

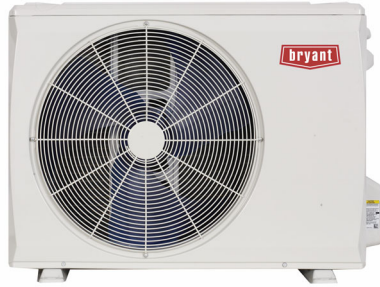
# 38MURA

Outdoor Unit Single Zone Ductless System  
Sizes 1-1/2 to 5 Nominal Tons



## Product Data

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#### Energy Efficiency

- 14.7 - 18 SEER2 / 8.2 - 12.4 EER2 / 8.2 - 9.8 HSPF2

#### Sound

- Levels as low as 54 dBA

#### Design Features

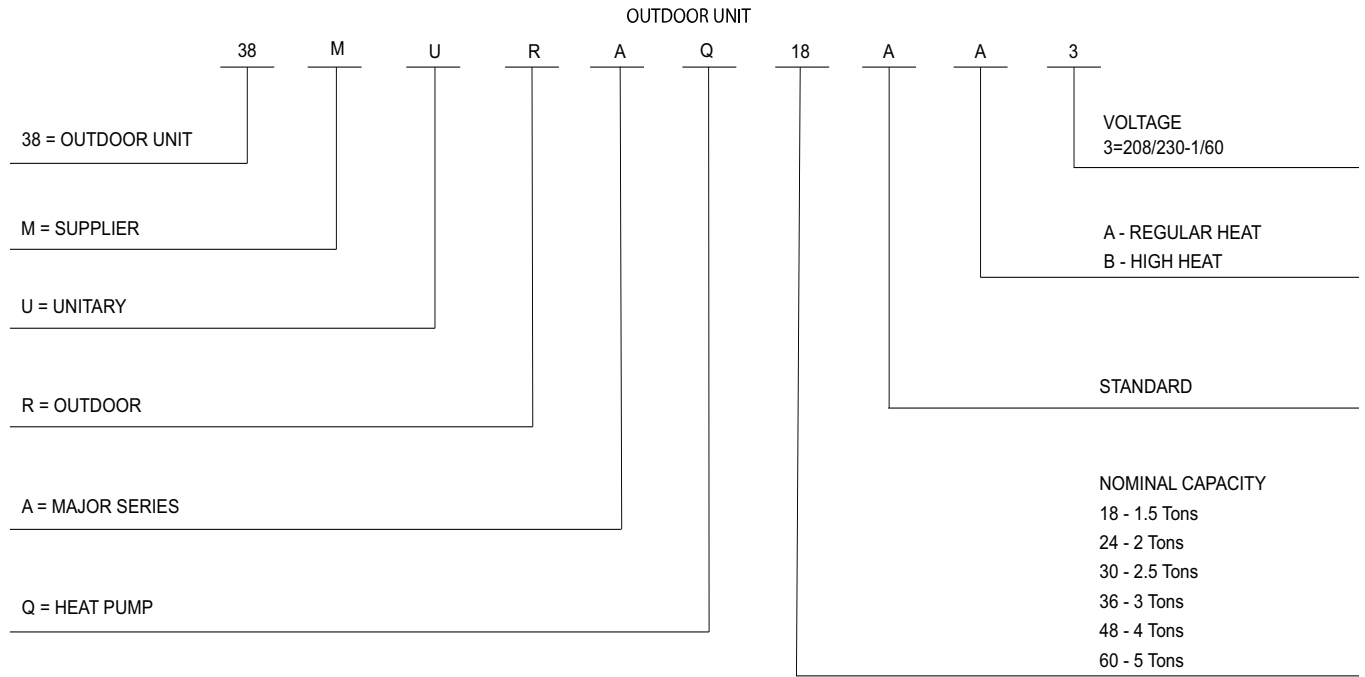
- Small Footprint
- Integrated 24V and RS-485 communications

#### Reliability, Quality and Toughness

- Inverter-driven, variable speed, rotary Compressor
- Line lengths up to 213' (65 m)
- Low ambient operation on high heat models down to -22F (-30C) without the use of wind baffles
- Conventional line set sizes

**NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory ([www.ahridirectory.org](http://www.ahridirectory.org)) for the most up-to-date ratings information.**

# MODEL NUMBER NOMENCLATURE



A220411



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program For verification of certification for individual products, go to [www.ahrirectory.org](http://www.ahrirectory.org).



A220412

## STANDARD FEATURES AND ACCESSORIES

<b>Ease Of Installation</b>	
Low Voltage Controls	S
<b>Comfort Features</b>	
Microprocessor Controls	S
Auto Restart Function	S
Auto Changeover	S
<b>Energy Saving Features</b>	
Inverter Driven Compressor	S
46° F Heating Mode (Heating Setback)*	S
<b>Safety And Reliability</b>	
3 Minute Time Delay For Compressor	S
High Compressor Discharge Temperature	S
Low Voltage Protection	S
Compressor Overload Protection	S
Compressor Over Current Protection	S
IPM Module Protection	S
Condenser High Temp Protection in Cooling Mode	S
Anti-corrosive film coating	S
<b>Ease Of Service And Maintenance</b>	
Diagnostics	S
Liquid Line Pressure Taps	S
<b>Application Flexibility</b>	
Crankcase Heater	S
Base pan Heater	S

\*46°F setback is available with the wireless remote to work with the wire controller's IR. Only available when the wireless remote is used in conjunction with wired controller KSACN1001.

### Legend

- S - Standard
- A - Accessory

### Accessories

Model	Rubber Plug P/N	Quantity
38MURAQ18AA3	12600801A00077	26
38MURAQ24AA3	12600801A00077	34
38MURAQ30AA3	12600801A00117	5
38MURAQ36AA3	12600801A00117	5
38MURAQ48AA3	12600801A00118	5
38MURAQ60AA3	12600801A00118	5
38MURAQ18AB3	12600801A00077	34
38MURAQ24AB3	12600801A00117	5
38MURAQ30AB3	12600801A00117	5
38MURAQ36AB3	12600801A00118	5
38MURAQ48AB3	12600801A00118	5
38MURAQ60AB3	12600801A00118	5

**NOTE:** The base pan is built in with multiple holes for proper draining during the defrost process. For applications where it is required to seal these holes, and re-direct the condensate drain, rubber plugs are available through RCD.

### Outdoor Units

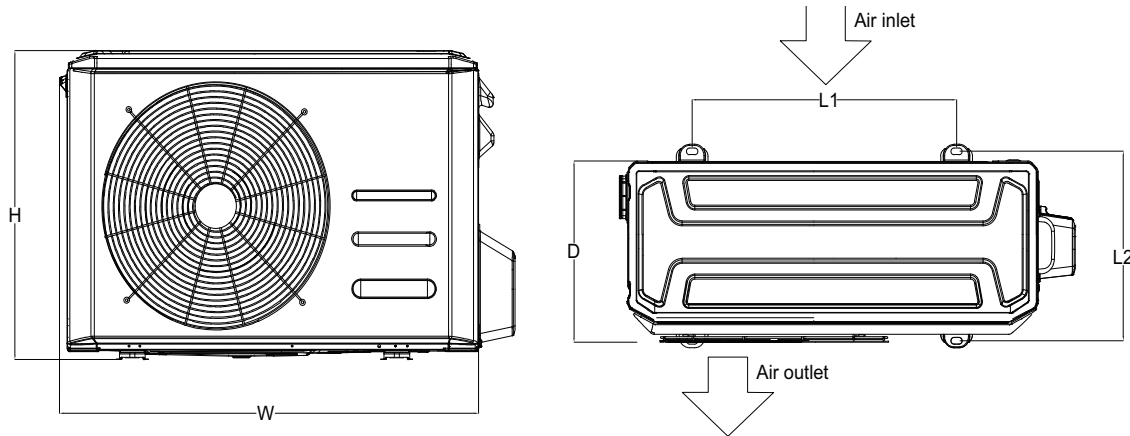
#### Crankcase Unit

The crankcase heater is standard on all unit sizes. Heater clamps must be placed around the compressor oil sump.

#### Base pan Heater

The base pan heater is standard on all unit sizes.

## DIMENSIONS



**Fig. 1 — Outdoor Unit**

A220414

Size	Unit	1.5T	2T	2.5T	3T	4T	5T
Width (W)	in (mm)	31.69 (805)	35.04 (890)	37.24 (946)	37.24 (946)	37.48 (952)	37.48 (952)
Height (H)	in (mm)	21.81 (554)	26.50 (673)	31.89 (810)	31.89 (810)	52.48 (1333)	52.48 (1333)
Depth (D)	in (mm)	12.99 (330)	13.29 (338)	16.02 (407)	16.02 (407)	16.34 (415)	16.34 (415)
L1	in (mm)	26.1 (663)	26.1 (663)	26.5 (673)	26.5 (673)	25 (634)	25 (634)
L2	in (mm)	13.65 (346.7)	13.65 (346.7)	15.85 (402.6)	15.85 (402.6)	15.9 (404)	15.9 (404)
Operating Weight	lbs (kg)	75.84 (34.4)	102.29 (46.4)	141.76 (64.3)	151.68 (68.8)	217.59 (98.7)	217.15 (98.5)
Shipping Width	in (mm)	36.02 (915)	39.17 (995)	42.91 (1090)	42.91 (1090)	43.11 (1095)	43.11 (1095)
Shipping Height	in (mm)	24.21 (615)	29.13 (740)	34.84 (885)	34.84 (885)	58.27 (1480)	58.27 (1480)
Shipping Depth	in (mm)	14.57 (370)	15.67 (398)	19.69 (500)	19.69 (500)	19.49 (495)	19.49 (495)
Shipping Weight	lbs (kg)	81.35 (36.9)	109.13 (49.5)	151.46 (68.7)	161.16 (73.1)	248.68 (112.8)	248.46 (112.7)

Size	Unit	1.5T - HH	2T - HH	2.5T - HH	3T - HH	4T - HH	5T - HH
Width (W)	in (mm)	35.04 (890)	37.24 (946)	37.24 (946)	37.48 (952)	37.48 (952)	37.48 (952)
Height (H)	in (mm)	26.50 (673)	31.89 (810)	31.89 (810)	52.48 (1333)	52.48 (1333)	52.48 (1333)
Depth (D)	in (mm)	13.29 (338)	16.02 (407)	16.02 (407)	16.34 (415)	16.34 (415)	16.34 (415)
L1	in (mm)	26.1 (663)	26.5 (673)	26.5 (673)	25 (634)	25 (634)	25 (634)
L2	in (mm)	13.65 (346.7)	15.85 (402.6)	15.85 (402.6)	15.9 (404)	15.9 (404)	15.9 (404)
Operating Weight	lbs (kg)	102.29 (46.4)	141.76 (64.3)	141.76 (64.3)	217.59 (98.7)	217.59 (98.7)	239.86 (108.8)
Shipping Width	in (mm)	39.17 (995)	42.91 (1090)	42.91 (1090)	43.11 (1095)	43.11 (1095)	43.11 (1095)
Shipping Height	in (mm)	29.13 (740)	34.84 (885)	34.84 (885)	58.27 (1480)	58.27 (1480)	58.27 (1480)
Shipping Depth	in (mm)	15.67 (398)	19.69 (500)	19.69 (500)	19.49 (495)	19.49 (495)	19.49 (495)
Shipping Weight	lbs (kg)	109.13 (49.5)	151.46 (68.7)	151.46 (68.7)	248.68 (112.8)	248.68 (112.8)	271.61 (123.2)

# DIMENSIONS (CONT)

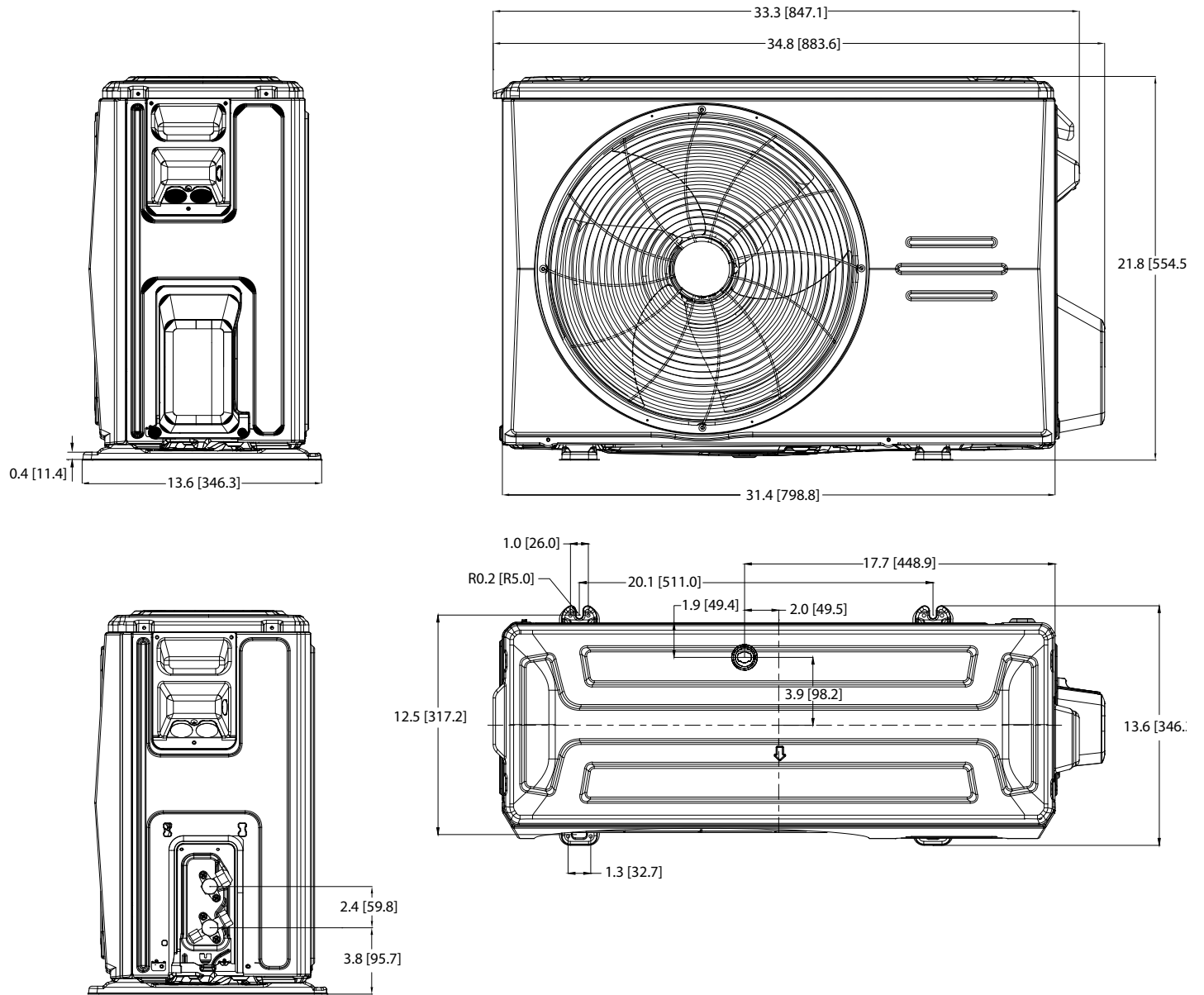
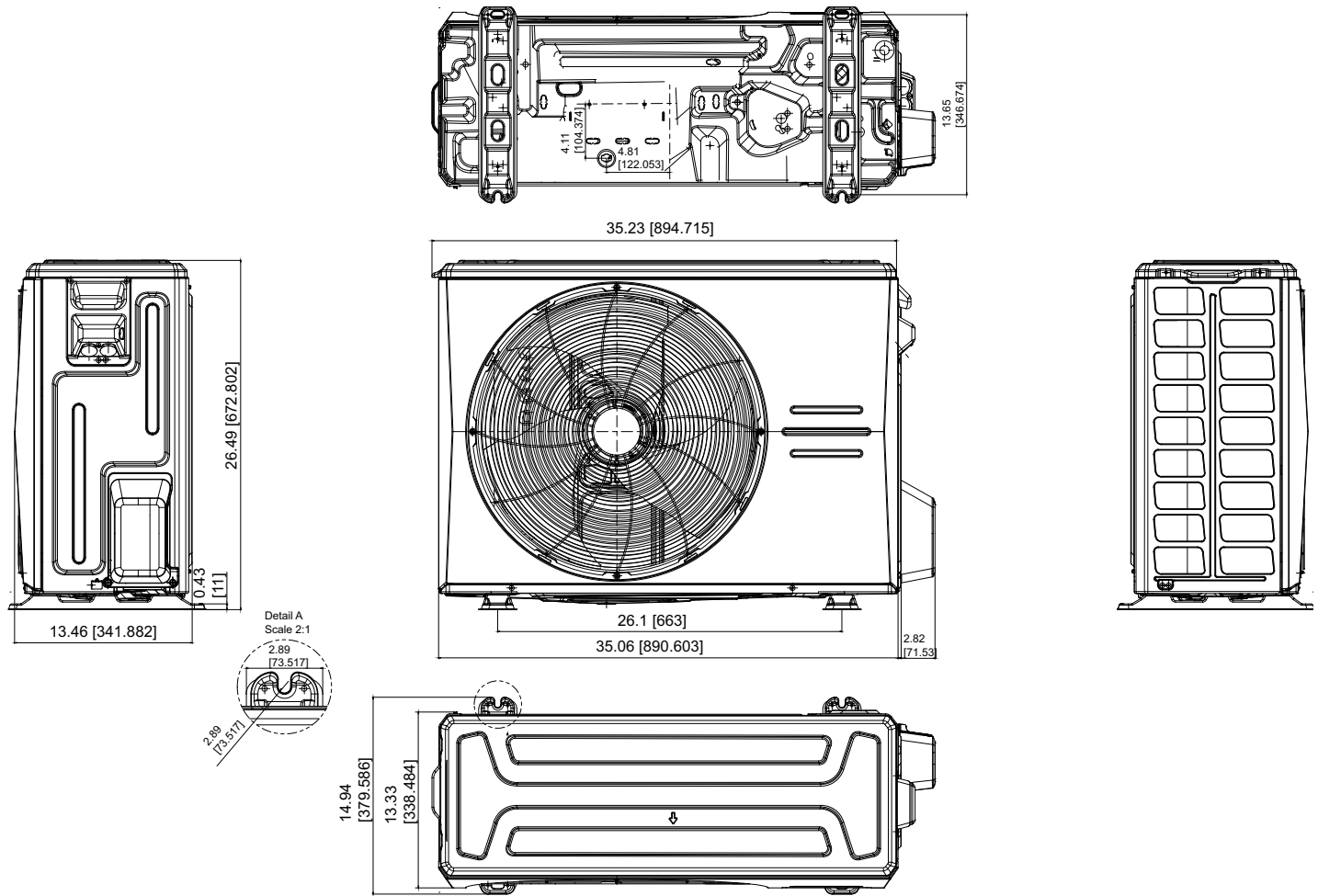


Fig. 2 —Dimension Size 18K

A221416

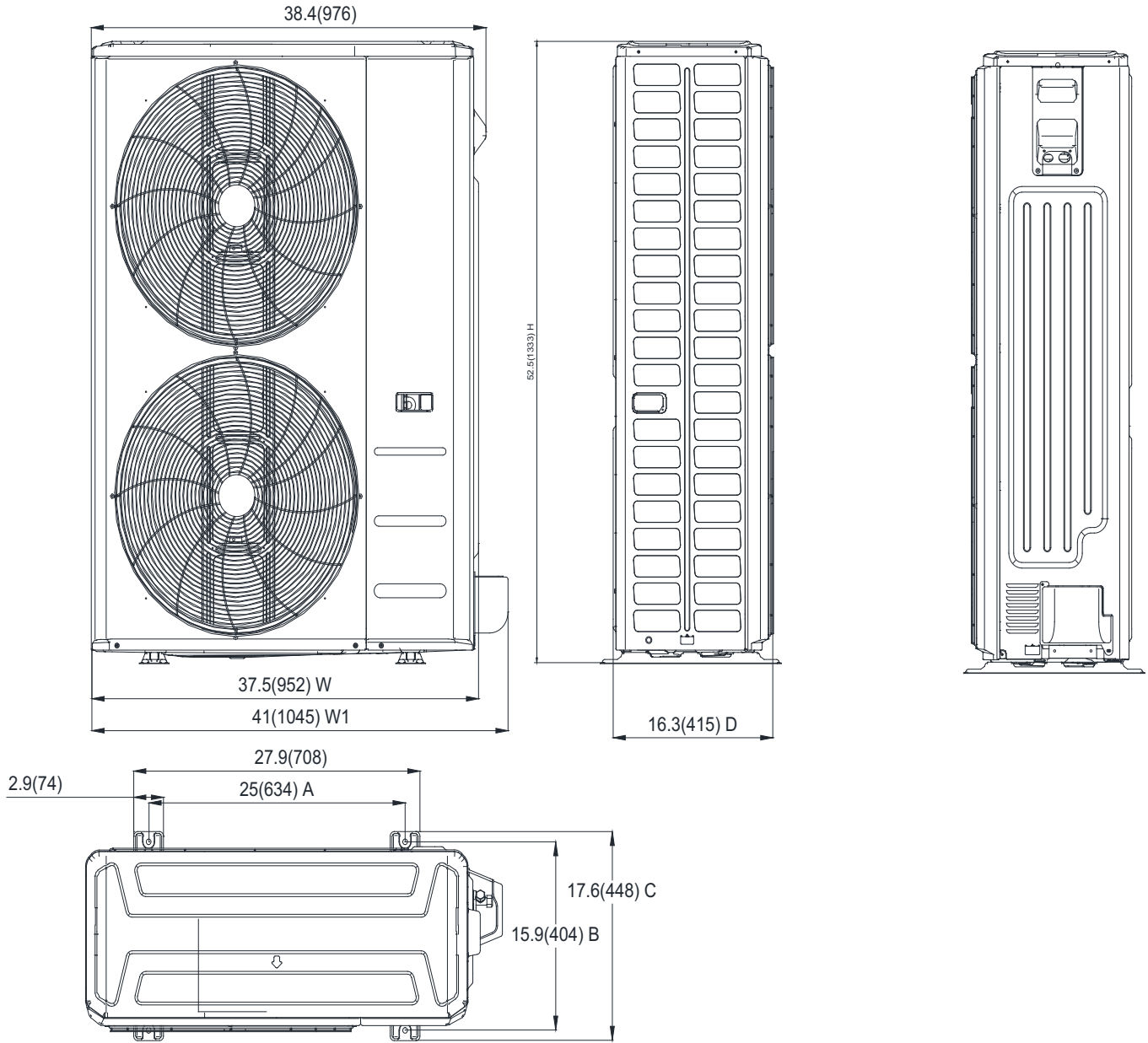
# DIMENSIONS (CONT)



**Fig. 3 —Dimension Sizes 18K HH / 24K**

A221417

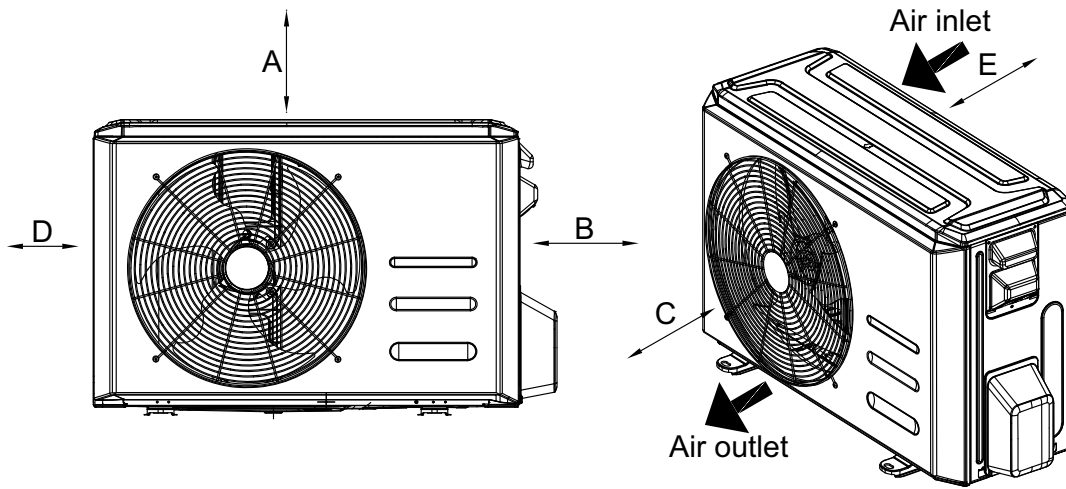
# DIMENSIONS (CONT)



**Fig. 4 —Dimension Sizes 36K HH / 48K HH / 60K / 60K HH**

A221418

# CLEARANCES

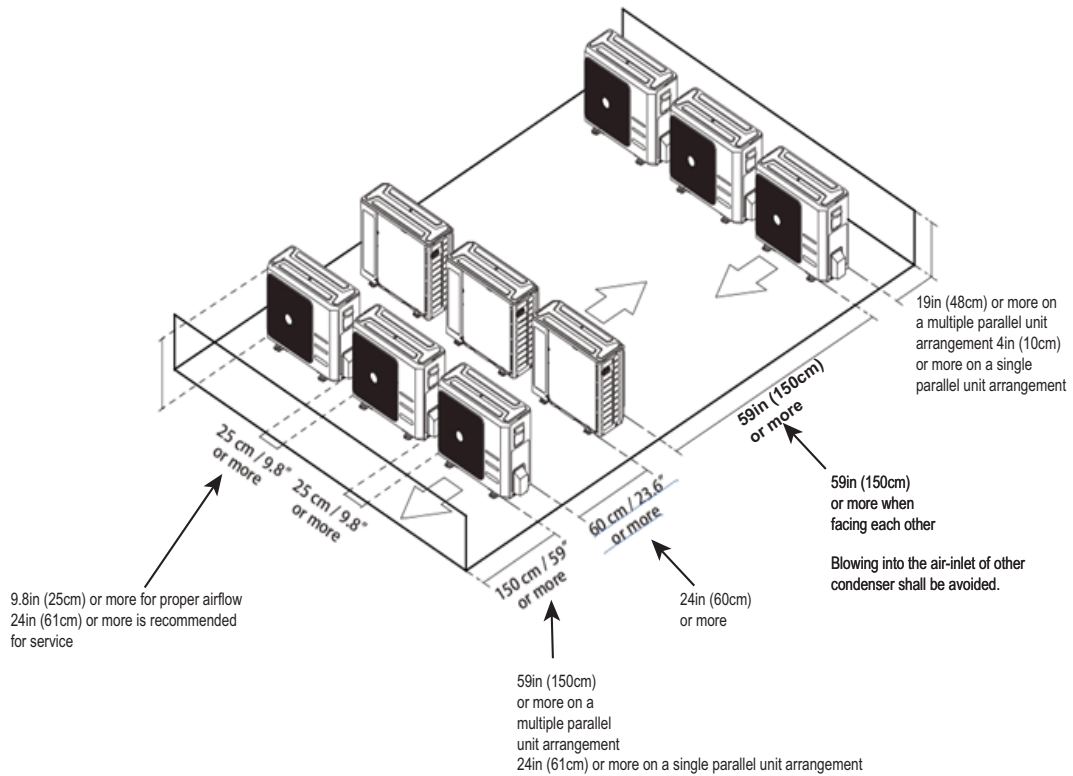


**Fig. 5 —Clearances**

A220419

UNIT	MINIMUM VALUE in. (mm)
A	24 (610)
B	24 (610)
C	24 (610)
D	4 (101)
E	4 (101)

**NOTE:** The outdoor unit must be mounted at least 2in (50mm) above the maximum anticipated snow depth.



**Fig. 6 —Clearances for multiple units**

A220421



## PERFORMANCE

**NOTE: Ratings contained in this document are subject to change at any time. For AHRI ratings certificates, refer to the AHRI directory [www.ahridirectory.org](http://www.ahridirectory.org)**

### AIR HANDLER

#### Heat Pump (Standard Heat)

Outdoor Size		1.5T	2T	2.5T	3T	4T	5T
<b>M Ratings</b>							
Indoor Model		18K	24K	30K	36K	48K	60K
Energy Star		NO	NO	NO	NO	NO	NO
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	57,000
Cooling Cap. Range Min - Max	Btu/h	5400~18700	7500~26000	9500~33000	8900~38900	10500~48000	4400~60200
SEER		19.0	19.4	19.5	18.0	17.3	18.0
EER		11.1	11.3	10.9	10.4	9.3	10.3
Heating Rated Capacity (47°F)	Btu/h	18,500	26,000	31,000	36,000	55,000	60,000
Heating Rated Capacity (17°F)	Btu/h	11,500	17,000	19,000	21,000	33,000	33,800
Heating Rated Capacity (5°F)	Btu/h	9,500	17,000	20,000	21,000	27,000	29,000
Heating Cap. Range Min - Max	Btu/h	5600~18700	5600~30000	12200~32000	6000~36400	11700~57000	11400~63100
HSPF		10.8	11.3	10.3	9.1	10.0	9.2
COP (47°F)	W/W	3.49	3.54	3.19	3.02	3.00	3.55
COP (17°F)	W/W	2.70	2.75	2.30	2.25	2.00	2.45
COP (5°F)	W/W	1.85	1.75	1.95	1.80	1.72	1.80
<b>M1 Ratings</b>							
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	57,000
Cooling Cap. Range Min - Max	Btu/h	5400~18700	7500~26000	9500~33000	8900~38900	10500~48000	4400~60200
<b>SEER2</b>		16.0	17.0	17.3	16.9	15.8	14.7
<b>EER2</b>		10.8	10.5	10.6	10.1	8.8	8.7
Heating Rated Capacity (47°F)	Btu/h	18,000	26,000	31,000	36,000	55,000	60,000
Heating Rated Capacity (17°F)	Btu/h	11,500	20,700	20,000	20,500	36,500	36,000
Heating Rated Capacity (5°F)	Btu/h	10,000	17,000	17,800	21,000	36,500	34,800
Heating Cap. Range Min - Max	Btu/h	5600~18700	5600~30000	12200~32000	6000~36400	11700~57000	11400~63100
<b>HSPF2</b>		8.7	9.1	8.5	8.2	9.4	8.4
COP (47°F)	W/W	3.50	3.45	3.25	3.39	3.15	3.45
COP (17°F)	W/W	2.75	2.40	2.45	2.40	2.30	2.35
COP (5°F)	W/W	1.90	2.00	1.75	1.88	1.98	1.89

#### Heat Pump (High Heat)

Outdoor Size		1.5T - HH	2T - HH	2.5T - HH	3T - HH	4T - HH	5T - HH
<b>M Ratings</b>							
Indoor Model		18K	24K	30K	36K	48K	60K
Energy Star		YES	YES	NO	NO	NO	NO
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	55,000
Cooling Cap. Range Min - Max	Btu/h	6900~21000	6400~27000	10400~33600	12000~47400	18000~48000	18000~56000
SEER		20.0	20.0	18.0	18.0	16.0	16.4
EER		12.5	12.5	11	10.5	8.5	9
Heating Rated Capacity (47°F)	Btu/h	19,000	24,000	33,000	41,500	50,000	59,000
Heating Rated Capacity (17°F)	Btu/h	13,000	16,700	19,400	24,000	32,000	42,000
Heating Rated Capacity (5°F)	Btu/h	19,000	24,000	28,500	43,300	47,000	50,000
Heating Cap. Range Min - Max	Btu/h	2800~21000	10100~31000	12000~37000	9000~57200	20000~55000	20000~68000
HSPF		11.0	12.0	10.5	10.5	10.0	10.5
COP (47°F)	W/W	3.59	3.45	3.48	3.45	3.00	3.50
COP (17°F)	W/W	2.75	2.70	2.60	2.65	2.30	2.60
COP (5°F)	W/W	1.90	1.80	1.95	1.80	1.88	1.96
<b>M1 Ratings</b>							
Cooling Rated Capacity	Btu/h	18,000	24,000	30,000	36,000	47,000	55,000
Cooling Cap. Range Min - Max	Btu/h	6900~21000	6400~27000	10400~33600	12000~47400	18000~48000	18000~56000
<b>SEER2</b>		18.0	17.4	16.2	15.8	15.6	15.0
<b>EER2</b>		12.4	11.7	9.8	9.8	8.2	8.5
Heating Rated Capacity (47°F)	Btu/h	19,000	24,000	33,000	41,000	50,000	59,000
Heating Rated Capacity (17°F)	Btu/h	13,000	18,600	20,400	29,500	35,000	42,000
Heating Rated Capacity (5°F)	Btu/h	16,500	22,700	24,100	34,500	46,000	50,000
Heating Cap. Range Min - Max	Btu/h	2800~21000	10100~31000	12000~37000	9000~57200	20000~55000	20000~68000
<b>HSPF2</b>		9.2	9.8	8.8	9.5	9.3	9.0
COP (47°F)	W/W	3.60	3.40	3.30	3.35	3.15	3.00
COP (17°F)	W/W	2.50	2.40	2.30	2.40	2.30	2.60
COP (5°F)	W/W	2.00	1.85	1.80	1.95	1.90	1.96

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

## PERFORMANCE - AIR HANDLER

COOLING PERFORMANCE - 18K (Sheet 1 of 4)

AIRFLOW (CFM)	OUTDOOR DB(F)	ID WB(F) ID DB(F)	60.8				64.4				66.2				71.6			
			73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
			489	-22	TC	19068	19078	19287	19495	19970	20392	20392	20598	20466	20466	20466	20466	21548
S/T	0.72	0.83			0.92	0.95	0.57	0.67	0.76	0.86	0.49	0.59	0.68	0.77	0.33	0.42	0.50	0.59
PI	1.36	1.37			1.37	1.36	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
-10	TC	18927		18937	19144	19351	19857	20276	20276	20481	20364	20364	20364	20364	21482	21482	21482	21482
	S/T	0.73		0.83	0.93	0.96	0.57	0.67	0.77	0.86	0.50	0.59	0.69	0.78	0.34	0.42	0.51	0.59
	PI	1.23		1.24	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24
0	TC	18810		18820	19026	19231	19762	20180	20180	20384	20279	20279	20279	20279	21428	21428	21428	21428
	S/T	0.73		0.84	0.93	0.96	0.58	0.67	0.77	0.87	0.50	0.60	0.69	0.78	0.34	0.42	0.51	0.60
	PI	1.15		1.16	1.16	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
5	TC	18755		18765	18970	19175	19726	20143	20143	20346	20248	20248	20248	20248	21414	21414	21414	21414
	S/T	0.73		0.84	0.94	0.97	0.58	0.68	0.77	0.87	0.50	0.60	0.70	0.78	0.34	0.42	0.51	0.60
	PI	1.08		1.09	1.09	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.07	1.07	1.07	1.07
14	TC	18643		18654	18857	19061	19615	20030	20030	20232	20146	20146	20146	20146	21341	21341	21341	21341
	S/T	0.74		0.84	0.94	0.97	0.58	0.68	0.78	0.87	0.50	0.60	0.70	0.79	0.34	0.43	0.51	0.60
	PI	1.08		1.08	1.08	1.08	1.07	1.07	1.07	1.07	1.08	1.08	1.08	1.08	1.07	1.07	1.07	1.07
23	TC	18532		18542	18745	18948	19541	19954	19954	20156	20073	20073	20073	20073	21287	21287	21287	21287
	S/T	0.74		0.85	0.95	0.98	0.59	0.68	0.78	0.88	0.51	0.60	0.70	0.79	0.34	0.43	0.52	0.60
	PI	1.08		1.08	1.08	1.08	1.07	1.07	1.07	1.07	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
32	TC	18440		18450	18651	18853	19468	19879	19879	20080	20017	20017	20017	20017	21269	21269	21269	21269
	S/T	0.74		0.85	0.95	0.98	0.59	0.69	0.78	0.88	0.51	0.61	0.71	0.79	0.34	0.43	0.52	0.61
	PI	1.08		1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
41	TC	18347		18357	18558	18758	19394	19803	19803	20003	19953	19953	19953	19953	21251	21251	21251	21251
	S/T	0.75		0.86	0.96	0.99	0.59	0.69	0.79	0.89	0.51	0.61	0.71	0.80	0.34	0.43	0.52	0.61
	PI	1.09		1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
50	TC	18236		18246	18445	18644	19301	19709	19709	19908	19869	19869	19869	19869	21196	21196	21196	21196
	S/T	0.75		0.86	0.96	0.99	0.59	0.69	0.79	0.89	0.51	0.61	0.71	0.80	0.35	0.44	0.52	0.61
	PI	1.11		1.11	1.11	1.11	1.10	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.10	1.10	1.10	1.10
59	TC	18087		18097	18295	18493	19172	19577	19577	19775	19749	19749	19749	19749	21106	21106	21106	21106
	S/T	0.76		0.87	0.97	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.81	0.35	0.44	0.53	0.62
	PI	1.14		1.14	1.14	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.12	1.12	1.12	1.12
68	TC	17884	17893	18089	18284	18969	18969	18969	19164	19556	19556	19556	19556	20924	20924	20924	20924	
	S/T	0.76	0.87	0.97	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.81	0.35	0.44	0.53	0.62	
	PI	1.17	1.18	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.16	1.16	1.16	1.16	
77	TC	17013	17209	17404	17600	18089	18089	18089	18284	18676	18676	18676	18676	20044	20044	20044	20044	
	S/T	0.78	0.88	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.83	0.34	0.44	0.53	0.63	
	PI	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	
86	TC	16231	16427	16622	16818	17307	17307	17307	17502	17796	17796	17796	17796	19164	19164	19164	19164	
	S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	0.94	0.53	0.64	0.74	0.85	0.34	0.44	0.54	0.64	
	PI	1.41	1.41	1.41	1.41	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	
95	TC	15449	15644	15840	16036	16427	16427	16427	16622	16916	16916	17209	16916	18284	18284	18284	18284	
	S/T	0.81	0.92	1.00	1.00	0.62	0.74	0.85	0.96	0.54	0.65	0.75	0.87	0.34	0.44	0.55	0.65	
	PI	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.56	1.56	1.56	1.56	1.57	1.57	1.57	1.57	
104	TC	14606	14758	14910	15061	15543	15543	15587	15739	16033	16033	16194	16122	17317	17317	17317	17317	
	S/T	0.84	0.97	1.00	1.00	0.64	0.76	0.89	1.00	0.54	0.67	0.79	0.91	0.33	0.45	0.56	0.67	
	PI	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.72	1.72	1.72	1.72	1.73	1.73	1.73	1.73	
115	TC	13536	13634	13732	13831	14419	14419	14517	14615	14910	14910	14910	15106	16087	16087	16087	16087	
	S/T	0.85	0.99	1.00	1.00	0.65	0.78	0.91	1.00	0.55	0.68	0.80	0.93	0.33	0.45	0.57	0.69	
	PI	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.93	1.93	1.93	1.93	
122	TC	12654	12752	12850	12948	13536	13536	13634	13732	14027	14027	14027	14125	15204	15204	15204	15204	
	S/T	0.88	1.00	1.00	1.00	0.66	0.80	0.94	1.00	0.56	0.69	0.83	0.96	0.33	0.45	0.58	0.70	
	PI	2.06	2.06	2.06	2.06	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.09	2.09	2.09	2.09	

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COOLING PERFORMANCE - 18K (Sheet 3 of 4)

AIRFLOW (CFM)	OUTDOOR DB(F)	ID WB(F) ID DB(F)	60.8				64.4				66.2				71.6			
			73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
577	-22	TC	19922	20131	20339	20548	20907	20907	20907	21113	21397	21397	21397	21397	22566	22566	22566	22566
		S/T	0.76	0.87	1.00	1.00	0.59	0.69	0.80	0.96	0.50	0.61	0.71	0.82	0.32	0.42	0.51	0.62
		PI	1.36	1.37	1.37	1.36	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
	-10	TC	19775	19982	20189	20396	20788	20788	20788	20993	21291	21291	21291	21291	22497	22497	22497	22497
		S/T	0.77	0.87	1.00	1.00	0.59	0.70	0.80	0.97	0.51	0.61	0.72	0.82	0.33	0.42	0.52	0.62
		PI	1.23	1.24	1.24	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.24	1.24	1.24	1.24
	0	TC	19652	19858	20064	20270	20689	20689	20689	20893	21202	21202	21202	21202	22440	22440	22440	22440
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.97	0.51	0.62	0.72	0.83	0.33	0.42	0.52	0.63
		PI	1.19	1.19	1.19	1.19	1.20	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.20	1.20	1.20	1.20
	5	TC	19595	19800	20005	20210	20651	20651	20651	20855	21170	21170	21170	21170	22425	22425	22425	22425
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.98	0.51	0.62	0.72	0.83	0.33	0.42	0.52	0.63
		PI	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
	14	TC	19479	19683	19887	20091	20535	20535	20535	20738	21063	21063	21063	21063	22349	22349	22349	22349
		S/T	0.78	0.88	1.00	1.00	0.60	0.71	0.82	0.98	0.51	0.62	0.73	0.83	0.33	0.43	0.52	0.63
		PI	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.11	1.11	1.11	1.11	1.12	1.12	1.12	1.12
	23	TC	19362	19565	19768	19971	20458	20458	20458	20660	20986	20986	20986	20986	22292	22292	22292	22292
		S/T	0.78	0.89	1.00	1.00	0.60	0.71	0.82	0.99	0.52	0.62	0.73	0.84	0.33	0.43	0.53	0.63
		PI	1.11	1.11	1.11	1.11	1.12	1.12	1.12	1.12	1.11	1.11	1.11	1.11	1.12	1.12	1.12	1.12
	32	TC	19266	19467	19669	19871	20381	20381	20381	20582	20928	20928	20928	20928	22274	22274	22274	22274
		S/T	0.78	0.89	1.00	1.00	0.61	0.72	0.82	0.99	0.52	0.63	0.74	0.84	0.33	0.43	0.53	0.64
		PI	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.13	1.13	1.13	1.13
	41	TC	19169	19370	19570	19771	20303	20303	20303	20503	20861	20861	20861	20861	22255	22255	22255	22255
		S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	1.00	0.52	0.63	0.74	0.85	0.33	0.43	0.53	0.64
		PI	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
	50	TC	19053	19252	19452	19651	20207	20207	20207	20406	20774	20774	20774	20774	22198	22198	22198	22198
		S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	1.00	0.52	0.63	0.74	0.85	0.34	0.44	0.53	0.64
		PI	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.14	1.14	1.14	1.15	1.15	1.15	1.15
	59	TC	18898	19096	19294	19491	20071	20071	20071	20269	20648	20648	20648	20648	22103	22103	22103	22103
		S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.95	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.65
		PI	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
	68	TC	18685	18880	19076	19272	19859	19859	19859	20054	20446	20446	20446	20446	21913	21913	21913	21913
		S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.95	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.65
		PI	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
	77	TC	17804	18000	18196	18391	18978	18978	18978	19174	19565	19565	19565	19565	21033	21033	21033	21033
		S/T	0.81	0.93	1.00	1.00	0.62	0.74	0.86	0.97	0.54	0.65	0.77	0.88	0.34	0.44	0.55	0.66
		PI	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
	86	TC	17022	17217	17413	17609	18098	18098	18098	18293	18587	18587	18587	18783	20054	20054	20054	20054
		S/T	0.83	0.96	1.00	1.00	0.63	0.76	0.88	1.00	0.54	0.66	0.78	0.90	0.33	0.45	0.56	0.67
		PI	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.48	1.48	1.48	1.48
	95	TC	16141	16337	16533	16728	17217	17217	17413	17609	17707	17707	18000	18196	19076	19076	19076	19076
S/T		0.85	0.98	1.00	1.00	0.64	0.77	0.90	1.00	0.55	0.67	0.80	0.91	0.33	0.45	0.57	0.68	
PI		1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.62	1.62	1.62	1.62	1.63	1.63	1.63	1.63	
104	TC	15159	15310	15461	15611	16188	16188	16383	16578	16675	16675	16835	17030	17996	17996	17996	17996	
	S/T	0.89	1.00	1.00	1.00	0.66	0.81	0.94	1.00	0.56	0.70	0.84	0.97	0.33	0.45	0.58	0.90	
	PI	1.77	1.77	1.77	1.77	1.78	1.78	1.78	1.78	1.79	1.79	1.79	1.79	1.80	1.80	1.80	1.80	
115	TC	14042	14140	14237	14335	15017	15017	15212	15407	15505	15505	15505	15700	16773	16773	16773	16773	
	S/T	0.90	1.00	1.00	1.00	0.67	0.82	0.96	1.00	0.57	0.71	0.85	0.99	0.32	0.46	0.59	0.92	
	PI	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	
122	TC	13165	13262	13360	13457	14042	14042	14140	14237	14530	14530	14530	14627	15798	15798	15798	15798	
	S/T	0.93	1.00	1.00	1.00	0.69	0.85	1.00	1.00	0.58	0.73	0.88	1.00	0.32	0.46	0.60	0.97	
	PI	2.14	2.14	2.14	2.14	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.17	2.17	2.17	2.17	

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HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
489	-22.0	8120	7994	7931	7931	0.98	1.01	1.01	1.02
	-10.0	9343	9199	9126	9126	1.15	1.19	1.19	1.20
	0.0	10363	10202	10122	10122	1.29	1.33	1.33	1.34
	5.0	10908	10739	10654	10654	1.37	1.41	1.41	1.42
	14.0	11647	11467	11376	11376	1.46	1.51	1.51	1.52
	17.0	12202	12013	11918	11918	1.55	1.60	1.60	1.61
	22.0	12807	12608	12509	12509	1.53	1.56	1.58	1.59
	27.0	13303	13204	13105	13005	1.50	1.53	1.55	1.56
	32.0	13800	13601	13502	13403	1.48	1.50	1.52	1.53
	37.0	14693	14495	14395	14296	1.46	1.49	1.50	1.52
	42.0	16182	15885	15785	15686	1.45	1.48	1.49	1.50
	44.6	17733	17407	16912	16813	1.45	1.47	1.49	1.50
	52.0	18593	18396	18297	18099	1.42	1.44	1.45	1.47
	57.0	19582	19286	19187	18989	1.40	1.42	1.43	1.44
62.0	20473	20176	20077	19879	1.37	1.40	1.41	1.42	
64.4	20967	20670	20473	20374	1.37	1.39	1.40	1.41	
530	-22.0	8260	8134	8134	8070	1.00	1.03	1.03	1.03
	-10.0	9504	9359	9359	9286	1.17	1.20	1.20	1.21
	0.0	10540	10379	10379	10299	1.31	1.35	1.35	1.36
	5.0	11095	10925	10925	10841	1.39	1.43	1.43	1.44
	14.0	11847	11666	11666	11576	1.48	1.53	1.53	1.54
	17.0	12411	12222	12222	12127	1.57	1.62	1.62	1.63
	22.0	13005	12807	12807	12708	1.55	1.58	1.60	1.61
	27.0	13601	13403	13303	13303	1.52	1.55	1.57	1.58
	32.0	13998	13800	13800	13700	1.49	1.52	1.54	1.55
	37.0	14991	14792	14693	14594	1.48	1.51	1.52	1.54
	42.0	16480	16282	16182	16083	1.47	1.50	1.51	1.52
	44.6	18019	17802	17308	17209	1.47	1.49	1.51	1.52
	52.0	19088	18791	18692	18593	1.44	1.46	1.47	1.49
	57.0	19978	19780	19582	19484	1.41	1.44	1.45	1.46
62.0	20967	20670	20571	20374	1.39	1.42	1.43	1.44	
64.4	21462	21165	20967	20868	1.38	1.41	1.42	1.43	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
577	-22.0	8319	8193	8193	8130	1.01	1.04	1.04	1.05
	-10.0	9572	9427	9427	9354	1.18	1.22	1.22	1.23
	0.0	10616	10455	10455	10374	1.33	1.37	1.37	1.37
	5.0	11174	11005	11005	10920	1.40	1.45	1.45	1.46
	14.0	11932	11751	11751	11661	1.50	1.54	1.54	1.55
	17.0	12500	12310	12310	12216	1.59	1.64	1.64	1.65
	22.0	13105	12906	12906	12807	1.57	1.60	1.62	1.63
	27.0	13700	13601	13502	13403	1.54	1.57	1.59	1.60
	32.0	14197	13998	13899	13800	1.51	1.54	1.56	1.57
	37.0	15190	14991	14792	14693	1.50	1.53	1.54	1.56
	42.0	16679	16480	16381	16182	1.49	1.52	1.53	1.54
	44.6	18217	18000	17505	17407	1.48	1.51	1.53	1.54
	52.0	19286	18989	18890	18791	1.45	1.48	1.49	1.51
	57.0	20275	19978	19879	19681	1.43	1.46	1.47	1.49
62.0	21264	20967	20769	20670	1.41	1.44	1.45	1.46	
64.4	21659	21363	21264	21066	1.40	1.43	1.44	1.45	
618	-22.0	8378	8252	8252	8189	1.58	1.63	1.58	1.58
	-10.0	9640	9495	9495	9423	1.85	1.91	1.86	1.86
	0.0	10692	10531	10531	10450	2.07	2.15	2.08	2.08
	5.0	11254	11085	11085	11000	2.20	2.28	2.21	2.21
	14.0	12017	11836	11836	11746	2.34	2.43	2.35	2.35
	17.0	12589	12400	12400	12305	2.49	2.58	2.50	2.50
	22.0	13205	13006	13006	12907	2.39	2.40	2.40	2.40
	27.0	13800	13803	13703	13503	2.22	2.22	2.21	2.21
	32.0	14398	14200	13999	13900	2.06	2.04	2.04	2.03
	37.0	15391	15192	14892	14793	1.90	1.88	1.87	1.86
	42.0	16880	16681	16582	16282	1.74	1.71	1.70	1.69
	44.6	18417	18200	17706	17607	1.66	1.54	1.62	1.60
	52.0	19486	19189	19090	18991	1.42	1.38	1.36	1.33
	57.0	20576	20178	20180	19881	1.25	1.20	1.18	1.16
62.0	21565	21268	20969	20971	1.10	1.04	1.01	0.98	
64.4	21859	21562	21565	21266	1.02	0.96	0.93	0.90	

Gray shaded area is Extrapolated Data





COOLING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K HH (Sheet 2 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID WB (DB F)	60.8				64.4				66.2				71.6			
		ID DB (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
530	-22	TC	19505	19713	19922	20131	20392	20392	20392	20598	20886	20886	20886	20886	22062	22062	22062	22062
		S/T	0.74	0.85	0.97	1.00	0.58	0.68	0.78	0.87	0.50	0.60	0.69	0.80	0.32	0.42	0.51	0.60
		PI	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21
	-10	TC	19361	19568	19775	19982	20276	20276	20276	20481	20781	20781	20781	20781	21995	21995	21995	21995
		S/T	0.75	0.85	0.97	1.00	0.58	0.68	0.79	0.88	0.51	0.60	0.70	0.80	0.33	0.42	0.52	0.60
		PI	1.08	1.08	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
	0	TC	19241	19446	19652	19858	20180	20180	20180	20384	20694	20694	20694	20694	21940	21940	21940	21940
		S/T	0.75	0.86	0.98	1.00	0.59	0.68	0.79	0.89	0.51	0.61	0.70	0.81	0.33	0.42	0.52	0.61
		PI	1.04	1.04	1.04	1.04	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	1.03	1.03	1.03	1.03
	5	TC	19184	19390	19595	19800	20143	20143	20143	20346	20663	20663	20663	20663	21925	21925	21925	21925
		S/T	0.75	0.86	0.98	1.00	0.59	0.69	0.79	0.89	0.51	0.61	0.70	0.81	0.33	0.42	0.52	0.61
		PI	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
	14	TC	19071	19275	19479	19683	20030	20030	20030	20232	20560	20560	20560	20560	21851	21851	21851	21851
		S/T	0.76	0.86	0.99	1.00	0.59	0.69	0.80	0.89	0.51	0.61	0.71	0.82	0.33	0.43	0.52	0.61
		PI	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
	23	TC	18957	19160	19362	19565	19954	19954	19954	20156	20484	20484	20484	20484	21795	21795	21795	21795
		S/T	0.76	0.87	0.99	1.00	0.59	0.69	0.80	0.90	0.52	0.61	0.71	0.82	0.33	0.43	0.53	0.61
		PI	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
	32	TC	18862	19064	19266	19467	19879	19879	19879	20080	20428	20428	20428	20428	21776	21776	21776	21776
		S/T	0.76	0.87	1.00	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.82	0.33	0.43	0.53	0.62
		PI	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
	41	TC	18767	18968	19169	19370	19803	19803	19803	20003	20362	20362	20362	20362	21758	21758	21758	21758
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.91	0.52	0.62	0.72	0.83	0.33	0.43	0.53	0.62
		PI	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97
	50	TC	18654	18853	19053	19252	19709	19709	19709	19908	20277	20277	20277	20277	21702	21702	21702	21702
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.91	0.52	0.62	0.72	0.83	0.34	0.44	0.53	0.62
		PI	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	59	TC	18502	18700	18898	19096	19577	19577	19577	19775	20154	20154	20154	20154	21609	21609	21609	21609
		S/T	0.78	0.89	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.84	0.34	0.44	0.54	0.63
		PI	1.02	1.02	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
	68	TC	18293	18489	18685	18880	19370	19370	19370	19565	19957	19957	19957	19957	21424	21424	21424	21424
		S/T	0.78	0.89	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.84	0.34	0.44	0.54	0.63
		PI	1.06	1.06	1.06	1.06	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.04	1.04	1.04	1.04
	77	TC	17413	17609	17804	18000	18489	18489	18489	18685	19076	19076	19076	19076	20543	20543	20543	20543
		S/T	0.79	0.91	1.00	1.00	0.62	0.73	0.84	0.94	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.64
		PI	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
	86	TC	16630	16826	17022	17217	17707	17707	17707	17902	18196	18196	18196	18196	19663	19663	19663	19663
		S/T	0.81	0.93	1.00	1.00	0.62	0.74	0.85	0.97	0.54	0.65	0.76	0.88	0.34	0.44	0.55	0.65
		PI	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.28	1.28	1.28	1.28
	95	TC	15750	15946	16141	16337	16826	16826	16826	17022	17315	17315	17609	17804	18685	18685	18685	18685
		S/T	0.83	0.95	1.00	1.00	0.63	0.75	0.88	0.99	0.54	0.66	0.77	0.89	0.34	0.45	0.56	0.67
		PI	1.39	1.39	1.39	1.39	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
	104	TC	14813	14964	15115	15266	15798	15798	15886	16081	16285	16285	16445	16640	17606	17606	17606	17606
		S/T	0.86	1.00	1.00	1.00	0.65	0.78	0.91	1.00	0.55	0.68	0.81	0.93	0.33	0.45	0.57	0.69
		PI	1.54	1.54	1.54	1.54	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.56	1.56	1.56	1.56
	115	TC	13750	13847	13945	14042	14627	14627	14822	15017	15115	15115	15115	15310	16383	16383	16383	16383
		S/T	0.88	1.00	1.00	1.00	0.66	0.80	0.93	1.00	0.56	0.69	0.83	0.96	0.33	0.45	0.58	0.70
		PI	1.71	1.71	1.71	1.71	1.72	1.72	1.72	1.72	1.73	1.73	1.73	1.73	1.74	1.74	1.74	1.74
122	TC	12872	12970	13067	13165	13750	13750	13847	13945	14237	14237	14237	14335	15407	15407	15407	15407	
	S/T	0.90	1.00	1.00	1.00	0.67	0.82	0.97	1.00	0.57	0.71	0.85	0.99	0.32	0.46	0.59	0.91	
	PI	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.89	1.89	1.89	1.89	

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COOLING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K HH (Sheet 3 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID WB (DB F)	60.8				64.4				66.2				71.6			
			ID DB (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6
577	-22	TC	19922	20131	20339	20548	20907	20907	20907	21113	21397	21397	21397	21397	22566	22566	22566	22566
		S/T	0.76	0.87	1.00	1.00	0.59	0.69	0.80	0.96	0.50	0.61	0.71	0.82	0.32	0.42	0.51	0.62
		PI	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21
	-10	TC	19775	19982	20189	20396	20788	20788	20788	20993	21291	21291	21291	21291	22497	22497	22497	22497
		S/T	0.77	0.87	1.00	1.00	0.59	0.70	0.80	0.97	0.51	0.61	0.72	0.82	0.33	0.42	0.52	0.62
		PI	1.08	1.08	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
	0	TC	19652	19858	20064	20270	20689	20689	20689	20893	21202	21202	21202	21202	22440	22440	22440	22440
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.97	0.51	0.62	0.72	0.83	0.33	0.42	0.52	0.63
		PI	1.06	1.06	1.06	1.06	1.05	1.05	1.05	1.05	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	5	TC	19595	19800	20005	20210	20651	20651	20651	20855	21170	21170	21170	21170	22425	22425	22425	22425
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	0.98	0.51	0.62	0.72	0.83	0.33	0.42	0.52	0.63
		PI	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	14	TC	19479	19683	19887	20091	20535	20535	20535	20738	21063	21063	21063	21063	22349	22349	22349	22349
		S/T	0.78	0.88	1.00	1.00	0.60	0.71	0.82	0.98	0.51	0.62	0.73	0.83	0.33	0.43	0.52	0.63
		PI	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99
23	TC	19362	19565	19768	19971	20458	20458	20458	20660	20986	20986	20986	20986	22292	22292	22292	22292	
	S/T	0.78	0.89	1.00	1.00	0.60	0.71	0.82	0.99	0.52	0.62	0.73	0.84	0.33	0.43	0.53	0.63	
	PI	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	
32	TC	19266	19467	19669	19871	20381	20381	20381	20582	20928	20928	20928	20928	22274	22274	22274	22274	
	S/T	0.78	0.89	1.00	1.00	0.61	0.72	0.82	0.99	0.52	0.63	0.74	0.84	0.33	0.43	0.53	0.64	
	PI	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	
41	TC	19169	19370	19570	19771	20303	20303	20303	20503	20861	20861	20861	20861	22255	22255	22255	22255	
	S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	1.00	0.52	0.63	0.74	0.85	0.33	0.43	0.53	0.64	
	PI	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50	TC	19053	19252	19452	19651	20207	20207	20207	20406	20774	20774	20774	20774	22198	22198	22198	22198	
	S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	1.00	0.52	0.63	0.74	0.85	0.34	0.44	0.53	0.64	
	PI	1.02	1.02	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
59	TC	18898	19096	19294	19491	20071	20071	20071	20269	20648	20648	20648	20648	22103	22103	22103	22103	
	S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.95	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.65	
	PI	1.04	1.04	1.04	1.04	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.04	1.04	1.04	1.04	
68	TC	18685	18880	19076	19272	19859	19859	19859	20054	20446	20446	20446	20446	21913	21913	21913	21913	
	S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.95	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.65	
	PI	1.08	1.08	1.08	1.08	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
77	TC	17804	18000	18196	18391	18978	18978	18978	19174	19565	19565	19565	19565	21033	21033	21033	21033	
	S/T	0.81	0.93	1.00	1.00	0.62	0.74	0.86	0.97	0.54	0.65	0.77	0.88	0.34	0.44	0.55	0.66	
	PI	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
86	TC	17022	17217	17413	17609	18098	18098	18098	18293	18587	18587	18587	18783	20054	20054	20054	20054	
	S/T	0.83	0.96	1.00	1.00	0.63	0.76	0.88	1.00	0.54	0.66	0.78	0.90	0.33	0.45	0.56	0.67	
	PI	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.31	1.31	1.31	1.31	
95	TC	16141	16337	16533	16728	17217	17217	17413	17609	17707	17707	18000	18196	19076	19076	19076	19076	
	S/T	0.85	0.98	1.00	1.00	0.64	0.77	0.90	1.00	0.55	0.67	0.80	0.91	0.33	0.45	0.57	0.68	
	PI	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.43	1.43	1.43	1.43	1.44	1.44	1.44	1.44	
104	TC	15159	15310	15461	15611	16188	16188	16383	16578	16675	16675	16835	17030	17996	17996	17996	17996	
	S/T	0.89	1.00	1.00	1.00	0.66	0.81	0.94	1.00	0.56	0.70	0.84	0.97	0.33	0.45	0.58	0.90	
	PI	1.57	1.57	1.57	1.57	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.60	1.60	1.60	1.60	
115	TC	14042	14140	14237	14335	15017	15017	15212	15407	15505	15505	15505	15700	16773	16773	16773	16773	
	S/T	0.90	1.00	1.00	1.00	0.67	0.82	0.96	1.00	0.57	0.71	0.85	0.99	0.32	0.46	0.59	0.92	
	PI	1.75	1.75	1.75	1.75	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.78	1.78	1.78	1.78	
122	TC	13165	13262	13360	13457	14042	14042	14140	14237	14530	14530	14530	14627	15798	15798	15798	15798	
	S/T	0.93	1.00	1.00	1.00	0.69	0.85	1.00	1.00	0.58	0.73	0.88	1.00	0.32	0.46	0.60	0.97	
	PI	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.93	1.93	1.93	1.93	

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HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K HH (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
489	-22.0	13894	13826	13758	13690	1.65	1.72	1.65	1.66
	-10.0	15987	15909	15830	15752	1.94	2.01	1.94	1.94
	0.0	17731	17644	17557	17470	2.17	2.25	2.17	2.18
	5.0	18664	18572	18481	18389	2.30	2.39	2.30	2.31
	14.0	19929	19831	19734	19636	2.45	2.55	2.45	2.46
	17.0	20878	20776	20673	20571	2.61	2.71	2.61	2.62
	22.0	20182	20083	19984	19885	2.51	2.50	2.50	2.50
	27.0	19490	19292	19193	19094	2.31	2.30	2.29	2.29
	32.0	18500	18401	18302	18204	2.11	2.09	2.08	2.07
	37.0	18204	18006	17907	17709	1.93	1.90	1.89	1.87
	42.0	18302	18105	18006	17907	1.76	1.72	1.70	1.69
	44.6	18607	18406	18505	18406	1.66	1.51	1.60	1.58
	52.0	18307	18109	17911	17813	1.38	1.33	1.30	1.27
	57.0	18010	17714	17516	17417	1.19	1.14	1.11	1.07
	62.0	17615	17318	17120	17021	1.01	0.94	0.90	0.87
64.4	17417	17120	16922	16823	0.92	0.85	0.81	0.77	
530	-22.0	14271	14135	14066	14066	1.67	1.73	1.67	1.67
	-10.0	16421	16263	16185	16185	1.96	2.03	1.96	1.96
	0.0	18212	18038	17950	17950	2.20	2.28	2.20	2.20
	5.0	19170	18986	18895	18895	2.33	2.41	2.33	2.33
	14.0	20470	20274	20176	20176	2.48	2.57	2.48	2.48
	17.0	21444	21239	21136	21136	2.64	2.73	2.64	2.64
	22.0	20677	20479	20380	20380	2.53	2.53	2.53	2.53
	27.0	19885	19688	19589	19589	2.33	2.32	2.32	2.31
	32.0	18995	18797	18698	18599	2.14	2.12	2.11	2.10
	37.0	18599	18401	18204	18105	1.95	1.92	1.91	1.90
	42.0	18797	18500	18401	18302	1.78	1.74	1.73	1.71
	44.6	19104	18802	18901	18802	1.68	1.53	1.62	1.60
	52.0	18703	18505	18307	18208	1.40	1.34	1.32	1.29
	57.0	18307	18109	17911	17813	1.21	1.16	1.12	1.09
	62.0	18010	17714	17516	17318	1.03	0.96	0.92	0.88
64.4	17813	17516	17318	17120	0.94	0.86	0.82	0.78	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 18K HH (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
577	-22.0	14424	14287	14287	14219	1.68	1.75	1.68	1.69
	-10.0	16596	16439	16439	16360	1.97	2.05	1.97	1.98
	0.0	18407	18232	18232	18145	2.21	2.30	2.21	2.22
	5.0	19375	19191	19191	19100	2.35	2.43	2.35	2.35
	14.0	20689	20492	20492	20394	2.50	2.59	2.50	2.51
	17.0	21674	21468	21468	21366	2.66	2.76	2.66	2.67
	22.0	20875	20677	20677	20578	2.55	2.55	2.55	2.55
	27.0	20083	19885	19885	19786	2.35	2.34	2.34	2.33
	32.0	19193	18995	18896	18797	2.16	2.14	2.13	2.12
	37.0	18797	18599	18401	18302	1.97	1.95	1.93	1.92
	42.0	18995	18698	18599	18500	1.80	1.76	1.75	1.73
	44.6	19302	19000	19099	19000	1.70	1.55	1.64	1.62
	52.0	18901	18703	18505	18406	1.42	1.36	1.34	1.31
	57.0	18505	18208	18109	18010	1.23	1.16	1.14	1.11
	62.0	18109	17813	17714	17516	1.05	0.98	0.94	0.90
64.4	18010	17615	17516	17318	0.96	0.88	0.84	0.80	
618	-22.0	14578	14441	14511	14373	1.70	1.76	1.70	1.71
	-10.0	16774	16616	16697	16538	1.99	2.06	1.99	2.00
	0.0	18604	18429	18518	18342	2.23	2.31	2.23	2.25
	5.0	19582	19398	19493	19307	2.36	2.45	2.36	2.38
	14.0	20910	20714	20814	20615	2.52	2.62	2.52	2.54
	17.0	21906	21700	21805	21597	2.68	2.78	2.68	2.70
	22.0	21074	20877	20978	20778	2.57	2.57	2.57	2.57
	27.0	20283	20085	20187	19986	2.37	2.36	2.36	2.35
	32.0	19393	19195	19096	18997	2.18	2.16	2.15	2.14
	37.0	18997	18799	18601	18502	1.99	1.98	1.95	1.94
	42.0	19195	18898	18799	18700	1.82	1.78	1.77	1.75
	44.6	19502	19200	19299	19200	1.72	1.57	1.66	1.64
	52.0	19101	18903	18705	18606	1.44	1.38	1.36	1.33
	57.0	18705	18308	18309	18211	1.25	1.17	1.16	1.13
	62.0	18209	17912	17914	17716	1.07	1.00	0.96	0.92
64.4	18211	17714	17716	17518	0.98	0.90	0.86	0.82	

Gray shaded area is Extrapolated Data











HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 24K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
630	-22.0	14472	14342	14277	14147	1.60	1.66	1.64	1.65
	-10.0	16652	16502	16427	16277	1.88	1.94	1.92	1.93
	0.0	18469	18302	18219	18053	2.11	2.18	2.16	2.16
	5.0	19440	19265	19178	19002	2.23	2.31	2.29	2.29
	14.0	20758	20571	20478	20291	2.38	2.47	2.44	2.45
	17.0	21747	21551	21453	21257	2.53	2.62	2.59	2.60
	22.0	21946	21749	21650	21452	2.48	2.51	2.53	2.55
	27.0	22045	21847	21749	21551	2.39	2.42	2.43	2.45
	32.0	21946	21650	21551	21452	2.29	2.32	2.33	2.35
	37.0	22638	22342	22144	22045	2.22	2.25	2.26	2.27
	42.0	24022	23726	23528	23330	2.16	2.17	2.18	2.19
	44.6	25524	25209	24814	24715	2.13	2.11	2.16	2.16
	52.0	26297	25901	25703	25605	2.01	2.02	2.03	2.03
	57.0	26890	26494	26297	26198	1.93	1.93	1.94	1.94
62.0	27582	27186	26989	26791	1.85	1.85	1.85	1.85	
64.4	27878	27483	27285	26989	1.81	1.81	1.81	1.81	
695	-22.0	14764	14633	14568	14503	1.62	1.68	1.65	1.67
	-10.0	16988	16837	16762	16687	1.90	1.97	1.94	1.95
	0.0	18841	18674	18591	18507	2.13	2.20	2.17	2.19
	5.0	19832	19656	19569	19481	2.26	2.34	2.30	2.32
	14.0	21177	20989	20895	20802	2.41	2.49	2.46	2.47
	17.0	22185	21989	21890	21792	2.56	2.65	2.61	2.63
	22.0	22342	22144	22045	21946	2.51	2.54	2.56	2.57
	27.0	22539	22243	22144	22045	2.41	2.44	2.46	2.47
	32.0	22342	22144	21946	21847	2.32	2.34	2.36	2.37
	37.0	23034	22737	22638	22441	2.25	2.27	2.28	2.29
	42.0	24418	24121	24022	23825	2.17	2.19	2.20	2.21
	44.6	26019	25703	25308	25209	2.15	2.13	2.18	2.18
	52.0	26791	26395	26198	26099	2.03	2.04	2.04	2.05
	57.0	27483	27087	26890	26692	1.94	1.95	1.96	1.96
62.0	28076	27681	27483	27285	1.86	1.86	1.87	1.87	
64.4	28373	27977	27779	27582	1.82	1.82	1.82	1.82	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 24K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR DB (F)	TC: TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
759	-22.0	14933	14803	14737	14607	1.64	1.70	1.67	1.68
	-10.0	17182	17032	16957	16807	1.92	1.99	1.96	1.97
	0.0	19056	18890	18807	18640	2.16	2.23	2.20	2.21
	5.0	20059	19884	19796	19621	2.29	2.36	2.33	2.35
	14.0	21419	21232	21138	20951	2.44	2.52	2.48	2.50
	17.0	22439	22243	22145	21949	2.59	2.68	2.64	2.66
	22.0	22638	22441	22342	22144	2.54	2.57	2.59	2.60
	27.0	22737	22539	22441	22243	2.44	2.47	2.49	2.50
	32.0	22638	22342	22243	22144	2.34	2.37	2.38	2.40
	37.0	23330	23034	22836	22737	2.27	2.29	2.30	2.31
	42.0	24714	24418	24220	24121	2.20	2.21	2.22	2.23
	44.6	26316	26000	25605	25506	2.17	2.15	2.20	2.20
	52.0	27087	26692	26593	26395	2.05	2.06	2.06	2.07
	57.0	27779	27384	27186	26989	1.96	1.97	1.97	1.97
	62.0	28373	27977	27779	27582	1.88	1.88	1.88	1.88
64.4	28768	28274	28076	27878	1.84	1.84	1.84	1.84	
824	-22.0	15104	14974	14909	14712	1.66	1.72	1.69	1.70
	-10.0	17379	17229	17154	16928	1.94	2.01	1.98	2.00
	0.0	19274	19108	19025	18774	2.18	2.26	2.22	2.24
	5.0	20288	20114	20026	19762	2.31	2.39	2.36	2.37
	14.0	21664	21477	21384	21102	2.47	2.55	2.51	2.53
	17.0	22696	22500	22402	22107	2.62	2.71	2.67	2.69
	22.0	22939	22741	22642	22343	2.57	2.60	2.62	2.63
	27.0	22937	22840	22741	22442	2.47	2.50	2.52	2.53
	32.0	22939	22541	22543	22445	2.36	2.40	2.40	2.43
	37.0	23631	23334	23035	23038	2.29	2.31	2.32	2.33
	42.0	25014	24718	24419	24421	2.23	2.23	2.24	2.25
	44.6	26616	26300	25905	25806	2.19	2.17	2.22	2.22
	52.0	27387	26992	26995	26695	2.07	2.08	2.08	2.09
	57.0	28079	27684	27486	27288	1.98	1.99	1.98	1.98
	62.0	28672	28277	28079	27882	1.90	1.90	1.89	1.89
64.4	29169	28573	28376	28178	1.86	1.86	1.86	1.86	

Gray shaded area is Extrapolated Data



COOLING PERFORMANCE - 24K HH (Sheet 2 of 3)

AIRFLOW (CFM)	OUTDOOR DB (F)	ID WB (F)	60.8				64.4				66.2				71.6			
		ID (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
695	-22	TC	26007	26216	26529	26843	27226	27226	27226	27535	27885	27885	27885	27885	29456	29456	29456	29456
		S/T	0.74	0.84	0.97	1.00	0.58	0.68	0.77	0.87	0.50	0.60	0.69	0.79	0.32	0.42	0.50	0.60
		PI	1.61	1.60	1.60	1.61	1.61	1.61	1.61	1.61	1.62	1.62	1.62	1.62	1.63	1.63	1.63	1.63
	-10	TC	25815	26022	26333	26644	27072	27072	27072	27379	27746	27746	27746	27746	29367	29367	29367	29367
		S/T	0.75	0.84	0.97	1.00	0.58	0.68	0.78	0.87	0.51	0.60	0.70	0.79	0.33	0.42	0.51	0.60
		PI	1.45	1.45	1.45	1.45	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.47	1.47	1.47	1.47
	0	TC	25655	25861	26170	26479	26943	26943	26943	27249	27630	27630	27630	27630	29293	29293	29293	29293
		S/T	0.75	0.85	0.98	1.00	0.59	0.68	0.78	0.88	0.51	0.61	0.70	0.80	0.33	0.42	0.51	0.61
		PI	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
	5	TC	25580	25785	26093	26402	26894	26894	26894	27199	27588	27588	27588	27588	29273	29273	29273	29273
		S/T	0.75	0.85	0.98	1.00	0.59	0.69	0.78	0.88	0.51	0.61	0.70	0.80	0.33	0.42	0.51	0.61
		PI	1.31	1.31	1.31	1.31	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	14	TC	25428	25632	25939	26245	26743	26743	26743	27046	27450	27450	27450	27450	29174	29174	29174	29174
		S/T	0.76	0.85	0.99	1.00	0.59	0.69	0.79	0.88	0.51	0.61	0.71	0.81	0.33	0.43	0.51	0.61
		PI	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	23	TC	25277	25480	25784	26089	26642	26642	26642	26945	27349	27349	27349	27349	29099	29099	29099	29099
		S/T	0.76	0.86	0.99	1.00	0.59	0.69	0.79	0.89	0.52	0.61	0.71	0.81	0.33	0.43	0.52	0.61
		PI	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
	32	TC	25150	25352	25655	25958	26541	26541	26541	26843	27274	27274	27274	27274	29075	29075	29075	29075
		S/T	0.76	0.86	1.00	1.00	0.60	0.70	0.79	0.89	0.52	0.62	0.72	0.81	0.33	0.43	0.52	0.62
		PI	1.31	1.31	1.31	1.31	1.30	1.30	1.30	1.30	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31
	41	TC	25024	25225	25526	25828	26440	26440	26440	26741	27186	27186	27186	27186	29050	29050	29050	29050
		S/T	0.77	0.87	1.00	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.82	0.33	0.43	0.52	0.62
		PI	1.32	1.32	1.32	1.32	1.31	1.31	1.31	1.31	1.32	1.32	1.32	1.32	1.31	1.31	1.31	1.31
	50	TC	24872	25072	25372	25671	26314	26314	26314	26614	27073	27073	27073	27073	28976	28976	28976	28976
		S/T	0.77	0.87	1.00	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.82	0.34	0.44	0.52	0.62
		PI	1.34	1.34	1.34	1.34	1.33	1.33	1.33	1.33	1.34	1.34	1.34	1.34	1.33	1.33	1.33	1.33
	59	TC	24670	24868	25165	25462	26138	26138	26138	26435	26909	26909	26909	26909	28852	28852	28852	28852
		S/T	0.78	0.88	0.99	1.00	0.61	0.71	0.81	0.91	0.53	0.63	0.73	0.83	0.34	0.44	0.53	0.63
		PI	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.36	1.37	1.37	1.37	1.37	1.36	1.36	1.36	1.36
	68	TC	24392	24588	24882	25176	25861	25861	25861	26155	26645	26645	26645	26645	28604	28604	28604	28604
		S/T	0.78	0.88	0.99	1.00	0.61	0.71	0.81	0.91	0.53	0.63	0.73	0.83	0.34	0.44	0.53	0.63
		PI	1.42	1.42	1.42	1.42	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.40	1.40	1.40	1.40
	77	TC	23314	23510	23706	23902	24784	24784	24784	25078	25469	25469	25469	25469	27429	27429	27429	27429
		S/T	0.79	0.90	1.00	1.00	0.61	0.72	0.83	0.93	0.53	0.64	0.74	0.85	0.34	0.44	0.54	0.64
		PI	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
86	TC	22237	22433	22629	22824	23608	23608	23608	23804	24294	24294	24294	24294	26253	26253	26253	26253	
	S/T	0.80	0.92	1.00	1.00	0.62	0.73	0.85	0.96	0.53	0.65	0.76	0.87	0.34	0.44	0.54	0.65	
	PI	1.70	1.70	1.70	1.70	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.72	1.72	1.72	1.72	
95	TC	21061	21257	21453	21649	22433	22433	22433	22629	23118	23118	23510	23706	24980	24980	24980	24980	
	S/T	0.82	0.94	1.00	1.00	0.63	0.75	0.87	0.99	0.54	0.66	0.77	0.88	0.34	0.44	0.55	0.66	
	PI	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	
104	TC	19892	20088	20285	20481	21177	21177	21266	21462	21863	21863	22077	22274	23638	23638	23638	23638	
	S/T	0.85	0.99	1.00	1.00	0.65	0.78	0.90	1.00	0.55	0.68	0.80	0.93	0.33	0.45	0.57	0.69	
	PI	2.06	2.06	2.06	2.06	2.07	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	
115	TC	18447	18643	18839	19036	19624	19624	19821	20017	20311	20311	20311	20508	21979	21979	21979	21979	
	S/T	0.87	1.00	1.00	1.00	0.65	0.79	0.93	1.00	0.55	0.69	0.82	0.95	0.33	0.45	0.57	0.70	
	PI	2.29	2.29	2.29	2.29	2.30	2.30	2.30	2.30	2.31	2.31	2.31	2.31	2.33	2.33	2.33	2.33	
122	TC	17269	17466	17662	17858	18447	18447	18643	18839	19134	19134	19134	19330	20704	20704	20704	20704	
	S/T	0.90	1.00	1.00	1.00	0.67	0.81	0.96	1.00	0.56	0.70	0.85	0.98	0.33	0.46	0.59	0.91	
	PI	2.48	2.48	2.48	2.48	2.49	2.49	2.49	2.49	2.50	2.50	2.50	2.50	2.52	2.52	2.52	2.52	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.





HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 24K HH (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
630	-22.0	17416	17279	17211	17143	2.19	2.27	2.19	2.19
	-10.0	20039	19882	19803	19724	2.57	2.66	2.57	2.57
	0.0	22225	22050	21963	21876	2.88	2.99	2.88	2.88
	5.0	23394	23210	23119	23027	3.05	3.17	3.05	3.05
	14.0	24980	24784	24686	24588	3.26	3.38	3.26	3.26
	17.0	26169	25964	25861	25759	3.46	3.59	3.46	3.46
	22.0	25270	25072	24973	24874	3.32	3.31	3.31	3.31
	27.0	24379	24180	24081	23982	3.06	3.04	3.03	3.03
	32.0	23288	23090	22991	22793	2.79	2.77	2.76	2.75
	37.0	22892	22595	22496	22397	2.56	2.52	2.50	2.49
	42.0	23189	22892	22694	22595	2.32	2.27	2.25	2.22
	44.6	23608	23306	23405	23306	2.20	2.00	2.12	2.09
	52.0	23306	22909	22810	22612	1.83	1.75	1.72	1.68
	57.0	22909	22512	22314	22116	1.58	1.50	1.46	1.41
	62.0	22413	22116	21917	21719	1.33	1.24	1.19	1.14
64.4	22215	21818	21620	21521	1.21	1.11	1.06	1.01	
695	-22.0	17783	17646	17578	17510	2.21	2.30	2.22	2.22
	-10.0	20461	20304	20226	20147	2.59	2.69	2.60	2.60
	0.0	22693	22519	22432	22345	2.90	3.02	2.91	2.91
	5.0	23887	23704	23612	23521	3.08	3.20	3.09	3.09
	14.0	25506	25311	25213	25115	3.28	3.41	3.29	3.29
	17.0	26721	26516	26414	26311	3.49	3.62	3.50	3.50
	22.0	25865	25667	25568	25469	3.35	3.35	3.35	3.34
	27.0	24973	24676	24577	24478	3.09	3.07	3.06	3.06
	32.0	23784	23586	23388	23288	2.82	2.80	2.78	2.77
	37.0	23388	23090	22991	22793	2.59	2.55	2.53	2.51
	42.0	23685	23388	23189	23090	2.34	2.29	2.27	2.24
	44.6	24104	23802	24000	23802	2.22	2.02	2.14	2.11
	52.0	23802	23405	23306	23107	1.85	1.77	1.73	1.70
	57.0	23306	23008	22810	22612	1.59	1.52	1.47	1.43
	62.0	22909	22512	22314	22116	1.35	1.25	1.20	1.15
64.4	22711	22314	22116	21917	1.23	1.12	1.07	1.02	
759	-22.0	17943	17807	17739	17670	2.24	2.32	2.24	2.24
	-10.0	20646	20489	20410	20332	2.62	2.71	2.62	2.62
	0.0	22898	22724	22637	22549	2.94	3.04	2.94	2.94
	5.0	24102	23919	23827	23736	3.11	3.23	3.11	3.11
	14.0	25736	25541	25443	25345	3.32	3.44	3.32	3.32
	17.0	26962	26757	26654	26552	3.53	3.66	3.53	3.53
	22.0	26063	25865	25766	25667	3.38	3.38	3.38	3.38
	27.0	25171	24973	24775	24676	3.12	3.10	3.09	3.08
	32.0	23982	23784	23586	23487	2.85	2.82	2.81	2.79
	37.0	23586	23288	23189	22991	2.61	2.57	2.55	2.53
	42.0	23883	23586	23388	23288	2.37	2.32	2.29	2.26
	44.6	24303	24000	24198	24000	2.24	2.04	2.16	2.13
	52.0	24000	23603	23504	23306	1.86	1.79	1.75	1.71
	57.0	23504	23207	23008	22810	1.61	1.53	1.49	1.44
	62.0	23107	22711	22512	22314	1.36	1.26	1.21	1.16
64.4	22909	22512	22314	22116	1.24	1.13	1.08	1.03	



HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE - 24K HH (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
824	-22.0	18105	17969	17900	17832	2.26	2.34	2.25	2.25
	-10.0	20832	20675	20596	20518	2.65	2.74	2.64	2.64
	0.0	23104	22930	22843	22756	2.97	3.07	2.96	2.96
	5.0	24320	24136	24045	23953	3.15	3.26	3.14	3.14
	14.0	25969	25773	25675	25577	3.36	3.47	3.35	3.35
	17.0	27205	27000	26897	26795	3.57	3.69	3.56	3.56
	22.0	26263	26065	25966	25867	3.41	3.41	3.41	3.42
	27.0	25371	25274	24975	24876	3.15	3.13	3.12	3.10
	32.0	24182	23984	23786	23687	2.88	2.84	2.84	2.81
	37.0	23786	23488	23389	23191	2.63	2.59	2.57	2.55
	42.0	24083	23786	23587	23488	2.40	2.35	2.31	2.28
	44.6	24502	24200	24398	24200	2.26	2.06	2.18	2.15
	52.0	24200	23803	23704	23506	1.87	1.81	1.77	1.72
	57.0	23704	23407	23208	23010	1.63	1.54	1.51	1.45
62.0	23308	22911	22713	22514	1.37	1.27	1.22	1.17	
64.4	23109	22713	22514	22316	1.25	1.14	1.09	1.04	

Gray shaded area is Extrapolated Data

## COOLING PERFORMANCE - 30K (Sheet 1 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F) ID (DB F)	60.8				64.4				66.2				71.6			
			73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
712	-22	TC	31921	31974	31974	31974	33428	34164	34164	34164	34153	34153	34153	34153	36129	36129	36129	36129
		S/T	0.65	0.69	0.75	0.81	0.54	0.59	0.65	0.70	0.49	0.54	0.60	0.65	0.38	0.43	0.48	0.52
		PI	2.30	2.30	2.30	2.30	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.33	2.33	2.33	2.33
	-10	TC	31686	31738	31738	31738	33238	33970	33970	33970	33983	33983	33983	33983	36020	36020	36020	36020
		S/T	0.65	0.70	0.76	0.81	0.55	0.60	0.65	0.71	0.50	0.55	0.60	0.65	0.38	0.43	0.48	0.53
		PI	2.09	2.08	2.08	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.10	2.10	2.10	2.10
	0	TC	31489	31541	31541	31541	33080	33808	33808	33808	33841	33841	33841	33841	35928	35928	35928	35928
		S/T	0.65	0.70	0.76	0.82	0.55	0.60	0.65	0.71	0.50	0.55	0.61	0.65	0.39	0.43	0.48	0.53
		PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96
	5	TC	31397	31449	31449	31449	33020	33746	33746	33746	33790	33790	33790	33790	35904	35904	35904	35904
		S/T	0.66	0.70	0.76	0.82	0.55	0.60	0.66	0.71	0.50	0.55	0.61	0.66	0.39	0.43	0.48	0.53
		PI	1.83	1.83	1.83	1.83	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82
	14	TC	31211	31262	31262	31262	32834	33557	33557	33557	33620	33620	33620	33620	35783	35783	35783	35783
		S/T	0.66	0.71	0.77	0.82	0.55	0.61	0.66	0.72	0.50	0.55	0.61	0.66	0.39	0.44	0.49	0.53
		PI	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82
	23	TC	31025	31076	31076	31076	32710	33431	33431	33431	33497	33497	33497	33497	35692	35692	35692	35692
		S/T	0.66	0.71	0.77	0.83	0.56	0.61	0.66	0.72	0.51	0.56	0.61	0.66	0.39	0.44	0.49	0.54
		PI	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83
	32	TC	30870	30920	30920	30920	32587	33304	33304	33304	33404	33404	33404	33404	35661	35661	35661	35661
		S/T	0.67	0.72	0.77	0.83	0.56	0.61	0.67	0.73	0.51	0.56	0.62	0.67	0.39	0.44	0.49	0.54
		PI	1.83	1.83	1.83	1.83	1.82	1.82	1.82	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83
	41	TC	30715	30765	30765	30765	32463	33178	33178	33178	33297	33297	33297	33297	35631	35631	35631	35631
		S/T	0.67	0.72	0.78	0.84	0.56	0.62	0.67	0.73	0.51	0.56	0.62	0.67	0.39	0.44	0.49	0.54
		PI	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.85	1.85	1.85
	50	TC	30528	30578	30578	30578	32309	33020	33020	33020	33158	33158	33158	33158	35540	35540	35540	35540
		S/T	0.67	0.72	0.78	0.84	0.56	0.62	0.67	0.73	0.51	0.56	0.62	0.67	0.40	0.45	0.50	0.54
		PI	1.88	1.87	1.87	1.88	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
	59	TC	30280	30330	30330	30330	32092	32799	32799	32799	32958	32958	32958	32958	35388	35388	35388	35388
		S/T	0.68	0.73	0.79	0.85	0.57	0.62	0.68	0.74	0.52	0.57	0.63	0.68	0.40	0.45	0.50	0.55
		PI	1.92	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
	68	TC	29939	29988	29988	29988	31752	31752	31752	31752	32634	32634	32634	32634	35084	35084	35084	35084
		S/T	0.68	0.73	0.79	0.85	0.57	0.63	0.68	0.74	0.52	0.57	0.63	0.68	0.40	0.45	0.50	0.55
		PI	1.99	1.99	1.99	1.99	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97
	77	TC	28518	28518	28518	28518	30380	30380	30380	30380	31262	31262	31262	31262	33614	33614	33614	33614
		S/T	0.68	0.74	0.80	0.86	0.57	0.63	0.68	0.74	0.52	0.57	0.63	0.68	0.40	0.45	0.50	0.55
		PI	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19
86	TC	27244	27244	27244	27244	28910	28910	28910	28910	29792	29792	29792	29792	32144	32144	32144	32144	
	S/T	0.68	0.75	0.81	0.88	0.57	0.63	0.69	0.75	0.51	0.57	0.63	0.69	0.39	0.44	0.50	0.55	
	PI	2.40	2.40	2.40	2.40	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.42	2.42	2.42	2.42	
95	TC	25872	25872	25872	26166	27538	27538	27538	27538	28420	28420	28812	28420	30576	30576	30576	30576	
	S/T	0.69	0.76	0.82	0.89	0.57	0.63	0.70	0.76	0.51	0.57	0.64	0.70	0.38	0.44	0.50	0.56	
	PI	2.62	2.62	2.62	2.62	2.63	2.63	2.63	2.63	2.64	2.64	2.64	2.64	2.65	2.65	2.65	2.65	
104	TC	24279	24279	24279	24527	25895	25895	25895	25895	26685	26685	26898	26685	28790	28790	28790	28790	
	S/T	0.70	0.77	0.85	0.92	0.57	0.64	0.71	0.78	0.51	0.58	0.65	0.72	0.38	0.44	0.50	0.56	
	PI	2.89	2.89	2.89	2.89	2.90	2.90	2.90	2.90	2.91	2.91	2.91	2.91	2.93	2.93	2.93	2.93	
115	TC	22467	22467	22467	22663	24030	24030	24030	24030	24714	24714	24714	24714	26765	26765	26765	26765	
	S/T	0.70	0.78	0.86	0.93	0.57	0.65	0.72	0.79	0.51	0.58	0.65	0.73	0.37	0.44	0.50	0.57	
	PI	3.21	3.21	3.21	3.21	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.26	3.26	3.26	3.26	
122	TC	21100	21100	21100	21295	22565	22565	22565	22565	23249	23249	23249	23249	25202	25202	25202	25202	
	S/T	0.71	0.80	0.88	0.96	0.58	0.65	0.73	0.81	0.51	0.59	0.66	0.74	0.37	0.44	0.51	0.58	
	PI	3.48	3.48	3.48	3.48	3.50	3.50	3.50	3.50	3.51	3.51	3.51	3.51	3.53	3.53	3.53	3.53	



COOLING PERFORMANCE - 30K (Sheet 3 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F)	60.8				64.4				66.2				71.6			
		ID (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
895	-22	TC	33241	33554	33868	34182	34783	34783	34783	35093	35603	35603	35603	35603	37658	37658	37658	37658
		S/T	0.74	0.85	1.00	1.00	0.58	0.68	0.78	0.96	0.50	0.60	0.69	0.79	0.32	0.42	0.50	0.60
		PI	2.30	2.30	2.30	2.30	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.33	2.33	2.33	2.33
	-10	TC	32995	33307	33618	33929	34586	34586	34586	34893	35426	35426	35426	35426	37544	37544	37544	37544
		S/T	0.75	0.85	1.00	1.00	0.58	0.68	0.79	0.97	0.51	0.60	0.70	0.79	0.33	0.42	0.51	0.60
		PI	2.09	2.08	2.08	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.10	2.10	2.10	2.10
	0	TC	32791	33100	33409	33719	34421	34421	34421	34728	35277	35277	35277	35277	37449	37449	37449	37449
		S/T	0.75	0.86	1.00	1.00	0.59	0.68	0.79	0.97	0.51	0.61	0.70	0.80	0.33	0.42	0.51	0.61
		PI	2.04	2.04	2.04	2.04	2.03	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.05
	5	TC	32695	33003	33312	33620	34358	34358	34358	34664	35224	35224	35224	35224	37423	37423	37423	37423
		S/T	0.75	0.86	1.00	1.00	0.59	0.69	0.79	0.98	0.51	0.61	0.70	0.80	0.33	0.42	0.51	0.61
		PI	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.90	1.90	1.90	1.90
	14	TC	32501	32808	33114	33421	34165	34165	34165	34469	35048	35048	35048	35048	37297	37297	37297	37297
		S/T	0.76	0.86	1.00	1.00	0.59	0.69	0.80	0.98	0.51	0.61	0.71	0.81	0.33	0.43	0.51	0.61
		PI	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91
	23	TC	32307	32612	32917	33222	34037	34037	34037	34340	34919	34919	34919	34919	37202	37202	37202	37202
		S/T	0.76	0.87	1.00	1.00	0.59	0.69	0.80	0.99	0.52	0.61	0.71	0.81	0.33	0.43	0.52	0.61
		PI	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91
	32	TC	32146	32449	32752	33055	33908	33908	33908	34210	34823	34823	34823	34823	37170	37170	37170	37170
		S/T	0.76	0.87	1.00	1.00	0.60	0.70	0.80	0.99	0.52	0.62	0.72	0.81	0.33	0.43	0.52	0.62
		PI	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
	41	TC	31984	32286	32588	32889	33779	33779	33779	34080	34710	34710	34710	34710	37139	37139	37139	37139
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	1.00	0.52	0.62	0.72	0.82	0.33	0.43	0.52	0.62
		PI	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93
	50	TC	31790	32090	32390	32690	33618	33618	33618	33918	34566	34566	34566	34566	37044	37044	37044	37044
		S/T	0.77	0.88	1.00	1.00	0.60	0.70	0.81	1.00	0.52	0.62	0.72	0.82	0.34	0.44	0.52	0.62
		PI	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
	59	TC	31532	31829	32127	32424	33393	33393	33393	33690	34357	34357	34357	34357	36885	36885	36885	36885
		S/T	0.78	0.89	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.83	0.34	0.44	0.53	0.63
		PI	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	68	TC	31176	31471	31765	32059	33039	33039	33039	33333	34020	34020	34020	34020	36569	36569	36569	36569
		S/T	0.78	0.89	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.83	0.34	0.44	0.53	0.63
		PI	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.06	2.06	2.06	2.06
	77	TC	29706	30000	30294	30588	31569	31569	31569	31863	32549	32549	32549	32549	35000	35000	35000	35000
		S/T	0.79	0.91	1.00	1.00	0.61	0.72	0.83	0.94	0.53	0.64	0.75	0.85	0.34	0.44	0.54	0.64
		PI	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29	2.29
86	TC	28333	28627	28922	29216	30098	30098	30098	30392	31078	31078	31078	31078	33431	33431	33431	33431	
	S/T	0.81	0.92	1.00	1.00	0.62	0.74	0.85	0.96	0.54	0.65	0.76	0.87	0.34	0.44	0.55	0.65	
	PI	2.51	2.51	2.51	2.51	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.53	2.53	2.53	2.53	
95	TC	26961	27255	27549	27843	28627	28627	28627	28922	29510	29510	30000	30294	31863	31863	31863	31863	
	S/T	0.82	0.95	1.00	1.00	0.63	0.75	0.87	0.99	0.54	0.66	0.77	0.88	0.34	0.44	0.55	0.66	
	PI	2.74	2.74	2.74	2.74	2.75	2.75	2.75	2.75	2.76	2.76	2.76	2.76	2.77	2.77	2.77	2.77	
104	TC	25089	25336	25583	25829	26738	26738	26870	27161	27567	27567	27831	28122	29807	29807	29807	29807	
	S/T	0.86	0.99	1.00	1.00	0.65	0.78	0.91	1.00	0.55	0.68	0.81	0.93	0.33	0.45	0.57	0.90	
	PI	3.03	3.03	3.03	3.03	3.04	3.04	3.04	3.04	3.05	3.05	3.05	3.05	3.07	3.07	3.07	3.07	
115	TC	23184	23378	23572	23766	24833	24833	25124	25415	25609	25609	25609	25900	27743	27743	27743	27743	
	S/T	0.87	1.00	1.00	1.00	0.66	0.79	0.93	1.00	0.56	0.69	0.83	0.95	0.33	0.45	0.58	0.92	
	PI	3.37	3.37	3.37	3.37	3.38	3.38	3.38	3.38	3.39	3.39	3.39	3.39	3.42	3.42	3.42	3.42	
122	TC	21826	22020	22214	22408	23281	23281	23475	23669	24057	24057	24057	24251	26094	26094	26094	26094	
	S/T	0.90	1.00	1.00	1.00	0.67	0.82	0.96	1.00	0.56	0.71	0.85	0.99	0.32	0.46	0.59	0.97	
	PI	3.64	3.64	3.64	3.64	3.66	3.66	3.66	3.66	3.67	3.67	3.67	3.67	3.70	3.70	3.70	3.70	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

COOLING PERFORMANCE - 30K (Sheet 4 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F)	60.8				64.4				66.2				71.6			
		ID (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
988	-22	TC	33880	34522	34836	35149	35413	35413	35413	36047	36336	36336	36336	36336	38378	38378	38378	38378
		S/T	0.80	0.94	1.00	1.00	0.61	0.73	0.86	1.00	0.52	0.64	0.76	0.87	0.31	0.42	0.52	0.65
		PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.93	1.93	1.93	1.93
	-10	TC	33630	34267	34578	34889	35212	35212	35212	35842	36155	36155	36155	36155	38262	38262	38262	38262
		S/T	0.81	0.95	1.00	1.00	0.61	0.73	0.87	1.00	0.53	0.64	0.76	0.88	0.31	0.42	0.53	0.66
		PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.93	1.93	1.93	1.93
	0	TC	33421	34055	34364	34673	35045	35045	35045	35672	36004	36004	36004	36004	38165	38165	38165	38165
		S/T	0.81	0.95	1.00	1.00	0.62	0.74	0.87	1.00	0.53	0.65	0.77	0.88	0.31	0.42	0.53	0.66
		PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94
	5	TC	33324	33955	34264	34572	34981	34981	34981	35607	35949	35949	35949	35949	38139	38139	38139	38139
		S/T	0.82	0.96	1.00	1.00	0.62	0.74	0.88	1.00	0.53	0.65	0.77	0.89	0.31	0.42	0.53	0.66
		PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94
	14	TC	33126	33754	34060	34367	34784	34784	34784	35407	35769	35769	35769	35769	38010	38010	38010	38010
		S/T	0.82	0.96	1.00	1.00	0.62	0.74	0.88	1.00	0.53	0.65	0.77	0.89	0.31	0.43	0.53	0.66
		PI	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94
	23	TC	32929	33553	33857	34162	34653	34653	34653	35273	35638	35638	35638	35638	37913	37913	37913	37913
		S/T	0.82	0.97	1.00	1.00	0.63	0.74	0.89	1.00	0.54	0.66	0.78	0.90	0.31	0.43	0.54	0.67
		PI	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94
	32	TC	32764	33385	33688	33991	34522	34522	34522	35140	35540	35540	35540	35540	37881	37881	37881	37881
		S/T	0.83	0.97	1.00	1.00	0.63	0.75	0.89	1.00	0.54	0.66	0.78	0.90	0.31	0.43	0.54	0.67
		PI	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.96	1.96	1.96	1.96	1.95	1.95	1.95	1.95
	41	TC	32599	33217	33519	33820	34391	34391	34391	35006	35425	35425	35425	35425	37849	37849	37849	37849
		S/T	0.83	0.98	0.99	0.99	0.63	0.75	0.90	1.00	0.54	0.66	0.78	0.90	0.32	0.43	0.54	0.67
		PI	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.97
	50	TC	32402	33016	33316	33615	34228	34228	34228	34840	35277	35277	35277	35277	37752	37752	37752	37752
		S/T	0.84	0.98	1.00	1.00	0.64	0.76	0.90	1.00	0.55	0.67	0.79	0.91	0.32	0.44	0.55	0.68
		PI	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99
	59	TC	32138	32747	33045	33342	33998	33998	33998	34606	35064	35064	35064	35064	37591	37591	37591	37591
		S/T	0.84	0.99	1.00	1.00	0.64	0.76	0.90	1.00	0.55	0.67	0.79	0.91	0.32	0.44	0.55	0.68
		PI	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.05	2.03	2.03	2.03	2.03
	68	TC	31776	32378	32672	32966	33638	33638	33638	34240	34720	34720	34720	34720	37268	37268	37268	37268
		S/T	0.85	0.99	1.00	1.00	0.64	0.76	0.91	1.00	0.55	0.67	0.80	0.92	0.32	0.44	0.55	0.68
		PI	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.12	2.12	2.12	2.12	2.10	2.10	2.10	2.10
	77	TC	30306	30909	31203	31497	32168	32168	32168	32770	33250	33250	33250	33250	35700	35700	35700	35700
		S/T	0.85	1.00	1.00	1.00	0.64	0.79	0.92	1.00	0.55	0.68	0.83	0.95	0.32	0.44	0.57	0.69
		PI	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34
	86	TC	28934	29538	29832	30126	30698	30698	30698	31301	31780	31780	31780	31780	34030	34030	34030	34030
		S/T	0.90	1.00	1.00	1.00	0.65	0.82	0.95	1.00	0.56	0.70	0.84	0.98	0.32	0.44	0.59	0.72
		PI	2.56	2.56	2.56	2.56	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.59	2.59	2.59	2.59
	95	TC	27562	28167	28461	28754	29126	29126	29126	29728	30110	30110	30600	31732	32462	32462	32462	32462
		S/T	0.90	1.00	1.00	1.00	0.67	0.83	0.98	1.00	0.56	0.71	0.86	0.98	0.33	0.44	0.58	0.73
		PI	2.80	2.80	2.80	2.80	2.81	2.81	2.81	2.81	2.82	2.82	2.82	2.82	2.84	2.84	2.84	2.84
104	TC	25592	26005	26252	26499	27232	27232	27502	27960	28115	28115	28380	29260	30400	30400	30400	30400	
	S/T	0.96	1.00	1.00	1.00	0.70	0.87	1.00	1.00	0.58	0.75	0.91	1.00	0.31	0.46	0.61	1.00	
	PI	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.11	3.11	3.11	3.11	3.14	3.14	3.14	3.14	
115	TC	23579	23772	23966	24160	25328	25328	25925	26215	26103	26103	26103	26700	28338	28338	28338	28338	
	S/T	0.97	1.00	1.00	1.00	0.71	0.88	1.00	1.00	0.59	0.76	0.94	1.00	0.31	0.46	0.63	1.00	
	PI	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.46	3.46	3.46	3.46	3.49	3.49	3.49	3.49	
122	TC	22322	22516	22710	22904	23776	23776	24174	24368	24552	24552	24552	24950	26588	26588	26588	26588	
	S/T	1.00	1.00	1.00	1.00	0.72	0.92	1.00	1.00	0.59	0.79	0.96	1.00	0.30	0.48	0.64	1.00	
	PI	3.72	3.72	3.72	3.72	3.74	3.74	3.74	3.74	3.75	3.75	3.75	3.75	3.78	3.78	3.78	3.78	

**LEGEND**  
 TC - Total Cooling Capacity (BTU/hr)  
 S/T - Sensible Cooling Capacity Ratio  
 PI - Power Input (kW)  
 Gray shaded area is Extrapolated Data

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 30K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
712	-22.0	13555	13368	13305	13243	1.70	1.75	1.76	1.78
	-10.0	15596	15381	15309	15237	1.99	2.05	2.07	2.09
	0.0	17298	17059	16979	16899	2.24	2.30	2.32	2.34
	5.0	18208	17956	17872	17788	2.37	2.44	2.46	2.48
	14.0	19442	19173	19084	18994	2.53	2.60	2.62	2.65
	17.0	20368	20086	19993	19899	2.69	2.76	2.78	2.81
	22.0	21472	21175	21076	20977	2.67	2.73	2.77	2.80
	27.0	22560	22263	22164	21966	2.66	2.72	2.76	2.79
	32.0	23352	23055	22956	22758	2.66	2.71	2.75	2.78
	37.0	25034	24737	24539	24440	2.67	2.73	2.77	2.80
	42.0	27705	27310	27112	26914	2.69	2.75	2.79	2.82
	44.6	30545	30109	29217	29019	2.70	2.79	2.80	2.84
	52.0	32288	31891	31693	31495	2.71	2.78	2.81	2.85
	57.0	34070	33575	33377	33080	2.71	2.78	2.82	2.85
	62.0	35754	35259	34962	34764	2.72	2.79	2.82	2.86
64.4	36546	36051	35754	35556	2.72	2.79	2.82	2.86	
806	-22.0	13742	13618	13494	13431	1.71	1.77	1.78	1.80
	-10.0	15812	15669	15526	15454	2.01	2.07	2.08	2.11
	0.0	17537	17378	17219	17140	2.25	2.32	2.33	2.37
	5.0	18459	18292	18125	18042	2.39	2.46	2.47	2.51
	14.0	19711	19532	19354	19265	2.55	2.62	2.64	2.68
	17.0	20649	20463	20276	20182	2.71	2.79	2.80	2.84
	22.0	21868	21670	21472	21373	2.70	2.76	2.79	2.83
	27.0	23055	22758	22560	22461	2.69	2.75	2.78	2.82
	32.0	23846	23550	23352	23154	2.68	2.74	2.77	2.81
	37.0	25529	25232	25034	24836	2.70	2.76	2.79	2.83
	42.0	28200	27804	27705	27508	2.71	2.78	2.82	2.85
	44.6	31140	30703	29812	29613	2.73	2.82	2.83	2.87
	52.0	32981	32486	32288	32089	2.74	2.81	2.84	2.88
	57.0	34665	34268	33971	33773	2.74	2.81	2.85	2.88
	62.0	36447	35952	35655	35457	2.75	2.82	2.85	2.89
64.4	37240	36744	36546	36249	2.75	2.82	2.86	2.89	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 30K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
895	-22.0	13949	13763	13638	13576	1.73	1.78	1.80	1.81
	-10.0	16050	15835	15692	15621	2.02	2.09	2.10	2.12
	0.0	17801	17563	17404	17324	2.27	2.34	2.36	2.38
	5.0	18738	18487	18319	18236	2.40	2.48	2.50	2.53
	14.0	20008	19740	19561	19472	2.56	2.65	2.67	2.70
	17.0	20961	20680	20493	20399	2.72	2.81	2.83	2.86
	22.0	22164	21868	21670	21571	2.71	2.78	2.82	2.85
	27.0	23253	22956	22758	22659	2.71	2.78	2.81	2.85
	32.0	24044	23748	23550	23451	2.71	2.77	2.80	2.84
	37.0	25825	25430	25331	25133	2.72	2.79	2.82	2.86
	42.0	28497	28101	27903	27705	2.74	2.81	2.84	2.88
	44.6	31437	31000	30109	29911	2.76	2.85	2.86	2.90
	52.0	33278	32882	32585	32387	2.77	2.84	2.87	2.91
	57.0	35061	34565	34367	34070	2.77	2.84	2.88	2.92
	62.0	36744	36249	36051	35754	2.78	2.85	2.89	2.92
64.4	37636	37141	36843	36645	2.78	2.85	2.89	2.93	
988	-22.0	14160	13909	13784	13722	1.74	1.80	1.81	1.83
	-10.0	16292	16004	15860	15789	2.04	2.11	2.13	2.14
	0.0	18070	17750	17590	17511	2.29	2.36	2.38	2.40
	5.0	19020	18683	18516	18432	2.42	2.51	2.53	2.54
	14.0	20310	19950	19771	19682	2.58	2.67	2.70	2.71
	17.0	21277	20900	20713	20619	2.74	2.84	2.86	2.88
	22.0	22465	22067	21869	21770	2.73	2.80	2.85	2.87
	27.0	23452	23156	22958	22859	2.74	2.81	2.84	2.88
	32.0	24244	23947	23749	23751	2.74	2.80	2.83	2.87
	37.0	26126	25629	25631	25433	2.75	2.82	2.85	2.89
	42.0	28797	28401	28103	27905	2.77	2.84	2.86	2.91
	44.6	31736	31300	30409	30211	2.79	2.88	2.89	2.93
	52.0	33578	33283	32885	32686	2.80	2.87	2.90	2.94
	57.0	35461	34865	34768	34370	2.80	2.87	2.91	2.96
	62.0	37044	36549	36452	36054	2.81	2.88	2.93	2.95
64.4	38036	37541	37143	37046	2.81	2.88	2.92	2.97	

Gray shaded area is Extrapolated Data





COOLING PERFORMANCE - 30K HH (Sheet 2 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F) ID (DB F)	60.8				64.4				66.2				71.6			
			73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
			806	-22	TC	32614	32614	32927	33241	34164	34164	34164	34473	34885	34885	34885	34885	36951
S/T	0.72	0.82			0.97	1.00	0.57	0.66	0.75	0.84	0.49	0.59	0.68	0.76	0.33	0.42	0.49	0.58
PI	2.29	2.29			2.29	2.29	2.30	2.30	2.30	2.30	2.31	2.31	2.31	2.31	2.32	2.32	2.32	2.32
-10	TC	32373		32373	32684	32995	33970	33970	33970	34278	34711	34711	34711	34711	36839	36839	36839	36839
	S/T	0.73		0.82	0.97	1.00	0.57	0.66	0.76	0.84	0.50	0.59	0.68	0.77	0.34	0.42	0.50	0.58
	PI	2.07		2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.09	2.09	2.09	2.09
0	TC	32172		32172	32481	32791	33808	33808	33808	34115	34566	34566	34566	34566	36746	36746	36746	36746
	S/T	0.73		0.83	0.98	1.00	0.58	0.66	0.76	0.85	0.50	0.60	0.68	0.77	0.34	0.42	0.50	0.59
	PI	1.97		1.97	1.97	1.97	1.98	1.98	1.98	1.98	1.97	1.97	1.97	1.97	1.98	1.98	1.98	1.98
5	TC	32078		32078	32386	32695	33746	33746	33746	34052	34514	34514	34514	34514	36721	36721	36721	36721
	S/T	0.73		0.83	0.98	1.00	0.58	0.67	0.76	0.85	0.50	0.60	0.69	0.77	0.34	0.42	0.50	0.59
	PI	1.86		1.86	1.86	1.86	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84	1.85	1.85	1.85	1.85
14	TC	31888		31888	32194	32501	33557	33557	33557	33861	34341	34341	34341	34341	36597	36597	36597	36597
	S/T	0.74		0.83	0.99	1.00	0.58	0.67	0.77	0.85	0.50	0.60	0.69	0.78	0.34	0.43	0.50	0.59
	PI	1.85		1.85	1.85	1.85	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.85	1.85	1.85
23	TC	31698		31698	32002	32307	33431	33431	33431	33734	34215	34215	34215	34215	36504	36504	36504	36504
	S/T	0.74		0.84	0.99	1.00	0.59	0.67	0.77	0.86	0.51	0.60	0.69	0.78	0.34	0.43	0.51	0.59
	PI	1.84		1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.85	1.85	1.85	1.85
32	TC	31539		31539	31842	32146	33304	33304	33304	33606	34120	34120	34120	34120	36473	36473	36473	36473
	S/T	0.74		0.84	1.00	1.00	0.59	0.68	0.77	0.86	0.51	0.61	0.70	0.78	0.34	0.43	0.51	0.60
	PI	1.85		1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84	1.86	1.86	1.86	1.86
41	TC	31381		31381	31682	31984	33178	33178	33178	33478	34010	34010	34010	34010	36442	36442	36442	36442
	S/T	0.75		0.85	1.00	1.00	0.59	0.68	0.78	0.87	0.51	0.61	0.70	0.79	0.34	0.43	0.51	0.60
	PI	1.87		1.87	1.87	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.87	1.87	1.87	1.87
50	TC	31190	31190	31490	31790	33020	33020	33020	33319	33868	33868	33868	33868	36348	36348	36348	36348	
	S/T	0.75	0.85	1.00	1.00	0.59	0.68	0.78	0.87	0.51	0.61	0.70	0.79	0.35	0.44	0.51	0.60	
	PI	1.90	1.90	1.90	1.90	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.90	1.90	1.90	1.90	
59	TC	30937	30937	31234	31532	32799	32799	32799	33096	33664	33664	33664	33664	36193	36193	36193	36193	
	S/T	0.76	0.86	0.96	1.00	0.60	0.69	0.79	0.88	0.52	0.62	0.71	0.80	0.35	0.44	0.52	0.61	
	PI	1.95	1.95	1.95	1.95	1.94	1.94	1.94	1.94	1.93	1.93	1.93	1.93	1.94	1.94	1.94	1.94	
68	TC	30588	30588	30882	31176	32451	32451	32451	32745	33333	33333	33333	33333	35882	35882	35882	35882	
	S/T	0.76	0.86	0.96	1.00	0.60	0.69	0.79	0.88	0.52	0.62	0.71	0.80	0.35	0.44	0.52	0.61	
	PI	2.01	2.01	2.01	2.01	2.00	2.00	2.00	2.00	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	
77	TC	29118	29118	29412	29706	30980	30980	30980	31275	31863	31863	31863	31863	34314	34314	34314	34314	
	S/T	0.77	0.88	0.98	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.82	0.35	0.44	0.53	0.62	
	PI	2.22	2.22	2.22	2.22	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.22	2.22	2.22	2.22	
86	TC	27745	28039	28333	28627	29510	29510	29510	29804	30392	30392	30392	30392	32843	32843	32843	32843	
	S/T	0.78	0.89	1.00	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.84	0.34	0.44	0.53	0.63	
	PI	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43	2.44	2.44	2.44	2.44	2.45	2.45	2.45	2.45	
95	TC	26373	26667	26961	27255	28137	28137	28137	28431	28922	28922	29412	28922	31275	31275	31275	31275	
	S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.95	0.53	0.64	0.74	0.86	0.34	0.44	0.54	0.64	
	PI	2.65	2.65	2.65	2.65	2.66	2.66	2.66	2.66	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	
104	TC	24880	25130	25379	25629	26557	26557	26691	26985	27342	27342	27609	27476	29563	29563	29563	29563	
	S/T	0.83	0.95	1.00	1.00	0.63	0.75	0.88	0.99	0.54	0.66	0.78	0.89	0.34	0.45	0.56	0.67	
	PI	2.92	2.92	2.92	2.92	2.94	2.94	2.94	2.94	2.95	2.95	2.95	2.95	2.96	2.96	2.96	2.96	
115	TC	23060	23256	23452	23649	24630	24630	24924	25219	25415	25415	25415	25709	27476	27476	27476	27476	
	S/T	0.84	0.97	1.00	1.00	0.64	0.77	0.89	1.00	0.55	0.67	0.79	0.91	0.33	0.45	0.56	0.68	
	PI	3.25	3.25	3.25	3.25	3.27	3.27	3.27	3.27	3.28	3.28	3.28	3.28	3.31	3.31	3.31	3.31	
122	TC	21588	21784	21981	22177	23060	23060	23256	23452	23845	23845	23845	24041	25906	25906	25906	25906	
	S/T	0.87	1.00	1.00	1.00	0.65	0.79	0.92	1.00	0.55	0.68	0.82	0.94	0.33	0.45	0.57	0.91	
	PI	3.53	3.53	3.53	3.53	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.58	3.58	3.58	3.58	





HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 30K HH (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
712	-22.0	19319	19121	18989	18923	2.31	2.39	2.34	2.35
	-10.0	22228	22001	21849	21773	2.71	2.80	2.74	2.76
	0.0	24653	24400	24232	24148	3.04	3.14	3.08	3.09
	5.0	25950	25684	25507	25418	3.22	3.33	3.26	3.28
	14.0	27709	27425	27236	27142	3.43	3.55	3.48	3.50
	17.0	29029	28731	28533	28434	3.65	3.77	3.70	3.72
	22.0	29029	28731	28533	28434	3.55	3.58	3.60	3.61
	27.0	28929	28632	28434	28335	3.37	3.39	3.40	3.42
	32.0	28533	28236	28038	27840	3.19	3.20	3.21	3.22
	37.0	29128	28731	28632	28434	3.04	3.04	3.05	3.05
	42.0	30713	30316	30118	29920	2.88	2.88	2.88	2.88
	44.6	32427	32009	31613	31414	2.81	2.72	2.80	2.80
	52.0	33099	32703	32405	32207	2.56	2.55	2.54	2.53
	57.0	33694	33198	33000	32703	2.40	2.37	2.36	2.35
	62.0	34288	33793	33495	33297	2.24	2.21	2.19	2.18
64.4	34586	34090	33793	33495	2.16	2.12	2.11	2.09	
806	-22.0	19729	19531	19465	19334	2.33	2.41	2.37	2.37
	-10.0	22701	22473	22397	22245	2.73	2.83	2.77	2.78
	0.0	25177	24925	24840	24672	3.06	3.17	3.11	3.12
	5.0	26502	26236	26147	25970	3.24	3.36	3.30	3.30
	14.0	28298	28015	27920	27731	3.46	3.58	3.52	3.52
	17.0	29646	29349	29249	29051	3.68	3.81	3.74	3.74
	22.0	29623	29326	29227	29029	3.58	3.61	3.63	3.65
	27.0	29524	29227	29128	28929	3.40	3.42	3.44	3.45
	32.0	29128	28830	28632	28533	3.22	3.24	3.24	3.25
	37.0	29722	29425	29227	29029	3.07	3.07	3.08	3.08
	42.0	31307	30911	30713	30515	2.91	2.91	2.91	2.91
	44.6	33122	32703	32306	32108	2.84	2.75	2.83	2.83
	52.0	33892	33396	33198	32901	2.59	2.58	2.57	2.56
	57.0	34486	33991	33694	33495	2.42	2.40	2.39	2.38
	62.0	35081	34486	34288	33991	2.27	2.24	2.22	2.21
64.4	35378	34784	34486	34288	2.19	2.15	2.14	2.12	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 30K HH (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
895	-22.0	19912	19714	19582	19516	2.35	2.44	2.38	2.40
	-10.0	22911	22683	22532	22456	2.76	2.85	2.79	2.81
	0.0	25410	25158	24989	24905	3.09	3.20	3.13	3.15
	5.0	26747	26481	26304	26215	3.28	3.39	3.32	3.34
	14.0	28560	28276	28087	27993	3.50	3.62	3.54	3.56
	17.0	29920	29623	29425	29326	3.72	3.84	3.76	3.78
	22.0	29920	29623	29425	29326	3.62	3.65	3.66	3.68
	27.0	29821	29524	29326	29227	3.43	3.46	3.47	3.48
	32.0	29425	29128	28929	28731	3.25	3.27	3.28	3.28
	37.0	30019	29623	29524	29326	3.10	3.11	3.11	3.11
	42.0	31604	31208	31010	30812	2.94	2.94	2.94	2.94
	44.6	33419	33000	32604	32405	2.87	2.78	2.86	2.86
	52.0	34189	33694	33495	33198	2.62	2.61	2.60	2.59
	57.0	34784	34288	33991	33793	2.45	2.43	2.42	2.41
	62.0	35378	34784	34586	34288	2.29	2.26	2.25	2.23
64.4	35676	35081	34883	34586	2.21	2.18	2.16	2.14	
988	-22.0	20096	19898	19700	19701	2.38	2.46	2.40	2.42
	-10.0	23123	22895	22667	22668	2.79	2.88	2.82	2.84
	0.0	25645	25393	25139	25141	3.13	3.23	3.16	3.18
	5.0	26994	26729	26462	26463	3.31	3.42	3.35	3.37
	14.0	28824	28541	28256	28257	3.53	3.65	3.57	3.60
	17.0	30197	29900	29601	29603	3.76	3.88	3.79	3.82
	22.0	30220	29923	29624	29626	3.66	3.69	3.69	3.71
	27.0	30121	29824	29525	29527	3.46	3.50	3.50	3.51
	32.0	29725	29428	29230	28931	3.28	3.30	3.32	3.31
	37.0	30319	29822	29824	29626	3.13	3.15	3.14	3.14
	42.0	31904	31508	31310	31112	2.97	2.97	2.97	2.97
	44.6	33719	33300	32904	32705	2.90	2.81	2.89	2.89
	52.0	34489	33994	33795	33498	2.65	2.64	2.63	2.62
	57.0	35084	34588	34291	34093	2.48	2.46	2.45	2.44
	62.0	35678	35084	34885	34588	2.31	2.28	2.28	2.25
64.4	35975	35381	35284	34885	2.23	2.21	2.18	2.16	

Gray shaded area is Extrapolated Data

COOLING PERFORMANCE - 36K (Sheet 1 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F)	60.8				64.4				66.2				71.6			
		ID (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
865	-22	TC	38348	38369	38369	38369	40157	40998	40998	40998	41048	41048	41048	41048	43420	43420	43420	43420
		S/T	0.65	0.70	0.77	0.83	0.54	0.60	0.66	0.71	0.49	0.54	0.60	0.66	0.37	0.43	0.48	0.52
		PI	3.16	3.16	3.16	3.16	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.20	3.20	3.20	3.20
	-10	TC	38065	38086	38086	38086	39929	40765	40765	40765	40843	40843	40843	40843	43288	43288	43288	43288
		S/T	0.65	0.71	0.78	0.83	0.55	0.60	0.66	0.72	0.50	0.55	0.60	0.66	0.37	0.43	0.48	0.53
		PI	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.88	2.88	2.88	2.88
	0	TC	37829	37850	37850	37850	39739	40572	40572	40572	40672	40672	40672	40672	43179	43179	43179	43179
		S/T	0.65	0.71	0.78	0.84	0.55	0.60	0.66	0.72	0.50	0.55	0.61	0.66	0.38	0.43	0.48	0.53
		PI	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.68	2.68	2.68	2.68
	5	TC	37719	37739	37739	37739	39666	40497	40497	40497	40611	40611	40611	40611	43150	43150	43150	43150
		S/T	0.66	0.71	0.78	0.84	0.55	0.61	0.67	0.72	0.50	0.55	0.61	0.67	0.38	0.43	0.48	0.53
		PI	2.51	2.51	2.51	2.51	2.50	2.50	2.50	2.50	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49
	14	TC	37495	37515	37515	37515	39444	40270	40270	40270	40407	40407	40407	40407	43004	43004	43004	43004
		S/T	0.66	0.72	0.79	0.84	0.55	0.61	0.67	0.73	0.50	0.55	0.61	0.67	0.38	0.44	0.49	0.53
		PI	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49
	23	TC	37271	37292	37292	37292	39295	40118	40118	40118	40259	40259	40259	40259	42894	42894	42894	42894
		S/T	0.66	0.72	0.79	0.85	0.56	0.61	0.67	0.73	0.51	0.56	0.61	0.67	0.38	0.44	0.49	0.54
		PI	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.50	2.50	2.50	2.50
	32	TC	37085	37105	37105	37105	39146	39967	39967	39967	40148	40148	40148	40148	42857	42857	42857	42857
		S/T	0.67	0.73	0.79	0.85	0.56	0.61	0.68	0.74	0.51	0.56	0.62	0.68	0.38	0.44	0.49	0.54
		PI	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
	41	TC	36899	36919	36919	36919	38998	39815	39815	39815	40019	40019	40019	40019	42821	42821	42821	42821
		S/T	0.67	0.73	0.80	0.86	0.56	0.62	0.68	0.74	0.51	0.56	0.62	0.68	0.38	0.44	0.49	0.54
		PI	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52
	50	TC	36675	36695	36695	36695	38812	39625	39625	39625	39852	39852	39852	39852	42711	42711	42711	42711
		S/T	0.67	0.73	0.80	0.86	0.56	0.62	0.68	0.74	0.51	0.56	0.62	0.68	0.39	0.45	0.50	0.54
		PI	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.55	2.55	2.55	2.55	2.56	2.56	2.56	2.56
	59	TC	36377	36397	36397	36397	38552	39360	39360	39360	39611	39611	39611	39611	42529	42529	42529	42529
		S/T	0.68	0.74	0.81	0.87	0.57	0.62	0.69	0.75	0.52	0.57	0.63	0.69	0.39	0.45	0.50	0.55
		PI	2.63	2.63	2.63	2.63	2.62	2.62	2.62	2.62	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
	68	TC	35967	35986	35986	35986	38144	38144	38144	38144	39222	39222	39222	39222	42164	42164	42164	42164
		S/T	0.68	0.74	0.81	0.87	0.57	0.63	0.69	0.75	0.52	0.57	0.63	0.69	0.39	0.45	0.50	0.55
		PI	2.72	2.72	2.72	2.72	2.71	2.71	2.71	2.71	2.70	2.70	2.70	2.70	2.69	2.69	2.69	2.69
	77	TC	34319	34319	34319	34319	36477	36477	36477	36477	37555	37555	37555	37555	40399	40399	40399	40399
		S/T	0.68	0.75	0.82	0.88	0.57	0.63	0.69	0.75	0.51	0.57	0.63	0.69	0.39	0.44	0.50	0.56
		PI	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
	86	TC	32653	32653	32653	32947	34810	34810	34810	34810	35790	35790	35790	35790	38634	38634	38634	38634
		S/T	0.69	0.76	0.83	0.89	0.57	0.63	0.70	0.76	0.51	0.58	0.64	0.70	0.38	0.44	0.50	0.56
		PI	3.28	3.28	3.28	3.28	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.31	3.31	3.31	3.31
	95	TC	31084	31084	31084	31378	33045	33045	33045	33045	34123	34123	34614	34123	36771	36771	36771	36771
		S/T	0.69	0.77	0.84	0.91	0.57	0.64	0.71	0.78	0.51	0.58	0.64	0.71	0.38	0.44	0.50	0.56
		PI	3.58	3.58	3.58	3.58	3.60	3.60	3.60	3.60	3.60	3.60	3.61	3.60	3.63	3.63	3.63	3.63
	104	TC	29259	29259	29259	29553	31176	31176	31176	31176	32165	32165	32433	32165	34724	34724	34724	34724
		S/T	0.71	0.79	0.87	0.94	0.57	0.65	0.72	0.80	0.51	0.59	0.66	0.73	0.37	0.44	0.50	0.57
		PI	3.96	3.96	3.96	3.96	3.98	3.98	3.98	3.98	3.99	3.99	3.99	3.99	4.02	4.02	4.02	4.02
	115	TC	27066	27066	27066	27360	28929	28929	28929	28929	29812	29812	29812	29812	32263	32263	32263	32263
		S/T	0.71	0.80	0.88	0.96	0.58	0.66	0.73	0.81	0.51	0.59	0.66	0.74	0.37	0.44	0.51	0.58
		PI	4.40	4.40	4.40	4.40	4.43	4.43	4.43	4.43	4.44	4.44	4.44	4.44	4.47	4.47	4.47	4.47
122	TC	25399	25399	25693	25987	27164	27164	27164	27164	28046	28046	28046	28046	30400	30400	30400	30400	
	S/T	0.73	0.82	0.90	0.98	0.58	0.66	0.75	0.83	0.51	0.60	0.68	0.76	0.36	0.44	0.51	0.58	
	PI	4.78	4.78	4.78	4.78	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.80	4.84	4.84	4.84	4.84	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

COOLING PERFORMANCE - 36K (Sheet 2 of 4)

AIRFLOW (CFM)	OUTDOOR (DB F)	ID (WB F)	60.8				64.4				66.2				71.6			
		ID (DB F)	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2	73.4	77.0	80.6	84.2
971	-22	TC	39116	39116	39116	39534	40998	40998	40998	40998	41885	41885	41885	41885	44345	44345	44345	44345
		S/T	0.68	0.76	0.97	1.00	0.55	0.63	0.70	0.78	0.48	0.56	0.64	0.70	0.34	0.42	0.48	0.55
		PI	3.16	3.16	3.16	3.16	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.20	3.20	3.20	3.20
	-10	TC	38827	38827	38827	39242	40765	40765	40765	40765	41676	41676	41676	41676	44211	44211	44211	44211
		S/T	0.69	0.77	0.97	1.00	0.56	0.63	0.71	0.79	0.49	0.56	0.64	0.71	0.34	0.42	0.49	0.56
		PI	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.88	2.88	2.88	2.88
	0	TC	38586	38586	38586	38999	40572	40572	40572	40572	41502	41502	41502	41502	44099	44099	44099	44099
		S/T	0.69	0.77	0.98	1.00	0.56	0.64	0.71	0.79	0.49	0.57	0.65	0.71	0.35	0.42	0.49	0.56
		PI	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.70	2.71	2.72	2.72	2.72	2.72
	5	TC	38473	38473	38473	38885	40497	40497	40497	40497	41439	41439	41439	41439	44069	44069	44069	44069
		S/T	0.70	0.77	0.98	1.00	0.56	0.64	0.71	0.79	0.49	0.57	0.65	0.71	0.35	0.42	0.49	0.56
		PI	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53
	14	TC	38245	38245	38245	38654	40270	40270	40270	40270	41231	41231	41231	41231	43920	43920	43920	43920
		S/T	0.70	0.78	0.99	1.00	0.56	0.64	0.72	0.80	0.49	0.57	0.65	0.72	0.35	0.43	0.49	0.56
		PI	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53
	23	TC	38017	38017	38017	38424	40118	40118	40118	40118	41080	41080	41080	41080	43808	43808	43808	43808
		S/T	0.70	0.78	0.99	1.00	0.57	0.64	0.72	0.80	0.50	0.58	0.65	0.72	0.35	0.43	0.50	0.57
		PI	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.54	2.54	2.54	2.54
	32	TC	37827	37827	37827	38232	39967	39967	39967	39967	40967	40967	40967	40967	43771	43771	43771	43771
		S/T	0.71	0.78	1.00	1.00	0.57	0.65	0.73	0.80	0.50	0.58	0.66	0.73	0.35	0.43	0.50	0.57
		PI	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54
	41	TC	37637	37637	37637	38040	39815	39815	39815	39815	40834	40834	40834	40834	43734	43734	43734	43734
		S/T	0.71	0.79	1.00	1.00	0.57	0.65	0.73	0.81	0.50	0.58	0.66	0.73	0.35	0.43	0.50	0.57
		PI	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
	50	TC	37409	37409	37409	37809	39625	39625	39625	39625	40664	40664	40664	40664	43622	43622	43622	43622
		S/T	0.71	0.79	1.00	1.00	0.57	0.65	0.73	0.81	0.50	0.58	0.66	0.73	0.36	0.44	0.50	0.57
		PI	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
	59	TC	37105	37105	37105	37502	39360	39360	39360	39360	40419	40419	40419	40419	43436	43436	43436	43436
		S/T	0.72	0.80	0.88	0.96	0.58	0.66	0.74	0.82	0.51	0.59	0.67	0.74	0.36	0.44	0.51	0.58
		PI	2.67	2.67	2.67	2.67	2.66	2.66	2.66	2.66	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
68	TC	36687	36687	36687	37079	38943	38943	38943	38943	40022	40022	40022	40022	43063	43063	43063	43063	
	S/T	0.72	0.80	0.88	0.96	0.58	0.66	0.74	0.82	0.51	0.59	0.67	0.74	0.36	0.44	0.51	0.58	
	PI	2.76	2.76	2.76	2.76	2.75	2.75	2.75	2.75	2.74	2.74	2.74	2.74	2.73	2.73	2.73	2.73	
77	TC	35019	35019	35411	35804	37177	37177	37177	37177	38256	38256	38256	38256	41199	41199	41199	41199	
	S/T	0.72	0.81	0.90	0.98	0.58	0.66	0.75	0.83	0.51	0.60	0.68	0.76	0.36	0.44	0.51	0.59	
	PI	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	
86	TC	33351	33351	33646	33940	35510	35510	35510	35510	36589	36589	36589	36589	39335	39335	39335	39335	
	S/T	0.73	0.83	0.92	1.00	0.59	0.67	0.76	0.85	0.52	0.60	0.69	0.77	0.36	0.44	0.51	0.59	
	PI	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.35	3.35	3.35	3.35	3.36	3.36	3.36	3.36	
95	TC	31684	31684	31978	32272	33744	33744	33744	33744	34725	34725	35313	34725	37471	37471	37471	37471	
	S/T	0.74	0.84	0.94	1.00	0.59	0.68	0.77	0.87	0.52	0.61	0.69	0.79	0.35	0.44	0.52	0.60	
	PI	3.64	3.64	3.64	3.64	3.66	3.66	3.66	3.66	3.66	3.66	3.67	3.66	3.66	3.66	3.66	3.66	
104	TC	29578	29710	30002	30293	31530	31530	31530	31663	32458	32458	32776	32458	35090	35090	35090	35090	
	S/T	0.77	0.87	0.98	1.00	0.60	0.70	0.80	0.90	0.52	0.62	0.72	0.82	0.35	0.44	0.53	0.62	
	PI	4.02	4.02	4.02	4.02	4.04	4.04	4.04	4.04	4.04	4.04	4.05	4.04	4.06	4.06	4.06	4.06	
115	TC	27404	27696	27987	28279	29251	29251	29251	29542	30125	30125	30125	30125	32652	32652	32652	32652	
	S/T	0.78	0.89	0.99	1.00	0.61	0.71	0.82	0.92	0.53	0.63	0.73	0.83	0.35	0.44	0.53	0.63	
	PI	4.47	4.47	4.47	4.47	4.49	4.49	4.49	4.49	4.50	4.50	4.50	4.50	4.54	4.54	4.54	4.54	
122	TC	25655	25947	26238	26530	27502	27502	27502	27793	28376	28376	28376	28376	30806	30806	30806	30806	
	S/T	0.80	0.91	1.00	1.00	0.62	0.73	0.84	0.94	0.53	0.64	0.75	0.86	0.34	0.44	0.54	0.91	
	PI	4.84	4.84	4.84	4.84	4.86	4.86	4.86	4.86	4.87	4.87	4.87	4.87	4.91	4.91	4.91	4.91	

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.







HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 36K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
865	-22.0	14970	14722	14660	14537	1.89	1.95	1.98	2.01
	-10.0	17224	16939	16868	16726	2.21	2.28	2.32	2.35
	0.0	19103	18787	18708	18550	2.48	2.56	2.60	2.64
	5.0	20108	19776	19693	19526	2.63	2.71	2.75	2.80
	14.0	21471	21116	21028	20850	2.81	2.89	2.94	2.98
	17.0	22494	22122	22029	21843	2.98	3.07	3.12	3.17
	22.0	24007	23610	23511	23312	2.99	3.09	3.13	3.18
	27.0	25495	25098	24900	24800	3.03	3.13	3.18	3.23
	32.0	26586	26189	25991	25892	3.07	3.17	3.22	3.27
	37.0	28768	28372	28173	27975	3.15	3.25	3.30	3.35
	42.0	32042	31546	31348	31149	3.22	3.32	3.38	3.43
	44.6	35461	34912	33824	33527	3.27	3.43	3.42	3.48
	52.0	37681	37187	36989	36692	3.35	3.46	3.51	3.57
	57.0	39857	39363	39066	38769	3.41	3.52	3.57	3.62
	62.0	42033	41538	41242	40945	3.46	3.58	3.63	3.68
64.4	43121	42527	42231	41934	3.49	3.60	3.65	3.71	
971	-22.0	15183	14998	14874	14812	1.91	1.97	2.00	2.03
	-10.0	17469	17256	17114	17043	2.24	2.30	2.34	2.37
	0.0	19375	19139	18981	18902	2.51	2.58	2.62	2.66
	5.0	20394	20146	19980	19897	2.66	2.74	2.78	2.82
	14.0	21777	21511	21334	21246	2.83	2.92	2.97	3.01
	17.0	22814	22536	22350	22257	3.01	3.10	3.15	3.20
	22.0	24404	24106	23908	23808	3.02	3.12	3.17	3.21
	27.0	25892	25594	25396	25296	3.06	3.16	3.21	3.26
	32.0	27082	26685	26586	26388	3.10	3.20	3.25	3.30
	37.0	29364	28967	28768	28570	3.18	3.28	3.33	3.38
	42.0	32637	32240	31943	31744	3.25	3.36	3.41	3.46
	44.6	36043	35604	34418	34220	3.30	3.46	3.46	3.51
	52.0	38473	37978	37681	37385	3.39	3.50	3.55	3.60
	57.0	40648	40154	39857	39560	3.44	3.56	3.60	3.66
	62.0	42923	42330	42033	41736	3.50	3.61	3.66	3.72
64.4	44011	43418	43121	42824	3.53	3.64	3.69	3.75	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 36K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1083	-22.0	15303	15118	15057	14933	1.93	1.98	2.01	2.05
	-10.0	17608	17395	17324	17182	2.26	2.32	2.36	2.40
	0.0	19529	19293	19214	19057	2.53	2.61	2.65	2.69
	5.0	20556	20308	20225	20059	2.68	2.76	2.81	2.85
	14.0	21950	21685	21596	21419	2.86	2.95	2.99	3.04
	17.0	22995	22717	22624	22439	3.04	3.13	3.18	3.23
	22.0	24602	24304	24205	24007	3.05	3.15	3.20	3.24
	27.0	26189	25792	25693	25495	3.09	3.19	3.24	3.29
	32.0	27380	26983	26784	26586	3.13	3.23	3.28	3.34
	37.0	29661	29264	29066	28868	3.21	3.31	3.36	3.42
	42.0	33034	32538	32340	32141	3.28	3.39	3.44	3.50
	44.6	36549	36000	34813	34615	3.33	3.50	3.49	3.55
	52.0	38868	38374	38077	37879	3.42	3.53	3.59	3.63
	57.0	41143	40648	40352	40055	3.48	3.59	3.64	3.70
	62.0	43418	42824	42527	42231	3.53	3.64	3.70	3.76
64.4	44505	43912	43615	43319	3.56	3.67	3.73	3.79	
1188	-22.0	15425	15240	15241	15055	1.95	2.00	2.03	2.07
	-10.0	17748	17535	17537	17322	2.28	2.34	2.38	2.42
	0.0	19684	19448	19450	19212	2.56	2.63	2.67	2.71
	5.0	20720	20471	20473	20223	2.71	2.79	2.83	2.88
	14.0	22125	21859	21861	21594	2.89	2.97	3.02	3.07
	17.0	23178	22900	22902	22622	3.07	3.16	3.21	3.26
	22.0	24802	24504	24506	24207	3.08	3.18	3.23	3.27
	27.0	26490	25992	25994	25695	3.12	3.22	3.27	3.32
	32.0	27680	27284	26984	26786	3.16	3.26	3.31	3.38
	37.0	29962	29565	29367	29168	3.24	3.34	3.39	3.46
	42.0	33436	32838	32741	32543	3.31	3.42	3.47	3.54
	44.6	37062	36400	35213	35016	3.36	3.53	3.52	3.59
	52.0	39268	38773	38477	38380	3.45	3.56	3.63	3.66
	57.0	41643	41149	40852	40556	3.52	3.62	3.68	3.74
	62.0	43918	43324	43028	42731	3.56	3.67	3.74	3.80
64.4	45006	44412	44116	43819	3.59	3.70	3.77	3.83	

Gray shaded area is Extrapolated Data









HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 36K HH (Sheet 1 of 2)

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE								
	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
865	-22.0	30766	30560	30422	30354	4.12	4.28	4.11	4.10
	-10.0	35399	35162	35004	34925	4.83	5.02	4.81	4.80
	0.0	39261	38998	38823	38735	5.42	5.63	5.40	5.39
	5.0	41326	41050	40865	40773	5.75	5.96	5.72	5.71
	14.0	44128	43833	43636	43537	6.13	6.36	6.10	6.09
	17.0	46229	45920	45713	45610	6.51	6.76	6.48	6.47
	22.0	44336	44039	43842	43743	6.21	6.18	6.16	6.14
	27.0	42456	42060	41862	41763	5.66	5.60	5.57	5.54
	32.0	40180	39784	39586	39388	5.10	5.02	4.98	4.94
	37.0	38992	38596	38398	38102	4.58	4.47	4.42	4.36
	42.0	38992	38596	38300	38102	4.06	3.93	3.86	3.79
	44.6	39210	38812	39307	39010	3.80	3.34	3.58	3.51
	52.0	38317	37822	37525	37228	3.00	2.82	2.73	2.64
	57.0	37228	36634	36337	36040	2.46	2.25	2.15	2.05
	62.0	36040	35446	35149	34752	1.92	1.69	1.58	1.46
64.4	35446	34851	34554	34257	1.67	1.42	1.30	1.18	
971	-22.0	31362	31156	31019	30881	4.16	4.32	4.14	4.14
	-10.0	36085	35848	35691	35533	4.88	5.06	4.85	4.85
	0.0	40022	39759	39584	39409	5.47	5.68	5.45	5.44
	5.0	42127	41850	41666	41482	5.80	6.02	5.77	5.76
	14.0	44983	44688	44491	44294	6.18	6.42	6.16	6.15
	17.0	47125	46816	46610	46403	6.57	6.82	6.54	6.53
	22.0	45227	44930	44732	44534	6.27	6.24	6.22	6.20
	27.0	43347	42951	42753	42555	5.71	5.65	5.62	5.60
	32.0	40972	40576	40378	40081	5.15	5.07	5.03	4.99
	37.0	39784	39388	39091	38893	4.62	4.51	4.46	4.40
	42.0	39784	39388	39091	38893	4.10	3.96	3.90	3.83
	44.6	40002	39604	40099	39802	3.84	3.37	3.62	3.54
	52.0	39109	38515	38317	38020	3.02	2.84	2.76	2.66
	57.0	37921	37327	37030	36733	2.48	2.27	2.17	2.06
	62.0	36832	36139	35842	35545	1.93	1.70	1.59	1.47
64.4	36238	35545	35248	34950	1.68	1.43	1.31	1.18	



HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 36K HH (Sheet 2 of 2)

AIRFLOW (CFM)	HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE								
	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1083	-22.0	31688	31482	31345	31207	4.21	4.37	4.19	4.18
	-10.0	36460	36223	36065	35908	4.93	5.12	4.91	4.90
	0.0	40437	40175	40000	39825	5.53	5.74	5.50	5.50
	5.0	42564	42288	42104	41920	5.86	6.09	5.83	5.82
	14.0	45450	45155	44958	44762	6.25	6.49	6.22	6.21
	17.0	47615	47305	47099	46893	6.64	6.90	6.61	6.60
	22.0	45722	45425	45227	45029	6.33	6.30	6.29	6.27
	27.0	43743	43347	43149	42951	5.77	5.71	5.68	5.65
	32.0	41367	40972	40774	40576	5.20	5.12	5.08	5.04
	37.0	40180	39784	39487	39289	4.67	4.56	4.50	4.45
	42.0	40279	39784	39487	39289	4.14	4.00	3.93	3.86
	44.6	40498	40000	40495	40198	3.87	3.40	3.65	3.58
	52.0	39505	38911	38614	38416	3.05	2.86	2.78	2.68
	57.0	38317	37723	37426	37129	2.50	2.29	2.18	2.08
	62.0	37129	36535	36238	35842	1.95	1.71	1.60	1.48
64.4	36634	35941	35644	35248	1.69	1.44	1.31	1.18	
1188	-22.0	32017	31811	31674	31537	4.25	4.42	4.23	4.23
	-10.0	36839	36602	36444	36287	4.98	5.17	4.96	4.95
	0.0	40857	40595	40420	40245	5.59	5.80	5.56	5.55
	5.0	43007	42730	42546	42362	5.92	6.15	5.89	5.89
	14.0	45922	45627	45431	45234	6.32	6.56	6.29	6.28
	17.0	48109	47800	47594	47388	6.71	6.97	6.68	6.67
	22.0	46222	45925	45727	45529	6.39	6.36	6.36	6.34
	27.0	44142	43746	43548	43350	5.83	5.77	5.74	5.70
	32.0	41767	41371	41173	41077	5.26	5.17	5.13	5.09
	37.0	40580	40184	39887	39689	4.72	4.61	4.54	4.50
	42.0	40780	40184	39887	39689	4.18	4.04	3.96	3.89
	44.6	40999	40400	40895	40598	3.90	3.43	3.68	3.62
	52.0	39905	39311	38913	38816	3.08	2.88	2.80	2.70
	57.0	38717	38123	37826	37529	2.52	2.31	2.19	2.10
	62.0	37428	36935	36638	36141	1.97	1.72	1.61	1.49
64.4	37034	36341	36044	35547	1.70	1.45	1.31	1.18	

Gray shaded area is Extrapolated Data









HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 48K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
906	-22.0	25743	25427	25300	25111	3.24	3.34	3.36	3.40
	-10.0	29620	29257	29111	28893	3.80	3.92	3.94	3.98
	0.0	32851	32448	32286	32044	4.26	4.39	4.42	4.47
	5.0	34580	34155	33985	33730	4.52	4.66	4.68	4.73
	14.0	36924	36470	36289	36017	4.82	4.97	4.99	5.05
	17.0	38682	38207	38017	37732	5.12	5.28	5.31	5.37
	22.0	40286	39791	39593	39296	5.09	5.22	5.28	5.34
	27.0	41771	41276	40979	40781	5.06	5.19	5.25	5.31
	32.0	42760	42166	41968	41672	5.03	5.16	5.22	5.29
	37.0	45334	44740	44443	44146	5.06	5.19	5.25	5.31
	42.0	49491	48897	48501	48204	5.08	5.21	5.27	5.34
	44.6	53966	53318	51933	51637	5.11	5.26	5.29	5.35
	52.0	56781	56088	55692	55297	5.11	5.22	5.29	5.35
	57.0	59353	58561	58165	57770	5.11	5.22	5.28	5.35
	62.0	62023	61133	60737	60243	5.10	5.22	5.28	5.35
64.4	63210	62320	61924	61430	5.10	5.22	5.28	5.34	
1095	-22.0	26267	25951	25824	25697	3.27	3.38	3.39	3.44
	-10.0	30223	29859	29713	29568	3.83	3.96	3.97	4.03
	0.0	33520	33116	32955	32793	4.30	4.44	4.46	4.52
	5.0	35283	34858	34688	34518	4.56	4.70	4.73	4.79
	14.0	37675	37222	37040	36858	4.86	5.02	5.04	5.11
	17.0	39470	38994	38804	38614	5.17	5.33	5.36	5.42
	22.0	41078	40583	40385	40187	5.14	5.27	5.33	5.39
	27.0	42661	42067	41870	41573	5.11	5.24	5.31	5.37
	32.0	43651	43057	42760	42463	5.09	5.21	5.28	5.34
	37.0	46225	45631	45334	45037	5.11	5.24	5.30	5.37
	42.0	50580	49887	49491	49194	5.14	5.26	5.33	5.39
	44.6	55162	54406	53022	52626	5.16	5.32	5.34	5.41
	52.0	57968	57176	56781	56385	5.16	5.28	5.34	5.40
	57.0	60638	59748	59353	58957	5.16	5.27	5.34	5.40
	62.0	63210	62320	61924	61529	5.16	5.27	5.34	5.40
64.4	64496	63606	63210	62716	5.15	5.27	5.33	5.40	
1283	-22.0	26470	26217	26028	25902	3.30	3.41	3.43	3.47
	-10.0	30457	30166	29948	29803	3.87	4.00	4.02	4.06
	0.0	33779	33457	33215	33054	4.34	4.48	4.51	4.56
	5.0	35556	35217	34962	34792	4.60	4.75	4.78	4.83
	14.0	37967	37604	37332	37151	4.91	5.07	5.10	5.15
	17.0	39775	39395	39110	38920	5.22	5.39	5.41	5.47
	22.0	41474	41078	40781	40583	5.20	5.33	5.39	5.44
	27.0	43057	42562	42265	42067	5.17	5.30	5.36	5.42
	32.0	44146	43552	43255	42958	5.14	5.27	5.33	5.39
	37.0	46819	46126	45829	45532	5.16	5.29	5.36	5.41
	42.0	51075	50382	50085	49689	5.19	5.32	5.38	5.44
	44.6	55756	55000	53615	53219	5.21	5.37	5.40	5.46
	52.0	58561	57869	57473	57077	5.20	5.33	5.40	5.46
	57.0	61232	60441	60045	59649	5.20	5.33	5.40	5.46
	62.0	63903	63013	62617	62221	5.20	5.33	5.39	5.46
64.4	65189	64299	63903	63408	5.20	5.33	5.39	5.46	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 48K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1470	-22.0	26470	26217	26028	25902	3.30	3.41	3.43	3.47
	-10.0	30457	30166	29948	29803	3.87	4.00	4.02	4.06
	0.0	33779	33457	33215	33054	4.34	4.48	4.51	4.56
	5.0	35831	35579	35238	35069	4.65	4.80	4.83	4.87
	14.0	38260	37991	37627	37446	4.96	5.12	5.15	5.20
	17.0	40082	39800	39419	39229	5.27	5.44	5.47	5.52
	22.0	41873	41579	41181	40983	5.26	5.39	5.45	5.49
	27.0	43457	43063	42665	42568	5.23	5.36	5.41	5.48
	32.0	44647	44053	43756	43459	5.19	5.33	5.38	5.45
	37.0	47420	46626	46329	46032	5.21	5.34	5.42	5.46
	42.0	51575	50882	50686	50189	5.24	5.38	5.43	5.50
	44.6	56357	55600	54215	53820	5.27	5.43	5.46	5.51
	52.0	59161	58570	58174	57778	5.25	5.38	5.46	5.52
	57.0	61831	61141	60745	60350	5.25	5.39	5.46	5.52
	62.0	64603	63713	63317	62921	5.25	5.39	5.44	5.52
64.4	65889	64999	64603	64108	5.26	5.39	5.45	5.52	

Gray shaded area is Extrapolated Data











HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 48K HH (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC?TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
906	-22.0	32845	32576	32442	32240	4.05	4.20	4.11	4.13
	-10.0	37792	37483	37328	37096	4.75	4.91	4.81	4.84
	0.0	41914	41571	41400	41143	5.32	5.51	5.40	5.43
	5.0	44119	43758	43578	43307	5.64	5.84	5.72	5.76
	14.0	47110	46725	46532	46243	6.02	6.23	6.10	6.14
	17.0	49354	48950	48748	48445	6.39	6.62	6.48	6.52
	22.0	48454	48058	47860	47563	6.23	6.28	6.31	6.34
	27.0	47464	46968	46770	46572	5.91	5.95	5.97	5.99
	32.0	45977	45482	45284	44986	5.59	5.62	5.63	5.65
	37.0	45977	45482	45184	44887	5.33	5.35	5.35	5.36
	42.0	47464	46869	46572	46274	5.07	5.07	5.07	5.07
	44.6	49130	48515	48416	48119	4.94	4.78	4.93	4.92
	52.0	49307	48614	48317	47921	4.50	4.48	4.46	4.45
	57.0	49307	48614	48218	47822	4.22	4.18	4.16	4.14
62.0	49307	48515	48119	47723	3.93	3.88	3.85	3.82	
64.4	49307	48515	48119	47723	3.79	3.73	3.70	3.67	
1095	-22.0	33528	33259	33125	32991	4.09	4.24	4.15	4.18
	-10.0	38578	38269	38114	37960	4.80	4.97	4.86	4.89
	0.0	42786	42443	42272	42100	5.38	5.57	5.46	5.49
	5.0	45037	44676	44496	44315	5.70	5.91	5.78	5.82
	14.0	48090	47705	47512	47319	6.08	6.30	6.17	6.20
	17.0	50380	49977	49775	49573	6.46	6.69	6.55	6.59
	22.0	49445	49049	48851	48653	6.29	6.35	6.37	6.39
	27.0	48454	47959	47761	47464	5.97	6.01	6.03	6.06
	32.0	46968	46473	46175	45878	5.65	5.68	5.69	5.71
	37.0	46968	46374	46076	45779	5.39	5.39	5.40	5.41
	42.0	48454	47761	47464	47166	5.12	5.12	5.12	5.12
	44.6	50224	49505	49406	49109	4.99	4.83	4.98	4.98
	52.0	50297	49604	49307	48911	4.55	4.52	4.51	4.50
	57.0	50297	49604	49208	48812	4.27	4.22	4.20	4.18
62.0	50297	49505	49109	48713	3.97	3.91	3.89	3.86	
64.4	50297	49505	49109	48713	3.83	3.77	3.74	3.70	
1283	-22.0	33902	33565	33431	33296	4.14	4.28	4.20	4.21
	-10.0	39008	38621	38466	38311	4.85	5.02	4.91	4.94
	0.0	43263	42834	42662	42490	5.44	5.63	5.51	5.54
	5.0	45539	45087	44906	44725	5.76	5.97	5.84	5.87
	14.0	48626	48144	47951	47758	6.15	6.36	6.23	6.26
	17.0	50942	50436	50234	50032	6.53	6.76	6.62	6.65
	22.0	49941	49445	49247	49049	6.36	6.40	6.43	6.46
	27.0	48950	48454	48157	47959	6.03	6.08	6.10	6.12
	32.0	47364	46869	46572	46374	5.71	5.74	5.75	5.77
	37.0	47364	46869	46572	46274	5.44	5.45	5.46	5.46
	42.0	48851	48256	47959	47662	5.17	5.17	5.17	5.17
	44.6	50616	50000	49901	49604	5.04	4.88	5.03	5.03
	52.0	50792	50099	49802	49406	4.60	4.57	4.56	4.54
	57.0	50792	50099	49703	49307	4.31	4.27	4.25	4.23
62.0	50792	50000	49604	49208	4.01	3.96	3.93	3.90	
64.4	50792	50000	49604	49208	3.87	3.81	3.77	3.74	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 48K HH (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC?TOTAL CAPACITY IN BTU/HR				PI?TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1470	-22.0	33902	33565	33431	33296	4.14	4.28	4.20	4.21
	-10.0	39008	38621	38466	38311	4.85	5.02	4.91	4.94
	0.0	43263	42834	42662	42490	5.44	5.63	5.51	5.54
	5.0	46046	45502	45321	45140	5.83	6.03	5.91	5.92
	14.0	49168	48586	48393	48200	6.21	6.43	6.30	6.32
	17.0	51509	50900	50698	50495	6.60	6.83	6.69	6.71
	22.0	50441	49845	49647	49449	6.43	6.46	6.49	6.53
	27.0	49450	48955	48557	48460	6.09	6.15	6.17	6.18
	32.0	47764	47269	46971	46874	5.77	5.80	5.81	5.83
	37.0	47764	47370	47072	46775	5.50	5.51	5.52	5.51
	42.0	49250	48757	48460	48162	5.22	5.22	5.22	5.22
	44.6	51011	50500	50401	50104	5.09	4.93	5.08	5.08
	52.0	51292	50599	50302	49906	4.65	4.62	4.61	4.58
	57.0	51292	50599	50203	49807	4.35	4.32	4.30	4.28
	62.0	51292	50500	50104	49708	4.05	4.01	3.97	3.94
64.4	51292	50500	50104	49708	3.91	3.85	3.80	3.78	

Gray shaded area is Extrapolated Data











Gray shaded area is Extrapolated Data

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 60K (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1136	-22.0	25571	25260	25074	24950	3.07	3.16	3.17	3.20
	-10.0	29422	29065	28851	28708	3.59	3.70	3.71	3.75
	0.0	32631	32235	31998	31839	4.03	4.15	4.16	4.21
	5.0	34348	33931	33681	33514	4.27	4.40	4.41	4.46
	14.0	36677	36231	35964	35786	4.56	4.70	4.71	4.76
	17.0	38423	37957	37677	37490	4.84	4.99	5.00	5.06
	22.0	40831	40335	40038	39840	4.80	4.91	4.97	5.03
	27.0	43110	42516	42317	42020	4.76	4.87	4.92	4.98
	32.0	44795	44200	43903	43606	4.71	4.82	4.88	4.93
	37.0	48264	47570	47273	46975	4.71	4.82	4.88	4.93
	42.0	53516	52723	52426	52030	4.72	4.83	4.88	4.94
	44.6	59093	58218	56436	56040	4.73	4.86	4.89	4.95
	52.0	62673	61782	61386	60990	4.70	4.81	4.86	4.92
	57.0	66139	65248	64752	64356	4.68	4.79	4.84	4.89
	62.0	69604	68614	68119	67723	4.66	4.77	4.82	4.87
64.4	71188	70297	69802	69307	4.65	4.76	4.81	4.86	
1360	-22.0	26063	25753	25567	25443	3.09	3.19	3.20	3.24
	-10.0	29989	29632	29417	29275	3.62	3.74	3.75	3.79
	0.0	33260	32864	32626	32468	4.06	4.19	4.20	4.25
	5.0	35010	34593	34343	34176	4.31	4.45	4.46	4.51
	14.0	37383	36938	36671	36493	4.59	4.74	4.75	4.81
	17.0	39163	38697	38417	38231	4.88	5.04	5.05	5.11
	22.0	41624	41128	40831	40633	4.85	4.96	5.02	5.07
	27.0	44002	43407	43110	42813	4.80	4.91	4.97	5.03
	32.0	45687	45092	44795	44498	4.76	4.87	4.92	4.98
	37.0	49255	48561	48264	47867	4.76	4.87	4.93	4.98
	42.0	54606	53813	53417	53120	4.77	4.88	4.93	4.99
	44.6	60281	59406	57624	57228	4.78	4.91	4.94	5.00
	52.0	63960	63069	62673	62277	4.75	4.86	4.91	4.97
	57.0	67426	66535	66139	65644	4.73	4.84	4.89	4.94
	62.0	70990	70000	69604	69109	4.71	4.81	4.87	4.92
64.4	72673	71683	71188	70693	4.70	4.80	4.86	4.91	
1583	-22.0	26296	25986	25800	25614	3.12	3.22	3.24	3.27
	-10.0	30256	29900	29685	29471	3.66	3.78	3.79	3.83
	0.0	33557	33161	32924	32686	4.11	4.24	4.25	4.29
	5.0	35322	34906	34656	34406	4.35	4.49	4.51	4.55
	14.0	37717	37272	37005	36738	4.64	4.79	4.81	4.85
	17.0	39513	39047	38767	38488	4.93	5.09	5.11	5.16
	22.0	42020	41525	41227	40930	4.90	5.01	5.07	5.13
	27.0	44399	43804	43507	43209	4.85	4.96	5.02	5.08
	32.0	46182	45489	45191	44894	4.81	4.92	4.97	5.03
	37.0	49750	49056	48660	48363	4.81	4.92	4.98	5.03
	42.0	55102	54408	54012	53615	4.81	4.93	4.98	5.04
	44.6	60765	60000	58119	57723	4.83	4.96	4.99	5.05
	52.0	64554	63762	63267	62871	4.80	4.91	4.96	5.02
	57.0	68119	67228	66832	66337	4.78	4.89	4.94	4.99
	62.0	71683	70792	70297	69802	4.76	4.87	4.92	4.97
64.4	73465	72475	71980	71485	4.75	4.85	4.91	4.96	

HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 60K (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1805	-22.0	26296	25986	25800	25614	3.12	3.22	3.24	3.27
	-10.0	30256	29900	29685	29471	3.66	3.78	3.79	3.83
	0.0	33557	33161	32924	32686	4.11	4.24	4.25	4.29
	5.0	35637	35221	34971	34637	4.39	4.54	4.56	4.60
	14.0	38054	37609	37342	36985	4.69	4.84	4.86	4.90
	17.0	39866	39400	39121	38747	4.98	5.14	5.17	5.21
	22.0	42420	41925	41627	41229	4.95	5.06	5.12	5.19
	27.0	44799	44204	43907	43609	4.90	5.01	5.07	5.13
	32.0	46683	45889	45591	45294	4.86	4.97	5.02	5.08
	37.0	50251	49557	49060	48863	4.86	4.97	5.03	5.08
	42.0	55602	55009	54613	54115	4.85	4.98	5.03	5.09
	44.6	61253	60600	58618	58222	4.88	5.01	5.04	5.10
	52.0	65154	64463	63867	63471	4.85	4.96	5.01	5.07
	57.0	68819	67928	67532	67037	4.83	4.94	4.99	5.04
	62.0	72383	71593	70997	70502	4.81	4.93	4.97	5.02
64.4	74266	73276	72781	72286	4.80	4.90	4.96	5.01	

Gray shaded area is Extrapolated Data









HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 60K HH (Sheet 1 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1136	-22.0	40717	41548	42396	42824	8.83	8.88	8.92	8.97
	-10.0	41160	42000	42857	43290	8.25	8.29	8.33	8.37
	0.0	41528	42376	43241	43677	7.76	7.80	7.84	7.87
	5.0	41713	42564	43433	43871	7.51	7.55	7.59	7.63
	14.0	42045	42903	43778	44220	7.07	7.11	7.14	7.18
	17.0	42155	43016	43893	44337	6.93	6.96	7.00	7.03
	22.0	44258	45161	46083	46548	6.72	6.75	6.78	6.82
	27.0	46360	47306	48272	48759	6.51	6.54	6.57	6.60
	32.0	48463	49452	50461	50971	6.30	6.33	6.36	6.39
	37.0	50565	51597	52650	53182	6.09	6.12	6.15	6.18
	42.0	51571	52624	53698	54240	5.97	6.00	6.03	6.06
	44.6	51974	53035	54117	54664	5.92	5.95	5.98	6.01
	52.0	53584	54678	55794	56357	5.74	5.77	5.80	5.83
	57.0	54591	55705	56842	57416	5.62	5.65	5.68	5.71
62.0	55597	56732	57889	58474	5.51	5.54	5.56	5.59	
64.4	56000	57142	58309	58898	5.46	5.49	5.52	5.54	
1360	-22.0	46013	46952	47910	48394	8.92	8.97	9.01	9.06
	-10.0	46513	47462	48431	48920	8.33	8.37	8.41	8.46
	0.0	46930	47888	48865	49359	7.84	7.87	7.91	7.95
	5.0	47138	48100	49082	49578	7.59	7.63	7.67	7.70
	14.0	47513	48483	49472	49972	7.14	7.18	7.22	7.25
	17.0	47638	48611	49603	50104	7.00	7.03	7.07	7.10
	22.0	50014	51035	52076	52602	6.78	6.82	6.85	6.89
	27.0	52390	53459	54550	55101	6.57	6.61	6.64	6.67
	32.0	54766	55884	57024	57600	6.36	6.39	6.42	6.46
	37.0	57142	58308	59498	60099	6.15	6.18	6.21	6.24
	42.0	58279	59469	60682	61295	6.03	6.06	6.09	6.12
	44.6	58734	59933	61156	61774	5.98	6.01	6.04	6.07
	52.0	60554	61790	63051	63688	5.80	5.83	5.86	5.88
	57.0	61691	62950	64235	64884	5.68	5.71	5.74	5.77
62.0	62828	64111	65419	66080	5.56	5.59	5.62	5.65	
64.4	63283	64575	65893	66558	5.52	5.54	5.57	5.60	



HEATING PERFORMANCE AT INDOOR DRY BULB TEMPERATURE- 60K HH (Sheet 2 of 2)

AIRFLOW (CFM)	OUTDOOR (DB F)	TC: TOTAL CAPACITY IN BTU/HR				PI: TOTAL POWER IN KILOWATTS			
		Indoor Conditions (DB F)				Indoor Conditions (DB F)			
		60.8	68.0	71.6	75.2	60.8	68.0	71.6	75.2
1583	-22.0	51998	53059	54142	54689	9.01	9.06	9.10	9.15
	-10.0	52563	53636	54730	55283	8.41	8.46	8.50	8.54
	0.0	53034	54116	55221	55779	7.91	7.95	7.99	8.03
	5.0	53269	54357	55466	56026	7.67	7.70	7.74	7.78
	14.0	53693	54789	55907	56472	7.22	7.25	7.29	7.33
	17.0	53835	54933	56054	56620	7.07	7.10	7.14	7.17
	22.0	56519	57673	58850	59444	6.85	6.89	6.92	6.96
	27.0	59204	60413	61646	62268	6.64	6.67	6.71	6.74
	32.0	61889	63152	64441	65092	6.42	6.46	6.49	6.52
	37.0	64574	65892	67237	67916	6.21	6.24	6.27	6.30
	42.0	65860	67204	68575	69268	6.09	6.12	6.15	6.18
	44.6	66374	67728	69110	69809	6.04	6.07	6.11	6.14
	52.0	68430	69827	71252	71971	5.86	5.89	5.91	5.94
	57.0	69715	71138	72590	73323	5.74	5.77	5.80	5.82
62.0	71001	72449	73928	74675	5.62	5.65	5.68	5.70	
64.4	71515	72974	74463	75216	5.57	5.60	5.63	5.66	
1805	-22.0	57563	58738	59937	60542	9.10	9.15	9.19	9.24
	-10.0	58189	59376	60588	61200	8.50	8.54	8.58	8.63
	0.0	58710	59908	61131	61748	7.99	8.03	8.07	8.11
	5.0	58971	60174	61402	62023	7.74	7.78	7.82	7.86
	14.0	59440	60653	61891	62516	7.29	7.33	7.36	7.40
	17.0	59596	60813	62054	62681	7.14	7.17	7.21	7.25
	22.0	62569	63846	65149	65807	6.92	6.96	6.99	7.03
	27.0	65541	66879	68243	68933	6.70	6.74	6.77	6.81
	32.0	68513	69912	71338	72059	6.49	6.52	6.55	6.59
	37.0	71486	72945	74433	75185	6.27	6.30	6.33	6.37
	42.0	72908	74396	75915	76682	6.15	6.18	6.21	6.25
	44.6	73478	74977	76507	77280	6.10	6.14	6.17	6.20
	52.0	75754	77300	78878	79674	5.91	5.94	5.97	6.00
	57.0	77177	78752	80359	81171	5.80	5.82	5.85	5.88
62.0	78600	80204	81841	82667	5.68	5.70	5.73	5.76	
64.4	79169	80784	82433	83266	5.63	5.66	5.68	5.71	

Gray shaded area is Extrapolated Data

## APPLICATION DATA

### Unit Selections

Select equipment that either matches or supports slightly more than the anticipated peak load. This provides better humidity control, fewer unit cycles, and less part-load operation.

For units used in spaces with high sensible loads, base equipment selection on unit sensible load, not on total anticipated load. Adjust for anticipated room wet bulb temperature to avoid undersizing the equipment.

### Unit Mounting (Outdoor)

Refer to the unit's installation instructions for further details.

**Unit leveling** - For reliable operation, units should be level in all planes.

**Clearance** - Minimum clearance (see Fig. 5 — on page 8 ) must be provided for airflow. The condensing units are designed for free-flow application. Air inlets and outlets should not be restricted.

**Unit location** - A location which is convenient to installation and not exposed to strong winds. A location that can bear the weight of the outdoor unit and where the outdoor unit can be mounted in a level position.

Do not install the indoor or outdoor units in a location with special environmental conditions. For those applications, contact your sales representative.

### System Operating Conditions

#### OPERATING RANGE MIN/MAX °F / °C

All High Heat Units:

- **Cooling:** -22/130 (-30/55)
- **Heating:** -22/86 (-30/30)

Regular Heat Units:

- **Cooling:** 5/130 (-15/55)
- **Heating:** -5/86 (-20/30)

**NOTE: Without intervention, the unit may continue to run at temperatures outside of the specified operating temperatures. However, operation outside of the specified temperature range may result in decreased performance and may cause damage to the unit.**

### METERING DEVICES

The outdoor unit has an electronic expansion valve to manage the refrigerant flow of the connected fan coil.

### DRAIN CONNECTIONS

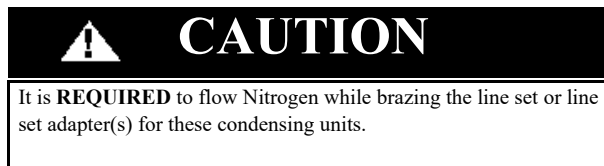
Install drains to meet the local sanitation codes.

### REFRIGERANT LINES

#### General refrigerant line sizing:

1. The outdoor units are shipped with a full charge of R410A refrigerant. All charges, line sizing, and capacities are based on runs of 25 ft. (7.6 m). For runs over 25 ft. (7.6 m), add 0.69 oz/ft (65 g/m) of refrigerant charge.
2. Refrigerant lines should not be buried in the ground. If it is necessary to bury the lines, do not bury more than 36-in (914 mm). Provide a minimum 6-in (152 mm) vertical rise to the service valves to prevent refrigerant migration.
3. Insulate the suction line with a minimum 3/8-in (10 mm) wall thermal pipe insulation. Follow local codes.

4. Special consideration should be given to isolating the interconnecting tubing from the building structure. Isolate the tubing so vibration or noise is not transmitted into the structure.



## WIRING

All wires must be sized per NEC (National Electrical Code) or CEC (Canadian Electrical Code) and local codes. Use Electrical Data table MCA (minimum circuit amps) and MOCP (maximum over current protection) to correctly size the wires and the disconnect fuse or breakers respectively.

### Power wiring

1. Remove the electric cover of the outdoor unit.
2. Connect the fork terminal to the terminals.
3. Match the wire labels with the labels on the terminal block.
4. Firmly screw the fork terminal of each wire to its corresponding terminal.
5. Insulate unused wires with electrical tape. Keep them away from any electrical or metal parts.
6. Reinstall the cover of the electric control box.

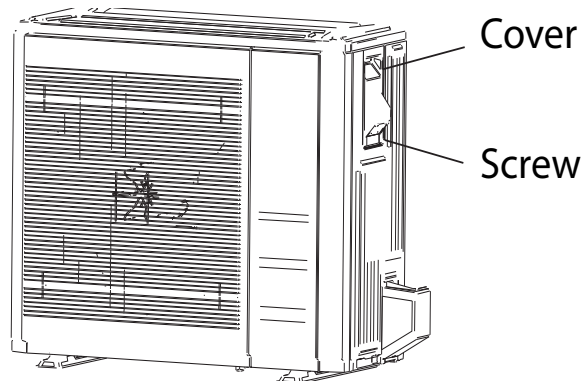
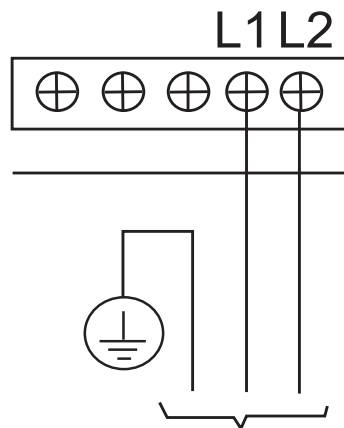


Fig. 1 —Remove Electrical Cover



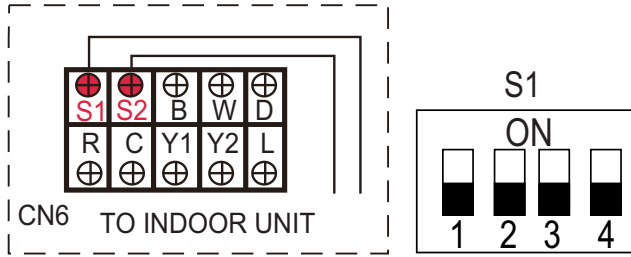
TO POWER SOURCE

Fig. 2 —Match Fork Terminal to Terminal Labels

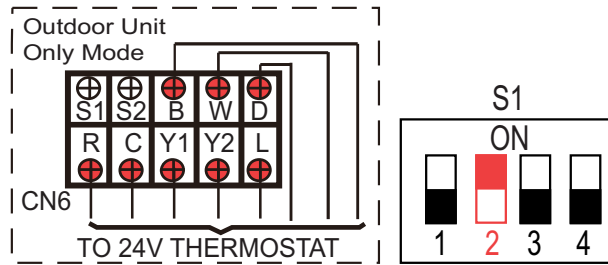
**Communication wiring**

There are two options available to establish communication between the outdoor unit and approved indoor unit.

OPTIONS	COMMUNICATION TYPE	RECOMMENDED CABLE SIZE
1	Non-Polarity RS485 Communication (S1 - S2)	16 AWG (stranded shielded)
2	24V communication	18 AWG 8 conductor thermostat wire



**Fig. 3 —Option 1: Non-polarity RS485 Communication**



**Fig. 4 —Option 2: 24V Communication**

**NOTES:**

1. Do not use the thermostat wire for any RS-485 connection between indoor and outdoor units.
2. All connections between the indoor and outdoor units must be made as shown in Figures 3 - 4.

**CAUTION**

Power needs to be OFF before dip switch adjustments.

**WARNING**

**EQUIPMENT DAMAGE HAZARD**  
Failure to follow this caution may result in equipment damage or improper operation. Wires should be sized based on NEDC and local codes.

**CAUTION**

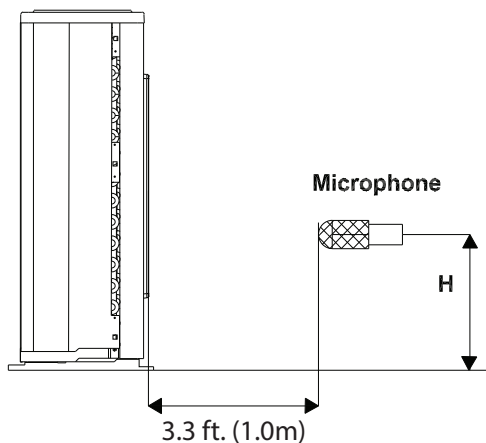
**EQUIPMENT DAMAGE HAZARD**  
Failure to follow this caution may result in equipment damage or improper operation. Be sure to comply with local codes while running wire from the indoor unit to the outdoor unit. Every wire must be connected firmly. Loose wiring may cause the terminal to overheat or result in unit malfunction. A fire hazard may also exist. Ensure all wiring is tightly connected.  
No wire should touch the refrigerant tubing, compressor or any moving parts. Disconnecting means must be provided and shall be located within sight and readily accessible from the air conditioner. Connecting cable with conduit shall be routed through the hole in the conduit panel.

### Sound Pressure in Octave Bands

	Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
18K (208V)	Cooling dB(A)	43.1	43.5	46.2	48.6	47.0	42.8	37.8	32.9
	Heating dB(A)	37.8	42.8	43.7	46.9	48.3	45.5	41.4	34.6
18K (208V) High Heat	Cooling dB(A)	56.9	63.4	57.0	53.4	48.7	43.7	37.4	32.0
	Heating dB(A)	59.7	63.3	57.7	54.3	50.3	44.8	39.7	34.7
24K (208V)	Cooling dB(A)	47.2	50.1	50.0	51.1	51.7	47.5	41.6	34.4
	Heating dB(A)	44.0	48.6	49.7	51.4	53.2	49.1	44.4	37.6
24K (208V) High Heat	Cooling dB(A)	63.3	62.4	59.2	53.6	51.0	46.1	42.6	36.8
	Heating dB(A)	65.6	66.8	62.6	55.4	53.7	49.3	45.3	40.8
30K (208V)	Cooling dB(A)	42.9	47.3	54.1	54.2	56.2	54.4	49.6	41.8
	Heating dB(A)	44.0	50.5	51.9	52.9	53.5	50.9	47.7	40.4
30K (208V) High Heat	Cooling dB(A)	64.0	69.4	61.6	55.7	54.5	50.4	47.1	41.3
	Heating dB(A)	64.2	68.2	62.7	57.1	56.5	52.6	49.1	43.5
36K (208V)	Cooling dB(A)	45.5	56.1	55.8	56.4	56.8	53.3	50.6	42.9
	Heating dB(A)	43.6	51.0	52.4	52.9	55.7	52.9	49.5	41.7
36K (208V) High Heat	Cooling dB(A)	65.9	63.3	57.4	57.6	53.2	48.4	44.1	48.0
	Heating dB(A)	68.5	64.8	58.9	58.0	54.6	49.0	44.2	42.5
48K (208V)	Cooling dB(A)	51.6	51.6	50.4	54.8	55.9	54.6	46.8	41.0
	Heating dB(A)	48.4	50.0	49.9	55.3	56.0	52.3	47.3	43.9
48K (208V) High Heat	Cooling dB(A)	65.4	66.5	58.7	57.7	54.6	50.1	46.5	45.6
	Heating dB(A)	64.0	65.5	60.9	59.7	56.1	50.6	45.6	42.7
60K (208V)	Cooling dB(A)	49.1	52.1	53.7	57.0	58.2	55.1	47.8	41.1
	Heating dB(A)	45.5	50.9	53.3	56.7	56.7	52.3	46.5	42.2
60K (208V) High Heat	Cooling dB(A)	49.4	52.2	52.3	56.4	56.4	50.9	48.2	51.0
	Heating dB(A)	49.8	51.1	51.2	54.9	56.8	51.6	46.2	43.2

### Outdoor Unit Sound Pressure Test Conditions

**NOTE: H=0.5 x Height of outdoor unit**



	INDOOR CONDITION		OUTDOOR CONDITION	
	DB	WB	DB	WB
<b>Cooling</b>	80.6°F (27°C)	66.2°F (19°C)	95°F (35°C)	75.2°F (24°C)
<b>Heating</b>	68°F (20°C)	59°F (15°C)	44.6°F (7°C)	42.8°F (6°C)

**Fig. 5 —Outdoor Unit Sound Pressure Test**

A220462

## ELECTRICAL DATA

Outdoor Unit		18K	18K High Heat	24K	24K High Heat	30K	30K High Heat	36K	36K High Heat	48K	48K High Heat	60K	60K High Heat
Minimum Circuit Ampacity (MCA)	A	16	16	19	20.5	20	23	24	41	34	42	34	42
Maximum Overcurrent Protection Ampacity (MOPA)	A	20	20	30	35	35	35	40	50	50	50	50	60
Voltage-Phase Frequency	208/230-1-60												
Max – Min Voltage Range*	V	253-187											
Cooling													
Running current	(A)	7.5	6.5	9.7	9.40	12.20	12.40	15.82	14.8	21.9	24.2	23.8	26.7
Power consumption	(W)	1620	1430	2120	1920	2760	2720	3750	3300	5046	5530	5644	6110
Power factor	(%)	97.2	71.1	98.9	94.6	95.8	96.4	97.2	97.8	98	99	98.3	97.9
Heating													
Running current range	(A)	6.7	7	9.8	9.13	12.40	12.50	16.12	14.8	23.3	21.5	20.9	21.5
Power consumption	(W)	1510	1550	2150	2040	2850	2780	3496	3400	5373	4880	4959	4940
Power factor	(%)	96.9	71.5	98.8	94.5	96.3	96.7	96.8	97.6	98.4	98.9	97.7	97.1

\*Permissible limits of the voltage range at which the unit will operate satisfactorily.

## Fan and Motor Specifications

System Size		18K	18K High Heat	24K	24K High Heat	30K	30K High Heat	36K	36K High Heat	48K	48K High Heat	60K	60K High Heat
Diameter	inch (mm)	17.09 (434)	21.06 (535)	21.06 (535)	22.05 (560)	22.05 (560)	22.05 (560)	22.05 (560)	21.8 (554)	21.8 (554)	21.8 (554)	21.8 (554)	21.8 (554)
Height	inch (mm)	5.67(144)	5.24 (133)	5.24 (133)	5.47 (139)	5.47 (139)	5.47 (139)	5.47 (139)	5.83 (148)	5.83 (148)	5.83 (148)	5.83 (148)	5.83 (148)
Model	-	ZKFN-34-10-1-3	ZKFN-80-8-3	ZKFN-80-8-3	ZKFN-120-8-2	ZKFN-120-8-2	ZKFN-120-8-2	ZKFN-120-8-2	ZKFN-85-8-22-5x2	ZKFN-85-8-22-5x2	ZKFN-85-8-22-5x2	ZKFN-85-8-22-5x2	ZKFN-85-8-22-5x2
Voltage-Phase-Frequency	208/230-3-60												
FLA	A	1	1	1	1.35	1.35	1.35	1.48	2.4	2.4	2.4	2.4	2.4
Rated HP	HP	1/16	1/10	1/10	1/6	1/6	1/6	1/6	1/9x2	1/9x2	1/9x2	1/9x2	1/9x2
Output	W	34	80	80	120	120	120	120	85	85	85	85	85
Type	-	DC											
Insulation class	-	B	E	E	E	E	E	E	E	E	E	E	E
Safe class	-	IP24	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Input	W	99.6	120	120	173	173	173	173	85	85	85	85	85
Range of current	Ams	0.89±10 %	1±20%	1±20%	1.39±10 %	1.39±10 %	1.39±10 %	1.39±10 %	1.178±10 %	1.178±10 %	1.178±10 %	1.178±10 %	1.178±10 %
Rated current	Amp	0.89	0.82	0.82	1.21	1.21	1.21	1.21	1.178	1.178	1.178	1.178	1.178
Speed	rev/min	840/700/650	800/700/580	810/700/450	950/700/500	950/700/500	950/900/500	950/700/500	850/750/650	850/750/650	850/750/650	900/850/650	850/750/650
Rated RPM	rev/min	840	800	810	950	950	950	950	850	850	850	900	850
Max. input	W	99.6	120.0	120.0	170.0	170.0	170.0	170.0	126	126	126	126	126

## CONNECTION DIAGRAMS

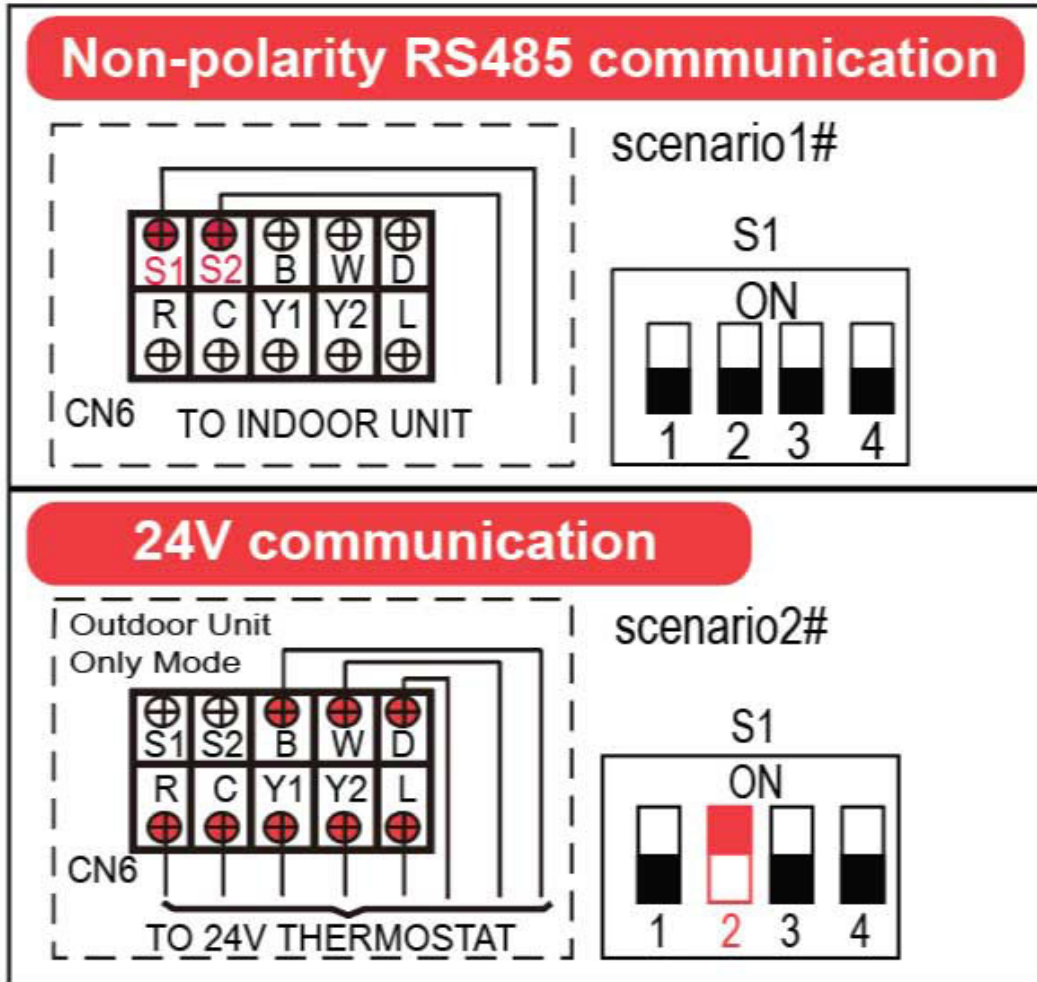


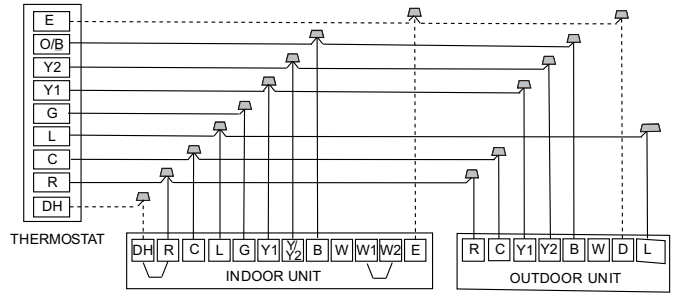
Fig. 6 —Connection Diagrams

# 24V CONNECTION DIAGRAMS

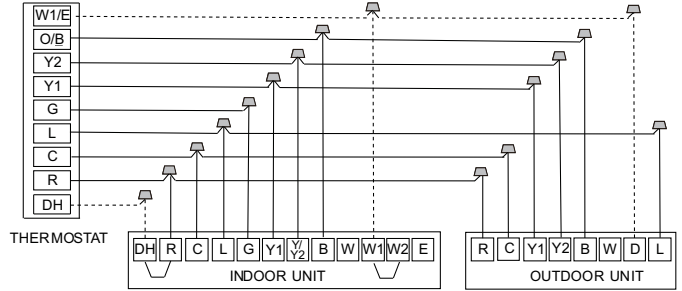
**Table 1 — Terminal Function**

R	24V Power Connection
C	Common
Y1	Low Demand
Y2	High Demand
B	Heating Reversing Valve
W	Heating Control
D	Defrost - (24V output signal)
L	System Fault - (24V output signal)

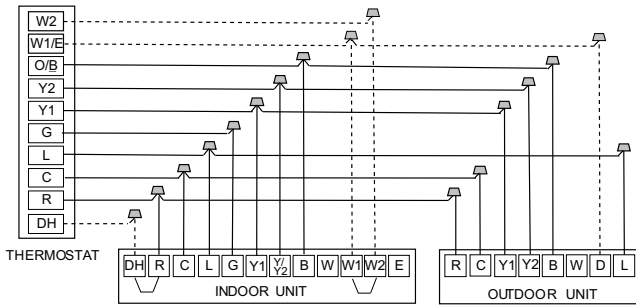
**NOTE:** Terminal D will be energized when the outdoor unit goes into defrost mode and can be used to enable electric heat. This feature is not available when the outdoor unit communicates with the indoor unit via non-polarity RS485 Communication S1-S2.



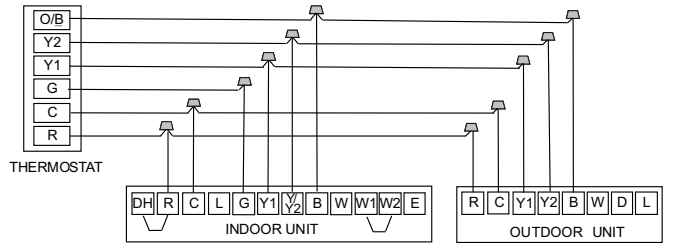
**Fig. 9 —Wiring for 3H and 2C Thermostat**



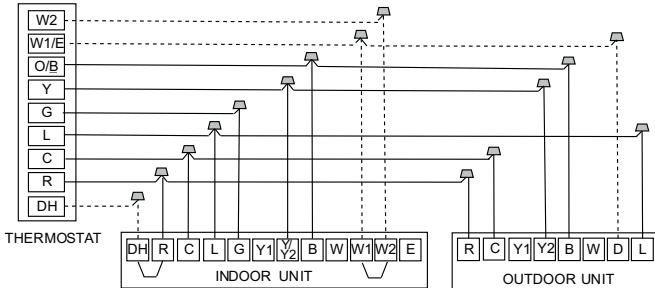
**Fig. 10 —Wiring for 3H and 2C Thermostat**



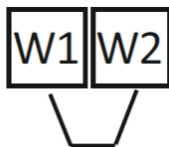
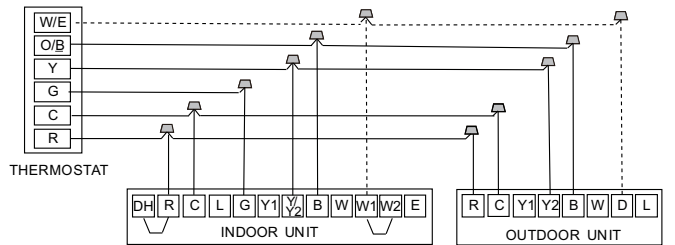
**Fig. 7 —Wiring for 4H and 2C Thermostat**



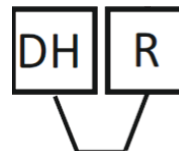
**Fig. 11 —Wiring for 2H and 2C Thermostat**



**Fig. 8 —Wiring for 3H and 1C Thermostat**



**S4-1:**  
 Default ON: For single stage supplemental heat, W1 and W2 are connected.  
 OFF: For dual stage supplemental heat, W1 and W2 are controlled independently. feature is enabled through thermostat.



**S4-2:**  
 Default ON: Dehumidification control not available.  
 OFF: Dehumidification feature is enabled through thermostat.

**Note:** Dip switches are located on compatible indoor unit.  
 Refer to the indoor unit installation manual for additional information.

# WIRING DIAGRAMS

CBP	BOM Code	Wiring Label
38MURAQ18AA3	22023116000102	16022000C73977
38MURAQ24AA3	22023116000081	16022000C73984
38MURAQ30AA3	22023116000101	16022000C75547
38MURAQ36AA3	22023116000082	16022000C75547
38MURAQ48AA3	22023116000103	16022000C72885
38MURAQ60AA3	22023116000083	16022000C72885
38MURAQ18AB3	22023116000162	16022000C73984
38MURAQ24AB3	22023116000161	16022000C75547
38MURAQ30AB3	22023116000163	16022000C75547
38MURAQ36AB3	22023116000164	16022000C72962
38MURAQ48AB3	22023116000141	16022000C72962
38MURAQ60AB3	22023116000281	16022000C72962

## Standard Models

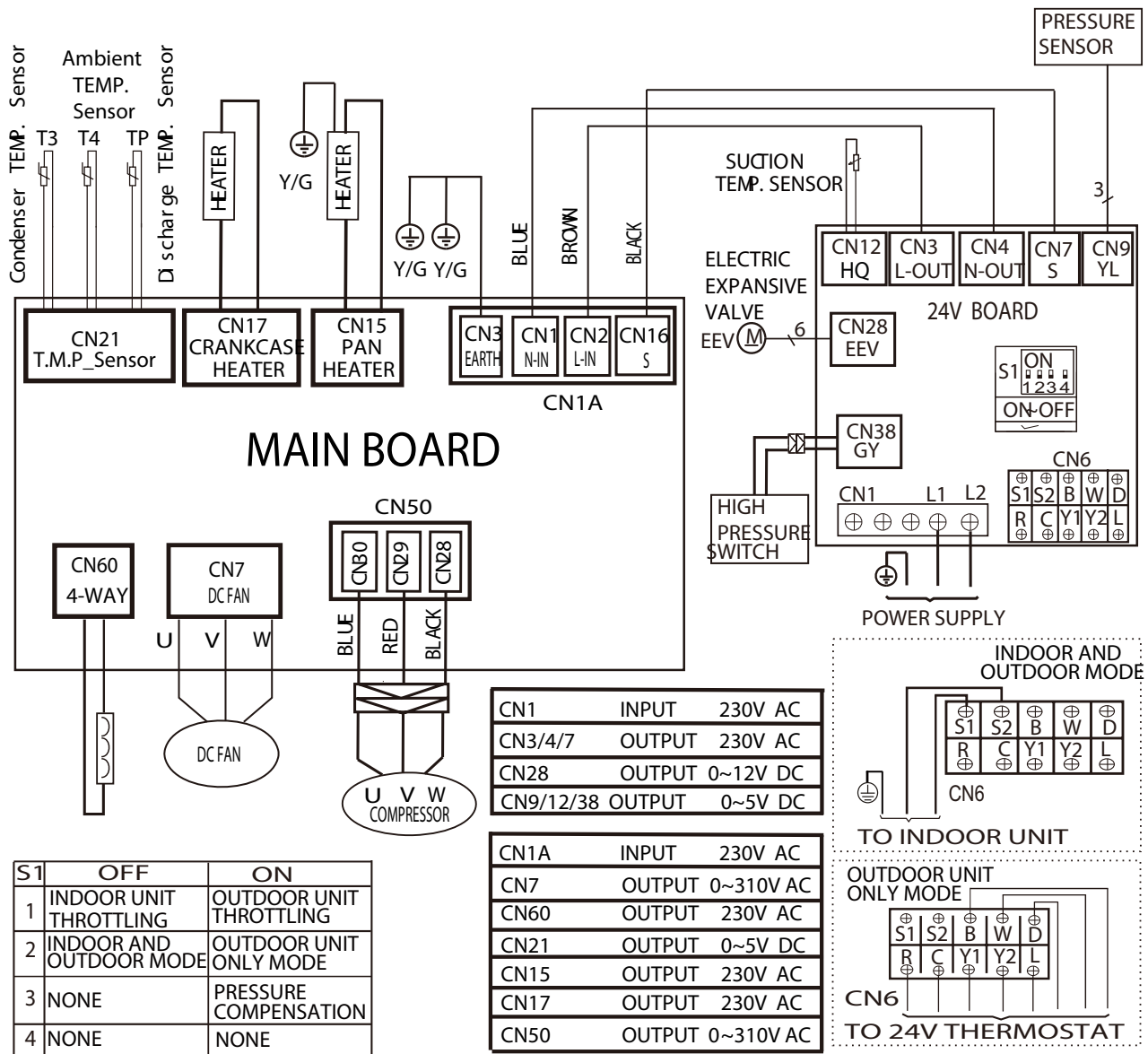


Fig. 14 —Wiring Diagram Size 18K



# WIRING DIAGRAMS (CONTINUED)

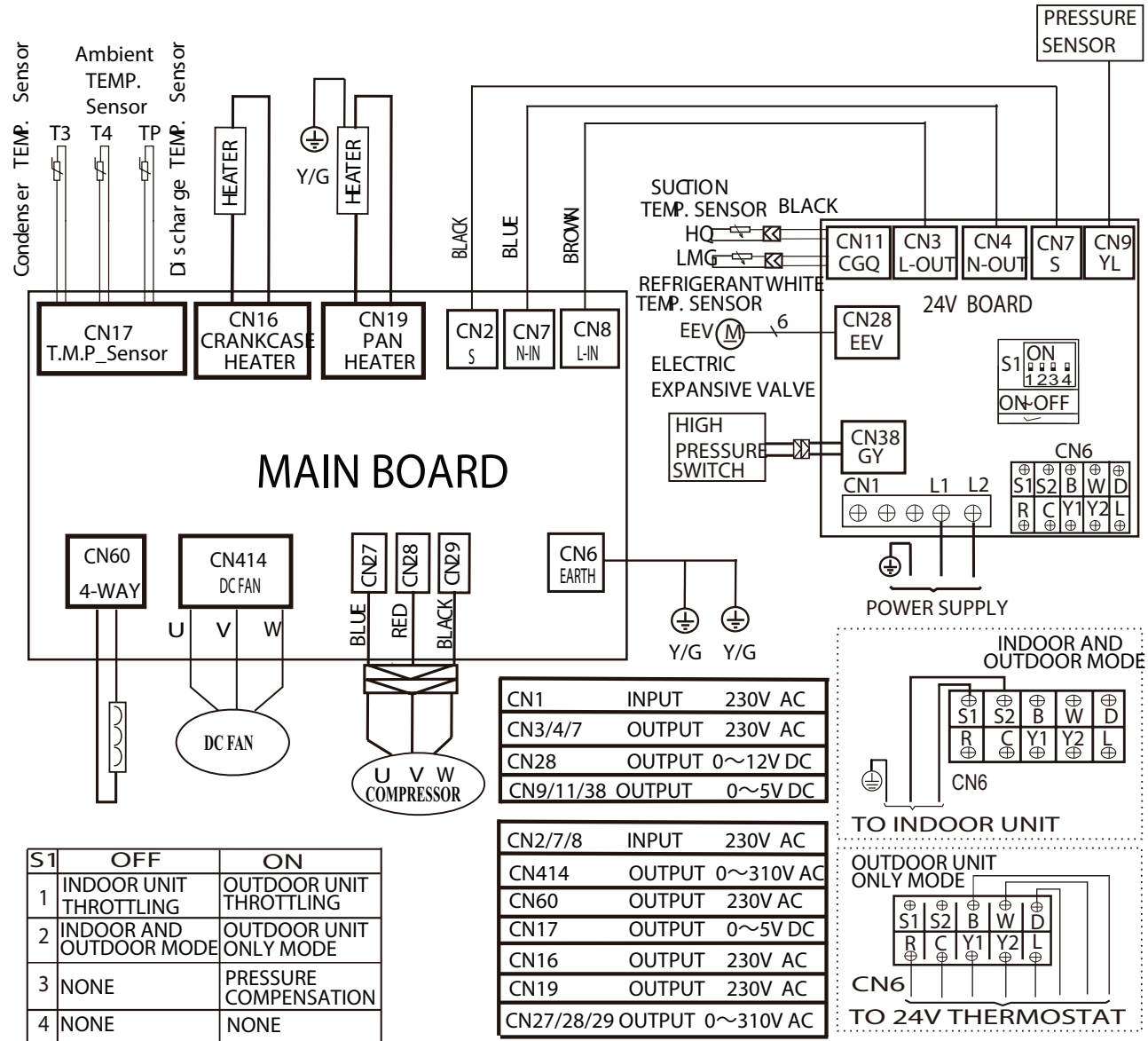


Fig. 15 — Wiring Diagram - Size 24K

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

# WIRING DIAGRAMS (CONTINUED)

OUTDOOR UNIT MAIN BOARD	
CODE	PART NAME
CN11 ,CN 12	Input:230VAC High voltage
CN 4	Output:Connection of the high voltage-- (24V BOARD' S CN7 "S"
CN4 1	Connection to the earth
CN2 6	Input:Pin2,Pin3,Pin5 (5VDC), Pin4, Pin1,Pin6 (0-5VDC)-- "T3","T4","Tp"
CN2 9	Input:Pin1,Pin3 (0-5VDC) Pin2, Pin4(0VDC)--H/L Pressure Switch
CN3 2	Connection to DC FAN
U,V,W	Connection to compressor voltage among phases 0-310VAC
CN20 ,CN 8	Output:230VAC High voltage--COMPRESSOR HEATER
CN21 ,CN 36	Output:230VAC High voltage--CHASSIS HEATER
CN3 8	Output:230VAC High voltage--REVERSE VALVE

OUTDOOR UNIT 24V BOARD	
CODE	PART NAME
CN 11	Input:Pin1,Pin3 (5VDC),Pin2,Pin4 (0-5VDC)
CN 28	Output:Pin1-Pin4 Pulse waveform (0-12VDC),Pin5, Pin6 (12VDC)--EEV
S1	Input:Pin1-Pin4 (5VDC),Pin5-Pin8 (0-5VDC)
CN6	INDOOR AND OUTDOOR MODE: S1~S2 Connection to INDOOR UNIT, OUTDOOR UNIT ONLY MODE: B~W, D~R~C~Y1~Y2 L Connection to 24V THERMOSTAT
CN9	Input:Pin2 (0-5VDC),Pin3 (5VDC),Pin1 (0VDC)--PRESSURE SENSOR
CN 7	Output:Connection of the high voltage-- (MAIN BOARD' S CN7) "S"
CN 4,CN3	Input:230VAC High voltage

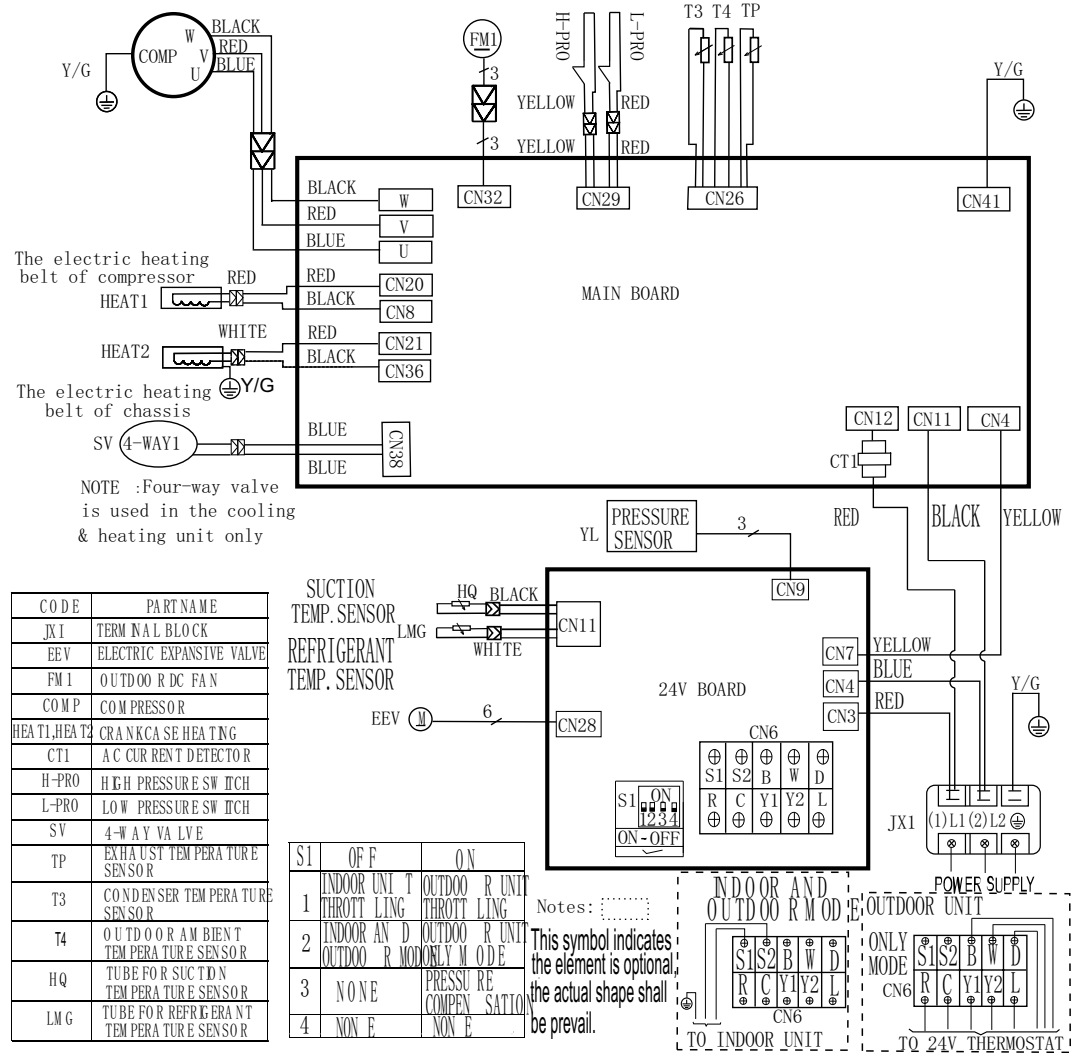


Fig. 16 —Wiring Diagram Sizes 30K-36K


# WIRING DIAGRAMS (CONTINUED)

OUTDOOR UNIT MAIN CONTROL BOARD	
CODE	PART NAME
CN1-CN3	Input:230VAC High voltage
P5 P6	Connection to the earth
P8-P7	Output:230VAC High voltage to 24V BOARD
CN21	Output:Pin1(Connection of the high voltage)"S"
CN17-CN18	Output:230VAC High voltage---REVERSING VALVE
CN24-CN25	Output:230VAC High voltage---CRANKCASE HEATER
CN19-CN20	Output:230VAC High voltage---CHASSIS HEATER
CN8	Input:Pin1(0-5VDC),Pin2(5VDC)
CN9	Input:Pin3 Pin4(5VDC),Pin2(0VDC),Pin1 Pin5(0-5VDC)
CN6	Communication:Pin1-Pin6 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin8(0-5VDC),Pin10(5VDC)--to IPM&PFC BOARD
CN2-CN4	Output:230VAC High voltage to IPM&PFC BOARD
CN10	Input:Pin2 Pin4(0VDC),Pin1 Pin3(0-5VDC)--H/L Pressure switch
CN14	Input:Pin1(5VDC),Pin2(0-5VDC)--COMP. TOP OLP TEMP.SENSOR

OUTDOOR UNIT IPM&PFC BOARD	
CODE	PART NAME
CN2-CN3	Input:230VAC High voltage
CN9	Communication:Pin1-Pin2 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin10(5VDC)--to outdoor main control board
U-V-W	Connect to compressor voltage among phases 0~250VAC
CN8 CN5	Connect to DCFAN voltage among phases 0~200VAC

24V BOARD	
CODE	PART NAME
CN3-CN4	Input:230VAC High voltage
CN7	(Connection of the high voltage)"S"
CN9	Input:Pin1(5VDC),Pin2(0-5VDC),Pin3(0VDC)--PRESSURE SENSOR
CN28	Output:Pin1-Pin4 Pulse waveform(0-12VDC), Pin5 Pin6(12VDC) to EEV
CN11	Input:Pin1 Pin3(5VDC),Pin2 Pin4(0-5VDC)

CODE	PART NAME
COMP	COMPRESSOR
CT1	AC CURRENT DETECTOR
EEV	ELECTRONIC EXPANSION VALVE
DCFAN1	OUTDOOR DC FAN MOTOR
DCFAN2	OUTDOOR DC FAN MOTOR
HEAT_D	CHASSIS HEATER
HEAT_Y	CRANKCASE HEATER
H-PRO	HIGH PRESSURE SWITCH
L-PRO	LOW PRESSURE SWITCH
SV	REVERSING VALVE
TP	COMP. DISCHARGE TEMP. SENSOR
T3	COIL TEMP. SENSOR
T4	OUTDOOR AMBIENT TEMP. SENSOR
HQ	SUCTION TEMP. SENSOR
LMG	REFRIGERANT TEMP. SENSOR
COMP TOP	COMP. TOP OLP TEMP. SENSOR

Notes:  This symbol indicates the element is optional, the actual shape shall be prevail

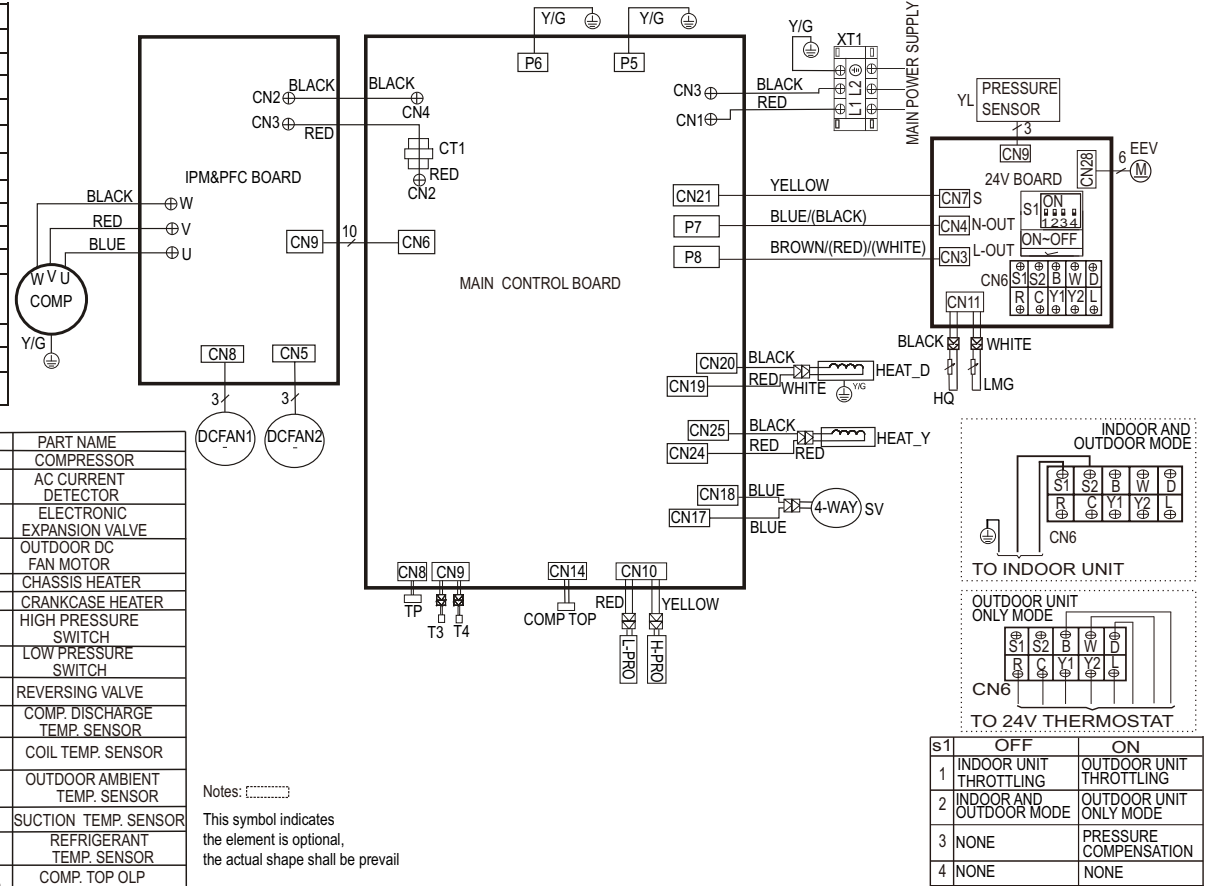


Fig. 17 —Wiring Diagram Sizes 48K-60K

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# WIRING DIAGRAMS (CONTINUED)

## High Heat Models

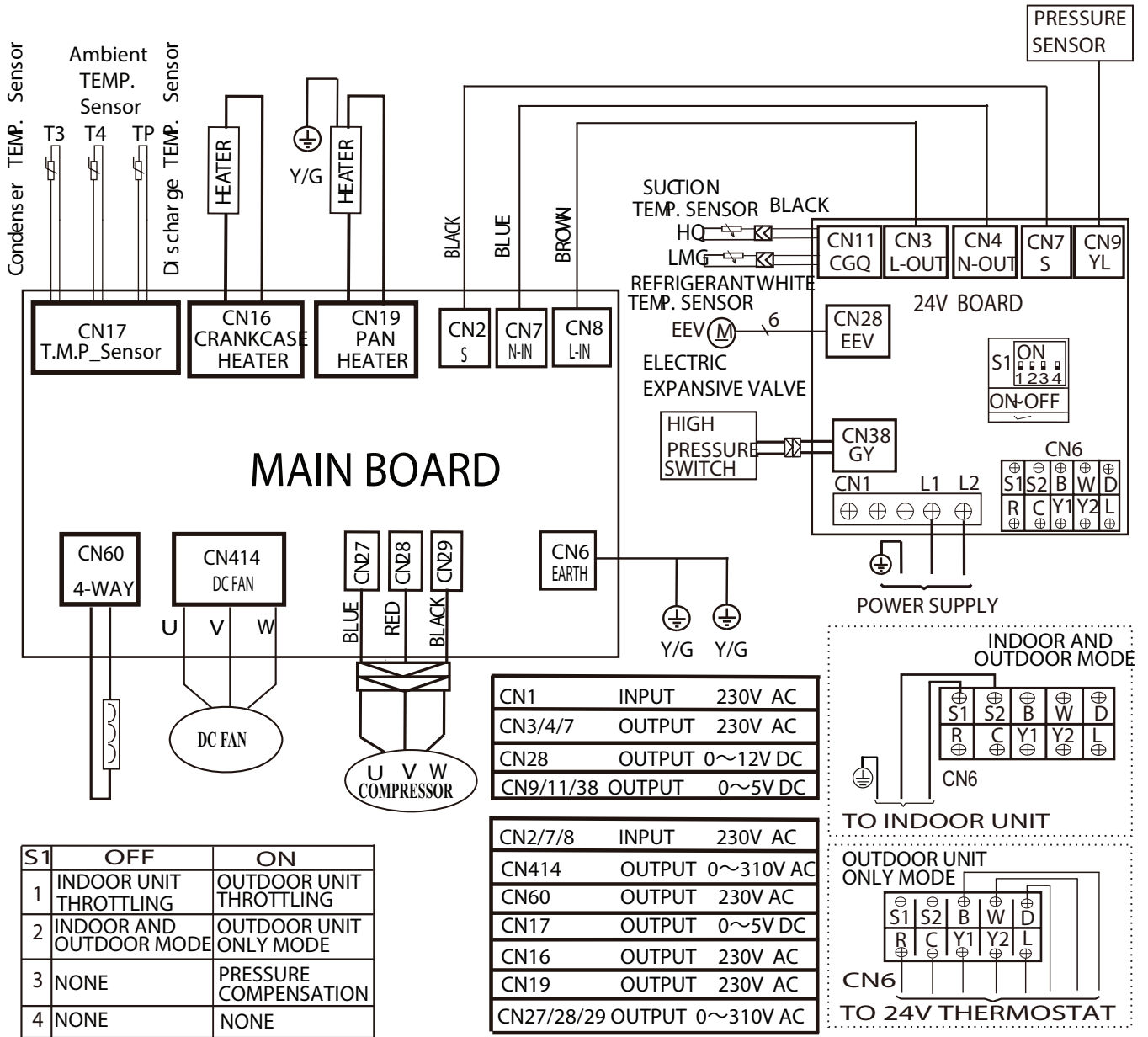


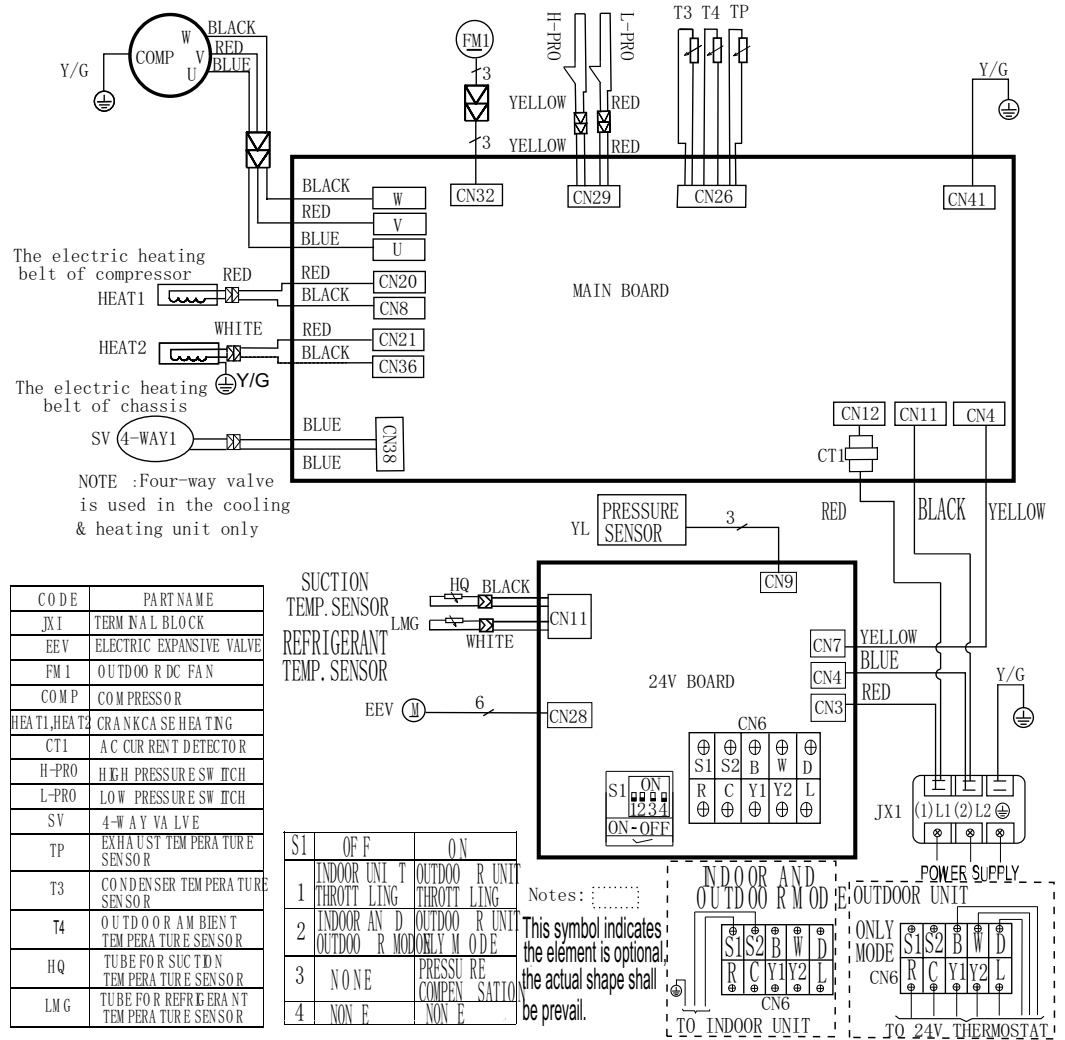
Fig. 14 —Wiring Diagram Sizes 18K HH

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# WIRING DIAGRAMS (CONTINUED)

OUTDOOR UNIT MAIN BOARD	
CODE	PART NAME
CN11, CN12	Input 230VAC High voltage
CN4	Output Connection of the high voltage -- (24V BOARD'S CN7) "S"
CN41	Connection to the earth
CN26	Input Pin2, Pin3, Pin5 (5VDC), Pin4, Pin1, Pin6 (0-5VDC) -- "T3", "T4", "Tp"
CN29	Input Pin1, Pin3 (0-5VDC) Pin2, Pin4 (0VDC) -- H/L Pressure Switch
CN32	Connection to DC FAN
U, V, W	Connection to compressor voltage among phases 0-310VAC
CN20, CN8	Output 230VAC High voltage -- COMPRESSOR HEATER
CN21, CN36	Output 230VAC High voltage -- CHASSIS HEATER
CN38	Output 230VAC High voltage -- REVERSE VALVE

OUTDOOR UNIT 24V BOARD	
CODE	PART NAME
CN11	Input Pin1, Pin3 (5VDC), Pin2, Pin4 (0-5VDC)
CN28	Output Pin1-Pin4 Pulse waveform (0-12VDC), Pin5, Pin6 (12VDC) -- EEV
S1	Input Pin1-Pin4 (5VDC), Pin5-Pin8 (0-5VDC)
CN6	INDOOR AND OUTDOOR MODE SELECT Connection to INDOOR UNIT, OUTDOOR UNIT ONLY MODE: B'W'D'R'CY1'Y2'L Connection to 24V THERMOSTAT
CN9	Input Pin2 (0-5VDC), Pin3 (5VDC), Pin1 (0VDC) -- PRESSURE SENSOR
CN7	Output Connection of the high voltage -- (MAIN BOARD'S CN7) "S"
CN4, CN3	Input 230VAC High voltage



CODE	PART NAME
JX1	TERMINAL BLOCK
EEV	ELECTRIC EXPANSIVE VALVE
FM1	OUTDOOR DC FAN
COMP	COMPRESSOR
HEAT1, HEAT2	CRANKCASE HEATING
CT1	A/C CURRENT DETECTOR
H-PRO	HIGH PRESSURE SWITCH
L-PRO	LOW PRESSURE SWITCH
SV	4-WAY VALVE
TP	EXHAUST TEMPERATURE SENSOR
T3	CONDENSER TEMPERATURE SENSOR
T4	OUTDOOR AMBIENT TEMPERATURE SENSOR
HQ	TUBE FOR SUCTION TEMPERATURE SENSOR
LMG	TUBE FOR REFRIGERANT TEMPERATURE SENSOR

S1	OFF	ON
1	INDOOR UNIT THROTTLE	OUTDOOR UNIT THROTTLE
2	INDOOR AND OUTDOOR UNIT ONLY MODE	OUTDOOR UNIT ONLY MODE
3	NONE	PRESSURE COMPENSATION
4	NONE	NONE

Fig. 14 —Wiring Diagram Sizes 24K-30K HH


# WIRING DIAGRAMS (CONTINUED)

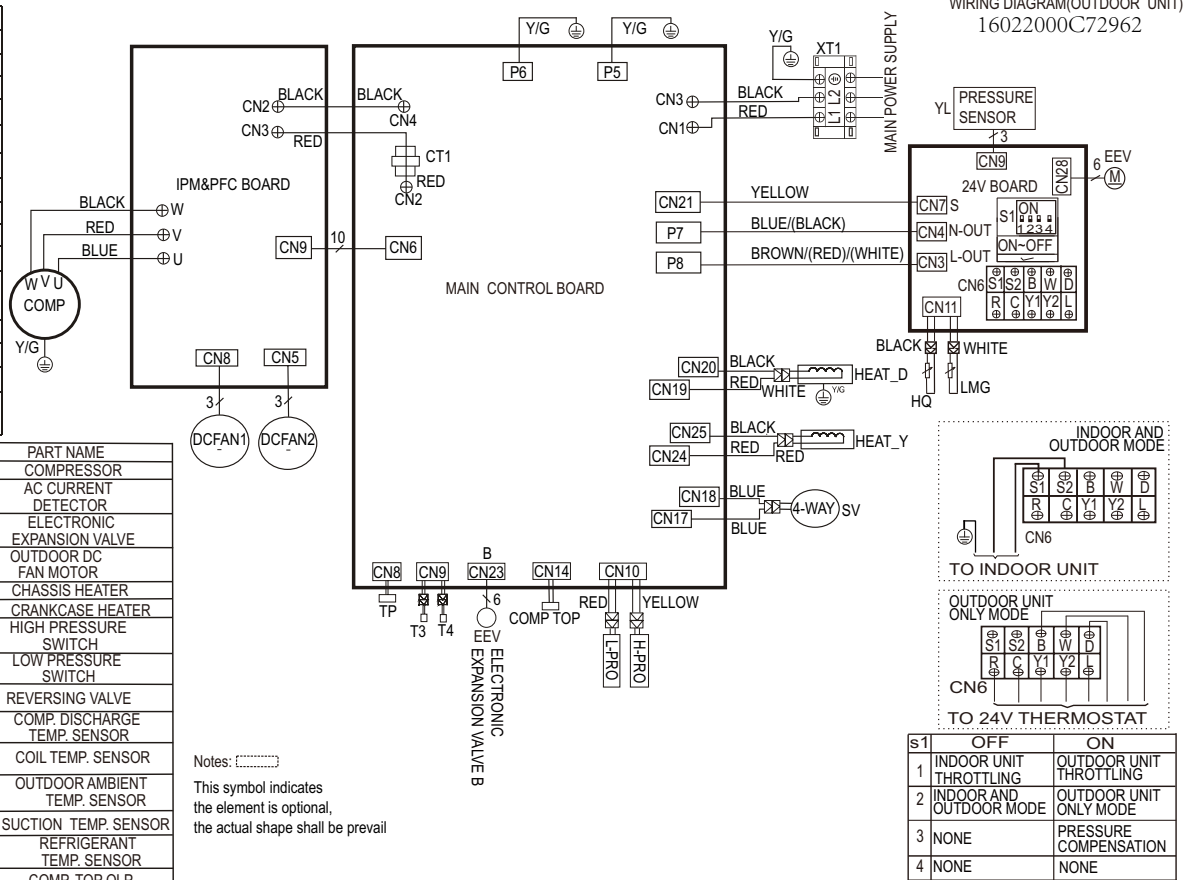
OUTDOOR UNIT MAIN CONTROL BOARD	
CODE	PART NAME
CN1~CN3	Input:230VAC High voltage
P5 P6	Connection to the earth
P8~P7	Output:230VAC High voltage to 24V BOARD
CN21	Output:Pin1( Connection of the high voltage)"S"
CN17~CN18	Output:230VAC High voltage---REVERSING VALVE
CN24~CN25	Output:230VAC High voltage---CRANKCASE HEATER
CN19~CN20	Output:230VAC High voltage---CHASSIS HEATER
CN8	Input:Pin1(0-5VDC),Pin2(5VDC)
CN9	Input:Pin3 Pin4(5VDC),Pin2(0VDC),Pin1 Pin5(0-5VDC)
CN6	Communication:Pin1-Pin6 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin8(0-5VDC),Pin10(5VDC)--to IPM&PFC BOARD
CN2~CN4	Output:230VAC High voltage to IPM&PFC BOARD
CN10	Input:Pin2 Pin4(0VDC),Pin1 Pin3(0-5VDC)--H/L Pressure switch
CN14	Input:Pin1(5VDC),Pin2(0-5VDC)--COMP. TOP OLP TEMP.SENSOR
CN23	Output:Pin1-Pin4 Pulse waveform(0-12VDC), Pin5 Pin6(12VDC) to EEV

OUTDOOR UNIT IPM&PFC BOARD	
CODE	PART NAME
CN2~CN3	Input:230VAC High voltage
CN9	Communication:Pin1-Pin2 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin10(5VDC)--to outdoor main control board
U~V~W	Connect to compressor voltage among phases 0~250VAC
CN8 CN5	Connect to DCFAN voltage among phases 0~200VAC

24V BOARD	
CODE	PART NAME
CN3~CN4	Input:230VAC High voltage
CN7	(Connection of the high voltage)"S"
CN9	Input:Pin1(5VDC),Pin2(0-5VDC),Pin3(0VDC)--PRESSURE SENSOR
CN28	Output:Pin1-Pin4 Pulse waveform(0-12VDC), Pin5 Pin6(12VDC) to EEV
CN11	Input:Pin1 Pin3(5VDC),Pin2 Pin4(0-5VDC)

CODE	PART NAME
COMP	COMPRESSOR
CT1	AC CURRENT DETECTOR
EEV	ELECTRONIC EXPANSION VALVE
DCFAN1	OUTDOOR DC FAN MOTOR
DCFAN2	OUTDOOR DC FAN MOTOR
HEAT_D	CHASSIS HEATER
HEAT_Y	CRANKCASE HEATER
H-PRO	HIGH PRESSURE SWITCH
L-PRO	LOW PRESSURE SWITCH
SV	REVERSING VALVE
TP	COMP. DISCHARGE TEMP. SENSOR
T3	COIL TEMP. SENSOR
T4	OUTDOOR AMBIENT TEMP. SENSOR
HQ	SUCTION TEMP. SENSOR
LMG	REFRIGERANT TEMP. SENSOR
COMP TOP	COMP. TOP OLP TEMP. SENSOR

Notes:  This symbol indicates the element is optional, the actual shape shall be prevail



WIRING DIAGRAM(OUTDOOR UNIT)  
16022000C72962

Fig. 14 —Wiring Diagram Sizes 36K-48K HH

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Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

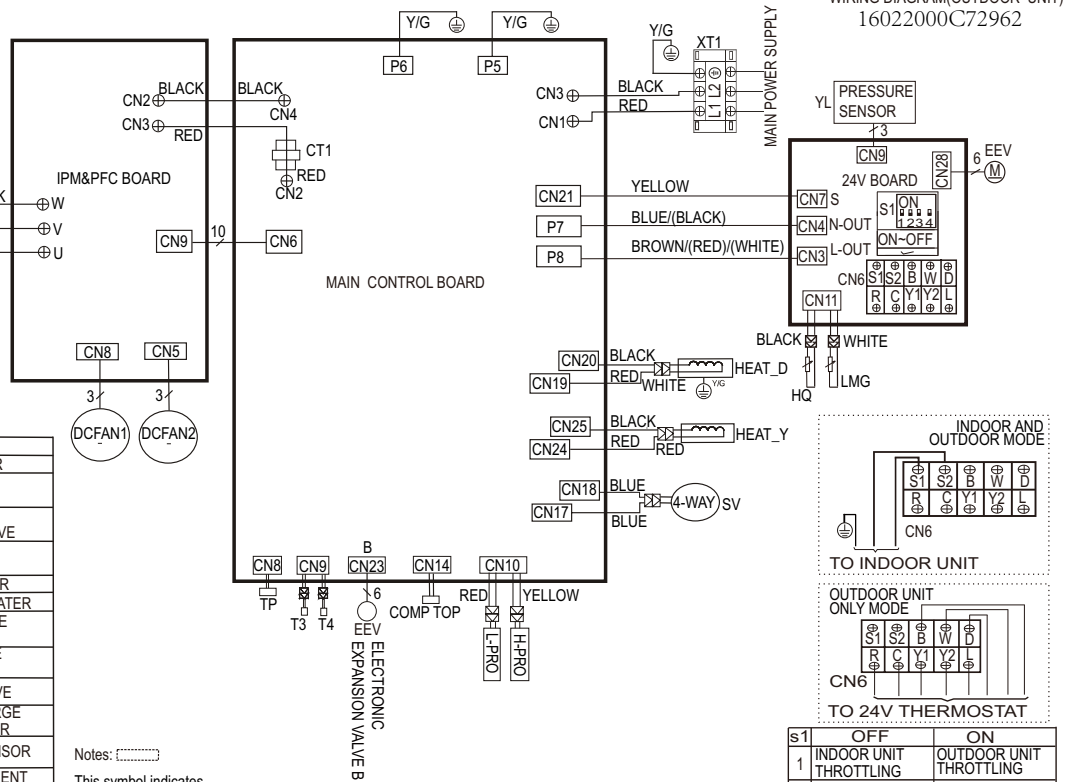
# WIRING DIAGRAMS (CONTINUED)

OUTDOOR UNIT MAIN CONTROL BOARD	
CODE	PART NAME
CN1~CN3	Input:230VAC High voltage
P5 P6	Connection to the earth
P8~P7	Output:230VAC High voltage to 24V BOARD
CN21	Output:Pin1(Connection of the high voltage)"S"
CN17~CN18	Output:230VAC High voltage---REVERSING VALVE
CN24~CN25	Output:230VAC High voltage---CRANKCASE HEATER
CN19~CN20	Output:230VAC High voltage---CHASSIS HEATER
CN8	Input:Pin1(0-5VDC),Pin2(5VDC)
CN9	Input:Pin3 Pin4(5VDC),Pin2(0VDC),Pin1 Pin5(0-5VDC)
CN6	Communication:Pin1-Pin6 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin8(0-5VDC),Pin10(5VDC)--to IPM&PFC BOARD
CN2~CN4	Output:230VAC High voltage to IPM&PFC BOARD
CN10	Input:Pin2 Pin4(0VDC),Pin1 Pin3(0-5VDC)--H/L Pressure switch
CN14	Input:Pin1(5VDC),Pin2(0-5VDC)--COMP. TOP OLP TEMP.SENSOR
CN23	Output:Pin1-Pin4 Pulse waveform(0-12VDC), Pin5 Pin6(12VDC) to EEV

OUTDOOR UNIT IPM&PFC BOARD	
CODE	PART NAME
CN2~CN3	Input:230VAC High voltage
CN9	Communication:Pin1-Pin2 Pulse waveform(0-5VDC),Pin7, Pin9(0VDC),Pin10(5VDC)--to outdoor main control board
U~V~W	Connect to compressor voltage among phases 0~250VAC
CN8 CN5	Connect to DCFAN voltage among phases 0~200VAC

24V BOARD	
CODE	PART NAME
CN3~CN4	Input:230VAC High voltage
CN7	(Connection of the high voltage)"S"
CN9	Input:Pin1(5VDC),Pin2(0-5VDC),Pin3(0VDC)--PRESSURE SENSOR
CN28	Output:Pin1-Pin4 Pulse waveform(0-12VDC), Pin5 Pin6(12VDC) to EEV
CN11	Input:Pin1 Pin3(5VDC),Pin2 Pin4(0-5VDC)

CODE	PART NAME
COMP	COMPRESSOR
CT1	AC CURRENT DETECTOR
EEV	ELECTRONIC EXPANSION VALVE
DCFAN1	OUTDOOR DC FAN MOTOR
DCFAN2	OUTDOOR DC FAN MOTOR
HEAT_D	CHASSIS HEATER
HEAT_Y	CRANKCASE HEATER
H-PRO	HIGH PRESSURE SWITCH
L-PRO	LOW PRESSURE SWITCH
SV	REVERSING VALVE
TP	COMP DISCHARGE TEMP. SENSOR
T3	COIL TEMP. SENSOR
T4	OUTDOOR AMBIENT TEMP. SENSOR
HQ	SUCTION TEMP. SENSOR
LMG	REFRIGERANT TEMP. SENSOR
COMP TOP	COMP. TOP OLP TEMP. SENSOR



Notes: [Symbol]  
 This symbol indicates the element is optional, the actual shape shall be prevail

WIRING DIAGRAM(OUTDOOR UNIT)  
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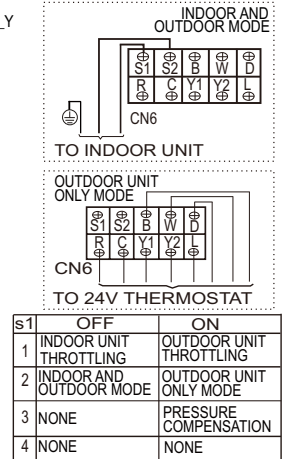


Fig. 15 —Wiring Diagram Sizes 60K HH

## Part 1 - GENERAL

### 1.01 System Description

1. Outdoor air-cooled split system compressor sections suitable for on-the-ground, rooftop, wall hung or balcony mounting. Units consist of a rotary compressor, an air-cooled coil, propeller-type draw-through outdoor fan, reversing valve (HP), accumulator (HP units), metering device(s), and a control box with integrated 24V and RS485 communication. Units discharge air horizontally as shown on the contract drawings. Units function as the outdoor component of an air-to-air heat pump system.
2. Units are to be used in a refrigeration circuit matched to residential heat pump fan coil units.

### 1.02 Agency Listings

1. Unit construction complies with ANSI/ASHRAE 15, latest revision, and with the NEC.
2. Units are evaluated in accordance with UL standard 60335-2-40.
3. Units are listed in the CEC directory.
4. Unit cabinet is capable of withstanding 500-hour salt spray test per Federal Test Standard No. 141 (method 6061).
5. Air-cooled condenser coils are leak tested at 550 psig.

### 1.03 Delivery, Storage, And Handling

Units are shipped in one piece and are stored and handled per unit manufacturer's recommendations.

### 1.04 Warranty (For Inclusion By Specifying Engineer)

## Part 2 - PRODUCTS

### 2.01 Equipment

#### A. General:

Factory assembled, single piece, air-cooled outdoor unit. Contained within the unit enclosure is all the factory wiring, piping, controls, and the compressor.

#### B. Unit Cabinet:

1. Unit cabinet is constructed of galvanized steel, bonderized and coated with a baked-enamel finish on the inside and outside.
2. Unit access panels is removable with minimal screws and provides full access to the compressor, fan, and control components.
3. The outdoor compartment is isolated and has an acoustic lining to assure quiet operation.

#### C. Fans:

1. Outdoor fans are the direct drive propeller type, and discharges air horizontally. Fans draw air through the outdoor coil.
2. Outdoor fan motors are totally enclosed, single phase motors with class E insulation and permanently lubricated ball bearings. The motor shall be protected by internal thermal overload protection.
3. The shaft has inherent corrosion resistance.
4. Fan blades are non-metallic and statically and dynamically balanced.

5. Outdoor fan openings are equipped with a PVC metal/mesh coated protection grille over the fan.

## GUIDE SPECIFICATIONS

### HORIZONTAL DISCHARGE SPLIT-SYSTEM HEAT PUMP

Size Range: 1-1/2 to 5 Ton Nominal Cooling and Heating Capacity  
Model Number: **38MURA**

#### D. Compressor:

1. Compressor is the fully hermetic rotary type.
2. Compressor is equipped with an oil system, operating oil charge, and a motor.
3. Motor is NEMA rated class E, suitable for operation in a refrigerant atmosphere.
4. Compressor assembly is installed on rubber vibration isolators.

#### E. Outdoor Coil:

The coil is constructed of aluminum pre-coated fins mechanically bonded to seamless copper tubes, which are cleaned, dehydrated, and sealed.

#### F. Refrigeration Components:

Refrigerant circuit components include a brass external liquid line service valve with service gage port connections, a suction line service valve with a service gage connection port, service gage port connections on compressor suction and discharge lines with Schrader type fittings with brass caps, accumulator, reversing valve.

#### G. Controls and Safeties:

Operating controls and safeties are factory selected, assembled, and tested. The minimum control functions include the following:

1. Controls:
  - **A time delay control sequence is provided standard through the fan coil board**
  - **Automatic outdoor fan motor protection.**
2. Safeties:
  - **System diagnostics**
  - **Compressor motor current and temperature overload protection**
  - **Outdoor fan failure protection.**

#### H. Electrical Requirements:

1. Unit operates on single-phase, 60 Hz power at 208/230V for unit sizes 1.5T, 1.5T-HH, 2T, 2T-HH, 2.5T, 2.5T-HH, 3T, 3T-HH, 4T, 4T-HH, 5T, 5T-HH as specified.
2. Unit electrical power has a single point connection.
3. All power and control wiring must be installed per NEC and all local electrical codes.
4. The unit has high and low voltage terminal block connections.