KIRLOSKAR GREEN GENERATING SET SPECIFICATIONS - 3 PHASE, 4 WIRE
CONTROL SYSTEM FEATURES AND SAFETIES

Genset Model	KG15AS4	KG20WS4	KG25WS	KG30WS	KG40WS	KG62.5WS2	KG82.5WS2	KG100WS	KG125WS	KG160WS2	KG200WS	KG250WS
Controller Make / Model	KG 545 / KG 934											
Displays	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Voltage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Current	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
kWHr Meter	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grid (Mains) Voltage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Battery Voltage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engine Run Hours	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oil Pressure Gauge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fuel Level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shut Downs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Low Oil Pressure	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
High Engine Temperature	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Low Coolant Level	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Under / Over Speed	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Under / Over Voltage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Over kW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Emergency Stop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fail to Stop	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Over Current	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Automatic Starting Input	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Standard feature

Kirloskar Green Brand

Kirloskar Green is the Genset brand of Kirloskar Oil Engines Ltd (KOEL), the flagship company of the century old Kirloskar Group. KOEL Green is India's largest selling and most trusted Genset brand for over a decade. Providing back-up power solutions from 2.1 to 5200 kVA for diverse market sectors, "Kirloskar Green" has over 1 million Gensets in service across the globe.

Research and Engineering

Kirloskar Green Gensets are designed and developed indigenously, using modern design & simulation technologies. Kirloskar Green's R&D team combines decades of application knowledge, global technology trends and emerging user expectations to develop best-in-class products for the target markets. The products are launched aGer extensive validation in world-class facilities.

State-of-the-art Manufacturing

Kirloskar Green Gensets are manufactured at the state-of-the-art manufacturing facilities of Kirloskar Green across India. Common design, modern infrastructure, trained manpower, stringent process controls and standardized material quality ensure that every Kirloskar Green Genset complies with the standards and meets KOEL's stringent quality norms.

Sales Network

Sales Network : Multivista Kenya Limited, a Ramco Group Company is the authorized sales and aftermarket distributor for Kenya. They are equipped to carryout load study, Genset sizing and provide techno-commercial support. Installation and commissioning support, warranty and post warranty support are also undertaken by them in line with Kirloskar Green stringent guidelines.

Service Network : As a Genset cannot be driven to a Service Station, service has to come to your doorstep. The need for aftermarket support for Kirloskar Green Gensets in Kenya are taken care of by Multivista Kenya Ltd. In order to experience a total-peace-of-mind ownership, standard and custom-made maintenance packages in line with Kirloskar Green guidelines are offered by Multivista Kenya Ltd.

7 EASY STEPS FOR A HAPPY GENSET OWNERSHIP

- Insist on a load-study
- Select the Genset rating as per the load-study and with sufficient margin for future load expansion
- Apply site-selection guidelines carefully
- Insist on installation in line with Kirloskar Green guidelines
- Ensure adequate size and proper connection of cables
- Understand the Genset operation & maintenance procedures during commissioning
- Follow routine maintenance protocols through authorized Kirloskar Green service dealers

Sales & Service Network:

Multivista Kenya Limited, a Ramco Group Company is the authorized sales and service provider in Kenya for Kirloskar Green Generators. They are geared up to provide complete techno-commercial support for your new equipment and for you to experience a total peace-of-mind ownership they also offer standard and custom made maintenance packages in line with the stringent Kirloskar Green guidelines.

International business offices

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Enriching Lives

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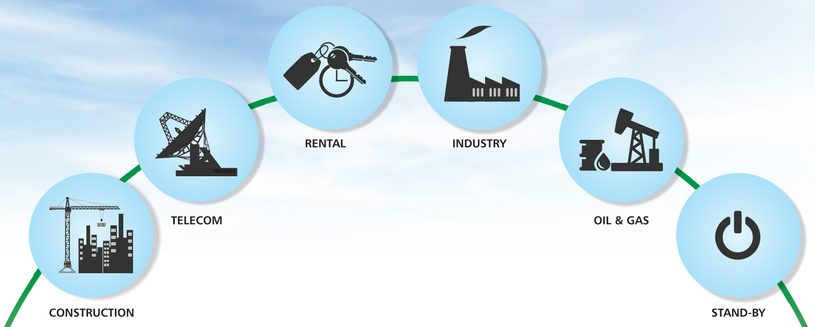
IBG.Q.127 Rev00

KIRLOSKAR
DIESEL GENERATING SETS

Enriching Lives



Power, Performance, Peace of Mind!
Efficiency Has a New Name
KIRLOSKAR GREEN - 15 to 1010 kVA

KIRLOSKAR GREEN POWER IDEAS

Thoughtful Design – Unmatched Features – Immense Benefits

Kirloskar generating sets have been designed giving highest consideration to end users, offering unmatched features and immense benefits to them.

From easy installation and increased reliability to faster service, lower maintenance costs and increased uptimes. Kirloskar generating sets offer distinct advantages which set new standards in engineering. That's Kirloskar Green Power Ideas for you !

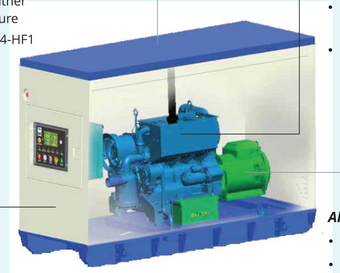
- Unmatched Features
- Easy installation
- Low maintenance cost
- Extended service intervals
- Low fuel consumption
- Easy to start
- ***500 hours service interval*** for ALL models subject to usage of 15W40-CI4 grade oil.

Canopy

- Ease of Access and Serviceability
- Aesthetically designed, weather and sound resistant enclosure
- Insulation conforms to UL94-HF1 class for flammability

Engine

- O2E Series: Low emission, high efficiency engines
- Compact, Robust and Rugged Design
- 500 hours lube-oil change period



Controller

- Microprocessor based
- Graphical LCD display
- Best in class monitoring and diagnostic Capability
- Integrable with AMF

Alternator

- Best In Class Efficiency
- Special Windings to Reduce Harmonics
- Vacuum Pressure Impregnation and epoxy gel coating on the winding

About Us –

- Kirloskar Oil Engines Limited, founded in 1946 and popularly known as KOEL, possesses more than 7 decades of engineering excellence.
- India's leading manufacturer of diesel engines and generating sets.
- Manufacturing facilities located at Kagal, Nashik and Rajkot.
- Annual production of over 225,000 diesel engines from 4 hp to 11,000 hp and 12,000 generating sets.
- Independent research & engineering cell using high end engine design software and emission testing labs.
- Engines used for more than 100 different applications and supplied to over 60 countries.
- A brand associated with trust.

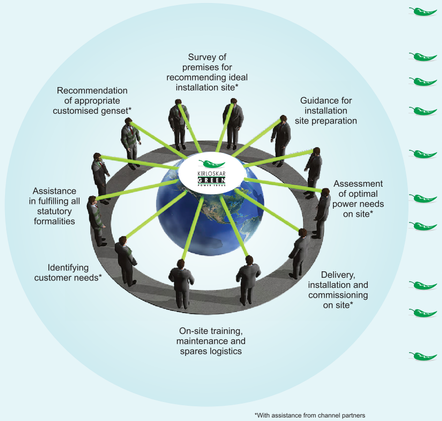
Manufacturing Facilities –

- Engines & generating sets are fully manufactured by us at our state of the art plant at Kagal located near the city of Kolhapur in India.
- Critical components like crankcase, crankshaft, camshaft, cylinder head, connecting rod, gear casing and many more are manufactured in-house.
- Adopting the principles of Toyota Production systems, we utilize the best combination of man, machine and method for efficiency, speed and high quality.
- At Kirloskar, we believe that industry and environment can and must coexist in a mutually beneficial way. This thought has been brought into practice whereby not only are our generating sets eco-friendly, but they are also manufactured in an eco-friendly way.

In pursuance of Zero Defect –

- Total Quality Management Systems (TQMs) – A combination of ISO9001, ISO14001 and OHSAS 18001 for quality, environment and safety.
- "Quality First" principle being the chosen value system, Kirloskar Green continuously takes various measures to pursue Zero defect product.

Why Kirloskar ?



*With assistance from channel partners

- Complete power ideas from Genset selection to Total Power Management
- Multiple sets for higher KVA requirements
- Air cooled & liquid cooled engines
- Aesthetically superior, compact, fully integrated, weather proof acoustic enclosures
- Widest range of extremely reliable power offering with lowest operating cost
- State-of-the-art engine & genset control system
- Ideally suitable for critical industries like Construction, Manufacturing, Textile, Telecom, Services etc
- Winner of the Frost & Sullivan Voice of Customer
- Award in the "Best Bang for Buck" category in the Indian Genest Market
- Effective rules and service support in all countries of operations

KIRLOSKAR GREEN GENERATING SET SPECIFICATIONS - 3 PHASE, 4 WIRE

kVA Rating / Genset Model		Unit	15 kVA	20 to 82.5 kVA						100 to 160 kVA			200 to 250 kVA	
			KG15AS4	KG20WS4	KG25WS	KG30WS	KG40WS	KG62.5WS2	KG82.5WS2	KG100WS	KG125WS	KG160WS2	KG200WS	KG250WS
Prime Power Output (PRP) at 0.8 pf		kVA (kW)	15 (12)	20 (16)	25 (20)	30 (24)	40 (32)	62.5 (50)	82.5 (66)	100 (80)	125 (100)	160 (128)	200 (160)	250 (200)
Voltage		V	415	415	415	415	415	415	415	415	415	415	415	415
Frequency		Hz	50	50	50	50	50	50	50	50	50	50	50	50
Fuel Tank Capacity		Ltrs	43	43	65	75	95	150	150	225	225	350	310	310
Fuel Consumption*	At 100% Load	Ltrs/HR	4	5.1	5.8	8.2	9.2	14.1	18.8	22.46	27.4	36.6	42.3	55.12
	At 75% Load		3	3.8	4.4	6.4	7.4	11.3	13.8	16.96	20.2	27.7	31.94	42.22
	At 50% Load		2.2	2.7	2.9	4.9	5.5	7.5	9.9	12.2	15.3	19.1	458	458
Overall Dimensions with canopy	Length	mm	1740	2205	2500	2500	2750	2900	3200	3250	3200	4000	4340	4340
	Width	mm	1050	960	950	950	1050	1100	1100	1140	1300	1500	1740	1740
	Hight	mm	1474	1294	1294	1294	1493	1581	1595	1870	1795	1915	1970	1975
Dry Weight of genset with canopy		Kg	810	880	1040	1040	1180	1470	17170	1950	2090	2730	3900	4010
Electrical starting system		Volt-DC	12V	12V	12V	12V	12V	12V	12 V	12 V	12V	12V	24V	24V
Battery Capacity		Ah	88	1x88	1x88	1x88	1x100	1x100	1x100	1x120/130	1x120/130	1x150	2X160	2X180
Noise level		dBA	<75											
Engine Specifications														
Engine Model			HA294 SRIII	2R1040	3R1040	3R1040	4R1040	4R1040T	4R1040TA	4K 1080TA	4K1080TA1	6K1080TA	6SL1500TA SR2	6SL8800TA
Rated output (prime rating as per ISO 3046)		kW (hp)	15.09 (20.5)	19.8 (27)	30.9 (42)	30.9 (42)	41.2(56)	61 (83)	77.2 (105)	114.7 (156)	126.76 (170)	147.2 (200)	185 (248)	228 (310)
No. of cylinder		Nos.	2 - Inline		3 - Inline			4 - Inline					6 - Inline	
Bore x Stroke		mm	100x120	105x120	105x120	105x120	105x120	105x120	105x120	105X125	105x125	105x125	118x135	118x135
Aspiration			NA							TA				
Cooling			Air Cooled	Liquid Cooled										
Lub oil Consumption*		LPH	0.01	0.015	0.015	0.015	0.035	0.04	0.05	0.07	0.07	0.09	0.11	0.14
Lub oil change period**		hrs	500	500	500	500	500	500	500	500	500	500	500	500
Lub oil Sump capacity		Ltrs	4.5	5.5	5.5	6	10	10	10	14	14	18	27	27
Coolant capacity		Ltrs	NA	4	4	4.7	6	6	6	7.5	7.5	10	13	13
Governor			Mechanical							Electronic				
Alternator														
Make			Kirloskar											
Rating		kVA	15	20	25	30	40	62.5	82.5	100	125	160	200	250
Insulation Class			H											
Protection			IP23											
Alternator Efficiency	100	%	85.2	88.6	83.7	88.7	89.2	91.1	91	92.6	92.9	92.9	93.7	94
Excitation			Self Excited											
Permissible transient voltage dip at full load 0.8 pf lag***		%	<18											
Time to built up rated voltage at rated RPM		sec	<5											
Short Circuit Withstand Time		sec	3 Times rated current for < 3 sec											
Overload Withstand Capacity		%	10% overload for one hour once in 12 hours & for 150% for 30 sec.											

Notes :

1) Genset ratings as per ISO 8528 performance class is G3.
2) Prime Power Rating is the maximum power available continuously for a variable electrical load for unlimited number of hours per year under standard operating conditions.
3) For the site conditions other than standard operating conditions, consult Kirloskar Green for available prime power.
4) * Under NTP conditions after 50 hrs. of running in, with reference fuel. Production Tolerance : +5 %"
5) All canopy dimensions have tolerance of + 50 mm.
6) ** First oil change at 50 hours.
7) ***Permissible transient % voltage dip at full load 0.8 pf lag (alternator tested alone) as per IS 4722.
8) Efficiency of Alternator as per standards IS 4722 and IEC 34-1.

Prime Rating and Stand-by Rating

'Prime power' is designed for Unlimited hours, as compared to 'Emergency stand-by' designed for 200 hours in a year. Prime rated Gensets also permit 10% temporary overloading. Users need to carefully select the Genset rating to meet their requirement. Kirloskar Green offers Prime power as a standard offer. Contact Kirloskar Green for stand-by ratings.

Engine Capacity DOES Matter

Engine capacity (cc) plays a vital role in Genset performance. Higher engine capacity leads to a robust and stable Genset performance.

Higher engine capacity also enables the Genset to respond quickly & positively to sudden load additions.