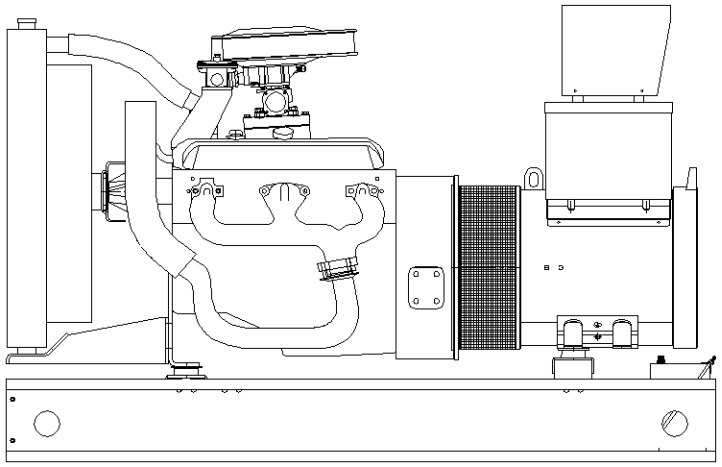
ARMSTRONG POWER SYSTEMS

Model: AGM60Si
Gas Generator Set



FEATURES

- Armstrong provides one-source responsibility for the generator system and its accessories.
- All units and components are factory tested during prototype and manufacturing stages assuring long product life.
- A one-year limited warranty covers all systems and components. Extended warranties are available.
- Rugged 4 cycle heavy duty gas engine, with swirl intake for better fuel consumption.

- **Generator features:**
  - Unique Volts per Hertz compensated electronic AVR excitation system delivers reliable voltage response for in rush loads.
  - Brushless, rotating-field generator has low reactance, 2/3 pitch, class H insulation, minimizes voltage distortion when powering non-linear loads.
- **More features:**
  - Controllers are available to meet your most demanding applications.

GENERATOR SET RATINGS

Model	Volt Code	Voltage	Phase	Power Factor	Hz	Standby Kw / kva LPG	Prime Kw / kva LPG	Standby Kw / kva NG	Prime Kw / kva NG
AGM60Si	61	277 / 480	3	0.8	60	64 / 80	59 / 74	60 / 75	55 / 69
AGM60Si	63	127 / 220	3	0.8	60	64 / 80	59 / 74	60 / 75	55 / 69
AGM60Si	64	139 / 240	3	0.8	60	64 / 80	59 / 74	60 / 75	55 / 69
AGM60Si	65	120 / 208	3	0.8	60	64 / 80	59 / 74	60 / 75	55 / 69
AGM60Si	66	120 / 240	3	0.8	60	64 / 80	59 / 74	60 / 75	55 / 69
AGM60Si	67	120 / 240	1	1.0	60	64 / 64	59 / 59	60 / 60	55 / 55
AGM60Si	51	240 / 416	3	0.8	50	53 / 66	50 / 63	49 / 61	45 / 56
AGM60Si	53	220 / 380	3	0.8	50	53 / 66	50 / 63	49 / 61	45 / 56
AGM60Si	57	110 / 220	1	1.0	50	53 / 53	50 / 50	49 / 49	45 / 45

Stand-By ratings are continuous electrical service during the interruption of normal power. No overload capacity is specified at these ratings.
Prime ratings available with variable loads are continuous, 10% overload capacity for one hour in twelve hours periods.
Both ratings per BS 5514, DIN 6271, ISO-3046. Many industrial, commercial and residential voltages are available

A G M 6 0 S i

ALTERNATOR SPECIFICATIONS

Type	**Four pole, rotating- field**
Rotor Insulation	**Class H**
Temperature Rise	**150°C Standby**
Insulation Material	**Class "H"High Grade Resin(VPI)**
Line-To-Line Harmonic Factor (Max)	**5%**
Telephone Interference Factor (Tif)	**1%**
Voltage Regulator	**Solid State**
Cooling	**Self-ventilated and drip proof**
Bearing	**1 each, Sealed**
Coupling	**Direct, Flexible Disc**
Load Capacity (Standby)	**100%**
Overload Capacity (Prime)	**110%**
Voltage Regulation	
No Load To Full Load	**± 0.25 %**
One Step Load Acceptance	
Per NFPA 110	**100%**

- ❑ Four pole, revolving field, direct coupled to engine flywheel, provides excellent alignment.
- ❑ Insulation is of class H, ready to be used on harsh environments where sea spray, sand and chemical corrosion are existing factors.
- ❑ Voltage regulator provides Volts/Hertz compensation to improve the motor starting capabilities, therefore support the engine handling transient loads.
- ❑ Dynamically balanced rotor, with damper winding, help dissipate transient voltage interference during load variations.
- ❑ The windings have a 2/3 pitch in order to reduce the harmonic content of voltage.
- ❑ Robust mechanical structure and easy access to connections.

ENGINE SPECIFICATIONS

Manufacturer	**General Motors**
Model	**Vortec 5.7L**
Bore	**4.00 In (101.6 mm)**
Stroke	**3.48 In (88.4 mm)**
Number Of Cylinders	**V-8**
Piston Displacement	**350 cu.in. (5.7 L)**
Compression Ratio	**9.1 : 1**
Combustion System	**Spark Ignited**
Engine Type	**4 cycle**
Aspiration	**Natural**
Piston Material	**Cast Aluminum**
Cylinder Head Material	**Cast Iron**
Crankshaft Material	**Cast Nodular**
Governor	**Electronic Control**
Frequency Regulation,	**± 0.5 %**
No Load To Full Load	**Isochronous**
Air Cleaner	**Dry**

- ❑ Robust industrial grade GM gas engine, for reliable endurance.
- ❑ Electronically controlled spark ignition and swirl intake ports combine for a low fuel consumption and excellent transient response.
- ❑ Cylinder Head provides superior airflow through specially designed intake manifold ports, large valves and seats resulting in superior engine performance in torque reserve, fuel consumption and emissions.
- ❑ Dynamically Balanced Crankshaft, with induction-hardened journal surfaces significantly increases wear life.
- ❑ Electronic Isochronous Governor achieves accurate frequency/speed regulation

STANDARD EQUIPMENT

ENGINE
- Air Cleaner
- Fuel DC solenoid
- Oil Pump
- Full Flow Oil Filter
- Jacket Water Pump
- Thermostat and Housing
- Exhaust Manifold, Dry
- Oil Cooler
- Blower Fan & Fan Drive
- Radiator - Unit Mounted
- Electric Starting Motor 12v
- Housing & Flywheel
- Charging Alternator - 12v
- Battery Kit & Battery Rack

GENERATOR
- Synchronous, Brush-less
- Four Pole
- Single Bearing
- Direct Coupled With Flex
- Class H Insulation
- Drip-Proof Construction

CONTROL PANEL
- Deep Sea Model 5120

Programmable microprocessor logic and digital display features
Provides engine and electrical metering facilities via the LCD display accesses via the SCROLL pushbutton.
Automatic engine starting and stopping
Automatic Shutdown on fault condition
LED and LCD alarms indication

GENERAL
- Industrial Muffler
- Rain Cap
- Lifting Points
- Acrylic Enamel Paint

INSTALLATION AND APPLICATION DATA

	Item	Units	Type of Operation and Application	
Engine	Rated Speed	Rpm (Hz)	**1800 (60)**	**1500 (50)**
	Gross Engine Output	bhp (kWm)	105 (78.3)	88 (65.6)
	Mean Piston Speed	Ft/min (m/min)	1044 (318)	870 (265)
	BMEP	psi (kPa)	118 (818)	
	Ambient Air Temperature	°F (°C)	122 (50)	
Cooling System	Heat Rejection to Coolant at Rated (Full Load, Nat. GAS)	BTU/min (kW)	3120 (54.8)	2600 (45.7)
	Coolant Flow	gal/min(L/min)	31 (117.3)	26 (98.4)
	Coolant Capacity	Gal (L)	8.3 (31.4)	
	Max. Water Pump Inlet Restriction	In.H_2O (kPa)	0.5 (0.125)	
Air Requirement	Radiator Air Flow	ft^3/min(m^3/min)	8400 (238)	6800 (193)
	Combustion Air	ft^3/min (m^3/min)	185 (5.2)	155 (4.4)
	Air Intake Restriction	In.H_2O (kPa)	6 (1.49)	
Exhaust System	Exhaust Gas Flow at Stanby Rating	ft^3/min(m^3/min)	580 (16.4)	480 (13.6)
	Exhaust Temp at Standby Rating	°F (°C)	1200 (649)	
	Maximun Allowable back pressure	In.H_2O (kPa)	3.0 (10.2)	
	Connection Outlet Size Diameter	In. (mm)	3 (76)	
Lubrication System	Total Engine Oil Cap. w/ Filter(s)	qt (L)	6.5 (6.2)	
	Oil Pan Capacity	qt (L)	5 (4.7)	
	Oil Filter Type		Spin-On Cartridge	
	Oil Cooler		Water cooled	
Engine Electricals	Battery Charging Alternator	Volts, Ground	12VDC, Negative	
	Baterry Charging Alternator	Rated amps	70	
	Starter Motor	Volts, Ground	12VDC, Negative	
	Recommended Battery Cold Crank	CCA amps 0°F (-18°C)	630	

FUEL CONSUMPTIONS

			Stby 60Hz	Prime 60Hz	Stby 50Hz	Prime 50Hz
Natural Gas	Fuel Consumption @ 100% Power	ft^3/hr (m^3/hr)	790 (22.4)	748 (21.2)	640 (18.1)	604 (17.1)
	Fuel Consumption @ 75% Power	ft^3/hr (m^3/hr)	685 (19.4)	636 (18.0)	550 (15.6)	510 (14.4)
	Fuel Consumption @ 50% Power	ft^3/hr (m^3/hr)	520 (14.7)	486 (13.8)	415 (11.8)	387 (11.0)
	Fuel Consumption @ 25% Power	ft^3/hr (m^3/hr)	350 (9.9)	335 (9.5)	275 (7.8)	263 (7.4)

			Stby 60Hz	Prime60Hz	Stby 50Hz	Prime 50Hz
Propane Gas	Fuel Consumption @ 100% Power	ft^3/hr (m^3/hr)	330 (9.3)	298 (8.4)	280 (7.9)	256 (7.2)
	Fuel Consumption @ 75% Power	ft^3/hr (m^3/hr)	250 (7.1)	232 (6.6)	220 (6.2)	204 (5.8)
	Fuel Consumption @ 50% Power	ft^3/hr (m^3/hr)	190 (5.4)	179 (5.1)	165 (4.7)	154 (4.4)
	Fuel Consumption @ 25% Power	ft^3/hr (m^3/hr)	135 (3.8)	130 (3.7)	110 (3.1)	105 (3.0)

OPTIONAL EQUIPMENT

Cooling System
- ❑ Remote Radiator
- ❑ Jacket Water Heater
- ❑ Crankcase Oil Heater

Fuel System
- ❑ Fuel Filter

Exhaust System
- ❑ Industrial Grade Muffler
- ❑ Residential Grade Muffler
- ❑ Critical Grade Muffler
- ❑ Super Critical Grade Muffler

Start System
- ❑ Battery Ni-cad
- ❑ Battery Warmer Plate
- ❑ Battery Charger
  - ❑ Automatic Float Equalizing
  - ❑ Trickle Charger

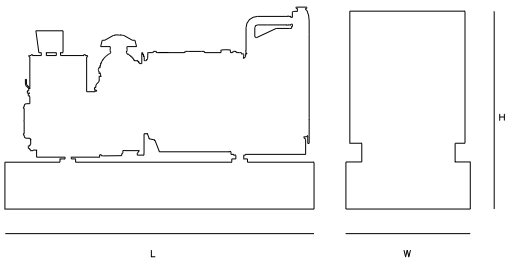
Switchgear
- ❑ Main Line Circuit Breaker
  - ❑ Shunt trip
  - ❑ Auxiliary switch
- ❑ Automatic Transfer Switch
- ❑ Paralleling
- ❑ Protective Relays

Generator
- ❑ Permanent Magnet Excitation
- ❑ Single Phase Output Upgrade
- ❑ Space Heaters
- ❑ Temperature Rise Detectors

Control Panel
- ❑ Emergency stop button
- ❑ Microprocessor Control Panel
- ❑ NFPA 110 Ready
- ❑ Remote Annunciation Panel
- ❑ Audible Alarm

General
- ❑ Spring vibration isolators
- ❑ Metal Enclosure
  - ❑ Weather Resistant
  - ❑ Sound Attenuated
  - ❑ Aluminum
- ❑ Interior lights AC or DC
- ❑ Export Packaging
- ❑ Special Testing
- ❑ Warranties
  - ❑ ____ Year

For Other Options Consult



DIMENSIONS AND WEIGHT

	Units	Open Unit	Enclosed Unit	Sound Att. Unit
Length	In. (mm)	77.5 (1968.5)	77.5 (1968.5)	97 (2464)
Width	In. (mm)	37 (939.8)	37 (939.8)	37 (939.8)
Height	In. (mm)	40.6 (1031)	57.6 (1463)	57.6 (1463)
Weight	Lbs (kg)	2460 (1116)	2632 (1192)	2661 (1207)

General configuration for reference only, do not use these dimensions for installation purposes. Contact your local dealer for certified drawings.

ARMSTRONG POWER SYSTEMS

ARMSTRONG POWER SYSTEMS LLC
Phone (305) 470-0058
Fax (305) 470-0068
Toll Free (800) 238-0732
Address: 8254 NW 58th St, Miami Fl 33166
Email: sales@armstrongpower.com
www.armstrongpower.com