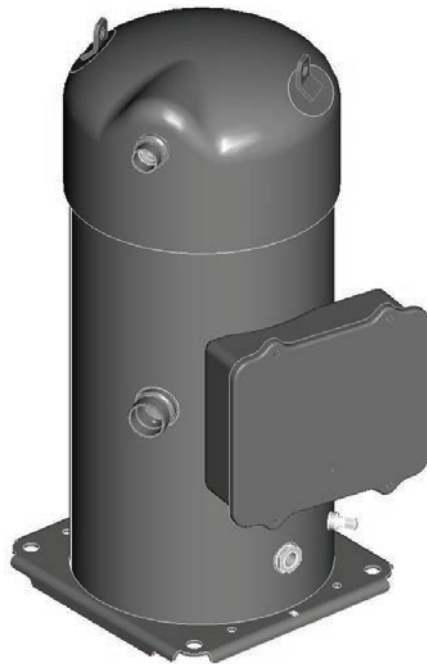




Product Catalog

# R-410A Scroll Compressor Models CSHN and CSHL

15 to 30 Tons

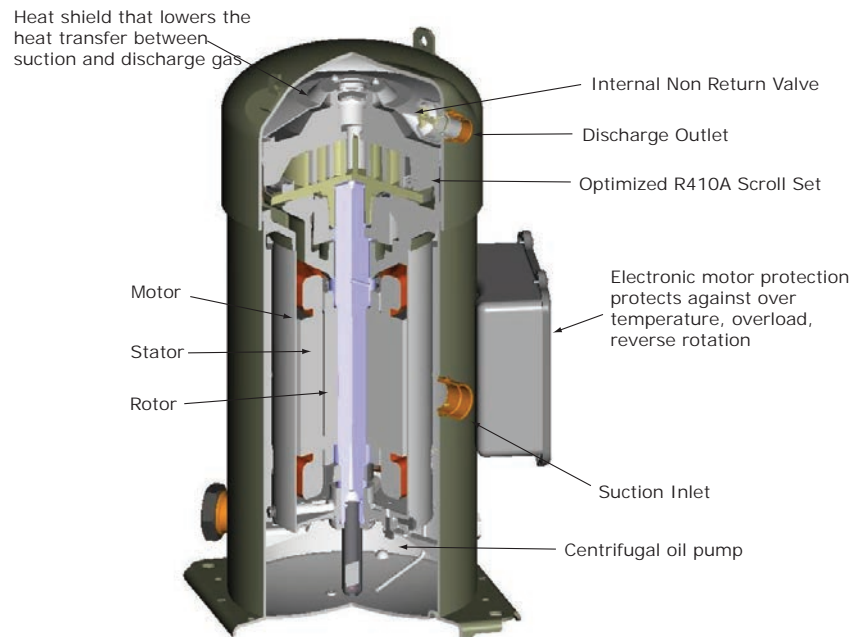


# Introduction

In Trane CSHN and CSHL 3D™ scrolls, compression is performed by the scroll set in the upper part of the compressor. Suction gas enters the compressor at the suction inlet and the gas flow is directed into the motor cap and down around the motor stator and rotor cooling the motor. The gas exits the motor is drawn up between the shell and the motor. Due to the large area the oil drops out of the gas and returns to the oil sump. The suction gas enters the scroll set where it is compressed. Ultimately, the discharge gas leaves the compressor at the discharge connection.

The figure below illustrates the entire compression process.

**Figure 1. CSHN/CSHL**



**Figure 2. How the Scroll Compressor Works**

**General**

A 3-D compressor has two scrolls. The top scroll is fixed and the bottom scroll orbits. Each scroll has walls in a spiral shape that intermesh.

**Inlet – First Orbit**

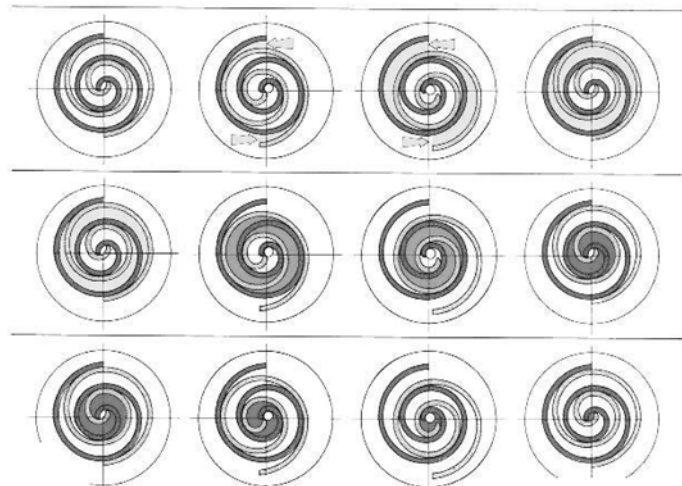
As the bottom scroll orbits, two refrigerant gas pockets are formed and enclosed.

**Compression – Second Orbit**

The refrigerant gas is compressed as the volume is reduced closer to the center of the scroll.

**Discharge – Third Orbit**

The gas is compressed further and discharged through a small port in the center of the fixed scroll.



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## Revision History

- Revised the Oil Sight Gas and Oil Charging/Drain Valve in General data table.
- Revised the Dimension data.



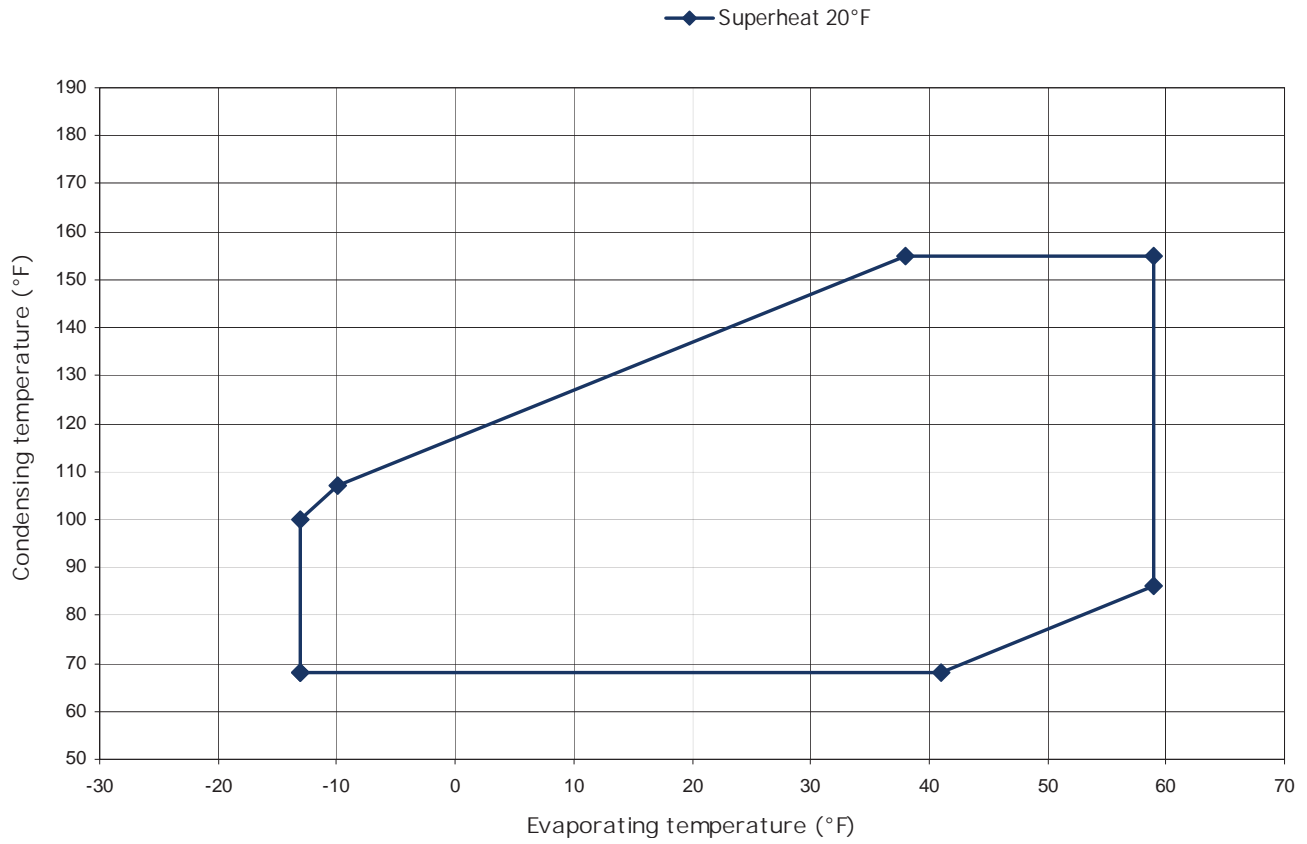
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# Application Consideration

Figure 3. CSHN/CSHL Scroll - R-410A operating envelope





# Model Number Description

C	S	H	N	1	8	4	K	0	B	K	M
1	2	3	4	5	6	7	8	9	10	11	12

## Digits 1-4 – Model

CSHN= Commercial Scroll – Induction Motor

CSHL= Commercial Scroll – Line Start Permanent Magnet Motor

## Digits 5-7 – Capacity @ 60 Hz AHRI Btu/Hr (Standard Volume Ratio)

- 176 = 175,409 (CSHN)
- 184 = 182,734 (CSHN)
- 240 = 235,408 (CSHN)
- 250 = 245,215 (CSHN)
- 315 = 308,912 (CSHN)
- 374 = 372,168 (CSHN)
- 374 = 373,785 (CSHL)

## Digit 8 – Voltage

- J = 200/230-60-3
- K = 460-60-3 or 380/415-50-3
- D = 575-60-3 or 500-50-3
- X = 380-60-3

## Digit 9 – Unloading

- 0 = No unloading

## Digit 10 – Design Sequence

- A = Original design
- B = Polymer journal bearings

## Digit 11 – Protection Module

- H = 24 Vac
- K = 115/230 Vac

## Digit 12 – Basic Compressor Variation

- M = Standard volume ratio, suction and discharge brazed tube
- R = Low Vi models, suction and discharge brazed tube
- T = Suction and Discharge Rotalocks



# General Data

**Notes:**

- See [Figure 3, p. 5](#) and [“Performance Data,” p. 8](#) for operating range.
- See [“Model Number Description,” p. 6](#) for complete model number description.
- See [“Dimensions,” p. 60](#) and [“Weights,” p. 59](#) for compressor measurements and weights.

**Table 1. General data – CSHD075 to CSHD120**

		CSHN176	CSHN184	CSHN240	CSHN250	CSHN315	CSHN374	CSHL374
		14.7 ton	15 ton	20 ton	20 ton	25 ton	30 ton	30 tons
<b>Compressor Data</b>								
Nominal Speed - 60 Hz	rpm	3500	3500	3500	3500	3500	3500	3600
Nominal Speed - 50 Hz	rpm	2900	2900	2900	2900	2900	2900	3000
Displacement at nominal speed - 60 Hz	ft <sup>3</sup> /hr	1211	1262	1620	1688	2117	2574	2544
Displacement at nominal speed - 50 Hz	ft <sup>3</sup> /hr	1003	1046	1342	1399	1754	2133	2120
Swept Volume	in <sup>3</sup> /rev	9.96	10.39	13.33	13.89	17.42	21.18	20.35
Internal Pressure Relief Valve	psig	None	None	None	None	None	665	665
Starts/Hour - maximum		12	12	12	12	12	12	12
Maximum High Pressure Switch Cutout Setting	psig	650	650	650	650	650	650	650
Minimum Low Pressure Switch Setting	psig	22	22	22	22	22	22	22
Minimum Pumpdown Low Pressure Switch Setting	psig	33	33	33	33	33	33	33
Recommended Pumpdown Low Pressure Setting (value below normal operating suction pressure)	psig	23	23	23	23	23	23	23
Maximum System Test Pressure - (high/low) <sup>(a)</sup>	psig	600/438	600/438	600/438	600/438	600/438	600/438	600/438
Maximum Test Pressure Differential <sup>(a)</sup>	psig	535	535	535	535	535	535	535
<b>Mechanical Data</b>								
Refrigerant Type		R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
Refrigerant Charge (limit)	lbs	30	30	30	30	30	32	32
Oil Type		Trane OIL00079 (qt)/OIL00080 (gal)						
Oil Charge	oz	227	227	227	227	227	243	243
Suction Fitting Connection		Brazed	Brazed	Brazed	Brazed	Brazed	Brazed	Brazed
Suction Fitting (ODF)	in	1.625	1.625	1.625	1.625	1.625	1.625	1.625
Discharge Fitting Connection		Brazed	Brazed	Brazed	Brazed	Brazed	Brazed	Brazed
Discharge Fitting (ODF)	in	1.125	1.125	1.125	1.125	1.125	1.125	1.125
Oil Equalizer Connection		Rotalock	Rotalock	Rotalock	Rotalock	Rotalock	Rotalock	Rotalock
Oil Equalizer Fitting	in	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Oil Sight Glass		Yes (welded)	Yes (welded)	Yes (welded)	Yes (welded)	Yes (welded)	Yes (welded)	Yes (welded)
Oil Charging/Drain Valve- Schrader	in	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Maximum Compressor Tilt		10°	10°	10°	10°	10°	10°	10°

**Notes:**

1. Suction and brazing connections are copper plated steel.
2. Recommended brazing material BcuP-3 or BA9-28.

(a) It is very important that the pressure at the low side does not exceed the high side pressure by more than 70 psig. A pressure differential greater than 70 psig could cause internal damage to the compressor. It is recommended to slowly pressurize the system during testing or system refrigerant charging. It will take at least two minutes to increase the pressure from 0 psig up to maximum system pressure at the low pressure. This will allow sufficient time for pressure equalization between the low and high sides.



# Performance Data

## Rated Performance at AHRI Standard

- AHRI Standard: 45°F SST/130°F SCT, 20°F Superheat/15°F Subcooling.
- Data only valid for standard volume ratio designs (model number digit 12 = M).

**Table 2. Rated performance at AHRI standard**

Compressor	Voltage	Capacity (Btu/hr)	Power (watts)	Current (amps)	Flow (lbs/hr)	EER (Btu/watt-hr)
<b>CSHN176</b>	200-60-3	172,426	16,131	51.7	2,545	10.69
	230-60-3	174,386	16,265	49.2	2,574	10.72
	400-50-3	142,975	13,677	25.9	2,110	10.45
	460-60-3	175,409	16,196	25.1	2,589	10.83
	575-60-3	-	-	-	-	-
<b>CSHN184</b>	200-60-3	179,627	16,709	58.2	2,651	10.75
	230-60-3	181,668	16,852	51.0	2,681	10.78
	400-50-3	148,862	14,177	26.8	2,197	10.50
	460-60-3	182,734	16,780	26.1	2,697	10.89
	575-60-3	182,734	16,780	20.8	2,697	10.89
<b>CSHN240</b>	200-60-3	232,325	21,803	76.3	3,429	10.66
	230-60-3	234,966	21,984	72.6	3,468	10.69
	400-50-3	193,773	18,289	32.2	2,860	10.60
	460-60-3	235,408	21,805	32.0	3,474	10.80
	575-60-3	-	-	-	-	-
<b>CSHN250</b>	200-60-3	242,004	22,596	85.8	3,572	10.71
	230-60-3	244,754	22,789	75.3	3,612	10.74
	400-50-3	201,846	18,953	33.3	2,979	10.65
	460-60-3	245,215	22,600	33.1	3,619	10.85
	575-60-3	245,215	22,600	26.5	3,619	10.85
<b>CSHN315</b>	200-60-3	303,929	28,646	100.8	4,486	10.61
	230-60-3	307,382	28,889	88.4	4,537	10.64
	400-50-3	254,484	23,940	42.9	3,756	10.63
	460-60-3	308,912	28,736	42.8	4,559	10.75
	575-60-3	308,912	28,736	34.3	4,559	10.75
<b>CSHN374</b>	200-60-3	365,809	34,773	120.1	5,399	10.52
	230-60-3	369,965	35,035	105.3	5,460	10.56
	400-50-3	302,492	28,350	47.8	4,465	10.67
	460-60-3	372,168	34,588	49.3	5,493	10.75
	575-60-3	372,168	34,588	39.4	5,493	10.75
<b>CSHL374</b>	200-60-3	372,328	33,085	99.1	5,495	11.25
	230-60-3	371,740	33,314	99.6	5,487	11.16
	380-50-3	309,322	27,329	44.5	4,565	11.32
	460-60-3	373,785	33,085	45.2	5,517	11.30
	575-60-3	371,937	33,250	36.2	5,489	11.19



## Nominal Performance Data

Performance data valid only for standard volume ratio designs (model number digit 12 = M).

### Capacity

**Table 3. Capacity (btu/hr) – voltage 200-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	74,982	93,473	116,688	144,731	177,675	215,561	236,359	258,390	306,113
	90	68,690	86,741	109,273	136,386	168,153	204,612	224,604	245,764	291,560
	100	62,296	79,821	101,584	127,685	158,194	193,148	212,294	232,548	276,343
	110	55,845	72,751	93,656	118,655	147,818	181,180	199,437	218,740	260,451
	120	-	65,607	85,564	109,373	137,102	168,787	186,114	204,425	243,970
	130	-	-	77,392	99,928	126,142	156,069	<b>172,426</b>	189,708	227,010
	140	-	-	-	90,323	114,923	142,994	158,332	174,534	209,495
	150	-	-	-	-	103,097	129,112	143,327	158,342	190,741
CSHN184	80	78,084	97,379	121,586	150,808	185,120	224,567	246,222	269,162	318,875
	90	71,562	90,367	113,840	142,081	175,164	213,133	233,954	255,998	303,730
	100	64,916	83,159	105,822	133,004	164,776	201,183	221,128	242,232	287,894
	110	58,190	75,790	97,561	123,597	153,969	188,720	207,742	227,858	271,350
	120	-	68,334	89,129	113,934	142,818	175,823	193,874	212,955	254,182
	130	-	-	80,610	104,102	131,415	162,589	<b>179,627</b>	197,630	236,504
	140	-	-	-	94,099	119,739	148,978	164,950	181,821	218,233
	150	-	-	-	-	107,424	134,519	149,316	164,942	198,657
CSHN240	80	95,687	120,909	152,396	190,281	234,660	285,585	313,504	343,054	406,999
	90	89,646	114,141	144,579	181,093	223,775	272,675	299,459	327,791	389,057
	100	83,497	107,057	136,244	171,187	211,979	258,669	284,227	311,254	369,669
	110	77,246	99,676	127,418	160,601	199,316	243,612	267,855	293,487	348,878
	120	-	92,058	118,184	149,437	185,907	227,646	250,493	274,652	326,864
	130	-	-	108,639	137,817	171,901	210,942	<b>232,325</b>	254,943	303,844
	140	-	-	-	125,746	157,299	193,497	213,341	234,344	279,787
	150	-	-	-	-	141,641	174,742	192,916	212,167	253,865
CSHN250	80	99,614	125,985	158,839	198,314	244,514	297,503	326,552	357,301	423,872
	90	93,392	118,917	150,619	188,636	233,068	283,980	311,873	341,389	405,260
	100	87,023	111,530	141,901	178,270	220,738	269,367	295,999	324,174	385,124
	110	80,505	103,833	132,699	167,237	207,548	253,693	278,961	305,689	363,501
	120	-	95,878	123,084	155,629	193,611	237,093	260,903	286,091	340,569
	130	-	-	113,147	143,558	179,065	219,730	<b>242,004</b>	265,570	316,551
	140	-	-	-	131,017	163,899	201,589	222,244	244,104	291,412
	150	-	-	-	-	147,625	182,072	200,966	220,972	264,294



## Performance Data

**Table 3. Capacity (btu/hr) — voltage 200-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN315	80	124,865	157,968	199,271	248,953	307,149	373,944	410,579	449,369	533,385
	90	117,060	149,180	189,134	237,097	293,204	357,539	392,802	430,129	510,935
	100	109,000	139,865	178,182	224,125	277,827	339,372	373,097	408,787	486,032
	110	100,695	130,049	166,457	210,093	261,089	319,529	351,551	385,439	458,779
	120	-	119,818	154,076	195,150	243,172	298,226	328,400	360,338	429,469
	130	-	-	141,181	179,477	224,297	275,726	<b>303,929</b>	333,790	398,453
	140	-	-	-	163,107	204,503	252,069	278,178	305,836	365,768
	150	-	-	-	-	183,242	226,582	250,402	275,655	330,426
CSHN374	80	152,337	191,903	241,174	300,352	369,587	448,973	492,483	538,535	638,218
	90	143,162	181,502	229,131	286,251	353,011	429,505	471,413	515,757	611,711
	100	133,450	170,282	215,968	270,712	334,662	407,912	448,035	490,485	582,327
	110	123,243	158,296	201,752	253,812	314,626	384,289	422,448	462,823	550,174
	120	-	145,675	186,641	235,742	293,128	358,893	394,928	433,062	515,583
	130	-	-	170,828	216,732	270,436	332,036	<b>365,809</b>	401,560	478,955
	140	-	-	-	196,834	246,602	303,765	335,131	368,352	440,314
	150	-	-	-	-	220,971	273,259	301,985	332,431	398,443
CSHL374	80	155,844	195,998	245,827	305,534	375,263	455,089	498,790	545,004	644,900
	90	146,274	184,893	232,844	290,333	357,506	434,440	476,570	521,131	617,474
	100	137,939	174,304	219,739	274,458	338,615	412,296	452,713	495,504	588,141
	110	130,603	164,093	206,449	257,899	318,614	388,691	427,248	468,145	556,889
	120	-	154,176	192,988	240,750	297,651	363,809	400,372	439,254	523,915
	130	-	-	179,387	223,127	275,911	337,879	<b>372,328</b>	409,085	489,475
	140	-	-	-	204,954	253,342	310,847	343,047	377,548	453,417
	150	-	-	-	-	229,139	281,746	311,461	343,459	414,277

**Table 4. Capacity (btu/hr) – voltage 230-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	75,834	94,535	118,014	146,376	179,694	218,011	239,045	261,326	309,591
	90	69,471	87,727	110,515	137,936	170,064	206,938	227,156	248,557	294,873
	100	63,004	80,728	102,739	129,136	159,992	195,343	214,707	235,190	279,483
	110	56,479	73,578	94,721	120,004	149,497	183,239	201,703	221,226	263,411
	120	-	66,352	86,536	110,616	138,660	170,705	188,229	206,748	246,742
	130	-	-	78,272	101,064	127,576	157,843	<b>174,386</b>	191,864	229,591
	140	-	-	-	91,350	116,230	144,620	160,132	176,518	211,876
	150	-	-	-	-	104,269	130,580	144,957	160,142	192,910
CSHN184	80	78,970	98,484	122,968	152,522	187,225	227,120	249,021	272,221	322,498
	90	72,375	91,393	115,133	143,696	177,154	215,555	236,613	258,907	307,181
	100	65,655	84,104	107,024	134,515	166,648	203,469	223,641	244,985	291,165
	110	58,853	76,652	98,669	125,001	155,719	190,865	210,102	230,447	274,433
	120	-	69,113	90,142	115,228	144,441	177,821	196,077	215,375	257,071
	130	-	-	81,527	105,284	132,908	164,436	<b>181,668</b>	199,876	239,192
	140	-	-	-	95,169	121,099	150,670	166,824	183,887	220,713
	150	-	-	-	-	108,644	136,047	151,012	166,816	200,915
CSHN240	80	96,775	122,283	154,128	192,443	237,327	288,830	317,066	346,952	411,624
	90	90,665	115,438	146,222	183,150	226,317	275,773	302,861	331,516	393,478
	100	84,446	108,273	137,792	173,132	214,388	261,608	287,457	314,791	373,869
	110	78,124	100,809	128,866	162,426	201,580	246,380	270,898	296,822	352,843
	120	-	93,105	119,527	151,135	188,020	230,233	253,340	277,774	330,579
	130	-	-	109,874	139,383	173,855	213,340	<b>234,966</b>	257,841	307,298
	140	-	-	-	127,175	159,087	195,696	215,766	237,008	282,967
	150	-	-	-	-	143,252	176,729	195,109	214,579	256,751
CSHN250	80	100,746	127,416	160,644	200,568	247,293	300,884	330,263	361,361	428,689
	90	94,454	120,268	152,331	190,779	235,717	287,207	315,417	345,268	409,865
	100	88,011	112,797	143,513	180,296	223,246	272,428	299,362	327,858	389,501
	110	81,420	105,012	134,207	169,138	209,907	256,576	282,131	309,163	367,632
	120	-	96,967	124,483	157,397	195,811	239,787	263,868	289,342	344,439
	130	-	-	114,433	145,189	181,100	222,227	<b>244,754</b>	268,588	320,148
	140	-	-	-	132,506	165,761	203,880	224,770	246,878	294,724
	150	-	-	-	118,950	149,303	184,141	203,250	223,483	267,298
CSHN315	80	126,284	159,762	201,535	251,781	310,638	378,193	415,244	454,475	539,445
	90	118,389	150,875	191,283	239,791	296,535	361,601	397,265	435,016	516,740
	100	110,238	141,454	180,206	226,671	280,984	343,228	377,336	413,432	491,554
	110	101,840	131,527	168,348	212,480	264,055	323,159	355,545	389,818	463,992
	120	-	121,179	155,826	197,367	245,935	301,614	332,131	364,432	434,348
	130	-	-	142,785	181,516	226,845	278,858	<b>307,382</b>	337,582	402,980
	140	-	-	-	164,961	206,826	254,933	281,339	309,311	369,923
	150	-	-	-	-	185,324	229,156	253,247	278,786	334,180



## Performance Data

**Table 4. Capacity (btu/hr) — voltage 230-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	154,088	194,113	243,937	303,771	373,776	454,056	498,061	544,642	645,490
	90	144,787	183,581	231,752	289,511	357,017	434,373	476,757	521,610	618,681
	100	134,946	172,221	218,434	273,796	338,464	412,539	453,118	496,055	588,961
	110	124,607	160,090	204,053	256,704	318,204	388,652	427,244	468,080	556,440
	120	-	147,317	188,767	238,430	296,464	362,970	399,414	437,982	521,451
	130	-	-	172,772	219,204	273,516	335,811	<b>369,965</b>	406,121	484,402
	140	-	-	-	199,081	249,414	307,220	338,940	372,535	445,317
	150	-	-	-	-	223,493	276,368	305,417	336,206	402,966
CSHL374	80	154,254	194,318	244,089	303,771	373,509	453,380	497,116	543,376	643,390
	90	144,834	183,330	231,195	288,635	355,798	432,765	474,926	519,529	615,988
	100	136,664	172,906	218,251	272,917	337,059	410,764	451,208	494,037	586,779
	110	129,505	162,898	205,184	256,594	317,299	387,397	425,978	466,905	555,737
	120	-	153,215	191,995	239,744	296,650	362,831	399,414	438,320	523,044
	130	-	-	178,702	222,467	275,278	337,276	<b>371,740</b>	408,513	488,937
	140	-	-	-	204,669	253,112	310,656	342,869	377,378	453,249
	150	-	-	-	-	229,327	281,983	311,709	343,707	414,495

**Table 5. Capacity (btu/hr) — voltage 380-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHL374	80	130,146	163,655	205,291	255,226	313,581	380,419	417,021	455,735	539,440
	90	123,240	154,863	194,447	242,171	298,165	362,501	397,800	435,179	516,117
	100	116,600	146,045	183,290	228,526	281,892	343,469	377,343	413,268	491,213
	110	110,131	137,151	171,804	214,295	264,778	323,344	355,668	390,014	464,724
	120	-	128,180	160,038	199,570	246,946	302,272	332,930	365,581	436,821
	130	-	-	148,056	184,461	228,546	280,433	<b>309,322</b>	340,173	407,723
	140	-	-	-	168,919	209,533	257,774	284,779	313,708	377,310
	150	-	-	-	-	189,241	233,483	258,404	285,197	344,374

**Table 6. Capacity (btu/hr) – voltage 400-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	59,014	74,996	94,888	118,771	146,704	178,719	196,258	214,814	254,946
	90	54,515	70,016	89,254	112,311	139,247	170,091	186,980	204,842	243,459
	100	49,829	64,731	83,204	105,330	131,167	160,747	176,942	194,069	231,092
	110	44,997	59,189	76,788	97,876	122,514	150,733	166,186	182,532	217,874
	120	-	53,467	70,093	90,046	113,388	140,153	154,821	170,342	203,917
	130	-	-	63,213	81,945	103,907	129,134	<b>142,975</b>	157,630	189,360
	140	-	-	-	73,613	94,100	117,693	130,657	144,398	174,183
	150	-	-	-	-	83,728	105,512	117,507	130,236	157,873
CSHN184	80	61,379	78,099	98,852	123,725	152,784	186,074	204,310	223,608	265,368
	90	56,786	72,923	92,937	116,917	144,930	177,019	194,598	213,199	253,451
	100	51,937	67,419	86,616	109,616	136,488	167,274	184,141	201,989	240,617
	110	-	61,626	79,925	101,856	127,488	156,865	172,964	190,002	226,882
	120	-	-	72,941	93,719	118,020	145,887	161,165	177,338	212,353
	130	-	-	65,754	85,302	108,187	134,454	<b>148,862</b>	164,119	197,166
	140	-	-	-	76,635	98,010	122,572	136,056	150,341	181,298
	150	-	-	-	-	87,230	109,903	122,362	135,570	164,215
CSHN240	80	81,061	102,486	129,193	161,293	198,867	241,958	265,574	290,563	344,626
	90	75,448	96,206	121,992	152,916	189,057	230,457	253,131	277,114	328,972
	100	69,543	89,483	114,201	143,807	178,380	217,961	239,632	262,550	312,090
	110	63,397	82,374	105,882	134,031	166,900	204,532	225,135	246,925	294,027
	120	-	74,975	97,145	123,711	154,752	190,313	209,791	230,394	274,944
	130	-	-	88,114	112,986	142,091	175,474	<b>193,773</b>	213,139	255,037
	140	-	-	-	101,902	128,953	160,040	177,100	195,168	234,292
	150	-	-	-	-	115,007	143,578	159,284	175,933	212,032
CSHN250	80	84,370	106,777	134,650	168,103	207,221	252,057	276,626	302,626	358,898
	90	78,612	100,234	127,085	159,278	196,900	240,002	263,615	288,600	342,662
	100	72,501	93,229	118,939	149,747	185,737	226,963	249,545	273,438	325,132
	110	66,089	85,812	110,265	139,560	173,782	212,985	234,461	257,183	306,347
	120	-	78,077	101,163	128,828	161,157	198,205	218,504	239,985	286,469
	130	-	-	91,753	117,684	148,010	182,784	<b>201,846</b>	222,022	265,695
	140	-	-	-	106,166	134,368	166,739	184,495	203,297	244,012
	150	-	-	-	-	119,875	149,611	165,937	183,234	220,717
CSHN315	80	106,301	133,993	168,434	209,769	258,109	313,523	343,892	376,034	445,609
	90	99,559	126,540	160,011	200,118	246,971	300,639	330,038	361,144	428,454
	100	92,207	118,220	150,449	189,039	234,102	285,706	313,971	343,875	408,573
	110	84,317	109,121	139,849	176,648	219,629	268,862	295,833	324,371	386,121
	120	-	99,388	128,384	163,144	203,781	250,365	275,897	302,921	361,416
	130	-	-	116,254	148,760	186,824	230,516	<b>254,484</b>	279,864	334,836
	140	-	-	-	133,614	168,880	209,441	231,717	255,324	306,501
	150	-	-	-	-	149,604	186,683	207,081	228,718	275,686



## Performance Data

**Table 6. Capacity (btu/hr) – voltage 400-50-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	127,968	161,071	202,287	251,792	309,719	376,155	412,574	451,127	534,597
	90	119,946	152,054	191,912	239,695	295,536	359,519	394,574	431,671	511,952
	100	111,369	142,210	180,426	226,190	279,634	340,840	374,365	409,836	486,580
	110	102,296	131,617	167,921	211,382	262,130	320,248	352,082	385,762	458,633
	120	-	120,416	154,571	195,476	243,262	298,013	328,011	359,756	428,450
	130	-	-	140,573	178,707	223,305	274,452	<b>302,492</b>	332,175	396,436
	140	-	-	-	161,171	202,359	249,664	275,623	303,118	362,683
	150	-	-	-	-	179,951	223,051	246,734	271,839	326,281

**Table 7. Capacity (btu/hr) – voltage 460-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	76,279	95,090	118,707	147,234	180,748	219,289	240,447	262,858	311,407
	90	69,878	88,241	111,163	138,745	171,061	208,151	228,488	250,015	296,602
	100	63,374	81,201	103,341	129,893	160,930	196,489	215,966	236,569	281,122
	110	56,811	74,010	95,276	120,707	150,374	184,313	202,886	222,523	264,956
	120	-	66,742	87,044	111,265	139,474	171,706	189,333	207,961	248,189
	130	-	-	78,731	101,657	128,324	158,769	<b>175,409</b>	192,989	230,937
	140	-	-	-	91,885	116,911	145,468	161,071	177,553	213,119
	150	-	-	-	-	104,880	131,346	145,807	161,082	194,041
CSHN184	80	79,436	99,066	123,693	153,422	188,328	228,456	250,485	273,820	324,388
	90	72,800	91,931	115,811	144,542	178,199	216,826	238,008	260,433	308,990
	100	66,040	84,597	107,652	135,305	167,629	204,668	224,959	246,430	292,883
	110	59,200	77,102	99,247	125,734	156,633	191,988	211,339	231,805	276,052
	120	-	69,520	90,671	115,903	145,287	178,865	197,230	216,642	258,586
	130	-	-	82,009	105,903	133,687	165,400	<b>182,734</b>	201,049	240,600
	140	-	-	-	95,733	121,812	151,555	167,803	184,966	222,011
	150	-	-	-	-	109,290	136,850	151,901	167,797	202,097
CSHN240	80	99,361	124,757	156,454	194,588	239,255	290,506	318,603	348,339	412,688
	90	93,189	117,838	148,473	185,227	228,194	277,423	304,388	332,913	394,596
	100	86,793	110,483	139,848	175,019	216,089	263,108	288,850	316,074	374,921
	110	80,196	102,727	130,624	164,018	203,002	247,625	272,054	297,887	353,723
	120	-	94,651	120,906	152,350	189,077	231,138	254,171	278,534	331,202
	130	-	-	110,812	140,159	174,484	213,840	<b>235,408</b>	258,230	307,596
	140	-	-	-	127,472	159,247	195,748	215,775	236,981	282,894
	150	-	-	-	-	142,928	176,316	194,666	214,117	256,282
CSHN250	80	103,429	129,996	163,080	202,820	249,319	302,641	331,869	362,805	429,776
	90	97,080	122,765	154,673	192,939	237,667	288,921	317,002	346,717	411,020
	100	90,463	115,096	145,646	182,249	225,006	273,980	300,806	329,189	390,598
	110	83,594	107,012	136,031	170,784	211,374	257,864	283,329	310,271	368,560
	120	-	98,585	125,916	158,655	196,903	240,724	264,732	290,136	345,102
	130	-	-	115,413	145,995	181,752	222,746	<b>245,215</b>	268,996	320,469
	140	-	-	-	132,819	165,930	203,934	224,779	246,850	294,646
	150	-	-	-	118,751	148,969	183,710	202,784	222,993	266,789
CSHN315	80	128,011	161,579	203,419	253,709	312,588	380,141	417,183	456,399	541,325
	90	120,095	152,688	193,194	241,790	298,612	363,746	399,441	437,220	518,996
	100	111,770	143,109	181,986	228,577	283,018	345,394	379,568	415,732	493,994
	110	103,069	132,891	169,859	214,150	265,898	325,189	357,674	392,050	466,441
	120	-	122,144	156,955	198,682	247,460	303,373	334,018	366,451	436,654
	130	-	-	143,445	182,383	227,952	280,238	<b>308,912</b>	339,271	405,013
	140	-	-	-	165,314	207,441	255,851	282,424	310,575	371,577
	150	-	-	-	-	185,401	229,555	253,825	279,556	335,372



## Performance Data

**Table 7. Capacity (btu/hr) – voltage 460-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	155,629	195,736	245,952	306,505	377,572	459,269	504,122	551,643	654,658
	90	146,122	184,921	233,427	291,868	360,420	439,200	482,443	528,254	627,545
	100	136,183	173,338	219,774	275,720	341,352	416,788	458,199	502,073	597,171
	110	125,830	161,030	205,059	258,146	320,472	392,153	431,519	473,236	563,686
	120	-	148,116	189,440	239,350	298,026	365,586	402,716	442,080	527,475
	130	-	-	173,115	219,576	274,310	337,437	<b>372,168</b>	409,011	488,999
	140	-	-	-	198,893	249,402	307,789	339,958	374,111	448,339
	150	-	-	-	-	222,674	275,859	305,217	336,419	404,329
CSHL374	80	156,391	196,558	246,448	306,266	376,156	456,195	500,022	546,375	646,589
	90	146,331	184,824	232,779	290,406	357,857	435,212	477,607	522,470	619,527
	100	138,022	174,090	219,423	274,244	338,716	412,929	453,695	496,892	590,509
	110	131,152	164,152	206,263	257,726	318,721	389,355	428,296	469,648	559,521
	120	-	154,853	193,250	240,893	297,982	364,647	401,586	440,927	526,758
	130	-	-	180,349	223,806	276,640	339,004	<b>373,785</b>	410,964	492,475
	140	-	-	-	206,331	254,597	312,341	344,799	379,654	456,518
	150	-	-	-	-	230,994	283,648	313,527	345,783	417,408



**Table 8. Capacity (btu/hr) – voltage 575-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN184	80	79,436	99,066	123,693	153,422	188,328	228,456	250,485	273,820	324,388
	90	72,800	91,931	115,811	144,542	178,199	216,826	238,008	260,433	308,990
	100	66,040	84,597	107,652	135,305	167,629	204,668	224,959	246,430	292,883
	110	59,200	77,102	99,247	125,734	156,633	191,988	211,339	231,805	276,052
	120	-	69,520	90,671	115,903	145,287	178,865	197,230	216,642	258,586
	130	-	-	82,009	105,903	133,687	165,400	<b>182,734</b>	201,049	240,600
	140	-	-	-	95,733	121,812	151,555	167,803	184,966	222,011
	150	-	-	-	-	109,290	136,850	151,901	167,797	202,097
CSHN250	80	103,429	129,996	163,080	202,820	249,319	302,641	331,869	362,805	429,776
	90	97,080	122,765	154,673	192,939	237,667	288,921	317,002	346,717	411,020
	100	90,463	115,096	145,646	182,249	225,006	273,980	300,806	329,189	390,598
	110	83,594	107,012	136,031	170,784	211,374	257,864	283,329	310,271	368,560
	120	-	98,585	125,916	158,655	196,903	240,724	264,732	290,136	345,102
	130	-	-	115,413	145,995	181,752	222,746	<b>245,215</b>	268,996	320,469
	140	-	-	-	132,819	165,930	203,934	224,779	246,850	294,646
	150	-	-	-	118,751	148,969	183,710	202,784	222,993	266,789
CSHN315	80	128,011	161,579	203,419	253,709	312,588	380,141	417,183	456,399	541,325
	90	120,095	152,688	193,194	241,790	298,612	363,746	399,441	437,220	518,996
	100	111,770	143,109	181,986	228,577	283,018	345,394	379,568	415,732	493,994
	110	103,069	132,891	169,859	214,150	265,898	325,189	357,674	392,050	466,441
	120	-	122,144	156,955	198,682	247,460	303,373	334,018	366,451	436,654
	130	-	-	143,445	182,383	227,952	280,238	<b>308,912</b>	339,271	405,013
	140	-	-	-	165,314	207,441	255,851	282,424	310,575	371,577
	150	-	-	-	-	185,401	229,555	253,825	279,556	335,372
CSHN374	80	155,629	195,736	245,952	306,505	377,572	459,269	504,122	551,643	654,658
	90	146,122	184,921	233,427	291,868	360,420	439,200	482,443	528,254	627,545
	100	136,183	173,338	219,774	275,720	341,352	416,788	458,199	502,073	597,171
	110	125,830	161,030	205,059	258,146	320,472	392,153	431,519	473,236	563,686
	120	-	148,116	189,440	239,350	298,026	365,586	402,716	442,080	527,475
	130	-	-	173,115	219,576	274,310	337,437	<b>372,168</b>	409,011	488,999
	140	-	-	-	198,893	249,402	307,789	339,958	374,111	448,339
	150	-	-	-	-	222,674	275,859	305,217	336,419	404,329
CSHL374	80	155,438	195,260	244,804	304,273	373,815	453,507	497,160	543,342	643,214
	90	146,092	184,261	231,844	289,051	356,034	432,874	474,993	519,567	616,014
	100	137,672	173,629	218,740	273,223	337,237	410,872	451,303	494,133	586,926
	110	129,990	163,252	205,435	256,771	317,431	387,518	426,105	467,047	555,933
	120	-	153,069	191,947	239,777	296,747	362,976	399,575	438,493	523,227
	130	-	-	178,312	222,348	275,350	337,453	<b>371,937</b>	408,707	489,055
	140	-	-	-	204,397	253,167	310,871	343,100	377,581	453,260
	150	-	-	-	-	229,371	282,238	311,972	343,910	414,371



## Performance Data

### Power

**Table 9. Power (watts) – voltage 200-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	8,368	8,511	8,605	8,652	8,651	8,602	8,559	8,505	8,360
	90	9,491	9,612	9,701	9,757	9,781	9,774	9,758	9,734	9,662
	100	10,871	10,952	11,016	11,064	11,097	11,113	11,114	11,112	11,096
	110	12,506	12,529	12,552	12,574	12,596	12,618	12,629	12,640	12,661
	120	-	14,345	14,308	14,287	14,281	14,290	14,301	14,316	14,356
	130	-	-	16,284	16,201	16,150	16,129	<b>16,131</b>	16,141	16,183
	140	-	-	-	18,318	18,203	18,135	18,119	18,115	18,141
	150	-	-	-	-	20,441	20,308	20,265	20,238	20,230
CSHN184	80	8,668	8,816	8,914	8,962	8,961	8,910	8,866	8,810	8,659
	90	9,832	9,957	10,048	10,107	10,132	10,124	10,108	10,083	10,009
	100	11,261	11,344	11,411	11,461	11,494	11,511	11,513	11,511	11,494
	110	12,955	12,979	13,002	13,025	13,048	13,070	13,082	13,093	13,115
	120	-	14,859	14,821	14,799	14,793	14,803	14,814	14,829	14,871
	130	-	-	16,868	16,782	16,729	16,708	<b>16,709</b>	16,719	16,764
	140	-	-	-	18,975	18,856	18,785	18,769	18,764	18,792
	150	-	-	-	-	21,174	21,036	20,991	20,963	20,956
CSHN240	80	12,016	12,056	12,135	12,252	12,406	12,599	12,709	12,829	13,097
	90	13,391	13,457	13,540	13,641	13,759	13,896	13,970	14,049	14,221
	100	14,968	15,073	15,175	15,274	15,371	15,464	15,510	15,555	15,644
	110	16,748	16,906	17,040	17,151	17,240	17,305	17,329	17,347	17,366
	120	-	18,954	19,135	19,273	19,367	19,417	19,426	19,425	19,388
	130	-	-	21,460	21,638	21,752	21,802	<b>21,803</b>	21,788	21,710
	140	-	-	-	24,247	24,394	24,458	24,458	24,437	24,332
	150	-	-	-	-	27,295	27,385	27,392	27,372	27,253
CSHN250	80	12,453	12,495	12,577	12,697	12,858	13,057	13,171	13,296	13,574
	90	13,878	13,946	14,033	14,137	14,260	14,401	14,479	14,560	14,738
	100	15,513	15,622	15,727	15,830	15,930	16,027	16,075	16,121	16,213
	110	17,357	17,521	17,660	17,776	17,867	17,935	17,960	17,978	17,998
	120	-	19,644	19,831	19,974	20,071	20,124	20,133	20,131	20,094
	130	-	-	22,241	22,425	22,543	22,595	<b>22,596</b>	22,581	22,500
	140	-	-	-	25,129	25,282	25,348	25,348	25,326	25,217
	150	-	-	-	-	28,288	28,382	28,388	28,367	28,245
CSHN315	80	16,230	16,266	16,377	16,563	16,825	17,162	17,359	17,574	18,062
	90	17,904	17,999	18,128	18,291	18,489	18,721	18,851	18,988	19,290
	100	19,801	19,983	20,159	20,329	20,492	20,649	20,725	20,800	20,944
	110	21,920	22,219	22,471	22,677	22,834	22,945	22,983	23,008	23,025
	120	-	24,707	25,065	25,334	25,516	25,609	25,623	25,614	25,532
	130	-	-	27,939	28,302	28,536	28,641	<b>28,646</b>	28,618	28,465
	140	-	-	-	31,580	31,896	32,042	32,051	32,018	31,824
	150	-	-	-	-	35,594	35,810	35,839	35,816	35,610

**Table 9. Power (watts) – voltage 200-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	20,081	20,125	20,220	20,367	20,566	20,817	20,961	21,119	21,473
	90	22,058	22,117	22,223	22,375	22,573	22,818	22,957	23,108	23,446
	100	24,425	24,498	24,613	24,768	24,965	25,202	25,336	25,481	25,800
	110	27,181	27,268	27,390	27,548	27,742	27,971	28,099	28,235	28,535
	120	-	30,425	30,554	30,714	30,903	31,123	31,244	31,373	31,653
	130	-	-	34,106	34,265	34,450	34,659	<b>34,773</b>	34,893	35,151
	140	-	-	-	38,203	38,381	38,579	38,685	38,795	39,032
	150	-	-	-	-	42,697	42,882	42,980	43,081	43,293
<b>CSHL374</b>	80	17,960	17,936	18,076	18,381	18,850	19,483	19,862	20,281	21,243
	90	19,973	19,967	20,090	20,340	20,719	21,227	21,529	21,863	22,627
	100	22,407	22,418	22,527	22,734	23,040	23,445	23,685	23,949	24,550
	110	25,262	25,287	25,388	25,563	25,813	26,139	26,329	26,539	27,013
	120	-	28,576	28,673	28,827	29,038	29,307	29,463	29,633	30,016
	130	-	-	32,382	32,525	32,715	32,950	<b>33,085</b>	33,231	33,558
	140	-	-	-	36,658	36,843	37,068	37,196	37,333	37,640
	150	-	-	-	-	41,423	41,661	41,795	41,940	42,261



## Performance Data

**Table 10. Power (watts) – voltage 230-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	8,437	8,581	8,677	8,724	8,723	8,673	8,630	8,575	8,429
	90	9,570	9,692	9,781	9,838	9,863	9,855	9,839	9,815	9,742
	100	10,961	11,042	11,107	11,156	11,189	11,205	11,207	11,204	11,188
	110	12,610	12,633	12,656	12,679	12,701	12,723	12,734	12,744	12,766
	120	-	14,464	14,427	14,405	14,399	14,409	14,420	14,434	14,475
	130	-	-	16,419	16,336	16,284	16,263	<b>16,265</b>	16,275	16,318
	140	-	-	-	18,470	18,354	18,286	18,269	18,265	18,292
	150	-	-	-	-	20,611	20,476	20,433	20,405	20,398
CSHN184	80	8,742	8,891	8,990	9,039	9,038	8,986	8,942	8,885	8,733
	90	9,916	10,042	10,134	10,193	10,219	10,211	10,194	10,169	10,094
	100	11,357	11,441	11,509	11,559	11,593	11,609	11,611	11,609	11,592
	110	13,065	13,089	13,113	13,136	13,160	13,182	13,193	13,205	13,227
	120	-	14,986	14,948	14,925	14,919	14,929	14,940	14,956	14,998
	130	-	-	17,012	16,926	16,872	16,851	<b>16,852</b>	16,862	16,907
	140	-	-	-	19,137	19,017	18,946	18,929	18,924	18,952
	150	-	-	-	-	21,355	21,216	21,171	21,142	21,135
CSHN240	80	12,115	12,156	12,236	12,353	12,509	12,703	12,814	12,935	13,206
	90	13,502	13,568	13,652	13,754	13,874	14,011	14,086	14,166	14,338
	100	15,092	15,198	15,301	15,401	15,498	15,593	15,639	15,684	15,773
	110	16,887	17,046	17,181	17,294	17,383	17,448	17,473	17,491	17,510
	120	-	19,111	19,294	19,432	19,527	19,578	19,588	19,586	19,549
	130	-	-	21,638	21,817	21,932	21,982	<b>21,984</b>	21,969	21,890
	140	-	-	-	24,448	24,597	24,660	24,661	24,639	24,534
	150	-	-	-	-	27,521	27,613	27,619	27,598	27,479
CSHN250	80	12,559	12,602	12,684	12,806	12,967	13,168	13,284	13,409	13,690
	90	13,997	14,065	14,153	14,258	14,382	14,524	14,602	14,685	14,864
	100	15,645	15,755	15,861	15,965	16,066	16,164	16,212	16,259	16,351
	110	17,506	17,670	17,811	17,927	18,020	18,088	18,113	18,132	18,152
	120	-	19,812	20,001	20,144	20,243	20,296	20,305	20,303	20,266
	130	-	-	22,431	22,617	22,736	22,788	<b>22,789</b>	22,773	22,692
	140	-	-	-	25,344	25,498	25,564	25,564	25,542	25,433
	150	-	-	-	28,326	28,530	28,624	28,631	28,610	28,486
CSHN315	80	16,369	16,404	16,516	16,704	16,968	17,308	17,506	17,724	18,216
	90	18,056	18,152	18,282	18,447	18,646	18,881	19,011	19,150	19,454
	100	19,969	20,153	20,331	20,502	20,667	20,825	20,902	20,977	21,122
	110	22,106	22,408	22,663	22,870	23,029	23,140	23,178	23,204	23,221
	120	-	24,918	25,278	25,550	25,733	25,827	25,841	25,832	25,749
	130	-	-	28,177	28,543	28,779	28,885	<b>28,889</b>	28,861	28,707
	140	-	-	-	31,849	32,167	32,314	32,324	32,290	32,095
	150	-	-	-	-	35,897	36,115	36,144	36,120	35,913

**Table 10. Power (watts) – voltage 230-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	20,232	20,276	20,372	20,521	20,721	20,973	21,119	21,278	21,635
	90	22,224	22,284	22,390	22,543	22,743	22,989	23,130	23,282	23,622
	100	24,609	24,683	24,798	24,955	25,153	25,392	25,527	25,672	25,994
	110	27,385	27,473	27,596	27,755	27,950	28,181	28,310	28,448	28,750
	120	-	30,654	30,784	30,945	31,136	31,357	31,479	31,609	31,891
	130	-	-	34,362	34,523	34,709	34,920	<b>35,035</b>	35,156	35,416
	140	-	-	-	38,491	38,670	38,869	38,976	39,088	39,326
	150	-	-	-	-	43,019	43,205	43,303	43,405	43,619
<b>CSHL374</b>	80	18,475	18,462	18,608	18,914	19,380	20,006	20,379	20,791	21,737
	90	20,454	20,466	20,601	20,860	21,242	21,749	22,048	22,378	23,132
	100	22,843	22,873	22,998	23,217	23,530	23,937	24,176	24,439	25,035
	110	25,641	25,684	25,799	25,986	26,243	26,572	26,763	26,973	27,444
	120	-	28,899	29,005	29,166	29,382	29,653	29,809	29,980	30,361
	130	-	-	32,614	32,757	32,946	33,180	<b>33,314</b>	33,460	33,785
	140	-	-	-	36,760	36,935	37,153	37,278	37,413	37,717
	150	-	-	-	-	41,350	41,572	41,700	41,840	42,155

**Table 11. Power (watts) – voltage 380-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHL374</b>	80	14,796	14,772	14,839	14,996	15,244	15,582	15,785	16,011	16,531
	90	16,647	16,610	16,642	16,743	16,913	17,152	17,297	17,460	17,837
	100	18,731	18,714	18,743	18,818	18,939	19,107	19,208	19,320	19,580
	110	21,049	21,084	21,141	21,221	21,322	21,446	21,517	21,592	21,761
	120	-	23,721	23,838	23,951	24,062	24,171	24,224	24,276	24,378
	130	-	-	26,831	27,010	27,160	27,280	<b>27,329</b>	27,371	27,433
	140	-	-	-	30,397	30,614	30,774	30,833	30,878	30,925
	150	-	-	-	-	34,425	34,653	34,735	34,796	34,854



## Performance Data

**Table 12. Power (watts) – voltage 400-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	7,945	7,875	7,808	7,745	7,686	7,630	7,604	7,578	7,530
	90	8,865	8,748	8,649	8,570	8,509	8,468	8,454	8,446	8,442
	100	10,031	9,855	9,713	9,605	9,532	9,493	9,487	9,489	9,519
	110	11,444	11,197	11,000	10,853	10,755	10,707	10,702	10,709	10,760
	120	-	12,774	12,510	12,311	12,177	12,108	12,098	12,105	12,166
	130	-	-	14,243	13,981	13,799	13,698	<b>13,677</b>	13,677	13,737
	140	-	-	-	15,862	15,621	15,475	15,438	15,426	15,472
	150	-	-	-	-	17,642	17,441	17,382	17,351	17,372
CSHN184	80	8,236	8,163	8,094	8,028	7,967	7,909	7,882	7,855	7,805
	90	9,189	9,067	8,965	8,883	8,820	8,777	8,763	8,754	8,751
	100	10,398	10,215	10,068	9,957	9,881	9,840	9,834	9,836	9,867
	110	-	11,607	11,402	11,249	11,148	11,098	11,093	11,100	11,153
	120	-	-	12,967	12,761	12,622	12,551	12,541	12,547	12,611
	130	-	-	14,763	14,492	14,303	14,199	<b>14,177</b>	14,177	14,239
	140	-	-	-	16,442	16,192	16,041	16,003	15,990	16,037
	150	-	-	-	-	18,287	18,078	18,017	17,985	18,007
CSHN240	80	9,768	9,731	9,745	9,810	9,925	10,092	10,194	10,309	10,577
	90	10,979	10,965	10,979	11,021	11,091	11,188	11,247	11,313	11,466
	100	12,393	12,417	12,445	12,479	12,517	12,560	12,583	12,607	12,660
	110	14,011	14,086	14,144	14,183	14,205	14,207	14,202	14,192	14,158
	120	-	15,974	16,075	16,135	16,153	16,131	16,104	16,067	15,962
	130	-	-	18,238	18,333	18,364	18,330	<b>18,289</b>	18,232	18,070
	140	-	-	-	20,778	20,835	20,805	20,757	20,687	20,483
	150	-	-	-	-	23,568	23,556	23,508	23,433	23,200
CSHN250	80	10,122	10,084	10,099	10,166	10,286	10,458	10,564	10,683	10,961
	90	11,377	11,363	11,377	11,421	11,493	11,594	11,655	11,724	11,882
	100	12,843	12,867	12,897	12,932	12,971	13,016	13,040	13,065	13,119
	110	14,519	14,598	14,657	14,698	14,720	14,723	14,717	14,707	14,672
	120	-	16,554	16,658	16,720	16,740	16,716	16,688	16,650	16,541
	130	-	-	18,900	18,998	19,030	18,995	<b>18,953</b>	18,894	18,725
	140	-	-	-	21,532	21,591	21,560	21,510	21,438	21,226
	150	-	-	-	-	24,423	24,410	24,361	24,283	24,042
CSHN315	80	13,533	13,626	13,698	13,749	13,777	13,784	13,779	13,769	13,733
	90	14,914	15,028	15,115	15,174	15,206	15,210	15,201	15,186	15,135
	100	16,597	16,733	16,835	16,904	16,939	16,940	16,929	16,908	16,843
	110	18,582	18,740	18,858	18,937	18,976	18,976	18,961	18,936	18,857
	120	-	21,050	21,185	21,274	21,318	21,316	21,298	21,269	21,176
	130	-	-	23,814	23,914	23,963	23,961	<b>23,940</b>	23,907	23,801
	140	-	-	-	26,859	26,913	26,910	26,887	26,850	26,733
	150	-	-	-	-	30,168	30,165	30,140	30,099	29,970

Table 12. Power (watts) – voltage 400-50-3 (continued)

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	15,939	15,992	16,031	16,056	16,067	16,063	16,056	16,045	16,012
	90	17,625	17,655	17,691	17,731	17,777	17,827	17,854	17,882	17,943
	100	19,745	19,733	19,746	19,783	19,845	19,931	19,983	20,041	20,176
	110	22,297	22,225	22,196	22,212	22,271	22,374	22,442	22,520	22,710
	120	-	25,131	25,043	25,018	25,055	25,156	25,231	25,320	25,548
	130	-	-	28,285	28,200	28,198	28,279	<b>28,350</b>	28,441	28,687
	140	-	-	-	31,760	31,699	31,740	31,799	31,883	32,128
	150	-	-	-	-	35,558	35,542	35,579	35,646	35,872



## Performance Data

**Table 13. Power (watts) – voltage 460-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	8,402	8,545	8,640	8,687	8,686	8,636	8,594	8,539	8,393
	90	9,530	9,651	9,740	9,796	9,821	9,813	9,797	9,773	9,701
	100	10,915	10,996	11,060	11,109	11,141	11,157	11,159	11,157	11,140
	110	12,557	12,580	12,602	12,625	12,647	12,669	12,680	12,690	12,711
	120	-	14,403	14,366	14,344	14,338	14,348	14,359	14,373	14,414
	130	-	-	16,350	16,266	16,215	16,194	<b>16,196</b>	16,206	16,248
	140	-	-	-	18,392	18,276	18,208	18,192	18,187	18,214
	150	-	-	-	-	20,523	20,389	20,346	20,319	20,312
CSHN184	80	8,705	8,853	8,951	9,000	8,999	8,948	8,903	8,847	8,696
	90	9,873	9,999	10,091	10,149	10,175	10,167	10,150	10,126	10,051
	100	11,308	11,392	11,459	11,510	11,543	11,560	11,562	11,559	11,542
	110	13,009	13,033	13,057	13,080	13,103	13,126	13,137	13,148	13,170
	120	-	14,922	14,884	14,861	14,855	14,865	14,876	14,891	14,934
	130	-	-	16,939	16,853	16,799	16,778	<b>16,780</b>	16,790	16,834
	140	-	-	-	19,055	18,935	18,865	18,848	18,843	18,871
	150	-	-	-	-	21,264	21,125	21,080	21,052	21,044
CSHN240	80	11,612	11,654	11,736	11,857	12,017	12,217	12,331	12,455	12,733
	90	12,998	13,070	13,160	13,269	13,397	13,544	13,624	13,709	13,893
	100	14,603	14,719	14,833	14,945	15,056	15,164	15,218	15,271	15,376
	110	16,427	16,602	16,755	16,885	16,993	17,078	17,113	17,141	17,182
	120	-	18,719	18,925	19,088	19,208	19,286	19,308	19,320	19,312
	130	-	-	21,344	21,555	21,703	21,787	<b>21,805</b>	21,808	21,765
	140	-	-	-	24,286	24,476	24,582	24,603	24,604	24,542
	150	-	-	-	-	27,528	27,670	27,702	27,708	27,642
CSHN250	80	12,035	12,079	12,164	12,289	12,455	12,662	12,781	12,909	13,197
	90	13,472	13,546	13,640	13,753	13,886	14,037	14,121	14,209	14,399
	100	15,135	15,255	15,374	15,490	15,604	15,717	15,773	15,828	15,936
	110	17,026	17,207	17,365	17,500	17,612	17,701	17,737	17,766	17,809
	120	-	19,402	19,615	19,784	19,909	19,989	20,012	20,025	20,016
	130	-	-	22,123	22,341	22,494	22,581	<b>22,600</b>	22,603	22,559
	140	-	-	-	25,172	25,368	25,478	25,500	25,501	25,437
	150	-	-	-	28,276	28,532	28,679	28,712	28,719	28,650
CSHN315	80	16,150	16,259	16,386	16,531	16,693	16,873	16,969	17,070	17,286
	90	17,771	17,931	18,090	18,245	18,397	18,547	18,621	18,694	18,837
	100	19,719	19,936	20,130	20,300	20,447	20,570	20,623	20,670	20,746
	110	21,996	22,273	22,506	22,696	22,841	22,942	22,976	22,999	23,012
	120	-	24,943	25,220	25,432	25,580	25,663	25,681	25,682	25,636
	130	-	-	28,270	28,510	28,664	28,733	<b>28,736</b>	28,717	28,616
	140	-	-	-	31,928	32,093	32,152	32,142	32,106	31,954
	150	-	-	-	-	35,867	35,920	35,900	35,848	35,649



**Table 13. Power (watts) – voltage 460-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	19,385	19,488	19,676	19,947	20,302	20,741	20,992	21,264	21,871
	90	21,444	21,564	21,741	21,975	22,265	22,613	22,808	23,017	23,479
	100	23,856	24,010	24,194	24,409	24,653	24,927	25,075	25,231	25,565
	110	26,618	26,825	27,036	27,249	27,465	27,684	27,795	27,906	28,131
	120	-	30,011	30,265	30,495	30,701	30,883	30,965	31,042	31,176
	130	-	-	33,882	34,148	34,362	34,525	<b>34,588</b>	34,638	34,700
	140	-	-	-	38,206	38,447	38,610	38,663	38,695	38,702
	150	-	-	-	-	42,957	43,138	43,189	43,213	43,184
<b>CSHL374</b>	80	18,368	18,281	18,372	18,642	19,090	19,716	20,096	20,521	21,504
	90	20,327	20,307	20,415	20,649	21,011	21,500	21,792	22,116	22,859
	100	22,663	22,703	22,828	23,039	23,335	23,716	23,939	24,183	24,734
	110	25,375	25,467	25,612	25,810	26,061	26,365	26,536	26,721	27,130
	120	-	28,601	28,768	28,964	29,190	29,446	29,585	29,731	30,046
	130	-	-	32,294	32,500	32,722	32,960	<b>33,085</b>	33,214	33,483
	140	-	-	-	36,418	36,657	36,907	37,036	37,168	37,440
	150	-	-	-	-	40,995	41,286	41,438	41,594	41,917



## Performance Data

**Table 14. Power (watts) – voltage 575-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN184	80	8,705	8,853	8,951	9,000	8,999	8,948	8,903	8,847	8,696
	90	9,873	9,999	10,091	10,149	10,175	10,167	10,150	10,126	10,051
	100	11,308	11,392	11,459	11,510	11,543	11,560	11,562	11,559	11,542
	110	13,009	13,033	13,057	13,080	13,103	13,126	13,137	13,148	13,170
	120	-	14,922	14,884	14,861	14,855	14,865	14,876	14,891	14,934
	130	-	-	16,939	16,853	16,799	16,778	<b>16,780</b>	16,790	16,834
	140	-	-	-	19,055	18,935	18,865	18,848	18,843	18,871
	150	-	-	-	-	21,264	21,125	21,080	21,052	21,044
CSHN250	80	12,035	12,079	12,164	12,289	12,455	12,662	12,781	12,909	13,197
	90	13,472	13,546	13,640	13,753	13,886	14,037	14,121	14,209	14,399
	100	15,135	15,255	15,374	15,490	15,604	15,717	15,773	15,828	15,936
	110	17,026	17,207	17,365	17,500	17,612	17,701	17,737	17,766	17,809
	120	-	19,402	19,615	19,784	19,909	19,989	20,012	20,025	20,016
	130	-	-	22,123	22,341	22,494	22,581	<b>22,600</b>	22,603	22,559
	140	-	-	-	25,172	25,368	25,478	25,500	25,501	25,437
	150	-	-	-	28,276	28,532	28,679	28,712	28,719	28,650
CSHN315	80	16,150	16,259	16,386	16,531	16,693	16,873	16,969	17,070	17,286
	90	17,771	17,931	18,090	18,245	18,397	18,547	18,621	18,694	18,837
	100	19,719	19,936	20,130	20,300	20,447	20,570	20,623	20,670	20,746
	110	21,996	22,273	22,506	22,696	22,841	22,942	22,976	22,999	23,012
	120	-	24,943	25,220	25,432	25,580	25,663	25,681	25,682	25,636
	130	-	-	28,270	28,510	28,664	28,733	<b>28,736</b>	28,717	28,616
	140	-	-	-	31,928	32,093	32,152	32,142	32,106	31,954
	150	-	-	-	-	35,867	35,920	35,900	35,848	35,649
CSHN374	80	19,385	19,488	19,676	19,947	20,302	20,741	20,992	21,264	21,871
	90	21,444	21,564	21,741	21,975	22,265	22,613	22,808	23,017	23,479
	100	23,856	24,010	24,194	24,409	24,653	24,927	25,075	25,231	25,565
	110	26,618	26,825	27,036	27,249	27,465	27,684	27,795	27,906	28,131
	120	-	30,011	30,265	30,495	30,701	30,883	30,965	31,042	31,176
	130	-	-	33,882	34,148	34,362	34,525	<b>34,588</b>	34,638	34,700
	140	-	-	-	38,206	38,447	38,610	38,663	38,695	38,702
	150	-	-	-	-	42,957	43,138	43,189	43,213	43,184
CSHL374	80	17,958	18,000	18,182	18,504	18,966	19,569	19,923	20,312	21,195
	90	20,013	20,074	20,238	20,505	20,875	21,347	21,622	21,923	22,601
	100	22,466	22,552	22,708	22,934	23,230	23,595	23,804	24,030	24,535
	110	25,316	25,434	25,593	25,792	26,032	26,314	26,469	26,636	26,998
	120	-	28,720	28,891	29,079	29,282	29,502	29,618	29,738	29,990
	130	-	-	32,604	32,794	32,979	33,161	<b>33,250</b>	33,338	33,511
	140	-	-	-	36,938	37,124	37,290	37,365	37,435	37,560
	150	-	-	-	-	41,715	41,888	41,963	42,030	42,138

**Current**
**Table 15. Current (amps) — voltage 200-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	36.1	35.9	35.9	35.9	35.9	36.0	36.1	36.2	36.4
	90	38.5	38.3	38.1	38.0	38.0	38.1	38.1	38.2	38.4
	100	41.4	41.1	40.9	40.7	40.6	40.6	40.7	40.7	40.9
	110	44.8	44.4	44.1	43.9	43.8	43.8	43.8	43.8	44.0
	120	-	48.2	47.9	47.7	47.5	47.5	47.5	47.5	47.6
	130	-	-	52.2	51.9	51.8	51.7	<b>51.7</b>	51.7	51.8
	140	-	-	-	56.7	56.5	56.4	56.4	56.5	56.6
	150	-	-	-	-	61.8	61.8	61.8	61.8	61.9
CSHN184	80	40.6	40.5	40.4	40.3	40.4	40.5	40.6	40.7	41.0
	90	43.3	43.1	42.9	42.8	42.8	42.8	42.9	43.0	43.2
	100	46.6	46.2	46.0	45.8	45.7	45.7	45.8	45.8	46.0
	110	50.4	50.0	49.6	49.4	49.3	49.3	49.3	49.3	49.5
	120	-	54.3	53.9	53.6	53.5	53.4	53.4	53.4	53.6
	130	-	-	58.7	58.4	58.2	58.2	<b>58.2</b>	58.2	58.3
	140	-	-	-	63.8	63.6	63.5	63.5	63.5	63.7
	150	-	-	-	-	69.6	69.5	69.5	69.5	69.7
CSHN240	80	58.8	59.0	59.3	59.5	59.7	59.9	60.0	60.1	60.3
	90	60.8	61.0	61.2	61.3	61.4	61.5	61.6	61.6	61.6
	100	63.3	63.6	63.8	63.9	64.0	64.0	64.0	64.0	63.9
	110	66.4	66.7	67.0	67.2	67.3	67.3	67.2	67.2	67.0
	120	-	70.5	70.9	71.2	71.3	71.4	71.3	71.3	71.1
	130	-	-	75.5	75.9	76.2	76.3	<b>76.3</b>	76.2	76.0
	140	-	-	-	81.4	81.8	82.0	82.0	82.0	81.9
	150	-	-	-	-	88.1	88.5	88.6	88.7	88.7
CSHN250	80	66.2	66.5	66.7	66.9	67.2	67.4	67.5	67.7	67.9
	90	68.4	68.7	68.9	69.0	69.2	69.3	69.3	69.3	69.4
	100	71.2	71.5	71.8	71.9	72.0	72.0	72.0	72.0	71.9
	110	74.7	75.1	75.4	75.6	75.7	75.7	75.7	75.6	75.4
	120	-	79.4	79.8	80.1	80.3	80.3	80.3	80.2	80.0
	130	-	-	85.0	85.5	85.7	85.8	<b>85.8</b>	85.8	85.6
	140	-	-	-	91.6	92.0	92.3	92.3	92.3	92.2
	150	-	-	-	-	99.2	99.6	99.8	99.8	99.8
CSHN315	80	73.0	73.1	73.4	73.8	74.3	75.0	75.4	75.8	76.8
	90	75.4	75.7	76.1	76.5	76.9	77.4	77.6	77.9	78.5
	100	78.9	79.4	80.0	80.4	80.8	81.2	81.3	81.5	81.7
	110	83.4	84.3	85.1	85.6	86.1	86.3	86.4	86.4	86.4
	120	-	90.4	91.4	92.1	92.6	92.9	92.9	92.8	92.6
	130	-	-	98.9	99.9	100.5	100.8	<b>100.8</b>	100.7	100.2
	140	-	-	-	108.9	109.7	110.1	110.1	109.9	109.3
	150	-	-	-	-	120.2	120.7	120.7	120.6	120.0



## Performance Data

**Table 15. Current (amps) — voltage 200-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	84.3	84.7	85.2	85.8	86.4	87.1	87.4	87.8	88.5
	90	87.4	88.2	89.0	89.7	90.4	91.0	91.3	91.6	92.2
	100	91.9	93.0	94.0	94.9	95.6	96.3	96.5	96.8	97.2
	110	97.6	99.0	100.3	101.4	102.2	102.8	103.1	103.3	103.5
	120	-	106.4	107.9	109.2	110.1	110.7	110.9	111.1	111.1
	130	-	-	116.9	118.3	119.3	119.9	<b>120.1</b>	120.2	120.1
	140	-	-	-	128.7	129.8	130.4	130.6	130.6	130.3
	150	-	-	-	-	141.6	142.3	142.4	142.4	141.9
	<b>CSHL374</b>	80	53.0	52.9	53.4	54.4	55.9	58.0	59.3	60.6
90		58.9	58.8	59.1	59.9	61.1	62.7	63.7	64.8	67.3
100		66.1	66.0	66.3	66.9	67.9	69.2	69.9	70.8	72.8
110		74.5	74.6	74.9	75.4	76.2	77.3	77.9	78.6	80.1
120		-	84.4	84.8	85.4	86.2	87.1	87.6	88.2	89.4
130		-	-	96.2	96.9	97.7	98.6	<b>99.1</b>	99.6	100.7
140		-	-	-	109.9	110.8	111.8	112.3	112.8	113.9
150		-	-	-	-	125.5	126.7	127.3	127.8	129.0

## Performance Data

**Table 16. Current (amps) — voltage 230-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	34.4	34.2	34.2	34.1	34.2	34.3	34.4	34.5	34.7
	90	36.7	36.4	36.3	36.2	36.2	36.2	36.3	36.4	36.6
	100	39.4	39.1	38.9	38.8	38.7	38.7	38.7	38.8	38.9
	110	42.6	42.3	42.0	41.8	41.7	41.7	41.7	41.7	41.9
	120	-	45.9	45.6	45.4	45.2	45.2	45.2	45.2	45.3
	130	-	-	49.7	49.4	49.3	49.2	<b>49.2</b>	49.2	49.3
	140	-	-	-	54.0	53.8	53.8	53.8	53.8	53.9
	150	-	-	-	-	58.9	58.8	58.8	58.8	59.0
CSHN184	80	35.6	35.5	35.4	35.4	35.4	35.5	35.6	35.7	36.0
	90	38.0	37.7	37.6	37.5	37.5	37.5	37.6	37.7	37.9
	100	40.8	40.5	40.3	40.2	40.1	40.1	40.1	40.2	40.3
	110	44.2	43.8	43.5	43.3	43.2	43.2	43.2	43.2	43.4
	120	-	47.6	47.3	47.0	46.9	46.8	46.8	46.8	47.0
	130	-	-	51.5	51.2	51.1	51.0	<b>51.0</b>	51.0	51.1
	140	-	-	-	55.9	55.8	55.7	55.7	55.7	55.8
	150	-	-	-	-	61.0	60.9	60.9	61.0	61.1
CSHN240	80	56.0	56.2	56.4	56.6	56.8	57.0	57.1	57.2	57.4
	90	57.9	58.1	58.3	58.4	58.5	58.6	58.6	58.7	58.7
	100	60.3	60.5	60.7	60.9	60.9	61.0	60.9	60.9	60.8
	110	63.2	63.6	63.8	64.0	64.1	64.1	64.0	64.0	63.8
	120	-	67.2	67.5	67.8	67.9	68.0	67.9	67.9	67.7
	130	-	-	71.9	72.3	72.5	72.6	<b>72.6</b>	72.6	72.4
	140	-	-	-	77.5	77.9	78.1	78.1	78.1	78.0
	150	-	-	-	-	83.9	84.3	84.4	84.5	84.4
CSHN250	80	58.1	58.3	58.5	58.7	58.9	59.1	59.2	59.3	59.5
	90	60.0	60.2	60.4	60.5	60.6	60.7	60.8	60.8	60.8
	100	62.5	62.7	62.9	63.1	63.1	63.2	63.2	63.1	63.0
	110	65.5	65.9	66.1	66.3	66.4	66.4	66.4	66.3	66.1
	120	-	69.6	70.0	70.3	70.4	70.4	70.4	70.3	70.1
	130	-	-	74.5	74.9	75.2	75.3	<b>75.3</b>	75.2	75.0
	140	-	-	-	80.3	80.7	80.9	80.9	80.9	80.8
	150	-	-	-	86.4	87.0	87.3	87.5	87.5	87.5
CSHN315	80	64.1	64.1	64.3	64.7	65.1	65.7	66.1	66.5	67.3
	90	66.1	66.4	66.7	67.0	67.4	67.9	68.1	68.3	68.8
	100	69.1	69.7	70.1	70.5	70.9	71.2	71.3	71.4	71.6
	110	73.1	73.9	74.6	75.1	75.5	75.7	75.8	75.8	75.8
	120	-	79.2	80.1	80.8	81.2	81.4	81.5	81.4	81.2
	130	-	-	86.7	87.6	88.1	88.4	<b>88.4</b>	88.3	87.9
	140	-	-	-	95.5	96.2	96.5	96.5	96.4	95.9
	150	-	-	-	-	105.4	105.8	105.9	105.8	105.2



## Performance Data

**Table 16. Current (amps) — voltage 230-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	73.9	74.3	74.7	75.2	75.8	76.3	76.6	76.9	77.6
	90	76.7	77.3	78.0	78.6	79.2	79.8	80.1	80.3	80.8
	100	80.5	81.5	82.4	83.2	83.8	84.4	84.6	84.9	85.2
	110	85.6	86.8	87.9	88.9	89.6	90.2	90.4	90.5	90.7
	120	-	93.3	94.6	95.7	96.5	97.1	97.3	97.4	97.4
	130	-	-	102.5	103.7	104.6	105.1	<b>105.3</b>	105.4	105.3
	140	-	-	-	112.8	113.8	114.4	114.5	114.5	114.3
	150	-	-	-	-	124.2	124.7	124.8	124.8	124.4
CSHL374	80	64.7	64.9	65.4	66.3	67.5	69.1	70.0	71.0	73.2
	90	68.6	68.7	69.2	69.9	70.9	72.2	73.0	73.8	75.7
	100	73.7	73.9	74.2	74.8	75.7	76.8	77.5	78.2	79.8
	110	80.1	80.3	80.6	81.1	81.9	82.8	83.4	84.0	85.4
	120	-	87.9	88.2	88.7	89.4	90.2	90.7	91.3	92.5
	130	-	-	97.2	97.6	98.3	99.1	<b>99.6</b>	100.1	101.2
	140	-	-	-	107.9	108.6	109.4	109.8	110.3	111.5
	150	-	-	-	-	120.2	121.1	121.5	122.1	123.3

**Table 17. Current (amps) — voltage 380-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHL374	80	24.9	24.9	25.0	25.3	25.8	26.4	26.7	27.1	28.0
	90	27.6	27.5	27.6	27.8	28.1	28.6	28.8	29.1	29.8
	100	30.7	30.7	30.8	30.9	31.1	31.4	31.6	31.8	32.3
	110	34.2	34.3	34.4	34.6	34.8	35.0	35.2	35.3	35.6
	120	-	38.4	38.7	38.9	39.1	39.3	39.4	39.6	39.8
	130	-	-	43.4	43.8	44.1	44.4	<b>44.5</b>	44.6	44.7
	140	-	-	-	49.3	49.7	50.1	50.2	50.3	50.5
	150	-	-	-	-	56.0	56.5	56.7	56.9	57.1

**Table 18. Current (amps) — voltage 400-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	22.6	21.7	21.0	20.6	20.4	20.4	20.6	20.7	21.3
	90	23.2	22.3	21.6	21.1	20.8	20.8	20.9	21.0	21.4
	100	24.1	23.2	22.5	21.9	21.6	21.5	21.5	21.6	21.9
	110	25.3	24.3	23.6	23.1	22.8	22.6	22.6	22.6	22.9
	120	-	25.8	25.1	24.6	24.2	24.1	24.1	24.1	24.3
	130	-	-	26.9	26.4	26.1	25.9	<b>25.9</b>	25.9	26.1
	140	-	-	-	28.5	28.3	28.1	28.1	28.1	28.3
	150	-	-	-	-	30.8	30.7	30.7	30.8	30.9
CSHN184	80	23.4	22.5	21.8	21.3	21.1	21.2	21.3	21.5	22.1
	90	24.1	23.1	22.4	21.8	21.6	21.5	21.6	21.7	22.2
	100	25.0	24.0	23.3	22.7	22.4	22.3	22.3	22.4	22.7
	110	-	25.2	24.5	23.9	23.6	23.4	23.4	23.5	23.7
	120	-	-	26.0	25.5	25.1	24.9	24.9	24.9	25.1
	130	-	-	27.8	27.3	27.0	26.9	<b>26.8</b>	26.8	27.0
	140	-	-	-	29.6	29.3	29.2	29.1	29.2	29.3
	150	-	-	-	-	31.9	31.8	31.8	31.9	32.1
CSHN240	80	22.4	22.3	22.3	22.3	22.3	22.4	22.4	22.5	22.6
	90	23.3	23.3	23.4	23.4	23.4	23.5	23.5	23.5	23.6
	100	24.6	24.7	24.9	24.9	25.0	25.0	25.0	25.0	25.0
	110	26.3	26.6	26.8	26.9	27.0	27.0	27.0	27.0	26.9
	120	-	28.9	29.1	29.3	29.4	29.4	29.4	29.3	29.1
	130	-	-	31.9	32.1	32.2	32.2	<b>32.2</b>	32.1	31.8
	140	-	-	-	35.4	35.5	35.4	35.4	35.2	34.9
	150	-	-	-	-	39.2	39.1	39.0	38.8	38.4
CSHN250	80	23.2	23.1	23.1	23.1	23.1	23.2	23.2	23.3	23.4
	90	24.1	24.1	24.2	24.2	24.3	24.3	24.4	24.4	24.4
	100	25.5	25.6	25.8	25.9	25.9	26.0	26.0	26.0	25.9
	110	27.3	27.6	27.8	27.9	28.0	28.0	28.0	27.9	27.8
	120	-	29.9	30.2	30.4	30.5	30.5	30.4	30.4	30.2
	130	-	-	33.1	33.3	33.4	33.4	<b>33.3</b>	33.2	33.0
	140	-	-	-	36.7	36.8	36.7	36.6	36.5	36.2
	150	-	-	-	-	40.6	40.5	40.4	40.2	39.8
CSHN315	80	30.8	31.0	31.1	31.2	31.2	31.2	31.1	31.1	31.0
	90	31.9	32.2	32.4	32.5	32.6	32.6	32.5	32.5	32.3
	100	33.6	33.9	34.2	34.3	34.4	34.4	34.4	34.4	34.2
	110	35.7	36.1	36.5	36.7	36.8	36.8	36.8	36.7	36.5
	120	-	38.9	39.3	39.5	39.6	39.7	39.6	39.5	39.3
	130	-	-	42.6	42.8	43.0	43.0	<b>42.9</b>	42.9	42.6
	140	-	-	-	46.7	46.8	46.8	46.8	46.6	46.3
	150	-	-	-	-	51.2	51.1	51.0	50.9	50.5



## Performance Data

**Table 18. Current (amps) — voltage 400-50-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	31.4	31.5	31.6	31.7	31.7	31.7	31.7	31.6	31.5
	90	33.2	33.4	33.5	33.6	33.7	33.7	33.7	33.7	33.7
	100	35.7	35.9	36.0	36.2	36.3	36.4	36.4	36.4	36.5
	110	38.9	39.1	39.2	39.4	39.5	39.6	39.6	39.7	39.7
	120	-	42.9	43.1	43.2	43.3	43.4	43.4	43.5	43.5
	130	-	-	47.5	47.6	47.7	47.8	<b>47.8</b>	47.8	47.9
	140	-	-	-	52.7	52.7	52.7	52.7	52.8	52.8
	150	-	-	-	-	58.3	58.3	58.3	58.2	58.2



## Performance Data

**Table 19. Current (amps) — voltage 460-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	17.6	17.5	17.5	17.4	17.5	17.5	17.6	17.6	17.7
	90	18.7	18.6	18.5	18.5	18.5	18.5	18.5	18.6	18.7
	100	20.1	20.0	19.9	19.8	19.8	19.8	19.8	19.8	19.9
	110	21.8	21.6	21.5	21.4	21.3	21.3	21.3	21.3	21.4
	120	-	23.5	23.3	23.2	23.1	23.1	23.1	23.1	23.2
	130	-	-	25.4	25.3	25.2	25.1	<b>25.1</b>	25.2	25.2
	140	-	-	-	27.6	27.5	27.5	27.5	27.5	27.5
	150	-	-	-	-	30.1	30.1	30.1	30.1	30.1
CSHN184	80	18.2	18.1	18.1	18.1	18.1	18.2	18.2	18.2	18.4
	90	19.4	19.3	19.2	19.2	19.2	19.2	19.2	19.2	19.3
	100	20.9	20.7	20.6	20.5	20.5	20.5	20.5	20.5	20.6
	110	22.6	22.4	22.2	22.1	22.1	22.1	22.1	22.1	22.2
	120	-	24.3	24.1	24.0	24.0	23.9	23.9	23.9	24.0
	130	-	-	26.3	26.2	26.1	26.1	<b>26.1</b>	26.1	26.1
	140	-	-	-	28.6	28.5	28.5	28.5	28.5	28.5
	150	-	-	-	-	31.2	31.1	31.1	31.1	31.2
CSHN240	80	20.3	20.6	20.8	20.9	21.1	21.2	21.3	21.3	21.4
	90	21.7	21.9	22.1	22.3	22.4	22.5	22.6	22.6	22.6
	100	23.4	23.7	23.9	24.1	24.2	24.3	24.3	24.3	24.3
	110	25.5	25.8	26.0	26.2	26.3	26.4	26.4	26.4	26.4
	120	-	28.2	28.5	28.7	28.9	29.0	29.0	29.0	28.9
	130	-	-	31.4	31.7	31.8	31.9	<b>32.0</b>	32.0	31.9
	140	-	-	-	35.0	35.2	35.3	35.4	35.4	35.3
	150	-	-	-	-	38.9	39.1	39.2	39.2	39.2
CSHN250	80	21.1	21.3	21.5	21.7	21.9	22.0	22.0	22.1	22.2
	90	22.5	22.7	22.9	23.1	23.3	23.4	23.4	23.4	23.4
	100	24.3	24.5	24.8	24.9	25.1	25.1	25.2	25.2	25.2
	110	26.4	26.7	27.0	27.2	27.3	27.4	27.4	27.4	27.3
	120	-	29.2	29.5	29.8	29.9	30.0	30.0	30.0	30.0
	130	-	-	32.5	32.8	33.0	33.1	<b>33.1</b>	33.1	33.0
	140	-	-	-	36.2	36.5	36.6	36.6	36.7	36.6
	150	-	-	-	40.0	40.3	40.6	40.6	40.6	40.6
CSHN315	80	28.6	28.8	29.0	29.1	29.2	29.3	29.3	29.3	29.4
	90	30.1	30.4	30.6	30.8	30.9	31.1	31.1	31.1	31.2
	100	32.2	32.5	32.8	33.0	33.2	33.3	33.3	33.4	33.4
	110	34.8	35.1	35.4	35.7	35.9	36.0	36.0	36.1	36.1
	120	-	38.3	38.6	38.9	39.0	39.2	39.2	39.2	39.2
	130	-	-	42.3	42.5	42.7	42.8	<b>42.8</b>	42.8	42.7
	140	-	-	-	46.7	46.8	46.9	46.9	46.9	46.7
	150	-	-	-	-	51.5	51.5	51.4	51.4	51.2



## Performance Data

**Table 19. Current (amps) — voltage 460-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	30.2	30.3	30.3	30.4	30.5	30.6	30.7	30.7	30.9
	90	32.2	32.5	32.7	32.9	33.1	33.4	33.5	33.6	33.9
	100	35.0	35.3	35.7	36.0	36.3	36.6	36.8	36.9	37.2
	110	38.5	38.9	39.3	39.6	40.0	40.3	40.5	40.6	41.0
	120	-	43.1	43.5	43.8	44.2	44.5	44.6	44.8	45.0
	130	-	-	48.3	48.6	48.9	49.1	<b>49.3</b>	49.3	49.5
	140	-	-	-	54.0	54.2	54.3	54.3	54.3	54.3
	150	-	-	-	-	59.9	59.8	59.8	59.7	59.5
<b>CSHL374</b>	80	26.2	26.0	26.2	26.6	27.2	28.1	28.6	29.2	30.6
	90	28.5	28.4	28.6	28.9	29.4	30.1	30.5	31.0	32.0
	100	31.4	31.4	31.6	31.9	32.3	32.8	33.1	33.5	34.3
	110	34.8	34.9	35.1	35.4	35.7	36.2	36.4	36.7	37.3
	120	-	39.0	39.2	39.5	39.9	40.2	40.5	40.7	41.2
	130	-	-	43.9	44.2	44.6	45.0	<b>45.2</b>	45.4	45.8
	140	-	-	-	49.5	50.0	50.4	50.6	50.8	51.3
	150	-	-	-	-	56.0	56.5	56.7	57.0	57.6

**Table 20. Current (amps) — voltage 575-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN184	80	14.6	14.5	14.5	14.5	14.5	14.5	14.6	14.6	14.7
	90	15.5	15.4	15.4	15.3	15.3	15.3	15.4	15.4	15.5
	100	16.7	16.6	16.5	16.4	16.4	16.4	16.4	16.4	16.5
	110	18.1	17.9	17.8	17.7	17.7	17.7	17.7	17.7	17.7
	120	-	19.4	19.3	19.2	19.2	19.1	19.1	19.2	19.2
	130	-	-	21.0	20.9	20.9	20.8	<b>20.8</b>	20.8	20.9
	140	-	-	-	22.9	22.8	22.8	22.8	22.8	22.8
	150	-	-	-	-	24.9	24.9	24.9	24.9	25.0
CSHN250	80	16.9	17.0	17.2	17.4	17.5	17.6	17.6	17.7	17.8
	90	18.0	18.2	18.4	18.5	18.6	18.7	18.7	18.7	18.8
	100	19.4	19.6	19.8	20.0	20.1	20.1	20.1	20.1	20.1
	110	21.1	21.4	21.6	21.7	21.8	21.9	21.9	21.9	21.9
	120	-	23.4	23.6	23.8	24.0	24.0	24.0	24.0	24.0
	130	-	-	26.0	26.2	26.4	26.5	<b>26.5</b>	26.5	26.4
	140	-	-	-	29.0	29.2	29.3	29.3	29.3	29.3
	150	-	-	-	32.0	32.3	32.4	32.5	32.5	32.5
CSHN315	80	22.9	23.1	23.2	23.3	23.4	23.4	23.5	23.5	23.5
	90	24.1	24.3	24.5	24.6	24.8	24.8	24.9	24.9	24.9
	100	25.8	26.0	26.2	26.4	26.5	26.6	26.7	26.7	26.7
	110	27.8	28.1	28.3	28.5	28.7	28.8	28.8	28.8	28.8
	120	-	30.6	30.9	31.1	31.2	31.3	31.4	31.4	31.3
	130	-	-	33.8	34.0	34.2	34.2	<b>34.2</b>	34.2	34.2
	140	-	-	-	37.4	37.5	37.5	37.5	37.5	37.4
	150	-	-	-	-	41.2	41.2	41.2	41.1	40.9
CSHN374	80	24.2	24.2	24.3	24.3	24.4	24.5	24.5	24.6	24.7
	90	25.8	26.0	26.1	26.3	26.5	26.7	26.8	26.9	27.1
	100	28.0	28.3	28.5	28.8	29.0	29.3	29.4	29.5	29.8
	110	30.8	31.1	31.4	31.7	32.0	32.3	32.4	32.5	32.8
	120	-	34.5	34.8	35.1	35.4	35.6	35.7	35.8	36.0
	130	-	-	38.7	38.9	39.1	39.3	<b>39.4</b>	39.5	39.6
	140	-	-	-	43.2	43.3	43.4	43.4	43.5	43.5
	150	-	-	-	-	47.9	47.9	47.8	47.8	47.6
CSHL374	80	20.4	20.4	20.6	21.0	21.5	22.2	22.6	23.1	24.1
	90	22.4	22.4	22.6	22.9	23.3	23.8	24.1	24.5	25.2
	100	24.8	24.9	25.0	25.2	25.6	26.0	26.2	26.5	27.1
	110	27.7	27.8	27.9	28.2	28.4	28.8	28.9	29.1	29.6
	120	-	31.2	31.4	31.6	31.8	32.1	32.3	32.4	32.7
	130	-	-	35.3	35.6	35.8	36.1	<b>36.2</b>	36.3	36.5
	140	-	-	-	40.0	40.3	40.6	40.7	40.8	41.0
	150	-	-	-	-	45.4	45.7	45.8	46.0	46.2



## Performance Data

### Refrigerant Flow

Table 21. Refrigerant flow (lb/hr) — voltage 200-60-3

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	898	1,104	1,361	1,668	2,026	2,433	2,655	2,889	3,395
	90	863	1,075	1,336	1,647	2,007	2,416	2,639	2,874	3,381
	100	825	1,042	1,307	1,622	1,985	2,396	2,620	2,856	3,364
	110	784	1,005	1,275	1,593	1,959	2,373	2,598	2,835	3,344
	120	-	966	1,240	1,561	1,931	2,347	2,573	2,811	3,321
	130	-	-	1,201	1,526	1,899	2,318	<b>2,545</b>	2,783	3,295
	140	-	-	-	1,488	1,863	2,285	2,513	2,753	3,267
	150	-	-	-	-	1,825	2,249	2,479	2,720	3,235
CSHN184	80	935	1,151	1,418	1,739	2,111	2,534	2,766	3,010	3,537
	90	899	1,120	1,392	1,715	2,091	2,517	2,749	2,994	3,522
	100	860	1,085	1,362	1,689	2,067	2,496	2,729	2,975	3,504
	110	817	1,047	1,328	1,660	2,041	2,472	2,706	2,953	3,484
	120	-	1,006	1,291	1,626	2,011	2,445	2,680	2,928	3,460
	130	-	-	1,251	1,590	1,978	2,415	<b>2,651</b>	2,900	3,433
	140	-	-	-	1,550	1,941	2,381	2,618	2,868	3,403
	150	-	-	-	-	1,901	2,344	2,582	2,833	3,370
CSHN240	80	1,146	1,429	1,778	2,194	2,675	3,223	3,521	3,836	4,514
	90	1,127	1,414	1,768	2,187	2,671	3,220	3,519	3,834	4,511
	100	1,106	1,397	1,753	2,174	2,660	3,209	3,508	3,823	4,500
	110	1,085	1,377	1,735	2,156	2,642	3,191	3,490	3,804	4,479
	120	-	1,355	1,712	2,133	2,618	3,166	3,463	3,776	4,449
	130	-	-	1,686	2,105	2,587	3,133	<b>3,429</b>	3,741	4,411
	140	-	-	-	2,071	2,550	3,092	3,387	3,697	4,363
	150	-	-	-	-	2,507	3,044	3,337	3,644	4,306
CSHN250	80	1,193	1,489	1,853	2,286	2,788	3,358	3,668	3,996	4,701
	90	1,174	1,473	1,841	2,278	2,782	3,353	3,665	3,993	4,699
	100	1,153	1,456	1,826	2,264	2,770	3,342	3,653	3,982	4,688
	110	1,130	1,435	1,807	2,246	2,751	3,323	3,634	3,962	4,667
	120	-	1,411	1,783	2,222	2,726	3,297	3,607	3,934	4,636
	130	-	-	1,756	2,193	2,695	3,263	<b>3,572</b>	3,897	4,595
	140	-	-	-	2,158	2,657	3,222	3,528	3,851	4,544
	150	-	-	-	-	2,613	3,172	3,476	3,796	4,483
CSHN315	80	1,496	1,867	2,325	2,870	3,502	4,220	4,612	5,025	5,916
	90	1,471	1,848	2,312	2,863	3,499	4,222	4,616	5,031	5,925
	100	1,444	1,825	2,293	2,846	3,486	4,211	4,605	5,021	5,916
	110	1,414	1,797	2,266	2,821	3,461	4,186	4,580	4,996	5,890
	120	-	1,764	2,232	2,786	3,424	4,147	4,540	4,955	5,846
	130	-	-	2,191	2,741	3,376	4,095	<b>4,486</b>	4,898	5,784
	140	-	-	-	2,686	3,316	4,028	4,416	4,824	5,704
	150	-	-	-	-	3,243	3,947	4,331	4,735	5,605

**Table 21. Refrigerant flow (lb/hr) – voltage 200-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	1,825	2,268	2,814	3,462	4,214	5,067	5,532	6,022	7,079
	90	1,799	2,249	2,801	3,456	4,213	5,072	5,539	6,032	7,093
	100	1,768	2,222	2,779	3,438	4,199	5,061	5,530	6,024	7,088
	110	1,730	2,188	2,747	3,408	4,170	5,034	5,504	5,998	7,063
	120	-	2,144	2,704	3,365	4,128	4,991	5,460	5,954	7,018
	130	-	-	2,651	3,310	4,070	4,931	<b>5,399</b>	5,892	6,952
	140	-	-	-	3,242	3,998	4,854	5,320	5,810	6,866
	150	-	-	-	-	3,911	4,761	5,223	5,710	6,758
<b>CSHL374</b>	80	1,867	2,316	2,868	3,522	4,278	5,136	5,603	6,094	7,153
	90	1,838	2,291	2,847	3,505	4,267	5,130	5,600	6,095	7,160
	100	1,827	2,275	2,828	3,486	4,248	5,115	5,588	6,086	7,159
	110	1,834	2,268	2,811	3,463	4,223	5,092	5,566	6,067	7,149
	120	-	2,269	2,796	3,437	4,191	5,059	5,535	6,040	7,131
	130	-	-	2,784	3,408	4,153	5,018	<b>5,495</b>	6,002	7,105
	140	-	-	-	3,376	4,107	4,968	5,446	5,956	7,070
	150	-	-	-	-	4,055	4,909	5,387	5,899	7,027



## Performance Data

**Table 22. Refrigerant flow (lb/hr) — voltage 230-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	908	1,117	1,377	1,687	2,049	2,460	2,685	2,922	3,434
	90	873	1,087	1,351	1,665	2,030	2,444	2,669	2,907	3,419
	100	835	1,054	1,322	1,640	2,007	2,424	2,650	2,889	3,402
	110	793	1,017	1,290	1,611	1,982	2,400	2,628	2,867	3,382
	120	-	977	1,254	1,579	1,953	2,374	2,602	2,843	3,359
	130	-	-	1,215	1,544	1,920	2,344	<b>2,574</b>	2,815	3,333
	140	-	-	-	1,505	1,884	2,311	2,542	2,784	3,304
	150	-	-	-	-	1,845	2,275	2,507	2,751	3,272
CSHN184	80	946	1,164	1,435	1,758	2,135	2,563	2,797	3,044	3,577
	90	910	1,132	1,408	1,735	2,114	2,545	2,780	3,028	3,562
	100	870	1,098	1,377	1,708	2,091	2,524	2,760	3,009	3,544
	110	826	1,059	1,343	1,678	2,064	2,500	2,737	2,987	3,523
	120	-	1,017	1,306	1,645	2,034	2,473	2,711	2,961	3,499
	130	-	-	1,265	1,608	2,000	2,442	<b>2,681</b>	2,933	3,472
	140	-	-	-	1,567	1,963	2,408	2,648	2,901	3,442
	150	-	-	-	-	1,923	2,370	2,612	2,865	3,408
CSHN240	80	1,159	1,445	1,798	2,218	2,706	3,260	3,562	3,880	4,565
	90	1,139	1,430	1,788	2,211	2,701	3,257	3,559	3,877	4,563
	100	1,119	1,413	1,773	2,199	2,690	3,246	3,548	3,866	4,551
	110	1,097	1,393	1,755	2,181	2,672	3,228	3,529	3,847	4,530
	120	-	1,370	1,732	2,158	2,648	3,202	3,503	3,819	4,500
	130	-	-	1,705	2,129	2,617	3,168	<b>3,468</b>	3,783	4,461
	140	-	-	-	2,095	2,579	3,127	3,425	3,739	4,412
	150	-	-	-	-	2,535	3,079	3,374	3,686	4,355
CSHN250	80	1,207	1,506	1,874	2,312	2,819	3,396	3,710	4,041	4,755
	90	1,187	1,490	1,862	2,303	2,813	3,392	3,706	4,038	4,753
	100	1,166	1,472	1,847	2,290	2,801	3,380	3,695	4,027	4,741
	110	1,143	1,451	1,827	2,271	2,782	3,361	3,676	4,007	4,720
	120	-	1,427	1,804	2,247	2,757	3,335	3,648	3,978	4,688
	130	-	-	1,776	2,217	2,726	3,300	<b>3,612</b>	3,941	4,647
	140	-	-	-	2,182	2,688	3,258	3,568	3,894	4,596
	150	-	-	-	2,142	2,642	3,208	3,515	3,839	4,534
CSHN315	80	1,513	1,888	2,351	2,903	3,542	4,268	4,664	5,082	5,983
	90	1,488	1,869	2,339	2,895	3,539	4,270	4,668	5,088	5,992
	100	1,460	1,846	2,319	2,879	3,525	4,258	4,657	5,078	5,983
	110	1,430	1,818	2,292	2,853	3,500	4,233	4,632	5,052	5,957
	120	-	1,784	2,258	2,818	3,463	4,194	4,592	5,011	5,912
	130	-	-	2,216	2,772	3,414	4,141	<b>4,537</b>	4,953	5,850
	140	-	-	-	2,717	3,353	4,074	4,466	4,879	5,768
	150	-	-	-	-	3,280	3,992	4,380	4,789	5,668

## Performance Data

**Table 22. Refrigerant flow (lb/hr) — voltage 230-60-3 (continued)**

Compressor Temp °F	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	1,846	2,294	2,846	3,502	4,261	5,124	5,595	6,090	7,159
	90	1,820	2,275	2,833	3,496	4,261	5,129	5,602	6,100	7,174
	100	1,788	2,248	2,811	3,477	4,247	5,118	5,593	6,093	7,169
	110	1,750	2,212	2,778	3,447	4,218	5,091	5,566	6,067	7,144
	120	-	2,169	2,735	3,404	4,175	5,048	5,522	6,022	7,098
	130	-	-	2,681	3,348	4,117	4,987	<b>5,460</b>	5,959	7,031
	140	-	-	-	3,279	4,044	4,910	5,380	5,876	6,944
	150	-	-	-	-	3,955	4,815	5,282	5,775	6,835
CSHL374	80	1,848	2,296	2,848	3,502	4,258	5,117	5,584	6,076	7,136
	90	1,820	2,272	2,827	3,485	4,246	5,110	5,581	6,076	7,143
	100	1,810	2,257	2,809	3,466	4,229	5,096	5,569	6,068	7,142
	110	1,818	2,251	2,794	3,445	4,206	5,075	5,550	6,051	7,135
	120	-	2,255	2,782	3,423	4,177	5,046	5,522	6,027	7,120
	130	-	-	2,773	3,398	4,143	5,009	<b>5,487</b>	5,994	7,097
	140	-	-	-	3,371	4,104	4,965	5,443	5,953	7,068
	150	-	-	-	-	4,059	4,913	5,391	5,904	7,031

**Table 23. Refrigerant flow (lb/hr) — voltage 380-50-3**

Compressor Temp °F	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHL374	80	1,559	1,934	2,395	2,942	3,575	4,293	4,684	5,096	5,983
	90	1,549	1,919	2,377	2,924	3,559	4,281	4,674	5,090	5,985
	100	1,545	1,906	2,359	2,902	3,537	4,261	4,657	5,076	5,979
	110	1,546	1,895	2,339	2,877	3,510	4,236	4,634	5,055	5,966
	120	-	1,887	2,319	2,849	3,477	4,204	4,603	5,027	5,946
	130	-	-	2,297	2,817	3,440	4,165	<b>4,565</b>	4,991	5,918
	140	-	-	-	2,782	3,397	4,119	4,521	4,949	5,883
	150	-	-	-	-	3,349	4,068	4,469	4,899	5,841



## Performance Data

**Table 24. Refrigerant flow (lb/hr) — voltage 400-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	707	886	1,107	1,369	1,673	2,017	2,205	2,402	2,828
	90	685	868	1,091	1,356	1,662	2,009	2,197	2,396	2,823
	100	660	845	1,071	1,338	1,646	1,994	2,184	2,384	2,813
	110	632	818	1,045	1,314	1,624	1,975	2,165	2,366	2,797
	120	-	787	1,016	1,285	1,597	1,949	2,141	2,342	2,776
	130	-	-	981	1,252	1,564	1,918	<b>2,110</b>	2,313	2,749
	140	-	-	-	1,212	1,526	1,881	2,074	2,278	2,716
	150	-	-	-	-	1,482	1,838	2,032	2,237	2,678
CSHN184	80	735	923	1,153	1,426	1,742	2,100	2,295	2,500	2,943
	90	714	904	1,136	1,412	1,730	2,090	2,287	2,493	2,939
	100	688	880	1,115	1,392	1,712	2,075	2,273	2,481	2,929
	110	-	852	1,088	1,368	1,690	2,055	2,253	2,463	2,913
	120	-	-	1,057	1,338	1,662	2,029	2,228	2,438	2,891
	130	-	-	1,020	1,303	1,628	1,997	<b>2,197</b>	2,408	2,862
	140	-	-	-	1,262	1,589	1,959	2,160	2,372	2,827
	150	-	-	-	-	1,544	1,915	2,116	2,329	2,785
CSHN240	80	971	1,211	1,507	1,859	2,267	2,731	2,983	3,249	3,822
	90	948	1,192	1,491	1,846	2,256	2,721	2,974	3,241	3,815
	100	921	1,168	1,470	1,826	2,238	2,704	2,958	3,225	3,799
	110	890	1,138	1,442	1,800	2,212	2,679	2,933	3,200	3,775
	120	-	1,104	1,407	1,766	2,179	2,647	2,900	3,168	3,742
	130	-	-	1,367	1,726	2,139	2,606	<b>2,860</b>	3,127	3,702
	140	-	-	-	1,678	2,091	2,558	2,811	3,079	3,653
	150	-	-	-	-	2,035	2,501	2,755	3,022	3,597
CSHN250	80	1,011	1,262	1,571	1,938	2,363	2,845	3,107	3,384	3,981
	90	988	1,242	1,554	1,923	2,350	2,834	3,098	3,375	3,973
	100	960	1,217	1,531	1,902	2,330	2,816	3,080	3,358	3,958
	110	928	1,186	1,501	1,874	2,304	2,790	3,055	3,333	3,933
	120	-	1,149	1,466	1,839	2,269	2,756	3,021	3,300	3,899
	130	-	-	1,424	1,797	2,228	2,715	<b>2,979</b>	3,258	3,857
	140	-	-	-	1,749	2,179	2,665	2,929	3,207	3,805
	150	-	-	-	-	2,122	2,607	2,870	3,147	3,744
CSHN315	80	1,273	1,583	1,965	2,418	2,943	3,538	3,863	4,205	4,942
	90	1,251	1,568	1,956	2,416	2,948	3,550	3,878	4,224	4,968
	100	1,222	1,543	1,936	2,401	2,937	3,545	3,875	4,224	4,973
	110	1,184	1,508	1,904	2,372	2,911	3,522	3,854	4,204	4,957
	120	-	1,463	1,860	2,329	2,870	3,482	3,814	4,165	4,920
	130	-	-	1,804	2,272	2,812	3,423	<b>3,756</b>	4,106	4,860
	140	-	-	-	2,201	2,738	3,347	3,678	4,028	4,779
	150	-	-	-	-	2,648	3,252	3,582	3,929	4,676



**Table 24. Refrigerant flow (lb/hr) – voltage 400-50-3 (continued)**

Compressor Temp °F	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	1,533	1,903	2,360	2,903	3,531	4,245	4,634	5,045	5,929
	90	1,507	1,884	2,346	2,894	3,527	4,245	4,636	5,049	5,936
	100	1,475	1,856	2,322	2,873	3,508	4,229	4,621	5,034	5,923
	110	1,436	1,819	2,286	2,838	3,475	4,195	4,587	5,000	5,888
	120	-	1,773	2,239	2,791	3,426	4,144	4,535	4,947	5,832
	130	-	-	2,181	2,729	3,361	4,076	<b>4,465</b>	4,874	5,755
	140	-	-	-	2,655	3,281	3,990	4,375	4,781	5,655
	150	-	-	-	-	3,185	3,886	4,267	4,669	5,534



## Performance Data

**Table 25. Refrigerant flow (lb/hr) — voltage 460-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	914	1,124	1,385	1,697	2,061	2,475	2,701	2,939	3,454
	90	878	1,093	1,359	1,675	2,042	2,458	2,685	2,924	3,439
	100	840	1,060	1,330	1,650	2,019	2,438	2,666	2,906	3,422
	110	798	1,023	1,297	1,621	1,993	2,414	2,643	2,884	3,402
	120	-	982	1,261	1,588	1,964	2,388	2,618	2,859	3,378
	130	-	-	1,222	1,553	1,931	2,358	<b>2,589</b>	2,832	3,352
	140	-	-	-	1,513	1,895	2,325	2,557	2,801	3,323
	150	-	-	-	-	1,856	2,288	2,522	2,767	3,291
CSHN184	80	951	1,171	1,443	1,769	2,147	2,578	2,814	3,062	3,598
	90	915	1,139	1,416	1,745	2,127	2,560	2,797	3,046	3,583
	100	875	1,104	1,385	1,718	2,103	2,539	2,777	3,027	3,565
	110	831	1,065	1,351	1,688	2,076	2,515	2,753	3,004	3,544
	120	-	1,023	1,314	1,655	2,046	2,487	2,727	2,979	3,520
	130	-	-	1,273	1,617	2,012	2,456	<b>2,697</b>	2,950	3,492
	140	-	-	-	1,577	1,975	2,422	2,664	2,918	3,462
	150	-	-	-	-	1,934	2,384	2,627	2,882	3,428
CSHN240	80	1,190	1,474	1,825	2,243	2,728	3,279	3,579	3,895	4,577
	90	1,171	1,460	1,815	2,236	2,723	3,276	3,577	3,894	4,576
	100	1,150	1,442	1,800	2,223	2,711	3,264	3,565	3,882	4,564
	110	1,126	1,420	1,778	2,202	2,691	3,244	3,544	3,861	4,541
	120	-	1,393	1,752	2,175	2,663	3,214	3,514	3,830	4,508
	130	-	-	1,719	2,141	2,626	3,176	<b>3,474</b>	3,789	4,465
	140	-	-	-	2,100	2,582	3,128	3,425	3,738	4,411
	150	-	-	-	-	2,530	3,072	3,367	3,678	4,347
CSHN250	80	1,239	1,536	1,903	2,338	2,843	3,416	3,728	4,057	4,767
	90	1,220	1,521	1,891	2,330	2,837	3,412	3,725	4,055	4,766
	100	1,198	1,502	1,874	2,315	2,823	3,399	3,713	4,043	4,754
	110	1,174	1,479	1,852	2,293	2,802	3,378	3,691	4,021	4,732
	120	-	1,451	1,824	2,265	2,773	3,348	3,660	3,989	4,697
	130	-	-	1,791	2,230	2,736	3,308	<b>3,619</b>	3,947	4,652
	140	-	-	-	2,188	2,690	3,259	3,568	3,894	4,594
	150	-	-	-	2,138	2,636	3,201	3,507	3,830	4,525
CSHN315	80	1,533	1,909	2,373	2,925	3,564	4,290	4,686	5,104	6,004
	90	1,509	1,892	2,362	2,919	3,564	4,295	4,694	5,114	6,018
	100	1,481	1,868	2,342	2,903	3,551	4,285	4,685	5,106	6,013
	110	1,447	1,836	2,313	2,875	3,525	4,260	4,660	5,081	5,988
	120	-	1,798	2,274	2,836	3,485	4,219	4,618	5,039	5,944
	130	-	-	2,226	2,786	3,431	4,162	<b>4,559</b>	4,978	5,879
	140	-	-	-	2,723	3,363	4,089	4,483	4,899	5,794
	150	-	-	-	-	3,281	3,999	4,390	4,802	5,689

**Table 25. Refrigerant flow (lb/hr) – voltage 460-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
<b>CSHN374</b>	80	1,864	2,313	2,869	3,533	4,305	5,183	5,663	6,169	7,261
	90	1,836	2,291	2,854	3,524	4,302	5,186	5,669	6,178	7,277
	100	1,804	2,262	2,828	3,502	4,283	5,171	5,655	6,167	7,269
	110	1,767	2,225	2,792	3,466	4,248	5,137	5,622	6,133	7,237
	120	-	2,180	2,745	3,417	4,197	5,084	5,568	6,078	7,180
	130	-	-	2,686	3,354	4,129	5,011	<b>5,493</b>	6,001	7,098
	140	-	-	-	3,276	4,044	4,919	5,397	5,901	6,991
	150	-	-	-	-	3,941	4,806	5,279	5,779	6,858
<b>CSHL374</b>	80	1,873	2,323	2,875	3,531	4,289	5,149	5,617	6,110	7,171
	90	1,839	2,290	2,846	3,506	4,271	5,139	5,612	6,111	7,184
	100	1,828	2,272	2,824	3,483	4,250	5,123	5,600	6,103	7,188
	110	1,841	2,268	2,808	3,461	4,225	5,100	5,580	6,087	7,183
	120	-	2,279	2,800	3,439	4,196	5,071	5,552	6,063	7,170
	130	-	-	2,798	3,418	4,164	5,035	<b>5,517</b>	6,030	7,149
	140	-	-	-	3,398	4,128	4,992	5,474	5,989	7,119
	150	-	-	-	-	4,088	4,942	5,423	5,939	7,080



## Performance Data

**Table 26. Refrigerant flow (lb/hr) — voltage 575-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN184	80	951	1,171	1,443	1,769	2,147	2,578	2,814	3,062	3,598
	90	915	1,139	1,416	1,745	2,127	2,560	2,797	3,046	3,583
	100	875	1,104	1,385	1,718	2,103	2,539	2,777	3,027	3,565
	110	831	1,065	1,351	1,688	2,076	2,515	2,753	3,004	3,544
	120	-	1,023	1,314	1,655	2,046	2,487	2,727	2,979	3,520
	130	-	-	1,273	1,617	2,012	2,456	<b>2,697</b>	2,950	3,492
	140	-	-	-	1,577	1,975	2,422	2,664	2,918	3,462
	150	-	-	-	-	1,934	2,384	2,627	2,882	3,428
CSHN250	80	1,239	1,536	1,903	2,338	2,843	3,416	3,728	4,057	4,767
	90	1,220	1,521	1,891	2,330	2,837	3,412	3,725	4,055	4,766
	100	1,198	1,502	1,874	2,315	2,823	3,399	3,713	4,043	4,754
	110	1,174	1,479	1,852	2,293	2,802	3,378	3,691	4,021	4,732
	120	-	1,451	1,824	2,265	2,773	3,348	3,660	3,989	4,697
	130	-	-	1,791	2,230	2,736	3,308	<b>3,619</b>	3,947	4,652
	140	-	-	-	2,188	2,690	3,259	3,568	3,894	4,594
	150	-	-	-	2,138	2,636	3,201	3,507	3,830	4,525
CSHN315	80	1,533	1,909	2,373	2,925	3,564	4,290	4,686	5,104	6,004
	90	1,509	1,892	2,362	2,919	3,564	4,295	4,694	5,114	6,018
	100	1,481	1,868	2,342	2,903	3,551	4,285	4,685	5,106	6,013
	110	1,447	1,836	2,313	2,875	3,525	4,260	4,660	5,081	5,988
	120	-	1,798	2,274	2,836	3,485	4,219	4,618	5,039	5,944
	130	-	-	2,226	2,786	3,431	4,162	<b>4,559</b>	4,978	5,879
	140	-	-	-	2,723	3,363	4,089	4,483	4,899	5,794
	150	-	-	-	-	3,281	3,999	4,390	4,802	5,689
CSHN374	80	1,864	2,313	2,869	3,533	4,305	5,183	5,663	6,169	7,261
	90	1,836	2,291	2,854	3,524	4,302	5,186	5,669	6,178	7,277
	100	1,804	2,262	2,828	3,502	4,283	5,171	5,655	6,167	7,269
	110	1,767	2,225	2,792	3,466	4,248	5,137	5,622	6,133	7,237
	120	-	2,180	2,745	3,417	4,197	5,084	5,568	6,078	7,180
	130	-	-	2,686	3,354	4,129	5,011	<b>5,493</b>	6,001	7,098
	140	-	-	-	3,276	4,044	4,919	5,397	5,901	6,991
	150	-	-	-	-	3,941	4,806	5,279	5,779	6,858
CSHL374	80	1,862	2,307	2,856	3,508	4,262	5,118	5,584	6,076	7,134
	90	1,836	2,283	2,834	3,490	4,249	5,112	5,581	6,077	7,143
	100	1,824	2,266	2,815	3,470	4,231	5,098	5,570	6,069	7,144
	110	1,825	2,256	2,797	3,448	4,208	5,076	5,551	6,053	7,137
	120	-	2,253	2,781	3,423	4,179	5,048	5,524	6,029	7,122
	130	-	-	2,767	3,396	4,144	5,012	<b>5,489</b>	5,997	7,099
	140	-	-	-	3,367	4,105	4,968	5,447	5,956	7,068
	150	-	-	-	-	4,059	4,917	5,396	5,907	7,029

**EER**
**Table 27. EER (btu/watt-hr) — voltage 200-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	8.96	10.98	13.56	16.73	20.54	25.06	27.61	30.38	36.62
	90	7.24	9.02	11.26	13.98	17.19	20.93	23.02	25.25	30.18
	100	5.73	7.29	9.22	11.54	14.26	17.38	19.10	20.93	24.90
	110	4.47	5.81	7.46	9.44	11.73	14.36	15.79	17.31	20.57
	120	-	4.57	5.98	7.66	9.60	11.81	13.01	14.28	16.99
	130	-	-	4.75	6.17	7.81	9.68	<b>10.69</b>	11.75	14.03
	140	-	-	-	4.93	6.31	7.88	8.74	9.63	11.55
	150	-	-	-	-	5.04	6.36	7.07	7.82	9.43
CSHN184	80	9.01	11.05	13.64	16.83	20.66	25.20	27.77	30.55	36.83
	90	7.28	9.08	11.33	14.06	17.29	21.05	23.15	25.39	30.35
	100	5.76	7.33	9.27	11.60	14.34	17.48	19.21	21.04	25.05
	110	4.49	5.84	7.50	9.49	11.80	14.44	15.88	17.40	20.69
	120	-	4.60	6.01	7.70	9.65	11.88	13.09	14.36	17.09
	130	-	-	4.78	6.20	7.86	9.73	<b>10.75</b>	11.82	14.11
	140	-	-	-	4.96	6.35	7.93	8.79	9.69	11.61
	150	-	-	-	-	5.07	6.39	7.11	7.87	9.48
CSHN240	80	7.96	10.03	12.56	15.53	18.91	22.67	24.67	26.74	31.08
	90	6.69	8.48	10.68	13.28	16.26	19.62	21.44	23.33	27.36
	100	5.58	7.10	8.98	11.21	13.79	16.73	18.33	20.01	23.63
	110	4.61	5.90	7.48	9.36	11.56	14.08	15.46	16.92	20.09
	120	-	4.86	6.18	7.75	9.60	11.72	12.89	14.14	16.86
	130	-	-	5.06	6.37	7.90	9.68	<b>10.66</b>	11.70	14.00
	140	-	-	-	5.19	6.45	7.91	8.72	9.59	11.50
	150	-	-	-	-	5.19	6.38	7.04	7.75	9.32
CSHN250	80	8.00	10.08	12.63	15.62	19.02	22.79	24.79	26.87	31.23
	90	6.73	8.53	10.73	13.34	16.34	19.72	21.54	23.45	27.50
	100	5.61	7.14	9.02	11.26	13.86	16.81	18.41	20.11	23.75
	110	4.64	5.93	7.51	9.41	11.62	14.15	15.53	17.00	20.20
	120	-	4.88	6.21	7.79	9.65	11.78	12.96	14.21	16.95
	130	-	-	5.09	6.40	7.94	9.72	<b>10.71</b>	11.76	14.07
	140	-	-	-	5.21	6.48	7.95	8.77	9.64	11.56
	150	-	-	-	-	5.22	6.42	7.08	7.79	9.36
CSHN315	80	7.69	9.71	12.17	15.03	18.26	21.79	23.65	25.57	29.53
	90	6.54	8.29	10.43	12.96	15.86	19.10	20.84	22.65	26.49
	100	5.50	7.00	8.84	11.03	13.56	16.44	18.00	19.65	23.21
	110	4.59	5.85	7.41	9.26	11.43	13.93	15.30	16.75	19.93
	120	-	4.85	6.15	7.70	9.53	11.65	12.82	14.07	16.82
	130	-	-	5.05	6.34	7.86	9.63	<b>10.61</b>	11.66	14.00
	140	-	-	-	5.16	6.41	7.87	8.68	9.55	11.49
	150	-	-	-	-	5.15	6.33	6.99	7.70	9.28



## Performance Data

Table 27. EER (btu/watt-hr) — voltage 200-60-3 (continued)

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	7.59	9.54	11.93	14.75	17.97	21.57	23.49	25.50	29.72
	90	6.49	8.21	10.31	12.79	15.64	18.82	20.53	22.32	26.09
	100	5.46	6.95	8.77	10.93	13.41	16.19	17.68	19.25	22.57
	110	4.53	5.81	7.37	9.21	11.34	13.74	15.03	16.39	19.28
	120	-	4.79	6.11	7.68	9.49	11.53	12.64	13.80	16.29
	130	-	-	5.01	6.33	7.85	9.58	<b>10.52</b>	11.51	13.63
	140	-	-	-	5.15	6.43	7.87	8.66	9.49	11.28
	150	-	-	-	-	5.18	6.37	7.03	7.72	9.20
CSHL374	80	8.68	10.93	13.60	16.62	19.91	23.36	25.11	26.87	30.36
	90	7.32	9.26	11.59	14.27	17.25	20.47	22.14	23.84	27.29
	100	6.16	7.78	9.75	12.07	14.70	17.59	19.11	20.69	23.96
	110	5.17	6.49	8.13	10.09	12.34	14.87	16.23	17.64	20.62
	120	-	5.40	6.73	8.35	10.25	12.41	13.59	14.82	17.45
	130	-	-	5.54	6.86	8.43	10.25	<b>11.25</b>	12.31	14.59
	140	-	-	-	5.59	6.88	8.39	9.22	10.11	12.05
	150	-	-	-	-	5.53	6.76	7.45	8.19	9.80

**Table 28. EER (btu/watt-hr) — voltage 230-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	8.99	11.02	13.60	16.78	20.60	25.14	27.70	30.47	36.73
	90	7.26	9.05	11.30	14.02	17.24	21.00	23.09	25.32	30.27
	100	5.75	7.31	9.25	11.58	14.30	17.43	19.16	20.99	24.98
	110	4.48	5.82	7.48	9.47	11.77	14.40	15.84	17.36	20.63
	120	-	4.59	6.00	7.68	9.63	11.85	13.05	14.32	17.05
	130	-	-	4.77	6.19	7.83	9.71	<b>10.72</b>	11.79	14.07
	140	-	-	-	4.95	6.33	7.91	8.77	9.66	11.58
	150	-	-	-	-	5.06	6.38	7.09	7.85	9.46
CSHN184	80	9.03	11.08	13.68	16.87	20.72	25.27	27.85	30.64	36.93
	90	7.30	9.10	11.36	14.10	17.34	21.11	23.21	25.46	30.43
	100	5.78	7.35	9.30	11.64	14.38	17.53	19.26	21.10	25.12
	110	4.50	5.86	7.52	9.52	11.83	14.48	15.92	17.45	20.75
	120	-	4.61	6.03	7.72	9.68	11.91	13.12	14.40	17.14
	130	-	-	4.79	6.22	7.88	9.76	<b>10.78</b>	11.85	14.15
	140	-	-	-	4.97	6.37	7.95	8.81	9.72	11.65
	150	-	-	-	-	5.09	6.41	7.13	7.89	9.51
CSHN240	80	7.99	10.06	12.60	15.58	18.97	22.74	24.74	26.82	31.17
	90	6.71	8.51	10.71	13.32	16.31	19.68	21.50	23.40	27.44
	100	5.60	7.12	9.01	11.24	13.83	16.78	18.38	20.07	23.70
	110	4.63	5.91	7.50	9.39	11.60	14.12	15.50	16.97	20.15
	120	-	4.87	6.20	7.78	9.63	11.76	12.93	14.18	16.91
	130	-	-	5.08	6.39	7.93	9.71	<b>10.69</b>	11.74	14.04
	140	-	-	-	5.20	6.47	7.94	8.75	9.62	11.53
	150	-	-	-	-	5.21	6.40	7.06	7.78	9.34
CSHN250	80	8.02	10.11	12.67	15.66	19.07	22.85	24.86	26.95	31.31
	90	6.75	8.55	10.76	13.38	16.39	19.77	21.60	23.51	27.57
	100	5.63	7.16	9.05	11.29	13.90	16.85	18.47	20.16	23.82
	110	4.65	5.94	7.54	9.43	11.65	14.19	15.58	17.05	20.25
	120	-	4.89	6.22	7.81	9.67	11.81	13.00	14.25	17.00
	130	-	-	5.10	6.42	7.97	9.75	<b>10.74</b>	11.79	14.11
	140	-	-	-	5.23	6.50	7.98	8.79	9.67	11.59
	150	-	-	-	4.20	5.23	6.43	7.10	7.81	9.38
CSHN315	80	7.72	9.74	12.20	15.07	18.31	21.85	23.72	25.64	29.61
	90	6.56	8.31	10.46	13.00	15.90	19.15	20.90	22.72	26.56
	100	5.52	7.02	8.86	11.06	13.60	16.48	18.05	19.71	23.27
	110	4.61	5.87	7.43	9.29	11.47	13.97	15.34	16.80	19.98
	120	-	4.86	6.16	7.72	9.56	11.68	12.85	14.11	16.87
	130	-	-	5.07	6.36	7.88	9.65	<b>10.64</b>	11.70	14.04
	140	-	-	-	5.18	6.43	7.89	8.70	9.58	11.53
	150	-	-	-	-	5.16	6.35	7.01	7.72	9.31



## Performance Data

**Table 28. EER (btu/watt-hr) — voltage 230-60-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	7.62	9.57	11.97	14.80	18.04	21.65	23.58	25.60	29.84
	90	6.51	8.24	10.35	12.84	15.70	18.89	20.61	22.40	26.19
	100	5.48	6.98	8.81	10.97	13.46	16.25	17.75	19.32	22.66
	110	4.55	5.83	7.39	9.25	11.38	13.79	15.09	16.45	19.35
	120	-	4.81	6.13	7.70	9.52	11.58	12.69	13.86	16.35
	130	-	-	5.03	6.35	7.88	9.62	<b>10.56</b>	11.55	13.68
	140	-	-	-	5.17	6.45	7.90	8.70	9.53	11.32
	150	-	-	-	-	5.20	6.40	7.05	7.75	9.24
CSHL374	80	8.35	10.53	13.12	16.06	19.27	22.66	24.39	26.13	29.60
	90	7.08	8.96	11.22	13.84	16.75	19.90	21.54	23.22	26.63
	100	5.98	7.56	9.49	11.76	14.32	17.16	18.66	20.22	23.44
	110	5.05	6.34	7.95	9.87	12.09	14.58	15.92	17.31	20.25
	120	-	5.30	6.62	8.22	10.10	12.24	13.40	14.62	17.23
	130	-	-	5.48	6.79	8.36	10.17	<b>11.16</b>	12.21	14.47
	140	-	-	-	5.57	6.85	8.36	9.20	10.09	12.02
	150	-	-	-	-	5.55	6.78	7.48	8.21	9.83

**Table 29. EER (btu/watt-hr) — voltage 380-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHL374	80	8.80	11.08	13.83	17.02	20.57	24.41	26.42	28.46	32.63
	90	7.40	9.32	11.68	14.46	17.63	21.13	23.00	24.92	28.94
	100	6.22	7.80	9.78	12.14	14.88	17.98	19.65	21.39	25.09
	110	5.23	6.50	8.13	10.10	12.42	15.08	16.53	18.06	21.36
	120	-	5.40	6.71	8.33	10.26	12.51	13.74	15.06	17.92
	130	-	-	5.52	6.83	8.41	10.28	<b>11.32</b>	12.43	14.86
	140	-	-	-	5.56	6.84	8.38	9.24	10.16	12.20
	150	-	-	-	-	5.50	6.74	7.44	8.20	9.88



## Performance Data

**Table 30. EER (btu/watt-hr) — voltage 400-50-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	7.43	9.52	12.15	15.33	19.09	23.42	25.81	28.35	33.86
	90	6.15	8.00	10.32	13.11	16.36	20.09	22.12	24.25	28.84
	100	4.97	6.57	8.57	10.97	13.76	16.93	18.65	20.45	24.28
	110	3.93	5.29	6.98	9.02	11.39	14.08	15.53	17.05	20.25
	120	-	4.19	5.60	7.31	9.31	11.57	12.80	14.07	16.76
	130	-	-	4.44	5.86	7.53	9.43	<b>10.45</b>	11.53	13.79
	140	-	-	-	4.64	6.02	7.61	8.46	9.36	11.26
	150	-	-	-	-	4.75	6.05	6.76	7.51	9.09
CSHN184	80	7.45	9.57	12.21	15.41	19.18	23.53	25.92	28.47	34.00
	90	6.18	8.04	10.37	13.16	16.43	20.17	22.21	24.35	28.96
	100	4.99	6.60	8.60	11.01	13.81	17.00	18.73	20.54	24.39
	110	-	5.31	7.01	9.05	11.44	14.13	15.59	17.12	20.34
	120	-	-	5.63	7.34	9.35	11.62	12.85	14.13	16.84
	130	-	-	4.45	5.89	7.56	9.47	<b>10.50</b>	11.58	13.85
	140	-	-	-	4.66	6.05	7.64	8.50	9.40	11.30
	150	-	-	-	-	4.77	6.08	6.79	7.54	9.12
CSHN240	80	8.30	10.53	13.26	16.44	20.04	23.98	26.05	28.19	32.58
	90	6.87	8.77	11.11	13.87	17.05	20.60	22.51	24.50	28.69
	100	5.61	7.21	9.18	11.52	14.25	17.35	19.04	20.82	24.65
	110	4.52	5.85	7.49	9.45	11.75	14.40	15.85	17.40	20.77
	120	-	4.69	6.04	7.67	9.58	11.80	13.03	14.34	17.23
	130	-	-	4.83	6.16	7.74	9.57	<b>10.60</b>	11.69	14.11
	140	-	-	-	4.90	6.19	7.69	8.53	9.43	11.44
	150	-	-	-	-	4.88	6.10	6.78	7.51	9.14
CSHN250	80	8.34	10.59	13.33	16.54	20.15	24.10	26.19	28.33	32.74
	90	6.91	8.82	11.17	13.95	17.13	20.70	22.62	24.62	28.84
	100	5.65	7.25	9.22	11.58	14.32	17.44	19.14	20.93	24.78
	110	4.55	5.88	7.52	9.50	11.81	14.47	15.93	17.49	20.88
	120	-	4.72	6.07	7.70	9.63	11.86	13.09	14.41	17.32
	130	-	-	4.85	6.19	7.78	9.62	<b>10.65</b>	11.75	14.19
	140	-	-	-	4.93	6.22	7.73	8.58	9.48	11.50
	150	-	-	-	-	4.91	6.13	6.81	7.55	9.18
CSHN315	80	7.86	9.83	12.30	15.26	18.73	22.75	24.96	27.31	32.45
	90	6.68	8.42	10.59	13.19	16.24	19.77	21.71	23.78	28.31
	100	5.56	7.07	8.94	11.18	13.82	16.87	18.55	20.34	24.26
	110	4.54	5.82	7.42	9.33	11.57	14.17	15.60	17.13	20.48
	120	-	4.72	6.06	7.67	9.56	11.75	12.95	14.24	17.07
	130	-	-	4.88	6.22	7.80	9.62	<b>10.63</b>	11.71	14.07
	140	-	-	-	4.97	6.27	7.78	8.62	9.51	11.47
	150	-	-	-	-	4.96	6.19	6.87	7.60	9.20



## Performance Data

**Table 30. EER (btu/watt-hr) — voltage 400-50-3 (continued)**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	8.03	10.07	12.62	15.68	19.28	23.42	25.70	28.12	33.39
	90	6.81	8.61	10.85	13.52	16.63	20.17	22.10	24.14	28.53
	100	5.64	7.21	9.14	11.43	14.09	17.10	18.73	20.45	24.12
	110	4.59	5.92	7.57	9.52	11.77	14.31	15.69	17.13	20.19
	120	-	4.79	6.17	7.81	9.71	11.85	13.00	14.21	16.77
	130	-	-	4.97	6.34	7.92	9.71	<b>10.67</b>	11.68	13.82
	140	-	-	-	5.07	6.38	7.87	8.67	9.51	11.29
	150	-	-	-	-	5.06	6.28	6.93	7.63	9.10

## Performance Data

**Table 31. EER (btu/watt-hr) — voltage 460-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN176	80	9.08	11.13	13.74	16.95	20.81	25.39	27.98	30.78	37.10
	90	7.33	9.14	11.41	14.16	17.42	21.21	23.32	25.58	30.57
	100	5.81	7.38	9.34	11.69	14.44	17.61	19.35	21.20	25.23
	110	4.52	5.88	7.56	9.56	11.89	14.55	16.00	17.53	20.84
	120	-	4.63	6.06	7.76	9.73	11.97	13.19	14.47	17.22
	130	-	-	4.82	6.25	7.91	9.80	<b>10.83</b>	11.91	14.21
	140	-	-	-	5.00	6.40	7.99	8.85	9.76	11.70
	150	-	-	-	-	5.11	6.44	7.17	7.93	9.55
CSHN184	80	9.13	11.19	13.82	17.05	20.93	25.53	28.13	30.95	37.30
	90	7.37	9.19	11.48	14.24	17.51	21.33	23.45	25.72	30.74
	100	5.84	7.43	9.39	11.76	14.52	17.71	19.46	21.32	25.37
	110	4.55	5.92	7.60	9.61	11.95	14.63	16.09	17.63	20.96
	120	-	4.66	6.09	7.80	9.78	12.03	13.26	14.55	17.32
	130	-	-	4.84	6.28	7.96	9.86	<b>10.89</b>	11.97	14.29
	140	-	-	-	5.02	6.43	8.03	8.90	9.82	11.76
	150	-	-	-	-	5.14	6.48	7.21	7.97	9.60
CSHN240	80	8.56	10.70	13.33	16.41	19.91	23.78	25.84	27.97	32.41
	90	7.17	9.02	11.28	13.96	17.03	20.48	22.34	24.28	28.40
	100	5.94	7.51	9.43	11.71	14.35	17.35	18.98	20.70	24.38
	110	4.88	6.19	7.80	9.71	11.95	14.50	15.90	17.38	20.59
	120	-	5.06	6.39	7.98	9.84	11.98	13.16	14.42	17.15
	130	-	-	5.19	6.50	8.04	9.81	<b>10.80</b>	11.84	14.13
	140	-	-	-	5.25	6.51	7.96	8.77	9.63	11.53
	150	-	-	-	-	5.19	6.37	7.03	7.73	9.27
CSHN250	80	8.59	10.76	13.41	16.50	20.02	23.90	25.97	28.10	32.57
	90	7.21	9.06	11.34	14.03	17.12	20.58	22.45	24.40	28.54
	100	5.98	7.54	9.47	11.77	14.42	17.43	19.07	20.80	24.51
	110	4.91	6.22	7.83	9.76	12.00	14.57	15.97	17.46	20.70
	120	-	5.08	6.42	8.02	9.89	12.04	13.23	14.49	17.24
	130	-	-	5.22	6.53	8.08	9.86	<b>10.85</b>	11.90	14.21
	140	-	-	-	5.28	6.54	8.00	8.81	9.68	11.58
	150	-	-	-	4.20	5.22	6.41	7.06	7.76	9.31
CSHN315	80	7.93	9.94	12.41	15.35	18.73	22.53	24.58	26.74	31.32
	90	6.76	8.52	10.68	13.25	16.23	19.61	21.45	23.39	27.55
	100	5.67	7.18	9.04	11.26	13.84	16.79	18.41	20.11	23.81
	110	4.69	5.97	7.55	9.44	11.64	14.17	15.57	17.05	20.27
	120	-	4.90	6.22	7.81	9.67	11.82	13.01	14.27	17.03
	130	-	-	5.07	6.40	7.95	9.75	<b>10.75</b>	11.81	14.15
	140	-	-	-	5.18	6.46	7.96	8.79	9.67	11.63
	150	-	-	-	-	5.17	6.39	7.07	7.80	9.41



## Performance Data

Table 31. EER (btu/watt-hr) — voltage 460-60-3 (continued)

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN374	80	8.03	10.04	12.50	15.37	18.60	22.14	24.01	25.94	29.93
	90	6.81	8.58	10.74	13.28	16.19	19.42	21.15	22.95	26.73
	100	5.71	7.22	9.08	11.30	13.85	16.72	18.27	19.90	23.36
	110	4.73	6.00	7.58	9.47	11.67	14.17	15.53	16.96	20.04
	120	-	4.94	6.26	7.85	9.71	11.84	13.01	14.24	16.92
	130	-	-	5.11	6.43	7.98	9.77	<b>10.76</b>	11.81	14.09
	140	-	-	-	5.21	6.49	7.97	8.79	9.67	11.58
	150	-	-	-	-	5.18	6.39	7.07	7.79	9.36
CSHL374	80	8.51	10.75	13.41	16.43	19.70	23.14	24.88	26.63	30.07
	90	7.20	9.10	11.40	14.06	17.03	20.24	21.92	23.62	27.10
	100	6.09	7.67	9.61	11.90	14.52	17.41	18.95	20.55	23.87
	110	5.17	6.45	8.05	9.99	12.23	14.77	16.14	17.58	20.62
	120	-	5.41	6.72	8.32	10.21	12.38	13.57	14.83	17.53
	130	-	-	5.58	6.89	8.45	10.29	<b>11.30</b>	12.37	14.71
	140	-	-	-	5.67	6.95	8.46	9.31	10.21	12.19
	150	-	-	-	-	5.63	6.87	7.57	8.31	9.96

**Table 32. EER (btu/watt-hr) — voltage 575-60-3**

Compressor	Cond Temp °F	Evaporator Temp °F								
		-10	0	10	20	30	40	45	50	60
CSHN184	80	9.13	11.19	13.82	17.05	20.93	25.53	28.13	30.95	37.30
	90	7.37	9.19	11.48	14.24	17.51	21.33	23.45	25.72	30.74
	100	5.84	7.43	9.39	11.76	14.52	17.71	19.46	21.32	25.37
	110	4.55	5.92	7.60	9.61	11.95	14.63	16.09	17.63	20.96
	120	-	4.66	6.09	7.80	9.78	12.03	13.26	14.55	17.32
	130	-	-	4.84	6.28	7.96	9.86	<b>10.89</b>	11.97	14.29
	140	-	-	-	5.02	6.43	8.03	8.90	9.82	11.76
	150	-	-	-	-	5.14	6.48	7.21	7.97	9.60
CSHN250	80	8.59	10.76	13.41	16.50	20.02	23.90	25.97	28.10	32.57
	90	7.21	9.06	11.34	14.03	17.12	20.58	22.45	24.40	28.54
	100	5.98	7.54	9.47	11.77	14.42	17.43	19.07	20.80	24.51
	110	4.91	6.22	7.83	9.76	12.00	14.57	15.97	17.46	20.70
	120	-	5.08	6.42	8.02	9.89	12.04	13.23	14.49	17.24
	130	-	-	5.22	6.53	8.08	9.86	<b>10.85</b>	11.90	14.21
	140	-	-	-	5.28	6.54	8.00	8.81	9.68	11.58
	150	-	-	-	4.20	5.22	6.41	7.06	7.76	9.31
CSHN315	80	7.93	9.94	12.41	15.35	18.73	22.53	24.58	26.74	31.32
	90	6.76	8.52	10.68	13.25	16.23	19.61	21.45	23.39	27.55
	100	5.67	7.18	9.04	11.26	13.84	16.79	18.41	20.11	23.81
	110	4.69	5.97	7.55	9.44	11.64	14.17	15.57	17.05	20.27
	120	-	4.90	6.22	7.81	9.67	11.82	13.01	14.27	17.03
	130	-	-	5.07	6.40	7.95	9.75	<b>10.75</b>	11.81	14.15
	140	-	-	-	5.18	6.46	7.96	8.79	9.67	11.63
	150	-	-	-	-	5.17	6.39	7.07	7.80	9.41
CSHN374	80	8.03	10.04	12.50	15.37	18.60	22.14	24.01	25.94	29.93
	90	6.81	8.58	10.74	13.28	16.19	19.42	21.15	22.95	26.73
	100	5.71	7.22	9.08	11.30	13.85	16.72	18.27	19.90	23.36
	110	4.73	6.00	7.58	9.47	11.67	14.17	15.53	16.96	20.04
	120	-	4.94	6.26	7.85	9.71	11.84	13.01	14.24	16.92
	130	-	-	5.11	6.43	7.98	9.77	<b>10.76</b>	11.81	14.09
	140	-	-	-	5.21	6.49	7.97	8.79	9.67	11.58
	150	-	-	-	-	5.18	6.39	7.07	7.79	9.36
CSHL374	80	8.66	10.85	13.46	16.44	19.71	23.17	24.95	26.75	30.35
	90	7.30	9.18	11.46	14.10	17.06	20.28	21.97	23.70	27.26
	100	6.13	7.70	9.63	11.91	14.52	17.41	18.96	20.56	23.92
	110	5.13	6.42	8.03	9.96	12.19	14.73	16.10	17.53	20.59
	120	-	5.33	6.64	8.25	10.13	12.30	13.49	14.75	17.45
	130	-	-	5.47	6.78	8.35	10.18	<b>11.19</b>	12.26	14.59
	140	-	-	-	5.53	6.82	8.34	9.18	10.09	12.07
	150	-	-	-	-	5.50	6.74	7.43	8.18	9.83



## Performance Data

### AHRI 10 Coefficients

- Superheat: 20°F
- Subcooling: 15°F
- Equations are of the form:

$$\text{VALUE} = C1 + C2 * T_e + C3 * T_c + C4 * T_e^2 + C5 * T_e * T_c + C6 * T_c^2 + C7 * T_e^3 + C8 * T_e^2 * T_c + C9 * T_e * T_c^2 + C10 * T_c^3$$

Where:

- $T_c$  = Saturated condensing temperature (°F) and
- $T_e$  = Saturated evaporating temperature (°F)

**Table 33. Coefficients 200-60-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN176	Capacity	4.75E+04	2.05E+03	2.15E+03	3.42E+01	5.34E+00	-2.58E+01	5.94E-04	-1.23E-01	-5.99E-02	7.57E-02
	Power	8.27E+03	-4.11E+01	-9.22E+01	-8.75E-01	1.37E+00	1.19E+00	-5.97E-14	7.94E-03	-8.92E-03	-5.43E-13
	Amps	3.55E+01	9.20E-02	-1.96E-01	7.88E-05	-1.72E-03	2.51E-03	-1.38E-16	3.08E-06	5.37E-06	-2.06E-15
	Flow	-2.03E+02	1.84E+01	4.01E+01	2.84E-01	6.83E-02	-3.85E-01	-1.08E-04	-3.35E-04	-8.68E-05	1.10E-03
CSHN184	Capacity	1.50E+05	2.30E+03	-6.01E+02	3.51E+01	2.25E+00	-7.74E-01	7.50E-03	-1.28E-01	-4.74E-02	1.05E-03
	Power	8.57E+03	-4.25E+01	-9.55E+01	-9.06E-01	1.42E+00	1.23E+00	1.62E-14	8.22E-03	-9.24E-03	3.15E-13
	Amps	4.00E+01	1.04E-01	-2.20E-01	8.87E-05	-1.94E-03	2.83E-03	-8.79E-17	3.46E-06	6.05E-06	-2.26E-15
	Flow	1.28E+03	2.08E+01	-4.30E-01	2.87E-01	3.86E-02	-1.43E-02	-3.58E-05	-3.15E-04	4.30E-05	-1.10E-05
CSHN240	Capacity	3.27E+04	2.84E+03	3.28E+03	4.47E+01	8.09E+00	-3.54E+01	-2.65E-04	-1.55E-01	-9.95E-02	1.01E-01
	Power	8.63E+03	4.42E+01	-4.37E+01	1.00E+00	-1.03E+00	1.08E+00	4.00E-14	-1.02E-02	6.96E-03	1.95E-13
	Amps	6.59E+01	2.04E-01	-3.34E-01	1.19E-03	-4.19E-03	3.11E-03	2.44E-17	-1.49E-05	2.39E-05	1.95E-15
	Flow	-4.24E+02	2.36E+01	5.32E+01	3.62E-01	1.55E-01	-4.89E-01	-1.62E-04	-2.73E-04	-6.59E-04	1.40E-03
CSHN250	Capacity	1.69E+05	3.10E+03	-3.59E+02	4.60E+01	5.27E+00	-2.54E+00	1.09E-02	-1.64E-01	-8.82E-02	3.84E-03
	Power	8.95E+03	4.58E+01	-4.53E+01	1.04E+00	-1.07E+00	1.12E+00	1.88E-15	-1.05E-02	7.21E-03	-1.77E-13
	Amps	7.42E+01	2.29E-01	-3.76E-01	1.34E-03	-4.72E-03	3.50E-03	-1.08E-17	-1.67E-05	2.69E-05	5.75E-16
	Flow	1.53E+03	2.58E+01	1.62E-01	3.67E-01	1.36E-01	-6.93E-03	-3.54E-05	-2.78E-04	-5.72E-04	-2.33E-05
CSHN315	Capacity	1.98E+05	3.65E+03	-8.14E+01	5.76E+01	1.17E+01	-6.31E+00	1.44E-02	-2.01E-01	-1.36E-01	1.29E-02
	Power	1.15E+04	8.13E+01	-4.08E+01	2.01E+00	-2.09E+00	1.26E+00	2.86E-14	-2.04E-02	1.45E-02	3.46E-13
	Amps	9.41E+01	8.06E-02	-7.24E-01	4.80E-03	-2.98E-03	5.77E-03	-1.13E-16	-5.09E-05	2.72E-05	2.05E-16
	Flow	1.86E+03	2.92E+01	1.43E+00	4.56E-01	2.37E-01	-1.44E-02	-3.80E-05	-2.46E-04	-1.04E-03	-3.72E-05
CSHN374	Capacity	2.33E+05	4.45E+03	5.89E+01	6.75E+01	1.18E+01	-8.58E+00	1.60E-02	-2.29E-01	-1.50E-01	1.66E-02
	Power	1.82E+04	-7.38E+00	-1.31E+02	4.75E-01	2.24E-01	1.94E+00	2.73E-14	-2.70E-03	-5.62E-04	3.65E-13
	Amps	1.04E+02	-1.74E-01	-7.60E-01	3.68E-03	2.66E-03	6.51E-03	5.50E-17	-4.28E-05	1.46E-06	5.07E-16
	Flow	2.17E+03	3.72E+01	3.72E+00	5.29E-01	2.32E-01	-2.68E-02	-5.84E-05	-1.64E-04	-9.79E-04	-4.69E-05
CSHL374	Capacity	1.45E+05	2.85E+03	3.40E+03	3.69E+01	5.97E+01	-4.82E+01	-8.21E-03	1.17E-01	-4.76E-01	1.72E-01
	Power	1.73E+04	8.97E+01	-1.63E+02	1.42E+00	-1.55E+00	2.14E+00	-1.09E-15	-8.78E-03	6.96E-03	3.62E-13
	Amps	5.41E+01	4.68E-01	-5.47E-01	5.78E-03	-9.29E-03	6.67E-03	-1.55E-17	-4.01E-05	4.68E-05	3.66E-17
	Flow	-1.52E+01	1.88E-01	8.35E+01	-3.09E-02	1.26E+00	-9.59E-01	-7.16E-04	6.25E-03	-7.65E-03	3.51E-03

**Table 34. Coefficients 230-60-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN176	Capacity	4.80E+04	2.07E+03	2.18E+03	3.46E+01	5.40E+00	-2.61E+01	6.01E-04	-1.24E-01	-6.06E-02	7.66E-02
	Power	8.34E+03	-4.14E+01	-9.30E+01	-8.82E-01	1.39E+00	1.20E+00	5.73E-15	8.00E-03	-8.99E-03	6.29E-13
	Amps	3.38E+01	8.76E-02	-1.86E-01	7.51E-05	-1.64E-03	2.39E-03	-4.07E-17	2.93E-06	5.12E-06	-4.38E-16
	Flow	-2.05E+02	1.86E+01	4.06E+01	2.87E-01	6.91E-02	-3.90E-01	-1.09E-04	-3.39E-04	-8.79E-05	1.11E-03
CSHN184	Capacity	1.52E+05	2.32E+03	-6.06E+02	3.55E+01	2.28E+00	-7.99E-01	7.68E-03	-1.29E-01	-4.78E-02	1.10E-03
	Power	8.64E+03	-4.29E+01	-9.64E+01	-9.14E-01	1.44E+00	1.24E+00	1.84E-16	8.29E-03	-9.32E-03	2.83E-13
	Amps	3.50E+01	9.08E-02	-1.93E-01	7.78E-05	-1.70E-03	2.48E-03	-1.00E-16	3.04E-06	5.30E-06	6.14E-16
	Flow	1.30E+03	2.10E+01	-4.44E-01	2.91E-01	3.90E-02	-1.43E-02	-3.67E-05	-3.17E-04	4.31E-05	-1.13E-05
CSHN240	Capacity	3.31E+04	2.88E+03	3.32E+03	4.52E+01	8.18E+00	-3.58E+01	-2.68E-04	-1.57E-01	-1.01E-01	1.02E-01
	Power	8.71E+03	4.45E+01	-4.40E+01	1.01E+00	-1.04E+00	1.09E+00	-1.33E-14	-1.03E-02	7.02E-03	-6.41E-13
	Amps	6.27E+01	1.94E-01	-3.18E-01	1.14E-03	-3.99E-03	2.96E-03	-1.06E-16	-1.42E-05	2.27E-05	-1.70E-15
	Flow	-4.29E+02	2.39E+01	5.38E+01	3.66E-01	1.57E-01	-4.94E-01	-1.64E-04	-2.76E-04	-6.66E-04	1.42E-03
CSHN250	Capacity	1.71E+05	3.14E+03	-3.63E+02	4.65E+01	5.33E+00	-2.57E+00	1.11E-02	-1.66E-01	-8.92E-02	3.88E-03
	Power	9.02E+03	4.62E+01	-4.56E+01	1.05E+00	-1.08E+00	1.13E+00	-7.43E-15	-1.06E-02	7.27E-03	-1.67E-13
	Amps	6.50E+01	2.01E-01	-3.30E-01	1.18E-03	-4.14E-03	3.07E-03	-3.58E-17	-1.47E-05	2.35E-05	-1.13E-15
	Flow	1.55E+03	2.61E+01	1.64E-01	3.71E-01	1.37E-01	-7.01E-03	-3.58E-05	-2.82E-04	-5.78E-04	-2.36E-05
CSHN315	Capacity	2.00E+05	3.69E+03	-8.23E+01	5.83E+01	1.19E+01	-6.38E+00	1.46E-02	-2.03E-01	-1.37E-01	1.31E-02
	Power	1.16E+04	8.20E+01	-4.12E+01	2.03E+00	-2.10E+00	1.27E+00	-2.11E-14	-2.06E-02	1.47E-02	-7.00E-13
	Amps	8.25E+01	7.07E-02	-6.35E-01	4.21E-03	-2.61E-03	5.06E-03	-1.22E-16	-4.46E-05	2.38E-05	-1.57E-15
	Flow	1.88E+03	2.95E+01	1.45E+00	4.61E-01	2.39E-01	-1.45E-02	-3.85E-05	-2.48E-04	-1.05E-03	-3.77E-05
CSHN374	Capacity	2.36E+05	4.50E+03	5.89E+01	6.82E+01	1.20E+01	-8.68E+00	1.70E-02	-2.32E-01	-1.52E-01	1.68E-02
	Power	1.83E+04	-7.44E+00	-1.32E+02	4.78E-01	2.26E-01	1.96E+00	1.45E-13	-2.72E-03	-5.66E-04	1.11E-12
	Amps	9.11E+01	-1.53E-01	-6.66E-01	3.22E-03	2.33E-03	5.71E-03	-2.12E-16	-3.75E-05	1.28E-06	-6.20E-15
	Flow	2.19E+03	3.75E+01	3.75E+00	5.35E-01	2.36E-01	-2.72E-02	-4.38E-05	-1.80E-04	-9.92E-04	-4.72E-05
CSHL374	Capacity	1.40E+05	2.89E+03	3.44E+03	3.75E+01	5.85E+01	-4.84E+01	-8.18E-03	1.11E-01	-4.68E-01	1.72E-01
	Power	1.75E+04	7.59E+01	-1.53E+02	1.33E+00	-1.23E+00	2.06E+00	1.50E-15	-8.09E-03	5.32E-03	3.17E-14
	Amps	8.07E+01	2.74E-01	-7.13E-01	2.48E-03	-4.33E-03	6.44E-03	-8.15E-18	-1.19E-05	1.81E-05	3.11E-16
	Flow	-7.88E+01	9.86E-01	8.44E+01	-2.03E-02	1.24E+00	-9.65E-01	-7.13E-04	6.15E-03	-7.53E-03	3.53E-03

**Table 35. Coefficients 380-50-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHL374	Capacity	7.16E+04	3.42E+03	3.85E+03	4.49E+01	2.31E+01	-4.53E+01	-1.90E-02	-2.83E-02	-2.41E-01	1.43E-01
	Power	9.51E+03	1.20E+02	-3.86E+01	1.46E+00	-2.64E+00	1.29E+00	-1.39E-04	-1.23E-02	1.45E-02	1.17E-04
	Amps	2.06E+01	2.37E-01	-1.35E-01	2.48E-03	-5.14E-03	2.33E-03	-2.50E-07	-2.09E-05	2.81E-05	2.11E-07
	Flow	-3.05E+02	2.34E+01	6.88E+01	2.48E-01	4.65E-01	-6.92E-01	-5.10E-04	2.50E-03	-2.96E-03	2.26E-03



## Performance Data

**Table 36. Coefficients 400-50-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN176	Capacity	3.11E+04	1.80E+03	1.86E+03	2.66E+01	4.81E+00	-2.12E+01	-6.03E-04	-8.08E-02	-6.02E-02	6.07E-02
	Power	9.34E+03	-1.72E+01	-1.12E+02	-5.96E-01	5.96E-01	1.17E+00	-2.00E-15	7.68E-03	-5.83E-03	-2.70E-13
	Amps	2.65E+01	3.80E-02	-1.68E-01	1.95E-03	-2.51E-03	1.35E-03	5.25E-17	-9.07E-06	1.29E-05	8.89E-16
	Flow	-1.37E+02	1.64E+01	3.04E+01	2.08E-01	6.48E-02	-2.83E-01	-1.05E-04	4.21E-05	-2.23E-04	7.75E-04
CSHN184	Capacity	1.05E+05	2.00E+03	-1.25E+02	2.73E+01	2.49E+00	-3.21E+00	6.70E-03	-8.49E-02	-5.08E-02	6.83E-03
	Power	9.68E+03	-1.79E+01	-1.16E+02	-6.17E-01	6.18E-01	1.22E+00	-3.39E-16	7.96E-03	-6.05E-03	3.53E-13
	Amps	2.74E+01	3.94E-02	-1.75E-01	2.02E-03	-2.60E-03	1.40E-03	-2.88E-17	-9.40E-06	1.34E-05	-6.71E-16
	Flow	9.38E+02	1.83E+01	1.15E+00	2.10E-01	4.24E-02	-1.46E-02	-1.51E-05	4.35E-05	-1.18E-04	-2.72E-05
CSHN240	Capacity	3.57E+04	2.48E+03	2.64E+03	3.71E+01	5.37E+00	-2.93E+01	3.65E-04	-1.24E-01	-7.61E-02	8.27E-02
	Power	7.70E+03	4.18E+01	-6.18E+01	1.17E+00	-1.12E+00	1.09E+00	3.16E-14	-1.15E-02	7.24E-03	2.96E-13
	Amps	2.96E+01	-8.44E-02	-2.61E-01	1.39E-03	1.05E-03	2.13E-03	-4.07E-17	-1.54E-05	-7.11E-07	-5.34E-16
	Flow	-2.47E+02	2.17E+01	4.24E+01	2.98E-01	9.33E-02	-3.88E-01	-1.22E-04	-1.57E-04	-3.42E-04	1.07E-03
CSHN250	Capacity	1.38E+05	2.72E+03	-8.28E+01	3.80E+01	2.67E+00	-4.56E+00	8.89E-03	-1.28E-01	-6.62E-02	9.19E-03
	Power	7.98E+03	4.33E+01	-6.40E+01	1.22E+00	-1.16E+00	1.13E+00	4.37E-15	-1.19E-02	7.50E-03	7.75E-14
	Amps	3.07E+01	-8.74E-02	-2.71E-01	1.44E-03	1.09E-03	2.20E-03	-7.30E-17	-1.60E-05	-7.37E-07	-5.37E-16
	Flow	1.24E+03	2.40E+01	2.13E+00	2.98E-01	7.20E-02	-2.13E-02	-3.15E-05	-1.00E-04	-2.65E-04	-2.26E-05
CSHN315	Capacity	1.42E+05	2.77E+03	6.44E+02	4.60E+01	1.49E+01	-1.14E+01	1.16E-02	-1.47E-01	-1.34E-01	2.51E-02
	Power	1.33E+04	-4.14E+00	-1.17E+02	1.29E-01	1.35E-01	1.51E+00	-2.81E-15	-2.97E-03	2.58E-04	-7.73E-13
	Amps	3.98E+01	-7.43E-02	-3.14E-01	4.93E-04	1.36E-03	2.56E-03	6.04E-17	-9.26E-06	-3.10E-06	6.26E-16
	Flow	1.39E+03	2.25E+01	5.66E+00	3.55E-01	2.26E-01	-3.72E-02	-3.03E-05	4.52E-05	-9.40E-04	-4.05E-05
CSHN374	Capacity	1.86E+05	3.66E+03	3.78E+02	5.69E+01	1.15E+01	-1.04E+01	1.42E-02	-1.97E-01	-1.35E-01	2.23E-02
	Power	1.76E+04	-5.18E+01	-1.86E+02	-8.46E-01	1.45E+00	2.07E+00	-6.04E-14	9.68E-03	-9.34E-03	-6.05E-13
	Amps	4.09E+01	-1.01E-01	-3.84E-01	-3.95E-04	2.25E-03	3.34E-03	-3.12E-18	2.81E-06	-1.08E-05	7.23E-16
	Flow	1.76E+03	2.95E+01	4.73E+00	4.50E-01	2.28E-01	-3.47E-02	-3.53E-05	-2.33E-04	-1.00E-03	-3.51E-05

**Table 37. Coefficients 460-60-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN176	Capacity	4.83E+04	2.09E+03	2.19E+03	3.48E+01	5.43E+00	-2.62E+01	6.04E-04	-1.25E-01	-6.10E-02	7.70E-02
	Power	8.30E+03	-4.12E+01	-9.26E+01	-8.78E-01	1.38E+00	1.20E+00	-3.64E-15	7.97E-03	-8.95E-03	5.57E-14
	Amps	1.73E+01	4.48E-02	-9.51E-02	3.84E-05	-8.37E-04	1.22E-03	-4.62E-17	1.50E-06	2.61E-06	-1.06E-15
	Flow	-2.07E+02	1.87E+01	4.08E+01	2.89E-01	6.95E-02	-3.92E-01	-1.10E-04	-3.41E-04	-8.84E-05	1.11E-03
CSHN184	Capacity	1.52E+05	2.33E+03	-5.99E+02	3.57E+01	2.43E+00	-9.27E-01	7.67E-03	-1.30E-01	-4.89E-02	1.57E-03
	Power	8.60E+03	-4.27E+01	-9.59E+01	-9.10E-01	1.43E+00	1.24E+00	7.67E-15	8.26E-03	-9.28E-03	1.51E-13
	Amps	1.79E+01	4.64E-02	-9.86E-02	3.97E-05	-8.67E-04	1.27E-03	-1.26E-17	1.55E-06	2.71E-06	-9.51E-17
	Flow	1.30E+03	2.11E+01	-3.75E-01	2.92E-01	4.01E-02	-1.53E-02	-3.73E-05	-3.16E-04	3.81E-05	-8.29E-06
CSHN240	Capacity	3.69E+04	2.88E+03	3.29E+03	4.44E+01	8.13E+00	-3.56E+01	-1.95E-03	-1.48E-01	-1.02E-01	1.01E-01
	Power	8.75E+03	4.48E+01	-5.73E+01	1.02E+00	-1.08E+00	1.17E+00	-8.00E-15	-1.03E-02	7.45E-03	2.37E-13
	Amps	2.23E+01	6.73E-02	-1.63E-01	4.09E-04	-1.18E-03	1.77E-03	-8.75E-17	-6.46E-06	7.50E-06	-9.07E-16
	Flow	-3.48E+02	2.42E+01	5.21E+01	3.54E-01	1.52E-01	-4.75E-01	-1.90E-04	-1.45E-04	-6.76E-04	1.35E-03



**Table 37. Coefficients 460-60-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN250	Capacity	1.67E+05	3.13E+03	-1.84E+02	4.58E+01	5.36E+00	-4.11E+00	1.10E-02	-1.60E-01	-9.00E-02	7.33E-03
	Power	9.07E+03	4.64E+01	-5.94E+01	1.05E+00	-1.12E+00	1.21E+00	-9.29E-15	-1.06E-02	7.73E-03	-4.64E-13
	Amps	2.31E+01	6.98E-02	-1.69E-01	4.24E-04	-1.22E-03	1.84E-03	2.88E-17	-6.69E-06	7.77E-06	7.34E-17
	Flow	1.53E+03	2.62E+01	1.26E+00	3.63E-01	1.34E-01	-1.25E-02	-3.61E-05	-2.02E-04	-5.76E-04	-2.92E-05
CSHN315	Capacity	1.94E+05	3.64E+03	1.54E+02	5.78E+01	1.28E+01	-8.33E+00	1.46E-02	-1.98E-01	-1.41E-01	1.74E-02
	Power	1.49E+04	-6.80E+00	-1.15E+02	9.13E-01	6.80E-02	1.66E+00	2.05E-14	-1.03E-02	2.05E-03	1.94E-13
	Amps	3.49E+01	-8.55E-02	-2.84E-01	3.24E-04	1.80E-03	2.60E-03	8.14E-17	-5.68E-06	-6.54E-06	1.09E-15
	Flow	1.83E+03	2.94E+01	3.07E+00	4.54E-01	2.41E-01	-2.31E-02	-3.63E-05	-1.82E-04	-1.04E-03	-4.03E-05
CSHN374	Capacity	2.36E+05	4.41E+03	1.51E+02	6.95E+01	1.52E+01	-9.89E+00	1.92E-02	-2.28E-01	-1.74E-01	2.10E-02
	Power	1.62E+04	7.78E+01	-1.07E+02	1.50E+00	-1.52E+00	1.85E+00	-3.50E-14	-1.35E-02	9.11E-03	-1.05E-12
	Amps	3.70E+01	-3.08E-01	-3.55E-01	4.45E-04	5.99E-03	3.38E-03	-2.74E-17	-4.83E-06	-2.57E-05	1.52E-16
	Flow	2.26E+03	3.56E+01	2.66E+00	5.36E-01	2.93E-01	-2.04E-02	-3.25E-05	3.49E-05	-1.37E-03	-6.25E-05
CSHL374	Capacity	1.44E+05	2.75E+03	3.44E+03	3.91E+01	6.06E+01	-4.86E+01	-8.13E-03	9.79E-02	-4.73E-01	1.72E-01
	Power	1.61E+04	7.55E+01	-1.25E+02	1.66E+00	-1.50E+00	1.91E+00	-8.53E-15	-1.16E-02	7.96E-03	-2.62E-13
	Amps	2.77E+01	1.44E-01	-2.47E-01	2.37E-03	-2.92E-03	2.84E-03	7.77E-18	-1.67E-05	1.56E-05	-3.58E-16
	Flow	-5.07E+01	-6.21E-01	8.45E+01	2.37E-03	1.26E+00	-9.67E-01	-7.07E-04	5.94E-03	-7.53E-03	3.53E-03

**Table 38. Coefficients 575-60-3**

Compressor		Coefficients									
		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
CSHN184	Capacity	1.52E+05	2.33E+03	-5.99E+02	3.57E+01	2.43E+00	-9.27E-01	7.67E-03	-1.30E-01	-4.89E-02	1.57E-03
	Power	8.60E+03	-4.27E+01	-9.59E+01	-9.10E-01	1.43E+00	1.24E+00	7.67E-15	8.26E-03	-9.28E-03	1.51E-13
	Amps	1.43E+01	3.71E-02	-7.89E-02	3.18E-05	-6.94E-04	1.01E-03	-1.01E-17	1.24E-06	2.17E-06	-7.61E-17
	Flow	1.30E+03	2.11E+01	-3.75E-01	2.92E-01	4.01E-02	-1.53E-02	-3.73E-05	-3.16E-04	3.81E-05	-8.29E-06
CSHN250	Capacity	1.67E+05	3.13E+03	-1.84E+02	4.58E+01	5.36E+00	-4.11E+00	1.10E-02	-1.60E-01	-9.00E-02	7.33E-03
	Power	9.07E+03	4.64E+01	-5.94E+01	1.05E+00	-1.12E+00	1.21E+00	-9.29E-15	-1.06E-02	7.73E-03	-4.64E-13
	Amps	1.85E+01	5.58E-02	-1.35E-01	3.39E-04	-9.79E-04	1.47E-03	2.31E-17	-5.36E-06	6.22E-06	5.87E-17
	Flow	1.53E+03	2.62E+01	1.26E+00	3.63E-01	1.34E-01	-1.25E-02	-3.61E-05	-2.02E-04	-5.76E-04	-2.92E-05
CSHN315	Capacity	1.94E+05	3.64E+03	1.54E+02	5.78E+01	1.28E+01	-8.33E+00	1.46E-02	-1.98E-01	-1.41E-01	1.74E-02
	Power	1.49E+04	-6.80E+00	-1.15E+02	9.13E-01	6.80E-02	1.66E+00	2.05E-14	-1.03E-02	2.05E-03	1.94E-13
	Amps	2.79E+01	-6.84E-02	-2.28E-01	2.59E-04	1.44E-03	2.08E-03	6.51E-17	-4.55E-06	-5.23E-06	8.71E-16
	Flow	1.83E+03	2.94E+01	3.07E+00	4.54E-01	2.41E-01	-2.31E-02	-3.63E-05	-1.82E-04	-1.04E-03	-4.03E-05
CSHN374	Capacity	2.36E+05	4.41E+03	1.51E+02	6.95E+01	1.52E+01	-9.89E+00	1.92E-02	-2.28E-01	-1.74E-01	2.10E-02
	Power	1.62E+04	7.78E+01	-1.07E+02	1.50E+00	-1.52E+00	1.85E+00	-3.50E-14	-1.35E-02	9.11E-03	-1.05E-12
	Amps	2.96E+01	-2.46E-01	-2.84E-01	3.56E-04	4.79E-03	2.70E-03	-2.19E-17	-3.86E-06	-2.05E-05	1.22E-16
	Flow	2.26E+03	3.56E+01	2.66E+00	5.36E-01	2.93E-01	-2.04E-02	-3.25E-05	3.49E-05	-1.37E-03	-6.25E-05
CSHL374	Capacity	1.37E+05	3.02E+03	3.53E+03	3.93E+01	5.42E+01	-4.86E+01	-8.09E-03	9.45E-02	-4.41E-01	1.69E-01
	Power	1.63E+04	9.35E+01	-1.42E+02	1.61E+00	-1.65E+00	2.05E+00	2.40E-15	-1.23E-02	8.27E-03	-2.23E-13
	Amps	2.16E+01	1.50E-01	-2.03E-01	1.99E-03	-2.88E-03	2.36E-03	-2.20E-18	-1.53E-05	1.48E-05	-5.29E-16
	Flow	-9.89E+01	4.51E+00	8.41E+01	1.11E-02	1.14E+00	-9.47E-01	-7.05E-04	5.85E-03	-6.95E-03	3.42E-03



# Electrical

## General Electrical

All compressors include:

- Motor Protection: Internal PTC measurement used with external module switch
- UL Recognized: File #SA2356
- Crankcase Heater:
  - Required
  - Bellyband 160W line voltage
  - UL file #SA5015
  - UL recognized (SEOT2, SEOT8 - heaters, crankcase and defrost, refrigeration component) to U.S. and Canadian standards.
- Installation torque: 20 in-lbs minimum, 30 in-lbs maximum

## Electrical Data

Table 39. Electrical data

Compressor	Primary/Secondary Voltage <sup>(a)</sup>	LRA	MCC <sup>(b)</sup>	RLA <sup>(c)</sup>	IMAX <sup>(d)</sup>
CSHN176	200/230-60-3	320	78	56	71
	460-60-3/380-415-50-3	160	36	26	36
	575-60-3/500-50-3	135	30	21	28
	380-60-3	210	46	33	44
CSHN184	200/230-60-3	320	78	56	71
	460-60-3/380-415-50-3	160	36	26	36
	575-60-3/500-50-3	135	30	21	28
	380-60-3	210	46	33	44
CSHN240	200/230-60-3	485	105	75	103
	460-60-3/380-415-50-3	215	51	36	49
	575-60-3/500-50-3	175	41	29	38
	380-60-3	260	60	43	54
CSHN250	200/230-60-3	485	105	75	103
	460-60-3/380-415-50-3	215	51	36	49
	575-60-3/500-50-3	175	41	29	38
	380-60-3	260	60	43	54
CSHD315	200/230-60-3	560	132	94	125
	460-60-3/380-415-50-3	260	65	46	62
	575-60-3/500-50-3	210	53	38	48
	380-60-3	310	85	61	72
CSHN374	200/230-60-3	680	170	121	147
	460-60-3/380-415-50-3	320	79	56	72
	575-60-3/500-50-3	235	60	43	55
	380-60-3	382	93	66	85
CSHL374	200/230-60-3	500	177	126	133
	460-60-3/380-415-50-3	235	81	58	66
	575-60-3/500-50-3	187	65	33	53
	380-60-3	-	-	-	-

(a) Voltage utilization ranges:  
 200/230-60-3: 180-253  
 460-60-3/380-415-50-3: 414-506/342-457  
 575-60-3/500-50-3: 518-632  
 380-50-3: 342-418

(b) MCC = Maximum Continuous Current (maximum current at which the compressor will operate)

(c) RLA = Rated Load Amperage (MCC/140). Unit compressor RLA cannot be less than the compressor RLA.

(d) IMAX = Max current @ 59°F SST/155°F SCT/20°F SH/15°F SC, 115°F ambient and 10% undervoltage.



# Weights

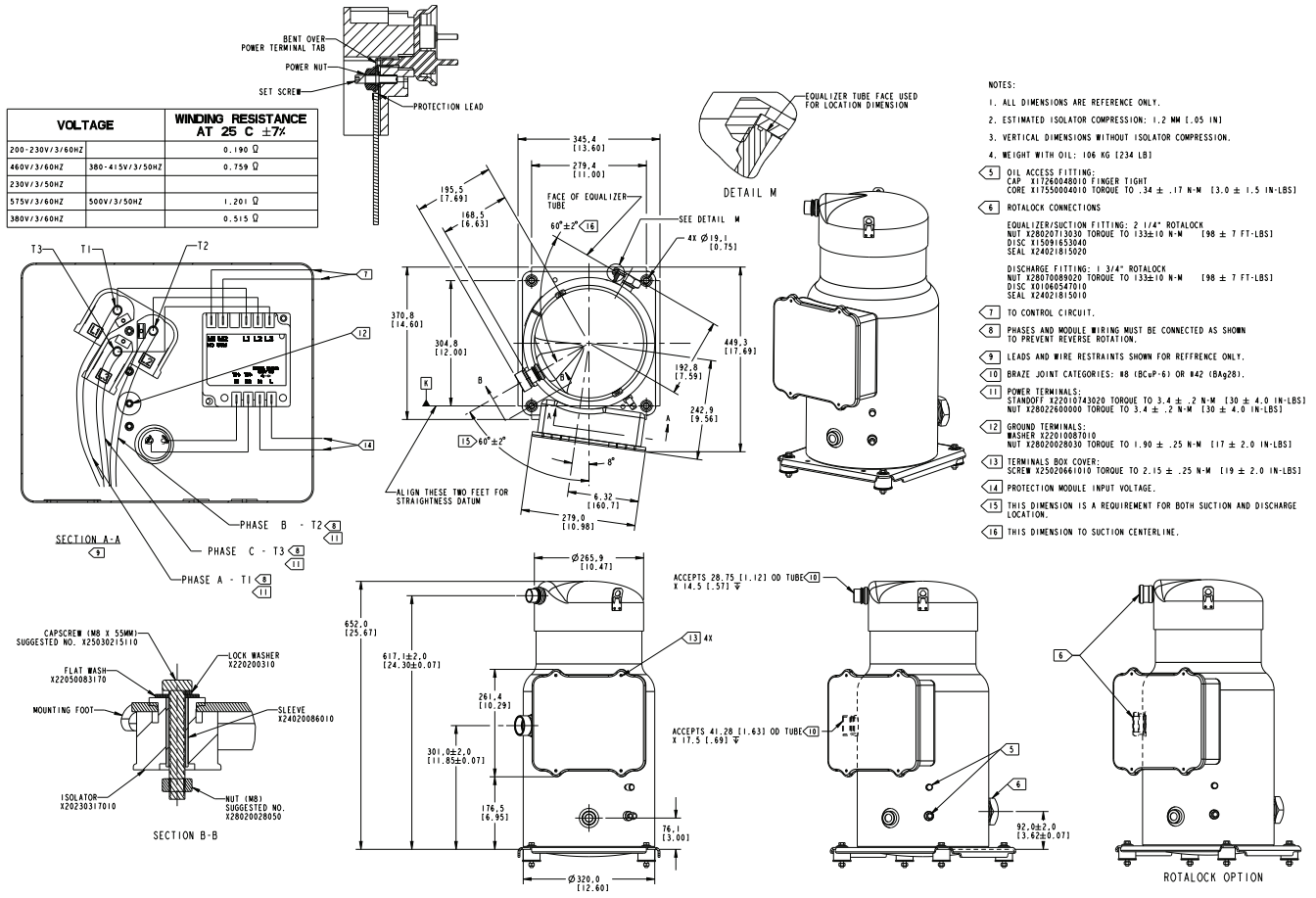
**Table 40. Weights<sup>(a)</sup>**

Compressor	Weight	
	lb	kg
CSHN176	249	112.9
CSHN184	249	112.9
CSHN240	253	114.8
CSHN250	253	114.8
CSHN315	363	164.7
CSHN374	378	171.5
CSHL374	378	171.5

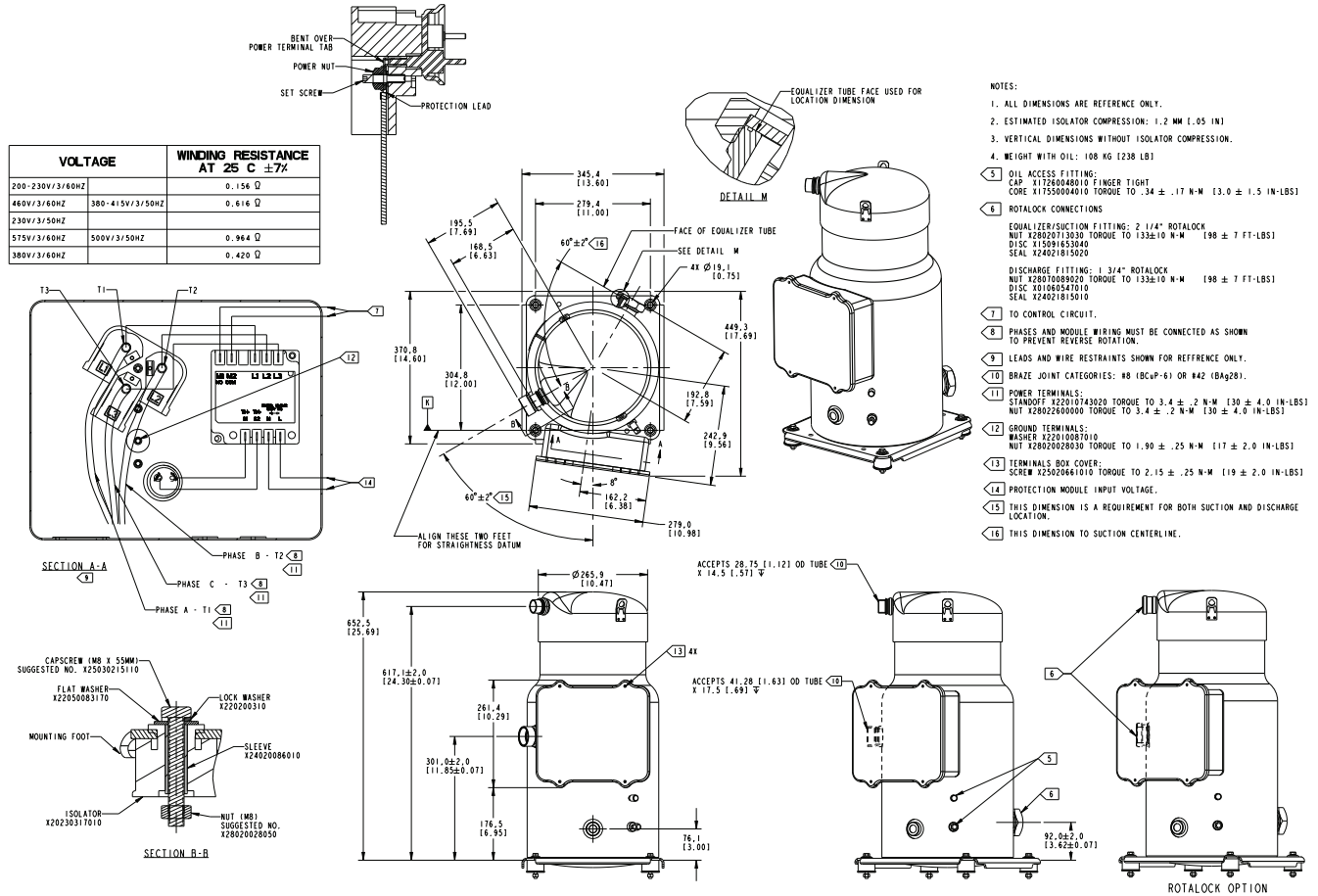
(a) Weights include oil charge

# Dimensions

Figure 4. Dimensions – CSHN 176 and 184

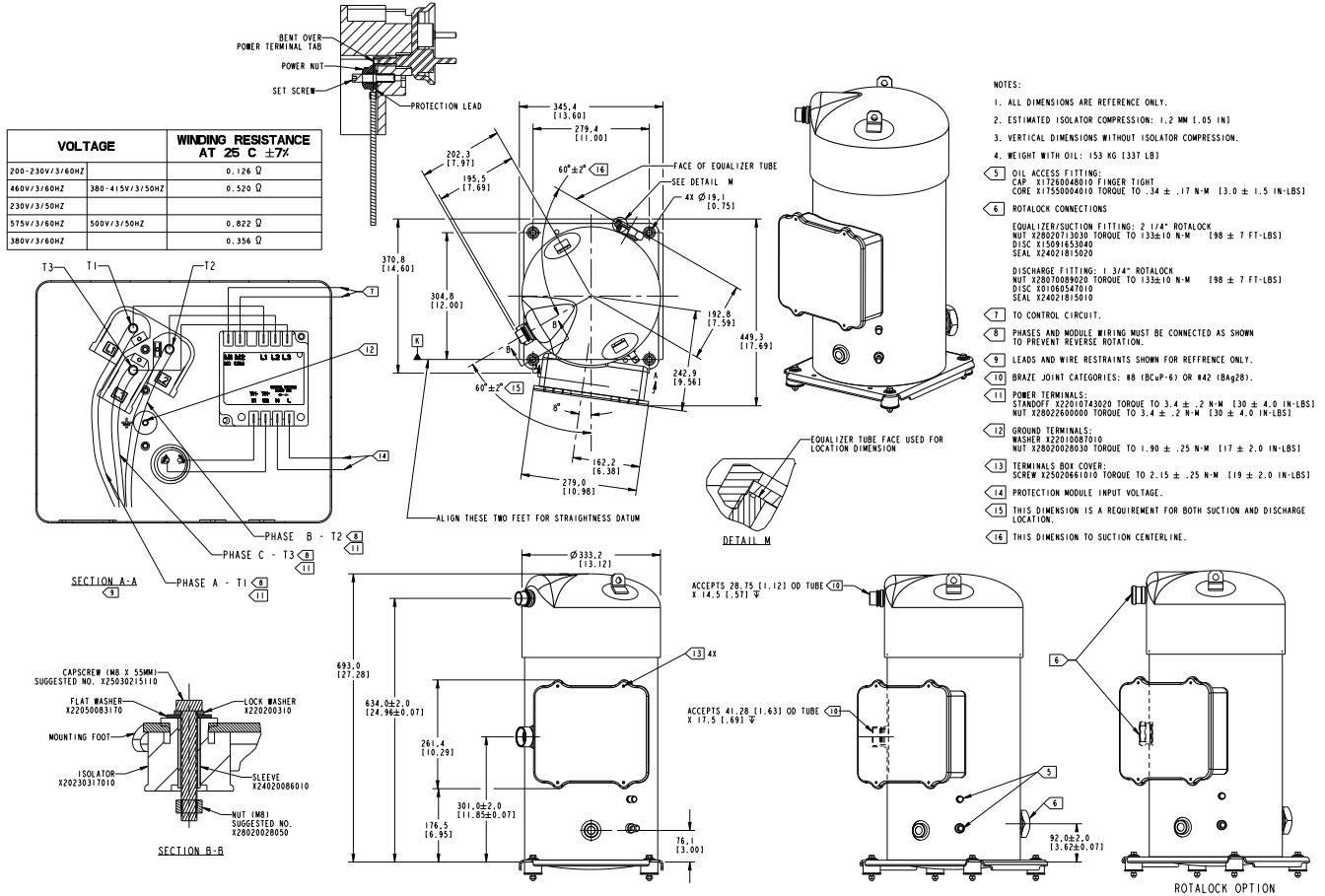


**Figure 5. Dimensions — CSHN 240 and 250**

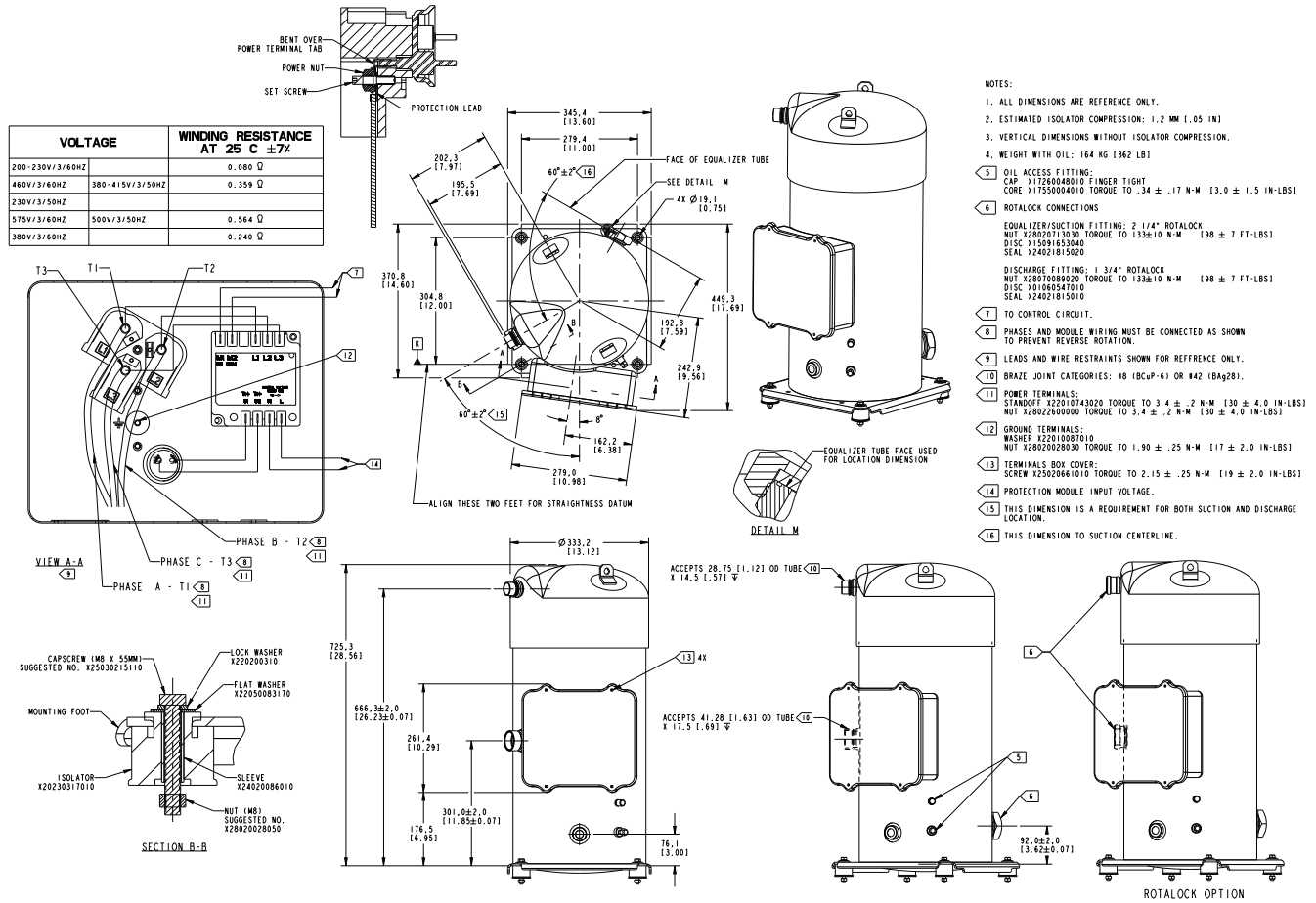


# Dimensions

Figure 6. Dimensions — CSHN 315



**Figure 7. Dimensions — CSHN 374 and CSHL 374**



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