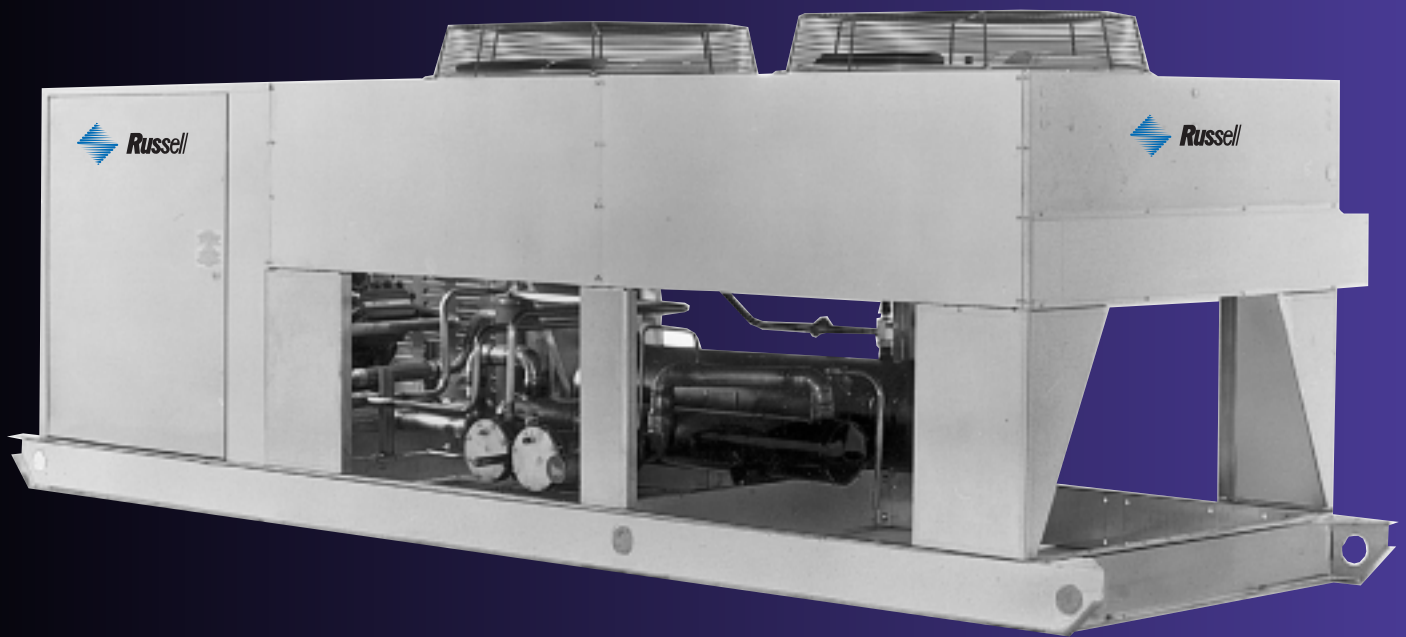
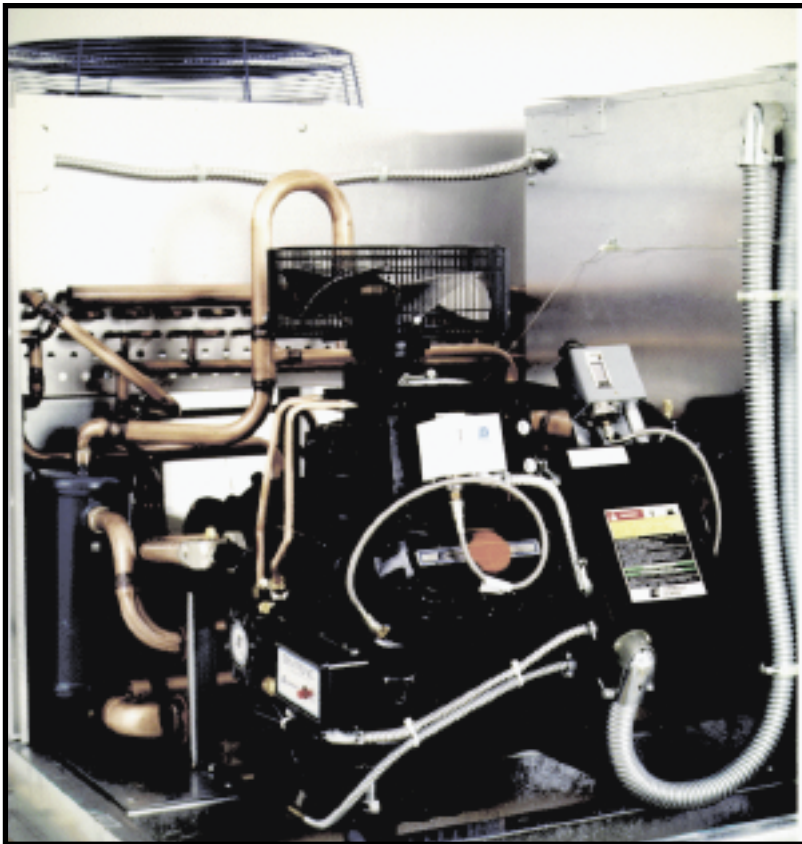




V Series

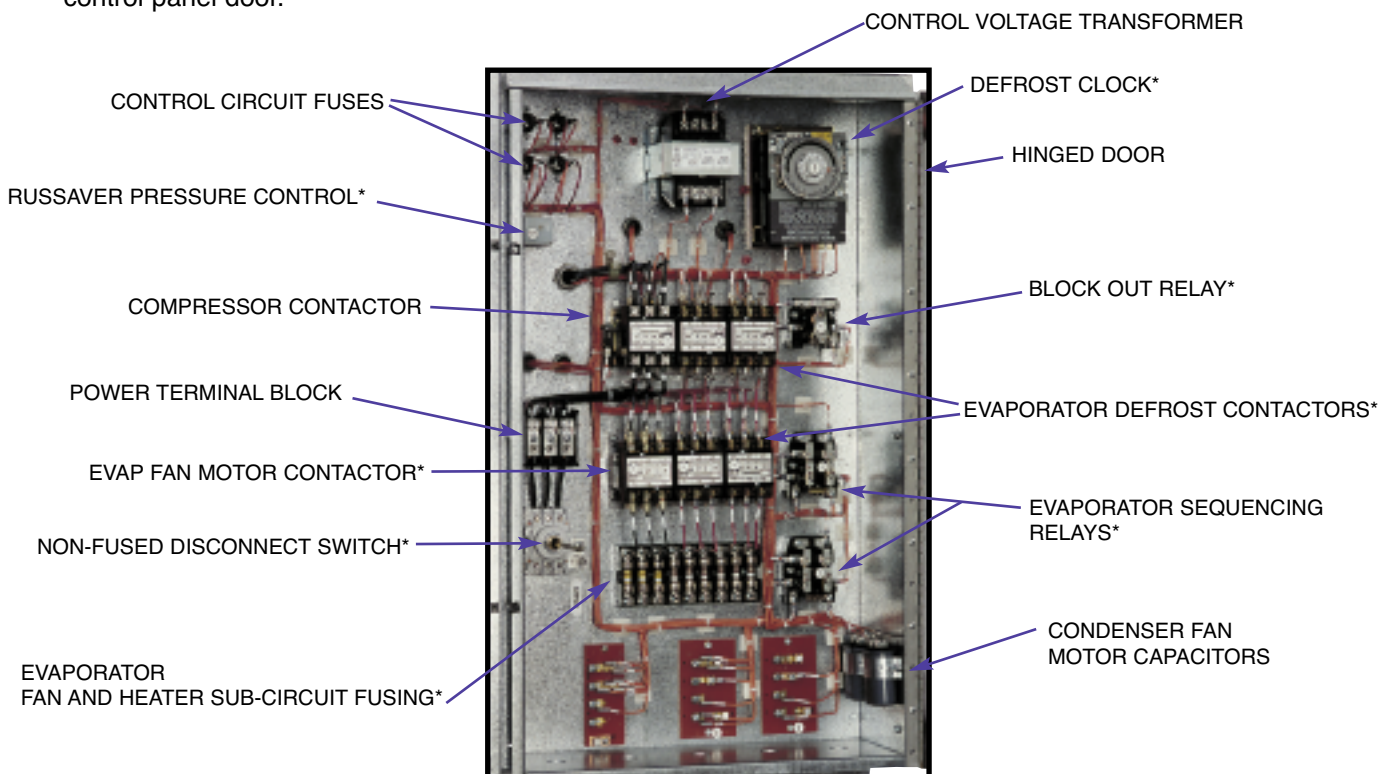
*Air Cooled
Condensing Units
20 to 80 HP
Brochure 520.8
February, 2007*





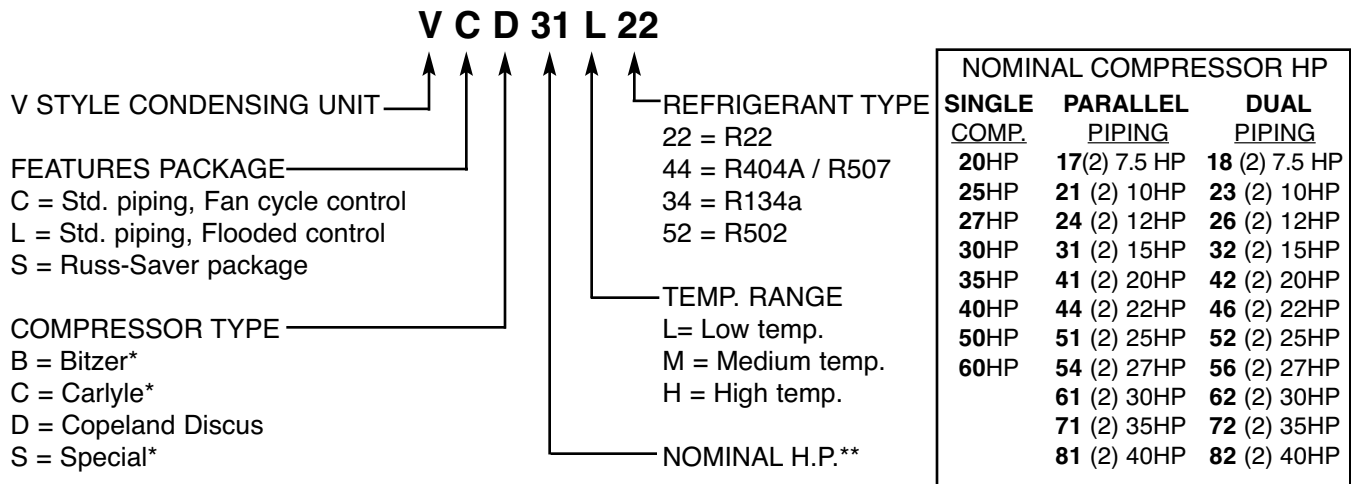
The **outdoor housing** of the unit has been re-engineered. Removing only a few screws allows complete removal of the compressor housing top panel, side panel and corner post. This gives the mechanic quick, unrestricted access to the compressor, all controls and components located within the compressor compartment. Or, just a single panel can be removed, depending on the requirements of the service call.

The **large control panel** has abundant space for the controls you choose. The components are intelligently arranged and laid out in a logical fashion which is easy to understand and work with. Each control and wire is clearly marked with a name or number as shown on the wiring diagram which is permanently affixed to the control panel door.



* OPTIONAL ITEMS, SEE PAGE 3

MODEL NUMBER NOMENCLATURE



	FEATURES AT A GLANCE	MODEL		
		VC	VL	VS
ELECTRICAL COMPONENTS	Crankcase heater	STD	STD	STD
	Oil failure control	STD	STD	STD
	High - Low pressure control - manual(high)/automatic(low) reset	STD	STD	STD
	Compressor contactor	STD	STD	STD
	Control circuit fuses - standard 230/1	STD	STD	STD
	Power terminal block	STD	STD	STD
CONDENSER	Copper tubes with Aluminum fins	STD	STD	STD
	Subcooling circuit	STD	STD	STD
	Fan motor - PSC overload protection	STD	STD	STD
	Fan blade - individually balanced	STD	STD	STD
	Fan guard - heavy duty resilient wire basket	STD	STD	STD
PIPING COMPONENTS	Suction line vibration eliminator	STD	STD	STD
	Replaceable core liquid line filter / drier	STD	STD	STD
	Suction line filter (replaceable core some models)	STD	STD	STD
	Discharge line vibration eliminator	STD	STD	STD
	High Pressure control hoses	STD	STD	STD
RECEIVER	Inlet and outlet isolation valves	STD	STD	STD
	Pressure relief valve	STD	STD	STD
HOUSING	Mill galvanized steel with removable access panels	STD	STD	STD
	Control panel with hinged door	STD	STD	STD
	Heavy galvanized steel base rails	STD	STD	STD
LOW AMBIENT CONTROLS	Pressure fan cycling control	STD	STD	N/A
	Flooded condenser	N/A	STD	N/A
	Russ-Saver — All ambient energy saver	N/A	N/A	STD
TESTING	UL / CUL listed — all models	STD	STD	STD
	Leak detection, dielectric and run tests	STD	STD	STD
	Dry nitrogen holding charge	STD	STD	STD

- OPTIONS:**
- 4 Year extended compressor warranty
 - Air defrost time clock
 - Compressor unloading
 - Copper or coated condenser fins
 - Electric defrost components
 - Evaporator sub circuit fusing
 - Fused or non fused disconnect
 - Heated and insulated receiver— not UL

- Hot Gas defrost components
- Liquid line solenoid valve
- Oil Separator
- Crankcase pressure regulator
- Sentronic oil safety control
- Stainless steel superhoses
- Suction accumulator

* Contact factory for details.

RUSS-SAVER

The initial cost of quality refrigeration equipment is a substantial investment. But the **costs of installation and operation** are also formidable. Rising to the challenge, Russell engineers have designed the **RUSS-SAVER** system to meet the highest standards of performance and reliability while effectively addressing the problem of these profit draining costs.

- **REDUCED INSTALLATION COSTS**

The installation of a refrigeration system which uses **RUSS-SAVER** requires a smaller refrigerant charge than equipment which uses other types of low ambient controls. As the more expensive zero ozone depleting refrigerants become the refrigerants of choice, the reduced charge requirements provided by **RUSS-SAVER** affords ***substantial and immediate cost saving benefits.***

- **REDUCED OPERATING COSTS**

The most expensive part of an *operating* refrigeration system is the cost of energy to operate the compressor. Day and night, year after year, the cost of electricity to operate your equipment is **unrelenting**. These dollars are pulled right from your bottom line.

The **RUSS-SAVER** system is designed to take advantage of reduced ambient conditions during non-peak requirements. As the outside air temperature decreases, head pressures are allowed to drop. This action results in the compressor pumping more refrigerant per stroke while requiring less energy; **saving substantial amounts of energy and your money!**

- **RUSS-SAVER even saves money during high ambient conditions.**

The sub cooling loop provided in the condenser of the **RUSS-SAVER** condensing unit increases the system efficiency 1/2% for each degree of sub cooling provided, thereby making the compressors job easier. Combined with Copeland's energy efficient DISCUS compressors, **RUSS-SAVER's** efficiency saves you money during summer operation and even more during the winter months.

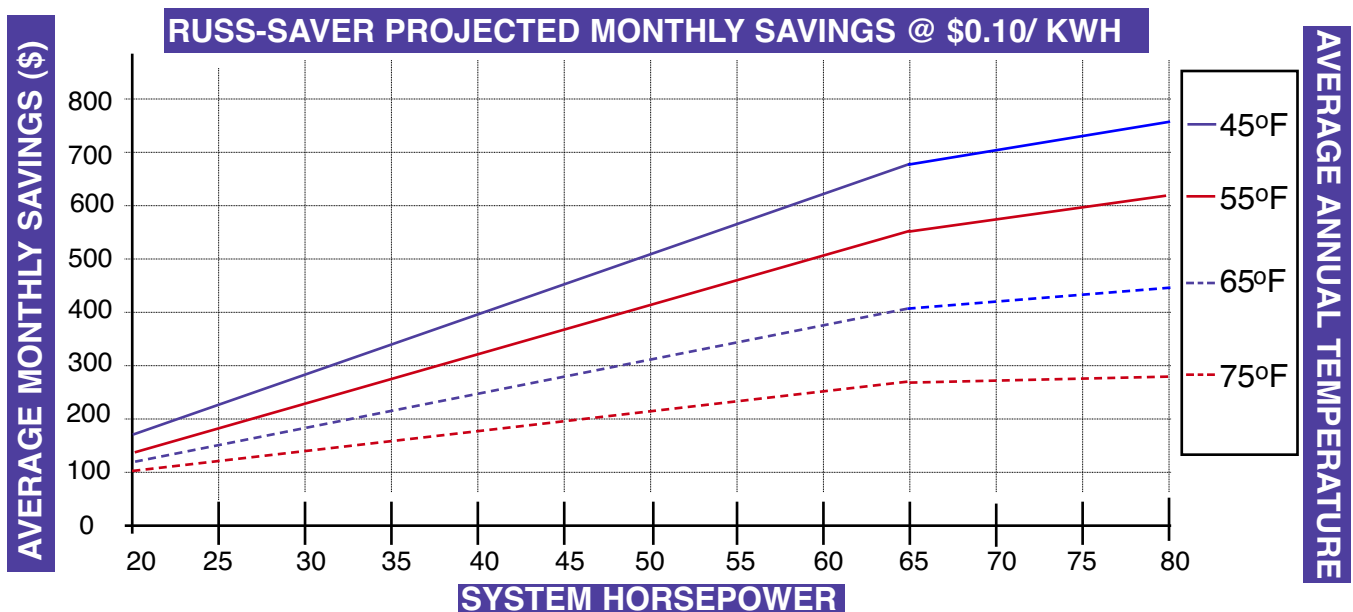
RUSS-SAVER

To estimate your average monthly savings:

- 1) Select a **RUSS-SAVER** system that meets your refrigeration requirements.
- 2) Determine the Average Annual Outdoor Air Temperature from the table below.
- 3) Using the Projected Monthly Savings graph, locate the system nominal horse power at the bottom of the graph.
- 4) Go straight up to the appropriate Annual Average Outdoor Temperature curve, then go horizontally to the left to determine your Estimated Monthly Savings.
- 5) To calculate your Estimated Monthly Savings for energy costs other than \$0.10 KWH, divide the Estimated Monthly Savings by 0.10 and multiply the result by your local electric utility rate.
- 6) To determine your Estimated Yearly Savings, multiply the Estimated Monthly Savings by 12.

AVERAGE ANNUAL OUTDOOR AIR TEMPERATURE

STATE & STATION	ANNUAL AVG. °F	STATE & STATION	ANNUAL AVG. °F	STATE & STATION	ANNUAL AVG. °F	STATE & STATION	ANNUAL AVG. °F
AL Mobile	70	IA Des Moines	50	NM Albuquerque	60	VT Burlington	45
AK Juneau	40	KS Wichita	55	NY Buffalo	45	VA Richmond	60
AZ Phoenix	70	KY Louisville	55	NY New York	55	WA Seattle	50
AR Little Rock	60	LA New Orleans	70	NC Charlotte	60	WV Charleston	55
CA Los Angeles	60	ME Portland	45	ND Bismarck	45	WI Milwaukee	45
CA San Francisco	55	MD Baltimore	55	OH Cleveland	50	WY Cheyenne	45
CO Denver	50	MA Boston	50	OH Columbus	50		
CT Hartford	50	MI Detroit	50	OK Oklahoma City	60	CANADA	
DE Wilmington	55	MN Sault St. Marie	40	OR Portland	55	ALB Calgary	40
D.C. Washington	55	Minneapolis	45	PA Philadelphia	50	B.C. Vancouver	50
FL Jacksonville	70	MS Jackson	65	RI Providence	50	MAN Winnipeg	35
FL Miami	75	MO St. Louis	55	SC Columbia	65	N.B. St. John	45
GA Atlanta	60	MT Great Falls	45	SD Sioux Falls	45	N.F. St. John's	40
HI Honolulu	75	NE Omaha	50	TN Nashville	60	N.S. Halifax	45
ID Boise	50	NV Reno	50	TX Dallas	65	ONT Toronto	45
IL Chicago	50	NH Concord	45	El Paso	65	QUE Montreal	45
IN Indianapolis	50	NJ Atlantic City	55	UT Salt Lake City	50	YUK Dawson	25



BTUH CAPACITIES (MBH)
R-22 HIGH TEMP - SINGLE COMPRESSOR
SUCTION TEMPERATURE °F
90° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
20H22	235.4	214.2	194.6	161.4	145.6	113.2
25H22	308.1	274.8	252.1	203.2	181.9	140.6
30H22	349.0	322.2	289.2	244.3	221.4	172.2
35H22	448.1	409.0	368.8	306.2	276.4	216.9
40H22	518.1	479.3	431.0	363.8	330.1	259.6
50H22	622.8	577.8	529.1	436.1	394.7	304.7
60H22	712.4	642.1	555.0	487.0	441.1	348.4

95° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
20H22	228.3	208.0	188.7	156.6	141.3	109.7
25H22	297.9	266.0	243.8	196.7	176.1	139.5
30H22	338.3	312.6	280.1	236.5	214.3	166.2
35H22	434.1	397.0	357.3	297.0	268.2	210.4
40H22	500.3	464.4	416.8	352.8	320.0	252.1
50H22	604.4	561.1	498.7	422.8	382.5	294.1
60H22	690.7	623.3	572.6	472.4	427.7	370.1

100° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
20H22	220.8	201.5	182.7	151.7	136.8	106.1
25H22	287.5	257.2	235.4	190.1	170.2	131.3
30H22	327.4	303.0	270.9	228.8	207.0	160.2
35H22	420.2	385.1	345.9	287.9	260.0	204.1
40H22	482.4	448.9	402.4	341.6	310.0	244.6
50H22	585.7	544.2	483.0	409.4	370.2	284.8
60H22	669.5	604.8	555.1	458.5	414.5	326.0

110° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
20H22	205.5	188.1	170.1	141.6	127.6	98.6
25H22	266.2	238.8	218.0	176.6	158.0	121.6
30H22	305.1	282.9	252.1	212.9	192.4	148.2
35H22	392.0	360.8	323.1	270.0	244.0	192.1
40H22	445.9	418.0	373.3	319.2	290.4	230.2
50H22	547.8	509.6	451.2	382.7	345.7	265.2
60H22	628.1	569.0	521.0	430.8	389.5	304.7

BTUH CAPACITIES (MBH) R22 HIGH TEMP - PARALLEL / DUAL SYSTEMS

SUCTION TEMPERATURE °F

90° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
17H22 / 18H22*	272.2	248.4	226.3	185.8	167.4	134.3
21H22 / 23H22*	317.3	290.0	264.5	218.4	197.5	160.3
24H22 / 26H22*	364.7	334.8	303.1	251.6	226.3	182.5
31H22 / 32H22*	420.5	385.3	352.0	291.0	263.1	212.2
41H22 / 42H22*	469.7	430.2	393.9	323.9	292.3	238.0
51H22 / 52H22*	603.9	550.1	501.1	406.8	364.2	281.5
61H22 / 62H22*	706.9	646.5	592.9	489.1	443.2	331.3
71H22 / 72H22*	901.4	821.0	749.8	614.2	554.7	428.7
81H22 / 82H22*	1,048.3	960.4	880.9	729.6	661.8	509.2

95° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
17H22 / 18H22*	263.2	240.2	218.8	179.6	161.8	129.8
21H22 / 23H22*	306.8	280.4	255.8	211.2	191.0	155.0
24H22 / 26H22*	354.1	321.0	292.9	244.1	218.4	176.2
31H22 / 32H22*	406.6	372.6	340.4	281.4	254.4	205.2
41H22 / 42H22*	454.2	416.0	380.9	313.2	282.6	230.1
51H22 / 52H22*	584.0	532.0	484.6	393.4	352.2	272.2
61H22 / 62H22*	683.6	625.2	573.4	473.0	428.6	320.4
71H22 / 72H22*	871.7	794.0	725.1	594.0	536.4	414.6
81H22 / 82H22*	1,013.8	928.8	851.9	705.6	640.0	492.4

100° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
17H22 / 18H22*	254.0	231.8	211.2	173.4	156.2	125.3
21H22 / 23H22*	296.1	270.6	246.9	203.9	184.4	149.6
24H22 / 26H22*	342.0	311.7	282.4	235.5	210.6	169.8
31H22 / 32H22*	392.4	359.6	328.5	271.6	245.5	198.1
41H22 / 42H22*	438.4	401.5	367.6	302.3	272.8	222.1
51H22 / 52H22*	563.6	513.4	467.7	379.7	339.9	262.7
61H22 / 62H22*	659.7	603.4	553.4	456.5	413.6	309.2
71H22 / 72H22*	841.2	766.3	699.8	573.3	517.7	400.1
81H22 / 82H22*	978.4	896.3	822.1	681.0	617.6	475.2

110° AMBIENT

VC / VL / VS	+45°	+40°	+35°	+25°	+20°	+10°
17H22 / 18H22*	237.0	216.3	197.1	161.8	145.8	117.0
21H22 / 23H22*	276.3	252.5	230.4	190.3	172.1	139.6
24H22 / 26H22*	312.8	287.0	262.3	216.4	195.3	157.4
31H22 / 32H22*	366.2	335.6	306.5	253.5	229.1	184.9
41H22 / 42H22*	409.1	374.6	343.0	282.1	254.6	207.3
51H22 / 52H22*	525.9	479.1	436.4	354.3	317.2	245.1
61H22 / 62H22*	615.6	563.0	516.4	426.0	385.9	288.5
71H22 / 72H22*	784.9	715.0	653.0	534.9	483.1	373.3
81H22 / 82H22*	912.9	836.3	767.1	635.4	576.3	443.4

*Dual compressor unit capacity is shown as combined total capacity of both systems.

BTUH CAPACITIES (MBH)
R-22 LOW TEMP
SUCTION TEMPERATURE °F
90° AMBIENT

VC / VL / VS	-5°	-10°	-15°	-20°	-25°	-30°	-40°
27L22	142.8	126.2	111.7	97.2	84.6	72.1	49.0
30L22	166.7	147.3	130.6	113.9	99.8	85.7	59.4
44L22 / 46L22*	239.8	210.0	185.3	160.5	140.2	119.9	82.3
54L22 / 56L22*	285.3	252.4	228.7	205.0	174.5	144.1	98.0
61L22 / 62L22*	333.4	294.6	261.2	227.8	199.6	171.4	118.7

95° AMBIENT

VC / VL / VS	-5°	-10°	-15°	-20°	-25°	-30°	-40°
27L22	136.0	120.3	106.5	92.7	80.7	68.7	46.7
30L22	158.9	140.4	124.5	108.6	95.2	81.7	56.6
44L22 / 46L22*	228.6	200.2	176.6	153.0	134.5	115.7	78.5
54L22 / 56L22*	272.0	240.6	218.0	195.4	166.4	137.4	93.4
61L22 / 62L22*	317.8	280.8	249.0	217.2	190.3	163.4	113.2

100° AMBIENT

VC / VL / VS	-5°	-10°	-15°	-20°	-25°	-30°	-40°
27L22	129.2	114.3	101.2	88.1	76.7	65.3	44.4
30L22	151.0	133.4	118.3	103.2	90.4	77.6	53.8
44L22 / 46L22*	217.2	190.2	167.8	145.4	127.0	108.6	74.6
54L22 / 56L22*	258.4	228.6	207.1	185.6	131.1	130.5	88.7
61L22 / 62L22*	301.9	266.8	236.6	206.3	180.7	155.2	107.5

110° AMBIENT

VC / VL / VS	-5°	-10°	-15°	-20°	-25°	-30°	-40°
27L22	122.4	108.3	95.9	83.4	72.6	61.8	42.0
30L22	143.0	126.4	112.1	97.7	85.6	73.5	50.9
44L22 / 46L22*	205.7	180.2	159.0	137.7	120.3	102.9	70.7
54L22 / 56L22*	244.8	216.5	196.2	175.9	149.8	123.7	84.1
61L22 / 62L22*	268.0	242.0	218.5	195.0	171.0	147.1	101.9

*Dual compressor unit capacity is shown as combined total capacity of both systems.

BTUH CAPACITIES (MBH)

R404A LOW TEMP

SUCTION TEMPERATURE °F

90° AMBIENT

VC / VL / VS	0°	-10°	-15°	-20°	-25°	-30°	-40°
27L44	173.7	143.0	128.8	114.7	102.1	89.4	66.9
30L44	200.9	165.0	148.4	131.7	117.0	102.3	77.1
44L44 / 46L44*	274.1	226.9	205.3	183.7	164.9	146.1	113.7
54L44 / 56L44*	346.5	285.1	256.9	228.7	203.5	178.3	133.3
61L44 / 62L44*	402.1	330.3	297.0	263.5	234.2	204.8	154.2

95° AMBIENT

VC / VL / VS	0°	-10°	-15°	-20°	-25°	-30°	-40°
27L44	164.8	135.6	122.2	108.8	96.8	84.8	63.4
30L44	190.9	156.8	141.0	125.1	111.2	97.2	73.2
44L44 / 46L44*	260.3	215.4	194.9	174.4	156.6	138.7	107.9
54L44 / 56L44*	329.6	271.2	244.4	217.6	193.6	169.6	126.8
61L44 / 62L44*	381.8	313.6	282.0	250.2	222.4	194.4	146.4

100° AMBIENT

VC / VL / VS	0°	-10°	-15°	-20°	-25°	-30°	-40°
27L44	157.3	129.4	116.6	103.8	92.4	80.9	60.5
30L44	181.8	149.3	134.3	119.1	105.9	92.6	69.7
44L44 / 46L44*	247.3	204.7	185.2	165.7	148.8	131.8	102.6
54L44 / 56L44*	314.2	258.5	233.0	207.4	184.6	161.7	120.9
61L44 / 62L44*	363.5	298.6	268.5	238.2	211.8	185.1	139.4

110° AMBIENT

VC / VL / VS	0°	-10°	-15°	-20°	-25°	-30°	-40°
27L44	134.4	110.6	99.6	88.7	78.9	69.2	51.7
30L44	154.7	127.1	114.3	101.4	90.1	78.8	59.3
44L44 / 46L44*	212.5	175.8	159.1	142.4	127.8	113.2	88.1
54L44 / 56L44*	270.3	222.4	200.5	178.5	158.8	139.1	104.0
61L44 / 62L44*	311.2	255.6	229.9	204.0	181.3	158.5	119.4

*[Dual compressor unit](#) capacity is shown as combined total capacity of both systems.

BTUH CAPACITIES (MBH) R404A MEDIUM TEMP - SINGLE COMPRESSOR
SUCTION TEMPERATURE °F
90° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	0°	-10°
20M44	231.7	197.4	164.8	149.7	129.7	96.6	75.8
25M44	292.1	251.8	212.1	192.9	157.0	125.9	101.7
30M44	347.6	295.0	246.6	224.1	182.6	146.2	114.8
35M44	443.7	374.2	311.7	283.1	231.2	186.0	147.2
40M44	551.9	471.7	397.1	362.3	297.7	240.9	192.2

95° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	0°	-10°
20M44	219.8	187.2	156.3	142.0	123.0	91.6	71.9
25M44	277.6	239.3	201.6	183.3	149.2	119.6	96.6
30M44	330.1	280.1	234.1	212.8	173.4	138.8	109.0
35M44	422.1	356.0	296.5	269.3	219.9	176.9	140.0
40M44	524.1	447.9	377.1	344.0	282.7	228.7	182.5

100° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	0°	-10°
20M44	209.7	178.6	149.2	135.5	117.4	87.4	68.6
25M44	264.3	227.9	192.0	174.6	142.1	113.9	92.0
30M44	313.6	266.1	222.4	202.2	164.8	131.9	103.6
35M44	402.3	339.3	282.6	256.7	209.6	168.6	133.5
40M44	499.0	426.5	359.0	327.5	269.2	217.8	173.8

110° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	0°	-10°
20M44	179.2	152.6	127.4	115.8	100.3	74.7	58.6
25M44	224.9	193.9	163.3	148.5	120.9	96.9	78.3
30M44	269.4	228.6	191.1	173.7	141.5	113.3	89.0
35M44	346.2	292.0	243.2	220.9	180.4	145.1	114.8
40M44	427.2	365.1	307.4	280.4	230.5	186.4	148.8

BTUH CAPACITIES (MBH)

R404A MEDIUM TEMP - PARALLEL / DUAL SYSTEMS

SUCTION TEMPERATURE °F

90° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	0°	-10°
17M44 / 18M44*	256.5	218.4	183.3	167.0	137.0	115.1	87.5
23M44*	309.4	262.6	220.3	200.9	165.2	133.7	105.7
24M44 / 26M44*	363.4	311.2	263.1	240.6	199.1	162.0	129.4
31M44 / 32M44*	421.0	357.8	300.2	273.7	225.2	182.4	145.2
41M44 / 42M44*	462.9	394.3	329.2	299.1	259.1	193.0	151.5
51M44 / 52M44*	584.1	503.5	424.2	385.7	314.0	251.7	203.1
61M44 / 62M44*	695.2	589.9	493.1	448.2	365.2	292.4	229.6
71M44 / 72M44*	888.1	749.1	623.9	566.7	462.7	372.2	294.6
81M44 / 82M44*	1101.7	941.5	792.7	723.1	594.3	480.8	383.7

95° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	+0°	-10°
17M44 / 18M44*	243.3	207.2	173.9	158.4	129.9	109.2	83.0
21M44 / 23M44*	294.1	249.6	209.4	190.9	157.0	127.0	100.4
24M44 / 26M44*	345.1	295.5	249.8	228.4	189.0	153.8	122.8
31M44 / 32M44*	400.5	340.4	285.6	260.4	214.2	173.5	138.1
41M44 / 42M44*	439.6	374.4	312.6	284.0	246.0	183.2	143.8
51M44 / 52M44*	555.2	478.6	403.2	366.6	298.4	239.2	193.0
61M44 / 62M44*	660.2	560.2	468.2	425.6	346.8	277.6	218.0
71M44 / 72M44*	844.2	712.0	593.0	538.6	439.8	353.8	280.0
81M44 / 82M44*	1048.2	895.8	754.2	688.0	565.4	457.4	365.0

100° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	+0°	-10°
17M44 / 18M44*	232.2	197.7	166.0	151.2	124.0	104.2	79.2
21M44 / 23M44*	280.0	237.7	199.4	181.8	149.5	121.0	95.6
24M44 / 26M44*	327.9	280.8	237.4	217.0	179.6	146.2	116.7
31M44 / 32M44*	381.7	324.5	272.2	248.2	204.2	165.4	131.7
41M44 / 42M44*	418.5	356.5	297.6	270.4	234.2	174.5	136.9
51M44 / 52M44*	529.2	456.2	384.3	349.4	284.4	228.0	184.0
61M44 / 62M44*	629.9	534.5	446.7	406.1	330.9	264.9	208.0
71M44 / 72M44*	804.6	678.6	565.2	513.3	419.2	337.2	266.9
81M44 / 82M44*	997.9	852.9	718.0	655.0	538.3	435.5	347.5

110° AMBIENT

VC / VL / VS	+45°	+35°	+25°	+20°	+10°	+0°	-10°
17M44 / 18M44*	198.3	168.9	141.8	129.1	105.9	89.0	67.7
21M44 / 23M44*	238.3	202.2	169.7	154.7	127.2	102.9	81.4
24M44 / 26M44*	281.7	241.2	203.9	186.4	154.3	125.6	100.3
31M44 / 32M44*	328.5	279.2	234.2	213.6	175.7	142.3	113.3
41M44 / 42M44*	358.3	305.2	254.8	231.5	200.5	149.4	117.2
51M44 / 52M44*	454.8	392.0	330.3	300.3	244.4	196.0	158.1
61M44 / 62M44*	542.7	460.5	384.9	349.9	285.1	228.2	179.2
71M44 / 72M44*	688.1	580.3	483.3	439.0	358.5	288.4	228.2
81M44 / 82M44*	849.1	725.6	611.0	557.3	458.0	370.5	295.7

*Dual compressor unit capacity is shown as combined total capacity of both systems.

ELECTRICAL SPECIFICATIONS - SINGLE AND PARALLEL COMPRESSOR MODELS

MODEL NUMBER VC / VL / VS	COMP. MODEL	230 / 3 / 60			TOTAL UNIT AMPS*	MCA*	460 / 3 / 60			TOTAL UNIT AMPS*	MCA*
		COMP.		COND FLA			COMP.		COND FLA		
		RLA	LRA				RLA	LRA			

HIGH TEMP R-22

20H22	4DA-R18ME	70.0	308.0	12.8	83.8	102.0	35.0	154.0	6.4	41.9	51.0
25H22	4DH-R22ME	85.7	428.0	12.8	99.5	121.0	42.9	214.0	6.4	49.8	61.0
30H22	4DJ-R28ME	118.0	470.0	12.8	131.8	162.0	59.0	235.0	6.4	65.9	81.0
35H22	6DH-R35ME	125.0	565.0	19.2	145.2	177.0	62.5	283.0	9.6	72.6	89.0
40H22	6DJ-R40ME	142.0	575.0	19.2	161.2	197.0	71.0	288.0	9.6	82.1	101.0
50H22	8DP-R56ME	180.0	1070.0	25.6	206.6	252.0	90.0	535.0	12.8	103.8	126.0
60H22	8DS-6000	224.0	1070.0	25.6	250.6	307.0	112.0	535.0	12.8	125.3	154.0

17H22	(2) 3DA-R10ME	82.0	430.0	12.8	95.8	106.0	40.0	212.0	6.4	46.9	52.0
21H22	(2) 3DB-R12ME	87.2	430.0	12.8	101.0	112.0	40.0	212.0	6.4	46.9	52.0
24M22	(2) 3DF-R15ME	96.4	550.0	12.8	110.2	122.0	47.2	276.0	6.4	54.1	60.0
31H22	(2) 3DS-R17ME	119.2	550.0	19.2	139.4	154.0	58.0	276.0	9.6	68.1	75.0
41H22	(2) 4DA-R18ME	132.0	856.0	19.2	152.2	169.0	66.0	428.0	9.6	76.1	84.0
51H22	(2) 4DH-R22ME	164.4	856.0	25.6	191.0	212.0	82.2	428.0	12.8	95.5	106.0
61H22	(2) 4DJ-R28ME	188.0	940.0	25.6	214.6	238.0	94.0	470.0	12.8	107.3	119.0
71H22	(2) 6DH-R35ME	214.0	1130.0	38.4	253.4	280.0	107.0	566.0	19.2	126.7	140.0
81H22	(2) 6DJ-R40ME	284.0	1150.0	38.4	323.4	359.0	142.0	575.0	19.2	161.7	180.0

LOW TEMP R-22

27L22	6DL-F93KE	80.8	450.0	12.8	94.6	115.0	40.4	225.0	6.4	47.3	58.0
30L22	6DT-F11ME	95.6	470.0	12.8	109.4	134.0	47.8	235.0	6.4	54.7	67.0
44L22	(2) 4DT-F76KE	132.0	748.0	19.2	152.2	169.0	66.0	374.0	9.6	76.1	84.0
54L22	(2) 6DL-F93KE	161.6	872.0	19.2	181.8	202.0	80.8	436.0	9.6	90.9	101.0
61L22	(2) 6DT-F11ME	191.2	940.0	19.2	211.4	235.0	95.6	470.0	9.6	105.7	118.0

MEDIUM TEMP R-404A

20M44	4DA-R18ME	66.0	308.0	12.8	79.8	97.0	33.0	154.0	6.4	39.4	49.0
25M44	4DH-R22ME	82.2	428.0	12.8	96.0	117.0	41.1	214.0	6.4	48.0	59.0
30M44	4DJ-R28ME	94.0	470.0	12.8	107.8	132.0	47.2	235.0	6.4	54.1	66.0
35M44	6DH-R35ME	107.0	565.0	19.2	127.2	154.0	53.5	283.0	9.6	63.6	77.0
40M44	6DJ-R40ME	142.0	594.0	19.2	162.2	198.0	71.0	297.0	9.6	81.1	99.0

17M44	(2) 3DA-R10ME	82.0	430.0	12.8	95.6	106.0	40.0	212.0	6.4	46.9	52.0
21M44	(2) 3DB-R12ME	87.2	430.0	12.8	101.0	112.0	40.0	212.0	6.4	46.9	52.0
24M44	(2) 3DF-R15ME	96.4	550.0	12.8	110.2	122.0	47.2	276.0	6.4	54.1	60.0
31M44	(2) 3DS-R17ME	119.2	550.0	19.2	139.4	154.0	58.0	276.0	9.6	68.1	75.0
41M44	(2) 4DA-R18ME	132.0	616.0	19.2	152.2	169.0	66.0	308.0	9.6	76.1	84.0
51M44	(2) 4DH-R22ME	164.4	856.0	25.6	191.0	212.0	82.2	428.0	12.8	95.5	106.0
61M44	(2) 4DJ-R28ME	188.0	940.0	25.6	214.6	238.0	94.0	470.0	12.8	107.3	119.0
71M44	(2) 6DH-R35ME	214.0	1130.0	38.4	253.4	280.0	107.0	566.0	19.2	126.7	140.0
81M44	(2) 6DJ-R40ME	284.0	1188.0	38.4	323.4	359.0	142.0	594.0	19.2	161.7	180.0

LOW TEMP R-404A

27L44	6DL-F93KE	80.8	450.0	12.8	94.6	115.0	40.4	225.0	6.4	47.3	58.0
30L44	6DT-F11ME	95.6	470.0	12.8	109.4	134.0	47.8	235.0	6.4	54.7	67.0
44L44	(2) 4DT-F76KE	132.0	748.0	19.2	152.2	169.0	66.0	374.0	9.6	76.1	84.0
54L44	(2) 6DL-F93KE	161.6	900.0	19.2	181.8	202.0	80.8	450.0	9.6	90.9	101.0
61L44	(2) 6DT-F11ME	191.2	940.0	19.2	211.4	235.0	95.6	470.0	9.6	105.7	118.0

COND FLA = Condenser motors full load amps.

*MINIMUM CIRCUIT AMPACITY — Total for the condensing unit and **does not include** evaporator electrical loads.

ELECTRICAL SPECIFICATIONS - DUAL COMPRESSOR MODELS

MODEL NUMBER VC / VL / VS	COMP. MODEL	230 / 3 / 60			TOTAL UNIT AMPS*	MCA*	460 / 3 / 60			TOTAL UNIT AMPS*	MCA*
		COMP.(EA.)		COND			COMP.(EA.)		COND		
		RLA	LRA	FLA			RLA	LRA	FLA		

HIGH TEMP R-22

18H22	(2) 3DA-R10ME	41.0	215.0	12.8	95.8	106.0	20.0	106.0	6.4	46.9	52.0
23H22	(2) 3DB-R12ME	43.6	215.0	12.8	101.0	112.0	20.0	106.0	6.4	46.9	52.0
26H22	(2) 3DF-R15ME	48.2	275.0	12.8	110.2	122.0	23.6	138.0	6.4	54.1	60.0
32H22	(2) 3DS-R17ME	59.6	275.0	19.2	139.4	154.0	29.0	138.0	9.6	68.1	75.0
42H22	(2) 4DA-R18ME	66.0	308.0	19.2	152.2	169.0	33.0	154.0	9.6	76.1	84.0
52H22	(2) 4DH-R22ME	82.2	428.0	25.6	191.0	212.0	41.1	214.0	12.8	95.5	106.0
62H22	(2) 4DJ -R28ME	94.0	470.0	25.6	214.6	238.0	47.2	235.0	12.8	107.3	119.0
72H22	(2) 6DH-R35ME	107.0	565.0	38.4	253.4	280.0	53.5	283.0	19.2	126.7	140.0
82H22	(2) 6DJ -R40ME	142.0	575.0	38.4	323.4	359.0	71.0	288.0	19.2	161.2	180.0

LOW TEMP R-22

46L22	(2) 4DT-F76KE	66.0	374.0	19.2	152.2	169.0	33.0	187.0	9.6	76.1	84.0
56L22	(2) 6DL-F93KE	80.8	450.0	19.2	181.8	202.0	40.4	225.0	9.6	90.9	101.0
62L22	(2) 6DT-F11ME	95.6	470.0	19.2	211.4	235.0	47.8	235.0	9.6	105.7	118.0

MEDIUM TEMP R-404A

18M44	(2) 3DA-R10ME	41.0	215.0	12.8	95.8	106.0	20.0	106.0	6.4	46.9	52.0
23M44	(2) 3DB-R12ME	43.6	215.0	12.8	101.0	112.0	20.0	106.0	6.4	46.9	52.0
26M44	(2) 3DF-R15ME	48.2	275.0	12.8	110.2	122.0	23.6	138.0	6.4	54.1	60.0
32M44	(2) 3DS-R17ME	59.6	275.0	19.2	139.4	154.0	29.0	138.0	9.6	68.1	75.0
42M44	(2) 4DA-R18ME	66.0	308.0	19.2	152.2	169.0	33.0	154.0	9.6	76.1	84.0
52M44	(2) 4DH-R22ME	82.2	428.0	25.6	191.0	212.0	41.1	214.0	12.8	95.5	106.0
62M44	(2) 4DJ -R28ME	94.0	470.0	25.6	214.6	238.0	47.2	235.0	12.8	107.3	119.0
72M44	(2) 6DH-R35ME	107.0	565.0	38.4	253.4	280.0	53.5	283.0	19.2	126.7	140.0
82M44	(2) 6DJ -R40ME	142.0	594.0	38.4	323.4	359.0	71.0	297.0	19.2	161.7	180.0

LOW TEMP R-404A

46L44	(2) 4DT-F76KE	66.0	374.0	19.2	152.2	169.0	33.0	187.0	9.6	76.1	84.0
56L44	(2) 6DL-F93KE	80.8	450.0	19.2	181.8	202.0	40.4	225.0	9.6	90.9	101.0
62L44	(2) 6DT-F11ME	95.6	470.0	19.2	211.4	235.0	47.8	235.0	9.6	105.7	118.0

COND FLA = Condenser motors full load amps.

*MINIMUM CIRCUIT AMPACITY — Total for the condensing unit and **does not include** evaporator electrical loads.

PHYSICAL DATA SINGLE AND PARALLEL COMPRESSOR MODELS

MODEL NUMBER VC / VL / VS	COMPRESSOR DATA		QTY COND. FANS	APPROXIMATE DIMENSIONS (in)			FAN CONFIG.	REC. CAP. @ 90%#	CONNECTION		APPROX WT LBS.
	MODEL	CFH*		L	W	A			LIQ. ODS#	SUCT. ODS#	

HIGH TEMP R-22

20H22	4DA-R18ME	2380	2	150-3/4	45-3/4	41-1/2	A	106	7/8	2-1/8	1925
25H22	4DH-R22ME	3020	2	150-3/4	45-3/4	41-1/2	A	144	7/8	2-1/8	2000
30H22	4DJ-R28ME	3603	2	150-3/4	45-3/4	41-1/2	A	182	1-1/8	2-1/8	2140
35H22	6DH-R35ME	4530	3	198-3/4	45-3/4	41-1/2	A†	220	1-1/8	2-1/8	2385
40H22	6DJ-R40ME	5404	3	198-3/4	45-3/4	41-1/2	A†	295	1-1/8	2-1/8	2525
50H22	8DP-R56ME	6429	4	150-3/4	90-3/4	41-1/2	D	295	1-1/8	2-5/8	3500
60H22	8DS-6000	7609	4	150-3/4	90-3/4	41-1/2	D	416	1-3/8	2-5/8	3710

17H22	(2) 3DA-R10ME	2742*	2	185	45-3/4	75-3/4	B	144	7/8	2-1/8	2450
21H22	(2) 3DB-R12ME	3230*	2	185	45-3/4	75-3/4	B	144	7/8	2-1/8	2575
24H22	(2) 3DF-R15ME	3826*	2	185	45-3/4	75-3/4	B	182	1-1/8	2-1/8	2750
31H22	(2) 3DS-R17ME	4254*	3	233	45-3/4	75-3/4	C	220	1-1/8	2-1/8	3050
41H22	(2) 4DA-R18ME	4760*	3	233	45-3/4	75-3/4	C	295	1-1/8	2-1/8	3200
51H22	(2) 4DH-R22ME	6040*	4	150-3/4	90-3/4	41-1/2	D	295	1-1/8	2-5/8	3500
61H22	(2) 4DJ-R28ME	7206*	4	150-3/4	90-3/4	41-1/2	D	295	1-3/8	2-5/8	3710
71H22	(2) 6DH-R35ME	9060*	6	198-3/4	90-3/4	41-1/2	E	416	1-5/8	3-1/8	4340
81H22	(2) 6DJ-R40ME	10808*	6	198-3/4	90-3/4	41-1/2	E	500	1-5/8	3-1/8	4750

LOW TEMP R-22

27L22	6DL-F93KE	4530	2	150-3/4	45-3/4	41-1/2	A	145	7/8	2-1/8	2000
30L22	6DT-F11ME	5404	2	150-3/4	45-3/4	41-1/2	A	145	7/8	2-1/8	2065
44L22	(2) 4DT-F76KE	7206*	3	233	45-3/4	75-3/4	C	220	1-1/8	3-1/8	2800
54L22	(2) 6DL-F93KE	9060*	3	233	45-3/4	75-3/4	C	295	1-1/8	3-1/8	3280
61L22	(2) 6DT-F11ME	10808*	3	233	45-3/4	75-3/4	C	295	1-1/8	3-1/8	3580

MEDIUM TEMP R-404A

20M44	4DA-R18ME	2380	2	150-3/4	45-3/4	41-1/2	A	94	7/8	2-1/8	1925
25M44	4DH-R22ME	3020	2	150-3/4	45-3/4	41-1/2	A	128	7/8	2-1/8	2000
30M44	4DJ-R28ME	3603	2	150-3/4	45-3/4	41-1/2	A	162	1-1/8	2-1/8	2140
35M44	6DH-R35ME	4530	3	198-3/4	45-3/4	41-1/2	A†	195	1-1/8	2-1/8	2385
40M44	6DJ-R40ME	5404	3	198-3/4	45-3/4	41-1/2	A†	262	1-1/8	2-1/8	2525

17M44	(2) 3DA-R10ME	2742*	2	185	45-3/4	75-3/4	B	128	7/8	2-1/8	2450
21M44	(2) 3DB-R12ME	3230*	2	185	45-3/4	75-3/4	B	128	7/8	2-1/8	2575
24M44	(2) 3DF-R15ME	3826*	2	185	45-3/4	75-3/4	B	162	1-1/8	2-1/8	2750
31M44	(2) 3DS-R17ME	4254*	3	233	45-3/4	75-3/4	C	195	1-1/8	2-1/8	3050
41M44	(2) 4DA-R18ME	4760*	3	233	45-3/4	75-3/4	C	262	1-1/8	2-1/8	3200
51M44	(2) 4DH-R22ME	6040*	4	150-3/4	90-3/4	41-1/2	D	262	1-1/8	2-5/8	3500
61M44	(2) 4DJ-R28ME	7206*	4	150-3/4	90-3/4	41-1/2	D	262	1-3/8	2-5/8	3710
71M44	(2) 6DH-R35ME	9060*	6	198-3/4	90-3/4	41-1/2	E	370	1-5/8	3-1/8	4340
81M44	(2) 6DJ-R40ME	10808*	6	198-3/4	90-3/4	41-1/2	E	445	1-5/8	3-1/8	4750

LOW TEMP R-404A

27L44	6DL-F93KE	4530	2	150-3/4	45-3/4	41-1/2	A	128	7/8	2-1/8	2000
30L44	6DT-F11ME	5404	2	150-3/4	45-3/4	41-1/2	A	145	7/8	2-1/8	2065
44L44	(2) 4DT-F76KE	7206*	3	233	45-3/4	75-3/4	C	195	1-1/8	3-1/8	2800
54L44	(2) 6DL-F93KE	9060*	3	233	45-3/4	75-3/4	C	262	1-1/8	3-1/8	3280
61L44	(2) 6DT-F11ME	10808*	3	233	45-3/4	75-3/4	C	262	1-1/8	3-1/8	3580

* COMBINED CFH WHEN TWO COMPRESSORS ARE PIPED IN PARALLEL.

ONE ITEM PER CONDENSING UNIT

PHYSICAL DATA DUAL COMPRESSOR MODELS (2 independent systems)

MODEL NUMBER VC / VL / VS	COMPRESSOR DATA		QTY COND. FANS	APPROXIMATE DIMENSIONS (in)			FAN CONFIG.	REC. CAP. @ 90%#	CONNECTION		APPROX WT LBS.
	MODEL #	CFH*		L	W	A			LIQ. ODS#	SUCT. ODS#	

HIGH TEMP R-22

18H22	(2) 3DA-R10ME	1375	2	185	45-3/4	75-3/4	B	(2) 62	(2) 7/8	(2) 1-3/8	2450
23H22	(2) 3DB-R12ME	1620	2	185	45-3/4	75-3/4	B	(2) 62	(2) 7/8	(2) 1-5/8	2575
26H22	(2) 3DF-R15ME	1913	2	185	45-3/4	75-3/4	B	(2) 62	(2) 7/8	(2) 1-5/8	2650
32H22	(2) 3DS-R17ME	2120	3	233	45-3/4	75-3/4	C	(2) 106	(2) 7/8	(2) 1-5/8	3050
42H22	(2) 4DA-R18ME	2380	3	233	45-3/4	75-3/4	C	(2) 106	(2) 7/8	(2) 2-1/8	3200
52H22	(2) 4DH-R22ME	3020	4	150-3/4	90-3/4	41-1/2	D	(2) 144	(2) 7/8	(2) 2-1/8	3500
62H22	(2) 4DJ-R28ME	3603	4	150-3/4	90-3/4	41-1/2	D	(2) 182	(2) 1-1/8	(2) 2-1/8	3710
72H22	(2) 6DH-R35ME	4530	6	198-3/4	90-3/4	41-1/2	E	(2) 220	(2) 1-1/8	(2) 2-1/8	4340
82H22	(2) 6DJ-R40ME	5404	6	198-3/4	90-3/4	41-1/2	E	(2) 295	(2) 1-1/8	(2) 2-1/8	4750

LOW TEMP R-22

46L22	(2) 4DT-F76KE	3603	3	233	45-3/4	75-3/4	C	(2) 106	(2) 7/8	(2) 2-1/8	2800
56L22	(2) 6DL-F93KE	4530	3	233	45-3/4	75-3/4	C	(2) 144	(2) 7/8	(2) 2-1/8	3280
62L22	(2) 6DT-F11ME	5404	3	233	45-3/4	75-3/4	C	(2) 144	(2) 7/8	(2) 2-1/8	3580

MEDIUM TEMP R-404A

18M44	(2) 3DA-R10ME	1375	2	185	45-3/4	75-3/4	B	(2) 55	(2) 7/8	(2) 1-3/8	2450
23M44	(2) 3DB-R12ME	1620	2	185	45-3/4	75-3/4	B	(2) 55	(2) 7/8	(2) 1-5/8	2575
26M44	(2) 3DF-R15ME	1915	2	185	45-3/4	75-3/4	B	(2) 55	(2) 7/8	(2) 1-5/8	2650
32M44	(2) 3DS-R17ME	2120	3	233	45-3/4	75-3/4	C	(2) 94	(2) 7/8	(2) 1-5/8	3050
42M44	(2) 4DA-R18ME	2380	3	233	45-3/4	75-3/4	C	(2) 94	(2) 7/8	(2) 2-1/8	3200
52M44	(2) 4DH-R22ME	3020	4	150-3/4	90-3/4	41-1/2	D	(2) 128	(2) 7/8	(2) 2-1/8	3500
62M44	(2) 4DJ-R28ME	3603	4	150-3/4	90-3/4	41-1/2	D	(2) 162	(2) 1-1/8	(2) 2-1/8	3710
72M44	(2) 6DH-R35ME	4530	6	198-3/4	90-3/4	41-1/2	E	(2) 195	(2) 1-1/8	(2) 2-1/8	4340
82M44	(2) 6DJ-R40ME	5404	6	198-3/4	90-3/4	41-1/2	E	(2) 262	(2) 1-1/8	(2) 2-1/8	4750

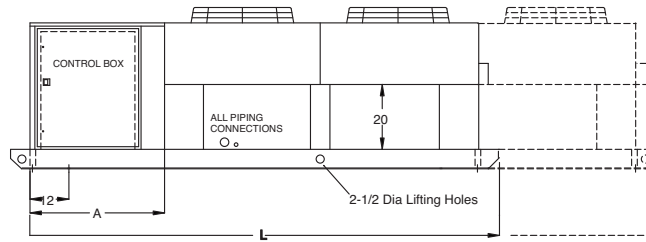
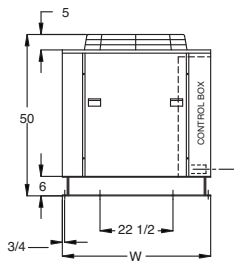
LOW TEMP R-404A

46L44	(2) 4DT-F76KE	3603	3	233	45-3/4	75-3/4	C	(2) 94	(2) 7/8	(2) 2-1/8	2800
56L44	(2) 6DL-F93KE	4530	3	233	45-3/4	75-3/4	C	(2) 128	(2) 7/8	(2) 2-1/8	3280
62L44	(2) 6DT-F11ME	5404	3	233	45-3/4	75-3/4	C	(2) 128	(2) 7/8	(2) 2-1/8	3580

* DATA SHOWN FOR EACH COMPRESSOR SYSTEM.

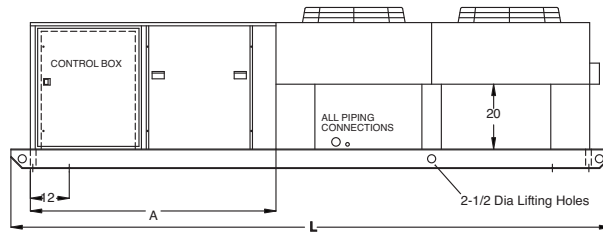
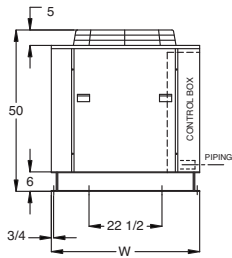
ONE ITEM PER EACH COMPRESSOR SYSTEM

DIMENSIONAL DRAWINGS

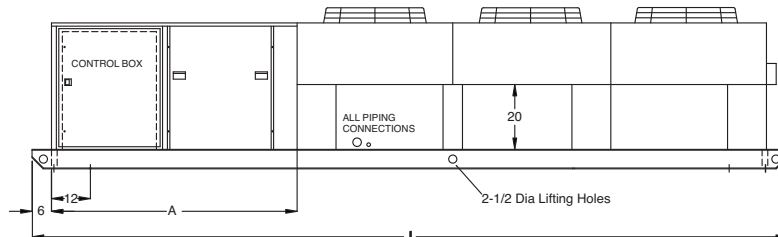
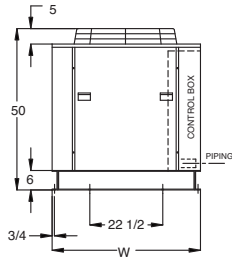


FAN CONFIGURATION "A"

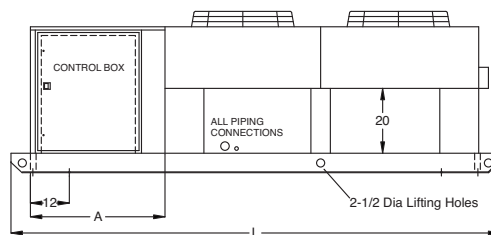
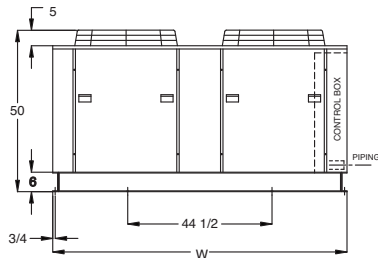
† 3rd Fan Section
for models:
V*35M44/H22
V*40M44/H22



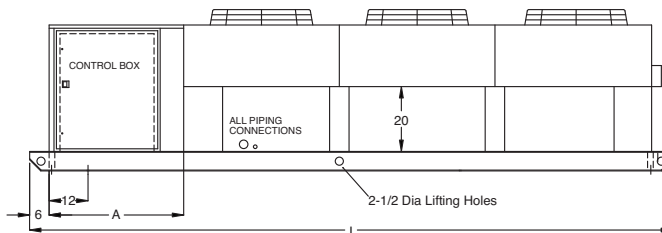
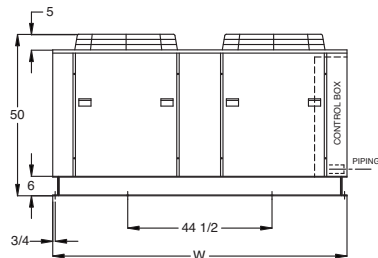
FAN CONFIGURATION "B"



FAN CONFIGURATION "C"



FAN CONFIGURATION "D"



FAN CONFIGURATION "E"

All dimensions are in inches.
9/16" diameter mounting holes typical for all units.

P/N 113343-026 REV.3 2/07 R-5000