



# **GPac** **PRODUCT DATA SHEET** **Models AVGA24-30-36-42-48-60**

## **GPac™** **Wall Mounted Air Conditioners** **with Gas Heat**

R-410A  
Refrigerant

### **General Description**

The GPac wall mounted air conditioner with gas heat is designed for use on a variety of applications including modular classrooms, relocatable offices and a multitude a permanent buildings. The GPac unit is manufactured in two cabinets with nominal cooling capacities of 2, 2-1/2, 3, 3-1/2, 4, and 5 tons and heating capacities of 45,000; 67,000; 75,000; 90,000; 100,000 and 125,000 BTUhs. The unit is available with a number of factory and field installed options and accessories that permit the user to optimize the unit for specific applications.

### **Safety Listed & Energy Certified**

All GPac air conditioners are built to UL standard 1995, 2nd edition and CAN/CSA C22, No. 236-5, 2nd edition. The units are listed by ETL and tested to the American National Standard/ CSA Standard for Gas Fired Central Furnaces; ANSI Z 21.47 2003 4th Edition, addendum "A" to the 4th edition. For energy efficiency and performance, the units are tested and rated in accordance to the ANSI/ARI (Air-Conditioning and Refrigeration Institute) Standard 390- 2003 (Single Package Vertical Units). All AVGA units meet or exceed the efficiency requirements of ANSI/ASHRAE/IESNA 90.1.2007. GPac air conditioners are commercial units and are not intended for use in residential applications.



### **Standard Features**

#### **Ease of Installation**

- Built-in mounting flanges eliminate need for side brackets.
- Sloped top sheds water, minimizes chance of water leaks and eliminates the need for a rainhood.
- Top flashing piece and bottom mounting bracket provided on all units.
- Electrical knockouts on back and side.
- Gas connection on the right side.
- Power disconnect.

#### **Protection of Refrigeration System Components**

- High and low pressure switches.
- Compressor time delay.

#### **Low Ambient Operation in Cooling Mode.**

- Condenser fan cycles allowing cooling down to 20°F (-7°C).

#### **Economical Gas Heat**

- Factory set up for natural gas with easy conversion in field to propane.

- Natural gas high altitude pressure switch kit allows operation in sites from 6,000 to 10,000 ft. (1,830 m to 3,050 m).
- Propane high altitude pressure switch kit allows operation in sites from 6,000 to 10,000 ft. (1,830 m to 3,050 m).
- Vertical vent pipe kits

#### **Patented Tubular Heat Exchanger with Integral Formed Dimple Turbulator**

- Enhanced heat transfer for optimum efficiency
- Quiet – eliminates noise caused by expansion and contraction of internal baffles.

#### **Patented Inshot Gas Burners**

- Quiet, clean burning gas inshot burners fire in a direct line with the orifice and the tube.
- Unique carryover design (cross lighting from one burner to another) for immediate lighting.
- Optional stainless steel burner

## Standard Features (cont'd)

### Direct Spark Ignition Control System with LED Flash Fault Indicator

- Thirty second purge of heat exchanger prior to ignition.
- Three ignition trials before lockout.
- Sixty second post purge at end of operating cycle prevents nuisance trips of rollout switch.
- One hour automatic reset after lockout – eliminates need to manually recycle on lockout.
- LED identifies operating status and simplifies service by flashing fault code.

### Ease of Service

- Compressor and electrical box are easily accessible.
  - Refrigerant access valves allow quick check of refrigerant pressures
  - Easily accessible filter.
  - LED identifies operating status and simplifies service by flashing fault code in heating mode.
- Copper tube, aluminum fin evaporator and condenser coils.

## Ventilation Options

- Manual damper capable of up to 15% of rated airflow of outside air; field adjustable, no pressure relief.
- Manual damper capable of 0 to 450 cfm (maximum of 40% of rated airflow) of outside air; field adjustable, no pressure relief.
- Manual damper capable of 0 to 450 cfm (maximum of 40% of rated airflow) of outside air; field adjustable, includes pressure relief.
- Motorized, two position damper (open and closed) capable of 0 to 450 cfm (maximum of 40% of rated airflow) of outside air; includes pressure relief. A 24-volt actuated motor controls the damper from an external input such as: a time clock, CO2 sensor, energy management system or manual switch.
- GreenWheel® total energy recovery ventilator that can recover both sensible and latent heat with efficiencies up to 75%.

## Outside Air Ventilation Schedule

Designator*	Outside Air	Pressure Relief	Damper
N	15% of rated air flow	No	Manual
Y	0 to 450 cfm	No	Manual
Z	0 to 450 cfm	Yes	Manual
B	0 to 450 cfm	Yes	Motorized
H	0 to 450 cfm	Yes	GreenWheel® ERV

\*See Model Identification Chart.

## Accessories

### Grilles for the AVGA24-30-36

Supply Grille	28" x 8"	P/N 80675
Return Grille	28" x 14"	P/N 80678
Return Filter Grille*	28" x 14"	P/N 80672

### Grilles for the AVGA42-48-60

Supply Grille	30" x 10"	P/N 80676
Return Grille	30" x 16"	P/N 80679
Return Filter Grille*	30" x 16"	P/N 80673

\*Used when filter is accessed and changed from inside the interior.

## Factory Installed Economizer

The economizer reduces the cost of air conditioning by using outside air when acceptable to cool the room. The factory installed Marvair economizer has integral pressure relief. On a signal from a thermostat that cooling is required, either mechanical cooling with the compressor or free cooling with the economizer is provided. The Marvair economizer is capable of bringing in outside air equal to 100% of the rated air flow of the unit and has integral pressure relief.

An internal enthalpy controller determines whether the outside air is sufficiently cool and dry to be used for cooling. If suitable, the compressor is de-energized and the economizer damper opens to bring in outside air. The temperature at which the economizer opens is adjustable from 53°F at 50% RH to 78° F at 50 % RH. If the outside air becomes too hot or humid, the economizer damper closes completely or to a minimum position and mechanical cooling is activated. When used with minimum position potentiometer (optional), the Marvair economizer can meet requirements of ASHRAE 62-1999.

## Hot Gas Reheat Operation

Marvair® units equipped with Hot Gas Reheat (HGR) allow the indoor humidity of the controlled environment to be maintained at or below a certain humidity set point. These units do not have the ability to add humidity to the classroom. Dehumidification is achieved by operating mechanical cooling in conjunction with a hot gas reheat coil. Hot Gas Reheat is only available with units with the "B" or "H" ventilation option.

### Operation

If the humidity rises above the set point on the humidity controller and the temperature in the classroom is satisfied, both mechanical cooling and the HGR coil operate to temper the air and lower the humidity. If the temperature in the classroom rises above (or falls below) the set point of the thermostat and the unit is operating in the dehumidification mode, the call for cooling (or heating) will override the call for dehumidification and the coil is disengaged until the thermostat is satisfied. This assures the environment temperature is maintained as first priority and humidity control is second.

## Model Identification

<b>AVG</b>	●	<b>AC</b>	●	●●	●	●
<b>Air Source</b> Vertical Gas	<b>Refrigerant</b> A = R-410A	<b>Nominal Cooling</b> 24 = 24,000 BTUH 30 = 30,000 BTUH 36 = 36,000 BTUH 42 = 42,500 BTUH 48 = 48,000 BTUH 60 = 57,000 BTUH	<b>System Type</b> Air Conditioner	<b>Power Supply</b> A = 208/230V, 1ø, 60Hz C = 208/230V, 3ø, 60Hz D = 460V, 3ø, 60Hz	<b>Heating Input (MBTUH)</b> 045 = 45,000 BTUH 067 = 67,000 BTUH 090 - 90,000 BTUH 075 = 75,000 BTUH 100 = 100,000 BTUH 125 = 125,000 BTUH	<b>Ventilation Configuration</b> N = 0-15% fresh air with manual damper, no pressure relief. Y = 0 to 450 cfm of outside air, field adjustable, manual damper, no pressure relief. Z = 0 to 450 cfm of outside air, field adjustable, manual damper, includes pressure relief. B = Motorized two position damper (open & closed) capable of 0 to 450 cfm of outside air, includes pressure relief. C = Economizer; capable of 100% of rated cooling capacity using outside air. H = GreenWheel® energy recovery ventilator

## Heating Capacity Inputs Available

MODEL	Available Heating Inputs
AVGA24	45,000 BTUH; 67,000 BTUH; 90,000 BTUH
AVGA30	45,000 BTUH; 67,000 BTUH; 90,000 BTUH
AVGA36	45,000 BTUH; 67,000 BTUH; 90,000 BTUH
AVGA42	75,000 BTUH; 100,000 BTUH; 125,000 BTUH
AVGA48	75,000 BTUH; 100,000 BTUH; 125,000 BTUH
AVP60	75,000 BTUH; 100,000 BTUH; 125,000 BTUH

## Certified Cooling Efficiency and Capacity Ratings in accordance with ARI Standard 390\*

Model	AVGA24AC	AVGA30AC	AVGA36AC	AVGA42AC	AVGA48AC	AVGA60AC
Cooling BTUH	24,000	30,000	36,000	42,500	47,000	56,000
EER	9.40	9.60	9.40	9.40	9.50	9.25
Rated Air Flow (CFM)	800	900	1050	1550	1600	1650
ESP (inches H <sub>2</sub> O)	0.15	0.15	0.20	0.15	0.20	0.20

\*Ratings at 80°F DB/67°F WB and 95°F outdoor air (26.5°C DB/19.4°C WB and 35°C outdoor)

## Heating Efficiency and Capacity Ratings\*

Input	45,000 BTUH	67,500 BTUH	90,000 BTUH	75,000 BTUH	100,000 BTUH	125,000 BTUH
Output	36,000 BTUH	54,000 BTUH	72,000 BTUH	60,000 BTUH	80,000 BTUH	100,000 BTUH
AFUE	80.0	80.0	80.0	80.0	80.0	80.0
Temperature Rise Range (°F)	25 to 55	40 to 70	50 to 80	25 to 55	40 to 70	50 to 80
Mid Range Air Flow (CFM)	840	1000	1220	1450	1450	1450
Acceptable Air Flow Range (CFM)	650 to 1050	750 to 1250	1000 to 1500	925 to 1750	1060 to 1750	1150 to 1750

\*Heating ratings in accordance with GAMA Efficiency Certification Program. Temperature rise (°F) at .035" Water Gauge External Static Pressure.

## Natural Gas Heating Capacity by Altitude (ft.)

NATURAL GAS DERATE CAPACITIES - Btu/Hr											
Rated Input	Altitude (Feet)										
	Sea Level	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
40,500	40,500	39,204	37,908	36,612	35,640	34,992	34,182	33,696	33,048	32,643	32,076
45,000	45,000	43,560	42,120	40,680	39,600	38,880	37,980	37,440	36,720	36,270	35,640
60,750	60,750	58,806	56,862	54,918	53,460	52,488	51,273	50,544	49,572	48,965	48,114
67,500	67,500	65,340	63,180	61,020	59,400	58,320	56,970	56,160	55,080	54,405	53,460
75,000	75,000	72,600	70,200	67,800	66,000	64,800	63,300	62,400	61,200	60,450	59,400
81,000	81,000	78,408	75,816	73,224	71,280	69,984	68,364	67,392	66,096	65,286	64,152
90,000	90,000	87,120	84,240	81,360	79,200	77,760	75,960	74,880	73,440	72,540	71,280
100,000	100,000	96,800	93,600	90,400	88,000	86,400	84,400	83,200	81,600	80,600	79,200
112,500	112,500	108,900	105,300	101,700	99,000	97,200	94,950	93,600	91,800	90,675	89,100
125,000	125,000	121,000	117,000	113,000	110,000	108,000	105,500	104,000	102,000	100,750	99,000

## Propane (LP) Heating Capacity by Altitude (ft.)

PROPANE (LP GAS) DERATE CAPACITIES - Btu/Hr											
Rated Input	Altitude (Feet)										
	Sea Level	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
40,500	40,500	39,852	39,528	39,204	38,556	38,232	37,584	36,612	35,640	34,344	32,724
45,000	45,000	44,280	43,920	43,560	42,840	42,480	41,760	40,680	39,600	38,160	36,360
60,750	60,750	59,778	59,292	58,806	57,834	57,348	56,376	54,918	53,460	51,516	49,086
67,500	67,500	66,420	65,880	65,340	64,260	63,720	62,640	61,020	59,400	57,240	54,540
75,000	75,000	73,800	73,200	72,600	71,400	70,800	69,600	67,800	66,000	63,600	60,600
81,000	81,000	79,704	79,056	78,408	77,112	76,464	75,168	73,224	71,280	68,688	65,448
90,000	90,000	88,560	87,840	87,120	85,680	84,960	83,520	81,360	79,200	76,320	72,720
100,000	100,000	98,400	97,600	96,800	95,200	94,400	92,800	90,400	88,000	84,800	80,800
112,500	112,500	110,700	109,800	108,900	107,100	106,200	104,400	101,700	99,000	95,400	90,900
125,000	125,000	123,000	122,000	121,000	119,000	118,000	116,000	113,000	110,000	106,000	101,000

## Orifice and Altitude Selection Tables for Factory Standard Input Models

HMG 22,500 BTUH/ Burner (Used with AVGA24/30/36 Heat Exchangers)				
Altitude	Orifice- Natural		Orifice- Propane	
	Drill Size	Dia.	Drill Size	Dia.
0-1999 ft	#43	0.089	#54	0.055
2000-2999 ft	2.2	0.0866	1.35	0.531
3000-3999 ft	2.15	0.0846	#55	0.052
4000-4999 ft	2.1	0.0827	1.3	0.0511
5000-5999 ft	#45	0.082	1.25	0.0492
6000-6999 ft	2.05	0.087	1.2	0.0472

HMG 25,000 BTUH/ Burner (Used with AVGA42/48/60 Heat Exchangers)				
Altitude	Orifice- Natural		Orifice- Propane	
	Drill Size	Dia.	Drill Size	Dia.
0-1999 ft	2.30	0.0906	1.5	0.0591
2000-2999 ft	#43	0.0890	#54	0.0550
3000-3999 ft	2.20	0.0866	1.35	0.0531
4000-4999 ft	2.15	0.0846	#55	0.0520
5000-5999 ft	2.10	0.0827	1.30	0.0511
6000-6999 ft	#45	0.0820	1.25	0.0492

Burner Input	Number of Orifices
40,500	2
45,000	2
60,750	3
67,500	3
75,000	3
81,000	4
90,000	4
100,000	4
112,500	5
125,000	5

Orifice Size (mm)	Orifice Diameter	Orifice Size (mm)	Orifice Diameter
2.10	0.0826	2.45	0.0964
2.15	0.0846	2.50	0.0984
2.20	0.0866	2.60	0.1024
2.25	0.0885	2.70	0.1063
2.30	0.0905	2.75	0.1082
2.35	0.0925	2.80	0.1102
2.40	0.0945	2.90	0.1142

## AVGA Summary Ratings (Wire Sizing)

BASIC MODEL	VOLTAGE PHASE	OPTIONS N, C		OPTION B		OPTION H		Gas Heat Capacities (Btu/Hr)					
		MCA	MFS	MCA	MFS	MCA	MFS	045		067		090	
								INPUT	OUTPUT	INPUT	OUTPUT	INPUT	OUTPUT
AVGA24ACA	208-230/1	20.3	30	21.3	30	22.5	35	45,000	36,000	67,500	54,000	90,000	72,000
AVGA30ACA	208-230/1	21.9	35	22.9	35	24.1	35	45,000	36,000	67,500	54,000	90,000	72,000
AVGA36ACA	208-230/1	26.7	40	27.7	45	28.9	45	45,000	36,000	67,500	54,000	90,000	72,000
AVGA24ACC	208-230/3	14.7	20	15.7	20	16.9	25	45,000	36,000	67,500	54,000	90,000	72,000
AVGA30ACC	208-230/3	15.6	20	16.6	25	17.8	25	45,000	36,000	67,500	54,000	90,000	72,000
AVGA36ACC	208-230/3	20.8	30	21.8	35	23.0	35	45,000	36,000	67,500	54,000	90,000	72,000
AVGA24ACD	460/3	8.5	15	9.0	15	10.1	15	45,000	36,000	67,500	54,000	90,000	72,000
AVGA30ACD	460/3	9.2	15	9.7	15	10.3	15	45,000	36,000	67,500	54,000	90,000	72,000
AVGA36ACD	460/3	9.7	15	10.2	15	10.8	15	45,000	36,000	67,500	54,000	90,000	72,000
BASIC MODEL	VOLTAGE PHASE	OPTIONS N, C		OPTION B		OPTION H		Gas Heat Capacities (Btu/Hr)					
		MCA	MFS	MCA	MFS	MCA	MFS	075		100		125	
								INPUT	OUTPUT	INPUT	OUTPUT	INPUT	OUTPUT
AVGA42ACA	208-230/1	30.7	50	31.7	50	32.9	50	75,000	60,000	100,000	80,000	125,000	100,000
AVGA48ACA	208-230/1	33.2	50	34.2	50	35.4	50	75,000	60,000	100,000	80,000	125,000	100,000
AVGA60ACA	208-230/1	40.8	60	41.8	60	43.0	60	75,000	60,000	100,000	80,000	125,000	100,000
AVGA42ACC	208-230/3	22.9	35	23.9	35	25.1	35	75,000	60,000	100,000	80,000	125,000	100,000
AVGA48ACC	208-230/3	23.0	35	24.0	35	25.2	35	75,000	60,000	100,000	80,000	125,000	100,000
AVGA60ACC	208-230/3	27.5	40	28.5	40	29.7	45	75,000	60,000	100,000	80,000	125,000	100,000
AVGA42ACD	460/3	10.6	15	11.1	15	11.7	15	75,000	60,000	100,000	80,000	125,000	100,000
AVGA48ACD	460/3	10.7	15	11.2	15	11.8	15	75,000	60,000	100,000	80,000	125,000	100,000
AVGA60ACD	460/3	13.6	20	14.1	20	14.7	20	75,000	60,000	100,000	80,000	125,000	100,000
Option N = Manual Fixed Position Damper    Option B = Motorized Damper with Fresh Air Intake Blower Option C = Economizer with Enthalpy and Mixed Air Sensors    Option H = GreenWheel® ERV													
MCA = Minimum Circuit Ampacity (wire sizing amps). MFS = Maximum Fuse or HACR size. MCA & MFS calculated at 240v. for HPA and HPC models and at 480v. for HPD models. This chart should be used as a general guideline for estimating the conductor size and over current protection. For specific models, refer to the data label on the cabinet. HPD (460v.) models have a step down transformer for 230v. motors.													

## AVGA Electrical Characteristics

BASIC MODEL	COMPRESSOR				OUTDOOR FAN MOTOR				INDOOR FAN MOTOR				GREENWHEEL® ERV	
	VOLTS-HZ-PH	RLA <sup>1</sup>	LRA <sup>2</sup>	MCC <sup>3</sup>	VOLTS-HZ-PH	RPM <sup>4</sup>	FLA <sup>5</sup>	HP <sup>6</sup>	VOLTS-HZ-PH	RPM	FLA	HP	VOLTS-HZ-PH	RLA
AVGA24ACA	208/230-60-1	12.8	64.0	20.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA30ACA	208/230-60-1	14.1	77.0	22.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA36ACA	208/230-60-1	17.9	112.0	28.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA42ACA	208/230-60-1	19.8	109.0	31.0	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA48ACA	208/230-60-1	21.8	117.0	34.0	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA60ACA	208/230-60-1	26.2	134.0	41.0	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	5.2	1/2	208/230-60-1	2.2
AVGA24ACC	208/230-60-3	8.3	61.0	13.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA30ACC	208/230-60-3	9.0	71.0	14.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA36ACC	208/230-60-3	13.2	88.0	20.6	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA42ACC	208/230-60-3	13.6	83.1	21.2	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA48ACC	208/230-60-3	13.7	83.1	21.4	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA60ACC	208/230-60-3	15.6	111.0	24.4	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	5.2	1/2	208/230-60-1	2.2
AVGA24ACD	460-60-3	5.1	28.0	8.0	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA30ACD	460-60-3	5.6	38.0	8.8	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA36ACD	460-60-3	6.0	44.0	9.3	208/230-60-1	1075	1.8	1/4	208/230-60-1	1050	2.5	1/4	208/230-60-1	2.2
AVGA42ACD	460-60-3	6.1	41.0	9.5	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA48ACD	460-60-3	6.2	41.0	9.7	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	3.1	1/2	208/230-60-1	2.2
AVGA60ACD	460-60-3	7.7	52.0	12.1	208/230-60-1	825	2.8	1/3	208/230-60-1	1075	5.2	1/2	208/230-60-1	2.2
<sup>1</sup> RLA = Rated Load Amps <sup>2</sup> LRA = Locked Rotor Amps <sup>3</sup> MCC = Maximum Continuous Current <sup>4</sup> RPM = Revolutions per Minute <sup>5</sup> FLA = Full Load Amps <sup>6</sup> HP = Horsepower														

## AVGA Unit Load Amps

BASIC MODEL	VOLTS/ PH/HZ	CURRENT (AMPS)		BASIC MODEL	VOLTS/ PH/HZ	CURRENT (AMPS)		BASIC MODEL	VOLTS/ PH/HZ	CURRENT (AMPS)	
		TOTAL	INDOOR BLOWER			TOTAL	INDOOR BLOWER			TOTAL	INDOOR BLOWER
AVG24ACA	208-230/1/60	14.0	1.4	AVG24ACC	208-230/3/60	9.8	1.4	AVG24ACD	460/3/60	5.1	0.7
AVG30ACA	208-230/1/60	18.0	2.5	AVG30ACC	208-230/3/60	13.3	2.5	AVG30ACD	460/3/60	6.6	1.3
AVG36ACA	208-230/1/60	20.4	2.5	AVG36ACC	208-230/3/60	14.5	2.5	AVG36ACD	460/3/60	6.6	1.3
AVG42ACA	208-230/1/60	23.8	3.1	AVG42ACC	208-230/3/60	18.3	3.1	AVG42ACD	460/3/60	8.8	1.6
AVG48ACA	208-230/1/60	25.1	3.1	AVG48ACC	208-230/3/60	20.6	3.1	AVG48ACD	460/3/60	10.0	1.6
AVG60ACA	208-230/1/60	30.9	3.1	AVG60ACC	208-230/3/60	23.2	3.1	AVG60ACD	460/3/60	10.4	1.6

NOTE: Three phase equipment (HPC and HPD models) contain single-phase motor loads. Values shown are maximum phase loads. Loads are not equally balanced on each phase.

## AVGA Cooling Performance (BTUH) at Various Ambient Temperatures

MODEL	OUTDOOR AMBIENT DRY BULB TEMPERATURES								
	75°F/24°C	80°F/26.5°C	85°F/29°C	90°F/32°C	95°F/35°C	100°F/38°C	105°F/40.5°C	110°F/43.3°C	115°F/46°C
24	27,840	26,880	25,920	24,960	24,000	23,040	22,080	21,120	20,640
30	34,800	33,600	32,400	31,200	30,000	28,800	27,600	26,400	25,800
36	41,760	40,320	38,880	37,440	36,000	34,560	33,120	31,680	30,960
42	49,300	47,600	45,900	44,200	42,500	40,800	39,100	37,400	36,550
48	54,520	52,640	50,760	48,880	47,000	45,120	43,240	41,360	40,240
60	64,960	62,720	60,480	58,240	56,000	53,760	51,520	49,280	48,160

Data based on 80°F (26.5°C) Dry Bulb/67°F (19.5°C) Wet Bulb Return air temperatures at various outdoor ambient temperatures at rated CFM

## AVGA Sensible to Total Ratio @ 95°F Dry Bulb Outside Air

MODEL	24	30	36	42	48	60
TOTAL CAPACITY (BTUH)	24,000	30,000	36,000	42,500	47,000	57,000
SENSIBLE HEAT RATIO	0.69	0.70	0.64	0.76	0.73	0.68
SENSIBLE CAPACITY (BTUH)	16,561	21,140	23,200	32,365	34,330	37,980
RATED CFM	800	900	1,050	1,550	1,600	1,650

Sensible ratios based upon ARI standard 390 return air conditions of 80°F (26.5°C) Dry Bulb/67°F (19.5°C) Wet Bulb.

## AVGA Air Flow: CFM vs. ESP (Wet Coil)

MODEL	0.10	0.20	0.25	0.30	0.40	0.50
AVG24	860	810	740	670		
AVG30	1100	1000	960	920	810	
AVG36	1310	1220	1185	1150	1060	
AVG42	1550	1525	1500	1470	1420	1370
AVG48		1600	1535	1470	1400	1310
AVG60		1650	1585	1520	1450	1360

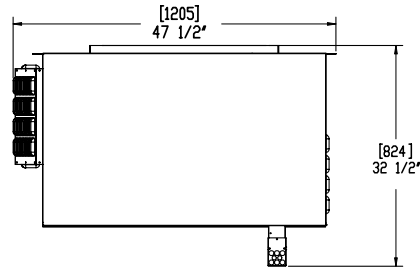
## AVGA Shipping Weight (pounds)

BASIC MODEL	AVGA24	AVGA30	AVGA36	AVGA42	AVGA48	AVGA60
SHIP WEIGHT - LBS	335	415	415	555	580	595
SHIP WEIGHT - KG	152	189	189	252	264	270

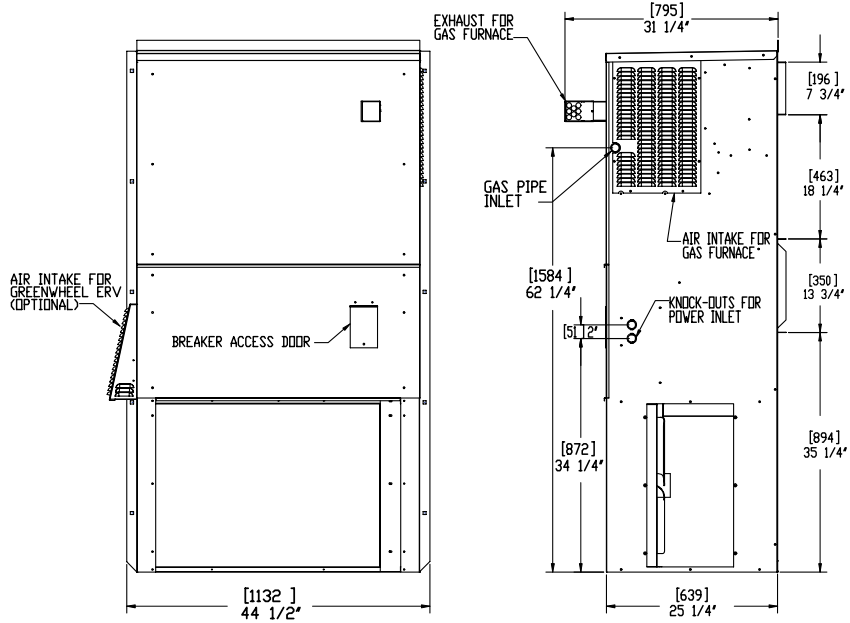
## AVGA Filter Size (inches)

BASIC MODEL	AVGA24	AVGA30	AVGA36	AVGA42	AVGA48	AVGA60
FILTER SIZE - IN	16 x 25 x 2	16 x 30 x 2		22 x 36-1/2 x 2		
FILTER SIZE - MM	406 x 635 x 51	406 x 762 x 51		559 x 927 x 51		

## Dimensional Data (in inches) - AVGA24-30-36

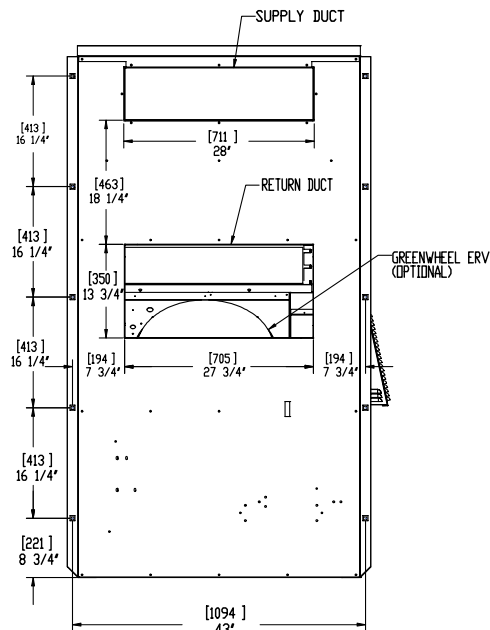


**TOP SIDE  
VIEW**

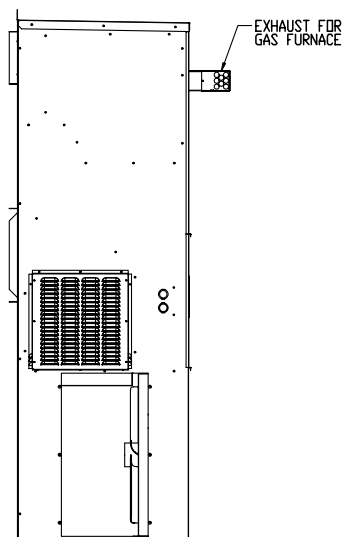


**FRONT VIEW**

**LEFT SIDE  
VIEW**



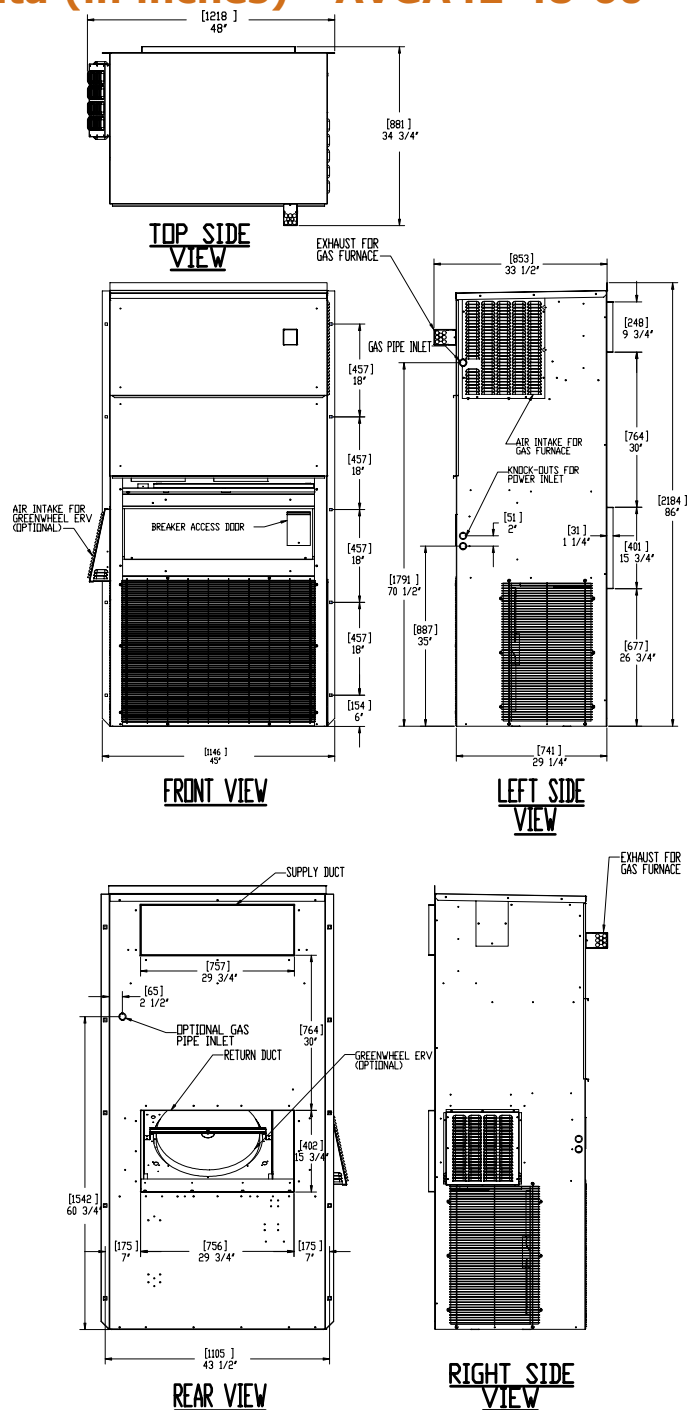
**REAR VIEW**



**RIGHT SIDE  
VIEW**



## Dimensional Data (in inches) - AVGA42-48-60



Please consult the Marvair® website at [www.marvair.com](http://www.marvair.com) for the latest product literature. Complete installation instructions are in the GPac™ Air Conditioner I&O Manual. Detailed dimensional data is available upon request. A complete warranty statement can be found in each product's Installation/Operation Manual, on our website or by contacting Marvair at 229-273-3636. As part of the Marvair continuous improvement program, specifications are subject to change without notice.



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