

TECHNICAL PARTICULARS OF KIRLOSKAR ELECTRIC BLISS DG SETS - FREEDOM SERIES

DG SET	Model	12.5K-2KFWN105	15K-2KFWN105	17.5K-3KFWN105	20K-3KFWN105	22.5K-3KFWN105	24K-3KFWN105	25K-4KFWN105	27.5K-4KFWN105	30K-4KFWN105	34K-4KFWN105
	RATING (kVA)	12.5	15	17.5	20	22.5	24	25	27.5	30	34
	Rated kW	10	12	14	16	18	19.2	20	22	24	27.2
	Rated Current (Amps)	17.40	20.88	24.36	27.84	31.32	33.41	34.80	38.28	41.76	47.328
	Length x Width x Height (mm)	1800x900x1425	1800x900x1425	2125x950x1500	2125x950x1500	2125x950x1500	2125x950x1500	2250x1050x1500	2250x1050x1500	2250x1050x1500	2250x1050x1500
	Total Dry Weight (Kgs)	900	900	1090	1090	1090	1090	1350	1350	1350	1350
ENGINE	Make	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric
	Model	2KFWN105	2KFWN105	3KFWN105	3KFWN105	3KFWN105	3KFWN105	4KFWN105	4KFWN105	4KFWN105	4KFWN105
	BHP	23	23	31	31	31	31	44	44	44	44
	No. of Cylinders	2	2	3	3	3	3	4	4	4	4
	RPM	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	Bore(mm)	105	105	105	105	105	105	105	105	105	105
	Stroke(mm)	117	117	117	117	117	117	117	117	117	117
	Displacement(ltrs)	2.03	2.03	3.04	3.04	3.04	3.04	4.05	4.05	4.05	4.05
	Compression ratio	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5	17:1± 0.5
	SFC (gms/BHP-hr)	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %	156 ± 5 %
	Governor	Mech	Mech	Mech	Mech	Mech	Mech	Mech	Mech	Mech	Mech
	Class of Governing	A	A	A	A	A	A	A	A	A	A
	Aspiration	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL
	Air filter	Drytype	Drytype	Drytype	Drytype	Drytype	Drytype	Drytype	Drytype	Drytype	Drytype
	Fuel	HSD	HSD	HSD	HSD	HSD	HSD	HSD	HSD	HSD	HSD
	Type of oil	20W/40	20W/40	20W/40	20W/40	20W/40	20W/40	20W/40	20W/40	20W/40	20W/40
	Oil sump capacity(ltrs)	9	9	12	12	12	12	14	14	14	14
	Lub Oil consumption (gms/BHP-hr)	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
	Cooling	Liquid Force Cooling									
	Bare Radiator Coolant capacity(ltrs)	3	3	3	3	3	3	13	13	13	13
	Coolant Capacity with engine Jacket(ltrs)	6.50	6.50	8.50	8.50	8.50	8.50	13	13	13	13
	Engine Dry Weight (Kgs)	235	235	290	290	290	290	350	350	350	350
	Electric Starting System	12V	12V	12V	12V	12V	12V	12V	12V	12V	12V
ALTERNATOR	Make	KEC	KEC	KEC	KEC	KEC	KEC	KEC	KEC	KEC	KEC
	Model	4AB180	4AB180	4AB180	4AB180	4AB180	4AB180	4AB180	4AB180	4AB180	4AB180
	Type	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless
	kVA	12.5	15	17.5	20	22.5	24	25	27.5	30	35
	Voltage (V)	415	415	415	415	415	415	415	415	415	415
	No. of Phases	3	3	3	3	3	3	3	3	3	3
	Power Factor	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	Speed (rpm) / Frequency (Hz)	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50	1500 / 50
	Voltage Regulation	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %	± 1 %
	Enclosure	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP
CONTROL PANEL	Insulation class	H	H	H	H	H	H	H	H	H	H
	Weight of A.C.G(Kgs)	150	150	162	162	162	180	180	210	210	260
	Type	Ready To Use / Inbuilt									
	Metering	Multidisplay meter cum kWh/limiter for display of Volts, Amps, Hz, RPM, Hour, kWh, kWh									
	Gauges	Fuel Level Indicator, Lub Oil Pressure, Water Temperature, Oil Temperature									
	Functions	Manual Start/Stop, Emergency Stop, Display Selection, Fault Reset									
BATTERY	Operator Interface	Short Circuit, Overload, MCCB with shunt coil for power ok(above 22.5 kVA), MCCBs for control circuit,									
	Safeties	Low Lub Oil Pressure, High Coolant Temperature, Auto Shut Down, Visual & Audio Alarm against Fault.									
	Make	Exide	Exide	Exide	Exide	Exide	Exide	Exide	Exide	Exide	Exide
	Type	MAINTENANCE FREE									
	Rating (AH)	100	100	100	100	100	100	100	100	100	100
EXHAUST SYSTEM	Quantity(Nos.)	1	1	1	1	1	1	1	1	1	1
	Charging Facility	Charging Alternator									
	Battery metering	Ammeter									
FUEL TANK	Silencertype	Residential									
	Location	TOP									
	Exhaust pipe size(inches)	2.5	2.5	2.5	2.5	2.5	2.5	3	3	3	3
CANOPY	Type	INBUILT									
	Capacity(Litres)	40	40	60	60	60	60	65	65	65	65
	Sheetmetal	BOLTED									
	Drain	CRCA									
OTHER ITEMS	Insulation	FORCED									
	Noise level at 1 m	FOAM/ROCK WOOL									
	Base frame	75 DB @ 1 Meter In line with CPCB norms									
	AVMs	Pressed CRCA Channel									
	Emergency stop	4	4	4	4	4	4	4	4	4	4
	Internal lights	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
In view of the continuous product development the format furnished is subject to revision and since published data is widely circulated responsibility of seeking update rests with the user											

* 'BLISS' the brand and catch line 'BLISS-Powerfully Reliable' are used by Kirloskar Electric Company for Diesel generating sets that gets manufactured at its units in different locations.