

**IMPROVED DESIGN
1/2 TO 2 HP
MODELS**

Air Cooled Condensing Units 1/2 Through 6 H.P.

*Publication No. 502.8
June, 2001*



1/2 to 2 HP Models



2 -1/2 to 6 HP Models



- Low, Medium and High Temperature
- R-22 and R-404A
- Outdoor and Indoor Applications

Description

The MiniCon series of condensing units are ideally suited for use in a variety of commercial applications such as convenience stores, restaurants and fast food outlets. MiniCon units offer a winning combination of quality, economy, and flexibility coupled with lower long term operating costs.

This low profile product line has been designed around environmentally safer refrigerants. All models utilize R-22 or R-404A. Units are available with a choice of compressors: low cost hermetic, heavy duty semi-hermetic, or energy efficient, heavy duty Copeland Discus™. MiniCons are also available with scroll compressors that are quieter and more reliable.

In addition to the basic Indoor and Outdoor models described in this bulletin Russell can also provide pre-engineered system packages with matching Russell evaporators and accessories.

Russell MiniCons can operate with up to 105°F air temperature entering the condenser. For applications exceeding 105°F entering air temperature, contact our Applications Engineers.

Russell's Sierra and High Sierra Systems give you the added benefits of higher energy savings with floating head pressure and subcooling. For more details see publication number 506 for Sierra information, and publication number 508 for High Sierra systems.

Indoor Models (MES / MEH / MED / MEO)

- Semi-hermetic, hermetic, scroll or Discus™ compressors.
- Low profile, copper tube/aluminum fin air cooled condenser.
- Larger electrical control panel for power and control circuits.
- Compressor contactor or start kit.
- High and low Pressure Control(s)
- Receiver with shut off valve
- Housing with raised base (1/2 to 2 HP models only.)
- UL and C-UL listed for indoor use.

Outdoor Models (MCS / MCH / MCD / MCO)

- Includes all the features of the indoor models.
- All-weather housing with raised base. (All models)
- Crankcase heater.
- Liquid line with filter-drier.
- Sight glass with moisture indicator.
- Suction line with filter.
- UL and C-UL listed for outdoor use.

Outdoor Models With Flooded Head Pressure Control and Defrost Package (MLS/MLH/MLD/MLO)

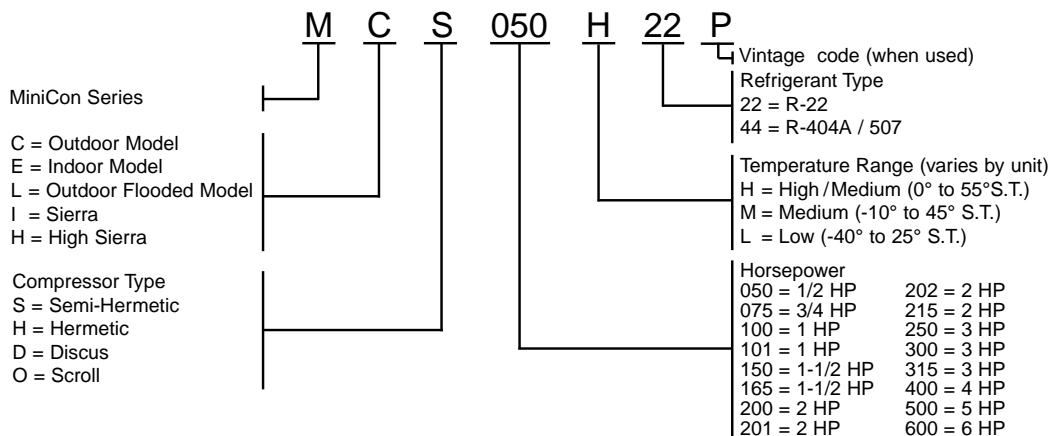
- Includes all the features of the outdoor models.
- Low Ambient - flooded head pressure control valve.
- Air defrost timer on 3 to 6 HP medium and high temperature models.
- Electric defrost timer with defrost contactor/relay on low temperature models (ED10-230/1 on 1/2 thru 3 HP models, and ED11-230/3 on 4 thru 6 HP models).
- Vibration isolation on 3 thru 6 HP semi-hermetic models.

Options

- Winter low ambient flooded control.
- Mild ambient fan cycle control (for 1-1/2 and 2 HP units).
- Outdoor housing kit for indoor models.
- Factory installed air defrost timer.
- Factory installed electric defrost timer with contactors and relays.
- Oil separator.

- Copper fins, or coated condenser coil.
- Tiered stacking.
- Liquid line solenoid (field installed).
- Pressure relief valve.
- Fused disconnect (field installed).
- Suction accumulator.
- High ambient condenser coil.

Nomenclature



Features and Options

	DESCRIPTION	INDOOR MODELS				OUTDOOR MODELS				OUTDOOR FLOODED PACKAGE MODELS			
		MEH	MED	MES	MEO	MCH	MCD	MCS	MCO	MLH	MLD	MLS	MLO
COMPRESSOR	Hermetic	STD	N/A	N/A	N/A	STD	N/A	N/A	N/A	STD	N/A	N/A	N/A
	Discus	N/A	STD	N/A	N/A	N/A	STD	N/A	N/A	N/A	STD	N/A	N/A
	Semi-Hermetic	N/A	N/A	STD	N/A	N/A	N/A	STD	N/A	N/A	N/A	STD	N/A
	Scroll	N/A	N/A	N/A	STD	N/A	N/A	N/A	STD	N/A	N/A	N/A	STD
ELECTRICAL CONTROLS	Oil failure control (as required)	N/R	STD	STD	N/R	N/R	STD	STD	N/R	N/R	STD	STD	N/R
	High / low pressure controls	STANDARD				STANDARD				STANDARD			
	Compressor contactor (3Ø), start kit (1Ø)	STANDARD				STANDARD				STANDARD			
	Control circuit fuses	STANDARD				STANDARD				STANDARD			
	Control transformer (460 to 230V.) (as required)	STANDARD				STANDARD				STANDARD			
Power connection terminal block	STANDARD				STANDARD				STANDARD				
CONDENSER	Copper tubes, Aluminum fins	STANDARD				STANDARD				STANDARD			
	Fan motor(s) - overload protection	STANDARD				STANDARD				STANDARD			
	Fan blade(s) - individually balanced	STANDARD				STANDARD				STANDARD			
	Fan guard(s)	STANDARD (3-6 HP)				OPTIONAL				OPTIONAL			
PIPING COMPONENTS	Suction line filter	OPTIONAL				STANDARD				STANDARD			
	Suction line accumulator	OPTIONAL				OPTIONAL				OPTIONAL			
	Suction line vibrasorb(s)(std. on 3 to 6 HP models only)	N/R	OPT	OPT	N/R	N/R	OPT	OPT	N/R	N/R	OPT	OPT	N/R
	Liquid line filter / drier	OPTIONAL				STANDARD				STANDARD			
	Sight glass / moisture indicator	OPTIONAL				STANDARD				STANDARD			
Discharge vibrasober (std. on 3 to 6 HP models)	N/R	OPT	OPT	N/R	N/R	OPT	OPT	N/R	N/R	OPT	OPT	N/R	
RECEIVER	Shut-off valve(s)	STANDARD				STANDARD				STANDARD			
	Fusible plug	STANDARD				STANDARD				STANDARD			
HOUSING	Alum-Zinc coated all weather housing	OPT. (STD 1/2 to 2 HP)				STANDARD				STANDARD			
	Control panel(s)	STANDARD				STANDARD				STANDARD			
LOW AMBIENT CONTROLS	Sierra	NOT AVAILABLE				See Publication No. 506				NOT AVAILABLE			
	High Sierra	NOT AVAILABLE				See Publication No. 508				NOT AVAILABLE			
	Fan cycle control (1-1/2 to 2 HP only)	OPTIONAL				OPTIONAL				OPTIONAL			
	Flooded head pressure control	OPTIONAL				OPTIONAL				STANDARD			
DEFROST PROVISIONS	Air defrost time clock	OPTIONAL				OPTIONAL				(1)	(1)	(1)	(1)
	Electric defrost package	OPTIONAL				OPTIONAL				(2)	(2)	(2)	(2)
	Hot gas defrost package	NOT AVAILABLE				(See High Sierra)				(See High Sierra)			
TESTING	UL and C-UL listed	STANDARD				STANDARD				STANDARD			
	Leak and dielectric tested before shipping	STANDARD				STANDARD				STANDARD			
	Dry Nitrogen shipping charge (25 to 35 PSI)	STANDARD				STANDARD				STANDARD			

STD = Standard Feature OPT = Optional Feature N/A = Not Available N/R = Not Required

(1) Air defrost timer is included on 3 to 6 HP Medium and High temperature models. Optional for 1/2 to 2 H.P. medium temperatures.

(2) Electric defrost timer with defrost contactor/relay is included on Low temperature models. ED-10-230/1 defrost kit is included on 1/2 to 3 HP models, and ED11-230/3 is included on 4 to 6 HP models.

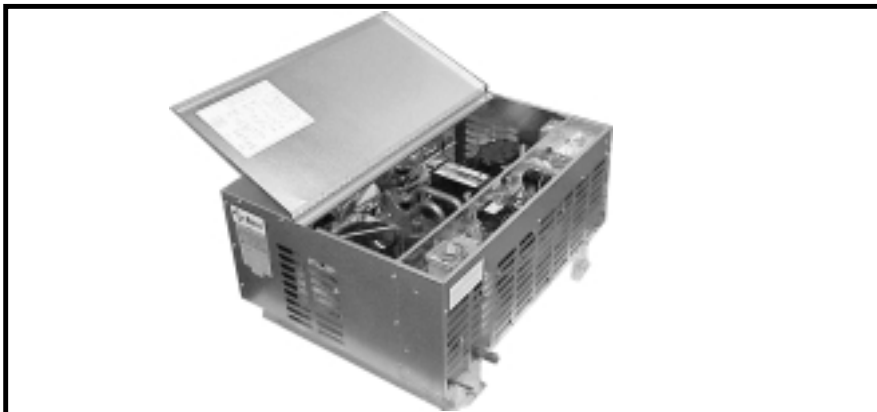


Photo shows a 1/2 - 2 HP Indoor MiniCon (housing included for this HP range only) with the hinged top panel open, allowing **easy** access to the electrical components and compressor compartment.

Performance Data

Physical Data

Hermetic Models

MODEL NUMBER	NOM. H.P.	CAPACITY (BTUH) AT 95°F AMBIENT										
		SUCTION TEMPERATURE (°F)										
		+40°	+30°	+25°	+20°	+10°	0°	-10°	-20°	-25°	-30°	-40°
M*H050M44P	0.50	----	6000	5400	4800	3800	----	----	----	----	----	----
M*H075M44P	0.75	----	8800	8100	7400	6200	----	----	----	----	----	----
M*H101M44P	1.00	----	12200	11300	10500	8500	----	----	----	----	----	----
M*H150M44P	1.50	----	15700	14300	13000	10400	----	----	----	----	----	----
M*H201M44P	2.00	----	23900	21100	19300	15700	----	----	----	----	----	----
M*H300M44	3.00	----	28000	25300	22700	18100	----	----	----	----	----	----
M*H400M44	4.00	----	34700	31600	28500	22700	----	----	----	----	----	----
M*H500M44	5.00	----	42300	37500	34300	27500	----	----	----	----	----	----
M*H050L44P	0.50	----	----	----	----	2650	2000	1500	1200	----	----	----
M*H075L44P	0.75	----	----	----	----	4400	3350	2250	1600	----	----	----
M*H100L44P	1.00	----	----	----	----	5700	4300	2950	2250	----	----	----
M*H165L44P	1.50	----	----	----	----	10190	7940	5670	4690	3770	----	----
M*H215L44P	2.00	----	----	----	----	16420	12930	8870	7360	5940	----	----
M*H315L44	3.00	----	----	----	----	20870	15940	11320	9508	7610	----	----

Hermetic Models

REC'R @90% (LBS)	FIG.	CONN. (ODS, IN.)		SHIPWT.(LBS)
		OUTDOOR MODELS		
		LIQ.	SUC.	
5.1	1	3/8	5/8	170
5.1	1	3/8	5/8	175
8.6	2	3/8	5/8	180
8.6	2	3/8	7/8	240
8.6	2	3/8	7/8	270
16.8	3	1/2	1-1/8	380
24.3	3	1/2	1-1/8	410
24.3	3	1/2	1-1/8	425
5.1	1	3/8	5/8	170
5.1	1	3/8	5/8	175
5.1	1	3/8	5/8	180
8.6	2	3/8	7/8	240
8.6	2	3/8	7/8	270
16.8	3	1/2	1-1/8	380

Scroll Models

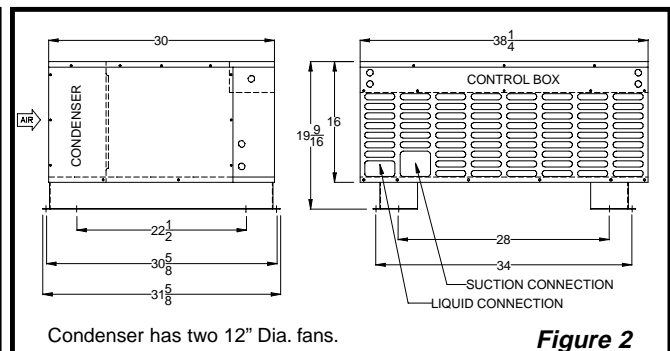
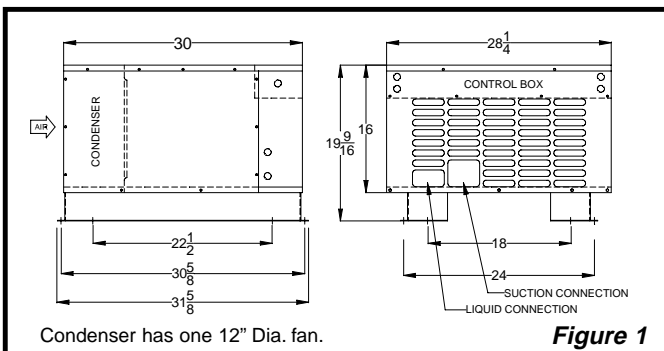
MODEL #	HP	+35°	+30°	+25°	+20°	+10°	0°	-10°	-20°	-25°	-30°	-40°
M*O200M44	2.00	21930	20350	18820	17360	14630	12160	----	----	----	----	----
M*O250M44	2.50	27080	25050	23160	21320	17900	14840	----	----	----	----	----
M*O300M44	3.00	31110	29050	26940	24860	20850	17090	----	----	----	----	----
M*O301M44	3.00	37190	34790	32330	29540	25190	20770	----	----	----	----	----
M*O400M44	4.00	44000	40480	37640	34630	29310	24800	----	----	----	----	----
M*O600M44	6.00	50400	47800	44200	41100	34500	28800	----	----	----	----	----
M*O200L44	2.00	----	----	----	----	11330	9400	7670	6870	6110	4390	----
M*O250L44	2.50	----	----	----	----	13800	12100	10060	8980	7720	5800	----
M*O300L44	3.00	----	----	----	----	15960	13380	11360	9680	8670	6520	----
M*O301L44	3.00	----	----	----	----	18760	15530	12580	11250	10160	8110	----
M*O400L44	4.00	----	----	----	----	24090	19800	15940	14080	12430	8600	----
M*O500L44	5.00	----	----	----	----	28490	23650	19250	17270	13200	11990	----
M*O600L44	6.00	----	----	----	----	33400	27400	22100	19800	17600	13600	----

Scroll Models

REC'R	FIG.	LIQ.	SUC.	SHIPWT.(LBS)
24.5	3	3/8	7/8	365
24.5	3	3/8	1-1/8	375
24.5	3	1/2	1-1/8	375
24.5	3	1/2	1-1/8	385
24.5	3	1/2	1-1/8	400
24.5	3	1/2	1-1/8	425
24.5	3	3/8	7/8	365
24.5	3	3/8	7/8	380
24.5	3	1/2	1-1/8	380
24.5	3	1/2	1-1/8	390
24.5	3	1/2	1-1/8	405
24.5	3	1/2	1-1/8	420
24.5	3	1/2	1-1/8	430

NOTE: For 90°F ambient multiply capacity by 1.03. For 100°F ambient multiply capacity by 0.96. For capacities at 105°F ambient and above, consult factory.

Physical Dimensions - Outdoor Models



Electrical Data

Hermetic Models

MODEL NUMBER	COMP. MODEL NUMBER	AMPS @ 230/1/60					AMPS @ 208/230/3/60**					AMPS @ 460/3/60				
		COMPR.		COND	TOTAL	MCA	COMPR.		COND	TOTAL	MCA	COMPR.		COND	TOTAL	MCA
		RLA	LRA	FLA	UNIT†	‡	RLA	LRA	FLA	UNIT†	‡	RLA	LRA	FLA	UNIT†	‡
M*H050M44P	RS43C1E	5.4	24.1	1.0	7.4	15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
M*H075M44P	RS70C1E	7.0	34.2	1.0	9.0	15	4.7	31.0	1.0	6.7	15	-----	-----	-----	-----	-----
M*H101M44P	RS97C1E	11.0	51.0	2.0	14.0	17	7.0	35.0	2.0	10.0	15	-----	-----	-----	-----	-----
M*H150M44P	CS12K6E	10.9	56.0	2.0	13.9	17	7.5	51.0	2.0	10.5	15	-----	-----	-----	-----	-----
M*H201M44P	CS18K6E	16.0	82.0	2.0	19.0	23	10.4	65.0	2.0	13.4	16	-----	-----	-----	-----	-----
M*H300M44	CS20K3E	18.0	96.0	2.9	21.9	27	11.4	75.0	2.9	15.3	19	-----	-----	-----	-----	-----
M*H400M44	CS27K3E	23.9	95.4	3.2	28.1	35	15.3	82.0	3.2	19.5	24	-----	-----	-----	-----	-----
M*H500M44	CS33K3E	30.7	125.0	3.2	34.9	43	20.7	90.0	3.2	24.9	31	8.6	45.0	1.3	10.4	15
M*H050L44P	RS43C1E	5.4	24.1	1.0	7.4	15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
M*H075L44P	RS70C1E	7.0	34.2	1.0	9.0	15	4.7	31.0	1.0	6.7	15	-----	-----	-----	-----	-----
M*H100L44P	RS97C1E	11.0	51.0	1.0	13.0	16	7.0	35.0	1.0	9.0	15	-----	-----	-----	-----	-----
M*H165L44P	CF06K6E	11.4	59.2	2.0	14.4	18	7.0	52.0	2.0	10.0	15	-----	-----	-----	-----	-----
M*H215L44P	CF09K6E	16.7	87.0	2.0	19.7	24	10.2	72.0	2.0	13.2	16	-----	-----	-----	-----	-----
M*H315L44	CF12K6E	19.0	105.0	2.9	22.9	28	11.9	85.0	2.9	15.8	19	5.9	42.0	1.3	7.7	15
M*H051H22P	ART82C1	5.9	30.0	1.0	7.9	15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
M*H075H22P	RSE-0075	7.1	35.5	1.0	9.1	15	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
M*H100H22P	RS70C1	7.0	34.2	1.0	9.0	15	4.7	31.0	1.0	6.7	15	-----	-----	-----	-----	-----
M*H150H22P	CRA-0150	10.8	48.0	2.0	13.8	17	9.3	58.0	2.0	12.3	15	-----	-----	-----	-----	-----
M*H200H22P	CRD-0200	13.4	59.0	2.0	16.4	20	8.7	50.0	2.0	11.7	15	-----	-----	-----	-----	-----
M*H250H22	CRG-0250	17.3	76.0	2.9	21.2	26	12.0	65.0	2.9	15.9	19	5.6	32.2	1.3	7.4	15
M*H300H22	CRK-0325	23.9	95.4	2.9	27.8	34	15.3	82.0	2.9	19.2	24	7.7	41.0	1.3	9.5	15
M*H400H22	CRM-0400	30.7	125.0	3.2	34.9	43	17.9	90.0	3.2	22.1	27	8.6	45.0	1.3	10.4	15
M*H500H22	CRN-0500	34.3	142.0	3.2	38.5	48	21.4	130.0	3.2	25.6	31	9.6	50.0	1.3	11.4	15

Scroll Models

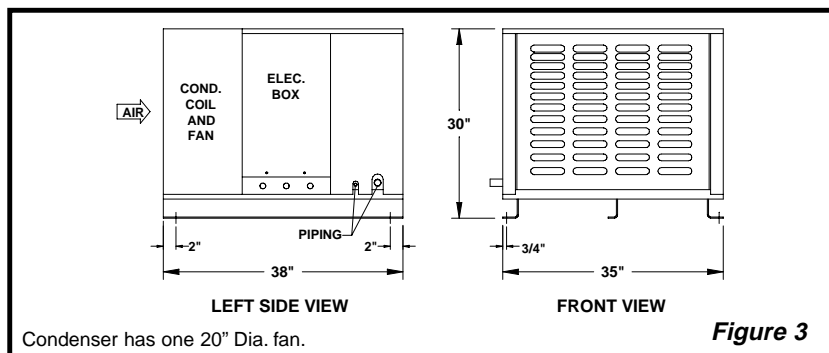
M*O200M44	ZS15K4E	13.6	55	2.9	17.5	20	9.3	55	2.9	13.2	16	4.3	27	1.3	6.1	15
M*O250M44	ZS19K4E	16.4	73	2.9	20.3	25	9.7	63	2.9	13.6	16	5.0	31	1.3	6.8	15
M*O300M44	ZS21K4E	16.4	88.0	3.2	20.6	25	11.1	77.0	3.2	15.3	18	5.7	39.0	1.3	7.5	15
M*O301M44	ZS26K4E	20.7	109.0	3.2	24.9	30	13.6	88.0	3.2	17.8	22	7.1	44.0	1.3	8.9	15
M*O400M44	ZS30K4E	26.8	129.0	3.2	31.0	38	15.0	99.0	3.2	19.2	23	8.2	49.5	1.3	10.0	15
M*O600M44	ZS38K4E	31.8	169.0	3.2	36.0	36	21.4	123.0	3.2	25.6	31	9.6	62.0	1.3	11.4	15
M*O200L44	ZF06K4E	13.6	55	2.9	17.5	20	9.3	55	2.9	13.2	16	4.3	27	1.3	6.1	15
M*O250L44	ZF08K4E	16.4	73	2.9	20.3	25	9.7	63	2.9	13.6	16	5.0	31	1.3	6.8	15
M*O300L44	ZF09K4E	16.4	88.0	3.2	20.6	25	11.1	77.0	3.2	15.3	18	5.7	39.0	1.3	7.5	15
M*O301L44	ZF11K4E	20.7	109.0	3.2	24.9	30	13.6	88.0	3.2	17.8	22	7.1	44.0	1.3	8.9	15
M*O400L44	ZF13K4E	26.8	129.0	3.2	31.0	38	15.0	99.0	3.2	19.2	23	8.2	49.5	1.3	10.0	15
M*O500L44	ZF15K4E	31.5	169.0	3.2	35.7	44	21.4	123.0	3.2	25.6	31	9.6	62.0	1.3	11.4	15
M*O600L44	ZF18K4E	-----	-----	-----	-----	-----	23.9	156.0	3.2	28.1	34	9.3	70.0	1.3	11.1	15

** All Models using "CS" Compressors are rated for 200/230/3/60 application.

† Total Unit Amps includes approximate allowance for control circuit as follows: 1A - 208/230V; 0.5A - 460V.

‡ MCA Minimum Circuit Ampacity does not include evaporator(s) electrical requirements. (Evaporator Fan Motor Amps, Defrost Heater Amps) Contact factory for specific details.

Physical Dimensions - Outdoor Models



Semi-Hermetic Models

MODEL NUMBER	NOM. H.P.	CAPACITY (BTUH) AT 95°F AMBIENT										
		SUCTION TEMPERATURE (°F)										
		+40°	+30°	+25°	+20°	+10°	0°	-10°	-20°	-25°	-30°	-40°
M*S050M44P	0.50	----	----	4650	4250	3420	2690	----	----	----	----	----
M*S100M44P	1.00	----	----	8150	7550	6260	5040	----	----	----	----	----
M*S200M44P	2.00	----	----	14100	12800	10600	8600	----	----	----	----	----
M*S300M44	3.00	----	----	25900	23600	19300	15500	----	----	----	----	----
M*S400M44	4.00	----	----	30500	27900	23000	18300	----	----	----	----	----
M*S050L44P	0.50	----	----	----	----	----	3000	2400	1800	1550	1300	900
M*S075L44P	0.75	----	----	----	----	----	5000	4000	3100	2700	2300	1600
M*S100L44P	1.00	----	----	----	----	----	6800	5500	4400	3850	3300	2400
M*S150L44P	1.50	----	----	----	----	----	10500	8600	6800	6000	5200	3900
M*S200L44P	2.00	----	----	----	----	----	13800	11100	8700	7600	6500	4800
M*S250L44	3.00	----	----	----	----	----	15600	12300	9400	8100	6800	4300
M*S300L44	3.00	----	----	----	----	----	20900	16700	12800	11050	9300	6300

Semi-Hermetic Models

REC'R @90% (LBS)	FIG.	CONN. (ODS, IN.)		SHIP WT. (LBS)
		LIQ.	SUC.	OUTDOOR MODELS
		5.1	1	
5.1	1	3/8	5/8	220
8.6	2	3/8	7/8	320
15.0	3	1/2	1-1/8	470
21.6	3	1/2	1-1/8	490
5.1	1	3/8	5/8	210
5.1	1	3/8	5/8	215
5.1	1	3/8	5/8	220
8.6	2	3/8	7/8	290
8.6	2	3/8	7/8	320
15.0	3	1/2	1-1/8	470
15.0	3	1/2	1-1/8	470

M*S050H22P	0.50	4930	4100	3700	3330	2650	2070	----	----	----	----	----
M*S075H22P	0.75	9020	7280	6480	5730	4370	3200	----	----	----	----	----
M*S100H22P	1.00	12060	9950	8980	8080	6450	5070	----	----	----	----	----
M*S150H22P	1.50	16600	13600	12200	10800	8500	6400	----	----	----	----	----
M*S200H22P	2.00	22500	18400	16600	14800	11500	8400	----	----	----	----	----
M*S300H22	3.00	34500	28200	25300	22600	17800	13800	----	----	----	----	----
M*S400H22	4.00	47600	39200	35300	31600	25000	19200	----	----	----	----	----
M*S400M22	4.00	----	----	31500	28300	22400	17800	----	----	----	----	----
M*S500H22	5.00	56800	47000	42400	38100	30100	23100	----	----	----	----	----
M*S500M22	5.00	----	----	50600	45500	36300	29000	----	----	----	----	----
M*S050L22P	0.50	----	----	----	----	3300	2500	1750	1450	1150	700	----
M*S075L22P	0.75	----	----	----	----	5450	4200	3150	2700	2250	1500	----
M*S100L22P	1.00	----	----	----	----	7200	5600	4200	3625	3050	2150	----
M*S200L22P	2.00	----	----	----	----	8500	6450	4850	4200	3550	2450	----
M*S201L22P	2.00	----	----	----	----	11350	8800	6550	5600	4650	3000	----
M*S202L22P	2.00	----	----	----	----	13800	10700	7900	6750	5600	4100	----
M*S300L22	3.00	----	----	----	----	20600	16100	11900	10050	8200	5650	----

6.0	1	3/8	5/8	210
6.0	1	3/8	5/8	215
6.0	1	3/8	5/8	220
10.0	2	3/8	7/8	290
10.0	2	3/8	7/8	320
17.4	3	1/2	1-1/8	470
25.1	3	1/2	1-1/8	490
25.1	3	1/2	1-1/8	490
25.1	3	1/2	1-1/8	500
25.1	3	1/2	1-1/8	500
6.0	1	3/8	5/8	210
6.0	1	3/8	5/8	215
6.0	1	3/8	5/8	220
10.0	2	3/8	7/8	290
10.0	2	3/8	7/8	320
17.4	3	1/2	1-1/8	470

Discus Models

M*D500M44	5.00	63700	53600	49100	44800	36700	29500	23500	----	----	----	----
M*D300L44	3.00	----	----	----	----	----	29700	23800	18300	16000	13700	9600
M*D400L44	4.00	----	----	----	----	----	34100	26800	21800	19350	16900	13000
M*D500L44	5.00	----	----	----	----	----	39500	32100	25300	22450	19600	15000

Discus Models

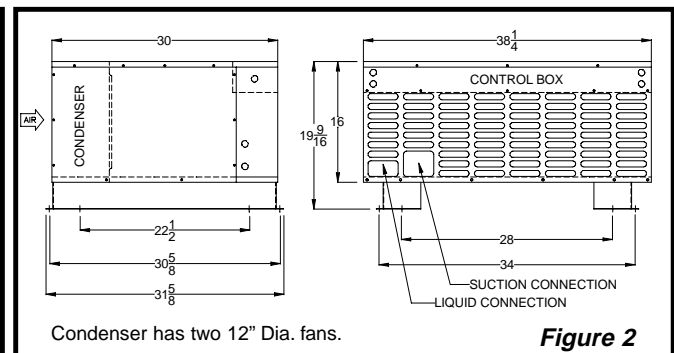
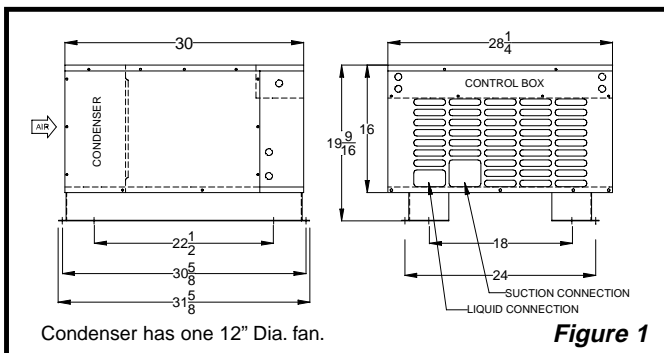
24.3	3	1/2	1-1/8	560
16.8	3	1/2	1-1/8	500
24.3	3	1/2	1-1/8	540
24.3	3	1/2	1-1/8	550

M*D500H22	5.00	64100	53300	48300	43600	34800	----	----	----	----	----	----
M*D300L22	3.00	----	----	----	----	----	26700	20600	15600	13550	11500	7900
M*D400L22	4.00	----	----	----	----	----	30800	24100	18100	15550	13000	8800
M*D500L22	5.00	----	----	----	----	----	37300	29200	22100	19050	16000	11000

28.2	3	1/2	1-1/8	560
16.8	3	1/2	1-1/8	500
28.2	3	1/2	1-1/8	540
28.2	3	1/2	1-1/8	550

NOTE: For 90°F ambient multiply capacity by 1.03. For 100°F ambient multiply capacity by 0.96. For capacities at 105°F ambient and above, consult factory.

Physical Dimensions - Outdoor Models



Electrical Data

Semi-Hermetic Models

MODEL NUMBER	COMP. MODEL NUMBER	AMPS @ 208/230/1/60**					AMPS @ 208/230/3/60					AMPS @ 460/3/60				
		COMPR.		COND	TOTAL	MCA	COMPR.		COND	TOTAL	MCA	COMPR.		COND	TOTAL	MCA
		RLA	LRA	FLA	UNIT†	‡	RLA	LRA	FLA	UNIT†	‡	RLA	LRA	FLA	UNIT†	‡
M*S050M44P	HAI-005E	3.7	22.0	1.0	5.7	15	2.2	13.0	1.0	4.2	15	----	----	----	----	----
M*S100M44P	KAR-010E	7.4	40.0	1.0	9.4	15	4.3	27.0	1.0	6.3	15	----	----	----	----	----
M*S200M44P	KAK-021E	10.6	55.0	2.0	13.6	17	6.8	50.0	2.0	9.8	15	----	----	----	----	----
M*S300M44	ERF-031E	----	----	----	----	----	12.4	82.0	2.9	16.3	20	5.8	41.0	1.3	7.6	15
M*S400M44	NRB-040E	----	----	----	----	----	21.8	141.0	3.2	26.0	32	----	----	----	----	----
M*S050L44P	KAN-005E	3.6	24.0	1.0	5.6	15	2.2	13.2	1.0	4.2	15	----	----	----	----	----
M*S075L44P	KAM-007E	5.6	35.0	1.0	7.6	15	3.2	19.9	1.0	5.2	15	----	----	----	----	----
M*S100L44P	KAJ-010E	6.9	40.0	1.0	8.9	15	4.5	27.0	1.0	6.5	15	----	----	----	----	----
M*S150L44P	KAL-015E	9.9	55.0	2.0	12.9	16	6.6	50.0	2.0	9.6	15	----	----	----	----	----
M*S200L44P	EAV-021E	14.7	102.0	2.0	17.7	22	7.4	50.0	2.0	10.4	15	----	----	----	----	----
M*S250L44	3AB-031E	**14.7	86.0	2.9	18.6	23	10.0	82.0	2.9	13.9	17	----	----	----	----	----
M*S300L44	LAH-032E	**16.7	105.0	2.9	20.6	20	12.8	112.0	2.9	16.7	20	6.0	56.0	1.3	7.8	15

M*S050H22P	HAG-0050	4.4	22.0	1.0	6.4	15	2.4	13.0	1.0	4.4	15	----	----	----	----	----
M*S075H22P	KAN-0075	6.1	36.0	1.0	8.1	15	3.5	19.9	1.0	5.5	15	----	----	----	----	----
M*S100H22P	KAR-0100	7.4	40.0	1.0	9.4	15	4.3	27.0	1.0	6.3	15	----	----	----	----	----
M*S150H22P	KAG-0150	9.6	55.0	2.0	12.6	15	5.5	35.5	2.0	8.5	15	----	----	----	----	----
M*S200H22P	KAK-0200	10.6	55.0	2.0	13.6	17	6.8	50.0	2.0	9.8	15	----	----	----	----	----
M*S300H22	ERF-0310	**17.0	86.0	2.9	20.9	26	11.7	82.0	2.9	15.6	19	6.4	41.0	1.3	8.2	15
M*S400H22	NRB-0400	----	----	----	----	----	21.8	141.0	3.2	26.0	32	11.3	62.5	1.3	13.1	16
M*S400M22	3RA-0311	*19.8	*86.0	*3.2	*22.0	*27	13.1	82.0	3.2	17.3	21	6.3	41.0	1.3	8.1	15
M*S500H22	NRA-0500	----	----	----	----	----	19.2	141.0	3.2	23.4	29	9.6	62.5	1.3	11.4	15
M*S500M22	NRM-0500	----	----	----	----	----	24.3	141.0	3.2	28.5	35	12.1	62.5	1.3	13.9	17
M*S050L22P	KAN-0050	3.6	24.0	1.0	5.6	15	----	----	----	----	----	----	----	----	----	----
M*S075L22P	KAM-0075	5.6	36.0	1.0	7.6	15	3.2	19.9	1.0	5.2	15	----	----	----	----	----
M*S100L22P	KAJ-0100	6.9	40.0	1.0	8.9	15	4.5	27.0	1.0	6.5	15	----	----	----	----	----
M*S200L22P	KAK-0200	10.6	55.0	2.0	13.6	17	6.8	50.0	2.0	9.8	15	----	----	----	----	----
M*S201L22P	EAD-0200	**8.4	58.0	2.0	11.4	15	6.8	46.0	2.0	9.8	15	----	----	----	----	----
M*S202L22P	EAV-0210	14.7	102.0	2.0	17.7	22	7.4	50.0	2.0	10.4	15	----	----	----	----	----
M*S300L22	LAH-0310	**16.6	93.0	2.9	20.5	25	10.7	82.0	2.9	14.6	18	5.2	41.0	1.3	7.0	15

Discus Models

M*D500M44	2DD-050E	----	----	----	----	----	22.3	120.0	3.2	26.5	33	10.5	60.0	1.3	12.3	15
M*D300L44	2DF-030E	----	----	----	----	----	16.8	102.0	2.9	20.7	25	8.1	52.0	1.3	9.9	15
M*D400L44	2DL-040E	----	----	----	----	----	26.3	161.0	3.2	30.5	38	10.2	60.0	1.3	12.0	15
M*D500L44	2DA-060E	----	----	----	----	----	28.8	161.0	3.2	33.0	41	10.2	60.0	1.3	12.0	15

M*D500H22	2DD-050E	----	----	----	----	----	22.3	120.0	3.2	26.5	33	10.5	60.0	1.3	12.3	15
M*D300L22	2DF-0300	----	----	----	----	----	16.8	102.0	2.9	20.7	25	8.1	52.0	1.3	9.9	15
M*D400L22	2DL-0400	----	----	----	----	----	26.3	161.0	3.2	30.5	38	10.2	60.0	1.3	12.0	15
M*D500L22	2DA-0600	----	----	----	----	----	28.8	161.0	3.2	33.0	41	10.2	60.0	1.3	12.0	15

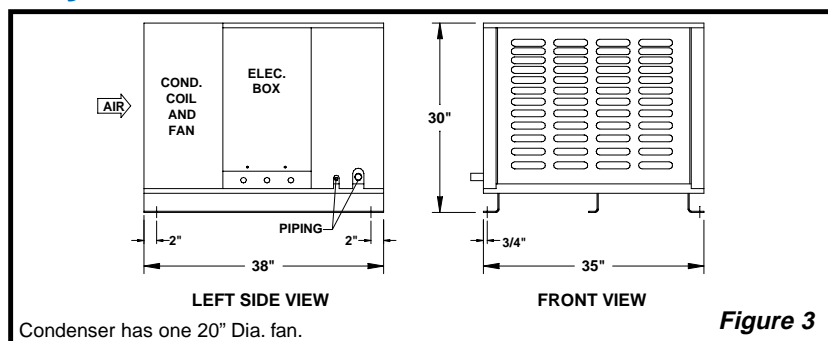
** Designated compressors are rated for 230/1/60 application only. Consult factory for 208/1 V.

† Total Unit Amps includes approximate allowance for control circuit as follows: 1A - 208/230V; 0.5A - 460V.

‡ MCA Minimum Circuit Ampacity does not include evaporator(s) electrical requirements. (Evaporator fan motor amps, defrost heater amps)
Contact factory for specific details.

* Uses 3RA-0310 for Single Phase

Physical Dimensions - Outdoor Models



Physical Dimensions - Indoor Models

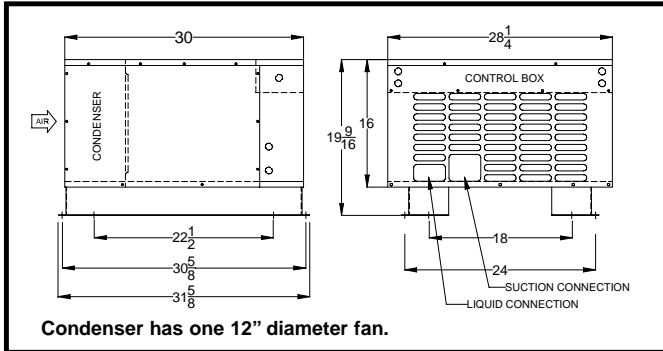


Figure 1

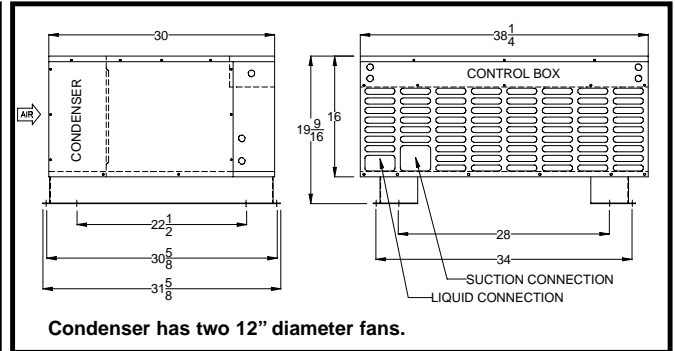


Figure 2

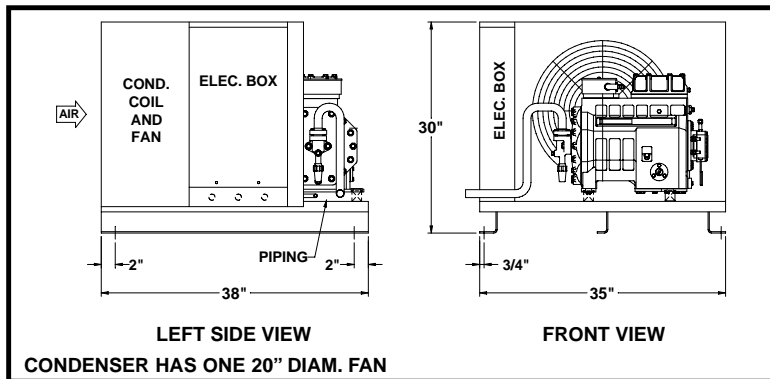


Figure 3A

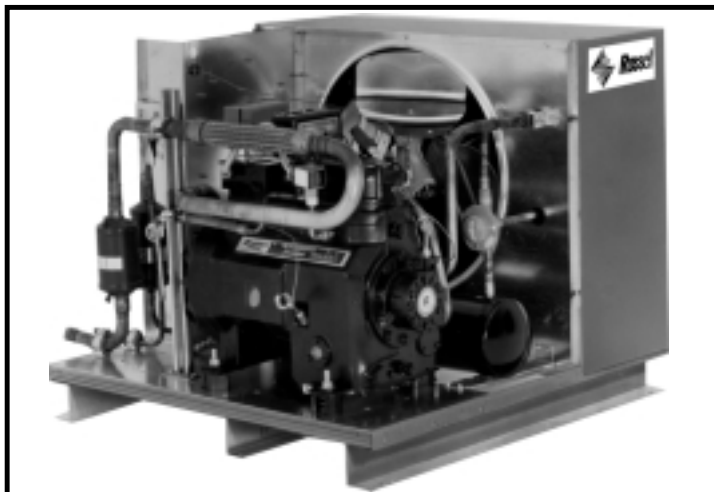


Photo shows an Outdoor MiniCon (3 to 5 HP range) — less housing, with a Discus compressor and suction line kits, flooded head pressure control, Hi-Lo Pressure controls, oil pressure control, receiver and condenser section. The indoor version also includes a fan guard.