



Enriching Lives

"Kirloskar Green" Gensets

R Series

Single & Three Phase
Liquid Cooled Silent Genset



Range 30 to 125 kVA



Salient Genset Features

■ Customized product range :

- Ready to use gensets, available in wide range from 30 to 125 kVA.
- Gensets powered with Liquid Cooled engines.
- DG Sets available in Multiple sets in synchronization for running parallel operations.
- Custom built tailored to meet your exact power needs.

■ Smart Aesthetics :

- State of the Art Design.
- Compact in size, smaller footprint saving money on space.
- Aesthetically superior, fully integrated weather proof acoustic enclosure.
- Light weight design.

■ Environment Friendly : The power to save environment and the earth. :

- Gensets conform to low noise emission norms as per CPCB.
- Engine complies with latest stringent international emission norms.

■ Highest Reliability :

- Utmost reliability ensuring continuous power for smooth operation.
- Electronic Governor for Isochronous governing & paralleling operations as optional.
- Extremely rugged, durable design.
- Low lifecycle costs.
- Safety for low lube oil, high water temperature, low fuel level etc.
- State-of-the-art technology for operations in low / high ambient temperature, high humidity and high altitude.

■ Unmatched Performance :

- Low fuel & lube oil consumption ensuring excellent economy.
- Low noise & vibration levels.
- High fuel efficiency at part operating load.
- Lowest power to weight ratio in its class.
- No oil top up required between two service.
- K-cool super plus for longer life.

■ Maintenance friendly design, ease of operation :

- Ready to use design.
- Easy serviceability for routine maintenance, replacement, overhaul.
- Modular design, ensuring lower maintenance cost.
- Ensures long maintenance intervals.
- Easy availability of spare parts.
- Minimum cost for maintenance, spares & services.
- Smart Genset Monitor Control (GMC) for closely monitoring the engine, genset & safety system.
- Annual maintenance contract through service dealers.
- PAN India single point AMC.



KIRLOSKAR
GREEN
POWER IDEAS

Standard Features

■ Engine



- Liquid Cooled technology
- Offering a wide comprehensive range with power output covering from 30 to 125 kVA
- Available in 2, 3, 4, and 6 cylinder configuration
- Most compact, extremely robust & rugged design
- 500 Hrs. oil change period
- Lowest fuel consumption in it's class
- Meets latest emission norms

■ Alternator



- Kirloskar Green Alternator
- Compact Design
- Best in Class Efficiency
- Positive Voltage built-up
- Special windings to reduce harmonics
- Electronic AVR
- High circuit current capacity upto 300% ensuring controlled regulation even at variable loads
- Epoxy gel coating to suit various environment conditions

■ Control Panel



- State-of-the-art engine & genset monitoring and safety system
- Safety controls for low coolant level in radiator and high canopy temperature
- Compact Microprocessor Controller
- All performance parameters of engine & DG set visible at one sight

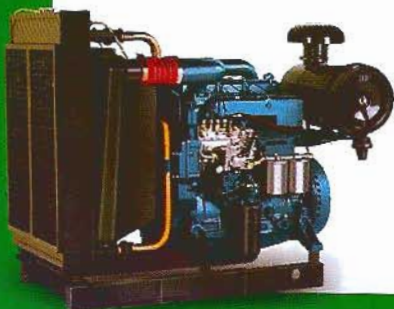
■ Canopy



- State-of-the-art Kirloskar Green Design
- Weather proof, sound proof enclosure, meets latest CPCB norms
- The powder-coated enclosure is manufactured on high-tech CNC machines to ensure smart quality finish & life long durability
- Specially designed to operate at full load, even at 50 deg C air inlet temperature
- Insulation material conforms to UL94HF1 class for flamability
- Use of zinc plating with green passivated hardware to withstand salt spray test as per ASTM B-117

Optional Features

- Remote monitoring
- Additional electrical metering
- Auto Mains Failure panel
- Cold starting aid
- Electronic Governor
- Parallel operations for Genset
- 24V ES in lieu of 12V
- Special air filtration system for dusty atmosphere
- Facility for external agency inspection
- Single phase upto 30 kVA available
- Bio diesel operations & many more



Technical Data

Overall Specifications of R Series Genset

Range 30 to 125 kVA

DG Set Specifications

Parameters	Unit	Genset Model						
		KG30WS	KG40WS	KG50WS	KG62.5WS2	KG82.5WS2	KG100WS	KG125WS2
kVA (kW) rating at 0.8pf	kVA (kW)	30 (24)	40 (32)	50 (40)	62.5 (50)	82.5 (66)	100 (80)	125 (100)
Voltage	V	415	415	415	415	415	415	415
Frequency	Hz	50	50	50	50	50	50	50
Overall dimensions with canopy	mm (LxBxH)	2540x1190x1350	3350x1190x1650	3350x1190x1650	3240x1140x1585	3240x1140x1585	3490x1340x1885	3490x1340x1885
Dry weight of genset with canopy	kg	1260	1520	1500	1930	1950	2500	2700
Electrical starting system		12	12	12	12	12	12	12
Battery capacity	Ah	88	100	100	100	100	120	120
DG set noise level as per CPCB norms	dB(A)	<75	<75	<75	<75	<75	<75	<75
Engine coolant capacity	Ltrs	12	18	18	24	24	38	39

Engine Specifications

Parameters	Unit	Engine Model						
		3R1040	4R1040	4R1190	4R1040T	4R1040TA	6R1080T	6R1080TA
Rated output (prime continuous rating) as per ISO 3046	kW (hp)	30.9 (42)	41.2 (56.1)	45.63 (62)	61 (83)	77.2 (105)	93.3 (127)	113.2 (154)
No of Cylinders	No's	3	4	4	4	4	6	6
Bore x Stroke	mm	105 x 120	105 x 120	110 x 125	105 x 120	105 x 120	105 x 125	105 x 125
Aspiration	NA/T/TA	NA	NA	NA	T	TA	T	TA
Governing		Class A2	Class A2	Class A2	Class A2	Class A2	Class A2	Class A2
Break mean effective pressure	kg/cm ²	8.1	8.1	8.1	11.25	15	11.73	14.4
* SFC at 75 % load	gms/hp-hr	157	155	156	157	150	150.5	146
* SFC at 100 % load	gms/hp-hr	158	155	153	155	151	152	148
Lube oil consumption	Ltrs/hr	< 0.3 % of SFC	< 0.3 % of SFC	< 0.3 % of SFC	< 0.3 % of SFC	< 0.3 % of SFC	< 0.3 % of SFC	< 0.3 % of SFC
Lube oil change period	Hrs	500	500	500	500	500	500	500
Lube oil sump capacity	Ltrs	7.5	9.5	9.5	9.5	9.5	13.5	13.5

Alternator Specifications

Parameter	Unit	Alternator Model						
		KG184C	KG184E	KG204D	KG224A	KG224D	KG224F	KG224H
Specifications		30 kVA	40 kVA	50 kVA	62.5 kVA	82.5 kVA	100 kVA	125 kVA
Insulation Class		H	H	H	H	H	H	H
Time permitted to build up rated voltage at rated RPM	Sec's	<5	<5	<5	<5	<5	<5	<5
Permissible voltage dip @ Full load 0.8pf lag	%	<18	<18	<18	<18	<18	<18	<18
Alternator efficiency at 100% load	%	89.0	89.2	89.7	91.0	91.4	92.0	92.6
Alternator efficiency at 75% load	%	90.5	90.7	90.8	91.8	92.5	92.8	93.2

In view of continuous product updation and design changes, all above specifications and dimensions are subject to change without prior notice.

Notes :

- Genset ratings are as per ISO 8528 performance class G2.
- 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.
- Single phase genset option available up to 30kVA.
- For the site conditions other than standard operating conditions, consult KOEL for available prime power.
- Specific gravity of diesel to be considered as 0.845 (+5 % tolerance as per ISO 3046).
- All canopy dimensions have tolerance of + 50 mm.
- * Under standard test conditions (+5% tolerance).



