

*Rapid Freeze*

*Moderate Ambient Air Cooled*

50-60 Hz Condensing Units

**COOL SOLUTIONS SINCE 1912**

## HOWE Proven. Best Choice.

Howe's moderate ambient condensing units are sized and configured to match Howe Rapid Freeze ice flakers. These units are designed for unexcelled quality, reliability, and long life. They are durable, energy efficient and they provide a high degree of flexibility to a wide diversity of industrial applications.

### STANDARD FEATURES

- High efficiency semi-hermetic compressors with POE Oil.
- Electrical controls in weatherproof control box with compressor contactor and fused control circuit.
- Head pressure control system
- Suction & liquid vibration eliminators.
- Liquid line filter-drier and sight glass.

### SPECIAL FEATURES

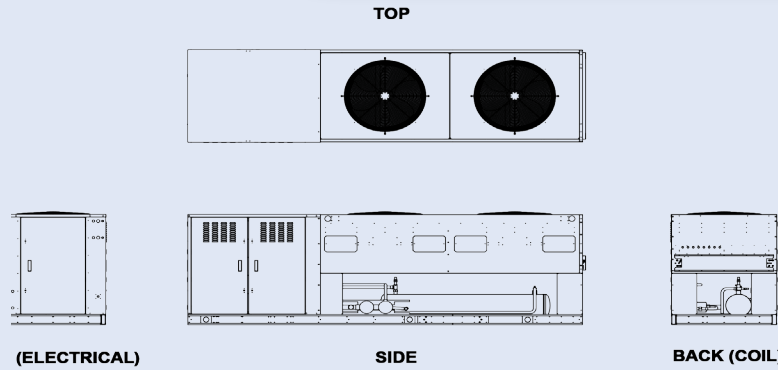
- Pump down toggle switch
- Suction Accumulator
- Oil Separator with oil return line.
- Separate high pressure, low pressure control switches

### OPTIONAL FEATURES

- Coated condenser coils for harsh environments.
- Oversized condensing units rated for 110°F ambient conditions.



MA77-A-R404A-1 shown.



## CONDENSING UNIT

MODEL	DIMENSIONS IN			CM			CONNECTION SIZES		REQUIRED RUN Line Sizes (ODS)		REC CAP LBS	SHIPPING WEIGHT	
	H	W	L	H	W	L	SUCTION	LIQUID	SUCTION	LIQUID		LBS	KG
MA77-A-R4**A-*	55	44-3/4	167-3/8	140	114	424	2 1/8	1-1/8	2 1/8	7/8	124	2200	998
MA77-A-R4**A-2	55	44-3/4	167-3/8	140	114	424	2 1/8	1-1/8	2 1/8	7/8	124	2510	1140
MA102-A-R4**A-*	55	44-3/4	167-3/8	140	114	424	2 1/8	1-1/8	2 5/8	1 1/8	157	2290	1040
MA102-A-R4**A-2	55	86-3/4	167-3/8	140	220	424	2 1/8	1-1/8	2 5/8	1 1/8	157	4120	1872

\*\*= 04 for R-404A, 48 for R-448A

\*= 1 for 230/3/60, 3 for 460/3/60, 4 for 575/3/60

## ELECTRICAL SPECS

VOLTAGE	MODEL	MFG #	COMPRESSOR		CONDENSER FAN MOTORS			AMPS	UNIT MCA	MOP
			RLA	LRA	QTY	WATT	FLA (EACH)			
208-230/3/60	MA77-A-R404A-1	C 1	80.7	450	2	3700	6.6	93.9	11415	175
	MA102-A-R404A-1	B 1	120.1	700	2	3500	6.2	132.5	162.5	250
380/3/50	MA77-A-R4**A-2	B 1	83.2	362	2	3700	4.9	92.9	116.2	210
	MA102-A-R4**A-2	C (2)	33.9	180	4	7400	4.9	87.3	159.8	210
460/3/60	MA77-A-R404A-3	C 1	40.4	225	2	3700	3.1	46.6	56.7	90
	MA102-A-R404A-3	C 1	63.9	367	2	3500	3.1	70.1	86.1	125
575/3/60	MA77-A-R404A-4	C 1	32.5	172	2	3700	2.5	37.5	45.6	70
	MA102-A-R404A-4	B 1	43.6	280	2	3500	2.5	48.6	59.5	100

<sup>1</sup> = Receiver capacity is based on R404A refrigerant. Multiply R404A value by the appropriate value below for alternate refrigerants:

Suction accumulator is provided with Howe furnished condensing unit.

R407A	R407C	R448A	R449A	R507	R22
1.10	1.10	1.05	1.05	1.0	1.15

Compressor MFG:  
B= Bitzer compressor, C= Copeland Compressor