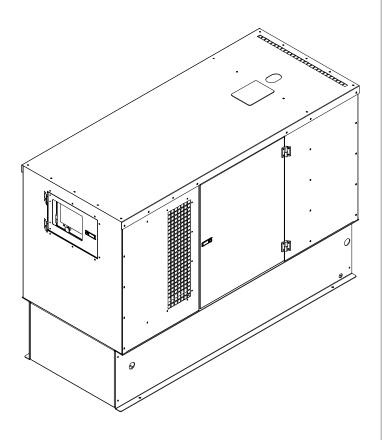


Model: A60KBS Diesel Generator Set



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.
- Generator set accepts one-step 100% of full load per NFPA 110.
- A one-year limited warranty covers all systems and components. Extended warranties are available.
- Rugged 4 cycle heavy-duty diesel engine, with swirl intake ports for a low fuel consumption and excellent transient response.

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.
- In the event of low oil pressure or high coolant temperature the self-protecting system will automatically stop the engine.
- Aluminum Enclosure Sound Attenuated
- Integrated fuel Tank

GENERATOR SET RATINGS

Model	Volt Code	Voltage	Winding Connection	Phase	Power Factor	Hz	Amps Standby	Standby kW / kVA	Prime kW/kVA
A60KBS	61	480 / 277	12 - HI WYE	3	0.8	60	75	50/62	45/56
A60KBS	63	440 / 254	12 - HI WYE	3	0.8	60	82	50/62	45/56
A60KBS	64	240 / 139	12 – HI DELTA	3	0.8	60	151	50/62	45/56
A60KBS	65	220 / 127	12 – LOW WYE	3	0.8	60	164	50/62	45/56
A60KBS	66	208 / 120	12 – LOW WYE	3	0.8	60	174	50/62	45/56
A60KBS	67	240 / 120	12 – 2 DELTA	1	1.0	60	208	50/50	45/45
A60KBS	51	415 / 240	12 – HI WYE	3	0.8	50	78	45/56	40/50
A60KBS	53	380 / 220	12 – HI WYE	3	0.8	50	86	45/56	40/50
A60KBS	55	220 / 127	12 – LOW WYE	3	0.8	50	148	45/56	40/50
A60KBS	57	220 / 110	12 – 2 DELTA	1	1.0	50	205	45/56	40/40

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

ALTERNATOR SPECIFICATIONS

Turne	Faur nels, revelving field
Туре	Four pole, revolving field
Rotor Insulation	Class H
7Temperature Rise	150°C Standby
Material	Epoxy resin
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, pre-lubed
Coupling	Direct, Flexible Disc
Load Capacity (Standby)	100%
Overload Capacity (Prime)	110%
Voltage Regulation	
No Load To Full Load	±1 %
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 permits easy access to connections.

ENGINE SPECIFICATIONS

Manufacturer	Kubota	
Model	V3800-T-BG	
Bore	3.93in. (100mm)	
Stroke	4.72in. (120mm)	
Number Of Cylinders	4	
Piston Displacement	230 in. ³ (3.769L)	
Compression Ratio	23.0:1	
Combustion System	DI	
Engine Type	In-Line – 4 Cycle	
Aspiration	Turbocharged	
Engine Crankcase Vent System	Closed	
Cylinder	Borable	
Crankshaft Material	Forged Steel	
Governor, Make	Electronic	
Frequency Regulation,		
No Load To Full Load	0.5 %	
Air Cleaner	Dry Element	

- Robust, compact, heavy duty Kubota diesel engine, for reliable endurance.
- Many various accessories available along with power take-off points.
- ☐ High in Output Low in fuel Consumption.
- High capacity governor and large size flywheel, makes Kubota engines control the speed regulation within 5%.
- □ Super Glow Systems, is standard equipment to help start the engine in cold temperatures, at -4°F (-20°c), the engine will start with only 10 seconds of preheating time.

Powered By:



STANDARD EQUIPMENT

ENGINE

- Air Cleaner
- Fuel Pump
- Fuel Filter
- 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

CONTROL PANEL

- Digital Control Panel
- Auto Start Module
- Electric Hour Meter
- Stop-Manual-Auto Pushbuttons
- Standard Engine Control

Monitoring

- Automatic Shutdowns
- * High Water Temperature
- * Low Oil Pressure
- *Protective 12vdc Circuit Breaker
- -Display For:
- * Water Temperature
- * Oil Pressure
- * Overcrank
- * Underspeed
- * Overspeed
- * Battery Charging

GENERAL

- Critical Muffler
- Flexible Connector
- Rain Cap
- Aluminum Enclosure-White
- Lockable & Removable Doors
- Sound Attenuated
- Mainline Circuit Breaker
- Oil Drainage kit
- Integrated Fuel tank 150 gal
- Battery Charger 5 amp
- In Frame Lifting Points

INSTALLATION AND APPLICATION DATA

		Units	Type of Operation and Application				
	Item		60 Hz		50 Hz		
	Data d Orașa d		Prime Standby		Prime Standby		
Engine	Rated Speed	rpm	1800		1500		
	Gross Engine Output	bhp (kWm)	72 (52)	80 (58)	63 (46)	70 (51)	
	BMEP	psi (kPa)	137.6 (948.6)	152.9 (1054)	144 (996)	160 (1106)	
	Mean Piston Speed	Ft/s (m/s)	23.5 (0.59)		19.5 (0.49)		
	Ambient Air Temperature	°F (°C)	122 (50)			T	
	Engine Heat Reject to Coolant	BTU/min (kW)	2337 (41.1)	2727 (47.9)	2103 (37.0)	2337 (41.1)	
	Pusher Fan Air Flow	Cfm (m3)	4750 (134)		3870 (109)		
Cooling	Coolant Flow	gal/min (L/min)	21 (80) 15.8 (60)		(60)		
System	Coolant Capacity	qt (L)	7.7 (8.5)				
	Thermostat Start to Open	°F (°C)	170 (76.5)				
	Thermostat Fully Open	°F (°C)	194 (90)				
	Blower Fan Diameter	in. (mm)	18 (457.2)				
	Max. Transfer Pump Suction	ft (m)	3 (0.9)				
	Fuel Type		Diesel #2				
Fuel	Fuel Consumption @ 25% Power	gal/hr (L/hr)	0.89 (3.36)	0.99 (3.74)	0.77 (2.88)	0.85 (3.2)	
System	Fuel Consumption @ 50% Power	gal/hr (L/hr)	1.78 (6.72)	1.98 (7.47)	1.53 (5.76)	1.7 (6.4)	
	Fuel Consumption @ 75% Power	gal/hr (L/hr)	2.67 (10.08)	2.96 (11.2)	2.29 (8.64)	2.54 (9.6)	
	Fuel Consumption @ 100% Power	gal/hr (L/hr)	3.55 (13.44)	3.95 (14.93)	3.05 (11.52)	3.39 (12.8)	
	Combustion Air Flow	ft ³ /min (m ³ /min)			119 ((3.40)	
Air	Air Intake Restriction	In.H ₂ O (kPa)	18.1 (4.5)		(4.5)	.5)	
Requirement	Exhaust Temperature	°F (°C)	842 (450)		797 (425)		
	Maximun Allowable Back Pressure	In.H ₂ O (kPa)	60.6 (15.1)				
	Specific Oil consumption		0.95g/kW-hr				
Lubrication	Oil Pan Capacity	qt (L)	13 (14.3)				
System	Total Engine Oil Cap. w/filter	qt (L)	14 (15.4)				
	Oil Filter Type		Cartridge				
Engine Electricals	Battery Charging Alternator	Volts, Ground	14V, negative				
	Baterry Charging Alternator	Rated amps	45				
	Recommended Battery Cold Crank	CCA amps	600				
	Starter Motor	Volts, Ground	12V, negative				
Operation	Temperature and Altidtude Losses		Consult Factory				

OPTIONAL EQUIPMENT

Cooling System

- Remote Radiator
- Jacket Water Heater

Fuel System

- ☐ Fuel/Water Separator
- Auxiliary Fuel Pump
- ☐ Sub-Base UL Tank 142 Double Wall

Start System

- Battery Nicad
- Battery Warmer Plate
- Battery Charger
 - Automatic Float Equalizing

☐ Trickle Switchgear

- ☐ Main Line Circuit Breaker
 - Shunt trip
 - Auxiliary switch
- Automatic Transfer Switch
- Paralleling

Generator

- □ Permanent Magnet Excitation
- Space Heaters

Control Panel

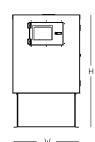
- NFPA 110 Ready
- □ Remote Annunciation Panel

Audible Alarm

General

- □ Spring vibration isolators
 - Interior lights AC or DC
- ☐ Trailer
- Export Packaging
- □ Special Testing
- Warranties
 - □ ____ Year

For Other Options Consult



DIMENSIONS AND WEIGHT

	Units	Sound Att. Unit
Length	In. (mm)	87 (2210)
Width	In. (mm)	37 (940)
Height	In. (mm)	64 (1626)
Weight	Lbs (kg)	1747 (794)

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

All Specifications and Materials are subject to change without prior notice.

ARMSTRONG POWER SYSTEMS

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