



**WALL MOUNT AIR CONDITIONER  
PRODUCT DATA SHEET SUPPLEMENT  
50Hz Performance & Electrical Data**

**Models MAA1018A - MAA1060A, MGA1072A-3150A**

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)	018 = 18,000   048 = 48,000
6		020 = 20,000   060 = 60,000
7		024 = 24,000   072 = 72,000
8		030 = 30,000   090 = 90,000
9	036 = 36,000   120 = 120,000	
10	042 = 42,000   150 = 150,000	
8	System Type	A = Air Conditioner
9	Power Supply (Volts-Hz-Phase)	E = 380-50-3 - 4 Wire   G = 200/220-50-3 K = 400-50-3 - 3 Wire   F = 220-50-1
10	Heat Designation @ Rated Voltage	000 = No Heat   090 = 9KW
11		050 = 5KW   120 = 12KW
12		060 = 6KW   150 = 15KW
13	Ventilation Configuration	A = Solid Front Door C = Economizer D = Motorized Damper w/Pressure Relief E = Motorized Damper w/Pressure Relief & Independent Motorized Damper Control F = No Free Cooling, 100% Emergency Ventilation Only w/Independent Control K = Economizer w/Factory Installed CO2 Control N = Barometric Damper w/15% OSA + = None \$ = Special
14	Dehumidification	G = Hot Gas Reheat R = Electric Reheat T = Electric Reheat w/Humidity Control + = None \$ = Special
15	Controls	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 + = None \$ = Special
16	Operating Condition	A = Evaporator Freeze Sensor (EFS) C = EFS w/Hot Gas Bypass D = Desert Duty F = Desert Duty w/Hard Start G = Desert Duty w/EFS H = Desert Duty w/Hard Start & EFS N = Hard Start P = Hard Start w/Low Ambient & CCH Q = Hard Start w/Low Ambient & Fan Cycle Control (FCC) R = Crank Case Heater (CCH) T = Hard Start w/EFS U = Hard Start w/Hot Gas Bypass V = Hard Start w/Low Ambient & CCH & EFS W = Low Ambient w/CCH Y = Low Ambient w/CCH & FCC Z = Low Ambient w/CCH & EFS 1 = Low Ambient w/FCC 2 = Low Ambient w/FCC & EFS + = None \$ = Special

17	Indoor Air Quality Features	D = Dry Bulb Sensor E = Dry Bulb Sensor w/Dirty Filter G = Dirty Filter Sensor M = Dry Bulb Sensor & CO2 Sensor (Only w/Economizer) + = 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 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 50Hz Power Supply

Model Number	MAA1018	MAA1020	MAA1024	MAA1030	MAA1036	MAA1042	MAA1048	MAA1060	MGA1072	MGA3090	MGA3120	MGA3150
Cooling BTUH <sup>1</sup>	14,000	16,000	19,900	24,000	29,000	34,000	37,300	45,300	58,100	73,800	97,900	121,200
EER <sup>2</sup>	11.00	11.00	11.00	11.00	11.00	11.50	11.00	11.00	10.00	10.00	10.00	10.00
Rated Air Flow (CFM <sup>3</sup> )	540	630	850	1,070	1,200	1,250	1,400	1,750	1,925	3,500	4,000	4,500

<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 400 volts for 380/420 volt units ("E" & "K" models) and 220 volts for 200/220 volt units ("F" & "G" models).

## 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	1/5	1.1	1/3	2.5
MAA1030AE	380/420-50-3	5.4	38	1/2	2.4	1/2	3.0
MAA1036AE	380/420-50-3	5.6	36	1/2	2.4	1/2	3.0
MAA1042AE	380/420-50-3	6.0	43	1/2	2.4	1/3	2.1
MAA1048AE	380/420-50-3	6.1	43	1/2	2.4	3/4	4.0
MAA1060AE	380/420-50-3	7.8	51.5	1/2	2.4	3/4	4.0
MGA1072AE	380/420-50-3	10.6	74	1/2	2.4	3/4	4.0
MGA3090AE/K	380/420-50-3	6.1 (12.2)	43 (86)	1/3	2.7	1	3.3
MGA3120AE/K - A	380/420-50-3	6.9 (13.8)	52 (104)	3/4	6.3	4	5.2
MGA3120AE/K - B	380/420-50-3	6.9 (13.8)	52 (104)	3/4	6.3	4	5.2
MGA3150AE	380/420-50-3	9.9 (19.8)	69 (138)	3/4	6.3	4	5.2
MAA1018AF	220/240-50-1	7.1	44	1/5	1.1	1/3	1.6
MAA1020AF	220/240-50-1	9.0	52	1/5	1.1	1/3	2.5
MGA3090AF	220/240-50-1	15.5 (31.0)	99 (198)	1/3	2.7	1	3.3
MGA3120AF - B	220/240-50-1	21.5 (43.0)	126 (252)	3/4	6.3	2	6.7
MAA1024AG	200/220-50-3	8.2	59	1/5	1.1	1/3	2.5
MAA1030AG	200/220-50-3	9.3	78	1/2	2.4	1/2	3.0
MAA1036AG	200/220-50-3	10.5	80	1/2	2.4	1/2	3.0
MAA1042AG	200/220-50-3	13.4	80.7	1/2	2.4	1/3	2.1
MAA1048AG	200/220-50-3	14	80.7	1/2	2.4	3/4	4.0
MAA1060AG	200/220-50-3	15.3	110	1/2	2.4	3/4	4.0
MGA1072AG	200/220-50-3	22.4	149	1/2	2.4	3/4	4.0
MGA3090AG	200/220-50-3	14.0 (28.0)	83 (166)	1/3	2.7	1	3.3
MGA3120AG - A	200/220-50-3	14.7 (29.4)	110 (220)	3/4	6.3	2	6.7
MGA3120AG - B	200/220-50-3	14.7 (29.4)	110 (220)	3/4	6.3	2	6.7

<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")*

ELECTRIC HEAT		000 = None		050 = 5 kw		060 = 6 kw		090 = 9 kw		120 = 12 kw		150 = 15 kw	
BASIC MODEL	VOLTS-HZ-PH	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	7.1	15			8.5	15	12.0	15	15.5	20	19.0	20
MAA1030AE	380/420-50-3	9.9	15			9.9	15	12.3	15	15.8	20	19.3	20
MAA1036AE	380/420-50-3	10.1	15			10.1	15	12.3	15	15.8	20	19.3	20
MAA1042AE	380/420-50-3	10.1	15			10.1	15	11.8	15	15.3	20	18.8	20
MAA1048AE	380/420-50-3	11.3	15			11.3	15	12.9	15	16.4	20	19.9	20
MAA1060AE	380/420-50-3	13.4	20			13.4	20	13.4	20	16.4	20	19.9	20
MGA1072AE	380/420-50-3	16.9	25			16.9	25	16.9	25	16.9	25	19.9	25
MGA3090AE/K	380/420-50-3	18.7	20					18.7	20	18.7	20	19.5	20
MGA3120AE/K - A	380/420-50-3	26.1	30					26.1	30	26.1	30	26.1	30
MGA3120AE/K - B	380/420-50-3	26.1	30					26.1	30	26.1	30	26.1	30
MGA3150AE	380/420-50-3	31.4	35					31.4	35	31.4	35	31.4	35
MAA1018AF	220/240-50-1	11.7	15	30.1	35			52.8	60				
MAA1020AF	220/240-50-1	15.0	20	31.0	35			53.8	60				
MGA3090AF	220/240-50-1	45.0	50	45.0	50			54.6	60				
MGA3120AF - B	220/240-50-1	67.3	80	67.3	80			67.3	80				
MAA1024AG	200/220-50-3	14.0	20			22.3	25	32.1	35	42.0	45	51.8	60
MAA1030AG	200/220-50-3	17.3	25			22.8	25	32.7	35	42.5	45	52.3	60
MAA1036AG	200/220-50-3	18.8	25			22.8	25	32.7	35	42.5	45	52.3	60
MAA1042AG	200/220-50-3	21.5	30			21.9	30	31.7	35	41.6	45	51.4	60
MAA1048AG	200/220-50-3	24.2	35			24.2	35	33.7	35	43.5	45	53.4	60
MAA1060AG	200/220-50-3	25.8	40			25.8	40	33.7	40	43.5	45	53.4	60
MGA1072AG	200/220-50-3	34.7	50			34.7	50	34.7	50	43.5	50	53.4	60
MGA3090AG	200/220-50-3	41.3	50					41.3	50	42.8	50	52.7	60
MGA3120AG - A	200/220-50-3	50.3	60					50.3	60	50.3	60	56.2	60
MGA3120AG - B	200/220-50-3	50.3	60					50.3	60	50.3	60	56.2	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 400 volts on the "E" & "K" models. The 220 volt "F" & "G" models are calculated at 220 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")*

ELECTRIC HEAT		000 = None		050 = 5 kw		060 = 6 kw		090 = 9 kw		120 = 12 kw		150 = 15 kw	
BASIC MODEL	VOLTS-HZ-PH	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	7.1	15			17.9	20	23.3	25	28.7	30	34.1	35
MAA1030AE	380/420-50-3	9.9	15			20.7	25	26.1	30	31.5	35	36.9	40
MAA1036AE	380/420-50-3	10.1	15			20.9	25	26.3	30	31.8	35	37.2	40
MAA1042AE	380/420-50-3	10.1	15			20.9	25	26.3	30	31.7	35	37.2	40
MAA1048AE	380/420-50-3	11.3	15			22.1	25	27.5	30	33.0	35	38.4	40
MAA1060AE	380/420-50-3	13.4	20			24.3	25	29.7	30	35.1	40	40.5	45
MGA1072AE	380/420-50-3	16.9	25			27.8	35	33.2	40	38.6	40	44.0	45
MGA3090AE/K	380/420-50-3	20.3	25					36.5	40	41.9	45	47.3	50
MGA3120AE/K - A	380/420-50-3	29.7	30					45.9	50	51.3	60	56.8	60
MGA3120AE/K - B	380/420-50-3	29.7	30					45.9	50	51.3	60	56.8	60
MGA3150AE	380/420-50-3	35.0	40					51.2	60	56.6	60	62.0	70
MAA1018AF	220/240-50-1	11.7	15	40.1	45			62.8	70				
MAA1020AF	220/240-50-1	15.0	20	43.4	45			66.2	70				
MGA3090AF	220/240-50-1	47.8	50	76.3	80			99.0	100				
MGA3120AF - B	220/240-50-1	73.9	90	102.3	110			125.1	150				
MAA1024AG	200/220-50-3	14.0	20			33.7	35	43.5	45	53.4	60	63.2	70
MAA1030AG	200/220-50-3	17.3	25			37.0	40	46.8	50	56.6	60	66.5	70
MAA1036AG	200/220-50-3	18.8	25			38.5	45	48.3	50	58.1	60	68.0	70
MAA1042AG	200/220-50-3	21.5	30			41.1	50	51.0	60	60.8	70	70.7	80
MAA1048AG	200/220-50-3	24.2	35			43.9	50	53.7	60	63.6	70	73.4	80
MAA1060AG	200/220-50-3	25.8	40			45.5	50	55.3	60	65.2	70	75.0	80
MGA1072AG	200/220-50-3	34.7	50			54.4	70	64.2	80	74.1	80	83.9	90
MGA3090AG	200/220-50-3	44.1	50					73.6	80	83.5	90	93.3	100
MGA3120AG - A	200/220-50-3	56.9	60					86.5	90	96.3	100	106.1	110
MGA3120AG - B	200/220-50-3	56.9	60					86.5	90	96.3	100	106.1	110

<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 400 volts on the "E" & "K" models. The 220 volt "F" & "G" models are calculated at 220 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")*

BASIC MODEL	VOLTS-HZ-PH	Current Amps		Load of Resistive Heating - Elements Only (Amps)					Total Maximum Heating Amps				
		AC <sup>1</sup>	IBM <sup>2</sup>	5 kW	6 kW	9 kW	12 kW	15 kW	5 kW	6 kW	9 kW	12 kW	15 kW
MAA1024AE/K	380/420-50-3	6.1	1.4		8.7	13.0	17.3	21.7		10.1	14.4	18.7	23.1
MAA1030AE/K	380/420-50-3	8.5	1.7		8.7	13.0	17.3	21.7		10.4	14.7	19.0	23.4
MAA1036AE/K	380/420-50-3	8.7	1.7		8.7	13.0	17.3	21.7		10.4	14.7	19.0	23.4
MAA1042AE/K	380/420-50-3	8.6	1.2		8.7	13.0	17.3	21.7		9.9	14.2	18.5	22.9
MAA1048AE/K	380/420-50-3	9.8	2.3		8.7	13.0	17.3	21.7		11.0	15.3	19.6	24.0
MAA1060AE/K	380/420-50-3	11.5	2.3		8.7	13.0	17.3	21.7		11.0	15.3	19.6	24.0
MGA1072AE/K	380/420-50-3	14.3	2.3		8.7	13.0	17.3	21.7		11.0	15.3	19.6	24.0
MGA3090AE/K	380/420-50-3	17.2	1.9			13.0	17.3	21.7			14.9	19.2	23.6
MGA3120AE/K - A	380/420-50-3	26.2	5.2			13.0	17.3	21.7			18.2	22.5	26.9
MGA3120AE/K - B	380/420-50-3	26.2	5.2			13.0	17.3	21.7			18.2	22.5	26.9
MGA3150AE/K - B	380/420-50-3	30.0	3.0			13.0	17.3	21.7			16.0	20.3	24.7
MAA1018AF	220/240-50-1	9.9	1.7	22.7		40.9			24.4		42.6		
MAA1020AF	220/240-50-1	12.8	2.6	22.7		40.9			25.3		43.5		
MGA3090AF	220/240-50-1	40.1	3.5	22.7		40.9			26.2		44.4		
MGA3120AF - B	220/240-50-1	63.2	7.0	22.7		40.9			29.7		47.9		
MAA1024AG	200/220-50-3	12.0	2.6		15.7	23.6	31.5	39.4		18.3	26.2	34.1	42.0
MAA1030AG	200/220-50-3	14.9	3.1		15.7	23.6	31.5	39.4		18.8	26.7	34.6	42.5
MAA1036AG	200/220-50-3	16.1	3.1		15.7	23.6	31.5	39.4		18.8	26.7	34.6	42.5
MAA1042AG	200/220-50-3	18.1	2.2		15.7	23.6	31.5	39.4		17.9	25.8	33.7	41.6
MAA1048AG	200/220-50-3	20.7	4.2		15.7	23.6	31.5	39.4		19.9	27.8	35.7	43.6
MAA1060AG	200/220-50-3	22.0	4.2		15.7	23.6	31.5	39.4		19.9	27.8	35.7	43.6
MGA1072AG	200/220-50-3	29.1	4.2		15.7	23.6	31.5	39.4		19.9	27.8	35.7	43.6
MGA3090AG	200/220-50-3	37.1	3.5			23.6	31.5	39.4			27.1	35.0	42.9
MGA3120AG - A	200/220-50-3	49.6	7.0			23.6	31.5	39.4			30.6	38.5	46.4
MGA3120AG - B	200/220-50-3	49.6	7.0			23.6	31.5	39.4			30.6	38.5	46.4