INDIA'S **#1** GENSET BRAND

DV SERIES GENSET 320-1010 kVA



India's first IOT enabled Genset

The Complete Power Back-up Solution

EFFICIENCY HAS A NEW NAME



320 - 1010 kVA

Prime Rating at rated rpm (as per ISO8528) 1		kVA	320 HD	380 HD	400 HD	500 HD	600 HD	625 HD	750 HD	900 HD	1010 HD	
		kW	256	304	320	400	480	500	600	720	808	
Genset Model			KG1-320WS	KG1-380WS	KG1-400WS	KG1-500WS	KG1-600WS	KG1-625WS	KG1-750WS	KG1-900WS	KG1-1010WS	
Frequency		Hz	50									
Power factor		lagging	0.8									
Voltage		V	415 3Ø									
Governing class (As per ISO	8528 Part-V)						G3					
DG set Noise level at 1Mtr with Genset Canopy		dBA	≤ 75								Contact KOEL for Details	
Fuel Consumption #	At 100 % Load	Ltrs/hr	69	83.3	86.9	107.5	125.9	130.5	154	197	199	
	At 75 % Load		52.5	61.2	65.1	81.9	94.2	98.6	126.4	163	155	
	At 50 % Load		37.6	44.1	46	57.1	63.8	66.2	89.7	120	112	
Fuel tank capacity		Ltrs	850	850	850	990	990	990	990	990	990	
Weight of genset with canopy (approx.) ^{\$}	Dry	Kg	5910	6000	6050	7200	7700	7800	8300	13600	13200	
Overall dimensions of genset ^	Length	mm	5180	5446	5650	5650	6560	6560	6800	8000	7800	
	Width	mm	2000	2000	2000	2000	2000	2000	2300	2300	2300	
	Height	mm	2408	2408	2408	2558	2710	2710	2713	2713	2713	
Electrical Battery starting voltage		Volts-DC										
ENGINE												
Engine Model (Parent Engine)			DV8TA	DV8TA	DV8TA	DV10TA	DV12TA	DV12TA	DV12ETA	DV16ETA	DV16ETA	
Rated output (Prime Continuous rating as per ISO 3046)		kW	294	346	360	447	532	552	663	799	889	
		HP	400	470	490	608	723	750	901	1086	1210	
No. of cylinder		Number	8 10 12						16			
Cubic capacity ²		Ltrs	15.92 19.9 23.88 3						.84			
Bore x Stroke		mm	130 x 150									
Rated Speed		RPM	1500									
Aspiration		NA/TC/TA										
Lube Oil change period		hrs	500									
Lube Oil Sump Capacity		Ltrs		41	1	45		0	73	130	130	
Coolant Capacity with Radia	tor	Ltrs	55	65	65	80	100	100	175	180	180	
ALTERNATOR		1										
Insulation Class			Class H									
Ingress Protection							IP 23					
Alternator Efficiency (at 100%	, ,		94.6	93.3	93.4	94.6	95.5	95	94.6	95.3	95.1	
Alternator Efficiency (at 75% load) 0.8 pf*			95.5	93.8	94	94.9	95.4 < 20 %	95.2	94.9	95.5	95.4	
Permissible Voltage Dip at Full Load 0.8 pf Lag Time Permitted to build up rated voltage at rated RPM			< 3 sec, provided engine should contracted RPM reach rated RPM									
Short Circuit Withstand Time		sec	3 Times rated current for "10 sec"									
Overload Withstand Capacity		%	10% overload for one hour once in 12 hours									

Notes

^ Tolerances Apply

With 0.845 Specific Gravity of diesel (5% Tolerance)

* These Weight are for handling & transportation only, ±5 % tolerance apply

* Efficiency of Alternator as per standards IEC60034-1 For Site Conditions other than standard operating conditions consult Kirloskar Oil Engines for available prime power.

For intermediate ratings, kindly contact nearest Kirloskar office

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

Canopy

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

Controller

- Microprocessor based
- Graphical LCD display
- Best in class monitoring and diagnostic capability
- Integrable with AMF, synchronization & communication configurations

- 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

Engine

- O2E Series: Low emission, high efficiency engines
- Compact, Robust and Rugged Design
- •500 hours lube-oil change period
- Integral set mounted radiator system, designed & tested for 50°C ambient temperature

– Alternator

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



Prime rating and Stand-by rating¹



'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 offers Prime power as a standard offer. Contact Kirloskar for stand-by ratings.

Engine capacity does matter²



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.

Best-in-class Fuel Efficiency



Kirloskar Green Gensets offer a unique combination of CPCB norm compliance and enhanced fuel efficiency. Across the range, Kirloskar Green Gensets offer substantial savings in fuel cost.

O2E Series (Optimal Operating Efficiency):

Genset ratings are selected based on the present load and future expansion. Fuel efficiency of most Gensets is optimized at the full rating of the Genset.

In practice, Gensets rarely get loaded to full capacity. Power demand variations across day & night, weekdays & weekends, summer & winter lead to an average 50-70% loading on Gensets.

Considering this practical situation, Kirloskar has extended fuel efficiency



KIRLOSI

optimization from 100%, right up to 50% of rated load.

Combination of best-in-class fuel efficiency & O2E provides a double advantage.

Genset Monitoring at Your Finger Tips



Kirloskar Green gensets are enabled with Kirloskar remote monitoring system which shares Real Time Genset information and location Services. It can be accessed via mobile device or desktop. Kirloskar remote monitoring system also highlights any

parameter which needs special attention. These critical indication alerts are sent to user mobile via text message. It also alerts nearest services dealer is case of any emergency break-down.



Ask your Dealer for KRM login details & password

Peace-of-mind Ownership



and on-site serviceability.

Kirloskar Green Gensets have always been preferred for their robust design and reliability over long usage life.

Kirloskar Green range carries the confidence of well-established and proven engine platforms. For compliance to revised CPCB norms, Kirloskar has carefully selected those technologies which not only retain, but enhance Gensets durability

Thus, Kirloskar Gensets offer you many years of trouble-free performance; backed by the assurance of prompt support. Peace-of-mind driven by product reliability and low cost of ownership.

State of the art Genset Controller



Kirloskar Green Genset put the command in your hands. Micro-processor based Genset controllers display a host of genset parameters and put all controls at your fingertips.

Monitoring Features:

- Phase Voltages & Currents, Frequency, Reverse power, Genset kVA, kW, kWh, kVAr, Power Factor, Canopy Temperature
- Lube oil Pressure, Engine Temperature, RPM, Run Hours, Number of starts, Fuel Level, Auto / Manual Stop, Battery charge condition, AMF feature

Diagnostic Features :

- Battery charging failure, Over/Under speed, Over Current, Over/Under Voltage, Over kW, Phase Seq., Phase missing, Mains Under voltage, Earth Fault trip, Fuel usage Alarm
- Low lube oil Pressure, High Engine Temperature, Low/High

battery voltage, Low Fuel Level, Over Crank protection, Routine maintenance indicator, Genset Test Facility, Mains Frequency

Optional Features:

- Modbus Communication
- Synchronization



KG745 Controller



EFFICIENCY• INTEGRATED

A KIRLOSKAR PROMISE



Laxmanrao Kirloskar Road, Khadki, Pune 411 003 INDIA.



Oil Engines

Stamp of Authorised Representative

Mark bearing word 'Kirloskar' in any form as a suffix or prefix is owned by Kirloskar Proprietary L td. and Kirloskar Oil Engines Ltd. is the Permitted User. This Catalog is copyrighted and may not be reproduced in any form not even parts of it, without previous written permission by copyright owners, Kirloskar Oil Engines L td. Product improvement is a continuous process. Kindly contact Kirloskar for latest information. Images are for illustration purposes only.