

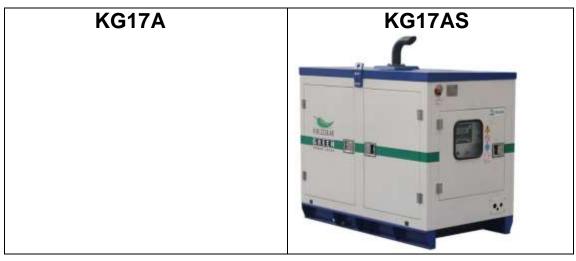


# KIRLOSKAR DIESEL GENERATING SETS

## **KG17A / KG17AS**

Diesel Generating Set Output Ratings					
Model	Prime Rating (PRP) at 0.8 pf (lag)	Standby Rating (ESP) at 0.8 pf (lag)	Phase / Hz	Standard Voltage (L-L)	Optional Voltage (L-L)
KG17A(OPEN) KG17AS (SAE)	17 kVA 13.6 kW	18.7 kVA 14.96 kW	3 Phase / 60Hz	220V	380V to 480V*

- SSAE Sound Attenuated Enclosure \* kVA rating may change please consult KOEL
- Ratings are according to ISO 8528; refer to ratings definition on page 2.



Note: Above picture shown for illustration purpose only, actual product may be different.

### **Features**

- Extremely reliable.
- Lower operating cost.
- Easy maintenance higher uptime.
- Sound attenuated enclosure (canopy) is fully integrated and designed for all weather conditions (weather proof).
- Best in class Sound attenuation 70 dB(A) at 7 meters as per ISO 8528
- State of the art generating set control system with high degree of accuracy and reliability.
- Superior design standards that minimize power deration even at high ambient temperatures.
- Ideally suitable for Telecom, Services, Residential application etc
- Efficient and prompt after sales service available





### **Ratings Definition:**

### **Standby Ratings:**

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO 8528-3)

### **Prime Rating:**

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercial purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

### **Continuous Rating:**

These ratings are applicable for supplying power continuously to a constant load upto the full output rating for unlimited hours. No sustained overload capability is available for this rating.

GENERATING SET SPECIFICATIONS			
Model - Open Type	KG17A		
Model - SAE Type	KG17AS		
Frequency (Hz)	60		
Power Factor	0.8		
Phase	Three phase		
Line Voltage (Volts)	220V	380V	
Phase Voltage (Volts)	127V	220V	
Fuel Tank Capacity (L)	Open – 63		
standard	SAE - 63		
Fuel consumption at 100% load (lit/hr) +5% tolerance	4.6		
Fuel consumption at 75% load (lit/hr) +5% tolerance	3.45		
Sound level at 7 m for Silent Generating set dB(A)	70		
Overall dimensions (LxWxH	Open – 130x92x130		
cms) standard	SAE – 172x105x143		
Weight (kgs) standard	Open Type – 650		
Weight (kgs) standard	SAE Type – 820		

CONTROL SYSTEM		
Controller Make	Deepsea	
Controller Model	DSE 6120 MKII	
Digital display instrumentation	Generator Voltage Generator Amps Generator Frequency Mains Voltage Battery Voltage Engine hours Run, Engine speed Oil Pressure Engine Temperature Fuel Level	
Shutdowns/Safeties	Fail to Stop Low Oil pressure High Engine Temperature Under/Over-speed Under/Over voltage Emergency Stop Failed to reach loading voltage Failed to reach loading frequency Charge Fail Over Current Low DC Voltage	
Automatic Starting & AMF facility	Available	





# **Engine Technical Data**

Physical Data		
Engine Make	Kirloskar	
Engine Model	HA294	
Cylinders / Configuration	2 / Inline	
Туре	Four stroke	
Bore x Stroke (mm)	100 x 120	
Displacement (L)	1.88	
Cooling	Air cooled	
Aspiration	Naturally Aspirated	
Compression Ratio	18 : 1	
hp Prime @ 1800rpm	23	
hp Standby @ 1800rpm	25.3	

Fuel System		
Type of fuel filter	Two stage spin on type	
Governor Type	Mechanical	
Class of Governing	ISO 8528-5, Class G2	
Fuel pump type	Inline	
Fuel System	Direct injection	
Recommended Fuel	Class A2, High speed diesel	
Fuel consumption at 100% load (lit/hr) +5% tolerance	4.6	
Fuel consumption at 75% load (lit/hr) +5% tolerance	3.45	
Fuel consumption readings are based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2)		

Lubrication System		
Type of lube oil filter	Full flow spin on type	
Oil to be used	SAE 15W40 API : CI4	
Oil pump type	Through G-rotor gear pump	
Lub oil sump capacity (lit)	5.5	
Lube oil consumption	Less then 0.7% of fuel consumption	

Electrical System		
Starting Arrangement	12V Electric	
Starter	12V Electric	
Starter Battery Rating	75Ah	
Battery charging alternator	Engine mounted 12V battery charger	
Battery charger amps	35	







Enriching Lives

Physical Data		
Line Voltage (Volts)	220V 380V	
Manufacturer	Stamford	
Model	PI 044 G1	PI 044 G1
Number of bearings	1	
Insulation class	Н	
Winding pitch	2/3	
Wires	12	
Ingress Protection Rating IP 23		23
AVR Model	AS	480

Operating Data			
Line Voltage (Volts)	220V	380V	
Over speed (RPM) 2250		50	
Excitation	Self excited		
Efficiency (%)	82.3	82.4	
THD at full linear balanced load AC waveform	<u>&lt;</u> 5%		
Voltage Regulation (%)	± 1.0		
Reactance per unit (Xd)	2.05	2.15	
Reactance per unit (X'd)	0.21	0.22	
Reactance per unit (X"d)	0.14	0.15	

**General Data** 

### **Sound Attenuating Enclosure (Canopy)**

Sound Level	70 dB at 7 meter as per ISO 8528	
Construction	<ul> <li>Fully Integrated, metal construction for ALL WEATHER USE (weather proof).</li> <li>Black zinc die cast, Aluminium hinges or Stainless steel hinges tested to withstand corrosive environment conditions.</li> <li>Fuel filling spout with lock.</li> <li>Emergency stop button on canopy exterior.</li> <li>Provision of glass window for viewing control panel</li> <li>Provision for lifting canopy</li> </ul>	
Maintenance	Easy access through lockable doors for operation/maintenance and repair works (including access for radiator service)	
Protection Standard	IP 23	

	<ul> <li>A full set of Illustrated</li> </ul>
	spare parts catalogue
Documents	<ul> <li>Operation &amp;</li> </ul>
	Maintenance manual
	<ul> <li>Circuit Diagrams</li> </ul>
Quality	ISO 8528, ISO 3046, IS
Quality Standards	100002, BS5514, DIN
Standards	6271, ISO 9001, ISO 14001



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