

**Models MAA1024A - MAA1060A & MGA1072A**

Example	M	A	A	1	0	3	6	A	E	0	5	0	C	+	+	+	+	1	E	A	+	A	1	1	+	+	+	+	+	+
Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

1	Unit Designation/Family	M = Marvair Wall Mount
2	Energy Efficiency Ratio (EER)	A = 11 G = 10
3	Refrigerant Type	A = R-410a
4	Compressor Type/Quantity	1 = Single   3 = Dual Compressors
5	Unit Capacity/Nominal Cooling (BTUH)	024 = 24,000
6		030 = 30,000
7		036 = 36,000
8		042 = 42,000
9	System Type	A = Air Conditioner
10	Power Supply (Volts-Phase-Hz)	E = 380-3-50 - 4 Wire   G = 200/220-3-50 K = 400-3-50 - 3 Wire   F = 220-1-50
11	Heat Designation @ Rated Voltage	000 = No Heat
12		022 = 2.2KW
13	Ventilation Configuration	080 = 8KW 090 = 9KW 100 = 10KW 120 = 12KW 150 = 15KW 180 = 18KW
14	Dehumidification	A = Solid Front Door C = Economizer D = Motorized Damper w/Pressure Relief E = Motorized Damper w/Pressure Relief & Independent Motorized Damper Control N = Barometric Damper w/15% OSA Y = Manual Damper w/No Pressure Relief Z = Manual Damper w/Pressure Relief + = None \$ = Special
15	Controls	G = Hot Gas Reheat R = Electric Reheat T = Electric Reheat w/Humidity Control + = None \$ = Special
16	Operating Condition	A = Power Fail Alarm w/Additional Lockouts C = 24V EMS Relay Kit D = 24V EMS Relay Kit w/Factory Installed T-Stat E = Factory Installed T-Stat F = ModBus Interface G = ModBus Interface w/Factory Installed T-Stat H = Bac-Net J = Bac-Net Controls w/Factory Installed T-Stat K = Summed Alarms + = None \$ = Special

17	Indoor Air Quality Features	D = Dry Bulb Sensor E = Dry Bulb Sensor w/Dirty Filter G = Dirty Filter Sensor + = None \$ = Special
18	Air Flow	1 = Top Supply/Bottom Return 2 = Center Supply (Reverse) 3 = Bottom Supply/Top Return (Counter) 4 = Top Panel Discharge 5 = Centrifugal Blowers 6 = 3T3 7 = 3T5 8 = 4T2 9 = 4T3 A = 3T2 \$ = Special
19	Compressor Location	C = Center - All 6 ton units and above D = Left Hand - All 3 1/2 to 5 ton units E = Right Hand - All 1 1/2 to 3 ton units
20	Filter Option	A = 2" Pleated (MERV 8, AC/HP-C) C = 2" Charcoal D = MERV 11 High Filtration Package E = MERV 13 High Filtration Package F = Filter Access Through Return Air Grille W = Aluminum Washable + = None \$ = Special
21	Corrosion Protection	A = Condenser Coil Only C = Evaporator Coil Only D = Both Coils Condenser & Evaporator E = All Coils Cond/Evap/Reheat F = Coat All G = Coastal Package & Evaporator Coil K = Coastal Package + = None \$ = Special
22	Engineering Revision Level	A1
23		B1
24	Cabinet Color	1 = Marvair Beige 2 = Gray 3 = Carlsbad Canyon 4 = White 5 = Stainless Steel Exterior 6 = Dark Bronze 7 = .050 Aluminum Stucco 8 = Mesa Tan 9 = Pebble Gray A = Stainless Steel - Unit \$ = Custom Color (Powder Coat)
25	Sound Attenuation	2 = Compressor Blanket + = None
26	Security Option	A = Lockable Access Plate/Tamper Proof C = Tamper Proof Screws D = Lockable Access Plate w/Tamper Proof + = None \$ = Special
27	Fastener/Drain Pan Option	A = Stainless Steel Fasteners C = Stainless Steel Drain Pan D = Stainless Steel Fasteners & Drain Pan + = None \$ = Special
28	Unused	+ = None \$ = Special
29	Unused	+ = None \$ = Special
30	Special Variation	+ = None \$ = Special Configuration Not Covered by Model Nomenclature

**Note:** Not all options are available with all configurations. Contact your Marvair sales representative for configuration details and feature compatibility.

# Marvair High Efficiency Wall Mount Air Conditioners Performance Data

## Efficiency and Capacity Ratings for Air Conditioners with Single Stage Compressor

Model Number	MAA1024A	MAA1030A	MAA1036A	MAA1042A	MAA1048A	MAA1060A	MGA1072A	MGA3090A	MGA3120A
Cooling BTUH <sup>1</sup>	24,000	29,000	35,000	41,000	45,000	54,600	70,000	89,000	120,000
EER <sup>2</sup>	11.00	11.00	11.00	11.50	11.00	11.00	10.00	10.00	10.00
Rated Air Flow (CFM <sup>3</sup> )	850	1,070	1,200	1,250	1,400	1,750	1,925	3,500	4,000

<sup>1</sup>Cooling rated at 95°F (35°C) outdoor and 80°F DB/67° WB (26.5°C DB/19.5°C WB) return air    <sup>2</sup>EER=Energy Efficiency Ratio    <sup>3</sup>CFM=Cubic Feet per Minute  
Ratings are with no outside air. Performance will be affected by altitude.  
Ratings are at 230 volts for 208/230 volt units ("A" & "C" models) and 460 volts for "D" models. Operation of units at a different voltage from that of the rating point will affect performance and air flow.

## Electrical Characteristics - Compressor, Fan & Blower Motors

BASIC MODEL	COMPRESSOR			OUTDOOR FAN MOTOR		INDOOR BLOWER MOTOR	
	VOLTS / HZ / PH	RLA <sup>1</sup>	LRA <sup>2</sup>	HP <sup>3</sup>	FLA <sup>4</sup>	HP <sup>3</sup>	FLA <sup>4</sup>
MAA1024AE	380/420-50-3	4.0	38.0	1/3	3.5	1/2	2.8
MAA1030AE	380/420-50-3	5.4	38.0	1/3	3.5	1/2	4.3
MAA1036AE	380/420-50-3	5.6	36.0	1/3	3.5	1/2	4.3
MAA1042AE	380/420-50-3	6.0	43.0	1/2	5.3	1/2	4.3
MAA1048AE	380/420-50-3	6.1	43.0	1/2	5.3	3/4	6.8
MAA1060AE	380/420-50-3	8.5	66.0	1/2	5.3	3/4	6.8
MGA1072AE	380/420-50-3	10.6	74.0	1/2	2.4	1/2	3.0
MGA3090AE/K	380-50-3	6.1 (12.20)	43.00	1/3	2.7 (5.40)	1.0	3.3
MGA3120AE/K "A1"	380-3-50	13.7 (27.4)	52.0	4	9.4	4.0	5.2
MGA3120AE/K "B1"	380-50-3	7.8 (15.60)	52.00	3/4	6.3 (12.60)	2.0	6.7
MGA3090AF	220-50-1	15.9 (31.80)	98.00	1/3	2.7 (5.40)	1.0	3.3
MGA3120AF "B1"	220-50-1	20.2 (40.40)	128.00	3/4	6.3 (12.60)	2.0	6.7
MAA1024AG	200/220 50-3	8.2	59.0	1/3	3.5	1/2	2.8
MAA1030AG	200/220 50-3	9.3	78.0	1/3	3.5	1/2	4.3
MAA1036AG	200/220 50-3	10.5	80.0	1/3	3.5	1/2	4.3
MAA1042AG	200/220 50-3	13.4	80.7	1/2	5.3	1/2	4.3
MAA1048AG	200/220 50-3	14.0	80.7	1/2	5.3	3/4	6.8
MAA1060AG	200/220 50-3	15.3	110.0	1/2	5.3	3/4	6.8
MGA1072AG	200/220 50-3	22.4	149.0	1/2	2.4	1/2	3.0
MGA3090AG	220-50-3	14 (28)	80.7	1/3	2.3 (4.6)	1.0	3.3
MGA3120AG "A1"	220-50-3	15.6 (31.2)	110.0	4	9.4	4.0	5.2
MGA3120AG "B1"	220-50-3	15.6 (31.2)	110.0	3/4	5.2 (10.4)	4.0	5.2

<sup>1</sup>RLA = Rated Load Amps    <sup>2</sup>LRA = Locked Rotor Amps    <sup>3</sup>HP = Horsepower    <sup>4</sup>FLA = Full Load Amps

## Summary Electrical Ratings (Wire and Circuit Breaker Sizing) -

*Air Conditioners with Single stage Compressors & Ventilation Configurations:*

*Manual Damper, up to 15% Outside Air ("N")*

*Economizer, Outside Air with Pressure Relief ("C")*

*Motorized Damper, up to 450 CFM of Outside Air with Pressure Relief ("D")*

*Manual Damper, up to 450 CFM of Outside Air ("Y")*

*Manual Damper, up to 15% Outside Air with Pressure Relief ("Z")*

ELECTRIC HEAT		000 = None		050 = 5 kw		060 = 6 kw		090 = 9 kw		120 = 12 kw		150 = 15 kw	
BASIC MODEL	VOLTAGE PHASE / HZ	SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>	
		MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>
MAA1024AE	380/420-50-3	8.15	15			10.40	15	14.90	15	19.40	20	23.90	25
MAA1030AE	380/420-50-3	10.65	15			11.20	15	15.70	20	20.20	25	24.70	25
MAA1036AE	380/420-50-3	10.90	15			11.20	15	15.70	20	20.20	25	24.70	25
MAA1042AE	380/420-50-3	12.30	15			13.30	15	15.70	20	20.20	25	24.70	25
MAA1048AE	380/420-50-3	13.68	15			13.80	15	16.90	20	21.40	25	25.90	30
MAA1060AE	380/420-50-3	16.68	25			16.70	25	16.90	25	21.40	25	25.90	30
MGA1072AE	380/420-50-3	15.95	25			16.00	25	16.00	25	19.50	25	24.00	25
MGA3090AE/K	380-50-3	24.0	25	24.0	25			24.0	25			24.0	25
MGA3120AE/K "A1"	380-50-3	27.7	30	27.7	30			27.7	30			27.7	30
MGA3120AE/K "B1"	380-50-3	37.3	40	37.3	40			37.3	40			37.3	40
MGA3090AF	220-50-1	48.5	60	48.5	60			48.5	60			60.6	70
MGA3120AF "B1"	220-50-1	69.8	80	69.8	80			69.8	80			69.8	80
MAA1024AG	200/220 50-3	16.55	25			20.80	25	30.00	35	38.90	40		
MAA1030AG	200/220 50-3	19.43	25			22.30	25	31.40	35	40.40	45	49.40	50
MAA1036AG	200/220 50-3	20.93	30			22.30	30	31.40	35	40.40	45	49.40	50
MAA1042AG	200/220 50-3	26.35	40			22.30	40	31.40	40	40.40	45	49.40	50
MAA1048AG	200/220 50-3	29.60	40			24.80	40	33.90	40	42.90	45	51.90	60
MAA1060AG	200/220 50-3	31.23	45			24.80	45	33.90	45	42.90	45	51.90	60
MGA1072AG	200/220 50-3	33.4	50			33.40	50	33.40	50	39.10	50	48.10	50
MGA3090AG	220-50-3	42.1	50	42.1	50			42.1	50			44.1	50
MGA3120AG "A1"	220-50-3	55.5	60	55.5	60			55.5	60			55.5	60
MGA3120AG "B1"	220-50-3	58.1	60	58.1	60			58.1	60			58.1	60

<sup>1</sup>MCA = Minimum Circuit Ampacity (Wiring Size Amps)    <sup>2</sup>MFS = Maximum Fuse or HACR Breaker Size    <sup>3</sup>SPPE = Single Point Power Entry  
MCA & MFS are calculated at 230 volts on the ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

## Summary Electrical Ratings (Wire and Circuit Breaker Sizing) -

*Air Conditioners with Electric Reheat ("R") with Single stage Compressors and Ventilation Configurations:*

*Manual Damper, up to 15% Outside Air ("N") • Economizer, Outside Air with Pressure Relief ("C")*

*Motorized Damper, up to 450 CFM of Outside Air with Pressure Relief ("D")*

*Manual Damper, up to 450 CFM of Outside Air ("Y") • Manual Damper, up to 15% Outside Air with Pressure Relief ("Z")*

ELECTRIC HEAT		000 = None		060 = 6 kw		090 = 9 kw		120 = 12 kw		150 = 15 kw	
BASIC MODEL	VOLTAGE PHASE / HZ	SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>		SPPE <sup>3</sup>	
		MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>	MCA <sup>1</sup>	MFS <sup>2</sup>
MAA1024AE	380/420-50-3	8.15	15	17.20	20	21.70	25	26.20	30	30.70	35
MAA1030AE	380/420-50-3	10.65	15	19.70	20	24.20	25	28.70	30	33.20	35
MAA1036AE	380/420-50-3	10.90	15	19.90	25	24.40	25	28.90	30	33.40	35
MAA1042AE	380/420-50-3	12.30	15	21.30	25	25.80	30	30.30	35	34.80	35
MAA1048AE	380/420-50-3	13.68	15	22.70	25	27.20	30	31.70	35	36.20	40
MAA1060AE	380/420-50-3	16.68	25	25.70	30	30.20	35	34.70	35	39.20	40
MGA1072AE	380/420-50-3	15.95	25	25.00	30	29.50	30	34.00	35	38.50	45
MAA1024AG	200/220 50-3	16.55	25	34.60	35	43.70	45	52.70	60	61.70	70
MAA1030AG	200/220 50-3	19.43	25	37.40	40	46.50	50	55.50	60	64.50	70
MAA1036AG	200/220 50-3	20.93	30	38.90	40	48.00	50	57.00	60	66.00	70
MAA1042AG	200/220 50-3	26.35	40	44.40	45	53.50	60	62.50	70	71.50	80
MAA1048AG	200/220 50-3	29.60	40	47.60	50	56.70	60	65.70	70	74.70	80
MAA1060AG	200/220 50-3	31.23	45	49.20	50	58.30	60	67.30	70	76.30	80
MGA1072AG	200/220 50-3	33.4	50	51.40	60	60.50	70	69.50	70	78.50	80

<sup>1</sup>MCA = Minimum Circuit Ampacity (Wiring Size Amps)    <sup>2</sup>MFS = Maximum Fuse or HACR Breaker Size    <sup>3</sup>SPPE = Single Point Power Entry  
MCA & MFS are calculated at 230 volts on the ACA & ACC models. The 460 volts ACD models are calculated at 460 volts. This chart should only be used as a guideline for estimating conductor size and overcurrent protection. For the requirements of specific units, always refer to the data label on the unit.

## Unit Load Amps -

*Air Conditioners with with Single stage Compressors and Ventilation Configurations:*

*Manual Damper, up to 15% Outside Air ("N") • Economizer, Outside Air with Pressure Relief ("C")*

*Motorized Damper, up to 450 CFM of Outside Air with Pressure Relief ("D")*

*Manual Damper, up to 450 CFM of Outside Air ("Y") • Manual Damper, up to 15% Outside Air with Pressure Relief ("Z")*

BASIC MODEL NUMBER	VOLTAGE PHASE / HZ	CURRENT AMPS		LOAD OF RESISTIVE HEATING - ELEMENTS ONLY (AMPS)												TOTAL MAXIMUM HEATING AMPS											
				(1) ALL HEATING ELEMENTS ARE ON A SEPARATE CIRCUIT (2) SHADED VALUES (12 & 15 kW) UTILIZE TWO CIRCUITS												INCLUDES AMPS FROM MOTOR(S) THAT ARE LOCATED ON AN ELECTRICAL CIRCUIT THAT DOES NOT HAVE HEATERS											
				Heating Kilowatts						Heating Kilowatts						Heating Kilowatts						Heating Kilowatts					
AC <sup>1</sup>	IBM <sup>2</sup>	2.2	3.6	04	05	06	08	09	10	12	15	2.2	3.6	04	05	06	08	09	10	12	15						
MAA1024AE	380/420-50-3	7.20	1.4					7.20		10.80		14.40	18.00					8.60		12.20		15.80	19.40				
MAA1030AE	380/420-50-3	9.30	2.2					7.20		10.80		14.40	18.00					9.40		13.00		16.60	20.20				
MAA1036AE	380/420-50-3	9.50	2.2					7.20		10.80		14.40	18.00					9.40		13.00		16.60	20.20				
MAA1042AE	380/420-50-3	10.80	2.2					7.20		10.80		14.40	18.00					9.40		13.00		16.60	20.20				
MAA1048AE	380/420-50-3	12.20	2.2					7.20		10.80		14.40	18.00					9.40		13.00		16.60	20.20				
MAA1060AE	380/420-50-3	14.60	3.4					7.20		10.80		14.40	18.00					10.60		14.20		17.80	21.40				
MGA1072AE	380/420-50-3	13.30	3.4					7.20		10.80		14.40	18.00					10.60		14.20		17.80	21.40				
MGA3090AE/K	380-50-3	20.9	3.3				4.8			8.6		14.3					8.1		11.9				17.6				
MGA3120AE/K "A1"	380-3-50	23.8	4.4				4.7			8.4		14.1					9.1		12.8				18.5				
MGA3120AE/K "B1"	380-50-3	25.3	6.7				4.8			8.6		14.3					11.5		15.3				21.0				
MGA3090AF	220-50-1	40.5	3.3				19.1			34.4		57.3					22.4		37.7				60.6				
MGA3120AF "B1"	220-50-1	59.7	6.7				19.1			34.4		57.3					25.8		41.1				64.0				
MAA1024AG	200/220 50-3	14.50	2.8					14.40		21.70		28.90	36.10					17.20		24.50		31.70	38.90				
MAA1030AG	200/220 50-3	17.10	4.3					14.40		21.70		28.90	36.10					18.70		26.00		33.20	40.40				
MAA1036AG	200/220 50-3	18.30	4.3					14.40		21.70		28.90	36.10					18.70		26.00		33.20	40.40				
MAA1042AG	200/220 50-3	23.00	4.3					14.40		21.70		28.90	36.10					18.70		26.00		33.20	40.40				
MAA1048AG	200/220 50-3	26.10	4.3					14.40		21.70		28.90	36.10					18.70		26.00		33.20	40.40				
MAA1060AG	200/220 50-3	27.40	6.8					14.40		21.70		28.90	36.10					21.20		28.50		35.70	42.90				
MGA1072AG	200/220 50-3	27.80	6.8					14.40		21.70		28.90	36.10					21.20		28.50		35.70	42.90				
MGA3090AG	220-50-3	35.1	2.7				11.0			19.9		33.1					13.7		22.6				35.8				
MGA3120AG "A1"	220-50-3	47.7	8.7				11.0			19.9		33.1					19.7		28.6				41.8				
MGA3120AG "B1"	220-50-3	50.3	8.7				11.0			19.9		33.1					19.7		28.6				41.8				

<sup>1</sup>AC = Air Conditioner Unit Amps    <sup>2</sup>IBM = Indoor Blower Motor  
Heating kW is rated at 240 volts on the ACA & ACC models. Derate heater output by 25% for operation at 208 volts. Heating kW is rated at 480 volts on the ACD models. Total heating and cooling amps includes all motors. Three phase models contain single phase motor loads. Loads are not equally balanced on each phase and values shown are maximum phase loads.