



Enriching Lives

KIRLOSKAR

Global Power Solution Provider



50_{HZ}





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 (India).
- 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.



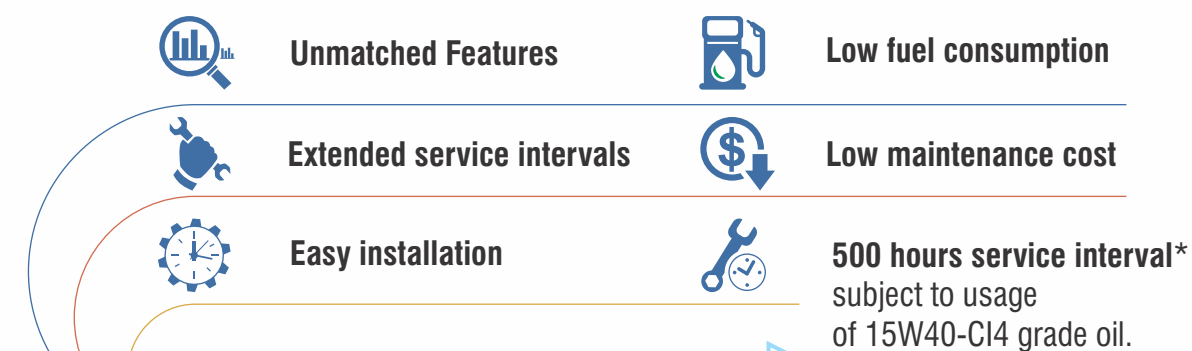
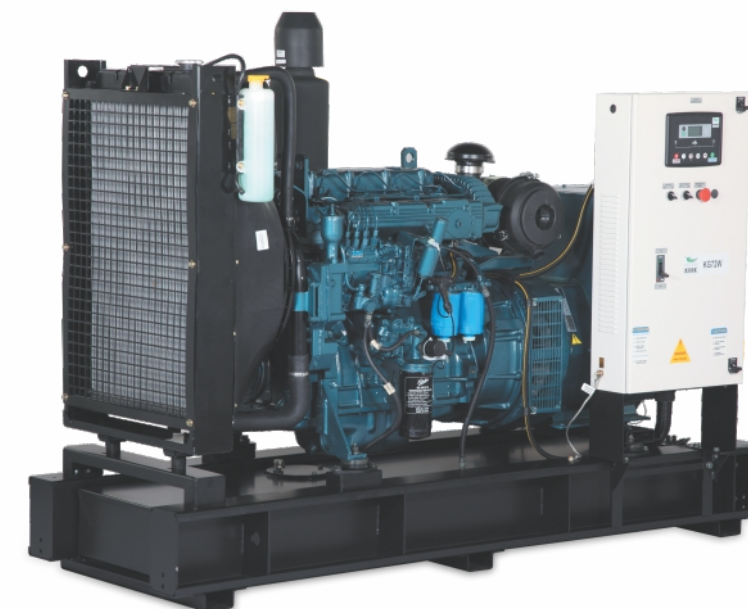
In pursuance of Zero Defect –

- 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, KOEL continuously takes various measures to pursue Zero defect product.

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 !



* Except 1010 kVA

External Features

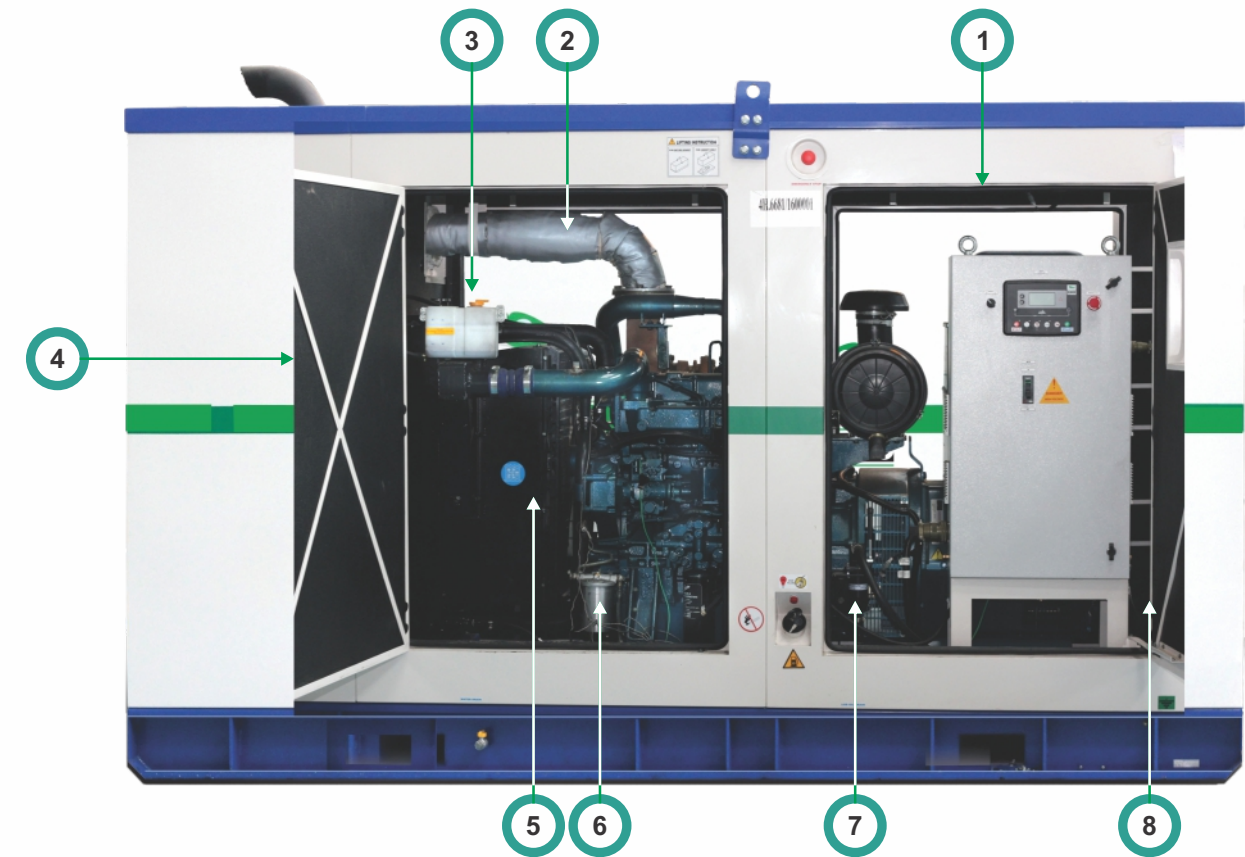


- 1 Door for radiator access**
Access to radiator for faster service.
- 2 Silencer mounted inside canopy**
Improved safety & reduced sound level
- 3 Mesh on exhaust tail pipe**
Prevents entry of pests / rodents
- 4 Top lifting arrangement**
Easy to lift by crane
- 5 Emergency stop switch**
Easily accessible on canopy for stopping
- 6 Glass window on canopy**
Easy to read generating set parameters & safe
- 7 Stainless steel door hinges**
Heavy-duty, anti-corrosive & long lasting
- 8 Fuel tank full with indicator lamp**
Prevents fuel spillage / wastage & improves safety
- 9 External fuel tank**
filling access Ease of refueling
- 10 Stainless steel door locks**
High durability & improved security
- 11 Coolant drain arrangement**
Easy access for faster service
- 12 Pockets for forklift**
Facilitates easy handling & installation



Provision of gland plate
Easy cable entry & improved safety

Internal Features



- 1 High quality door rubber beading**
Better sound attenuation & ingress protection
- 2 Heat insulated exhaust line**
Improved engine cooling efficiency & serviceability
- 3 Coolant level sensor**
Supplementary engine protection
- 4 High quality PU foam**
Superior sound attenuation, long life, dust resistant & fire retardant
- 5 Guard for rotating parts**
Enhanced safety
- 6 Water separator as a standard feature**
Prevents water entry into engine
- 7 Lube oil drain pump**
Faster oil drain, reduces downtime, eliminates need of additional tray
- 8 Control panel door stopper**
Facilitates service & improves safety



Longer fuel tank breather tube
Prevents fuel spillage due to overfilling



Dual Fuel gauge (Mechanical + Electrical)
Easy fuel level reading while re-fueling



High efficiency LED lamp
Extra bright & low power consumption



SMF batteries

TECHNICAL SPECIFICATIONS - 3 PHASE, 4 WIRE, 0.8 PF

50 Hz

GENERATING SETS																																																					
Model		Open	17W50			22W50			33W50			44W50			69W50			91W50			110W50			138W50			176W50			220W50			275W50			352W50			440W50			550W50			660W50			825W50			1111W50		
		SAE	17WS50			22WS50			33WS50			44WS50			69WS50			91WS50			110WS50			138WS50			176WS50			220WS50			275WS50			352WS50			440WS50			550WS50			660WS50			825WS50			1111WS50		
Voltage	L-L	V	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415	380	400	415			
	L-N	V	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240	220	230	240			
Standby Power Output	ESP	kVA	16.5*			22			33			44			69*			91*			110			138*			176			220			275			352			440			550			660			825			1111		
		kW	13.2			17.6			26.4			35.2			55			72.6			88			110			140.8			176			220			281.6			352			440			528			660			888.8		
Prime Power Output	PRP	kVA	15			20			30			40			62.5			82.5			100			125			160			200			250			320			400			500			600			750			1010		
		kW	12			16			24			32			50			66			80			100			128			160			200			256			320			400			480			600			808		
Fuel consumption (at % of PRP)	50%	L/Hr	2.0			2.6			3.7			5.1			7.6			9.7			10.7			15.5			19.1			24			29.8			40.5			46.4			61.2			70.7			83			120.6		
	75%	L/Hr	2.7			3.6			5.1			6.9			10.8			13.8			17.7			20.7			25.0			31.9			41.9			55.3			61.6			75.6			92.7			115			161		
	100%	L/Hr	3.4			4.7			6.7			9.1			14.4			18.3			22.5			26.8			34.0			42.3			55.1			70.8			80.4			97			123.7			152			208		
Fuel Tank Capacity	Open	L	65			65			80			95			150			150			225			225			280			310			310			530			530			665			900			650			425		
	SAE	L	43			43			75			95			150			150			225			225			350			310			310			530			530			860			930			990			900		
Sound Level at 7m	SAE	dB(A)	70			70			70			70			70			70			70			70			70			70			70			70			75			75			80			80					
Dimensions (LxWxH) (as per GA drawing)	Open	cm	141 x 104 x 133			141 x 104 x 133			150 x 109 x 134			175 x 109 x 136			211 x 106 x 146			211 x 106 x 146			224 x 104 x 160			224 x 104 x 160			259 x 133 x 173			311 x 154 x 170			311 x 154 x 170			339 x 166 x 220			339 x 166 x 220			365 x 184 x 235			379 x 178 x 236			398 x 230 x 240			454 x 210 x 251		
	SAE	cm	198 x 97 x 123			198 x 97 x 123			218 x 101 x 145			256 x 111 x 146			297 x 116 x 166			297 x 116 x 166			327 x 116 x 193			327 x 116 x 193			372 x 116 x 211			437 x 162 x 198			436 x 167 x 223			498 x 211 x 228			498 x 211 x 228			525 x 212 x 257			566 x 211 x 257			580 x 230 x 253			687 x 230 x 250		
Dry weight (net) approx.	Open	kg	650			700			790			840			1100			1200			1450			1510			1910			2320			2320			4250			4550			4750			5200			880			8650		
	SAE	kg	920			970			1100			1310			1630			1950			2120			2180			2720			3440			3670			6000			6300			7100			7830			8340			13200		

ENGINE (LIQUID COOLED, 4 STROKE, DIESEL ENGINE)																			
Make			Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	Kirloskar	
Model			2R1040	2R1040	3R1040	3R1040TA	4R1040TC	4R1040TA	4K1080TA	4K1080TA	6K1080TA	6SL1500TA	6SL8800TA	DV8	DV8	DV10	DV12	DV12 CRDi	DV16 ETA G1
Engine output	PRP	hp	27	27	42	56	83	105	156	156	200	248	310	400	490	608	750	901	1210
Cyls & configuration			2 - Inline	2 - Inline	3 - Inline	3 - Inline	4 - Inline	4 - Inline	4 - Inline	4 - Inline	6 - Inline	6 - Inline	6 - Inline	8 - V	8 - V	10 - V	12 - V	12 - V	16 - V
Bore x Stroke		mm	105 x 120	105 x 120	105 x 120	105 x 120	105 x 120	105 x 120	105 x 125	105 x 125	105 x 125	118 x 135	118 x 135	130 x 150	130 x 150	130 x 150	130 x 150	130 x 150	130 x 150
Compression ratio			18:1	18:1	18:1	18:1	18:1	18:1	15.5:1	15.5:1	15.5:1	17.5:1	17.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1	16.5:1
Displacement		L	2.08	2.08	3.12	3.12	4.16	4.16	4.32	4.32	6.48	8.86	8.86	15.91	15.91	19.9	23.88	23.88	31.86
Aspiration			Natural	Natural	Natural	TA	TC	TA	TA	TA	TA	TA	TA	TA	TA	TA	TA	TA	TA
Starting System			12V	12V	12V	12V	12V	12V	12V	12V	12V	24V	24V	24V	24V	24V	24V	24V	24V
Governor			Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Governing class as per ISO8528-5			G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2	G2
Lub oil sump capacity - refill		L	5.5	5.5	7.5	7.5	9.5	9.5	14	14	18	21	21	38	38	42	42	53	130
Coolant capacity		L	10	10	12	12	24	24	49	54	54	43	43	123	123	133	144	166	180

Kirloskar Green Generating Set Specifications

Control System Features And Safeties

Controller Module		DEEP SEA						
Models	17W50, 22W50, 33W50, 44W50, 69W50, 91W50, 110W50, 138W50, 176W50				220W50, 275W50, 352W50, 440W50, 550W50, 660W50, 825W50, 1111W50			
	17WS50, 22WS50, 33WS50, 44WS50, 69WS50, 91WS50, 110WS50, 138WS50, 176WS50				220WS50, 275WS50, 352WS50, 440WS50, 550WS50, 660WS50, 825WS50, 1111WS50			
On display screen								
Generating set Volts, Amps. Hz	✓				✓			
Generating set kW, kVA, kVAr	✓				✓			
Generating set per phase PF	✓				✓			
generating set kWhr meter	✓				✓			
Earth current (A)	No				✓			
Grid (Mains) Voltage (L-L)	✓				✓			
Battery Voltage (V)	✓				✓			
Engine start attempts	✓				✓			
Engine Temperature (°C)	✓				✓			
Engine speed (RPM)	✓				✓			
Engine Run Hours (Hours & Min.)	✓				✓			
Lube oil Pressure (kPa, PSI, bar)	✓				✓			
Diesel fuel level (%)	✓				✓			
Communication ports								
RS485	No				✓			
RS232	No				✓			
Protections	WR	SD	Ind	DI	WR	SD	Ind	DI
Low oil pressure	No	✓	✓	----	✓	✓	✓	----
High coolant temperature	✓	✓	✓	----	✓	✓	✓	----
Low fuel level	✓	✓	✓	----	✓	No	✓	----
Low coolant level	No	✓	✓	----	No	✓	✓	----
Under / over speed	✓	✓	✓	----	✓	✓	✓	----
Low / high battery voltage	✓	No	✓	----	✓	No	✓	----
Low charge alternator	✓	No	✓	----	✓	No	✓	----
Emergency stop	No	✓	✓	----	No	✓	✓	----
Fail to start/ stop warning	✓	No	✓	----	✓	No	✓	----
Auto remote start/stop DI	----	----	----	✓	----	----	----	✓
Under / over voltage	✓	✓	✓	----	✓	✓	✓	----
Under / over frequency	✓	✓	✓	----	✓	✓	✓	----
Over kW / Overcurrent	No	✓	✓	----	No	✓	✓	----
Low load	No	No	No	----	✓	✓	✓	----
Incorrect phase sequence	No	No	No	No	No	✓	✓	----
Reverse power	No	No	No	No	No	✓	✓	----
Short circuit	No	No	No	No	No	✓	✓	----
Earth fault	No	No	No	No	No	✓	✓	----

✓ - Available No – Not available ---- - Not applicable WR –Warning SD- Shutdown Ind – Indication DI – Digital Input

Customize Your Power Needs - Optional Accessories

Generating set

- External bulk fuel tank of 1000L, 5000L, 10000L, 15000L
- Fuel transfer pump
- Fuel priming manual pump
- Fire extinguisher

Engine

- Cold start kit
- Battery isolator switch
- 1000hrs service interval kit for select ratings
- Jacket water heater 220V - 240V AC
- Lube oil temperature sensor

Alternator

- Alternator space heater
- Permanent magnet exciter (PMG) (for select ratings)
- Alternator inlet louver filters
- Droop current transformer (for select ratings)

Controls

- Static battery charger 12V 5A / 24V 10A
- ATS panel
- Dummy load bank
- Remote monitoring unit
- Synchronization panel for higher kVA solutions

Why Kirloskar?

Rich Heritage of
132+ years
of engineering excellence

Designing and manufacturing diesel engines
since 1946

Annual sales of nearly
200,000 engines

Global presence covering more than
50 countries

State-of-the-art
R&D and manufacturing facilities

Reliable engines
for every need!

Liquid Cooled Diesel Generating Sets



Global presence

KIRLOSKAR DMCC

JBC - 5, Cluster W, Jumeirah Lake
Towers, P.O. Box 37745 Dubai U.A.E
Tel.: +971 4 443 8591
Fax : +971 4 441 4532
Email : enquiry@kirloskarib.com
Email : enquiry@kirloskar.ae
Website : www.kirloskarib.com

KIRLOSKAR TRADING SA (PTY) LTD.

Unit B1, The Stables Business Park,
Cnr of Third Avenue & Second Road,
Limbro Park, Modderfontein, Johannesburg.
Tel. : +27 11 553 6900 / 6903
Email : kirsons@kirloskar-africa.co.za

KIRLOSKAR KENYA LTD.

P.O Box 60061, Off Dunga Road, Nairobi, Kenya,
Tel. : +254 20 653 6632
Fax : +254 20 653 3390
Email : rspatil@kirloskar.co.ke

KIRLOSKAR REPRESENTATIVE OFFICE VIETNAM

Suite 1331A, 13th Floor, Level One Saigon, mPlaza
Saigon, No. 39, Le Duan Street, Ben Nghe Ward,
District 1, Ho Chi Minh City, Vietnam.
Cell Ph: +84 12 2965 9756
Tel.: +84 28 6288 6401 (Extn. 1511)
Email : Sanjay.Kunchetti@kirloskar.com

KOEL AMERICAS CORPORATION

33300 Egypt Lane, Suite C300
Mangolia, TX 77354
Tel. : +1 346 248 5777
Cell Ph : +1 832 675 1595
Fax : +1 830 423 8060
Email : Vinay.Kulkarni@koelamerica.com



Enriching Lives

KIRLOSKAR OIL ENGINES LIMITED

A Kirloskar Group Company

Regd Office: 13, Laxmanrao Kirloskar Road, Khadki, Pune, Maharashtra 411 003 INDIA
Tel.: +91(20) 2581 0341 Fax: +91(20) 2581 3208, 2581 0209 Helpline: +91 8806 33 44 33
Email: koel.helpdesk@kirloskar.com Website: www.koel.co.in

- Technical details mentioned above may vary as per site condition / situation. As continuous improvements are contemplated the description and illustrations are not binding.
- This catalogue 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 Ltd.