Company History

In 1965, Mr.Sumeth Simakulthorn founded Kulthorn Engineering Ltd. Partnership. Initially, the business only imported and sold Refrigeration, Air-conditioning and Motorcycle spare parts from Europe, Japan and USA.

In 1968, Tecumseh appointed Kulthorn Engineering Ltd. Partnership., to become Sales Representative for Thai market.

Later in 1980, Mr.Sumeth Simakulthorn was selected by the Board of Investment (BOI) of Thailand to establish the neutral company called “Kulthorn Kirby Public Co., Ltd.” (KKC) to manufacture Hermetic Compressors in Thailand, a project led by Thai Government at that time. The original shareholders consisted of Simakulthorn Group, James N. Kirby Pty Ltd., 10 Original Equipment Manufacturers of Refrigerators and Air-conditioners and Industrial Finance Corporation of Thailand (IFCT). With the growth of Kulthorn Group in the past 40 years, the company has currently 5 other subsidiaries which support as a vertical-integrated supply chain operation to manufacture a wide range of products, including: hermetic reciprocating compressors; slitting and blanking steel; castings; and high quality magnet copper and aluminum wire.

In 2018, KKC has purchased the assets, machineries, intellectual properties (IPs), brand names and trademarks from Bristol Compressors International, LLC. to produce Bristol Compressors in Thailand. KKC has spent the past two years relocating the manufacturing machineries from Virginia, USA to Bangkok, Thailand with the support of key Bristol US production and quality team to ensure product quality.

Rating Conditions (ASHRAE-T)

	LBP	MBP/CBP	HBP
- Evaporating Temp.	-10 °F (-23 °C)	20 °F (-7 °C)	45 °F (7 °C)
- Condensing Temp.	130 °F (54 °C)	130 °F (54 °C)	130 °F (54 °C)
- Return Gas Temp.	90 °F (32 °C)	95 °F (35 °C)	95 °F (35 °C)
- Liquid temp.	90 °F (32 °C)	115 °F (46 °C)	115 °F (46 °C)
- Ambient Temp.	90 °F (32 °C)	95 °F (35 °C)	95 °F (35 °C)

Rating Conditions (ARI)

	LBP	MBP/CBP	HBP
- Evaporating Temp.	-10 °F (-23 °C)	20 °F (-7 °C)	45 °F (7 °C)
- Condensing Temp.	120 °F (49 °C)	120 °F (49 °C)	130 °F (54 °C)
- Return Gas Temp.	40 °F (4 °C)	40 °F (4 °C)	65 °F (18 °C)
- Liquid temp.	120 °F (49 °C)	120 °F (49 °C)	115 °F (46 °C)
- Ambient Temp.	95 °F (35 °C)	95 °F (35 °C)	95 °F (35 °C)

กลุ่มบริษัท กุลธรเคอร์บี้ จำกัด (มหาชน)

KULTHORN GROUP OF COMPANIES

World - Class Products for Refrigeration and Air - Conditioning

บริษัท กุลธรเคอร์บี้ จำกัด (มหาชน)
KULTHORN KIRBY PUBLIC COMPANY LIMITED

AZ AW AE

Corporate Profile	
Registered Capital	: Baht 1,500 million
Factory Floor Space	: 85,300 sq.m.
Employees	: 2,300 persons
Capacity	: 5,200,000 Units/A
Location	: Bangkok

บริษัท กุลธรพรีเมียร์ จำกัด
KULTHORN PREMIER COMPANY LIMITED

C-BF C-BZN

Corporate Profile	
Registered Capital	: Baht 1,260 million
Factory Floor Space	: 41,500 sq.m.
Employees	: 901 persons
Capacity	: 4,000,000 Units/A
Location	: Prachinburi

บริษัท กุลธร สตีล จำกัด
KULTHORN STEEL COMPANY LIMITED

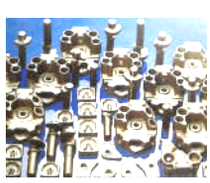
Corporate Profile	
Registered Capital	: Baht 400 million
Factory Floor Space	: 6,750 sq.m.
Employees	: 276 persons
Capacity	: 264,000 Tons /A
Location	: Bangkok

บริษัท กุลธรแมททีเรียลส์แอนด์คอนโทรลส์ จำกัด
KULTHORN MATERIALS & CONTROLS CO., LTD.

Manufacturing high quality of Magnet Copper Wire for hermetic compressor of air conditioner and refrigerator Class H - 200 C and for Electric Motor Class F - 155 C with UL, ISO9001:2008, ISO14001:2004 and OHSAS18001:2007 standards.

Corporate Profile	
Registered Capital	: Baht 450 million
Factory Floor Space	: 11,350 sq.m.
Employees	: 192 persons
Capacity	: 14,000 Tons /A
Location	: Chachoengsao

บริษัท กุลธรเคอร์บี้เฟาน์ดรี่ จำกัด
KULTHORN KIRBY FOUNDRY CO., LTD.



Corporate Profile	
Registered Capital	: Baht 575 million
Factory Floor Space	: 11,350 sq.m.
Employees	: 727 persons
Capacity	: 96,000 Tons /A
Location	: Chachoensao

THACOM
บริษัท อุตสาหกรรมคอมเพรสเซอร์ไทย จำกัด
Thai Compressor Manufacturing Co.,Ltd.

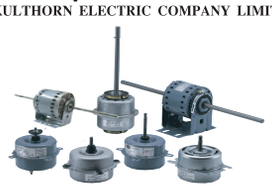
LICENSE MITSUBISHI HEAVY INDUSTRIES,LTD.

Corporate Profile	
Registered Capital	: Baht 490 million
Factory Floor Space	: 14,400 sq.m.
Employees	: 640 persons
Capacity	: 1,000,000 Units/A
Location	: Chachoensao

บริษัท กุลธรวิจัยและพัฒนา จำกัด
KULTHORN RESEARCH AND DEVELOPMENT CO., LTD.

Corporate Profile	
Registered Capital	: Baht 50 million
Factory Floor Space	: 400 sq.m.
Employees	: 50 persons
Location	: Bangkok

บริษัท กุลธรอิเล็คทริค จำกัด
KULTHORN ELECTRIC COMPANY LIMITED



FRAME SIZE J-C-V-D-H-L

Corporate Profile	
Registered Capital	: Baht 110 million
Factory Floor Space	: 6,304 sq.m.
Employees	: 325 persons
Capacity	: 1,400,000 Units/A
Location	: Bangkok

KULTHORN KIRBY PUBLIC CO., LTD.

LATKRABANG INDUSTRIAL ESTATE

126 CHALONG KRUNG ROAD 31, BANGKOK 10520,THILAND

Tel. : (662) 326-0831-6, 739-4893-5 E-mail : sales@kulthorn.com

BRISTOL
COMPRESSORS™

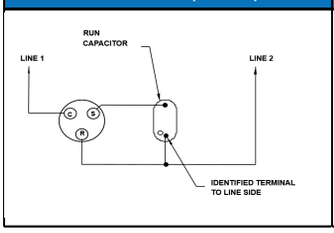
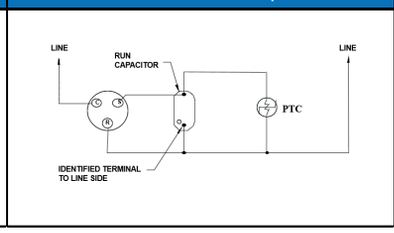
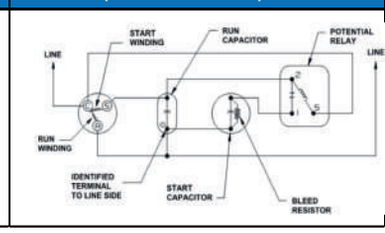
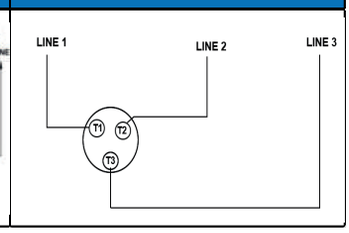
Compressor solutions that exceed expectations.

FAMILY J - B - A - G

J FAMILY

Model	Disp.	Electricity	ASHRAE_T (Estimated)			ARI				
			Cooling Capacity	Motor Input	EER	Cooling Capacity	Motor Input	EER		
	CM3/Rev.	V/Ph. /Hz	Btu/hr	Watts	Btu/Whr	Btu/hr	Watts	Btu/Whr	RLA	LRA
R22 / HBP										
H22J133ABC	27.27	208–230/1/60	13,500	1,280	10.55	13,260	1,270	10.44	6.0	48.0
H22J153ABC	30.82	208–230/1/60	15,800	1,480	10.68	15,480	1,480	10.46	6.7	48.0
H22J183ABC	35.05	208–230/1/60	18,600	1,720	10.81	18,260	1,710	10.68	7.4	48.0
H22J203ABC	39.60	208–230/1/60	20,800	1,900	10.95	20,500	1,900	10.79	8.6	60.0
H22J223ABC	42.37	208–230/1/60	23,000	2,110	10.90	22,620	2,100	10.77	9.6	60.0
H22J253ABC	44.22	208–230/1/60	24,600	2,190	11.23	24,210	2,190	11.05	9.6	61.0
H22J293ABC	50.08	208–230/1/60	29,400	2,620	11.22	28,830	2,590	11.13	11.8	73.0
H22J333ABC	55.08	208–230/1/60	32,400	2,910	11.13	31,950	2,880	11.09	13.0	82.0
H22J363ABC	60.55	208–230/1/60	36,300	3,240	11.20	35,680	3,220	11.08	14.4	86.0
H22J383ABC	63.43	208–230/1/60	38,400	3,480	11.03	37,830	3,460	10.93	14.9	86.0
H22J413ABC	67.96	208–230/1/60	41,600	3,770	11.03	40,930	3,750	10.91	17.1	102.0
R410A / HBP										
H82J133ABC	20.65	208–230/1/60	13,100	1,340	9.78	12,960	1,330	9.74	5.9	43.0
H82J153ABC	22.34	208–230/1/60	14,900	1,490	10.00	14,720	1,480	9.95	6.5	43.0
H82J183ABC	25.73	208–230/1/60	18,300	1,790	10.22	18,060	1,780	10.15	7.4	43.0
H82J193ABC	27.12	208–230/1/60	19,200	1,870	10.27	18,960	1,870	10.14	8.0	43.0
H82J213ABC	28.97	208–230/1/60	21,300	2,050	10.39	21,000	2,040	10.29	9.4	54.0
H82J223ABC	30.51	208–230/1/60	22,600	2,180	10.37	22,330	2,170	10.29	9.9	54.0
H82J243ABC	32.36	208–230/1/60	24,600	2,350	10.47	24,340	2,330	10.45	10.6	54.0
H82J263ABC	34.36	208–230/1/60	26,500	2,500	10.60	26,170	2,490	10.51	11.6	74.0
H82J273ABC	35.13	208–230/1/60	27,400	2,580	10.62	27,050	2,570	10.53	11.8	74.0
H82J283ABC	36.36	208–230/1/60	28,500	2,690	10.59	28,140	2,680	10.50	13.0	74.0
H82J293ABC	37.90	208–230/1/60	29,700	2,810	10.57	29,360	2,790	10.52	12.9	74.0
H82J303ABC	38.83	208–230/1/60	31,200	2,930	10.65	30,780	2,920	10.54	13.0	88.0
H82J323ABC	40.37	208–230/1/60	32,700	3,070	10.65	32,230	3,060	10.53	13.6	88.0
H82J333ABC	42.83	208–230/1/60	33,800	3,210	10.53	33,360	3,190	10.46	14.2	84.0
H82J333DBV	42.83	380–460/3/60	33,300	3,180	10.47	32,910	3,160	10.41	5.0	44.0
H82J353ABC	44.69	208–230/1/60	35,300	3,330	10.60	34,840	3,320	10.49	14.5	84.0
H82J353DBV	44.69	380–460/3/60	35,000	3,320	10.54	34,520	3,300	10.46	5.1	44.0
H82J373ABC	47.77	208–230/1/60	38,100	3,620	10.52	37,640	3,600	10.46	15.7	84.0
H82J403ABC	49.63	208–230/1/60	40,300	3,770	10.69	39,740	3,750	10.60	17.9	102.0
H82J403DBV	49.63	380–460/3/60	40,100	3,750	10.69	39,570	3,740	10.58	5.5	44.0
H82J423ABC	51.07	208–230/1/60	42,700	3,970	10.76	42,140	3,950	10.67	18.3	102.0
H82J423DBV	51.07	380–460/3/60	41,900	3,940	10.63	41,350	3,920	10.55	5.9	44.0
H82J443ABC	53.64	208–230/1/60	44,700	4,180	10.69	44,050	4,170	10.56	18.5	105.0
H82J443DBV	53.64	380–460/3/60	43,800	4,130	10.61	43,330	4,110	10.54	6.1	44.0
H82J463ABC	55.39	208–230/1/60	46,300	4,370	10.59	45,810	4,350	10.53	20.2	105.0
H82J463DBV	55.39	380–460/3/60	46,000	4,300	10.70	45,400	4,270	10.63	6.7	55.0
H82J483ABC	57.66	208–230/1/60	48,600	4,540	10.70	47,960	4,520	10.61	21.4	130.0
H82J503ABC	60.13	208–230/1/60	50,900	4,780	10.65	50,290	4,750	10.59	22.5	130.0
R22 or 407C / HBP										
R92J223ABC	41.60	208–230/1/60	20,600	2,010	10.25	20,300	1,990	10.20	7.8	61.0
R92J253ABC	45.30	208–230/1/60	24,100	2,220	10.86	23,700	2,210	10.72	10.6	61.0
R92J273ABC	47.76	208–230/1/60	25,800	2,340	11.03	25,400	2,330	10.90	10.6	61.0
R92J323ABC	53.76	208–230/1/60	28,900	2,690	10.74	28,500	2,670	10.67	12.3	82.0
R92J343ABC	57.85	208–230/1/60	33,700	2,990	11.27	31,700	2,970	10.67	13.0	78.0
R92J433ABC	70.62	208–230/1/60	40,300	3,690	10.92	39,700	3,660	10.85	17.0	102.0

Motor Type/Wiring Diagram

PSC: Permanent Split Capacitor	RSCR: Resistance Start Capacitor Run	CSR: Capacitor Start Capacitor Run	3 Phase Motor
			

B FAMILY

Model	Disp.	Electricity	ASHRAE_T (Estimated)			ARI				
			Cooling Capacity	Motor Input	EER	Cooling Capacity	Motor Input	EER		
	CM3/Rev.	V/Ph. /Hz	Btu/hr	Watts	Btu/Whr	Btu/hr	Watts	Btu/Whr	RLA	LRA
R22 / HBP										
H2EB153ABC	31.89	208–230/1/60	15,400	1,700	9.06	15,160	1,680	9.02	9.0	45.0
H2EB193ABC	38.37	208–230/1/60	19,300	2,110	9.15	19,030	2,100	9.06	11.2	61.0
H2EB223ABC	44.22	208–230/1/60	22,200	2,440	9.10	21,840	2,420	9.02	12.1	61.0
H2EB243ABC	46.61	208–230/1/60	24,200	2,470	9.80	23,840	2,460	9.69	10.6	66.0
H2EB263ABC	51.31	208–230/1/60	26,600	2,850	9.33	26,270	2,830	9.28	12.8	83.0
H2EB283ABC	55.08	208–230/1/60	28,400	3,120	9.10	28,060	3,100	9.05	13.5	85.0
H2EB323ABC	60.55	208–230/1/60	31,400	3,530	8.90	30,840	3,500	8.81	16.5	93.0
R410A / HBP										
H84B123ABC	19.26	208–230/1/60	11,700	1,230	9.51	11,610	1,210	9.60	5.5	45.0
H84B133ABC	20.65	208–230/1/60	12,700	1,300	9.77	12,480	1,290	9.67	5.9	45.0
H84B183ABC	25.73	208–230/1/60	18,000	1,750	10.29	17,730	1,740	10.19	7.9	45.0
H84B193ABC	27.12	208–230/1/60	19,000	1,860	10.22	18,790	1,850	10.16	8.7	45.0
H84B223ABC	30.51	208–230/1/60	22,500	2,170	10.37	22,170	2,150	10.31	9.8	57.0
H84B233ABC	31.43	208–230/1/60	23,200	2,250	10.31	22,930	2,230	10.28	10.3	57.0
H84B243ABC	32.36	208–230/1/60	23,900	2,300	10.39	23,570	2,300	10.25	10.6	57.0
H84B263ABC	34.36	208–230/1/60	26,800	2,480	10.81	26,430	2,470	10.70	13.0	78.0
H84B273ABC	35.13	208–230/1/60	27,100	2,510	10.80	26,380	2,470	10.68	13.0	78.0
H84B283ABC	36.36	208–230/1/60	27,800	2,600	10.69	27,480	2,590	10.61	13.0	78.0
H84B283DBV	36.36	380–460/3/60	27,800	2,600	10.69	27,500	2,590	10.62	3.9	34.0
H84B293ABC	37.90	208–230/1/60	30,300	2,820	10.74	30,150	2,800	10.77	13.0	78.0
H84B293DBV	37.90	380–460/3/60	30,300	2,820	10.74	29,900	2,810	10.64	4.1	34.0
H84B303ABC	38.82	208–230/1/60	31,900	2,940	10.85	31,500	2,930	10.75	13.0	88.0
R22 or 407C / HBP										
HCRB143ABC	29.27	208–230/1/60	14,300	1,360	10.51	14,080	1,350	10.43	5.8	48.0
HCRB183ABC	35.05	208–230/1/60	18,600	1,710	10.88	18,260	1,700	10.74	7.4	48.0
HCRB223ABC	42.37	208–230/1/60	23,000	2,130	10.80	22,620	2,120	10.67	9.4	60.0
HCRB243ABC	44.22	208–230/1/60	24,600	2,230	11.03	24,210	2,210	10.95	9.6	61.0
HCRB283ABC	50.08	208–230/1/60	29,400	2,650	11.09	28,830	2,640	10.92	12.1	73.0
HCRB303ABC	52.39	208–230/1/60	30,300	2,740	11.06	29,860	2,720	10.98	12.0	82.0
HCRB323ABC	55.08	208–230/1/60	32,400	2,940	11.02	31,950	2,930	10.90	13.1	82.0
R404A / MBP										
M63B872BBC	28.84	208–230/1/60	7,900	1,170	6.75	6,600	1,170	5.64	6.1	54.0
M63B872BBK	28.84	220–240/1/50	6,600	1,090	6.06	5,200	1,040	5.00	5.0	35.0
M63B982BBC	31.28	208–230/1/60	9,200	1,340	6.87	7,800	1,330	5.86	6.9	54.0
M63B982BBK	31.28	220–240/1/50	7,400	1,160	6.38	6,100	1,150	5.30	5.4	42.0
M63B123BBC	41.60	208–230/1/60	11,800	1,680	7.02	10,300	1,670	6.17	8.6	66.0
M63B123DBL	41.60	200–230/3/60	11,500	1,660	6.93	10,300	1,720	5.99	4.9	48.0
M63B153BBC	47.60	208–230/1/60	14,400	1,980	7.27	12,500	2,000	6.25	10.0	66.0
M63B153DBV	47.60	380–460/3/60	14,100	1,960	7.19	12,300	1,970	6.24	3.0	23.0
M63B203BBC	55.07	208–230/1/60	18,900	2,660	7.11	16,100	2,530	6.36	13.1	85.0
M63B203BBK	55.07	220–240/1/50	16,000	2,250	7.11	13,600	2,160	6.30	11.4	76.0
R404A / LBP										
L63B562BBC	34.64	208–230/1/60	5,100	1,110	4.59	3,500	1,140	3.07	5.5	57.0
L63B562DBV	34.64	380–460/3/60	5,100	1,060	4.81	3,400	1,080	3.15	1.8	18.0
L63B652BBC	41.40	208–230/1/60	6,200	1,230	5.04	4,600	1,300	3.54	6.6	57.0
L63B652DBV	41.40	380–460/3/60	6,000	1,340	4.48	4,400	1,410	3.12	2.0	18.0
L63B752BBC	45.52	208–230/1/60	7,500	1,440	5.21	5,400	1,470	3.67	7.2	55.0
L63B752DBV	45.52	380–460/3/60	7,600	1,500	5.07	5,500	1,530	3.59	2.9	24.0

A FAMILY

Model	Disp.	Electricity	ASHRAE_T (Estimated)			ARI				
			Cooling Capacity	Motor Input	EER	Cooling Capacity	Motor Input	EER		
	CM3/Rev.	V/Ph. /Hz	Btu/hr	Watts	Btu/Whr	Btu/hr	Watts	Btu/Whr	RLA	LRA
R22 / HBP										
H22A503ABC	85.25	208–230/1/60	49,700	4,930	10.08	49,000	4,890	10.02	22.3	138.0
H22A503DBE	85.25	460/3/60	49,700	4,930	10.08	49,000	4,890	10.02	6.8	53.0
		380–415/3/50	42,800	4,230	10.12	42,190	4,210	10.02	6.6	53.0
H22A503DBL	85.25	200–230/3/60	49,700	4,930	10.08	49,000	4,890	10.02	13.7	106.0
		200–220/3/50	43,200	4,340	9.95	42,390	4,310	9.84	14.7	106.0
H22A543ABC	92.67	208–230/1/60	54,300	5,370	10.11	53,420	5,340	10.00	24.4	138.0
H22A543DBE	92.67	460/3/60	54,300	5,280	10.28	53,420	5,250	10.18	7.5	53.0
		380–415/3/50	46,700	4,490	10.40	46,000	4,460	10.31	7.2	53.0
H22A543DBL	92.67	200–230/3/60	54,300	5,280	10.28	53,420	5,250	10.18	14.5	106.0
		200–220/3/50	47,300	4,640	10.19	46,600	4,610	10.11	15.1	106.0
H22A563DBL	95.34	200–230/3/60	56,500	5,430	10.41	55,630	5,360	10.38	15.3	124.0
		200–220/3/50	48,300	4,680	10.32	47,500	4,640	10.24	15.9	124.0
H22A583ABC	98.84	208–230/1/60	58,000	5,780	10.03	57,120	5,780	9.88	26.6	178.0
H22A583DBE	98.84	460/3/60	59,300	5,590	10.61	58,410	5,550	10.52	7.9	62.0
		380–415/3/50	50,000	4,680	10.68	49,220	4,650	10.58	7.7	62.0
H22A623ABC	103.37	208–230/1/60	61,800	6,110	10.11	60,800	6,060	10.03	28.2	178.0
H22A623DBE	103.37	460/3/60	61,800	6,010	10.28	60,800	5,980	10.17	8.5	62.0
		380–415/3/50	52,600	5,070	10.37	51,800	5,030	10.30	8.2	62.0
H22A623DBL	103.37	200–230/3/60	61,800	6,010	10.28	60,800	5,980	10.17	17.0	124.0
		200–220/3/50	53,100	5,140	10.33	52,300	5,130	10.19	18.0	124.0
R404A / MBP										
M63A243BBC	70.62	208–230/1/60	24,400	3,500	6.97	20,600	3,210	6.42	16.5	96.0
M63A243DBL	70.62	200–230/3/60	23,800	3,285	7.25	20,500	3,070	6.68	9.6	78.0
		200–220/3/50	18,600	2,660	6.99	17,200	2,630	6.54	9.7	78.0
M63A243DBV	70.62	380–460/3/60	23,800	3,285	7.25	20,500	3,070	6.68	4.8	39.0
		380–415/3/50	19,500	2,680	7.28	17,200	2,630	6.54	4.7	39.0
M63A273BBC	77.20	208–230/1/60	25,600	3,610	7.09	22,300	3,470	6.43	17.2	96.0
M63A273DBD	77.20	208–230/3/60	26,800	3,700	7.24	22,400	3,360	6.67	10.8	70.0
		200–220/3/50	22,000	3,100	7.10	18,100	2,820	6.42	10.8	70.0
M63A323BBC	85.23	208–230/1/60	30,400	4,200	7.24	25,500	3,870	6.59	19.7	138.0
M63A323DBL	85.23	200–230/3/60	30,000	4,250	7.06	25,700	3,880	6.62	12.3	106.0
		200–220/3/50	25,000	3,550	7.04	22,400	3,440	6.51	12.5	106.0
M63A323DBV	85.23	380–460/3/60	30,000	4,250	7.06	25,700	3,910	6.57	6.1	53.0
		380–415/3/50	25,000	3,530	7.08	22,100	3,400	6.50	6.1	53.0
R404A / LBP										
L63A113BBC	64.44	208–230/1/60	10,600	2,000	5.30	7,700	2,020	3.81	11.6	65.0
L63A113BBK	64.44	220–240/1/50	9,200	1,840	5.00	6,400	1,870	3.42	9.0	60.0
L63A113DBE	64.44	460/3/60	10,800	1,920	5.63	7,700	1,890	4.07	3.3	30.0
		380–415/3/50	8,400	1,520	5.53	6,200	1,590	3.90	3.3	30.0
L63A113DBL	64.44	200–230/3/60	10,800	1,920	5.63	7,700	1,890	4.07	6.1	50.0
		200–220/3/50	8,300	1,520	5.46	6,200	1,590	3.90	6.1	50.0
L63A183BBC	98.83	208–230/1/60	18,100	3,300	5.48	13,300	3,040	4.38	15.6	110.0
L63A183BBK	98.83	220–240/1/50	14,400	2,620	5.50	11,500	2,690	4.28	14.0	104.0
L63A183DBD	98.83	208–230/3/60	18,000	3,040	5.92	13,200	3,060	4.31	9.8	78.0
		200–220/3/50	14,700	2,570	5.72	10,900	2,570	4.24	9.8	78.0

Compressor Mounting System