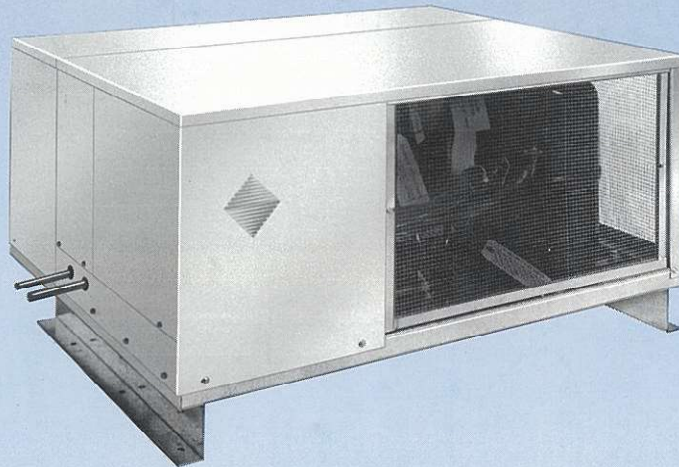


AIR COOLED CONDENSING UNITS 1/2 Through 2 HP

Bulletin 502, March 1990



The Russell MiniCon condensing unit is designed specifically to meet the needs of the Food Service Industry. The Pre-assembled unit comes pre-piped and wired from the factory for easy and cost effective installation. Russell offers a complete line of semi-hermetic or hermetic compressors for cooler or freezer applications. The extra low profile provides convenient placement of the unit, while the open design allows for easy access to all the components, minimizing costs for maintenance or service.

STANDARD FEATURES

INDOOR MODELS

- Semi-Hermetic or Hermetic Compressors
- Low Profile Air Cooled Condenser
- Separate Power & Control Electrical Compartments
- Compressor Contactors or Start Kits
- High and Low Pressure Controls
- Receiver with Shut Off Valve
- UL Listed

OUTDOOR MODELS

- Includes all Features of the Indoor Models
- All-Weather Housing with Raised Base
- Crankcase Heater
- Liquid Line Filter Drier and Sight Glass
- Suction Line Filter

OPTIONS

- Outdoor Housing Conversion Kit for Indoor Models
- Cold Ambient Flooded Control
- Fan Cycle Control for 1-1/2 and 2 HP Units and all Hermetic Units
- Air or Electric Defrost Time Clock
- Fused or Non-Fused Disconnect

PERFORMANCE DATA

Semi-Hermetic Units

Capacity - BTUH*

	MODEL NO. MES/MCS	NOM HP	REFR TYPE	SUCTION TEMPERATURE — °F						
				+35	+25	+20	0	-10	-20	-30
COOLER	050H12	1/2	R-12	5160	4200	3700	2050	—	—	—
	075H12	3/4	R-12	8100	6680	5940	3400	—	—	—
	100H12	1	R-12	9800	8420	7530	4590	—	—	—
	150H12	1.5	R-12	14950	12700	11200	7000	—	—	—
	200H22	2	R-22	21000	17200	15600	9600	—	—	—
FREEZER	050L52	1/2	R-502	—	—	—	3900	3050	2300	1700
	075L52	3/4	R-502	—	—	—	—	4650	3550	2600
	100L52	1	R-502	—	—	—	—	6190	4770	3550
	150L52	1.5	R-502	—	—	—	—	8900	6800	5050
	200L52	2	R-502	—	—	—	—	12500	9800	7500

Hermetic Units

Capacity - BTUH*

	MODEL NO. MEH/MCH	NOM HP	REFR TYPE	SUCTION TEMPERATURE — °F						
				+35	+25	+20	0	-10	-20	-30
COOLER	050H12	1/2	R-12	6500	5300	4750	3140	—	—	—
	075H12	3/4	R-12	8400	6680	5950	—	—	—	—
	100H12	1	R-12	10100	7900	7050	4760	—	—	—
	150H22	1.5	R-22	16400	12600	11980	5800	—	—	—
	200H22	2	R-22	21300	16500	14400	7500	—	—	—
FREEZER	050L12	1/2	R-12	—	—	—	3500	2860	2220	1670
	075L12	3/4	R-12	—	—	—	5360	4220	3140	2110
	100L12	1	R-12	—	—	—	6390	5050	3860	2680
	150L12	1.5	R-502	—	—	—	9060	7100	5350	3700
	200L52	2	R-502	—	—	—	13640	11070	8750	6480

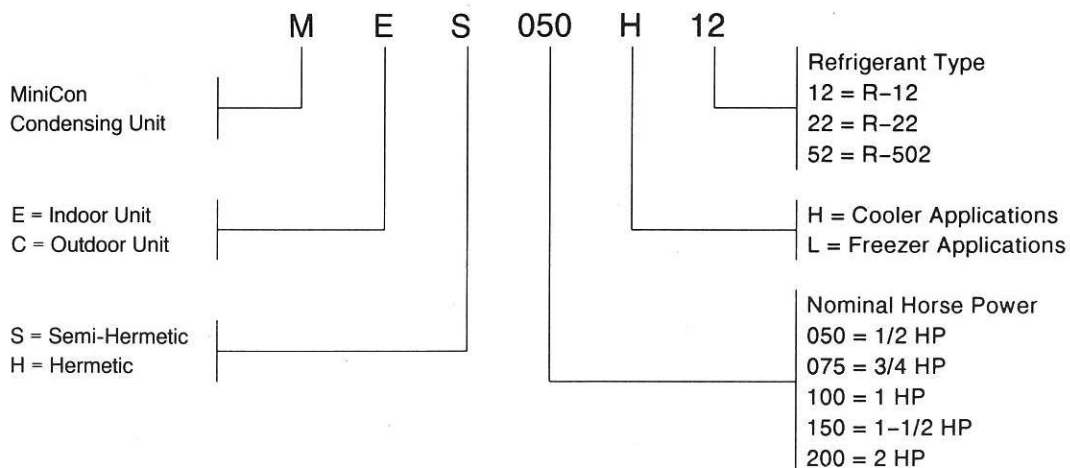
* 95° F. Ambient.

Other Ambients. **Coolers:** Decrease capacity by 3% for each 5° F. higher ambient.
Increase capacity by 3% for each 5° F. lower ambient.

Freezers: Decrease capacity by 4% for each 5° F. higher ambient.
Increase capacity by 4% for each 5° F. lower ambient.

R-22 compressors will be substituted for R-12 compressors as they become available.

MODEL NUMBER NOMENCLATURE



ELECTRICAL DATA

SEMI-HERMETIC UNITS

	MODEL NO.	COMPRESSOR MODEL	208-230/1/60*						208-230/3/60							
			COMPR.		FLA		MCA		COMPR.		FLA		MCA			
			RLA	LRA	COND.	TOTAL	AIR	ELECT.	COND.	TOTAL	AIR	ELECT.	COND.	TOTAL	AIR	ELECT.
					FAN	UNIT	DEFR.	DEFR.								
COOLER	050H12	KAN-0050	3.6	24.0	1.0	4.8	15	20	2.1	13.2	1.0	3.3	15	20		
	075H12	KAM-0075	5.6	36.0	1.0	6.8	15	20	2.7	19.9	1.0	3.9	15	20		
	100H12	KAJ-0100	6.9	40.0	1.0	8.1	15	25	3.4	25.0	1.0	4.6	15	25		
	150H12	KAL-0150	9.9	55.0	2.0	12.1	16	30	5.4	35.5	2.0	7.6	15	30		
	200H22*	ERA-0200	10.4	58.0	2.0	12.6*	19	30	6.6	46.0	2.0	8.9	15	30		
FREEZER	050L52	KAN-0050	3.6	24.0	1.0	4.8	15	20	2.1	13.2	1.0	3.3	15	20		
	075L52	KAM-0075	5.6	36.0	1.0	6.8	15	20	2.7	19.9	1.0	3.9	15	20		
	100L52	KAJ-0100	6.9	40.0	1.0	8.1	15	25	3.4	25.0	1.0	4.6	15	25		
	150L52	KAL-0150	9.9	55.0	2.0	12.1	16	30	5.4	35.5	2.0	7.6	15	30		
	200L52*	EAV-0200	12.4	57.2	2.0	14.6*	19	30	6.6	46.0	2.0	8.8	15	30		

HERMETIC UNITS

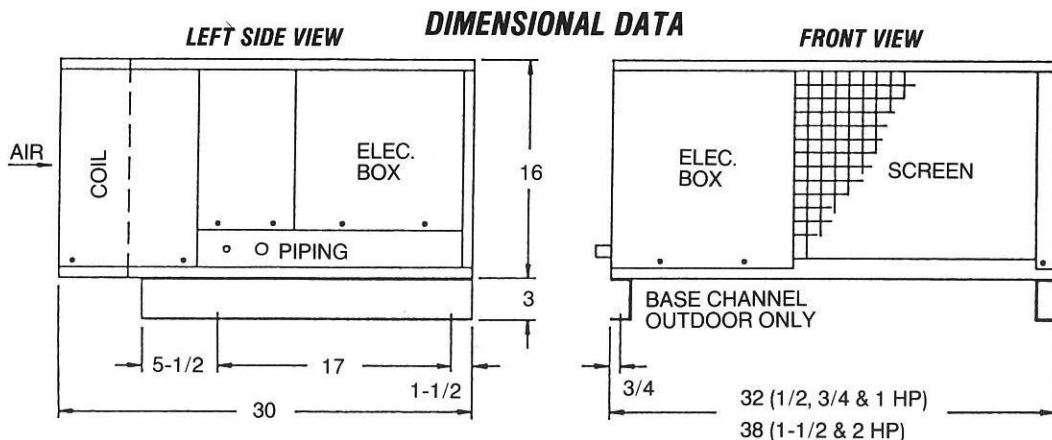
COOLER	050H12	RSF-0050	4.8	24.1	1.0	6.0	15	20	N/A	N/A	N/A	N/A	N/A	N/A
	075H12	RRS-0075	6.5	33.5	2.0	7.7	15	20	N/A	N/A	N/A	N/A	N/A	N/A
	100H12	RRL-0100	7.3	40.0	1.0	8.5	15	25	N/A	N/A	N/A	N/A	N/A	N/A
	150H22	CRA-0150	10.8	48.0	2.0	13.0	17	30	N/A	N/A	N/A	N/A	N/A	N/A
	200H22	CRD-0200	13.4	59.0	2.0	15.6	20	30	8.7	50.0	2.0	10.9	15	30
FREEZER	050L12	AJ2425A	4.3	30.0	1.0	5.5	15	20	N/A	N/A	N/A	N/A	N/A	N/A
	075L12	AH2435A	6.4	45.0	1.0	7.6	15	20	N/A	N/A	N/A	N/A	N/A	N/A
	100L12	AH2445A	8.2	51.0	1.0	9.4	15	25	3.8	34.0	1.0	5.0	15	25
	150L12	AH2466A	9.7	71.0	2.0	11.9	16	30	5.4	47.0	2.0	7.6	15	30
	200L52*	AH2511A	11.4	81.0	2.0	13.6*	18	30	7.0	65.0	2.0	9.2	15	30

ABBREVIATIONS: RLA - Running Load Amps FLA - Full Load Amps
LRA - Locked Rotor Amps MCA - Minimum Circuit Ampacity

*NOTE: 230/1 only. 208/1 applications will require special considerations. Consult factory for details.

PHYSICAL DATA

HORSEPOWER	1/2 HP	3/4 HP	1 HP	1-1/2 HP	2 HP
APPROX. WT. SEMI-HERMETIC (Lbs)	190	200	210	240	280
APPROX. WT. HERMETIC (Lbs)	135	140	145	180	200
LIQUID CONNECTION (ODM)	3/8	3/8	3/8	3/8	3/8
SUCTION CONNECTION (ODM)	5/8	5/8	5/8	7/8	7/8



QUICK SELECTION CHART

35 DEG COOLER - HERMETIC COMPRESSOR

DIMEN. W x L	BTUH LOAD	NOM HP	SYSTEM MODEL NUMBER	
			END MOUNT EVAPORATOR	CENTER MOUNT EVAPORATOR
6 x 6	4500	1/2	MCH050H12/AA18-53	MCH050H12/TW17-45
6 x 8	5400	3/4	MCH075H12/AA18-66	MCH075H12/CTA38-75
6 x 10	6300	3/4	MCH075H12/AA18-66	MCH075H12/CTA38-75
6 x 12	7150	1	MCH100H12/AA28-76	MCH100H12/CTA38-88
8 x 8	6500	3/4	MCH075H12/AA18-66	MCH075H12/CTA38-75
8 x 10	7550	1	MCH100H12/AA28-76	MCH100H12/CTA38-88
8 x 12	8550	1	MCH100H12/AA28-76	MCH100H12/CTA38-88
8 x 14	9550	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
8 x 16	10500	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
10 x 10	8750	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
10 x 12	9950	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
10 x 14	11100	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
10 x 18	12200	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
10 x 18	13300	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
10 x 20	14400	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
12 x 12	11250	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
12 x 14	12550	1-1/2	MCH150H22/AA28-134	MCH150H22/CTA48-130
12 x 16	13850	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
12 x 18	15100	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
12 x 20	16350	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
14 x 14	14000	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
14 x 16	15450	2	MCH200H22/AA38-160	MCH200H22/CTA58-162
14 x 18	16850	2	MCH200H22/AA38-160	MCH200H22/CTA58-162

-10 DEG FREEZER - HERMETIC COMPRESSOR

DIMEN. W x L	BTUH LOAD	NOM HP	SYSTEM MODEL NUMBER	
			END MOUNT EVAPORATOR	CENTER MOUNT EVAPORATOR
6 x 6	4500	1/2	MCH100L12/AE16-46	MCH100L12/CTE34-48
6 x 8	5200	1-1/2	MCH150L12/AE26-60	MCH150L12/CTE36-62
6 x 10	6000	1-1/2	MCH150L12/AE26-60	MCH150L12/CTE36-62
6 x 12	6750	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
8 x 8	6200	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
8 x 10	7150	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
8 x 12	8050	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
8 x 14	8900	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
10 x 10	8200	2	MCH200L52/AE26-92	MCH200L52/CTE46-90
10 x 12	9250	2	MCH200L52/AE26-92	MCH200L52/CTE46-90

NOTES: All loads based on 95° Ambient and Average operating conditions. All rooms are 9 ft. high (outside) with 4" urethane walls and ceiling.

Cooler Floor — No insulation, concrete on grade.

Freezer Floors — 4" urethane.

This chart is designed to be used as a guide and should not replace actual engineering calculations, if needed.