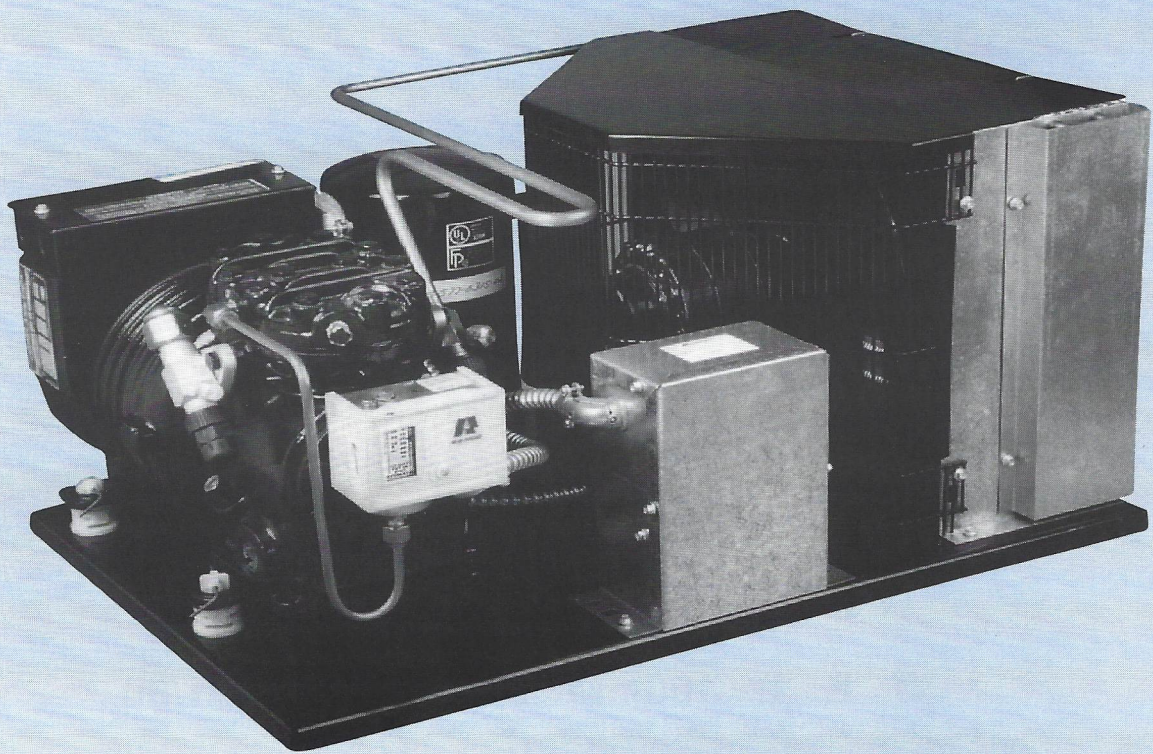


**INDOOR
AIR COOLED
CONDENSING UNITS
1/4 THROUGH 5 H.P.**

Bulletin No. 504.0 • March 1995



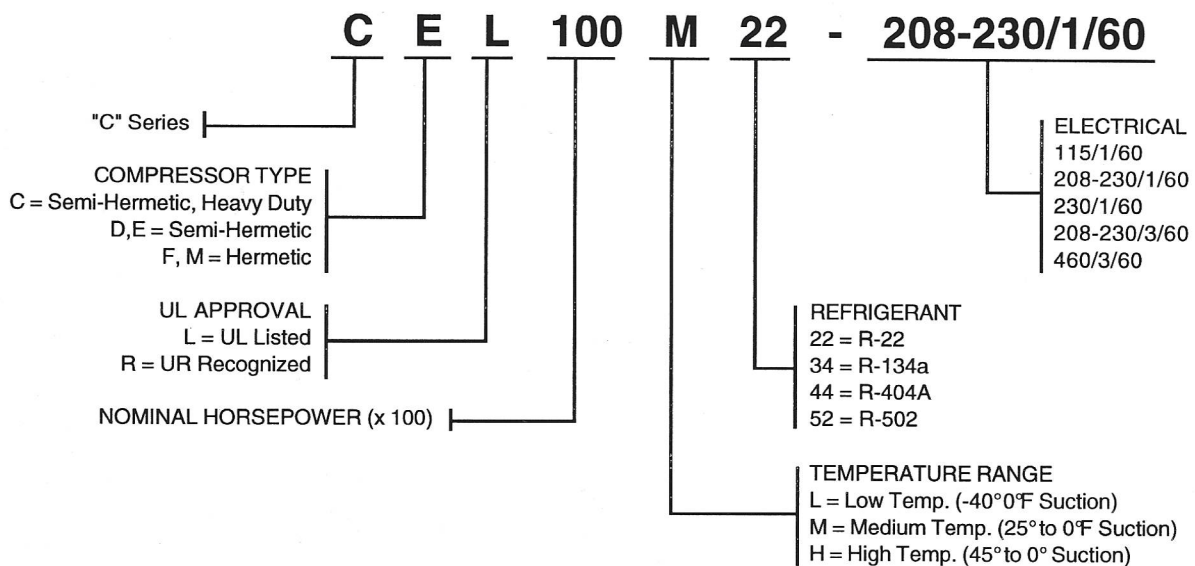
RUSSELL "C" LINE INDOOR CONDENSING UNIT

The "C" Line series of indoor style condensing units is ideally suited for a variety of OEM and commercial applications where refrigeration systems are being installed in such places as; convenience stores, restaurants, and fast food outlets. The "C" Line offers an economical alternative when the installation allows the condensing unit to be installed indoors. In addition to being compact the "C" Line offers reliable performance and flexibility. Models are available with either Hermetic and Semi-Hermetic compressors and with temperature ranges of High, Medium, and Low. A selection of refrigerants includes R-22, 134a, 404A, and 502 providing environmentally friendlier choices when installing a system. All models are safety approved by Underwriters Laboratories, and bear either a UL listing or UR recognized marking.

FEATURES

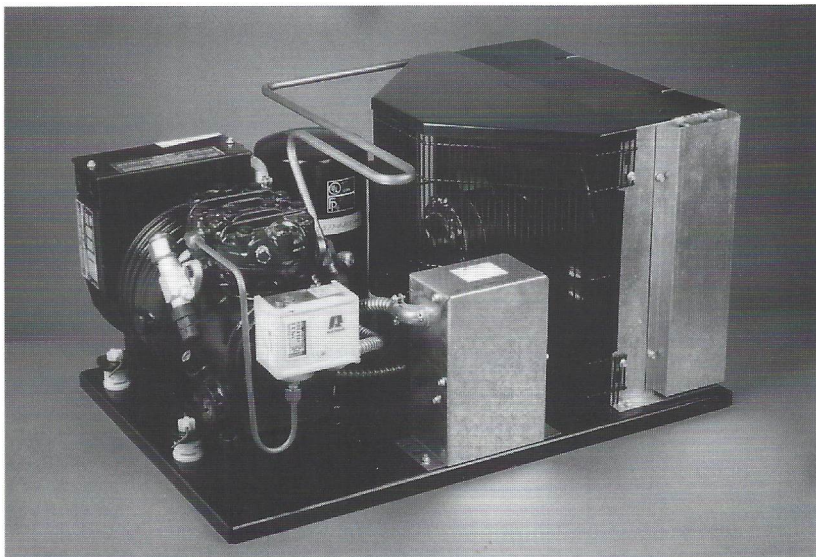
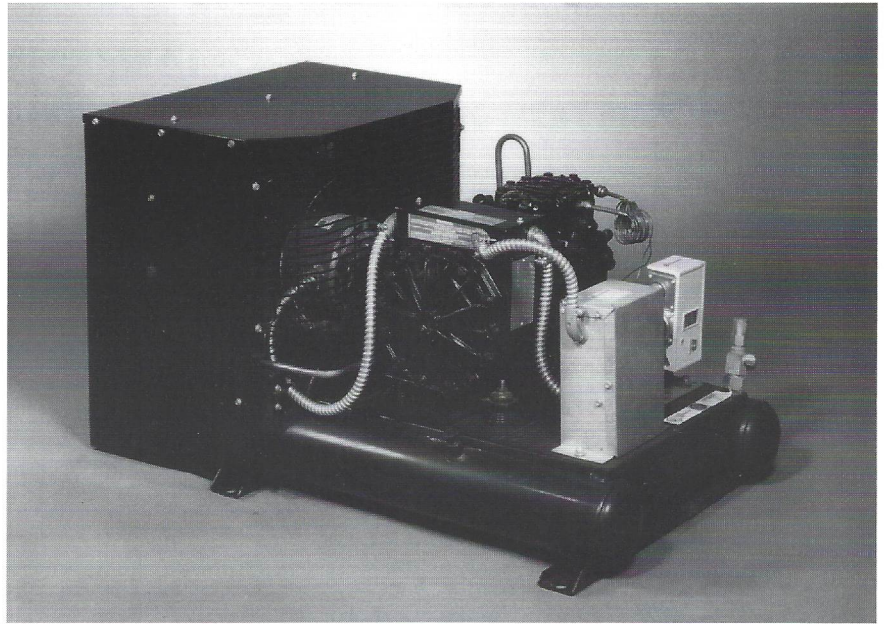
- Hermetic or Semi-Hermetic Copeland Compressor
- High efficiency condenser fan motor
- Copper tube, aluminum fin condenser coil
- Fan guard(s)
- Receiver
- Heavy duty steel base
- Spring mounted compressor (semi-hermetic only)
- Pressure switch (as required)
- Service valves (as required)

NOMENCLATURE



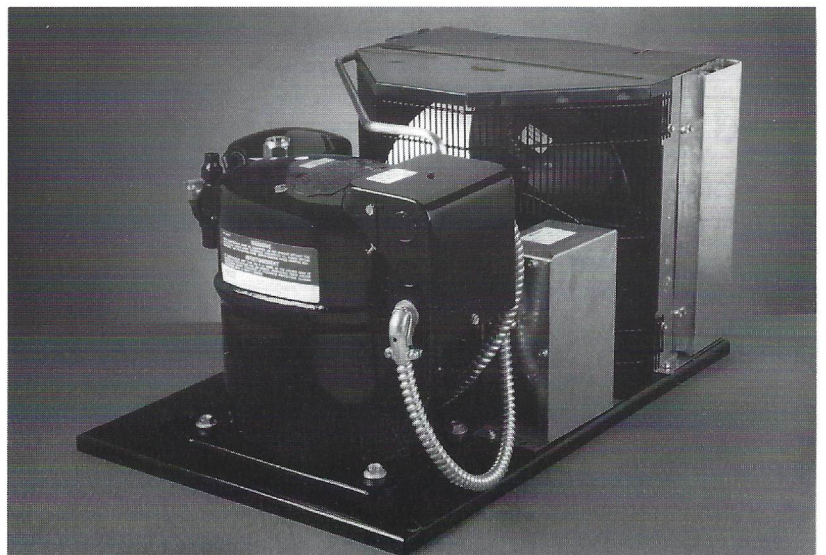
"C" Line

HEAVY DUTY CONSTRUCTION
"CC" MODELS WITH SEMI-HERMETIC
COMPRESSORS AND
LARGE CAPACITY RECEIVERS.



STANDARD DUTY CONSTRUCTION
"CE" AND "CD" MODELS WITH
SEMI-HERMETIC COMPRESSORS.

STANDARD DUTY CONSTRUCTION
"CM" AND "CF" MODELS WITH
HERMETIC COMPRESSORS.



PERFORMANCE DATA

SEMI-HERMETIC & HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	CAPACITY (BTU/HR) @ 90° AMBIENT								
					SUCTION TEMPERATURES (°F)								
					45°F	40°F	35°F	30°F	25°F	20°F	15°F	10°F	0°F
SEMI-HERM.	HIGH & MED. TEMP 22	CCL075H22	KAN-0075	0.75	9,440	8,570	7,750	6,970	6,230	5,540	4,890	4,270	
		CCL075M22	KAE-0075	0.75					7,430	6,630	6,010	5,490	4,450
		CCL100M22	KAM-0100	1.00					10,400	9,380	8,430	7,530	5,920
		CCL150H22	KAG-0150	1.50	16,600	15,100	13,800	12,500	11,300	10,100	9,060	8,060	
		CCL203H22	ERA-0200	2.00	21,600	19,700	17,900	16,000	14,200	12,300	10,600	8,840	
		CCL203M22	KAK-0200	2.00					15,200	13,700	12,400	11,200	8,930
		CCL202M22	ERC-0200	2.00					17,800	16,000	14,500	13,100	10,400
		CCL303H22	ERF-0310	3.00	38,150	35,150	32,350	29,600	26,750	24,400	21,850	19,700	
		CCL303M22	3RA-0310	3.00					32,000	28,800	25,900	23,200	18,000
		CCL503M22	NRM-0500	5.00					49,000	44,450	40,200	35,900	28,100

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	HIGH & MED. TEMP 22	CEL050H22	HAG-0050	0.50	5,870	5,400	4,940	4,510	4,100	3,700	3,330	2,980	
		CEL050M22	HAI-0050	0.50					4,420	4,010	3,600	3,220	2,530
		CEL075H22	KAN-0075	0.75	9,100	8,280	7,500	6,760	6,060	5,400	4,770	4,170	
		CEL075M22	KAE-0075	0.75					7,110	6,410	5,780	5,210	4,160
		CEL100H22	KAR-0100	1.00	11,600	10,700	9,830	8,960	8,130	7,320	6,550	5,820	
		CEL100M22	KAM-0100	1.00					9,650	8,750	7,890	7,070	5,570
		CDL150H22	KAG-0150	1.50	16,500	15,000	13,700	12,400	11,200	10,100	9,000	8,010	
		CDL200H22	ERA-0200	2.00	22,900	20,800	18,800	16,800	14,900	13,000	11,200	9,420	
		CDL200M22	KAK-0200	2.00					15,400	13,800	12,600	11,800	10,000
		CDL201M22	ERC-0200	2.00					18,100	16,200	14,700	13,300	10,600
HERM.	HIGH TEMP 22	CFL075H22	RSE-0075	0.75	9,150	8,400	7,670	6,950	6,250	5,580	4,940	4,340	
		CFL100H22	RRG-0100	1.00	11,200	10,200	9,220	8,320	7,480	6,700	5,960	5,260	
		CFL101H22	REK-0125	1.00	12,900	11,700	10,600	9,550	8,580	7,650	6,750	5,850	
		CFL152H22	REY-0175	1.50	17,900	16,200	14,600	13,550	12,100	10,800	9,690	8,690	
		CFL151H22	CRA-0150	1.50	18,250	16,600	15,000	13,550	12,100	10,800	9,550	8,250	
		CFL201H22	CRD-0200	2.00	23,600	21,600	19,750	17,900	16,200	14,550	13,000	11,400	
		CFL301H22	CRJ-0300	3.00	37,750	34,200	30,800	27,650	24,600	21,750	19,100	16,600	
		CFL401H22	CRM-0401	4.00	54,350	49,750	45,350	41,050	36,900	32,850	28,950	25,000	
		CFL501H22	CRN-0500	5.00	62,950	57,500	52,350	47,400	42,700	38,200	34,000	29,800	
HERM.	HIGH TEMP 134a	CFL075H34	RR81C1E	0.75	7,990	7,990	7,250	6,560	5,910	5,310	4,730	4,180	3,130
		CFL075M34	RS54C1E	0.75				8,080	7,180	6,300	5,470	4,710	3,510
		CFL100H34	RR10K1E	1.00	10,400	9,560	8,660	7,780	6,920	6,100	5,310	4,590	3,490

SEMI-HERMETIC & HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	CAPACITY (BTU/HR) @ 90° AMBIENT								
					SUCTION TEMPERATURES (°F)								
					0°F	-5°F	-10°F	-15°F	-20°F	-25°F	-30°	-35°	-40°F
SEMI-HERM.	LOW TEMP 404a	CCL100L44	KAJ-010E	1.00	7,030	6,240	5,540	4,920	4,350	3,840	3,370	2,940	2,570
		CCL150L44	KAL-015E	1.50	11,000	9,730	8,620	7,620	6,710	5,870	5,080	4,330	3,610
		CCL151L44	EAD-020E	2.00	12,600	11,400	10,200	9,020	7,920	6,870	5,890	4,940	4,000
		CCL200L44	EAV-021E	2.00	14,500	13,000	11,400	10,700	9,560	8,420	7,280	6,210	5,340
		CCL300L44	LAH-032E	3.00	25,300	22,200	11,800	16,900	14,500	12,400	10,600	9,040	7,940
HERM.	LT 404A	CFL200L44	CS14K6E	2.00	10,040	8,700	7,460	6,450	5,380	4,440			
		CFL300L44	CS20K6E	3.00	12,770	10,930	9,830	8,220	6,610	5,390			

"C" Line

PERFORMANCE DATA SEMI-HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	CAPACITY (BTU/HR) @ 90° AMBIENT								
					SUCTION TEMPERATURES (°F)								
					0°F	-5°F	-10°F	-15°F	-20°F	-25°F	-30°	-35°	-40°F

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	LOW TEMP 404A	CEL050L44	KAN-005E	0.50	3,400	2,990	2,640	2,320	2,030	1,750	1,490	1,250	1,010
		CEL075L44	KAM-007E	0.75	5,630	5,140	4,670	4,200	3,750	3,320	2,900	2,490	2,080
		CEL100L44	KAJ-010E	1.00	7,070	6,360	5,690	5,080	4,510	3,980	3,490	3,030	2,580
		CDL150L44	KAL-015E	1.50	10,400	9,400	8,380	7,410	6,530	5,770	5,130	4,570	4,030
		CDL200L44	EAV-021E	2.00	14,600	13,100	11,700	10,500	9,280	8,180	7,140	6,160	5,250
		CDL300L44	LAH-032E	3.00	25,300	22,200	19,400	16,900	14,500	12,400	10,600	9,040	7,940
SEMI-HERM.	LOW TEMP 502	CEL050L52	KAN-0050	0.50	3,430	3,020	2,670	2,360	2,050	1,740	1,510	1,280	1,020
		CEL075L52	KAM-0075	0.75	5,580	5,110	4,630	4,160	3,710	3,280	2,870	2,470	2,060
		CEL100L52	KAJ-0100	1.00	7,150	6,340	5,760	5,130	4,560	4,050	3,530	3,020	2,610
		CDL150L52	KAL-0150	1.50			8,470	7,520	6,600	5,840	5,190	4,570	4,070
		CDL200L52	EAV-0200	2.00		13,300	11,900	10,640	9,380	8,240	7,220	6,200	5,300
		CDL300L52	LAH-0310	3.00	23,800	21,300	18,700	16,400	14,200	12,200	10,400	8,900	7,590
SEMI-HERM.	LOW TEMP 22	CEL 050L22	KAN-0050	0.50	3,320	2,910	2,520	2,150	1,800	1,490	1,210	961	750
		CEL051L22	HAT-0051	0.50	3,850	3,400	3,000	2,640	2,310	2,010	1,720	1,460	1,210
		CEL075L22	KAM-0075	0.75	5,520	4,970	4,400	3,840	3,330	2,870	2,460	2,090	1,750
		CEL100L22	KAJ-0100	1.00	7,100	6,260	5,570	4,950	4,360	3,780	3,210	2,680	2,250
		CEL152L22	KAK-0200	1.50	8,520	7,500	6,570	5,710	4,930	4,220	3,570	3,000	2,470
		CDL200L22	EAD-0200	2.00	12,900	11,300	9,870	8,540	7,320	6,210	5,200	4,290	3,740
		CDL201L22	EAV-0210	2.00	15,100	13,200	11,600	10,000	8,600	7,330	6,190	5,220	4,430
		CDL301L22	LAH-0310	3.00	22,700	20,100	17,500	15,100	12,800	10,600	8,740	7,170	6,000

HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	CAPACITY (BTU/HR) @ 90° AMBIENT								
					SUCTION TEMPERATURES (°F)								
					45°F	40°F	35°F	30°F	25°F	20°F	15°F	10°F	0°F
HERM.	HIGH TEMP 22	CMR025H22	ARE-0025	0.25		3,110	2,870	2,640	2,410	2,200	2,000	1,800	
		CMR033H22	ARF-0033	0.33		3,830	3,520	3,210	2,900	2,600	2,280	1,970	
		CFR050H22	JRE-0050	0.50		5,180	4,750	4,340	3,950	3,570	3,210	2,870	
		CFR056H22	JRF-0050	0.50	8,090	7,380	6,700	6,060	5,460	4,900	4,380	3,900	
		CFR074H22	RSE-0075	0.75	9,060	8,390	7,680	6,930	6,190	5,460	4,770	4,160	
		CFR100H22	RRG-0100	1.00	11,200	10,200	9,220	8,320	7,480	6,700	5,960	5,260	
HERM.	HIGH & MED. TEMP 134a	CFR025H34	JR26C1E	0.25	2,860	2,610	2,380	2,150	1,940	1,730	1,540	1,350	998
		CFR033H34	JR36C1E	0.33	3,740	3,430	3,110	2,800	2,510	2,220	1,960	1,700	1,260
		CFR050H34	JR53C1E	0.50	5,420	4,980	4,530	4,100	3,680	3,300	2,930	2,590	1,980
		CFR050M34	RS40C1E	0.50				5,030	4,620	4,200	3,770	3,350	2,570
		CFR075H34	RR81C1E	0.75	7,990	7,990	7,250	6,560	5,910	5,310	4,730	4,180	3,130
		CFR075M34	RS54C1E	0.75				8,080	7,180	6,300	5,470	4,710	3,510
		CFR100H34	RR10K1E	1.00	10,400	9,560	8,660	7,780	6,920	6,100	5,310	4,590	3,490

HERMETIC MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	CAPACITY (BTU/HR) @ 90° AMBIENT								
					SUCTION TEMPERATURES (°F)								
					25°F	20°F	15°F	10°F	0°F	-10°F	-15°F	-20°F	-25°F
HERM.	MED. TEMP 502	CMR027L52	AFF-0027	0.25					1,840	1,410	1,200	980	770
		CMR035L52	AFG-0035	0.33					2,320	1,850	1,620	1,375	1,130
		CFR050L52	RSU-0050	0.50	5,080	4,620	4,220	3,850	3,150	2,500	2,190	1,890	1,600
		CFR075L52	RSN-0075	0.75	8,330	7,520	6,820	6,190	5,050	4,000	3,510	3,010	2,610
		CFR100L52	RSL-0101	1.00	10,500	9,590	8,750	7,950	6,410	4,980	4,330	3,730	3,180

ELECTRICAL DATA

SEMI-HERMETIC & HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	AMPERAGE AND FUSE RATING							
					115/1		* 208/230/1		208/230/3		460/3/60	
					M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS
SEMI-HERM.	HIGH & MED. TEMP 22	CCL075H22	KAN-0075	0.75			8.8	15	5.5	15		
		CCL075M22	KAE-0075	0.75			7.9	15	5.4	15		
		CCL100M22	KAM-0100	1.00			12.3	15	8.5	15	TBD	TBD
		CCL150H22	KAG-0150	1.50			14.9	20	9.8	15	4.7	15
		CCL203H22	ERA-0200	2.00			**14.4	20	10.1	15	5.6	15
		CCL203M22	KAK-0200	2.00			16.2	20	11.4	15		
		CCL202M22	ERC-0200	2.00			**15.4	20	10.3	15	5.7	15
		CCL303H22	ERF-0310	3.00			**25.7	35	19.0	25	10.4	15
		CCL303M22	3RA-0310	3.00			**26.7	40	20.8	25	10.7	15
		CCL503M22	NRM-0500	5.00					34.8	50	17.5	25

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	HIGH & MED. TEMP 22	CEL050H22	HAG-0050	0.50	11.9	15	5.7	15	3.7	15		
		CEL050M22	HAJ-0050	0.50	11.7	15	5.3	15	3.5	15		
		CEL075H22	KAN-0075	0.75	16.6	25	8.8	15	5.5	15		
		CEL075M22	KAE-0075	0.75	15.6	20	7.9	15	5.4	15		
		CEL100H22	KAR-0100	1.00	21.3	30	10.4	15	6.5	15	3.4	15
		CEL100M22	KAM-0100	1.00	21.4	30	10.5	15	6.8	15	3.5	15
		CDL150H22	KAG-0150	1.50			14.2	20	9.2	15	4.6	15
		CDL200H22	ERA-0200	2.00			**15.3	20	10.6	15	5.9	15
		CDL200M22	KAK-0200	2.00			15.6	20	10.8	15	5.2	15
		CDL201M22	ERC-0200	2.00			**16.0	20	10.8	15	5.2	15
HERM.	HIGH TEMP 22	CFL075H22	RSE-0075	0.75	19.9	30	10.0	15				
		CFL100H22	RRG-0100	1.00	18.5	25	8.7	15				
		CFL101H22	REK-0125	1.00			9.9	15	7.0	15	4.0	15
		CFL152H22	REY-0175	1.50			15.9	20	11.0	15		
		CFL151H22	CRA-0150	1.50			16.4	20	14.5	20	6.7	15
		CFL201H22	CRD-0200	2.00			19.1	30	13.2	15	6.8	15
		CFL301H22	CRJ-0300	3.00			33.9	50	23.7	30	11.6	15
		CFL401H22	CRM-0401	4.00			41.9	60	25.9	40	13.2	15
HERM.	HIGH TEMP 134a	CFL501H22	CRN-0500	5.00			46.4	70	30.3	45	14.4	20
		CFL075H34	RR81C1E	0.75	18.6	25	10.7	15				
		CFL075M34	RS54C1E	0.75	16.8	25	9.7	15				
		CFL100H34	RR10K1E	1.00			10.3	15				

SEMI-HERMETIC & HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	AMPERAGE AND FUSE RATING							
					115/1		* 208/230/1		208/230/3		460/3/60	
					M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS
SEMI-HERM.	LOW TEMP 404A	CCL100L44	KAJ-010E	1.00			11.5	15	TBD	TBD	TBD	TBD
		CCL150L44	KAL-015E	1.50			15.3	20	11.2	15	5.9	15
		CCL151L44	EAD-020E	2.00			TBD	TBD	11.4	15		
		CCL200L44	EAV-021E	2.00			20.2	30	11.1	15	5.8	15
		CCL300L44	LAH-032E	3.00					20.3	25	TBD	TBD
HERM.	LT 404A	CFL200L44	CS14K6E	2.00			18.6	25	14.3	20		
		CFL300L44	CS20K6E	3.00			26.2	40	17.2	25		

NOTES: M/C is the minimum circuit ampacity value developed for U.L. This value has a calculated safety factor and can be used for wire sizing.

Contact factory for electrical data when TBD is shown.

* Amperage data for 208/230/1 Volt models are shown for the highest current conditions which is 208 Volts.

** Models are only available for 230/1/60 Volt operation.

"C" Line

ELECTRICAL DATA SEMI-HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	AMPERAGE AND FUSE RATING							
					115/1		* 208/230/1		208/230/3		460/3/60	
					M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	LOW TEMP 404A	CEL050L44	KAN-005E	0.50	11.1	15	5.2	15	3.3	15		
		CEL075L44	KAM-007E	0.75	15.6	20	8.2	15	5.2	15		
		CEL100L44	KAJ-010E	1.00			10.6	15				
		CDL150L44	KAL-015E	1.50			14.7	20	10.6	15	6.6	15
		CDL200L44	EAV-021E	2.00			20.7	30	11.6	15	6.4	15
		CDL300L44	LAH-032E	3.00			**TBD	TBD	21.8	25	10.7	15
SEMI-HERM.	LOW TEMP 502	CEL050L52	KAN-0050	0.50	11.2	15	5.2	15	3.3	15		
		CEL075L52	KAM-0075	0.75	14.6	20	8.2	15	4.5	15		
		CEL100L52	KAJ-0100	1.00	17.5	20	9.8	15	5.4	15	3.9	15
		CDL150L52	KAL-0150	1.50			14.7	20	9.1	15	5.1	15
		CDL200L52	EAV-0200	2.00			***17.8	25	10.6	15	5.9	15
		CDL300L52	LAH-0310	3.00			**24.7	30	19.2	20	9.7	15
SEMI-HERM.	LOW TEMP 22	CEL050L22	KAN-0050	0.50	11.1	15	5.2	15				
		CEL051L22	HAT-0051	0.50	14.1	20						
		CEL075L22	KAM-0075	0.75	15.6	20	8.2	15	5.2	15		
		CEL100L22	KAJ-0100	1.00			9.8	15	6.8	15		
		CEL152L22	KAK-0200	1.50			16.2	20	11.4	15		
		CDL200L22	EAD-0200	2.00			**10.8	15	12.8	15		
		CDL201L22	EAV-0210	2.00			20.7	30	11.6	15		
		CDL301L22	LAH-0310	3.00			**23.7	35	19.2	20		

HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	AMPERAGE AND FUSE RATING							
					115/1		* 208/230/1		208/230/3		460/3/60	
					M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS
HERM.	HIGH TEMP 22	CMR025H22	ARE-0025	0.25	9.1	15						
		CMR033H22	ARF-0033	0.33	9.9	15						
		CFR050H22	JRE-0050	0.50	11.9	15	7.0	15				
		CFR056H22	JRF-0050	0.50	18.7	30	9.0	15				
		CFR074H22	RSE-0075	0.75	19.6	30	9.9	15				
		CFR100H22	RRG-0100	1.00	18.5	25	8.7	15				
HERM.	HIGH & MED. TEMP 134a	CFR025H34	JR26C1E	0.25	6.9	15						
		CFR033H34	JR36C1E	0.33	9.8	15	5.0	15				
		CFR050H34	JR53C1E	0.50	14.1	20	7.4	15				
		CFR050M34	RS40C1E	0.50	12.4	20	7.2	15				
		CFR075H34	RR81C1E	0.75	18.6	25	10.7	15				
		CFR075M34	RS54C1E	0.75	16.8	25	9.7	15				
		CFR100H34	RR10K1E	1.00			10.3	15				

HERMETIC MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	AMPERAGE AND FUSE RATING							
					115/1		* 208/230/1		208/230/3		460/3/60	
					M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS	M/C AMPS	FUSE AMPS
HERM.	MED. TEMP 502	CMR027L52	AFF-0027	0.25	6.2	15						
		CMR035L52	AFG-0035	0.33	8.7	15						
		CFR050L52	RSU-0050	0.50	13.7	20	7.5	15				
		CFR075L52	RSN-0075	0.75	20.6	30	12.2	15				
		CFR100L52	RSL-0101	1.00			14.2	20	8.3	15		

NOTES: M/C is the minimum circuit ampacity value developed for U.L. This value has a calculated safety factor and can be used for wire sizing.

Contact factory for electrical data when TBD is shown.

* Amperage data for 208/230/1 Volt models are shown for the highest current conditions which is 208 Volts.

** Models are only available for 230/1/60 Volt operation.

*** Amperage and fuse size shown are for 208/1 Volts. At 230/1 Volts Amperage is 14.8 and fuse size is 20.0

PHYSICAL DATA

SEMI-HERMETIC & HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	OVERALL DIMENSIONS (IN)			CONNECTION SIZE (IN)		† REC'R CAP. @ 90% (LBS)	APPROXIMATE WEIGHT (LBS)		AIR FLOW (CFM)
					LT	WD	HT	LIQUID	SUCTION		NET	SHIP	
HEAVY DUTY CONSTRUCTION													
SEMI-HERM.	HIGH & MED. TEMP 22	CCL075H22	KAN-0075	0.75	19.5	14.5	12.0	1/4 FL	1/2 FL	2.5	109	124	331
		CCL075M22	KAE-0075	0.75	19.5	14.5	12.0	1/4 FL	1/2 FL	2.5	109	124	331
		CCL100M22	KAM-0100	1.00	24.0	17.9	13.6	3/8 FL	5/8 FL	6.3	145	160	767
		CCL150H22	KAG-0150	1.50	24.0	17.9	13.6	3/8 FL	5/8 FL	6.3	145	160	767
		CCL203H22	ERA-0200	2.00	24.0	17.9	13.6	3/8 FL	5/8 FL	6.3	149	164	712
		CCL203M22	KAK-0200	2.00	24.0	17.9	13.6	3/8 FL	5/8 FL	6.3	149	164	712
		CCL202M22	ERC-0200	2.00	24.5	31.6	14.9	3/8 FL	7/8 SWT	13.2	180	210	1196
		CCL303H22	ERF-0310	3.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	13.2	260	290	1000
		CCL303M22	3RA-0310	3.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	13.2	200	230	1000
CCL503M22	NRM-0500	5.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	13.2	260	290	1000		

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	HIGH & MED. TEMP 22	CEL050H22	HAG-0050	0.50	33.5	20.0	19.0	3/8 FL	5/8 FL	20.0	170	190	1155
		CEL050M22	HAJ-0050	0.50	33.5	20.0	19.0	3/8 FL	5/8 FL	20.0	170	190	1155
		CEL075H22	KAN-0075	0.75	33.5	20.0	19.0	3/8 FL	5/8 FL	20.0	170	190	1625
		CEL075M22	KAE-0075	0.75	33.5	20.0	19.0	3/8 FL	7/8 SWT	20.0	180	200	1625
		CEL100H22	KAR-0100	1.00	33.5	20.0	19.0	1/2 FL	7/8 SWT	20.0	240	260	1508
		CEL100M22	KAM-0100	1.00	33.5	20.0	19.0	1/2 FL	7/8 SWT	20.0	180	200	1508
		CDL150H22	KAG-0150	1.50	33.5	20.0	19.0	1/2 FL	7/8 SWT	20.0	240	260	1508
		CDL200H22	ERA-0200	2.00	39.0	30.0	29.5	1/2 FL	1-1/8 SWT	53.0	360	430	4090
		CDL200M22	KAK-0200	2.00	39.0	3.0	29.5	1/2 FL	1-1/8 SWT	53.0	390	460	4090
CDL201M22	ERC-0200	2.00	39.0	30.0	29.5	5/8 FL	1-3/8 SWT	53.0	410	480	3102		
HERM.	HIGH TEMP 22	CFL075H22	RSE-0075	0.75	24.0	16.9	13.1	3/8 FL	5/8 FL	3.7	91	106	767
		CFL100H22	RRG-0100	1.00	24.0	16.9	13.1	3/8 FL	5/8 FL	6.3	97	112	712
		CFL101H22	REK-0125	1.00	24.0	16.9	13.1	3/8 FL	5/8 FL	6.3	97	112	712
		CFL152H22	REY-0175	1.50	24.0	18.3	15.8	3/8 FL	7/8 SWT	6.3	108	128	1050
		CFL151H22	CRA-0150	1.50	24.1	18.3	16.9	3/8 FL	7/8 SWT	6.3	120	140	1050
		CFL201H22	CRD-0200	2.00	25.1	34.1	19.1	3/8 FL	7/8 SWT	13.2	172	215	1704
		CFL301H22	CRJ-0300	3.00	25.1	34.1	19.1	3/8 FL	1-1/8 SWT	13.2	196	239	2420
		CFL401H22	CRM-0401	4.00	28.6	44.1	26.9	1/2 FL	1-1/8 SWT	19.2	286	373	4237
		CFL501H22	CRN-0500	5.00	28.6	44.1	26.9	1/2 FL	1-1/8 SWT	19.2	286	373	4237
HERM.	HIGH TEMP 134a	CFL075H34	RR81C1E	0.75	24.0	16.9	12.9	3/8 FL	5/8 FL	3.7	91	106	767
		CFL075M34	RS54C1E	0.75	24.0	16.9	12.9	3/8 FL	5/8 FL	3.7	91	106	767
		CFL100H34	RR10K1E	1.00	24.0	16.9	12.9	3/8 FL	5/8 FL	6.2	97	112	712

SEMI-HERMETIC & HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	OVERALL DIMENSIONS (IN)			CONNECTION SIZE (IN)		† REC'R CAP. @ 90% (LBS)	APPROXIMATE WEIGHT (LBS)		AIR FLOW (CFM)
					LT	WD	HT	LIQUID	SUCTION		NET	SHIP	
HEAVY DUTY CONSTRUCTION													
SEMI-HERM.	LOW TEMP 404A	CCL100L44	KAJ-010E	1.00	33.5	20.0	19.0	3/8 FL	5/8 FL	18.6	170	190	1625
		CCL150L44	KAL-015E	1.50	33.0	20.0	19.0	3/8 FL	7/8 SWT	18.6	180	200	1625
		CCL151L44	EAD-020E	2.00	33.5	20.0	19.0	3/8 FL	7/8 SWT	18.6	240	260	1508
		CCL200L44	EAV-021E	2.00	33.5	20.0	19.0	1/2 FL	7/8 SWT	18.6	250	270	1508
		CCL300L44	LAH-032E	3.00	39.0	30.0	29.5	1/2 FL	1-1/8 SWT	48.5	390	460	4090
STANDARD DUTY CONSTRUCTION													
HERM.	LT 404A	CFL200L44	CS14K6E	2.00	24.0	18.4	16.2	3/8 SWT	7/8 SWT	5.4	128	148	1010
		CFL300L44	CS20K6E	3.00	24.0	18.4	16.2	3/8 SWT	7/8 SWT	5.4	130	150	1010

† Special application such as; supermarket cases, remote applications etc, may require additional receiver capacity to assure sufficient pumpdown volume.

"C" Line

PHYSICAL DATA SEMI-HERMETIC LOW TEMPERATURE MODELS UL (LISTED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	OVERALL DIMENSIONS (IN)			CONNECTION SIZE (IN)		† REC'R CAP. @ 90% (LBS)	APPROXIMATE WEIGHT (LBS)		AIR FLOW (CFM)
					LT	WD	HT	LIQUID	SUCTION		NET	SHIP	

STANDARD DUTY CONSTRUCTION

SEMI-HERM.	LOW TEMP 404A	CEL050L44	KAN-005E	0.50	19.5	14.5	12.0	1/4 FL	1/2 FL	2.2	109	124	331
		CEL075L44	KAM-007E	0.75	24.0	17.9	13.3	3/8 FL	5/8 FL	5.4	145	160	767
		CEL100L44	KAJ-010E	1.00	24.0	17.9	13.3	3/8 FL	5/8 FL	5.4	149	164	712
		CDL150L44	KAL-015E	1.50	24.5	31.6	14.9	3/8 FL	7/8 SWT	10.3	180	210	1196
		CDL200L44	EAV-021E	2.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	10.3	260	290	1000
		CDL300L44	LAH-032E	3.00	26.2	34.1	18.8	3/8 FL	1-1/8 SWT	10.3	338	388	2420
SEMI-HERM.	LOW TEMP 502	CEL050L52	KAN-0050	0.50	19.5	14.5	12.0	1/4 FL	1/2 FL	2.6	109	124	331
		CEL075L52	KAM-0075	0.75	24.0	17.9	13.3	3/8 FL	5/8 FL	6.3	145	160	767
		CEL100L52	KAJ-0100	1.00	24.0	17.9	13.3	3/8 FL	5/8 FL	6.3	149	164	712
		CDL150L52	KAL-0150	1.50	24.5	31.6	14.9	3/8 FL	7/8 SWT	12.0	180	210	1196
		CDL200L52	EAV-0200	2.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	12.0	260	290	1000
		CDL300L52	LAH-0310	3.00	26.2	34.1	18.8	3/8 FL	1-1/8 SWT	12.0	338	388	2420
SEMI-HERM.	LOW TEMP 22	CEL050L22	KAN-0050	0.50	19.5	14.5	12.0	1/4 FL	1/2 FL	2.6	109	124	331
		CEL051L22	HAT-0051	0.50	19.5	14.5	12.0	1/4 FL	1/2 FL	2.6	100	113	331
		CEL075L22	KAM-0075	0.75	24.0	17.9	13.3	3/8 FL	5/8 FL	6.3	145	160	767
		CEL100L22	KAJ-0100	1.00	24.0	17.9	13.3	3/8 FL	5/8 FL	6.3	149	164	712
		CEL152L22	KAK-0200	1.50	26.2	18.3	16.0	3/8 FL	7/8 SWT	6.3	152	172	1050
		CDL200L22	EAD-0200	2.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	12.0	260	290	1000
		CDL201L22	EAV-0210	2.00	28.0	32.0	14.9	3/8 FL	7/8 SWT	12.0	260	290	1000
		CDL301L22	LAH-0310	3.00	26.2	34.1	18.9	3/8 FL	7/8 SWT	12.0	338	380	2420

HERMETIC HIGH & MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	OVERALL DIMENSIONS (IN)			CONNECTION SIZE (IN)		† REC'R CAP. @ 90% (LBS)	APPROXIMATE WEIGHT (LBS)		AIR FLOW (CFM)
					LT	WD	HT	LIQUID	SUCTION		NET	SHIP	
HERM.	HIGH TEMP 22	CMR025H22	ARE-0025	0.25	15.4	11.3	9.9	1/4 FL	3/8 FL	1.8	36	40	236
		CMR033H22	ARF-0033	0.33	15.4	11.3	9.9	1/4 FL	3/8 FL	1.8	37	41	250
		CFR050H22	JRE-0050	0.50	16.1	13.2	11.8	1/4 FL	3/8 FL	2.5	54	64	331
		CFR056H22	JRF-0050	0.50	17.5	14.3	11.8	1/4 FL	3/8 FL	3.3	57	67	530
		CFR074H22	RSE-0075	0.75	17.5	14.3	12.0	1/4 FL	5/8 FL	3.3	69	79	530
		CFR100H22	RRG-0100	1.00	24.0	16.9	13.1	3/8 FL	5/8 FL	3.7	91	106	767
HERM.	HIGH & MED. TEMP 134a	CFR025H34	JR26C1E	0.25	13.9	11.7	9.8	1/4 FL	3/8 FL	1.8	41	46	245
		CFR033H34	JR36C1E	0.33	13.9	11.7	9.8	1/4 FL	3/8 FL	1.8	46	51	236
		CFR050H34	JR53C1E	0.50	16.0	12.9	11.8	1/4 FL	3/8 FL	2.5	54	64	330
		CFR050M34	RS40C1E	0.50	16.0	12.9	11.8	1/4 FL	1/2 FL	2.5	66	76	330
		CFR075H34	RR81C1E	0.75	24.0	16.9	12.9	3/8 FL	5/8 FL	3.7	91	106	767
		CFR075M34	RS54C1E	0.75	24.0	16.9	12.9	3/8 FL	5/8 FL	3.7	91	106	767
		CFR100H34	RR10K1E	1.00	24.0	16.9	12.9	3/8 FL	5/8 FL	6.2	97	112	712

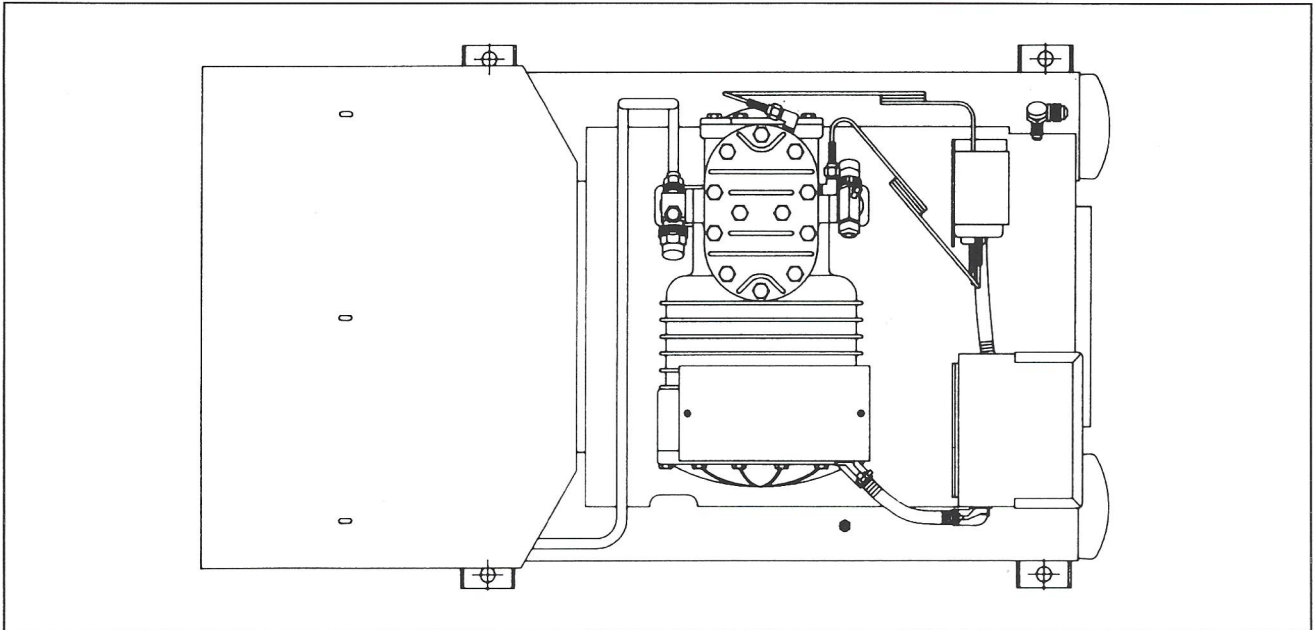
HERMETIC MEDIUM TEMPERATURE MODELS UR (RECOGNIZED) MODELS

COMP TYPE	REFR. TYPE & RANGE	RUSSELL MODEL NUMBER	COMPRESSOR MODEL NUMBER	HP	OVERALL DIMENSIONS (IN)			CONNECTION SIZE (IN)		† REC'R CAP. @ 90% (LBS)	APPROXIMATE WEIGHT (LBS)		AIR FLOW (CFM)
					LT	WD	HT	LIQUID	SUCTION		NET	SHIP	
HERM.	MED. TEMP 502	CMR027L52	AFF-0027	0.25	15.4	11.3	9.9	1/4 FL	3/8 FL	1.8	36	40	236
		CMR035L52	AFG-0035	0.33	15.4	11.3	9.9	1/4 FL	3/8 FL	1.8	37	41	250
		CFR050L52	RSU-0050	0.50	16.2	13.2	11.9	1/4 FL	1/2 FL	2.5	54	64	331
		CFR075L52	RSN-0075	0.75	24.0	16.9	13.1	3/8 FL	5/8 FL	3.7	91	106	767
		CFR100L52	RSL-0101	1.00	24.0	16.9	13.1	3/8 FL	5/8 FL	6.3	110	125	712

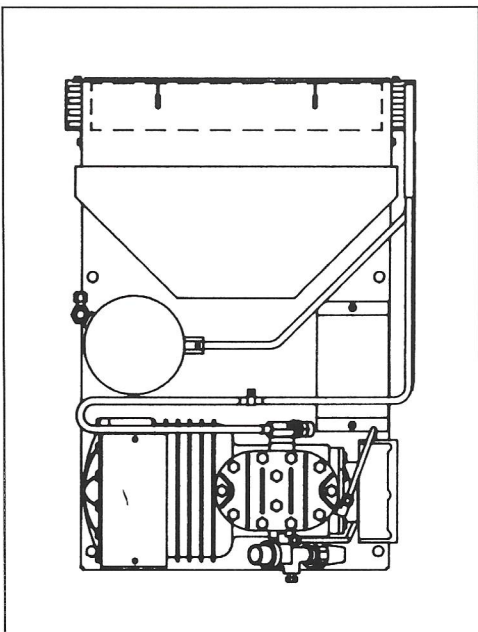
† Special application such as; supermarket cases, remote applications etc, may require additional receiver capacity to assure sufficient pumpdown volume.

PHYSICAL DATA

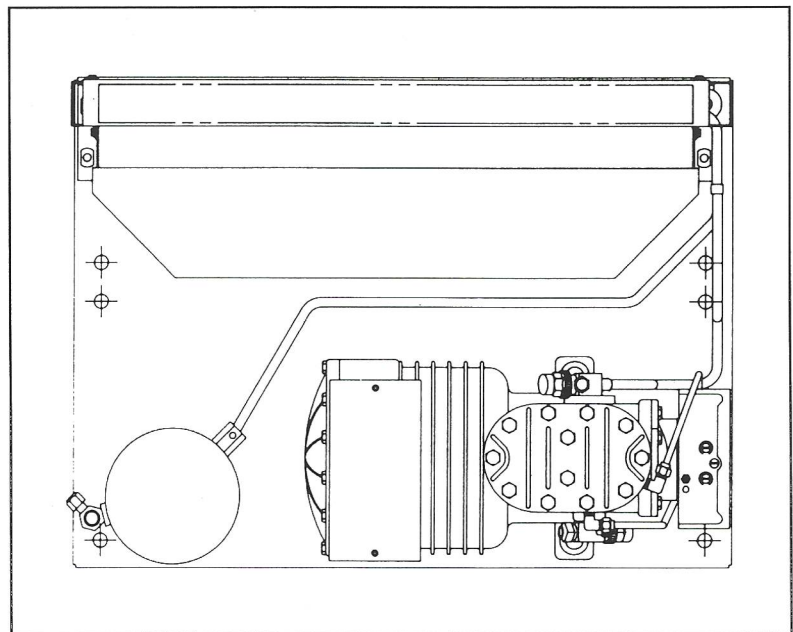
SEMI-HERMETIC MODELS



TYPICAL SEMI-HERMETIC "CC" MODELS

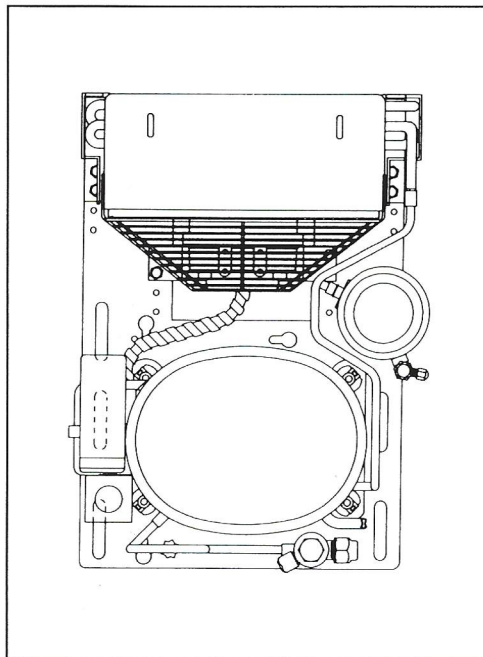


TYPICAL SEMI-HERMETIC
"CE" MODELS

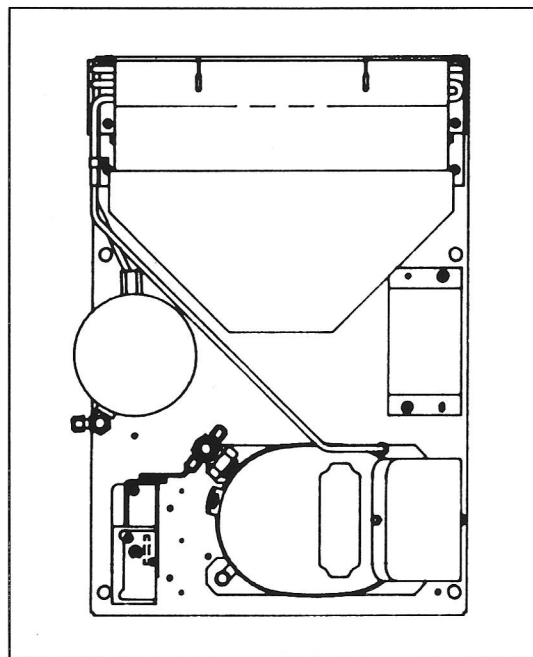


TYPICAL SEMI-HERMETIC "CD" MODELS

PHYSICAL DATA
HERMETIC MODELS



TYPICAL HERMETIC "CM" MODELS



TYPICAL HERMETIC "CF" MODELS

PRINCIPAL TERMS AND CONDITIONS OF SALE

1. **Applicable Law and Terms of Sale:** All orders shall be subject to the following terms and conditions notwithstanding any additional or contrary printed terms and conditions of Buyer. Such additional or contrary terms shall not bind Seller unless accepted in writing even though such terms do not materially alter the terms hereof. No oral statements, warranties, stipulations, representations or terms shall have any binding effect or be any part of the contract whatsoever.
2. **Orders:** All orders must be in writing and will be binding when our order acknowledgment is mailed. Orders are accepted subject to strikes, fires, accidents, and other causes beyond our reasonable control. Acceptance of your order is conditioned upon an agreement to hold us harmless by reason of delivery delays. Minimum order charge is \$50.00.
3. **Prices:** Prices are subject to change without notice, and all quotations, unless otherwise specified, are binding only for immediate acceptance. Prices are based on material made to Seller's standard tolerances, unless otherwise specified.
4. **Freight:** All products are shipped FOB Point of Shipment. Routing and selection of carrier will be made by Seller. For special routing requests buyer will bear all additional costs for such routing. Equipment is shipped at Buyer's risk. Buyer should examine equipment before signing transportation receipt. If equipment is received damaged, or if quantity received does not match freight bill, the Buyer should require agent to so indicate on freight bill and immediately file a damage/missing claim. Our liability ceases upon delivery of equipment in good order to carrier. Full freight is allowed on shipments over 600 lbs. except surface coils, and parts within the continental U.S.A. excluding Alaska and Hawaii.
5. **Taxes:** Any sales, use, excise, or similar tax payable by Seller which is or may be imposed by any taxing authority upon the manufacture, sale, or delivery of goods covered by any order, or any increase in rate of any such tax now in force, shall be added to the sales price; if not collected at the time of payment of sales prices, Buyer will hold Seller harmless.
6. **Limited Warranty:** Seller warrants against defect in materials and workmanship in products which it manufactures for (1) year from date of installation, or up to (15) fifteen months from date of shipment, whichever event occurs first, when properly installed and operated under normal use. This guarantee does not include any labor or other charges made outside of the Seller's factory for replacement or repair of defective parts unless specifically stated in the body of Seller's invoice. On parts not manufactured by Seller, such as motors, controls, valves and compressors, we extend to the Buyer the same warranties made to us by the manufacturer. Seller's only liability under this warranty or otherwise shall be the repair or replacement (at Seller's option) of non-conforming goods or parts. Seller assumes no liability for incidental or consequential damages such as injury to person or property, or lost profits.

THIS GUARANTEE SUPERSEDES AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES BY LAW OR CUSTOM, EITHER EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED BY THIS ENUMERATION, ANY GUARANTEE AS TO QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE, EXCEPT AS SET FORTH ABOVE. NO PERSON, AGENT, OR DEALER IS AUTHORIZED TO GIVE ANY WARRANTIES ON BEHALF OF SELLER NOR TO ASSUME FOR SELLER ANY OTHER LIABILITY IN CONNECTION WITH ANY OF THE SELLER'S PRODUCTS.

7. **Delivery:** Seller shall not be liable for any delays in or failure of delivery due to acts of God or public authority, labor disputes, accidents, fires, floods, extreme weather conditions, failure of and delays by carriers, shortages of material, delays of a supplier, and any other cause beyond Seller's control. In no event shall Seller be liable for consequential or special damages arising out of a delay in or failure of delivery. Failure to meet estimated ship dates will not be considered sufficient cause for cancellation of orders.
8. **Cancellations and Returned Goods:** Permission to return any part or product must be obtained from Seller. Credits for new material accepted for return will be at the original sales price or current market price, whichever is lower, less handling and restocking charges. Buyer must prepay all transportation charges. Any costs for putting material in condition for resale will be charged to the Buyer. Shipment of material returned without factory authorization or not properly tagged with Material Return Authorization Number or not freight prepaid cannot be received by Seller. Obsolete products or material made to special order are not returnable.
9. **Catalog Materials and Drawings:** Seller is not responsible for typographical errors or other errors or omissions in Seller's catalogs or drawings.
10. **Late Charge Provision:** Buyer agrees to pay a late charge of 1-1/2% per month (18% per year) for any invoice or bill not paid within (30) thirty days of the date of the billing invoice.
11. **Choices of Law, Disputes:** This agreement and the performance of the parties hereunder shall be construed in accordance with and governed by the laws of the State of California and shall be deemed made in that state. Buyer irrevocably consents to the exclusive jurisdiction of the courts of Orange County, California, on all matters arising out of or relating to this sale and Buyer further irrevocably consents to service of process by certified mail, return receipt requested, at Buyer's address set forth in the order acknowledgment.

The above terms and conditions apply to all orders placed with the Seller. Buyer acknowledges having read and understood these terms and conditions and agrees to abide by them upon placement of any order with Seller. In the event it becomes necessary to refer the account to a collection agency or to institute legal action to obtain payment of the account, Buyer agrees to pay all reasonable attorney fees and court costs incurred by such action.

