

# KRAMER

Catalog  
**CU-882**  
Feb 1997

## KRAMER SAVER

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MODEL C & KS  
Outdoor Condensing Units  
3 Thru 70 HP

# **KRAMER**

**SINCE 1914 - WITH OVER 82 YEARS OF CONTINUOUS IMPROVEMENT IN HEAT TRANSFER TECHNOLOGY, KRAMER PRESENTS MODELS C & KS CONDENSING UNITS.**

**KRAMER - WHERE THE BEST SERVICE, MATERIALS, COMPONENTS, PROCESSES, WORKMANSHIP, AND PRODUCTS ARE A PERMANENT TRADITION.**



**SIZE 0400-1200**



**SIZE 1500-7000**

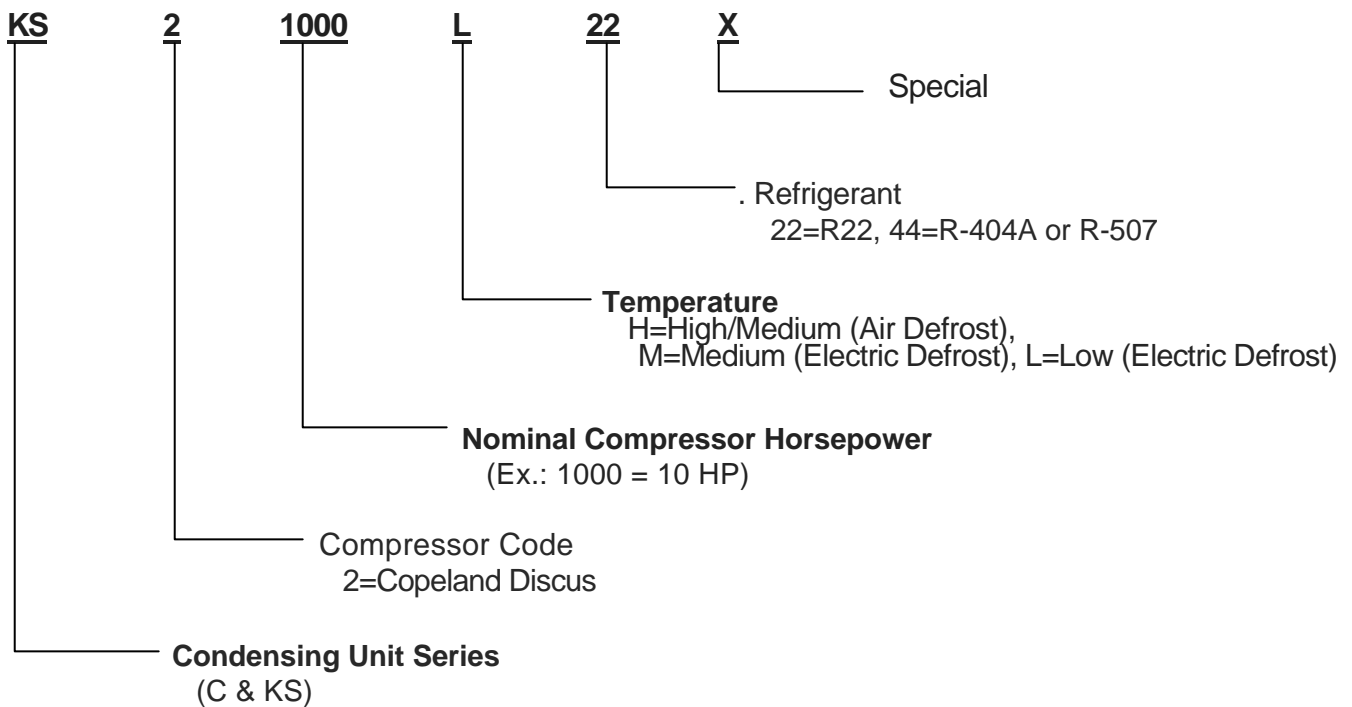
**ENVIRONMENTALLY FRIENDLY COMMERCIAL REFRIGERATION SYSTEMS**



## MODEL C & KS

OUTDOOR AIR COOLED CONDENSING UNITS • 3 TO 70 HP  
LOW, MEDIUM & HIGH TEMPERATURE R-22, R-404A & R-507

### NOMENCLATURE



#### MODEL C - CHOICE OF HEAD PRESSURE CONTROL

- WITHOUT CONTROLS
- WITH CONDENSER FAN CYCLING
- WITH FLOODED CONDENSER CONTROL
- WITH FLOODED CONDENSER AND FAN CYCLING

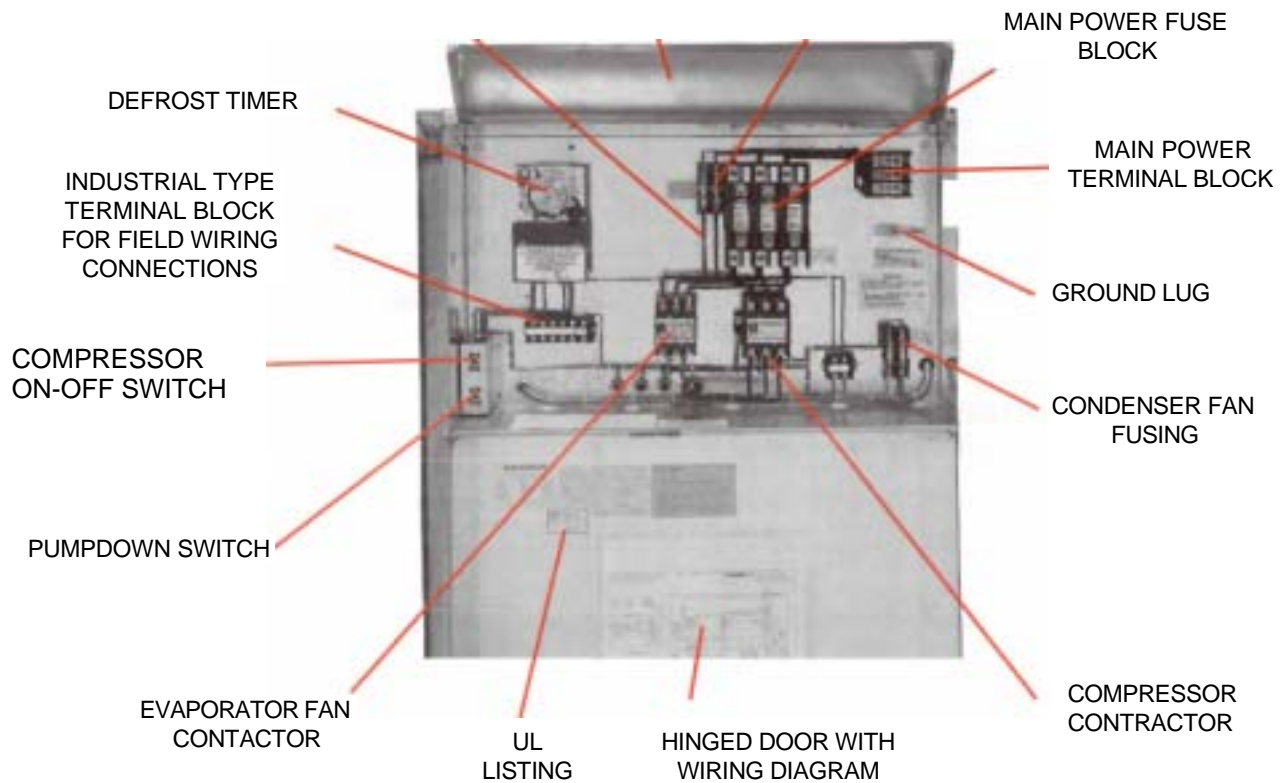
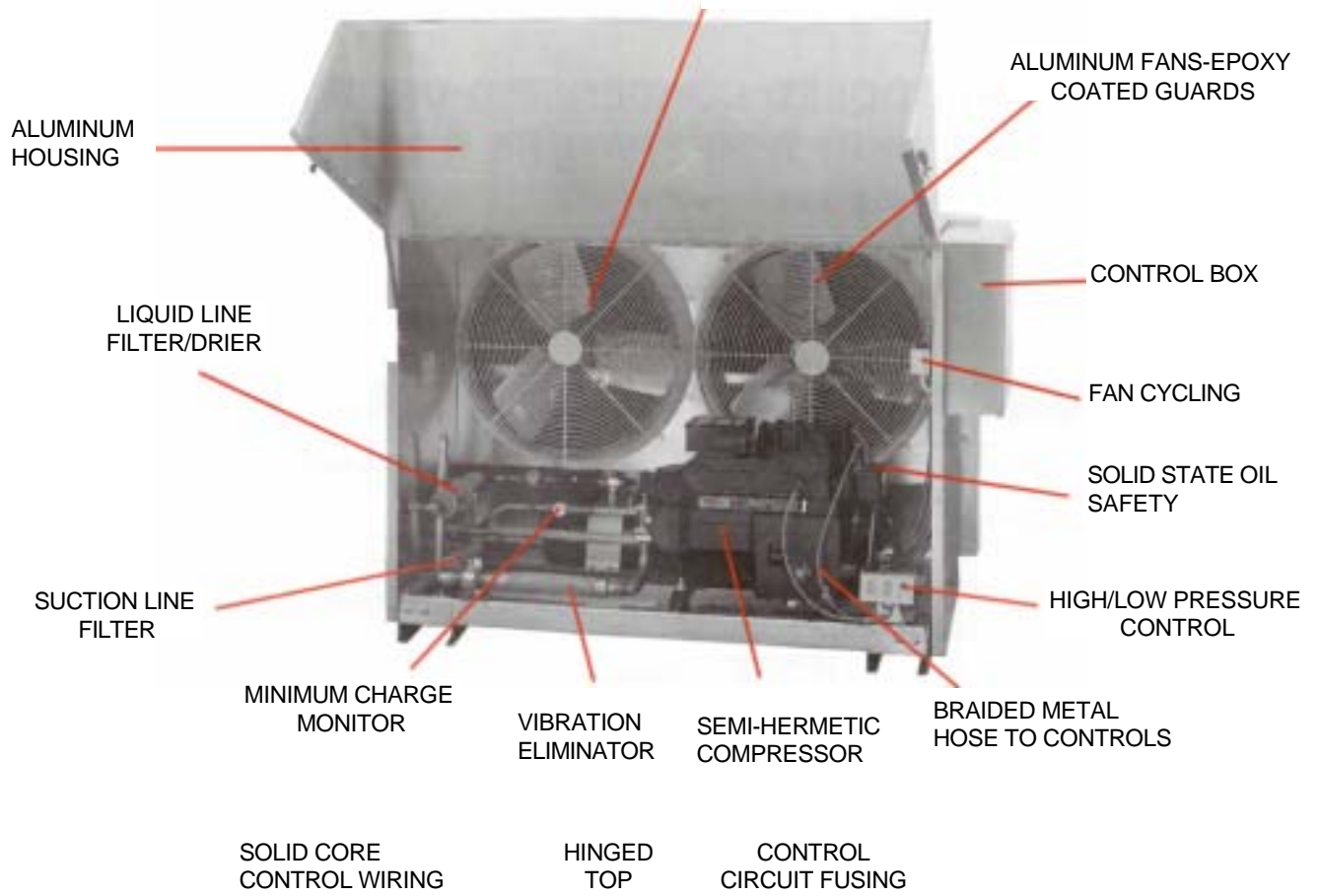
#### MODEL KS - "KRAMER SAVER" - WITH FLOATING HEAD PRESSURE CONTROL

- SUITABLE FOR ALL CLIMATES
- REDUCES REFRIGERANT CHARGE
- REDUCES OPERATING COST - INCREASE PROFITS
- A BALANCED SYSTEM WITH FACTORY SELECTED COMPONENTS



# KRAMER - VALUE

RESILIENT BASE  
PSC MOTOR



# KRAMER - QUALITY



**Model C and KS** are available with environment friendly (HCFC) R-22 or with the newer (HFC) R-404A or R-507 refrigerants. Condensing units using R-22 are supplied with mineral oil lubricant. Units using R-404A or R-507 are supplied with a polyol ester (POE) synthetic lubricant.

**Model C** is a basic outdoor condensing unit that can be customized for specific applications with optional components. It can be used for air defrost/off cycle systems or may be ordered with electric defrost components.

**Model C** can be customized for any outdoor climate. The standard unit without head pressure control can usually be used in mild, tropical climates. When used in colder climates it may be ordered with optional ambient fan cycling and/or flooded condenser head pressure control.

**Model KS - KRAMER SAVER-** is a floating head pressure outdoor condensing unit that is sold as a balanced system with Kramer unit coolers. **Model KS** with floating head pressure is an ALL CLIMATE refrigeration system. Factory selected thermostatic expansion valve, liquid line solenoid valve, room thermostat, and thermolator are shipped loose for field mounting. A timer is shipped loose with medium and high temperature units while low temperature electric defrost units will have the defrost controls mounted.

**Model KS** is suitable for all climates and begins saving energy when the outdoor temperature drops below approximately 70 °F. As the outdoor temperature drops, the head pressure floats down, the performance increases and less energy is consumed. That's more BTUs for less watts. **More BTU for less \$.** The lower head pressure reduces operating cost and thereby increases profits. Less refrigerant is required in the system, and the compressor runs less hours due to increased performance. Less run time also means longer equipment life. The **KRAMER SAVER** can provide yearly cost saving up to 30% when compared to conventional refrigeration systems. That can be a **SUBSTANTIAL COST SAVING.**

**Model C and KS** can be further customized with options including anti-short cycle timer, evaporator fan contactors, oil separator, suction accumulator, non fused disconnect, gauge kit, oversize receivers, phase loss monitor, pressure relief valve, and single point alarm.



## MODEL C & KS CONDENSING UNITS

### CONSTRUCTION FEATURES

- 4 TO 40 HP HAVE 10 GA GALVANIZED STEEL BASE
- 54 TO 70 HP HAVE STRUCTURAL STEEL BASE
- MILL FINISH ALUMINUM HOUSING IS DURABLE AND ATTRACTIVE
- RIGID ASSEMBLY FOR ROOF, PAD OR RAIL MOUNTING

### COPELAND SEMI-HERMETIC DISCUS COMPRESSOR

- MORE DURABLE - LONGER LIFE
- ENERGY EFFICIENT - COST LESS TO OPERATE
- ACCESSIBLE - WITH SERVICE VALVES
- SOLID STATE MOTOR PROTECTION
- ELECTRONIC OIL PRESSURE CONTROL
- CRANKCASE HEATER PROTECTS COMPRESSOR
- ALL LOW TEMP R-22 HAVE DEMAND COOLING
- EXTENDED WARRANTY AVAILABLE
- SERVICE PARTS READILY AVAILABLE



*Kramer fans are sturdier,  
quieter, move more air*

### HIGH PERFORMANCE AIR COOLED CONDENSER

- COPPER TUBE WITH ALUMINUM FINNS
- GENEROUS COIL SURFACE LOWERS OPERATING COST
- BASE MOUNT FAN MOTORS
- HEAVY GAUGE RAIL TYPE MOTOR MOUNT
- EPOXY COATED FAN GUARDS
- ALUMINUM FAN BLADES WITH STEEL SPIDER AND HUB

### PIPING AND LINE COMPONENTS

- REPLACEABLE CORE LIQUID LINE FILTER-DRIER, 15 - 70 HP
- SUCTION LINE VIBRATION ELIMINATOR
- DISCHARGE LINE VIBRATION ELIMINATOR
- RECEIVER WITH SERVICE VALVES AND PRESSURE SAFETY



*Suction filter's replaceable  
core speeds servicing*

### ALL SYSTEMS SUPPLIED WITH MONITOR



Kramer's "Minimum-Charge-Monitor" is a patented device allowing all Kramer systems to operate with the lowest refrigerant charge possible. Using the monitor, you can quickly see if the system is properly charged-anytime.

## MODEL C & KS CONDENSING UNITS



*Etched aluminum wiring  
diagram, easy circuit tracing*

*Most thorough testing in  
the industry*



### LARGE WEATHERPROOF CONTROL CABINET

HINGED DOORS FOR SAFETY AND CONVENIENCE •

- MAIN POWER TERMINAL BLOCK •
- COMPRESSOR CONTACTORS •
- COMPRESSOR FUSING • CONDENSER  
MOTOR CONTACTORS • CONDENSER  
MOTOR FUSING • CONTROL CIRCUIT  
FUSING • EVAPORATOR MOTOR  
FUSING • PUMPDOWN SWITCH •
- COMPRESSOR SERVICE SWITCH •
- ORGANIZED ROUTING OF WIRES •

ETCHED PLATE SCHEMATIC WIRING DIAGRAM, 15HP & UP •  
ROOM FOR OPTIONAL DEFROST CONTROLS • CONTROL  
TRANSFORMER SUPPLIED ON 460 VOLT UNITS •

### OPTIONAL FEATURES AND ACCESSORIES

- SPECIAL COMPRESSORS •
- OVERSIZE RECEIVERS • ELECTRIC  
DEFROST CONTROLS • PHASE LOSS  
MONITOR • SUCTION  
ACCUMULATOR • OIL SEPARATOR •
- HOT GAS BYPASS (SOME MODELS) • ANTI  
SHORT CYCLE TIMER • COPPER FIN  
CONDENSER • COATED FIN CONDENSER •
- OVERSIZE CONDENSER • TWO TEMPERATURE  
CONTROL VALVE • EXTENDED WARRANTY ON  
COMPRESSOR • NON FUSED DISCONNECT  
SWITCH • GAUGE KIT - HIGH, LOW AND OIL  
PRESSURE •

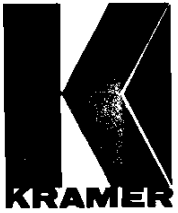
- ROOM THERMOSTAT •
- SINGLE POINT ALARM •
- PRESSURE RELIEF VALVE •
- CYLINDER UNLOADING (SOME MODELS) •



### QUALITY ASSURANCE AND WARRANTY

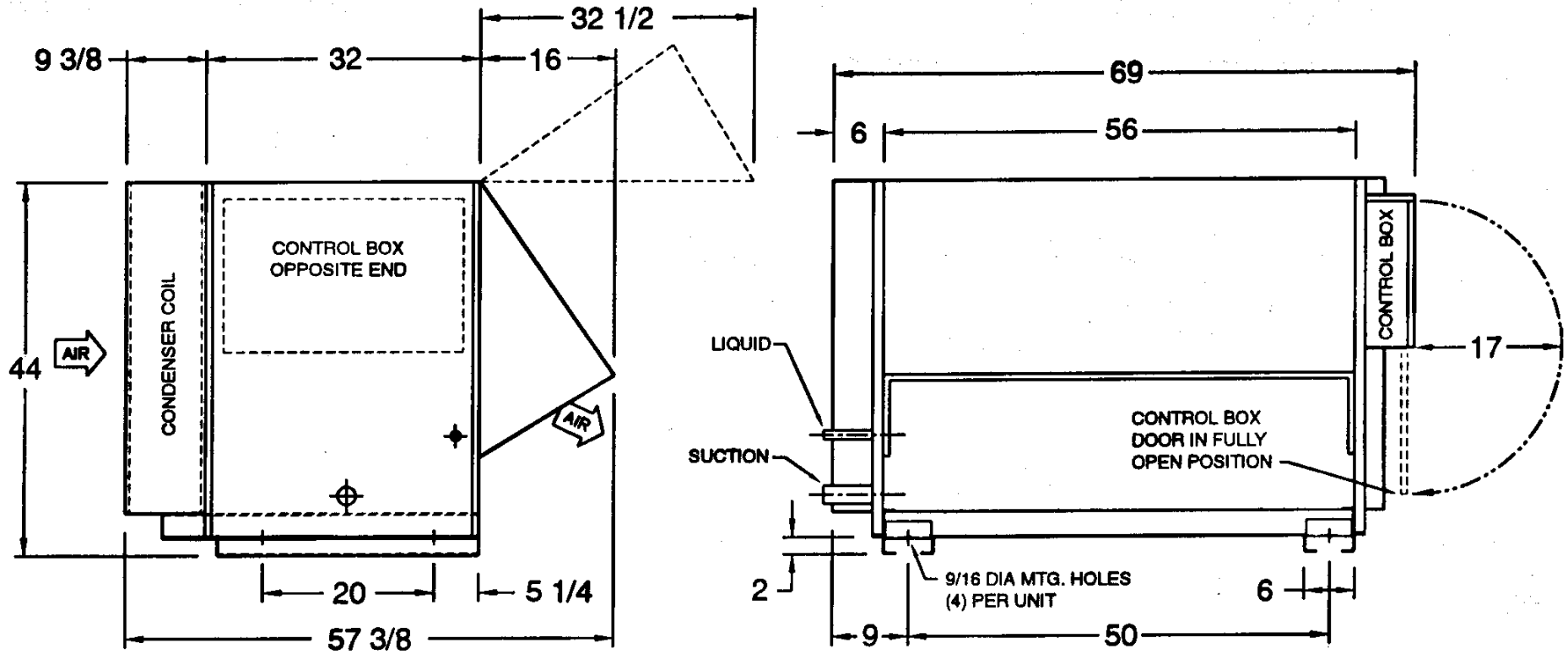
- UL AND C-UL LISTED •
- RUN TESTED UNDER FULL LOAD CONDITIONS • HEAVY CRATING  
PROTECTS DURING SHIPPING AND HANDLING • WARRANTED 12  
MONTHS FROM INSTALLATION OR 15 MONTHS • FROM SHIPMENT,  
WHICHEVER COMES FIRST

**THINK LONG TERM - THINK KRAMER**



# MODEL C & KS - SIZE 0400 - 1200

## Dimensions





For your convenience the diagram(s) originally here has(have) been enlarged, and can be found just prior to this page in the Adobe document.

### Performance Data

#### Low Temperature R-22 (Demand Cooling)

MODEL NUMBER C/KS	CAPACITY BTU/HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	0°F	-5°	-10°F	-15°F	-20°F	-25°F	-30°F	-40°F
0400L22 0500L22	30,800 41,200	26,600 36,100	22,900 31,400	19,700 27,100	16,800 23,200	14,300 19,600	12,100 16,400	8,100 11,000
0600L22 0800L22	48,700 59,200	42,700 52,100	37,300 45,700	32,300 39,900	27,900 34,700	23,800 30,000	20,200 25,700	13,900
0900L22 1000L22	72,700 78,300	64,200 69,000	56,300 60,500	48,900 52,600	42,200 45,500	36,000 39,000	30,400 33,000	21,100 22,600

#### Low Temperature R-404A & R-507

MODEL NUMBER C/KS	CAPACITY BTU/HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	0°F	-5°	-10°F	-15°F	-20°F	-25°F	-30°F	-40°F
0400L44 0500L44	32,700 42,800	29,100 38,400	25,700 34,300	22,600 30,400	19,700 26,900	17,100 23,600	14,700 20,500	10,400 14,900
0600L44 0800L44	52,500 60,800	47,100 54,600	42,000 48,800	37,200 43,400	32,800 38,400	28,700 33,700	24,900 29,400	18,500 21,600
0900L44 1000L44	78,100 82,900	69,900 74,700	62,300 67,000	55,300 59,700	48,700 52,800	42,600 46,400	37,100 40,400	27,400 29,800
1200L44	96,100	86,000	76,800	68,400	60,700	53,400	46,500	33,200

#### Ambient Correction Factors

REFRIGERANT	AMBIENT TEMPERATURE (°F)					
	80°F	85°F	90°F	95°F	100°F	105°F
R-22	1.10	1.07	1.03	1.00	0.96	0.92
R-404A or R-507	1.15	1.10	1.05	1.00	0.95	0.90

For design condition other than 95°F, multiply the rating by the correction factor.

# R-22, R-404A, & R-507 0 to -40°F SUCTION

## Physical Data



### Low Temperature R-22 (Demand Cooling)

MODEL NUMBER C/KS	COMPRESSOR			CONDENSE R FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-22 (LBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
0400L22	2DF-0300	904	1	2	24	1/2	1-1/8	1/2	7	35	530
0500L22	2DA-0600	1,135	1	2	24	1/2	1-3/8	1/2	8	35	600
0600L22	3DA-0600	1,375	1	2	24	1/2	1-3/8	1/2	9	35	670
0800L22	3DB-0750	1,620	1	2	24	1/2	1-5/8	5/8	11	35	750
0900L22	3DF-0900	1,915	1	2	24	1/2	1-5/8	5/8	21	75	770
1000L22	3DS-1000	2,120	1	2	24	1/2	1-5/8	5/8	21	75	800

### Low Temperature R-404A & R-507

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-404A (LBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
0400L44	2DF-030E	904	1	2	24	1/2	1-1/8	1/2	8	30	530
0500L44	2DA-060E	1,135	1	2	24	1/2	1-3/8	1/2	8	30	600
0600L44	3DA-060E	1,375	1	2	24	1/2	1-3/8	1/2	10	30	670
0800L44	3DB-075E	1,620	1	2	24	1/2	1-5/8	5/8	10	30	750
0900L44	3DF-090E	1,915	1	2	24	1/2	1-5/8	5/8	19	64	770
1000L44	3DS-100E	2,120	1	2	24	1/2	1-5/8	5/8	19	64	800
1200L44	4DA-101E	2,386	1	2	24	1/2	1-5/8	5/8	20	64	875

(1) Estimated refrigerant charge is for a floating head pressure condensing unit only. It does not include interconnecting piping, evaporators, flooded condenser or other accessories.

## Electrical Data

### Low Temperature R-22 (Demand Cooling)

MODEL NUMBER C/KS	ELECTRICAL 230 / 3 / 60					ELECTRICAL 460 / 3 / 60				
	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)
	RLA	LRA				RLA	LRA			
0400L22	16.8	102	8.0	25.8	30	8.1	52	4.0	12.5	15
0500L22	28.8	161	8.0	37.8	45	10.2	60	4.0	14.7	18
0600L22	30.3	150	8.0	39.3	47	13.7	77	4.0	18.2	22
0800L22	31.5	161	8.0	40.5	49	16.1	83	4.0	20.6	25
0900L22	39.0	215	8.0	48.0	58	16.9	106	4.0	21.4	26
1000L22	42.0	215	8.0	51.0	62	18.6	106	4.0	23.1	28

### Low Temperature R-404A & R-507

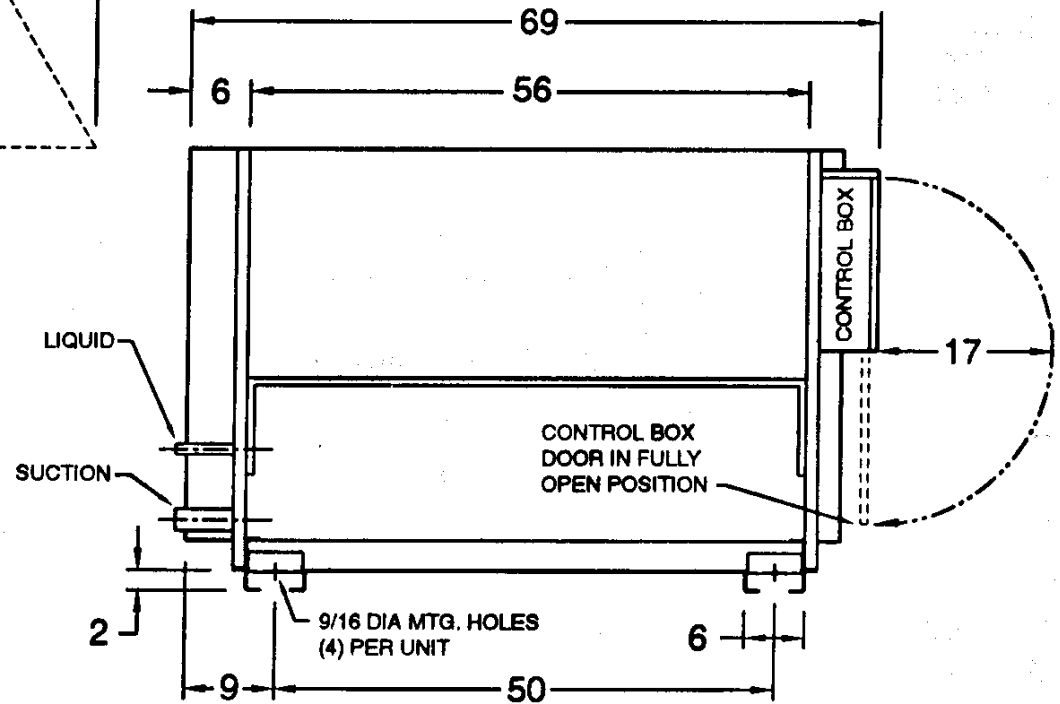
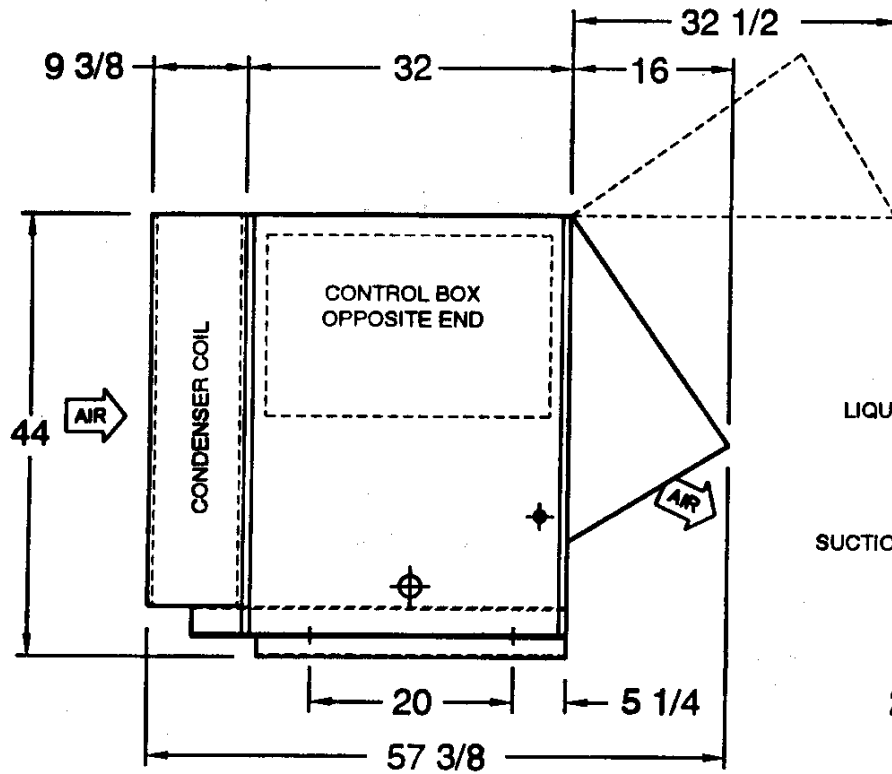
MODEL NUMBER C/KS	ELECTRICAL 230 / 3 / 60					ELECTRICAL 460 / 3 / 60				
	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)
	RLA	LRA				RLA	LRA			
0400L44	16.8	102	8.0	25.8	30	8.1	52	4.0	12.5	15
0500L44	28.8	161	8.0	37.8	45	10.2	60	4.0	14.7	18
0600L44	30.3	150	8.0	39.3	47	13.7	77	4.0	18.2	22
0800L44	31.5	161	8.0	40.5	49	16.1	83	4.0	20.6	25
0900L44	39.0	215	8.0	48.0	58	16.9	106	4.0	21.4	26
1000L44	42.0	215	8.0	51.0	62	18.6	106	4.0	23.1	28
1200L44	45.2	220	8.0	54.2	66	22.6	110	4.0	27.6	34

(2) Minimum Circuit Ampacity (MCA) does not include evaporator(s) electrical requirements (Fan Motors or Defrost Heaters).



# MODEL C & KS - SIZE 0400 - 1200

## Dimensions



For your convenience the diagram(s) originally here has(have) been enlarged, and can be found just prior to this page in the Adobe document.

### Performance Data

#### Medium and High Temperature R-22

MODEL NUMBER C/KS	CAPACITY BTU/HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	+45°F	+40°F	+35°F	+30°F	+25°F	+20°F	+15°F	+10°F
0500M, H22	78,700	71,400	64,500	58,100	52,100	46,600	41,300	36,500
0700M, H22	105,300	96,800	88,300	80,100	72,300	65,000	57,900	51,200
0800M, H22	130,600	119,300	108,700	98,600	89,300	80,500	72,300	64,600
1000M, H22	152,500	139,500	127,300	115,900	105,200	95,200	85,900	77,300
12000M, H22	164,500	151,700	139,300	127,400	116,000	105,200	95,000	85,500

#### Medium and High Temperature R-404A & R-507

MODEL NUMBER C/KS	CAPACITY BTU/HR @ 95°F AMBIENT								
	SUCTION TEMPERATURE (°F)								
	+45°F	+40°F	+35°F	+30°F	+25°F	+20°F	+15°F	+10°F	+5°F
0500M, H44	75,400	69,500	63,700	58,100	52,800	47,700	42,900	38,400	34,400
0700M, H44	105,300	97,100	89,200	81,700	74,600	67,900	61,600	55,700	50,300
0800M, H44	128,100	117,900	108,700	99,400	91,000	82,800	75,100	67,700	60,700
1000M, H44	151,500	139,600	128,400	118,000	107,800	98,300	89,300	80,700	72,600
1200M, H44	172,700	160,200	148,100	136,500	125,300	114,700	104,600	95,000	86,200

#### Ambient Correction Factors

REFRIGERANT	AMBIENT TEMPERATURE (°F)					
	80°F	85°F	90°F	95°F	100°F	105°F
R-22	1.10	1.07	1.03	1.00	0.96	0.92
R-404A or R-507	1.15	1.10	1.05	1.00	0.95	0.90

For design condition other than 95°F, multiply the rating by the correction factor.

# R-22, R-404A, & R-507 +10 to +45°F SUCTION



## Physical Data

### Medium and High Temperature R-22

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-22 (LBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
0500M, H22	2DD-0500	823	1	2	24	1/2	1-3/8	1/2	7	35	650
0700M, H22	2DA-0750	1,135	1	2	24	1/2	1-3/8	5/8	9	35	700
0800M, H22	3DA-0750	1,375	1	2	24	1/2	1-3/8	5/8	15	74	750
1000M, H22	3DB-1000	1,620	1	2	24	1/2	1-3/8	5/8	19	74	800
1200M, H22	3DF-1200	1,913	1	2	24	1/2	1-3/8	7/8	21	74	875

### Medium and High Temperature R-404A & R-507

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-404A (LBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
0500M, H44	2DD-050E	823	1	2	24	1/2	1-1/8	1/2	8	30	650
0700M, H44	2DA-075E	1,135	1	2	24	1/2	1-3/8	5/8	10	30	700
0800M, H44	3DA-75E	1,375	1	2	24	1/2	1-3/8	5/8	14	64	750
1000M, H44	3DB-100E	1,620	1	2	24	1/2	1-3/8	5/8	17	64	800
1200M, H44	3DF-120E	1,913	1	2	24	1/2	1-3/8	5/8	19	64	875

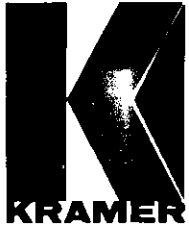
(1) Estimated refrigerant charge is for a floating head pressure condensing unit only. It does not include interconnecting piping, evaporators, flooded condenser or other accessories.

## Electric Data

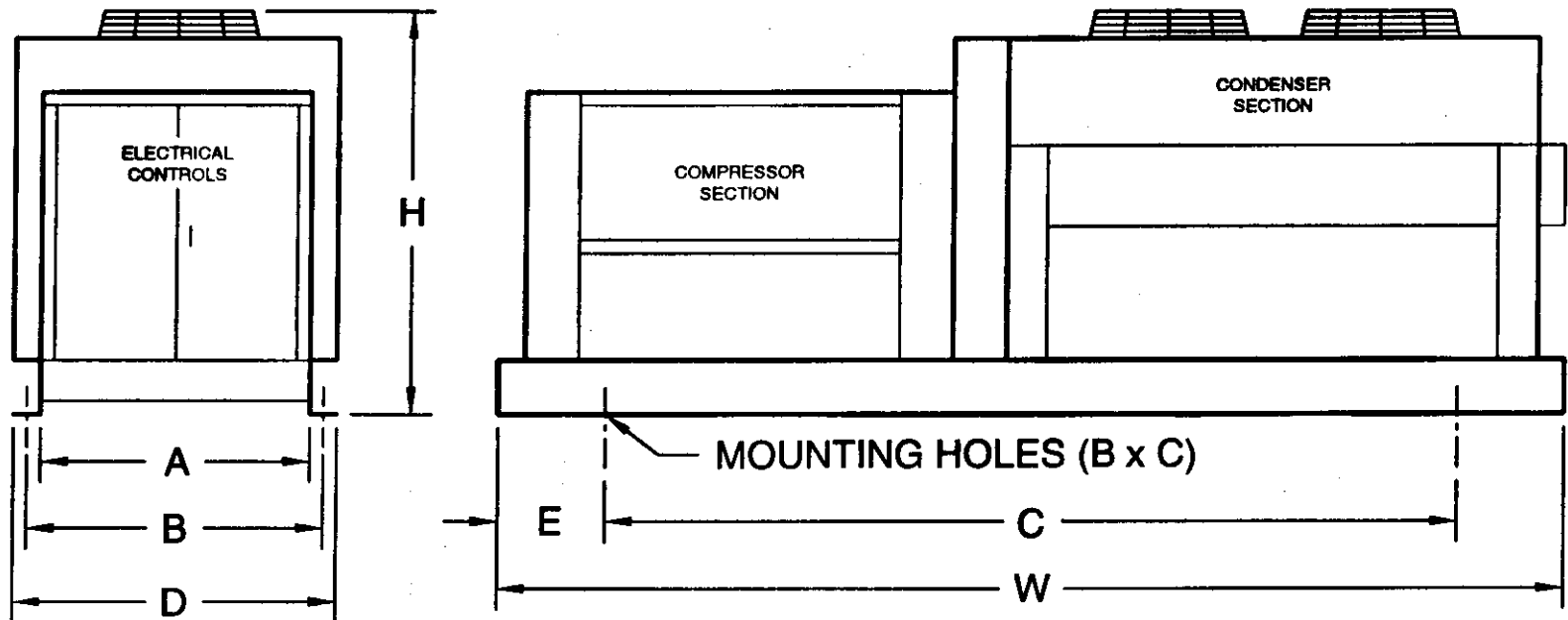
### Medium and High Temperature R-22, R-404A & R-507

MODEL NUMBER C/KS	ELECTRICAL 230 / 3 / 60					ELECTRICAL 460 / 3 / 60				
	COMPRESSOR		TOTAL COND. FLA	TOTAL UNIT AMPS	MCA (2)	COMPRESSOR		TOTAL COND. FLA	TOTAL UNIT AMPS	MCA (2)
	RLA	LRA				RLA	LRA			
0500M, H22 M, H44	22.3	120	8.0	31.3	37	10.5	60	4.0	15.0	18.23
0700M, H22 M, H44	32.0	169	8.0	41.0	49	14.1	85	4.0	18.6	
0800M, H22 M, H44	41.0	215	8.0	50.0	61	20.0	106	4.0	24.5	30
1000M, H22 M, H44	43.6	215	8.0	52.6	64	20.0	106	4.0	24.5	30
1200M, H22 M, H44	48.2	275	8.0	57.2	70	23.6	138	4.0	28.1	34

(2) Minimum Circuit Ampacity (MCA) does not include evaporator(s) electrical requirements (Fan Motors or Defrost Heaters).



# MODEL C & KS - SIZE 1500 - 6200



For your convenience the diagram(s) originally here has(have) been enlarged, and can be found just prior to this page in the Adobe document.

### Dimensions

C / KS SIZE	OVERALL			MOUNTING		REFERENCE	
	H	W	D	B	C	A	E
1500, 2200, 2700, 3100L 1500, 2000, 2500M, H	45	164	43 1/8	41	144 1/2	39	9
3000M, H	48 1/2	192	43 1/8	41	170	39	11
3500, 4000M, H	50 1/2	230	43 1/8	41	208	39	11
4400L	52 1/2	260	43 1/8	41	238	39	11
5400, 6200L 5000, 6000, 7000M, H	64 1/2	276	57 7/8	56	256	53 1/4	10

### Performance Data

#### Low Temperature R-22 (Demand Cooling)

MODEL NUMBER C/KS	CAPACITY BTU/HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	0°F	-5°	-10°F	-15°F	-20°F	-25°F	-30°F	-40°F
1500L22	106,200	93,900	82,500	72,000	62,400	53,600	45,500	31,200
2200L22	128,800	112,800	98,700	86,400	75,500	65,600	56,400	38,700
2700L22	159,800	141,200	124,300	109,000	94,900	81,900	69,700	47,000
3100L22	191,300	168,000	147,400	129,100	112,700	97,800	83,900	57,600
4400L22	260,300	227,800	199,500	174,600	152,500	132,500	113,900	78,200
5400L22	324,900	287,000	252,600	221,400	192,800	166,300	141,600	95,500
6200L22	386,000	339,100	297,600	260,700	227,500	197,400	169,400	116,400

#### Low Temperature R-404A & R-507

MODEL NUMBER C/KS	CAPACITY BTU / HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	0°F	-5°	-10°F	-15°F	-20°F	-25°F	-30°F	-40°F
1500L44	113,700	102,400	92,200	82,700	73,900	65,700	57,800	42,400
2200L44	132,000	119,800	109,200	98,100	87,500	77,300	67,600	49,100
2700L44	169,800	153,700	138,100	123,100	108,700	95,200	82,600	60,400
3100L44	187,300	169,900	153,900	136,600	121,700	106,400	92,700	69,350
4400L44	267,000	242,100	218,600	196,300	175,100	154,800	135,300	98,300
5400L44	340,500	307,900	279,100	248,500	219,400	192,000	166,400	121,700
6200L44	373,300	338,000	306,700	271,650	242,600	212,100	184,750	138,200

#### Ambient Correction Factors

REFRIGERANT	AMBIENT TEMPERATURE (°F)					
	80°F	85°F	90°F	95°F	100°F	105°F
R-22	1.10	1.07	1.03	1.00	0.96	0.92
R-404A or R-507	1.15	1.10	1.05	1.00	0.95	0.90

For design condition other than 95°F, multiply the rating by the correction factor.

# R-22, R-404A, & R-507 0 to -40°F SUCTION



## Physical Data

### Low Temperature R-22 (Demand Cooling)

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-22 (LBS)		APPROX NET
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	WEIGHT LBS. C/KS
1500L22	4DL-1500	3,020	1	3	24	1/2	1-5/8	7/8	23	82	1,150
2200L22	4DT-2200	3,603	1	3	24	1/2	2-1/8	7/8	27	82	1,430
2700L22	6DL-2700	4,530	1	3	24	3/4	2-1/8	7/8	30	82	1,800
3100L22	6DT-3000	5,404	1	3	24	3/4	2-1/8	7/8	34	82	2,450
4400L22	4DT-2200	(2) 3,603	2	4	30	3/4	2-1/8	1-1/8	46	120	3,150
5400L22	6DL-2700	(2) 4,530	2	5	30	3/4	2-5/8	1-1/8	56	120	3,700
6200L22	6DT-3000	(2) 5,404	2	5	30	3/4	2-5/8	1-1/8	65	120	5,050

### Low Temperature R-404A & R-507

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE R-404A (LBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
1500L44	4DL-150E	3,020	1	3	24	1/2	1-5/8	7/8	21	71	1,150
2200L44	4DT-220E	3,603	1	3	24	1/2	2-1/8	7/8	24	71	1,430
2700L44	6DL-270E	4,530	1	3	24	3/4	2-1/8	7/8	27	71	1,800
3100L44	6DT-300E	5,404 (2)	1	3 4	24	3/4	2-1/8	7/8	31	103	2,450
4400L44	4DT-220E	3,603	2		30	3/4	2-1/8	1-1/8	44	103	3,150
5400L44	6DL-270E	(2) 4,530	2	5	30	3/4	2-5/8	1-1/8	49	103	3,700
6200L44	6DT-300E	(2) 5,404	2	5	30	3/4	2-5/8	1-1/8	57	103	5,050

(1) Estimated refrigerant charge is for a floating head pressure condensing unit only. It does not include interconnecting piping, evaporators, flooded condenser or other accessories.

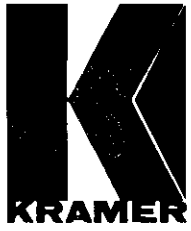
## Electrical Data

### Low Temperature R-22, R-404A & R-507

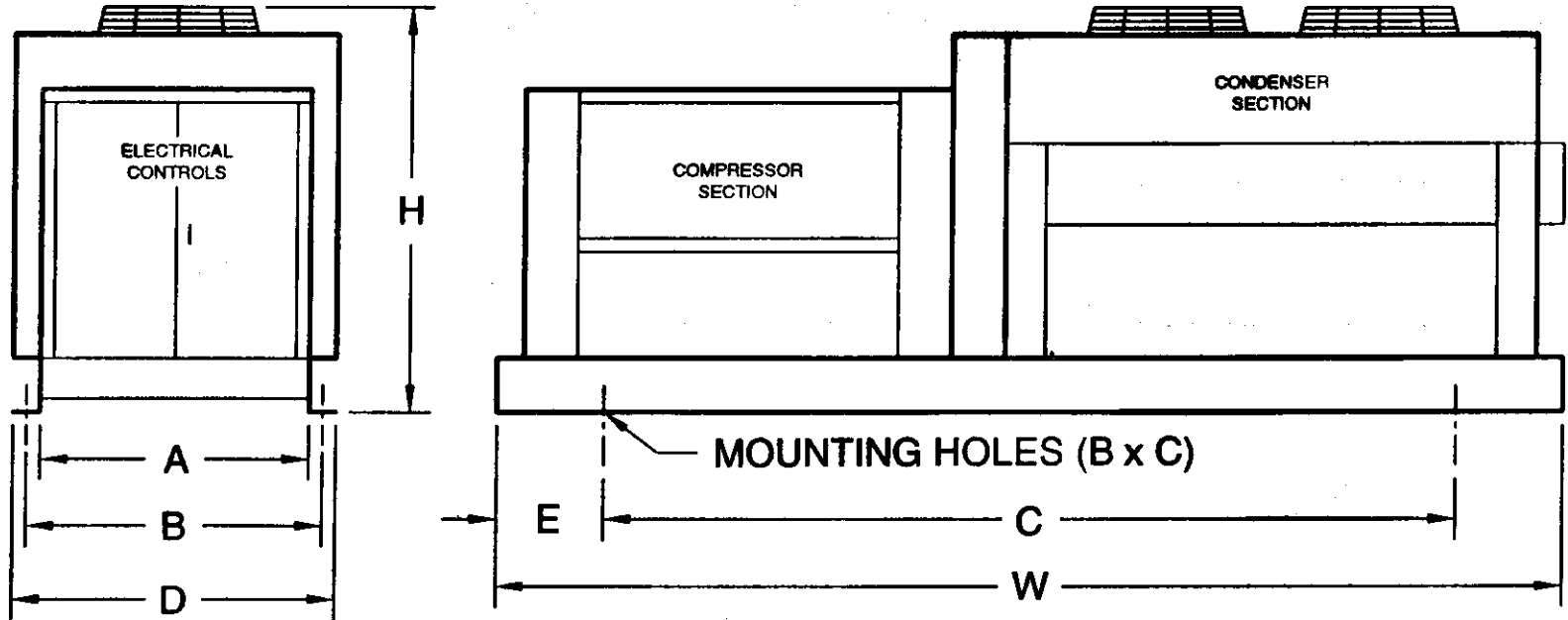
MODEL NUMBER C/KS	ELECTRICAL					ELECTRICAL				
	230 / 3 / 60					460 / 3 / 60				
	COMPRESSOR		TOTAL COND. FLA	TOTAL UNIT AMPS	MCA (2)	COMPRESSOR		TOTAL COND. FLA	TOTAL UNIT AMPS	MCA (2)
RLA	LRA	RLA				LRA				
1500L44, 22	52.6	278	5.4	59.0	73	26.3	139	2.7	29.5	37
2200L44, 22	66.0	374	5.4	72.4	89	33.0	187	2.7	36.2	45
2700L44, 22	80.8	450	10.2	92.0	113	40.4	225	5.1	46.0	57
3100L44, 22	95.6	470	10.2	106.8	131	47.8	235	5.1	53.4	66
4400L44, 22	(2) 66.0	(2) 374	13.6	146.6	164	(2) 33.0	(2) 187	6.8	73.3	83
5400L44, 22	(2) 80.8	(2) 450	17.0	179.6	200	(2) 40.4	(2) 225	8.5	89.8	101
6200L44, 22	(2) 95.6	(2) 470	17.0	209.2	234	(2) 47.8	(2) 235	8.5	104.6	118

(2) Minimum Circuit Ampacity (MCA) does not include evaporator(s) electrical requirements (Fan Motors or Defrost Heaters).





# MODEL C & KS - SIZE 1500 - 7000



For your convenience the diagram(s) originally here has(have) been enlarged, and can be found just prior to this page in the Adobe document.

### Dimensions

C / KS SIZE	OVERALL			MOUNTING		REFERENCE	
	H	W	D	B	C	A	E
1500, 2200, 2700, 3100L 1500, 2000, 2500M, H	45	164	43 1/8	41	144 1/2	39	9
3000M, H	48 1/2	192	43 1/8	41	170	39	11
3500, 4000M, H	50 1/2	230	43 1/8	41	208	39	11
4400L	52 1/2	260	43 1/8	41	238	39	11
5400, 6200L 5000, 6000, 7000M, H	64 1/2	276	57 7/8	56	256	53 1/4	10

### Performance Data

#### Medium and High Temperature R-22

MODEL NUMBER C / KS	CAPACITY BTU/HR @ 95°F AMBIENT							
	SUCTION TEMPERATURE (°F)							
	+45°F	+40°F	+35°F	+30°F	+25°F	+20°F	+15°F	+10°F
1500M, H22	195,000	178,000	163,500	149,700	136,600	123,000	111,300	100,200
2000M, H22	220,900	202,500	185,000	168,300	152,500	137,600	125,900	112,500
2500M, H22	283,300	258,900	235,500	213,300	192,100	172,200	154,900	128,200
3000M, H22	313,100	286,900	262,100	238,700	216,700	196,200	177,000	159,200
3500M, H22	407,900	373,600	337,800	307,300	278,800	252,200	227,700	205,200
4000M, H22	453,600	417,800	382,500	350,800	319,800	290,800	263,800	238,900
5000M, H22	539,100	494,400	451,900	411,800	374,100	338,800	306,100	275,800
6000M, H22	621,300	570,800	522,600	476,900	433,600	392,600	353,900	317,200
7000M, H22	803,100	735,500	671,500	611,300	555,000	502,700	454,400	410,200

#### Medium and High Temperature R-404A & R-507

MODEL NUMBER C / KS	CAPACITY BTU / HR @ 95°F AMBIENT								
	SUCTION TEMPERATURE (°F)								
	+45°F	+40°F	+35°F	+30°F	+25°F	+20°F	+15°F	+10°F	+5°F
1500M, H44	201,600	185,000	170,900	157,300	144,300	130,700	119,100	108,000	98,000
2000M, H44	220,400	204,200	188,300	172,900	157,900	143,500	132,200	118,900	106,900
2500M, H44	274,000	255,900	237,500	219,200	201,000	183,200	167,700	151,200	136,500
3000M, H44	318,200	294,400	271,400	249,300	228,100	207,700	188,400	170,100	153,400
3500M, H44	425,700	392,500	357,300	327,300	298,900	272,000	246,700	222,900	201,400
4000M, H44	468,800	434,900	402,000	370,100	339,400	310,000	282,000	255,400	231,200
5000M, H44	526,900	491,500	455,700	420,000	384,800	350,400	317,300	285,900	257,900
6000M, H44	635,100	587,700	541,900	497,800	455,400	414,900	376,300	339,800	306,400
7000M, H44	808,400	749,600	692,100	636,900	584,100	533,700	485,700	440,300	398,700

### Ambient Correction Factors

REFRIGERANT	AMBIENT TEMPERATURE (°F)					
	80°F	85°F	90°F	95°F	100°F	105°F
R-22	1.10	1.07	1.03	1.00	0.96	0.92
R-404A or R-507	1.15	1.10	1.05	1.00	0.95	0.90

For design condition other than 95°F, multiply the rating by the correction factor.

# R-22, R-404A, & R-507 +10 to+45°F SUCTION



## Physical Data

### Medium and High Temperature R-22

MODEL NUMBER C/KS	COMPRESSOR			CONDENSER FANS			CONNECTION SIZE (IN.)		REFR. CHARGE (UBS)		APPROX NET WEIGHT LBS. C/KS
	MODEL NUMBER	CFH	QTY	QTY	FAN DIAM (IN.)	HP	SUCTION O.D.	LIQUID O.D.	COND. UNIT (1)	REC'R @90% CAP.	
1500M, H22	3DS-1500	2,120	1	3	24	1/2	1-5/8	7/8	25	103	1,100
2000M, H22	4DA-2000	2,380	1	3	24	1/2	1-5/8	7/8	29	103	1,410
2500M, H22	4DH-2500	3,020	1	3	24	3/4	2-1/8	7/8	32	103	1,750
3000M, H22	4DJ-3000	3,603	1	3	30	3/4	2-1/8	7/8	46	120	2,350
3500M, H22	6DH-3500	4,955	1	4	30	3/4	2-1/8	1-1/8	49	120	2,600
4000M, H22	6DJ-4000	5,404	1	4	30	3/4	2-1/8	1-3/8	60	120	2,950
5000M, H22	8DP-5000	6,429	1	5	30	3/4	2-5/8	1-3/8	65	120	3,250
6000M, H22	8DS-6000	7,609 (2)	1	5	30	3/4	2-5/8	1-5/8	74	120	3,600
7000M, H22	6DH-3500	4,955	2	5	30	3/4	2-5/8	1-5/8	89	182	5,250

### Medium and High Temperature R-404A & R-507

1500M, H44	3DS-150E	2,120	1	3	24	1/2	1-3/8	5/8	23	88	1,100
2000M, H44	4DA-200E	2,380	1	3	24	1/2	1-5/8	7/8	26	88	1,410
2500M, H44	4DH-250E	3,020	1	3	24	3/4	2-1/8	7/8	29	88	1,750
3000M, H44	4DJ-300E	3,603	1	3	30	3/4	2-1/8	7/8	33	103	2,350
3500M, H44	6DH-350E	4,955	1	4	30	3/4	2-1/8	1-1/8	42	103	2,600
4000M, H44	6DJ-400E	5,404	1	4	30	3/4	2-1/8	1-1/8	53	103	2,950
5000M, H44	4DH-250E	(2) 3,020	2	5	30	3/4	2-5/8	1-1/8	57	103	3,250
6000M, H44	4DJ-300E	(2) 3,603	2	5	30	3/4	2-5/8	1-1/8	65	103	3,600
7000M, H44	6DH-350E	(2) 4,955	2	5	30	3/4	2-5/8	1-1/8	78	157	5,250

(1) Estimated refrigerant charge is for a floating head pressure condensing unit only. It does not include interconnecting piping, evaporators, flooded condenser or other accessories.

## Electrical Data

### Medium and High Temperature R-22

MODEL NUMBER C/KS	ELECTRICAL 230 / 3 / 60					ELECTRICAL 460 / 3 / 60				
	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)	COMPRESSOR		COND. FLA	UNIT AMPS	MCA (2)
	RLA	LRA				RLA	LRA			
1500M, H22	59.6	275	5.4	66.0	81	29.0	138	2.7	32.2	40
2000M, H22	66.6	308	5.4	73.0	90	33.0	154	2.7	36.2	45
2500M, H22	82.2	428	10.2	93.4	114	41.1	214	5.1	46.7	57
3000M, H22	94.0	470	10.2	105.2	129	47.0	235	5.1	52.6	65
3500M, H22	107.0	565	13.6	121.6	149	53.5	283	6.8	60.8	75
4000M, H22	142.0	594	13.6	156.6	193	71.0	297	6.8	78.3	97
5000M, H22	180.0	1070	17.0	198.0	243	90.0	535	8.5	99.0	122
6000M, H22	224.0 (2)	1070 (2)	17.0	242.0	298	112.0 (2)	535 (2)	8.5	121.0	149
7000M, H22	107.0	565	17.0	232.0	259	53.5	283	8.5	116.0	130.0

### Medium and High Temperature R-404A & R-507

1500M, H44	59.6	275	5.4	66.0	81	29.0	138	2.7	32.2	40
2000M, H44	66.6	308	5.4	73.0	90	33.0	154	2.7	36.2	45
2500M, H44	82.2	428	10.2	93.4	114	41.1	214	5.1	46.7	57
3000M, H44	94.0	470	10.2	105.2	129	47.0	235	5.1	52.6	65
3500M, H44	107.0	565	13.6	121.6	149	53.5	283	6.8	60.8	75
4000M, H44	142.0 (2)	594 (2)	13.6	156.6	193	71.0	297 (2)	6.8	78.3	97
5000M, H44	82.2	428	17.0	182.4	203	(2)41.1	214	8.5	91.8	103
6000M, H44	(2) 94.0	(2) 470	17.0	206.0	230	(2) 47.0	(2) 235	8.5	103.5	115
7000M, H44	(2) 107.0	(2) 565	17.0	232.0	259	(2) 53.5	(2) 283	8.5	116.0	130.0

(2) Minimum Circuit Ampacity (MCA) does not include evaporator(s) electrical requirements (Fan Motors or Defrost Heaters).