1
20	-7	2730		25.8	7.6
17	-8	2695		24.6	7.2
15	-9	2665		23.6	6.9
10	-12	2580		21.2	6.2
5	-15	2420		18.9	5.5
0	-18	2260		16.6	4.9
-5	-21	2100		14.3	4.2
-10	-23	1940		12.0	3.5
-15	-26	1780		9.7	2.8
-20	-29	1615		7.4	2.2

**RATINGS**

**3.5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-042 with**

**[CB31MV-41]**

Entering Wet Bulb Temperature	Total Air Volume cfm   L/s		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1265	595	39.7	11.6	3130	.75	.90	1.0	38.3	11.2	3490	.76	.91	1.0	36.8	10.8	3890	.78	.93	1.0	35.3	10.3	4350	.79	.95	1.0
	1400	660	40.4	11.8	3140	.78	.93	1.0	39.0	11.4	3500	.79	.94	1.0	37.5	11.0	3900	.8	.96	1.0	36.0	10.6	4360	.82	.98	1.0
	1545	730	41.1	12.0	3150	.8	.95	1.0	39.7	11.6	3510	.82	.97	1.0	38.2	11.2	3910	.83	.98	1.0	36.7	10.8	4370	.85	1.0	1.0
67°F (19°C)	1265	595	42.2	12.4	3170	.58	.73	.86	40.7	11.9	3530	.59	.74	.88	39.1	11.5	3930	.6	.75	.90	37.4	11.0	4390	.61	.77	.92
	1400	660	42.8	12.5	3180	.6	.75	.90	41.3	12.1	3540	.6	.77	.91	39.7	11.6	3940	.61	.78	.93	37.9	11.1	4400	.62	.80	.95
	1545	730	43.3	12.7	3190	.61	.78	.93	41.8	12.3	3540	.62	.79	.94	40.1	11.8	3950	.63	.81	.96	38.4	11.3	4410	.64	.83	.98
71°F (22°C)	1265	595	45.1	13.2	3210	.43	.57	.70	43.5	12.7	3580	.43	.57	.71	41.8	12.3	3980	.44	.58	.73	40.0	11.7	4450	.44	.59	.74
	1400	660	45.7	13.4	3220	.44	.58	.73	44.1	12.9	3580	.44	.59	.74	42.3	12.4	3990	.44	.60	.75	40.5	11.9	4460	.45	.61	.78
	1545	730	46.2	13.5	3230	.44	.60	.75	44.6	13.1	3590	.45	.61	.77	42.8	12.5	4000	.45	.62	.79	40.9	12.0	4460	.45	.63	.80

**COOLING CAPACITY - HP29-042 with**

**[CB31MV-51]**

Entering Wet Bulb Temperature	Total Air Volume cfm   L/s		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1205	570	40.4	11.8	3280	.74	.88	1.0	38.9	11.4	3650	.75	.89	1.0	37.4	11.0	4070	.76	.91	1.0	35.8	10.5	4550	.78	.93	1.0
	1425	675	41.6	12.2	3300	.78	.93	1.0	40.1	11.8	3670	.79	.95	1.0	38.5	11.3	4090	.81	.97	1.0	36.9	10.8	4580	.83	.98	1.0
	1625	765	42.6	12.5	3310	.82	.97	1.0	41.1	12.0	3690	.83	.99	1.0	39.5	11.6	4110	.85	1.0	1.0	38.0	11.1	4590	.87	1.0	1.0
67°F (19°C)	1205	570	43.1	12.6	3320	.57	.71	.84	41.5	12.2	3700	.58	.72	.86	39.9	11.7	4120	.59	.73	.88	38.1	11.2	4600	.6	.75	.90
	1425	675	44.2	13.0	3340	.6	.75	.90	42.6	12.5	3720	.61	.77	.92	40.8	12.0	4140	.62	.78	.94	39.0	11.4	4620	.63	.80	.96
	1625	765	45.0	13.2	3350	.62	.79	.94	43.3	12.7	3730	.63	.81	.96	41.5	12.2	4150	.64	.82	.98	39.6	11.6	4630	.65	.85	1.0
71°F (22°C)	1205	570	46.2	13.5	3370	.43	.56	.68	44.5	13.0	3750	.43	.56	.69	42.7	12.5	4180	.43	.57	.71	40.8	12.0	4660	.44	.58	.73
	1425	675	47.2	13.8	3390	.44	.58	.73	45.5	13.3	3770	.44	.59	.74	43.7	12.8	4200	.44	.60	.76	41.7	12.2	4680	.45	.61	.78
	1625	765	48.0	14.1	3400	.45	.61	.77	46.2	13.5	3780	.45	.62	.78	44.3	13.0	4210	.45	.63	.80	42.2	12.4	4690	.46	.64	.82

**HEATING CAPACITY - HP29-042 with**

**[CB31MV-41]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil																			
		65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
		Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
kBtuh	kW	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW			
1265	595	48.7	14.3	3450	38.7	11.3	3150	28.6	8.4	2845	19.6	5.7	2500	9.8	2.9	1850	9.8	2.9	1850		
1400	660	49.2	14.4	3370	39.2	11.5	3070	29.1	8.5	2765	20.1	5.9	2420	10.3	3.0	1770	10.3	3.0	1770		
1545	730	49.8	14.6	3300	39.8	11.7	3000	29.7	8.7	2695	20.7	6.1	2350	10.9	3.2	1700	10.9	3.2	1700		

**HEATING CAPACITY - HP29-042 with**

**[CB31MV-51]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil																			
		65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
		Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
kBtuh	kW	kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW			
1205	570	46.4	13.6	3465	36.7	10.8	3205	26.8	7.9	2940	18.2	5.3	2615	9.0	2.6	1945	9.0	2.6	1945		
1425	675	47.0	13.8	3330	37.3	10.9	3070	27.4	8.0	2805	18.8	5.5	2480	9.6	2.8	1810	9.6	2.8	1810		
1625	765	47.6	14.0	3245	37.9	11.1	2985	28.0	8.2	2720	19.4	5.7	2395	10.2	3.0	1725	10.2	3.0	1725		

**HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume HP29-042 with**

**[CB31MV-41]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	W Input		kBtuh	kW
65	18	3370		49.2	14.4
60	16	3300		46.8	13.7
55	13	3230		44.4	13.0
50	10	3155		42.0	12.3
47	8	3115		40.5	11.9
45	7	3070		39.2	11.5
40	4	2970		36.1	10.6
35	2	2870		33.0	9.7
30	-1	2815		31.0	9.1
25	-4	2765		29.1	8.5
20	-7	2710		27.2	8.0
17	-8	2680		26.0	7.6
15	-9	2650		25.0	7.3
10	-12	2580		22.6	6.6
5	-15	2420		20.1	5.9
0	-18	2255		17.7	5.2
-5	-21	2095		15.2	4.5
-10	-23	1930		12.7	3.7
-15	-26	1770		10.3	3.0
-20	-29	1610		7.8	2.3

**HEATING PERFORMANCE at 1425 cfm (675 L/s) Indoor Coil Air Volume HP29-042 with**

**[CB31MV-51]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	W Input		kBtuh	kW
65	18	3330		47.0	13.8
60	16	3265		44.6	13.1
55	13	3205		42.3	12.4
50	10	3145		39.9	11.7
47	8	3105		38.5	11.3
45	7	3070		37.3	10.9
40	4	2980		34.3	10.1
35	2	2885		31.2	9.1
30	-1	2845		29.3	8.6
25	-4	2805		27.4	8.0
20	-7	2760		25.5	7.5
17	-8	2735		24.4	7.2
15	-9	2710		23.5	6.9
10	-12	2650		21.1	6.2
5	-15	2480		18.8	5.5
0	-18	2315		16.5	4.8
-5	-21	2145		14.2	4.2
-10	-23	1980		11.9	3.5
-15	-26	1810		9.6	2.8
-20	-29	1640		7.3	2.1

**RATINGS**

**3.5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**UP-FLOW INDOOR COILS**

**COOLING CAPACITY - HP29-042 with**

**[C33-42B]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	800	380	36.8	10.8	3170	.67	.78	.89	35.6	10.4	3540	.68	.79	.90	34.3	10.1	3950	.68	.80	.91	32.9	9.6	4430	.7	.82	.93
	1000	470	38.5	11.3	3200	.71	.83	.95	37.2	10.9	3560	.71	.84	.96	35.8	10.5	3980	.72	.86	.98	34.3	10.1	4460	.73	.88	.99
	1200	565	39.8	11.7	3220	.74	.88	.99	38.4	11.3	3590	.75	.90	1.0	37.0	10.8	4000	.77	.91	1.0	35.4	10.4	4490	.78	.93	1.0
67°F (19°C)	800	380	39.5	11.6	3210	.54	.64	.74	38.2	11.2	3580	.54	.65	.75	36.8	10.8	4000	.55	.65	.77	35.3	10.3	4480	.55	.67	.78
	1000	470	41.2	12.1	3240	.56	.68	.80	39.8	11.7	3610	.56	.69	.81	38.3	11.2	4030	.57	.70	.82	36.7	10.8	4500	.57	.71	.84
	1200	565	42.4	12.4	3260	.58	.71	.85	40.9	12.0	3630	.58	.73	.86	39.3	11.5	4050	.59	.74	.88	37.6	11.0	4520	.6	.76	.90
71°F (22°C)	800	380	42.3	12.4	3260	.42	.52	.61	40.9	12.0	3630	.42	.52	.62	39.4	11.5	4050	.42	.53	.63	37.9	11.1	4530	.42	.53	.64
	1000	470	44.1	12.9	3280	.42	.54	.65	42.6	12.5	3660	.42	.54	.66	41.0	12.0	4080	.42	.55	.67	39.3	11.5	4550	.43	.55	.68
	1200	565	45.3	13.3	3300	.43	.56	.69	43.7	12.8	3680	.43	.57	.70	42.1	12.3	4100	.43	.57	.71	40.3	11.8	4580	.44	.58	.73

**COOLING CAPACITY - HP29-042 with**

**[C33-44C]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	11.4	39.0	3200	.7	.83	.95	37.7	11.0	3560	.71	.85	36.2	.96	10.6	3980	.72	.86	.98	34.7	10.2	4450	.74	.88	.99
	1200	565	11.8	40.4	3220	.74	.88	1.0	39.0	11.4	3590	.75	.90	37.5	1.0	11.0	4000	.77	.91	1.0	35.9	10.5	4480	.78	.94	1.0
	1400	660	12.2	41.5	3240	.78	.93	1.0	40.1	11.8	3610	.79	.95	38.6	1.0	11.3	4020	.81	.96	1.0	37.0	10.8	4500	.83	.98	1.0
67°F (19°C)	1000	470	12.2	41.7	3240	.56	.68	.80	40.3	11.8	3610	.56	.69	38.7	.81	11.3	4020	.57	.70	.82	37.1	10.9	4500	.57	.71	.84
	1200	565	12.6	43.0	3260	.58	.72	.85	41.5	12.2	3630	.58	.73	39.8	.87	11.7	4040	.59	.74	.88	38.1	11.2	4520	.6	.76	.90
	1400	660	12.9	44.0	3280	.6	.75	.90	42.4	12.4	3640	.61	.77	40.7	.92	11.9	4060	.62	.78	.94	38.9	11.4	4540	.63	.80	.96
71°F (22°C)	1000	470	13.1	44.7	3290	.42	.54	.65	43.1	12.6	3660	.42	.54	41.5	.66	12.2	4080	.43	.55	.67	39.7	11.6	4550	.43	.56	.68
	1200	565	13.5	46.0	3310	.43	.56	.69	44.3	13.0	3680	.43	.57	42.6	.70	12.5	4100	.43	.58	.72	40.7	11.9	4580	.44	.58	.73
	1400	660	13.7	46.9	3320	.44	.58	.73	45.2	13.2	3700	.44	.59	43.4	.75	12.7	4120	.44	.60	.76	41.5	12.2	4600	.45	.61	.78

**HEATING CAPACITY - HP29-042 with**

**[C33-42B]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
			Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW
800	380	47.6	14.0			3875			38.0			11.1			3635		
1000	470	48.4	14.2	3575	38.8	11.4	3335	29.0	8.5	3085	20.2	5.9	2760	10.3	3.0	2005	
1200	565	49.1	14.4	3350	39.5	11.6	3110	29.7	8.7	2860	20.9	6.1	2535	11.0	3.2	1780	

**HEATING CAPACITY - HP29-042 with**

**[C33-44C]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
			Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW	Total Heating Capacity	Comp. Motor W Input	kW
1000	470	49.3	14.4			3675			39.1			11.5			3410		
1200	565	49.9	14.6	3490	39.7	11.6	3225	29.4	8.6	2945	20.3	5.9	2610	10.3	3.0	1905	
1400	660	50.4	14.8	3365	40.2	11.8	3100	29.9	8.8	2820	20.8	6.1	2485	10.8	3.2	1780	

**HEATING PERFORMANCE at 1000 cfm (470 L/s) Indoor Coil Air Volume HP29-042 with**

**[C33-42B]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3575	48.4	14.2
60	16	3520	46.1	13.5
55	13	3460	43.7	12.8
50	10	3405	41.4	12.1
47	8	3370	40.0	11.7
45	7	3335	38.8	11.4
40	4	3245	35.7	10.5
35	2	3155	32.7	9.6
30	-1	3120	30.8	9.0
25	-4	3085	29.0	8.5
20	-7	3050	27.1	7.9
17	-8	3030	26.0	7.6
15	-9	3005	25.1	7.4
10	-12	2950	22.7	6.7
5	-15	2760	20.2	5.9
0	-18	2570	17.8	5.2
-5	-21	2380	15.3	4.5
-10	-23	2195	12.8	3.8
-15	-26	2005	10.3	3.0
-20	-29	1815	7.8	2.3

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-042 with**

**[C33-44C]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3490	49.9	14.6
60	16	3425	47.4	13.9
55	13	3365	44.9	13.2
50	10	3300	42.5	12.5
47	8	3260	41.0	12.0
45	7	3225	39.7	11.6
40	4	3125	36.5	10.7
35	2	3030	33.3	9.8
30	-1	2990	31.3	9.2
25	-4	2945	29.4	8.6
20	-7	2905	27.4	8.0
17	-8	2880	26.2	7.7
15	-9	2850	25.2	7.4
10	-12	2790	22.7	6.7
5	-15	2610	20.3	5.9
0	-18	2435	17.8	5.2
-5	-21	2260	15.3	4.5
-10	-23	2080	12.8	3.8
-15	-26	1905	10.3	3.0
-20	-29	1725	7.9	2.3

**RATINGS**

**3.5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section. Expanded rating tables are sorted by smallest to largest indoor unit model no.

**DOWN-FLOW INDOOR COILS**

**[CR33-30/36B/C-F]**

**COOLING CAPACITY - HP29-042 with**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	38.2	11.2	3170	.71	.83	.95	36.9	10.8	3530	.71	.85	.96	35.5	10.4	3950	.73	.86	.98	34.1	10.0	4420	.74	.88	.99
	1200	565	39.4	11.5	3190	.74	.88	.99	38.1	11.2	3560	.75	.90	1.0	36.7	10.8	3970	.77	.91	1.0	35.2	10.3	4440	.78	.93	1.0
	1400	660	40.5	11.9	3210	.78	.93	1.0	39.1	11.5	3570	.79	.94	1.0	37.7	11.0	3990	.8	.96	1.0	36.1	10.6	4470	.82	.98	1.0
67°F (19°C)	1000	470	40.8	12.0	3210	.56	.68	.80	39.5	11.6	3570	.56	.69	.81	38.0	11.1	3990	.57	.70	.82	36.4	10.7	4470	.57	.71	.84
	1200	565	42.0	12.3	3230	.58	.71	.85	40.5	11.9	3590	.58	.73	.86	39.0	11.4	4010	.59	.74	.88	37.3	10.9	4480	.6	.76	.90
	1400	660	42.9	12.6	3240	.6	.75	.90	41.3	12.1	3610	.6	.77	.91	39.8	11.7	4020	.61	.78	.93	38.1	11.2	4490	.63	.80	.95
71°F (22°C)	1000	470	43.7	12.8	3250	.42	.54	.65	42.2	12.4	3620	.42	.54	.66	40.6	11.9	4040	.43	.55	.67	39.0	11.4	4510	.43	.56	.68
	1200	565	44.9	13.2	3270	.43	.56	.69	43.3	12.7	3640	.43	.57	.70	41.7	12.2	4060	.43	.57	.72	39.9	11.7	4530	.44	.58	.73
	1400	660	45.7	13.4	3280	.44	.58	.73	44.1	12.9	3650	.44	.59	.74	42.4	12.4	4070	.44	.60	.76	40.6	11.9	4550	.45	.61	.77

**COOLING CAPACITY - HP29-042 with**

**[CR33-48B/C-F]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1100	520	39.3	11.5	3160	.71	.85	.96	38.0	11.1	3520	.72	.86	.98	36.5	10.7	3930	.74	.88	.99	35.0	10.3	4400	.75	.89	1.0
	1300	615	40.4	11.8	3180	.75	.89	1.0	39.0	11.4	3540	.76	.91	1.0	37.6	11.0	3950	.77	.93	1.0	36.0	10.6	4430	.79	.94	1.0
	1500	710	41.4	12.1	3200	.78	.93	1.0	40.0	11.7	3560	.8	.95	1.0	38.5	11.3	3970	.81	.97	1.0	36.9	10.8	4440	.83	.98	1.0
67°F (19°C)	1100	520	42.1	12.3	3200	.56	.69	.81	40.6	11.9	3570	.57	.70	.83	39.1	11.5	3980	.57	.71	.84	37.4	11.0	4450	.58	.72	.86
	1300	615	43.2	12.7	3220	.58	.72	.86	41.6	12.2	3580	.59	.73	.87	40.0	11.7	4000	.6	.75	.89	38.2	11.2	4460	.6	.76	.91
	1500	710	44.0	12.9	3230	.6	.76	.90	42.4	12.4	3600	.61	.77	.92	40.7	11.9	4010	.62	.79	.94	38.9	11.4	4480	.63	.80	.96
71°F (22°C)	1100	520	45.0	13.2	3250	.42	.54	.66	43.5	12.7	3620	.43	.55	.67	41.8	12.3	4030	.43	.56	.68	40.1	11.8	4500	.43	.56	.69
	1300	615	46.2	13.5	3260	.43	.56	.70	44.5	13.0	3630	.43	.57	.71	42.8	12.5	4050	.43	.58	.72	40.9	12.0	4510	.44	.59	.74
	1500	710	47.0	13.8	3280	.44	.59	.73	45.3	13.3	3650	.44	.59	.75	43.5	12.7	4060	.44	.60	.76	41.6	12.2	4530	.45	.62	.78

**HEATING CAPACITY - HP29-042 with**

**[CR33-30/36B/C-F]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	
kBtuh	kW	kBtuh		kW		kBtuh		kW		kBtuh		kW		kBtuh		kW
1000	470	48.4	14.2	3645	38.7	11.3	3415	28.8	8.4	3175	20.0	5.9	2865	9.9	2.9	2130
1200	565	49.0	14.4	3460	39.3	11.5	3230	29.4	8.6	2990	20.6	6.0	2680	10.5	3.1	1945
1400	660	49.5	14.5	3330	39.8	11.7	3100	29.9	8.8	2860	21.1	6.2	2550	11.0	3.2	1815

**HEATING CAPACITY - HP29-042 with**

**[CR33-48B/C-F]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	
kBtuh	kW	kBtuh		kW		kBtuh		kW		kBtuh		kW		kBtuh		kW
1100	520	49.3	14.4	3600	39.1	11.5	3330	28.8	8.4	3055	19.7	5.8	2720	9.7	2.8	2025
1300	615	49.9	14.6	3455	39.7	11.6	3185	29.4	8.6	2910	20.3	5.9	2575	10.3	3.0	1880
1500	710	50.4	14.8	3345	40.2	11.8	3075	29.9	8.8	2800	20.8	6.1	2465	10.8	3.2	1770

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-042 with**

**[CR33-30/36B/C-F]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3460	49.0	14.4
60	16	3405	46.6	13.7
55	13	3355	44.3	13.0
50	10	3300	41.9	12.3
47	8	3265	40.5	11.9
45	7	3230	39.3	11.5
40	4	3145	36.2	10.6
35	2	3060	33.1	9.7
30	-1	3025	31.3	9.2
25	-4	2990	29.4	8.6
20	-7	2960	27.5	8.1
17	-8	2940	26.4	7.7
15	-9	2920	25.5	7.5
10	-12	2865	23.1	6.8
5	-15	2680	20.6	6.0
0	-18	2495	18.0	5.3
-5	-21	2315	15.5	4.5
-10	-23	2130	13.0	3.8
-15	-26	1945	10.5	3.1
-20	-29	1765	7.9	2.3

**HEATING PERFORMANCE at 1300 cfm (615 L/s) Indoor Coil Air Volume HP29-042 with**

**[CR33-48B/C-F]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3455	49.9	14.6
60	16	3390	47.4	13.9
55	13	3325	44.9	13.2
50	10	3260	42.5	12.5
47	8	3225	41.0	12.0
45	7	3185	39.7	11.6
40	4	3090	36.5	10.7
35	2	2995	33.3	9.8
30	-1	2950	31.3	9.2
25	-4	2910	29.4	8.6
20	-7	2865	27.4	8.0
17	-8	2840	26.2	7.7
15	-9	2815	25.2	7.4
10	-12	2750	22.7	6.7
5	-15	2575	20.3	5.9
0	-18	2405	17.8	5.2
-5	-21	2230	15.3	4.5
-10	-23	2055	12.8	3.8
-15	-26	1880	10.3	3.0
-20	-29	1705	7.9	2.3

**RATINGS**

**3.5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**HORIZONTAL INDOOR COILS**

**COOLING CAPACITY - HP29-042 with**

**[CH33-42B-2F] [CH23-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)					95°F (35°C)					105°F (41°C)					115°F (46°C)								
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	38.9	11.4	3120	.75	.89	.99	37.6	11.0	3470	.76	.90	1.0	36.2	10.6	3880	.77	.92	1.0	34.7	10.2	4340	.78	.94	1.0
	1400	660	40.0	11.7	3130	.78	.94	1.0	38.7	11.3	3490	.8	.95	1.0	37.2	10.9	3890	.81	.97	1.0	35.7	10.5	4360	.83	.98	1.0
	1600	755	41.0	12.0	3150	.82	.97	1.0	39.6	11.6	3500	.84	.98	1.0	38.2	11.2	3910	.85	.99	1.0	36.8	10.8	4370	.87	1.0	1.0
67°F (19°C)	1200	565	41.4	12.1	3150	.58	.72	.86	39.9	11.7	3510	.59	.73	.87	38.4	11.3	3910	.59	.75	.89	36.8	10.8	4380	.6	.76	.91
	1400	660	42.2	12.4	3160	.6	.76	.91	40.8	12.0	3520	.61	.77	.92	39.2	11.5	3930	.62	.79	.94	37.5	11.0	4390	.63	.81	.96
	1600	755	42.9	12.6	3170	.62	.80	.95	41.4	12.1	3530	.64	.82	.96	39.8	11.7	3940	.64	.83	.98	38.1	11.2	4400	.66	.85	.99
71°F (22°C)	1200	565	44.2	13.0	3190	.43	.56	.69	42.7	12.5	3550	.43	.57	.71	41.0	12.0	3960	.44	.58	.72	39.3	11.5	4420	.44	.59	.74
	1400	660	45.0	13.2	3200	.44	.59	.74	43.5	12.7	3570	.44	.60	.75	41.8	12.3	3970	.44	.61	.77	40.0	11.7	4440	.45	.62	.78
	1600	755	45.7	13.4	3210	.45	.61	.74	44.1	12.9	3580	.45	.62	.79	42.3	12.4	3980	.46	.64	.81	40.5	11.9	4450	.46	.65	.83

**COOLING CAPACITY - HP29-042 with**

**[CH33-48C-F] [CH23-51]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)					95°F (35°C)					105°F (41°C)					115°F (46°C)								
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1200	565	39.9	11.7	3250	.74	.88	1.0	38.5	11.3	3620	.76	.90	1.0	37.0	10.8	4040	.77	.92	1.0	35.5	10.4	4520	.78	.94	1.0
	1400	660	41.0	12.0	3270	.78	.93	1.0	39.6	11.6	3640	.8	.95	1.0	38.1	11.2	4060	.81	.96	1.0	36.6	10.7	4540	.83	.98	1.0
	1600	755	41.9	12.3	3280	.82	.97	1.0	40.5	11.9	3660	.83	.99	1.0	39.1	11.5	4080	.85	.99	1.0	37.6	11.0	4560	.87	1.0	1.0
67°F (19°C)	1200	565	42.4	12.4	3290	.58	.72	.85	40.9	12.0	3660	.58	.73	.87	39.3	11.5	4080	.59	.74	.89	37.6	11.0	4560	.6	.76	.91
	1400	660	43.3	12.7	3300	.6	.76	.90	41.8	12.3	3670	.61	.77	.92	40.1	11.8	4090	.62	.79	.94	38.4	11.3	4580	.63	.80	.96
	1600	755	44.1	12.9	3310	.63	.80	.95	42.5	12.5	3680	.63	.81	.96	40.8	12.0	4110	.64	.83	.98	39.0	11.4	4590	.66	.85	.99
71°F (22°C)	1200	565	45.3	13.3	3330	.43	.56	.69	43.7	12.8	3710	.43	.57	.70	42.0	12.3	4130	.44	.58	.72	40.2	11.8	4610	.44	.59	.74
	1400	660	46.2	13.5	3350	.44	.59	.73	44.6	13.1	3720	.44	.59	.75	42.8	12.5	4150	.44	.61	.76	40.9	12.0	4630	.45	.62	.78
	1600	755	46.9	13.7	3360	.45	.61	.77	45.2	13.2	3730	.45	.62	.79	43.4	12.7	4160	.46	.63	.81	41.5	12.2	4640	.46	.65	.83

**HEATING CAPACITY - HP29-042 with**

**[CH33-42B-2F] [CH23-41]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	
		kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	
1200	565	48.6	14.2	3575	38.9	11.4	3345	29.0	8.5	20.2	3105	5.9	2795	10.1	3.0	2085
1400	660	49.0	14.4	3390	39.3	11.5	3160	29.4	8.6	20.6	2920	6.0	2610	10.5	3.1	1900
1600	755	49.4	14.5	3295	39.7	11.6	3065	29.8	8.7	21.0	2825	6.2	2515	10.9	3.2	1805

**HEATING CAPACITY - HP29-042 with**

**[CH33-48C-F] [CH23-51]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	
		kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	
1200	565	49.4	14.5	3375	39.2	11.5	3180	28.9	8.5	2970	19.8	5.8	2690	9.8	2.9	1985
1400	660	49.9	14.6	3250	39.7	11.6	3055	29.4	8.6	2845	20.3	5.9	2565	10.3	3.0	1860
1600	755	50.4	14.8	3155	40.2	11.8	2960	29.9	8.8	2750	20.8	6.1	2470	10.8	3.2	1765

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil Air Volume HP29-042 with**

**[CH33-42B-2F] [CH23-41]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3390	49.0	14.4
60	16	3335	46.6	13.7
55	13	3280	44.3	13.0
50	10	3225	41.9	12.3
47	8	3195	40.5	11.9
45	7	3160	39.3	11.5
40	4	3070	36.2	10.6
35	2	2985	33.1	9.7
30	-1	2950	31.3	9.2
25	-4	2920	29.4	8.6
20	-7	2885	27.5	8.1
17	-8	2865	26.4	7.7
15	-9	2845	25.5	7.5
10	-12	2790	23.1	6.8
5	-15	2610	20.6	6.0
0	-18	2435	18.0	5.3
-5	-21	2255	15.5	4.5
-10	-23	2075	13.0	3.8
-15	-26	1900	10.5	3.1
-20	-29	1720	7.9	2.3

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil Air Volume HP29-042 with**

**[CH33-48C-F] [CH23-51]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3250	49.9	14.6
60	16	3205	47.4	13.9
55	13	3160	44.9	13.2
50	10	3110	42.5	12.5
47	8	3085	41.0	12.0
45	7	3055	39.7	11.6
40	4	2975	36.5	10.7
35	2	2895	33.3	9.8
30	-1	2870	31.3	9.2
25	-4	2845	29.4	8.6
20	-7	2820	27.4	8.0
17	-8	2805	26.2	7.7
15	-9	2785	25.2	7.4
10	-12	2740	22.7	6.7
5	-15	2565	20.3	5.9
0	-18	2390	17.8	5.2
-5	-21	2210	15.3	4.5
-10	-23	2035	12.8	3.8
-15	-26	1860	10.3	3.0
-20	-29	1685	7.9	2.3



# RATINGS

# 4 TON

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

## AIR HANDLERS

### COOLING CAPACITY - HP29-048 with

[CB29M-46]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1450	685	45.4	13.3	3640	.76	.91	1.0	43.7	12.8	4110	.78	.92	1.0	41.9	12.3	4660	.79	.94	1.0	40.2	11.8	5280	.81	.96	1.0
	1550	730	45.9	13.5	3650	.78	.93	1.0	44.2	13.0	4120	.79	.94	1.0	42.4	12.4	4660	.81	.96	1.0	40.7	11.9	5290	.83	.98	1.0
	1650	780	46.4	13.6	3660	.79	.95	1.0	44.6	13.1	4130	.81	.96	1.0	42.9	12.6	4670	.82	.98	1.0	41.1	12.0	5300	.84	.99	1.0
67°F (19°C)	1450	685	48.1	14.1	3680	.59	.74	.88	46.3	13.6	4150	.6	.75	.89	44.4	13.0	4690	.61	.77	.91	42.5	12.5	5310	.62	.78	.93
	1550	730	48.6	14.2	3680	.6	.75	.90	46.7	13.7	4160	.61	.77	.92	44.7	13.1	4700	.62	.79	.93	42.8	12.5	5310	.63	.80	.95
	1650	780	48.9	14.3	3690	.61	.77	.92	47.0	13.8	4160	.62	.79	.93	45.1	13.2	4710	.63	.80	.95	43.1	12.6	5320	.64	.82	.97
71°F (22°C)	1450	685	51.4	15.1	3730	.43	.57	.71	49.5	14.5	4210	.44	.58	.73	47.4	13.9	4750	.44	.59	.74	45.4	13.3	5360	.44	.60	.76
	1550	730	51.8	15.2	3740	.44	.58	.73	49.8	14.6	4210	.44	.59	.74	47.8	14.0	4760	.44	.60	.76	45.7	13.4	5370	.45	.61	.78
	1650	780	52.2	15.3	3740	.44	.59	.75	50.2	14.7	4220	.44	.60	.76	48.1	14.1	4760	.45	.62	.78	46.0	13.5	5380	.45	.63	.80

### COOLING CAPACITY - HP29-048 with

[CB29M-51]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1550	730	46.0	13.5	3590	.78	.93	1.0	44.2	13.0	4060	.79	.95	1.0	42.4	12.4	4600	.81	.96	1.0	40.7	11.9	5200	.83	.98	1.0
	1675	790	46.6	13.7	3600	.8	.95	1.0	44.8	13.1	4070	.81	.97	1.0	43.0	12.6	4600	.83	.98	1.0	41.3	12.1	5210	.85	1.0	1.0
	1800	850	47.1	13.8	3610	.82	.97	1.0	45.4	13.3	4080	.83	.98	1.0	43.7	12.8	4610	.85	1.0	1.0	42.0	12.3	5210	.87	1.0	1.0
67°F (19°C)	1550	730	48.7	14.3	3630	.6	.75	.90	46.8	13.7	4100	.61	.77	.92	44.8	13.1	4630	.62	.78	.93	42.9	12.6	5240	.63	.80	.95
	1675	790	49.1	14.4	3640	.61	.77	.92	47.2	13.8	4110	.62	.79	.94	45.2	13.2	4640	.63	.81	.96	43.3	12.7	5240	.64	.82	.98
	1800	850	49.6	14.5	3650	.62	.79	.94	47.6	14.0	4120	.63	.81	.96	45.6	13.4	4650	.64	.83	.98	43.6	12.8	5250	.66	.85	.99
71°F (22°C)	1550	730	52.0	15.2	3690	.44	.58	.73	49.9	14.6	4160	.44	.59	.74	47.9	14.0	4690	.44	.60	.76	45.8	13.4	5290	.45	.61	.78
	1675	790	52.4	15.4	3700	.44	.60	.75	50.4	14.8	4170	.44	.61	.77	48.3	14.2	4700	.45	.62	.78	46.1	13.5	5300	.45	.63	.80
	1800	850	52.8	15.5	3710	.45	.61	.77	50.7	14.9	4180	.45	.62	.79	48.6	14.2	4710	.45	.63	.81	46.5	13.6	5310	.46	.65	.83

### HEATING CAPACITY - HP29-048 with

[CB29M-46]

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																		
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)		
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input				
		kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW				
1450	685	53.3	15.6	3720	42.4	12.4	3355	31.2	9.1	2980	21.6	6.3	2565	10.9	3.2	1905			
1550	730	53.5	15.7	3660	42.6	12.5	3295	31.4	9.2	2920	21.8	6.4	2505	11.1	3.3	1845			
1650	780	53.8	15.8	3605	42.9	12.6	3240	31.7	9.3	2865	22.1	6.5	2450	11.4	3.3	1790			

### HEATING CAPACITY - HP29-048 with

[CB29M-51]

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																		
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)		
cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input				
		kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW				
1550	730	53.6	15.7	3555	42.7	12.5	3230	31.4	9.2	2900	21.8	6.4	2515	10.9	3.2	1865			
1675	790	54.0	15.8	3480	43.1	12.6	3155	31.8	9.3	2825	22.2	6.5	2440	11.3	3.3	1790			
1800	850	54.6	16.0	3425	43.7	12.8	3100	32.4	9.5	2770	22.8	6.7	2385	11.9	3.5	1735			

### HEATING PERFORMANCE at 1550 cfm (730 L/s) Indoor Coil Air Volume HP29-048 with

[CB29M-46]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	3660	10.6	53.5	15.7
60	16	3570	10.4	50.8	14.9
55	13	3480	10.2	48.2	14.1
50	10	3390	9.9	45.6	13.4
47	8	3335	9.8	44.0	12.9
45	7	3295	9.7	42.6	12.5
40	4	3185	9.3	39.0	11.4
35	2	3080	9.0	35.4	10.4
30	-1	3000	8.8	33.4	9.8
25	-4	2920	8.6	31.4	9.2
20	-7	2845	8.4	29.4	8.6
17	-8	2795	8.2	28.2	8.3
15	-9	2760	8.1	27.1	7.9
10	-12	2670	7.8	24.5	7.2
5	-15	2505	7.4	21.8	6.4
0	-18	2340	6.9	19.2	5.6
-5	-21	2175	6.4	16.5	4.8
-10	-23	2010	5.9	13.8	4.0
-15	-26	1845	5.4	11.1	3.3
-20	-29	1680	4.9	8.5	2.5

### HEATING PERFORMANCE at 1675 cfm (790 L/s) Indoor Coil Air Volume HP29-048 with

[CB29M-51]

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	3480	10.1	54.0	15.8
60	16	3400	9.9	51.4	15.1
55	13	3320	9.7	48.7	14.3
50	10	3240	9.5	46.1	13.5
47	8	3195	9.4	44.5	13.0
45	7	3155	9.3	43.1	12.6
40	4	3060	9.1	39.5	11.6
35	2	2960	8.8	35.9	10.5
30	-1	2890	8.7	33.8	9.9
25	-4	2825	8.5	31.8	9.3
20	-7	2755	8.4	29.8	8.7
17	-8	2715	8.3	28.6	8.4
15	-9	2680	8.2	27.5	8.1
10	-12	2600	8.0	24.9	7.3
5	-15	2440	7.2	22.2	6.5
0	-18	2275	6.7	19.5	5.7
-5	-21	2115	6.3	16.7	4.9
-10	-23	1955	5.7	14.0	4.1
-15	-26	1790	5.2	11.3	3.3
-20	-29	1630	4.8	8.3	2.5

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-048 with**

**[CB29M-65]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	45.5	13.3	3630	.75	.90	1.0	43.8	12.8	4100	.77	.91	1.0	42.0	12.3	4640	.78	.93	1.0	40.2	11.8	5260	.8	.95	1.0
	1600	755	46.5	13.6	3640	.79	.94	1.0	44.8	13.1	4110	.8	.95	1.0	43.0	12.6	4660	.82	.97	1.0	41.2	12.1	5270	.83	.99	1.0
	1800	850	47.5	13.9	3660	.82	.97	1.0	45.7	13.4	4130	.83	.98	1.0	44.0	12.9	4670	.85	1.0	1.0	42.3	12.4	5280	.87	1.0	1.0
67°F (19°C)	1400	660	48.4	14.2	3670	.58	.73	.86	46.5	13.6	4140	.59	.74	.88	44.6	13.1	4680	.6	.76	.90	42.6	12.5	5290	.61	.77	.92
	1600	755	49.2	14.4	3680	.6	.76	.91	47.3	13.9	4160	.61	.78	.92	45.3	13.3	4690	.62	.79	.95	43.3	12.7	5310	.63	.81	.96
	1800	850	49.9	14.6	3700	.62	.80	.94	48.0	14.1	4170	.63	.81	.96	45.9	13.5	4710	.64	.83	.98	43.9	12.9	5320	.66	.85	.99
71°F (22°C)	1400	660	51.7	15.2	3720	.43	.57	.70	49.7	14.6	4200	.43	.58	.71	47.6	14.0	4740	.44	.58	.73	45.6	13.4	5350	.44	.59	.75
	1600	755	52.5	15.4	3740	.44	.59	.74	50.5	14.8	4220	.44	.60	.75	48.4	14.2	4750	.45	.61	.77	46.2	13.5	5360	.45	.62	.79
	1800	850	53.2	15.6	3750	.45	.61	.77	51.1	15.0	4230	.45	.62	.79	48.9	14.3	4770	.46	.63	.81	46.8	13.7	5380	.46	.65	.83

**COOLING CAPACITY - HP29-048 with**

**[CB30M-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1050	495	41.4	12.1	3530	.7	.82	.93	39.9	11.7	3990	.71	.83	.95	38.3	11.2	4520	.71	.85	.97	36.7	10.8	5130	.73	.86	.98
	1250	590	42.8	12.5	3550	.73	.86	.98	41.2	12.1	4010	.74	.88	.99	39.5	11.6	4540	.75	.90	1.0	37.8	11.1	5150	.77	.92	1.0
	1450	685	43.9	12.9	3570	.76	.91	1.0	42.2	12.4	4030	.77	.93	1.0	40.5	11.9	4560	.79	.94	1.0	38.8	11.4	5170	.81	.96	1.0
67°F (19°C)	1050	495	44.4	13.0	3570	.55	.67	.78	42.7	12.5	4040	.56	.68	.80	41.0	12.0	4570	.56	.69	.81	39.2	11.5	5170	.57	.70	.83
	1250	590	45.7	13.4	3590	.57	.70	.83	43.9	12.9	4060	.58	.71	.85	42.1	12.3	4590	.58	.73	.86	40.3	11.8	5190	.59	.74	.88
	1450	685	46.6	13.7	3610	.59	.74	.88	44.8	13.1	4070	.6	.75	.89	42.9	12.6	4600	.61	.77	.91	41.1	12.0	5200	.61	.78	.93
71°F (22°C)	1050	495	47.5	13.9	3620	.42	.53	.64	45.7	13.4	4090	.42	.54	.65	43.9	12.9	4620	.43	.54	.66	42.1	12.3	5220	.43	.55	.67
	1250	590	48.8	14.3	3650	.43	.55	.67	47.0	13.8	4110	.43	.56	.69	45.1	13.2	4640	.43	.57	.70	43.1	12.6	5240	.43	.58	.72
	1450	685	49.8	14.6	3670	.43	.57	.71	47.9	14.0	4130	.43	.58	.72	45.9	13.5	4660	.44	.59	.74	43.9	12.9	5260	.44	.60	.76

**HEATING CAPACITY - HP29-048 with**

**[CB29M-65]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1400	660	53.4	15.6	3745	42.2	12.4	3400	30.9	9.1	3050	21.2	6.2	2645	10.4	3.0	1980
1600	755	54.2	15.9	3610	43.0	12.6	3265	31.7	9.3	2915	22.0	6.4	2510	11.2	3.3	1845
1800	850	55.2	16.2	3550	44.0	12.9	3205	32.7	9.6	2855	23.0	6.7	2450	12.2	3.6	1785

**HEATING CAPACITY - HP29-048 with**

**[CB30M-41]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil														
		65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW	
1050	495	51.7	15.2	3950	40.8	12.0	3600	29.6	8.7	3240	20.2	5.9	2825	9.9	2.9	2130
1250	590	52.5	15.4	3735	41.6	12.2	3385	30.4	8.9	3025	21.0	6.2	2610	10.7	3.1	1915
1450	685	53.1	15.6	3585	42.2	12.4	3235	31.0	9.1	2875	21.6	6.3	2460	11.3	3.3	1765

**HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB29M-65]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C			kBtuh	kW
65	18	3610		54.2	15.9
60	16	3525		51.5	15.1
55	13	3440		48.8	14.3
50	10	3355		46.1	13.5
47	8	3305		44.5	13.0
45	7	3265		43.0	12.6
40	4	3160		39.4	11.5
35	2	3060		35.8	10.5
30	-1	2985		33.7	9.9
25	-4	2915		31.7	9.3
20	-7	2840		29.6	8.7
17	-8	2795		28.4	8.3
15	-9	2765		27.3	8.0
10	-12	2680		24.6	7.2
5	-15	2510		22.0	6.4
0	-18	2345		19.3	5.7
-5	-21	2180		16.6	4.9
-10	-23	2010		13.9	4.1
-15	-26	1845		11.2	3.3
-20	-29	1680		8.5	2.5

**HEATING PERFORMANCE at 1250 cfm (590 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB30M-41]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C			kBtuh	kW
65	18	3735		52.5	15.4
60	16	3650		49.8	14.6
55	13	3565		47.2	13.8
50	10	3475		44.6	13.1
47	8	3425		43.0	12.6
45	7	3385		41.6	12.2
40	4	3280		38.0	11.1
35	2	3175		34.5	10.1
30	-1	3100		32.5	9.5
25	-4	3025		30.4	8.9
20	-7	2950		28.4	8.3
17	-8	2905		27.2	8.0
15	-9	2870		26.1	7.6
10	-12	2780		23.5	6.9
5	-15	2610		21.0	6.2
0	-18	2435		18.1	5.4
-5	-21	2260		15.8	4.6
-10	-23	2090		13.3	3.9
-15	-26	1915		10.7	3.1
-20	-29	1740		8.2	2.4

**RATINGS**

**4 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-048 with**

**[CB30M-46] [CB30U-41/46]**

Entering Wet Bulb Temperature	Total Air Volume cfm   L/s		Outdoor Air Temperature Entering Outdoor Coil																										
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)								
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb					
75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		
63°F (17°C)	1250	590	43.8	12.8	3430	.73	.86	.98	42.1	12.3	3870	.74	.88	.99	40.4	11.8	4390	.75	1.0	.90	38.7	11.3	4970	.77	.92	1.0			
	1375	650	44.5	13.0	3440	.75	.89	1.0	42.8	12.5	3890	.76	.91	1.0	41.1	12.0	4400	.78	1.0	.93	39.3	11.5	4990	.79	.95	1.0			
	1500	710	45.2	13.2	3450	.77	.92	1.0	43.4	12.7	3900	.78	.94	1.0	41.7	12.2	4410	.8	1.0	.95	40.0	11.7	5000	.81	.97	1.0			
67°F (19°C)	1250	590	46.7	13.7	3470	.57	.70	.83	44.9	13.2	3920	.57	.71	.84	43.0	12.6	4430	.58	.87	.73	41.2	12.1	5010	.59	.74	.88			
	1375	650	47.3	13.9	3480	.58	.72	.86	45.5	13.3	3930	.59	.74	.88	43.6	12.8	4440	.6	.90	.75	41.7	12.2	5010	.61	.77	.91			
	1500	710	47.9	14.0	3490	.59	.74	.89	46.0	13.5	3940	.6	.76	.90	44.1	12.9	4450	.61	.92	.78	42.2	12.4	5030	.62	.79	.94			
71°F (22°C)	1250	590	49.9	14.6	3520	.43	.56	.68	48.0	14.1	3970	.43	.56	.69	46.1	13.5	4480	.43	.70	.57	44.1	12.9	5060	.43	.58	.72			
	1375	650	50.6	14.8	3530	.43	.56	.70	48.7	14.3	3980	.43	.57	.71	46.6	13.7	4490	.44	.73	.58	44.6	13.1	5070	.44	.59	.74			
	1500	710	51.2	15.0	3540	.43	.58	.72	49.2	14.4	3990	.44	.59	.73	47.1	13.8	4500	.44	.75	.60	45.1	13.2	5080	.45	.61	.77			

**COOLING CAPACITY - HP29-048 with**

**[CB30U-51] [CB30M-51] [CB30U-65] [CB30M-65]**

Entering Wet Bulb Temperature	Total Air Volume cfm   L/s		Outdoor Air Temperature Entering Outdoor Coil																										
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)								
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb					
75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		
63°F (17°C)	1400	660	45.6	13.4	3560	.75	.89	1.0	43.8	12.8	4020	.76	.91	1.0	42.0	12.3	4540	.78	.93	1.0	40.2	11.8	5130	.79	.95	1.0			
	1600	755	46.7	13.7	3580	.78	.94	1.0	44.9	13.2	4040	.8	.96	1.0	43.1	12.6	4560	.81	.97	1.0	41.2	12.1	5160	.83	.99	1.0			
	1800	850	47.7	14.0	3590	.82	.97	1.0	45.9	13.5	4060	.83	.99	1.0	44.1	12.9	4580	.85	1.0	1.0	42.4	12.4	5170	.87	1.0	1.0			
67°F (19°C)	1400	660	48.6	14.2	3610	.58	.72	.86	46.7	13.7	4070	.59	.74	.88	44.7	13.1	4600	.6	.75	.90	42.7	12.5	5190	.61	.77	.92			
	1600	755	49.6	14.5	3630	.6	.76	.91	47.6	14.0	4090	.61	.77	.92	45.5	13.3	4610	.62	.79	.94	43.5	12.7	5210	.63	.81	.97			
	1800	850	50.3	14.7	3640	.62	.79	.94	48.3	14.2	4100	.63	.81	.96	46.2	13.5	4630	.64	.83	.98	44.1	12.9	5220	.66	.85	1.0			
71°F (22°C)	1400	660	52.1	15.3	3670	.43	.56	.70	50.0	14.7	4140	.43	.57	.71	47.8	14.0	4660	.44	.58	.73	45.7	13.4	5250	.44	.59	.74			
	1600	755	52.9	15.5	3690	.44	.59	.74	50.8	14.9	4160	.44	.60	.75	48.6	14.2	4680	.44	.61	.77	46.5	13.6	5270	.45	.62	.79			
	1800	850	53.7	15.7	3710	.45	.61	.77	51.5	15.1	4170	.45	.62	.79	49.2	14.4	4700	.46	.63	.81	47.1	13.8	5290	.46	.65	.83			

**HEATING CAPACITY - HP29-048 with**

**[CB30M-46] [CB30U-41/46]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
cfm	L/s	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	
1250	590	52.3	15.3	3830	41.7	12.2	3530	30.9	9.1	3230	21.5	6.3	2845	10.8	3.2	2110				
1400	660	52.7	15.4	3715	42.1	12.3	3415	31.3	9.2	3115	21.9	6.4	2730	11.2	3.3	1995				
1550	730	53.2	15.6	3620	42.6	12.5	3320	31.8	9.3	3020	22.4	6.6	2635	11.7	3.4	1900				

**HEATING CAPACITY - HP29-048 with**

**[CB30U-51] [CB30M-51] [CB30U-65] [CB30M-65]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
cfm	L/s	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	
1400	660	53.4	15.6	3615	42.1	12.3	3330	30.6	9.0	3040	20.8	6.1	2675	10.5	3.1	1985				
1600	755	53.8	15.8	3500	42.5	12.5	3215	31.0	9.1	2925	21.2	6.2	2560	10.9	3.2	1870				
1800	850	54.5	16.0	3415	43.2	12.7	3130	31.7	9.3	2840	21.9	6.4	2475	11.6	3.4	1785				

**HEATING PERFORMANCE at 1400 cfm (660 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB30M-46] [CB30U-41/46]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kW		kBtuh	kW
65	18	3715		52.7	15.4
60	16	3640		50.1	14.7
55	13	3570		47.6	14.0
50	10	3495		45.0	13.2
47	8	3455		43.5	12.7
45	7	3415		42.1	12.3
40	4	3330		38.6	11.3
35	2	3240		35.1	10.3
30	-1	3175		33.2	9.7
25	-4	3115		31.3	9.2
20	-7	3055		29.4	8.6
17	-8	3015		28.2	8.3
15	-9	2985		27.2	8.0
10	-12	2915		24.6	7.2
5	-15	2730		21.9	6.4
0	-18	2545		19.2	5.6
-5	-21	2360		16.5	4.8
-10	-23	2180		13.9	4.1
-15	-26	1995		11.2	3.3
-20	-29	1810		8.5	2.5

**HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB30M/U-51] [CB30M/U-65]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kW		kBtuh	kW
65	18	3500		53.8	15.8
60	16	3430		51.1	15.0
55	13	3360		48.4	14.2
50	10	3290		45.6	13.4
47	8	3250		44.0	12.9
45	7	3215		42.5	12.5
40	4	3130		38.9	11.4
35	2	3045		35.2	10.3
30	-1	2985		33.1	9.7
25	-4	2925		31.0	9.1
20	-7	2865		28.9	8.5
17	-8	2830		27.6	8.1
15	-9	2800		26.5	7.8
10	-12	2730		23.8	7.0
5	-15	2560		21.2	6.2
0	-18	2385		18.6	5.5
-5	-21	2215		16.0	4.7
-10	-23	2045		13.4	3.9
-15	-26	1870		10.9	3.2
-20	-29	1700		8.3	2.4

**RATINGS**

**4 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-048 with**

**[CB31MV-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1135	535	42.8	12.5	3590	.71	.84	.95	41.2	12.1	4060	.72	.85	.97	39.5	11.6	4600	.73	.87	.99	37.8	11.1	5210	.74	.89	1.0
	1275	600	43.7	12.8	3600	.73	.87	.98	42.0	12.3	4070	.74	.89	.99	40.3	11.8	4610	.76	.90	1.0	38.6	11.3	5230	.77	.92	1.0
	1400	660	44.4	13.0	3620	.75	.90	1.0	42.7	12.5	4090	.76	.91	1.0	41.0	12.0	4620	.78	.93	1.0	39.2	11.5	5240	.8	.95	1.0
67°F (19°C)	1135	535	45.7	13.4	3630	.56	.68	.80	44.0	12.9	4100	.56	.69	.82	42.2	12.4	4640	.57	.70	.83	40.4	11.8	5260	.58	.72	.85
	1275	600	46.6	13.7	3650	.57	.70	.84	44.8	13.1	4120	.58	.72	.85	42.9	12.6	4660	.59	.73	.87	41.0	12.0	5270	.6	.75	.89
	1400	660	47.2	13.8	3660	.58	.73	.86	45.3	13.3	4130	.59	.74	.88	43.5	12.7	4670	.6	.75	.90	41.6	12.2	5270	.61	.77	.92
71°F (22°C)	1135	535	48.9	14.3	3690	.42	.54	.65	47.1	13.8	4160	.42	.55	.66	45.2	13.2	4700	.43	.55	.68	43.3	12.7	5310	.43	.56	.69
	1275	600	49.8	14.6	3700	.43	.55	.68	47.9	14.0	4180	.43	.56	.69	45.9	13.5	4710	.43	.57	.71	44.0	12.9	5320	.43	.58	.72
	1400	660	50.4	14.8	3710	.43	.57	.70	48.5	14.2	4190	.43	.57	.71	46.5	13.6	4730	.44	.58	.73	44.5	13.0	5330	.44	.59	.75

**COOLING CAPACITY - HP29-048 with**

**[CB31MV-51] [CB31MV-65]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1425	675	45.5	13.3	3570	.75	.90	1.0	43.7	12.8	4040	.77	.92	1.0	41.8	12.3	4560	.78	.94	1.0	40.0	11.7	5160	.8	.96	1.0
	1625	765	46.5	13.6	3600	.79	.94	1.0	44.7	13.1	4050	.8	.96	1.0	42.9	12.6	4580	.82	.98	1.0	41.0	12.0	5180	.84	1.0	1.0
	1805	850	47.4	13.9	3610	.82	.97	1.0	45.6	13.4	4070	.83	.99	1.0	43.8	12.8	4600	.85	1.0	1.0	42.1	12.3	5190	.87	1.0	1.0
67°F (19°C)	1425	675	48.4	14.2	3630	.58	.73	.87	46.5	13.6	4090	.59	.74	.88	44.5	13.0	4610	.6	.76	.90	42.5	12.5	5210	.61	.77	.93
	1625	765	49.3	14.4	3640	.6	.76	.91	47.3	13.9	4100	.61	.78	.93	45.3	13.3	4630	.62	.79	.95	43.2	12.7	5230	.64	.81	.97
	1805	850	50.0	14.7	3660	.62	.79	.95	48.0	14.1	4120	.63	.81	.96	45.9	13.5	4650	.65	.83	.98	43.8	12.8	5240	.66	.85	1.0
71°F (22°C)	1425	675	51.8	15.2	3690	.43	.57	.70	49.7	14.6	4160	.43	.58	.72	47.6	14.0	4690	.44	.58	.73	45.5	13.3	5270	.44	.60	.75
	1625	765	52.7	15.4	3710	.44	.59	.74	50.5	14.8	4180	.44	.60	.75	48.4	14.2	4700	.45	.61	.77	46.2	13.5	5300	.45	.62	.79
	1805	850	53.3	15.6	3720	.45	.61	.77	51.1	15.0	4190	.45	.62	.79	48.9	14.3	4720	.45	.63	.81	46.7	13.7	5310	.46	.65	.83

**HEATING CAPACITY - HP29-048 with**

**[CB31MV-41]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil														
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input
1135	535	3965	41.1	12.0	3615	29.9	8.8	3255	20.5	6.0	2830	10.2	3.0	2115	
1275	600	3830	41.6	12.2	3480	30.4	8.9	3120	21.0	6.2	2695	10.7	3.1	1980	
1400	660	3740	42.2	12.4	3390	31.0	9.1	3030	21.6	6.3	2605	11.3	3.3	1890	

**HEATING CAPACITY - HP29-048 with**

**[CB31MV-51] [CB31MV-65]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil														
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input
1425	675	3560	41.8	12.3	3305	30.3	8.9	3040	20.5	6.0	2695	10.2	3.0	1995	
1625	765	3450	42.5	12.5	3195	31.0	9.1	2930	21.2	6.2	2585	10.9	3.2	1885	
1805	850	3375	43.2	12.7	3120	31.7	9.3	2855	21.9	6.4	2510	11.6	3.4	1810	

**HEATING PERFORMANCE at 1275 cfm (600 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB31MV-41]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3830	52.5	15.4
60	16	3745	49.8	14.6
55	13	3660	47.2	13.8
50	10	3570	44.6	13.1
47	8	3520	43.0	12.6
45	7	3480	41.6	12.2
40	4	3375	38.0	11.1
35	2	3270	34.5	10.1
30	-1	3195	32.5	9.5
25	-4	3120	30.4	8.9
20	-7	3045	28.4	8.3
17	-8	3000	27.2	8.0
15	-9	2965	26.1	7.6
10	-12	2875	23.5	6.9
5	-15	2695	21.0	6.2
0	-18	2515	18.4	5.4
-5	-21	2340	15.8	4.6
-10	-23	2160	13.3	3.9
-15	-26	1980	10.7	3.1
-20	-29	1800	8.2	2.4

**HEATING PERFORMANCE at 1625 cfm (765 L/s) Indoor Coil Air Volume HP29-048 with**

**[CB31MV-51] [CB31MV-65]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3450	53.8	15.8
60	16	3390	51.1	15.0
55	13	3325	48.4	14.2
50	10	3265	45.6	13.4
47	8	3225	44.0	12.9
45	7	3195	42.5	12.5
40	4	3115	38.9	11.4
35	2	3035	35.2	10.3
30	-1	2985	33.1	9.7
25	-4	2930	31.0	9.1
20	-7	2880	28.9	8.5
17	-8	2850	27.6	8.1
15	-9	2825	26.5	7.8
10	-12	2760	23.8	7.0
5	-15	2585	21.2	6.2
0	-18	2410	18.6	5.5
-5	-21	2235	16.0	4.7
-10	-23	2060	13.4	3.9
-15	-26	1885	10.9	3.2
-20	-29	1710	8.3	2.4

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**UP-FLOW INDOOR COILS**

**COOLING CAPACITY - HP29-048 with**

**[C33-44C]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1300	615	44.9	13.2	3590	.74	.88	.99	43.1	12.6	4060	.75	.89	1.0	41.3	12.1	4590	.76	.91	1.0	39.6	11.6	5200	.78	.93	1.0
	1500	710	46.1	13.5	3610	.77	.92	1.0	44.3	13.0	4080	.79	.94	1.0	42.5	12.5	4610	.8	.96	1.0	40.7	11.9	5210	.82	.98	1.0
	1700	800	47.1	13.8	3640	.8	.96	1.0	45.3	13.3	4100	.82	.98	1.0	43.5	12.7	4630	.84	.99	1.0	41.8	12.3	5240	.86	1.0	1.0
67°F (19°C)	1300	615	47.9	14.0	3650	.57	.71	.84	46.0	13.5	4110	.58	.72	.86	44.0	12.9	4640	.59	.74	.88	42.1	12.3	5240	.6	.75	.90
	1500	710	48.9	14.3	3660	.59	.75	.89	46.9	13.7	4130	.6	.76	.91	44.9	13.2	4670	.61	.78	.93	42.9	12.6	5260	.62	.79	.95
	1700	800	49.7	14.6	3680	.61	.78	.93	47.7	14.0	4150	.63	.80	.95	45.7	13.4	4680	.64	.82	.97	43.6	12.8	5280	.65	.84	.99
71°F (22°C)	1300	615	51.2	15.0	3710	.43	.56	.68	49.2	14.4	4180	.43	.56	.70	47.1	13.8	4700	.43	.57	.71	45.1	13.2	5310	.44	.58	.73
	1500	710	52.2	15.3	3730	.44	.58	.72	50.1	14.7	4200	.44	.59	.74	48.0	14.1	4730	.44	.60	.75	45.9	13.5	5330	.45	.61	.77
	1700	800	53.0	15.5	3740	.43	.60	.76	50.8	14.9	4210	.45	.61	.78	48.7	14.3	4740	.45	.62	.79	46.5	13.6	5340	.46	.64	.81

**COOLING CAPACITY - HP29-048 with**

**[C33-48C]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	cfm	L/s	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb		
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1000	470	42.3	12.4	3610	.69	.81	.92	40.7	11.9	4090	.7	.82	.94	39.1	11.5	4630	.71	.84	.95	37.4	11.0	5250	.72	.85	.97
	1200	565	43.8	12.8	3640	.72	.86	.97	42.2	12.4	4110	.73	.87	.99	40.4	11.8	4650	.75	.89	1.0	38.7	11.3	5270	.76	.91	1.0
	1400	660	45.1	13.2	3660	.75	.90	1.0	43.3	12.7	4130	.77	.92	1.0	41.6	12.2	4680	.79	.94	1.0	39.8	11.7	5300	.8	.96	1.0
67°F (19°C)	1000	470	45.3	13.3	3660	.56	.66	.77	43.6	12.8	4130	.55	.67	.79	41.8	12.3	4680	.56	.68	.80	40.0	11.7	5300	.56	.69	.82
	1200	565	46.8	13.7	3680	.56	.69	.82	45.0	13.2	4160	.57	.71	.84	43.1	12.6	4700	.58	.72	.85	41.2	12.1	5320	.59	.74	.87
	1400	660	47.9	14.0	3700	.58	.73	.87	46.0	13.5	4180	.59	.75	.89	44.1	12.9	4720	.6	.76	.91	42.1	12.3	5340	.61	.78	.92
71°F (22°C)	1000	470	48.5	14.2	3710	.42	.53	.63	46.7	13.7	4190	.42	.53	.64	44.8	13.1	4730	.42	.54	.65	43.0	12.6	5350	.42	.54	.66
	1200	565	50.0	14.7	3740	.43	.55	.67	48.1	14.1	4220	.43	.56	.68	46.1	13.5	4760	.43	.56	.69	44.2	13.0	5370	.43	.57	.71
	1400	660	51.1	15.0	3760	.43	.57	.71	49.1	14.4	4240	.44	.58	.72	47.1	13.8	4780	.44	.59	.73	45.0	13.2	5390	.44	.60	.75

**HEATING CAPACITY - HP29-048 with**

**[C33-44C]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil																	
		65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)	
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW				
1000	470	51.0	14.9	4095	40.3	11.8	3705	29.4	8.6	3315	20.0	5.9	2880	9.8	2.9	2180	10.6	3.1	1935
1200	565	51.8	15.2	3850	41.1	12.0	3460	30.2	8.9	3070	20.8	6.1	2635	10.6	3.1	1935	11.3	3.3	1780
1400	660	52.5	15.4	3695	41.8	12.3	3305	30.9	9.1	2915	21.5	6.3	2480	11.3	3.3	1780			

**HEATING CAPACITY - HP29-048 with**

**[C33-48C]**

Indoor Coil Air Volume 70°F db (21°C db)		Air Temperature Entering Outdoor Coil																	
		65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)	
cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW		kBtuh	kW				
1300	615	52.0	15.2	3790	41.0	12.0	3400	29.7	8.7	3005	20.1	5.9	2575	10.0	2.9	1935	11.1	3.3	1700
1500	710	52.6	15.4	3650	41.6	12.2	3260	30.3	8.9	2865	20.7	6.1	2435	10.6	3.1	1795			
1700	800	53.1	15.6	3555	42.1	12.3	3165	30.8	9.0	2770	21.2	6.2	2340	11.1	3.3	1700			

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-048 with**

**[C33-44C]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3850	51.8	15.2
60	16	3755	49.2	14.4
55	13	3660	46.6	13.7
50	10	3565	44.1	12.9
47	8	3505	42.5	12.5
45	7	3460	41.1	12.0
40	4	3350	37.6	11.0
35	2	3240	34.1	10.0
30	-1	3155	32.1	9.4
25	-4	3070	30.2	8.9
20	-7	2990	28.2	8.3
17	-8	2940	27.0	7.9
15	-9	2900	26.0	7.6
10	-12	2805	23.4	6.9
5	-15	2635	20.8	6.1
0	-18	2460	18.3	5.4
-5	-21	2285	15.7	4.6
-10	-23	2110	13.2	3.9
-15	-26	1935	10.6	3.1
-20	-29	1765	8.1	2.4

**HEATING PERFORMANCE at 1500 cfm (710 L/s) Indoor Coil Air Volume HP29-048 with**

**[C33-48C]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3650	52.6	15.4
60	16	3555	49.9	14.6
55	13	3460	47.3	13.9
50	10	3360	44.6	13.1
47	8	3305	43.0	12.6
45	7	3260	41.6	12.2
40	4	3145	38.0	11.1
35	2	3035	34.4	10.1
30	-1	2950	32.3	9.5
25	-4	2865	30.3	8.9
20	-7	2780	28.2	8.3
17	-8	2730	27.0	7.9
15	-9	2690	25.9	7.6
10	-12	2595	23.3	6.8
5	-15	2435	20.7	6.1
0	-18	2275	18.2	5.3
-5	-21	2115	15.7	4.6
-10	-23	1955	13.2	3.9
-15	-26	1795	10.6	3.1
-20	-29	1635	8.1	2.4

**RATINGS**

**4 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**DOWN-FLOW INDOOR COILS  
[CR33-48B-F]**

**COOLING CAPACITY - HP29-048 with**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume, and Cooling Capacity (Total, Sensible To Total Ratio (S/T), Comp Motor W Input) for outdoor air temperatures of 85°F, 95°F, 105°F, and 115°F. Rows include 63°F, 67°F, and 71°F wet bulb temperatures.

**COOLING CAPACITY - HP29-048 with**

**[CR33-48C-F]**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume, and Cooling Capacity (Total, Sensible To Total Ratio (S/T), Comp Motor W Input) for outdoor air temperatures of 85°F, 95°F, 105°F, and 115°F. Rows include 63°F, 67°F, and 71°F wet bulb temperatures.

**HEATING CAPACITY - HP29-048 with**

**[CR33-48B-F]**

Table with columns for Indoor Coil Air Volume, Air Temperature Entering Outdoor Coil, and Heating Capacity (Total Heating Capacity, Comp. Motor W Input) for outdoor temperatures of 65°F, 45°F, 25°F, 5°F, and -15°F. Rows include indoor temperatures of 70°F, 1300, and 1500 cfm.

**HEATING CAPACITY - HP29-048 with**

**[CR33-48C-F]**

Table with columns for Indoor Coil Air Volume, Air Temperature Entering Outdoor Coil, and Heating Capacity (Total Heating Capacity, Comp. Motor W Input) for outdoor temperatures of 65°F, 45°F, 25°F, 5°F, and -15°F. Rows include indoor temperatures of 70°F, 1300, 1500, and 1700 cfm.

**HEATING PERFORMANCE at cfm ( L/s) Indoor Coil Air Volume HP29-048 with**

**[CR33-48B-F]**

Table with columns for Outdoor Temperature and Heating Performance (Compressor Motor W Input, Total Output kBTuh, kW) for various outdoor temperatures from 65°F to -20°F.

**HEATING PERFORMANCE at 1500 cfm (710 L/s) Indoor Coil Air Volume HP29-048 with**

**[CR33-48C-F]**

Table with columns for Outdoor Temperature and Heating Performance (Compressor Motor W Input, Total Output kBTuh, kW) for various outdoor temperatures from 65°F to -20°F.

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**HORIZONTAL INDOOR COILS**

**COOLING CAPACITY - HP29-048 with**

**[CH23-51]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	cfm	L/s	Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	45.3	13.3	3620	.76	.91	1.0	43.6	12.8	4090	.77	.92	1.0	41.9	12.3	4630	.79	.94	1.0	40.1	11.8	5260	.8	.96	1.0
	1600	755	46.4	13.6	3640	.79	.94	1.0	44.7	13.1	4110	.81	.96	1.0	42.9	12.6	4660	.82	.98	1.0	41.2	12.1	5270	.84	.99	1.0
	1800	850	47.4	13.9	3660	.83	.98	1.0	45.7	13.4	4130	.84	.99	1.0	43.9	12.9	4670	.86	1.0	1.0	42.3	12.4	5280	.88	1.0	1.0
67°F (19°C)	1400	660	48.1	14.1	3660	.59	.77	.87	46.2	13.5	4130	.59	.75	.89	44.3	13.0	4670	.6	.76	.91	42.5	12.5	5280	.61	.78	.93
	1600	755	49.0	14.4	3680	.61	.77	.92	47.1	13.8	4150	.62	.78	.93	45.1	13.2	4690	.63	.80	.95	43.1	12.6	5300	.64	.82	.97
	1800	850	49.7	14.6	3690	.63	.80	.95	47.7	14.0	4160	.64	.82	.97	45.7	13.4	4700	.65	.84	.98	43.8	12.8	5310	.66	.86	1.0
71°F (22°C)	1400	660	51.4	15.1	3720	.43	.57	.71	49.4	14.5	4190	.44	.58	.72	47.3	13.9	4730	.44	.59	.74	45.3	13.3	5340	.44	.60	.75
	1600	755	52.2	15.3	3730	.44	.59	.75	50.2	14.7	4210	.44	.60	.76	48.1	14.1	4740	.45	.61	.78	46.0	13.5	5350	.45	.63	.80
	1800	850	52.8	15.5	3740	.45	.62	.78	50.8	14.9	4220	.45	.63	.80	48.6	14.2	4760	.46	.64	.82	46.5	13.6	5370	.46	.65	.84

**COOLING CAPACITY - HP29-048 with**

**[CH33-42B-2F] [CH23-41]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	cfm	L/s	Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity kBtuh	Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C
63°F (17°C)	1400	660	43.9	12.9	3530	.76	.91	1.0	42.3	12.4	3990	.77	.92	1.0	40.6	11.9	4520	.79	.94	1.0	39.0	11.4	5130	.81	.96	1.0
	1600	755	44.9	13.2	3540	.8	.95	1.0	43.3	12.7	4010	.81	.96	1.0	41.6	12.2	4540	.83	.98	1.0	40.0	11.7	5150	.84	.99	1.0
	1800	850	45.9	13.5	3560	.83	.98	1.0	44.2	13.0	4020	.85	.99	1.0	42.6	12.5	4550	.86	1.0	1.0	41.0	12.0	5150	.88	1.0	1.0
67°F (19°C)	1400	660	46.5	13.6	3560	.59	.74	.88	44.8	13.1	4030	.6	.75	.89	42.9	12.6	4550	.61	.77	.91	41.1	12.0	5160	.62	.78	.93
	1600	755	47.3	13.9	3580	.61	.77	.92	45.5	13.3	4040	.62	.79	.93	43.6	12.8	4570	.63	.81	.95	41.8	12.3	5160	.64	.82	.97
	1800	850	48.0	14.1	3590	.63	.81	.95	46.1	13.5	4050	.64	.82	.97	44.3	13.0	4570	.65	.84	.98	42.4	12.4	5170	.67	.86	1.0
71°F (22°C)	1400	660	49.6	14.5	3610	.43	.57	.71	47.8	14.0	4080	.44	.58	.73	45.8	13.4	4600	.44	.59	.74	43.9	12.9	5200	.44	.60	.76
	1600	755	50.4	14.8	3630	.44	.60	.75	48.5	14.2	4090	.45	.61	.76	46.5	13.6	4620	.45	.62	.78	44.5	13.0	5220	.45	.63	.80
	1800	850	51.0	14.9	3640	.45	.62	.78	49.1	14.4	4100	.45	.63	.80	47.0	13.8	4630	.46	.64	.82	45.0	13.2	5230	.46	.66	.84

**HEATING CAPACITY - HP29-048 with**

**[CH23-51]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)							
cfm	L/s	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	
1400	660	53.0	15.5	3735	42.0	12.3	3360	30.7	9.0	2975	21.0	6.2	2555	10.4	3.0	1915
1600	755	53.6	15.7	3615	42.6	12.5	3240	31.3	9.2	2855	21.6	6.3	2435	11.0	3.2	1795
1800	850	54.1	15.9	3525	43.1	12.6	3150	31.8	9.3	2765	22.1	6.5	2345	11.5	3.4	1705

**HEATING CAPACITY - HP29-048 with**

**[CH33-42B-2F] [CH23-41]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)		45°F (7°C)		25°F (-4°C)		5°F (-15°C)		-15°F (-26°C)							
cfm	L/s	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	Total Heating Capacity kW	Comp. Motor W Input	Total Heating Capacity kBtuh	Comp. Motor W Input	
1400	660	52.4	15.4	3795	41.5	12.2	3400	30.2	8.9	2995	20.7	6.1	2550	10.3	3.0	1915
1600	755	53.0	15.5	3670	42.1	12.3	3275	30.8	9.0	2870	21.3	6.2	2425	10.9	3.2	1790
1800	850	53.5	15.7	3575	42.6	12.5	3180	31.3	9.2	2775	21.8	6.4	2330	11.4	3.3	1695

**HEATING PERFORMANCE at cfm ( L/s) Indoor Coil Air Volume HP29-048 with**

**[CH23-51]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	3615	53.6	15.7	53.6
60	16	3525	50.9	14.9	50.9
55	13	3430	48.3	14.2	48.3
50	10	3340	45.6	13.4	45.6
47	8	3280	44.0	12.9	44.0
45	7	3240	42.6	12.5	42.6
40	4	3130	39.0	11.4	39.0
35	2	3020	35.3	10.3	35.3
30	-1	2940	33.3	9.8	33.3
25	-4	2855	31.3	9.2	31.3
20	-7	2775	29.2	8.6	29.2
17	-8	2725	28.0	8.2	28.0
15	-9	2690	26.9	7.9	26.9
10	-12	2595	24.3	7.1	24.3
5	-15	2435	21.6	6.3	21.6
0	-18	2275	19.0	5.6	19.0
-5	-21	2115	16.3	4.8	16.3
-10	-23	1955	13.7	4.0	13.7
-15	-26	1795	11.0	3.2	11.0
-20	-29	1635	8.4	2.5	8.4

**HEATING PERFORMANCE at 1600 cfm (755 L/s) Indoor Coil Air Volume HP29-048 with**

**[CH33-42B-2F] [CH23-41]**

*Outdoor Temperature		Compressor Motor W Input		Total Output	
°F	°C	kBtuh	kW	kBtuh	kW
65	18	2670	53.0	15.5	53.0
60	16	3575	50.4	14.8	50.4
55	13	3475	47.7	14.0	47.7
50	10	3375	45.1	13.2	45.1
47	8	3315	43.5	12.7	43.5
45	7	3275	42.1	12.3	42.1
40	4	3165	38.5	11.3	38.5
35	2	3060	34.9	10.2	34.9
30	-1	2965	32.9	9.6	32.9
25	-4	2870	30.8	9.0	30.8
20	-7	2780	28.8	8.4	28.8
17	-8	2720	27.6	8.1	27.6
15	-9	2680	26.5	7.8	26.5
10	-12	2585	23.9	7.0	23.9
5	-15	2425	21.3	6.2	21.3
0	-18	2265	18.7	5.5	18.7
-5	-21	2110	16.1	4.7	16.1
-10	-23	1950	13.5	4.0	13.5
-15	-26	1790	10.9	3.2	10.9
-20	-29	1635	8.3	2.4	8.3

**RATINGS**

**4 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**HORIZONTAL INDOOR COILS**

**COOLING CAPACITY - HP29-048 with**

[CH33-48C-F] [CH23-65]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb				
				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C		
cfm	L/s	kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				
63°F (17°C)	1400	660	45.2	13.2	3600	.76	.90	1.0	43.4	12.7	4060	.77	.92	1.0	41.7	12.2	4600	.78	.94	1.0	39.9	11.7	5210	.8	.96	1.0
	1600	755	46.3	13.6	3620	.79	.94	1.0	44.5	13.0	4090	.81	.96	1.0	42.7	12.5	4610	.82	.98	1.0	41.0	12.0	5220	.84	.99	1.0
	1800	850	47.2	13.8	3630	.82	.98	1.0	45.5	13.3	4100	.84	.99	1.0	43.8	12.8	4630	.86	1.0	1.0	42.1	12.3	5240	.88	1.0	1.0
67°F (19°C)	1400	660	48.0	14.1	3640	.59	.73	.87	46.1	13.5	4110	.59	.74	.89	44.2	13.0	4640	.6	.76	.91	42.2	12.4	5250	.61	.78	.93
	1600	755	48.9	14.3	3660	.61	.77	.91	46.9	13.7	4120	.61	.78	.93	45.0	13.2	4660	.63	.80	.95	43.0	12.6	5260	.64	.82	.97
	1800	850	49.6	14.5	3670	.63	.80	.95	47.6	14.0	4140	.64	.82	.97	45.6	13.4	4670	.65	.84	.98	43.6	12.8	5270	.66	.86	1.0
71°F (22°C)	1400	660	51.3	15.0	3700	.43	.57	.71	49.3	14.4	4170	.43	.58	.72	47.2	13.8	4700	.44	.59	.74	45.1	13.2	5310	.44	.60	.75
	1600	755	52.1	15.3	3720	.44	.59	.74	50.1	14.7	4190	.44	.60	.76	47.9	14.0	4720	.45	.61	.78	45.8	13.4	5320	.45	.62	.79
	1800	850	52.8	15.5	3730	.45	.62	.78	50.7	14.9	4200	.45	.63	.80	48.5	14.2	4730	.46	.64	.82	46.4	13.6	5330	.46	.65	.83

**HEATING CAPACITY - HP29-048 with**

[CH33-48C-F] [CH23-65]

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
cfm	L/s	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh
1400	660	53.0	15.5	3730	42.0	12.3	3355	30.7	9.0	2975	21.0	6.2	2550	10.4	3.0	1910				
1600	755	53.6	15.7	3615	42.6	12.5	3240	31.3	9.2	2860	21.6	6.3	2435	11.0	3.2	1795				
1800	850	54.1	15.9	3530	43.1	12.6	3155	31.8	9.3	2775	22.1	6.5	2350	11.5	3.4	1710				

**HEATING PERFORMANCE at cfm ( L/s) Indoor Coil Air Volume HP29-048 with**

[CH33-48C-F] [CH23-65]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	3615	53.6	15.7
60	16	3525	50.9	14.9
55	13	3430	48.3	14.2
50	10	3340	45.6	13.4
47	8	3280	44.0	12.9
45	7	3240	42.6	12.5
40	4	3130	39.0	11.4
35	2	3020	35.3	10.3
30	-1	2940	33.3	9.8
25	-4	2860	31.3	9.2
20	-7	2775	29.2	8.6
17	-8	2725	28.0	8.2
15	-9	2690	26.9	7.9
10	-12	2595	24.3	7.1
5	-15	2435	21.6	6.3
0	-18	2275	19.0	5.6
-5	-21	2115	16.3	4.8
-10	-23	1955	13.7	4.0
-15	-26	1795	11.0	3.2
-20	-29	1635	8.4	2.5



**RATINGS**

**5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section. Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-060 with**

**[CB29M-51]**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume, and Outdoor Air Temperature (85°F, 95°F, 105°F, 115°F) with sub-columns for Cooling Capacity and Sensible To Total Ratio (S/T) Dry Bulb.

**COOLING CAPACITY - HP29-060 with**

**[CB29M-65]**

Table with columns for Entering Wet Bulb Temperature, Total Air Volume, and Outdoor Air Temperature (85°F, 95°F, 105°F, 115°F) with sub-columns for Cooling Capacity and Sensible To Total Ratio (S/T) Dry Bulb.

**HEATING CAPACITY - HP29-060 with**

**[CB29M-51]**

Table with columns for Indoor Coil Air Volume (70°F db) and Air Temperature Entering Outdoor Coil (65°F, 45°F, 25°F, 5°F, -15°F) with sub-columns for Heating Capacity and Comp. Motor W Input.

**HEATING CAPACITY - HP29-060 with**

**[CB29M-65]**

Table with columns for Indoor Coil Air Volume (70°F db) and Air Temperature Entering Outdoor Coil (65°F, 45°F, 25°F, 5°F, -15°F) with sub-columns for Heating Capacity and Comp. Motor W Input.

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil Air Volume HP29-060 with**

**[CB29M-51]**

Table with columns for \*Outdoor Temperature (°F, °C), Compressor Motor W Input, and Total Output (kBTuh, kW).

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-060 with**

**[CB29M-65]**

Table with columns for \*Outdoor Temperature (°F, °C), Compressor Motor W Input, and Total Output (kBTuh, kW).

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**AIR HANDLERS**

**COOLING CAPACITY - HP29-060 with**

**[CB30M-51] [CB30U-51]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																											
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)									
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C				
63°F (17°C)	1400	660	52.7	15.4	4460	.69	.80	.92	50.9	14.9	5040	.69	.82	.93	49.0	14.4	5710	.7	.83	.95	47.0	13.8	6460	.71	.84	.96				
	1600	755	54.2	15.9	4450	.71	.84	.95	52.3	15.3	5030	.72	.85	.97	50.3	14.7	5700	.73	.86	.98	48.2	14.1	6460	.74	.88	.99				
	1800	850	55.3	16.2	4450	.73	.87	.98	53.4	15.6	5030	.74	.88	.99	51.4	15.1	5700	.75	.90	1.0	49.3	14.4	6460	.77	.92	1.0				
67°F (19°C)	1400	660	56.5	16.6	4450	.55	.66	.77	54.6	16.0	5020	.55	.67	.78	52.6	15.4	5690	.56	.67	.79	50.5	14.8	6460	.56	.69	.81				
	1600	755	58.0	17.0	4450	.56	.68	.80	56.0	16.4	5020	.56	.69	.81	53.8	15.8	5690	.57	.70	.83	51.6	15.1	6450	.58	.71	.85				
	1800	850	59.1	17.3	4440	.57	.70	.83	57.0	16.7	5010	.58	.71	.85	54.8	16.1	5690	.58	.73	.87	52.6	15.4	6450	.59	.74	.88				
71°F (22°C)	1400	660	60.7	17.8	4440	.42	.53	.63	58.6	17.2	5020	.42	.53	.64	56.5	16.6	5690	.42	.53	.65	54.3	15.9	6460	.42	.54	.66				
	1600	755	62.1	18.2	4430	.42	.54	.65	60.0	17.6	5010	.42	.54	.66	57.8	16.9	5680	.43	.55	.67	55.4	16.2	6460	.43	.56	.69				
	1800	850	63.2	18.5	4450	.43	.55	.68	61.0	17.9	5010	.43	.56	.69	58.8	17.2	5680	.43	.57	.70	56.4	16.5	6450	.43	.57	.71				

**COOLING CAPACITY - HP29-060 with**

**[CB30M-65] [CB30U-65]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																											
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)									
			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb						
			kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C				
63°F (17°C)	1550	730	57.2	16.8	4490	.7	.83	.94	55.2	16.2	5070	.71	.84	.96	53.2	15.6	5750	.72	.86	.97	51.0	14.9	6510	.73	.87	.99				
	1750	825	58.6	17.2	4480	.72	.86	.98	56.5	16.6	5070	.74	.88	.99	54.4	15.9	5740	.75	.89	1.0	52.2	15.3	6510	.76	.91	1.0				
	1950	920	59.7	17.5	4480	.75	.89	1.0	57.6	16.9	5060	.76	.91	1.0	55.4	16.2	5740	.77	.92	1.0	53.2	15.6	6510	.79	.94	1.0				
67°F (19°C)	1550	730	61.3	18.0	4480	.55	.68	.79	59.2	17.3	5060	.56	.68	.81	57.0	16.7	5730	.56	.69	.82	54.6	16.0	6500	.57	.71	.84				
	1750	825	62.6	18.3	4480	.57	.70	.83	60.4	17.7	5050	.57	.71	.84	58.1	17.0	5730	.58	.72	.86	55.7	16.3	6500	.59	.73	.88				
	1950	920	63.6	18.6	4470	.58	.72	.86	61.4	18.0	5050	.59	.73	.87	59.0	17.3	5730	.59	.75	.89	56.5	16.6	6500	.6	.76	.91				
71°F (22°C)	1550	730	65.7	19.3	4470	.42	.54	.65	63.4	18.6	5050	.42	.54	.66	61.1	17.9	5730	.43	.55	.67	58.7	17.2	6510	.43	.55	.68				
	1750	825	66.9	19.6	4480	.43	.55	.67	64.7	19.0	5050	.43	.55	.68	62.3	18.3	5720	.43	.56	.69	59.7	17.5	6500	.43	.57	.71				
	1950	920	67.9	19.9	4490	.43	.56	.70	65.6	19.2	5060	.43	.57	.71	63.1	18.5	5740	.44	.58	.72	60.6	17.8	6510	.44	.59	.74				

**HEATING CAPACITY - HP29-060 with**

**[CB30M-51] [CB30U-51]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
cfm	L/s	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh
1400	660	65.0	19.0	5285	51.2	15.0	4675	37.1	10.9	4060	25.2	7.4	3425	12.7	3.7	2600				
1600	755	65.5	19.2	5065	51.7	15.2	4455	37.6	11.0	3840	25.7	7.5	3205	13.2	3.9	2380				
1800	850	66.1	19.4	4900	52.3	15.3	4290	38.2	11.2	3675	26.3	7.7	3040	13.8	4.0	2215				

**HEATING CAPACITY - HP29-060 with**

**[CB30M-65] [CB30U-65]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
cfm	L/s	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh
1425	675	64.9	19.0	5300	51.1	15.0	4680	37.0	10.8	4055	25.1	7.4	3410	12.6	3.7	2590				
1625	765	65.5	19.2	5090	51.7	15.2	4470	37.6	11.0	3845	25.7	7.5	3200	13.2	3.9	2380				
1805	850	65.8	19.3	4945	52.0	15.2	4325	37.9	11.1	3700	26.0	7.6	3055	13.5	4.0	2235				

**HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-060 with**

**[CB30M-51] [CB30U-51]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	5065	65.5	19.2
60	16	4915	62.2	18.2
55	13	4765	58.8	17.2
50	10	4615	55.5	16.3
47	8	4525	53.5	15.7
45	7	4455	51.7	15.2
40	4	4285	47.2	13.8
35	2	4115	42.8	12.5
30	-1	3975	40.2	11.8
25	-4	3840	37.6	11.0
20	-7	3705	35.0	10.3
17	-8	3620	33.5	9.8
15	-9	3560	32.2	9.4
10	-12	3410	28.8	8.4
5	-15	3205	25.7	7.5
0	-18	3000	22.6	6.6
-5	-21	2790	19.4	5.7
-10	-23	2585	16.3	4.8
-15	-26	2380	13.2	3.9
-20	-29	2175	10.1	3.0

**HEATING PERFORMANCE at 1625 cfm (765 L/s) Indoor Coil Air Volume HP29-060 with**

**[CB30M-65] [CB30U-65]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	4955	67.0	19.6
60	16	4810	63.7	18.7
55	13	4670	60.3	17.7
50	10	4525	57.0	16.7
47	8	4440	55.0	16.1
45	7	4375	53.2	15.6
40	4	4215	48.7	14.3
35	2	4050	44.2	13.0
30	-1	3920	41.6	12.2
25	-4	3795	39.1	11.5
20	-7	3665	36.5	10.7
17	-8	3590	35.0	10.3
15	-9	3530	33.7	9.9
10	-12	3390	30.3	8.9
5	-15	3185	27.0	7.9
0	-18	2980	23.7	6.9
-5	-21	2770	20.4	6.0
-10	-23	2565	17.1	5.0
-15	-26	2360	13.8	4.0
-20	-29	2155	10.5	3.1



**RATINGS**

**5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**UP-FLOW INDOOR COILS**

**COOLING CAPACITY - HP29-060 with**

**[C33-50/60C]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb				
	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C		
63°F (17°C)	1300	615	55.2	16.2	4620	.68	.79	.90	53.4	15.6	5220	.68	.80	.91	51.4	15.1	5910	.69	.82	.93	49.3	14.4	6690	.7	.83	.95
	1500	710	56.9	16.7	4610	.70	.83	.94	55.0	16.1	5210	.71	.84	.95	52.9	15.5	5900	.72	.85	.97	50.8	14.9	6690	.73	.87	.98
	1700	800	58.3	17.1	4610	.72	.86	.97	56.3	16.5	5210	.73	.87	.98	54.2	15.9	5900	.75	.89	1.0	52.0	15.2	6680	.76	.91	1.0
67°F (19°C)	1300	615	59.2	17.3	4610	.54	.65	.76	57.2	16.8	5200	.55	.66	.77	55.2	16.2	5900	.55	.66	.78	53.0	15.5	6680	.55	.68	.79
	1500	710	60.9	17.8	4610	.56	.67	.79	58.8	17.2	5200	.56	.68	.80	56.6	16.6	5890	.56	.69	.82	54.3	15.9	6680	.57	.70	.83
	1700	800	62.2	18.2	4610	.57	.70	.83	60.1	17.6	5190	.57	.71	.84	57.8	16.9	5890	.58	.72	.86	55.4	16.2	6680	.59	.73	.87
71°F (22°C)	1300	615	63.5	18.6	4600	.42	.52	.62	61.4	18.0	5200	.42	.53	.63	59.2	17.3	5890	.42	.53	.64	56.9	16.7	6690	.42	.54	.65
	1500	710	65.2	19.1	4590	.42	.54	.65	63.0	18.5	5190	.42	.54	.66	60.7	17.8	5890	.43	.55	.67	58.3	17.1	6680	.43	.55	.68
	1700	800	66.6	19.5	4590	.42	.55	.67	64.3	18.8	5190	.43	.55	.68	61.9	18.1	5880	.43	.56	.69	59.4	17.4	6680	.43	.57	.71

**COOLING CAPACITY - HP29-060 with**

**[C33-60D]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb				
	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW		75°F 24°C	80°F 27°C	85°F 29°C		
63°F (17°C)	1600	755	57.7	16.9	4410	.71	.84	.95	55.7	16.3	4980	.72	.85	.97	53.6	15.7	5650	.73	.86	.98	51.4	15.1	6400	.74	.88	.99
	1800	850	59.0	17.3	4400	.73	.87	.98	56.9	16.7	4980	.74	.88	.99	54.8	16.1	5640	.75	.90	1.0	52.5	15.4	6400	.77	.92	1.0
	2000	945	60.1	17.6	4400	.75	.90	1.0	58.0	17.0	4980	.76	.91	1.0	55.8	16.4	5640	.78	.93	1.0	53.5	15.7	6390	.8	.95	1.0
67°F (19°C)	1600	755	61.8	18.1	4400	.56	.68	.80	59.7	17.5	4970	.56	.69	.81	57.4	16.8	5630	.57	.70	.83	55.0	16.1	6390	.57	.71	.85
	1800	850	63.0	18.5	4400	.57	.70	.83	60.8	17.8	4960	.58	.71	.85	58.5	17.1	5630	.58	.73	.87	56.0	16.4	6390	.59	.74	.88
	2000	945	64.0	18.8	4390	.58	.73	.86	61.7	18.1	4960	.59	.74	.88	59.3	17.4	5630	.6	.75	.90	56.9	16.7	6390	.61	.77	.92
71°F (22°C)	1600	755	66.2	19.4	4390	.42	.54	.65	63.9	18.7	4960	.43	.54	.66	61.6	18.1	5630	.43	.55	.67	59.1	17.3	6390	.43	.56	.69
	1800	850	67.4	19.8	4410	.43	.55	.68	65.0	19.0	4970	.43	.56	.69	62.6	18.3	5640	.43	.57	.70	60.1	17.6	6400	.43	.57	.71
	2000	945	68.3	20.0	4420	.43	.57	.70	65.9	19.3	4990	.43	.58	.71	63.5	18.6	5650	.44	.58	.73	60.9	17.8	6410	.44	.59	.74

**HEATING CAPACITY - HP29-060 with**

**[C33-50/60C]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
kBtuh	kW	kBtuh	kW	kBtuh		kW	kBtuh		kW	kBtuh		kW					
1300	615		67.5	19.8	5505	53.5	15.7	4915	39.1	11.5	4315	26.8	7.9	3685	13.3	3.9	2800
	1500	710	68.2	20.0	5215	54.2	15.9	4625	39.8	11.7	4025	27.5	8.1	3395	14.0	4.1	2510
	1700	800	68.7	20.1	5000	54.7	16.0	4410	40.3	11.8	3810	28.0	8.2	3180	14.5	4.2	2295

**HEATING CAPACITY - HP29-060 with**

**[C33-60D]**

Indoor Coil Air Volume 70°F db (21°C db)	Total Air Volume		Air Temperature Entering Outdoor Coil														
			65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)		
	cfm	L/s	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input
kBtuh	kW	kBtuh	kW	kBtuh		kW	kBtuh		kW	kBtuh		kW					
1600	755		66.5	19.5	5155	52.7	15.4	4580	38.6	11.3	3995	26.5	7.8	3385	13.3	3.9	2550
	1800	850	67.0	19.6	4990	53.2	15.6	4415	39.1	11.5	3830	27.0	7.9	3220	13.8	4.0	2385
	2000	945	67.5	19.8	4860	53.7	15.7	4285	39.6	11.6	3700	27.5	8.1	3090	14.3	4.2	2255

**HEATING PERFORMANCE at 1500 cfm (710 L/s) Indoor Coil Air Volume HP29-060 with**

**[C33-50/60C]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	5215	68.2	20.0
60	16	5070	64.8	19.0
55	13	4925	61.4	18.0
50	10	4775	58.0	17.0
47	8	4690	56.0	16.4
45	7	4625	54.2	15.9
40	4	4455	49.6	14.5
35	2	4290	45.0	13.2
30	-1	4155	42.4	12.4
25	-4	4025	39.8	11.7
20	-7	3895	37.2	10.9
17	-8	3815	35.6	10.4
15	-9	3760	34.2	10.0
10	-12	3615	30.8	9.0
5	-15	3395	27.5	8.1
0	-18	3170	24.1	7.1
-5	-21	2950	20.8	6.1
-10	-23	2730	17.4	5.1
-15	-26	2510	14.0	4.1
-20	-29	2290	10.7	3.1

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil Air Volume HP29-060 with**

**[C33-60D]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	4990	67.0	19.6
60	16	4850	63.7	18.7
55	13	4705	60.3	17.7
50	10	4565	57.0	16.7
47	8	4480	55.0	16.1
45	7	4415	53.2	15.6
40	4	4250	48.7	14.3
35	2	4085	44.2	13.0
30	-1	3960	41.6	12.2
25	-4	3830	39.1	11.5
20	-7	3705	36.5	10.7
17	-8	3625	35.0	10.3
15	-9	3570	33.7	9.9
10	-12	3430	30.3	8.9
5	-15	3220	27.0	7.9
0	-18	3010	23.7	6.9
-5	-21	2800	20.4	6.0
-10	-23	2595	17.1	5.0
-15	-26	2385	13.8	4.0
-20	-29	2175	10.5	3.1

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section. Expanded rating tables are sorted by smallest to largest indoor unit model no.

DOWN-FLOW INDOOR COILS

[CR33-48C-F]

COOLING CAPACITY - HP29-060 with

Table for Cooling Capacity - HP29-060 with CR33-48C-F. Columns include Entering Wet Bulb Temperature, Total Air Volume (cfm, L/s), and Outdoor Air Temperature Entering Outdoor Coil (85°F, 95°F, 105°F, 115°F) with sub-columns for Total Cooling Capacity, Comp. Motor W Input, and Sensible To Total Ratio (S/T) Dry Bulb.

COOLING CAPACITY - HP29-060 with

[CR33-60D-F]

Table for Cooling Capacity - HP29-060 with CR33-60D-F. Columns include Entering Wet Bulb Temperature, Total Air Volume (cfm, L/s), and Outdoor Air Temperature Entering Outdoor Coil (85°F, 95°F, 105°F, 115°F) with sub-columns for Total Cooling Capacity, Comp. Motor W Input, and Sensible To Total Ratio (S/T) Dry Bulb.

HEATING CAPACITY - HP29-060 with

[CR33-48C-F]

Table for Heating Capacity - HP29-060 with CR33-48C-F. Columns include Indoor Coil Air Volume (70°F db, 21°C db) and Air Temperature Entering Outdoor Coil (65°F, 45°F, 25°F, 5°F, -15°F) with sub-columns for Total Heating Capacity and Comp. Motor W Input.

HEATING CAPACITY - HP29-060 with

[CR33-60D-F]

Table for Heating Capacity - HP29-060 with CR33-60D-F. Columns include Indoor Coil Air Volume (70°F db, 21°C db) and Air Temperature Entering Outdoor Coil (65°F, 45°F, 25°F, 5°F, -15°F) with sub-columns for Total Heating Capacity and Comp. Motor W Input.

HEATING PERFORMANCE at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-060 with [CR33-48C-F]

Table for Heating Performance at 1200 cfm (565 L/s) Indoor Coil Air Volume HP29-060 with CR33-48C-F. Columns include Outdoor Temperature (°F, °C), Compressor Motor W Input, and Total Output (kBtu/h, kW).

HEATING PERFORMANCE at 1500 cfm (710 L/s) Indoor Coil Air Volume HP29-060 with [CR33-60D-F]

Table for Heating Performance at 1500 cfm (710 L/s) Indoor Coil Air Volume HP29-060 with CR33-60D-F. Columns include Outdoor Temperature (°F, °C), Compressor Motor W Input, and Total Output (kBtu/h, kW).

**RATINGS**

**5 TON**

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**HORIZONTAL INDOOR COILS**

**COOLING CAPACITY - HP29-060 with**

**[CH33-48C-F] [CH23-51]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb										
	cfm	L/s		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	1500	710	55.2	16.2	4530	.71	.84	.95	53.4	15.6	5120	.72	.85	.96	51.5	15.1	5800	.73	.86	.97	49.5	14.5	6560	.74	.88	.99
	1700	800	56.5	16.6	4530	.73	.87	.98	54.6	16.0	5120	.74	.88	.99	52.7	15.4	5790	.75	.90	1.0	50.6	14.8	6560	.77	.91	1.0
	1900	895	57.6	16.9	4530	.76	.90	1.0	55.7	16.3	5120	.77	.91	1.0	53.7	15.7	5790	.78	.93	1.0	51.6	15.1	6560	.8	.95	1.0
67°F (19°C)	1500	710	58.9	17.3	4530	.56	.68	.80	57.0	16.7	5110	.56	.69	.81	54.9	16.1	5790	.57	.70	.83	52.7	15.4	6560	.59	.74	.84
	1700	800	60.1	17.6	4530	.57	.71	.84	58.1	17.0	5110	.58	.72	.85	56.0	16.4	5780	.58	.73	.87	53.7	15.7	6550	.59	.74	.88
	1900	895	61.0	17.9	4520	.59	.73	.87	59.0	17.3	5100	.59	.74	.88	56.8	16.6	5780	.6	.76	.90	54.5	16.0	6550	.61	.77	.92
71°F (22°C)	1500	710	62.9	18.4	4520	.42	.54	.66	60.9	17.8	5110	.42	.54	.66	58.7	17.2	5780	.43	.55	.67	56.4	16.5	6560	.43	.56	.68
	1700	800	64.2	18.8	4510	.43	.55	.68	62.0	18.2	5100	.43	.56	.69	59.8	17.5	5780	.43	.57	.70	57.4	16.8	6560	.43	.57	.72
	1900	895	65.1	19.1	4510	.43	.57	.71	62.9	18.4	5100	.43	.58	.72	60.7	17.8	5780	.44	.58	.73	58.3	17.1	6560	.44	.59	.75

**COOLING CAPACITY - HP29-060 with**

**[CH33-50C-F] [CH23-65]**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb										
	cfm	L/s		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C		kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	1600	755	56.4	16.5	4520	.72	.85	.96	54.5	16.0	5100	.72	.86	.97	52.5	15.4	5780	.74	.87	.98	50.4	14.8	6540	.75	.89	1.0
	1800	850	57.6	16.9	4510	.74	.88	.99	55.7	16.3	5100	.75	.89	.99	53.6	15.7	5770	.76	.91	1.0	51.5	15.1	6540	.78	.93	1.0
	2000	945	58.7	17.2	4510	.76	.91	1.0	56.7	16.6	5100	.78	.92	1.0	54.7	16.0	5770	.79	.94	1.0	52.5	15.4	6540	.81	.96	1.0
67°F (19°C)	1600	755	60.2	17.6	4510	.56	.69	.81	58.2	17.1	5090	.57	.70	.83	56.0	16.4	5770	.57	.71	.84	53.7	15.7	6540	.58	.72	.86
	1800	850	61.3	18.0	4510	.58	.71	.85	59.2	17.3	5090	.58	.72	.86	57.0	16.7	5760	.59	.74	.88	54.6	16.0	6540	.6	.75	.89
	2000	945	62.2	18.2	4500	.59	.74	.88	60.1	17.6	5080	.6	.75	.89	57.8	16.9	5760	.61	.77	.91	55.4	16.2	6540	.61	.78	.93
71°F (22°C)	1600	755	64.4	18.9	4500	.42	.54	.66	62.2	18.2	5090	.43	.55	.67	60.0	17.6	5760	.43	.56	.68	57.6	16.9	6540	.43	.56	.69
	1800	850	65.5	19.2	4490	.42	.56	.69	63.3	18.6	5080	.43	.56	.70	60.9	17.8	5760	.43	.57	.71	58.5	17.1	6540	.44	.58	.73
	2000	945	66.4	19.5	4490	.43	.57	.71	64.1	18.8	5080	.44	.58	.73	61.7	18.1	5760	.44	.59	.74	59.2	17.3	6540	.44	.60	.76

**HEATING CAPACITY - HP29-060 with**

**[CH33-48C-F] [CH23-51]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input		
1500	710	67.3	19.7	5710	53.2	15.6	5065	38.7	11.3	4415	26.4	7.7	3735	13.3	3.9	2820
1700	800	67.8	19.9	5510	53.7	15.7	4865	39.2	11.5	4215	26.9	7.9	3535	13.8	4.0	2620
1900	895	68.2	20.0	5355	54.1	15.9	4710	39.6	11.6	4060	27.3	8.0	3380	14.2	4.2	2465

**HEATING CAPACITY - HP29-060 with**

**[CH33-50C-F] [CH23-65]**

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil															
	65°F (18°C)			45°F (7°C)			25°F (-4°C)			5°F (-15°C)			-15°F (-26°C)			
	cfm	L/s	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input	Total Heating Capacity	Comp. Motor W Input		
1600	755	67.7	19.8	5270	53.7	15.7	4680	39.3	11.5	4080	27.0	7.9	3455	13.5	4.0	2605
1800	850	68.2	20.0	5105	54.2	15.9	4515	39.8	11.7	3915	27.5	8.1	3290	14.0	4.1	2440
2000	945	68.7	20.1	4975	54.7	16.0	4385	40.3	11.8	3785	28.0	8.2	3160	14.5	4.2	2310

**HEATING PERFORMANCE at 1700 cfm (800 L/s) Indoor Coil Air Volume HP29-060 with**

**[CH33-48C-F] [CH23-51]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	5510	67.8	19.9
60	16	5350	64.4	18.9
55	13	5190	61.0	17.9
50	10	5030	57.6	16.9
47	8	4935	55.5	16.3
45	7	4865	53.7	15.7
40	4	4685	49.1	14.4
35	2	4500	44.5	13.0
30	-1	4360	41.8	12.3
25	-4	4215	39.2	11.5
20	-7	4070	36.6	10.7
17	-8	3985	35.0	10.3
15	-9	3925	33.6	9.8
10	-12	3765	30.2	8.9
5	-15	3535	26.9	7.9
0	-18	3305	23.6	6.9
-5	-21	3080	20.4	6.0
-10	-23	2850	17.1	5.0
-15	-26	2620	13.8	4.0
-20	-29	2390	10.5	3.1

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil Air Volume HP29-060 with**

**[CH33-50C-F] [CH23-65]**

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	5105	68.2	20.0
60	16	4960	64.8	19.0
55	13	4815	61.4	18.0
50	10	4670	58.0	17.0
47	8	4580	56.0	16.4
45	7	4515	54.2	15.9
40	4	4345	49.6	14.5
35	2	4180	45.0	13.2
30	-1	4050	42.4	12.4
25	-4	3915	39.8	11.7
20	-7	3785	37.2	10.9
17	-8	3710	35.6	10.4
15	-9	3650	34.2	10.0
10	-12	3505	30.8	9.0
5	-15	3290	27.5	8.1
0	-18	3080	24.1	7.1
-5	-21	2865	20.8	6.1
-10	-23	2650	17.4	5.1
-15	-26	2440	14.0	4.1
-20	-29	2225	10.7	3.1

NOTES: For Temperatures and Capacities not shown in tables, see bulletin - Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.  
Expanded rating tables are sorted by smallest to largest indoor unit model no.

**HORIZONTAL INDOOR COILS**

**COOLING CAPACITY - HP29-060 with**

[CH33-62D-F] [CH23-68]

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
	Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cooling Capacity		Comp Motor W Input	Sensible To Total Ratio (S/T) Dry Bulb				
				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C				75°F 24°C	80°F 27°C	85°F 29°C		
cfm	L/s	kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				kBtuh	kW	Input				
63°F (17°C)	1600	755	57.3	16.8	4410	.71	.84	.96	55.3	16.2	4990	.72	.85	.97	53.2	15.6	5650	.73	.87	.99	50.9	14.9	6410	.74	.89	1.0
	1800	850	58.6	17.2	4410	.73	.87	.99	56.5	16.6	4980	.74	.89	1.0	54.4	15.9	5650	.76	.90	1.0	52.1	15.3	6410	.77	.92	1.0
	2000	945	59.8	17.5	4400	.76	.90	1.0	57.7	16.9	4980	.77	.92	1.0	55.4	16.2	5640	.79	.94	1.0	53.1	15.6	6400	.8	.96	1.0
67°F (19°C)	1600	755	61.3	18.0	4400	.56	.68	.80	59.1	17.3	4970	.56	.69	.82	56.9	16.7	5640	.57	.70	.83	54.5	16.0	6400	.58	.72	.85
	1800	850	62.5	18.3	4400	.57	.71	.84	60.3	17.7	4970	.58	.72	.85	58.0	17.0	5630	.59	.73	.87	55.5	16.3	6400	.59	.75	.89
	2000	945	63.5	18.6	4410	.59	.73	.87	61.3	18.0	4960	.59	.75	.89	58.9	17.3	5630	.6	.76	.91	56.4	16.5	6400	.61	.77	.92
71°F (22°C)	1600	755	65.6	19.2	4420	.42	.54	.66	63.3	18.6	4990	.42	.55	.67	60.9	17.8	5660	.43	.55	.68	58.5	17.1	6410	.43	.56	.69
	1800	850	66.7	19.5	4440	.43	.55	.68	64.4	18.9	5010	.43	.56	.69	62.0	18.2	5670	.43	.57	.71	59.5	17.4	6440	.44	.58	.72
	2000	945	67.7	19.8	4460	.43	.57	.71	65.3	19.1	5020	.43	.58	.72	62.8	18.4	5690	.44	.59	.73	60.2	17.6	6460	.44	.60	.75

**HEATING CAPACITY - HP29-060 with**

[CH33-62D-F] [CH23-68]

Indoor Coil Air Volume 70°F db (21°C db)	Air Temperature Entering Outdoor Coil																			
	65°F (18°C)				45°F (7°C)				25°F (-4°C)				5°F (-15°C)				-15°F (-26°C)			
	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input	Total Heating Capacity		Comp. Motor W Input		
kBtuh	kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	kBtuh		kW	
1600	755	66.5	19.5	5155	52.7	15.4	4580	38.6	11.3	3995	26.5	7.8	3385	13.3	3.9	2550				
1800	850	67.0	19.6	4990	53.2	15.6	4415	39.1	11.5	3830	27.0	7.9	3220	13.8	4.0	2385				
2000	945	67.5	19.8	4860	53.7	15.7	4285	39.6	11.6	3700	27.5	8.1	3090	14.3	4.2	2255				

**HEATING PERFORMANCE at 1800 cfm (850 L/s) Indoor Coil  
Air Volume HP29-060 with**

[CH33-62D-F] [CH23-68]

*Outdoor Temperature		Compressor Motor W Input	Total Output	
°F	°C		kBtuh	kW
65	18	4990	67.0	19.6
60	16	4850	63.7	18.7
55	13	4705	60.3	17.7
50	10	4565	57.0	16.7
47	8	4480	55.0	16.1
45	7	4415	53.2	15.6
40	4	4250	48.7	14.3
35	2	4085	44.2	13.0
30	-1	3960	41.6	12.2
25	-4	3830	39.1	11.5
20	-7	3705	36.5	10.7
17	-8	3625	35.0	10.3
15	-9	3570	33.7	9.9
10	-12	3430	30.3	8.9
5	-15	3220	27.0	7.9
0	-18	3010	23.7	6.9
-5	-21	2800	20.4	6.0
-10	-23	2595	17.1	5.0
-15	-26	2385	13.8	4.0
-20	-29	2175	10.5	3.1