



Enriching Lives

# Kirloskar Green Gensets

## DV Series

Liquid Cooled Silent Gensets



320 to 625 kVA



Salient Features of Genset

### ■ Customized product range:

- Gensets powered by DV series liquid cooled engines.
- Available in wide range from 320 to 625 kVA.
- Gensets available in multiple configurations in synchronization for parallel operations.
- Remote Monitoring and BMS options.

### ■ Smart Aesthetics

- State - of - the - art design.
- Compact in size, smaller footprint hence more saving on space.
- Aesthetically superior and fully integrated weather proof acoustic enclosure.

### ■ Highest Reliability

- Utmost reliability ensuring continuous power for smooth operation.
- Electronic governor with Isochronous and synchronous governing for reliable, stable and paralleling operations.
- Extremely rugged and durable design.
- Safety against all the critical engine and genset parameters.

### ■ Unmatched Performance

- Gensets powered by DV series engines having 4 valve HPCI technology that makes DV series gensets most fuel efficient in its class.
- DV series engines are with Centrifuge filter for extended oil change intervals and low operating cost.
- K-cool super plus coolant and K-oil super for best performance and longer engine life.
- Lower lifecycle cost.

### ■ Environment Friendly

- The power to preserve, save environment and the earth – Kirloskar Green Power Ideas.
- Gensets conforms to lowest noise pollution norms as laid down by MOEF / CPCB.
- Genset engine conforms with the latest stringent MOEF exhaust emission norms and International emission standards.
- 100% Bio-diesel compatibility.

### ■ Maintenance friendly design and Ease of Operation

- Smart genset controller for close monitoring of engine and genset parameters for preventive maintenance and safety of genset.
- Remote monitoring system as a standard scope for real time monitoring of critical engine and genset parameters giving following benefits:
  - Prevent unscheduled breakdowns and downtime.
  - Improved response time.
  - Preventive maintenance.
- Ease in serviceability for routine maintenance and overhauls.
- Readily available spare parts across Nationwide network of authorized service outlets.
- Customized Annual Maintenance Contract ( AMC) for specific customer service needs.
- Single window service.



**KIRLOSKAR**  
**GREEN**  
POWER IDEAS

# DV Series

# Kirloskar Green Gensets

## Standard Features

### ■ Engine



- Efficient liquid cooled technology
- Offering a wide comprehensive range with power output covering from 320 to 625 kVA
- Available in 6,8,10 and 12 cylinder compact configurations
- Most compact, extremely robust and rugged design
- 500 Hrs. of Longer lub-oil change period
- Lowest fuel consumption in it's class
- Compliance with latest Emission norms of MOEF
- Four valve technology with central Injection system
- 100% Bio-Diesel compatibility with 100% power for lower emissions

### ■ Alternator



- Kirloskar Green Alternator
- Compact design with sealed bearings for longer life and lesser maintenance
- Best in class efficiency
- Positive voltage built-up
- Special windings to reduce harmonics
- Electronic AVR
- High short circuit current capacity upto 300% ensuring controlled regulation even at variable loads
- Epoxy gel coating to suit various environment conditions

### ■ KG 545 Genset Controller



- State - of - the - art compact Micro-processor based fully configurable genset operating, monitoring, metering and protection control system with LCD display
- Complete safety for genset on operating faults
- Real time and 100 event logging facilities for performance monitoring
- AMF option in the controller as standard scope with control for mains and DG set circuit breakers
- User friendly operating systems on manual, auto and test modes with touch buttons
- Provision for additional 3 digital inputs and 2 digital outputs
- Compatibility for remote monitoring and remote start – stop options

### ■ Acoustic Enclosure



- Smart, standardized and dynamic Kirloskar Green Power Ideas modular design for ease of serviceability
- Aesthetically designed weather proof, sound proof acoustic enclosure meeting stringent and latest MOEF noise pollution norms
- PU Based powder-coated enclosure, manufactured on high-tech special purpose CNC machines to ensure highest quality on fit, form, finish, function and durability
- Specially designed with adequate air flow to operate at full load, even at 50 deg. C air inlet temperature
- Noise and thermal insulation material conforms to UL94 - HF1 class for flammability
- Green passivated / black ionized hardware for manufacturing to withstand salt spray and corrosion test as per ASTM B-117
- Designed for low noise, high reliability, lowest vibrations and user-friendly installations

### ■ Optionals



- Remote monitoring and BMS
- Auto mains failure panel
- Cold starting aid
- Parallel operations and synchronization of multiple genset.
- Special air filtration system for dusty atmosphere
- Facility for external agency inspection as per custom and IS standards
- PMG for non-linear loads
- Power house design support for varying load patterns

# Technical Data Sheet

## Overall Specifications of DV Series Gensets

320 to 625 kVA

### DG Set Specifications

Parameters	Unit	Genset Model					
		KG320 WS4	KG380 WS	KG400 WS2	KG500 WS3	KG600 WS3	KG625 WS3
Prime Rating at 0.8 pf	kVA(kW)	320 (256)	380 (304)	400 (320)	500 (400)	600 (480)	625 (500)
Voltage	V	415	415	415	415	415	415
Frequency	Hz	50	50	50	50	50	50
Overall Dimensions with canopy (L×W×H)	mm	5700×2000×2555	5700×2000×2555	5700×2000×2555	6200×2000×2555	6660×2000×2705	6660×2000×2705
Dry Weight of genset with canopy ( Aprox)	kg	5200	6000	6000	6655	7500	7500
Electrical starting system	Volt-DC	24 ( 2 x 12 V)	24 ( 2 x 12 V)	24 ( 2 x 12 V)	24 ( 2 x 12 V)	24 ( 2 x 12 V)	24 ( 2 x 12 V)
Battery Capacity	Ah	180	180	180	180	180	180
DG set Noise level as per CPCB Norms	dB(A)	< 75	< 75	< 75	< 75	< 75	< 75

### Engine Specifications

Parameters	Unit	Engine Model					
		DV6I TA SR1	DV8 SR2	DV8	DV10	DV12	DV12 SR1
Rated output (Prime rating as per ISO 3046)	kW(hp)	284 (386)	346 (470)	360 (490)	448(608)	532 (723)	552 (750)
No. of cylinder	Nos	6	8	8	10	12	12
Bore × Stroke	mm	123 × 155	130 × 150	130 × 150	130 × 150	130 × 150	130 × 150
Aspiration		TA	TA	TA	TA	TA	TA
Governor / Class		Electronic A0	Electronic A0	Electronic A0	Electronic A0	Electronic A0	Electronic A0
SFC at 75% load*	(g/Hp-hr)	147	145	144	146	144	144
SFC at 100% load*	(g/Hp-hr)	147	143	143	143	143	143
Lub oil Consumption*	LPH	0.11	0.10	0.10	0.13	0.16	0.16
Lub oil change period**	hrs	250	500	500	500	500	500
Lub oil Sump capacity	Ltrs	23	41	41	45	50	50

### Alternator Specifications

Parameters	Unit	Alternator Model					
		KG 284 C	KG 354 S1	KG 354 S2	KG 354 MI	354 L1	354 L2
Rating	kVA	320	380	400	500	600	625
Insulation Class		H	H	H	H	H	H
Protection	IP	IP23	IP23	IP23	IP23	IP23	IP23
Time to built up rated voltage at rated RPM	sec	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5
Alternator Efficiency at 100% load	%	93.8	94.1	94.1	94.8	95.5	95.5
Voltage regulation	%	± 1	± 1	± 1	± 1	± 1	± 1
Wave form Distortion at No load and at Non-distorting balance linear Load	%	< 1.8 & < 4	< 1.8 & < 4	< 1.8 & < 4	< 1.8 & < 4	< 1.8 & < 4	< 1.8 & < 4
Permissible transient voltage dip at full load 0.8 pf lag***	%	< 18	< 18	< 18	< 18	< 18	< 18

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

#### Notes :

- Genset ratings as per ISO 8528 performance class is G3.
- 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.
- For the site conditions other than standard operating conditions, consult KOEL for available prime power.
- \*+5 % tolerance as per ISO 3046. For LPH calculation specific gravity of diesel is considered as 0.845.
- All canopy dimensions have tolerance of ± 50 mm.
- \*\*First oil change at 50 hours.
- \*\*\*Permissible transient % voltage dip at full load 0.8 pf lag (alternator tested alone) as per IS 4722.

