

Technical Particulars of Kirloskar Electric BLISS DG Sets - Freedom series										
DG SET	Model	12.5K-2KFWN105	15K-2KFWN105	20K-3KFWN105	22.5K-3KFWN105	24K-3KFWN105	25K-4KFWN105	30K-4KFWN105	34K-4KFWN105	
	RATING (kVA)	12.5	15	20	22.5	24	25	30	34	
	Rated kW	10	12	16	18	19.2	20	24	27.2	
	Rated Current (Amps)	17	21	28	31	33	35	42	47	
	Length x Width x Height (mm)	2000x1025x1425	2000x1025x1425	2175x1025x1425	2175x1025x1425	2175x1025x1425	2400X1050X1525	2400X1050X1525	2400X1050X1525	2400X1050X1525
	Total Dry Weight (Kgs)	900	900	1090	1090	1090	1350	1350	1350	
ENGINE	Make	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	Kirloskar Electric	
	Model	2KFWN105	2KFWN105	3KFWN105	3KFWN105	3KFWN105	4KFWN105	4KFWN105	4KFWN105	
	BHP	23	23	31	31	31	44	44	44	
	No. of Cylinders	2	2	3	3	3	4	4	4	
	RPM	1500	1500	1500	1500	1500	1500	1500	1500	
	Bore(mm)	105	105	105	105	105	105	105	105	
	Stroke(mm)	117	117	117	117	117	117	117	117	
	Displacement(ltrs)	2.03	2.03	3.04	3.04	3.04	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	
	SFC (gms/BHP-hr)	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	
	Class of Governing	A	A	A	A	A	A	A	A	
	Aspiration	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	NATURAL	
	Air filter	Dry type	Dry type	Dry type	Dry type	Dry type	Dry type	Dry type	Dry type	
	Fuel	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	
	Oil sump capacity(ltrs)	9	9	12	12	12	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	
	Cooling	WC / Radiator / Force Cooled								
	Bare Radiator Coolant capacity(ltrs)	3	3	3	3	3	13	13	13	
	Coolant Capacity with engine Jacket(ltrs)	6.50	6.50	8.50	8.50	8.50	13	13	13	
	Engine Dry Weight (Kgs)	235	235	290	290	290	350	350	350	
	Electric Starting System	12V	12V	12V	12V	12V	12V	12V	12V	
ALTERNATOR	Make	KEC	KEC	KEC	KEC	KEC	KEC	KEC	KEC	
	Model	4AB160	4AB160	4AB160	4AB160	4AB160	4AB 160	4AB 180	4AB 180	
	Type	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	Brushless	
	kVA	12.5	15	20	22.5	24	25	30	34	
	Voltage (V)	415	415	415	415	415	415	415	415	
	No. of Phases	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	
	Speed (rpm) / Frequency (Hz)	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%	
	Enclosure	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	SPDP	
	Insulation class	H	H	H	H	H	H	H	H	
Weight of ACG(Kgs)	150	150	162	162	162	162	180	210		
CONTROL PANEL	Type	With microprocessor based BLISS EAR Monitor / Inbuilt								
	DG parameter monitoring display	On BLISS EAR monitor - Volts line to line & line to neutral , Amps, Hz, Hour, kW, KWH, kVA, PF.								
	Engine parameter monitoring display	On BLISS EAR monitor- Oil pressure, oil temp,coolant temp,fuel level, battery voltage & charging status, engine speed								
	Functions	Manual Start/Stop, Emergency Stop, Cooling time, LCD Display, acknowledgment & Fault Reset.								
	Protection	Short Circuit, Over load MCB, MCB's for control circuit.,						Short Circuit, Over load, MCCB with shunt coil for power ckt, MCB's for control circuit.		
BATTERY	Safeties	Low Lube Oil Pressure, High Coolant Temperature, Radiator coolant level, Over load, Under& over voltage, Under & over frequency Auto Shut Down, Visual & Audio Alarm against Fault.								
	Make	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	Exide Express /Reputed	
	Type	MAINTENANCE FREE								
	Rating (AH)	88	88	88	88	88	88	88	88	
	Quantity(Nos.)	1	1	1	1	1	1	1	1	
EXHAUST SYSTEM	Charging Facility	Charging Alternator								
	Battery metering	Ammeter, Voltmeter built in BLISS EAR Monitor								
	Silencer type	Residential								
FUEL TANK	Location	Inside canopy in Radiator Duct								
	Exhaust pipe size in mm	75	75	75	75	75	90	90	90	
	Type	Drag type in base frame								
CANOPY	Capacity (Liters)	50	50	65	65	65	75	75	75	
	Type	BOLTED								
	Sheet metal	CRCA								
	Draft	Forced								
	Insulation	FOAM								
OTHER ITEMS	Noise level at 1 m	75 DB @ 1 Meter In line with CPCB norms								
	Base frame	Pressed CRCA Channel								
	AVMs	4	4	4	4	4	4	4	4	
	Emergency stop	YES	YES	YES	YES	YES	YES	YES	YES	
Internal Lights	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										