A.R.JUBAILI&CO



J20 KVA Genset

Output Ratings		
Generating Set Model	Prime	Standby
380-415V, 3 ph, 50 Hz, 1500rpm	20 kVA	22 kVA
	16 KW	17.6 KW

Rating Defenitions

Prime Power - Model J20

These ratings are applicable for supplying continuous electrical power in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply %10 overload power for 1 hour in 12 hours.

Standby Power - Model J20

These ratings are applicable for supplying continuous electrical power in event of a utility power failur. No overload is permitted on these ratings. The alternator on this model is peak continuous rated.

ALTERNATOR DATA	
Make	Leroy Somer
Model	LSA40M5 / TAL040F
No. of bearings	1
Insulation class	Н
Total Harmonic Content	at no load <3.5% - on load <2%
Wires	12
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (wdg 6)
AVR Model	R220/R120
Overspeed	2250 mn ⁻¹
Voltage Regulation (steady)	±1%
Short Circuit Capacity	-

AREP Excitation System Available as Optional.



Generating set picture may include optional accessories

ENGINE / TECHNICAL DATA	ı	
Engine Make	Perkins	
Engine Model	404A-22G1	
Governing Type	Mechanical	
Number of Cylinders	4	
Cylinder Arrangement	Vertical in line	
Bore and Stroke mm	84 x 100	
Displacement / Cubic Capacity litres	2.216	
Induction System	Naturally Aspirated	
Cycle	4 stroke	
Combustion System	Indirect Injection	
Compression Ratio	23.3:1	
Rotation	Anti-clockwise, viewed on flywheel	
Cooling System	Water - cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	Prime	Standby
Gross Engine Power kW (hp)	18.7(25.1)	20.6(27.6)
Fuel Consumption @ 50% load L/hr	2.9	-
@ 75% load L/hr	4.0	-
Fuel Consumption @ 50% load L/hr	5.3	6.1
Total Lubrication System Capacity litres	10.6	10.6
Total Coolant Capacity (inc. radiator) litres	7.0	7.0
Exhaust Temperature: °C	445	505
Radiator Cooling Air Flow (Min): m3/sec	0.49	0.49
Combustion Air Flow: m3/min	1.45	1.45
Exhaust Gas Flow: m3/min	3.64	3.64
Fuel Tank Capacity: litres	50	50

Note: Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. De-ration may apply, please consult your dealer for specific site ratings.

Dimensions and Weights			
Length cm	Width cm	Height cm	Weight* kg (wet)
140	52	132	475

Standard Specifications

1. ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

2. ENGINE FILTRATION SYSTEM

- Cartridge Type dry air filter.
- Cartridge Type fuel air filter
- Full flow lube oil filter.

All filters have replaceable elements.

3. COOLING RADIATOR

Radiator and cooling fan, designed to cool the engine at high ambient temperature

----, ---, -----

Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level	20 (dB)
Maximum allowable back pressure	10.2(kPa)

5. CIRCUIT BREAKER TYPE

ABB 3 pole MCCB (4 pole is optional)

6. ALTERNATOR

Perkins four stroke heavy duty high performance industrial type diesel engine.

- 6.1 INSULATION SYSTEM
- · The insulation system is Class H.
- All windings are impregnated in either triple dip thermosetting liquid, oil and acid resisting polyester vanish or vacuum pressure impregnated with a special polyester resin.
- Heavy coat of antitracking vanish additional protection against moisture or condensation.

6.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at + - 0.5%. Nominal adjustment by means of a trim pot incorporated on the AVR.

6.3 MOTOR STARTING

An overload capacity equivalent to 300% of the full Load. Impedance at Zero Power Factor can be sustained for 10 seconds, when AREO or PMG option is fitted.

7. MOUNTING ARRANGEMENT

7.1 BASE FRAME

The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

7.2 COUPLING

The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

7.3 ANTI-VIBRATION MOUNTING PADS

Anti-Vibration pads are affixed between the Engine/Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

7.4 SAFETY GUARDS

The fan & fan drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

8. FACTORY TESTS

- The Generating set is load tested before dispatch
- All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch

9. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

10. DOCUMENTATIONS

Operation & Maintenance manual, circuit wiring diagrams and Commissioning / Fault finding instruction leaflets are accompanied with the Generator.

11. QUALITY STANDARDS

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VdE0530, NEMA MG 1.22 and ISO 8528.

12. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.

In line with continuous product development, we reserve the right to change specifications without notice.

We offer a range of optional features & accessories to tailor our generating sets to meet you power needs.

Generating Set Options

Engine

- Electronic Governor
- · Manual Oil Drain Pump
- Coolant Heater and Thermostat
- Exhaust Temperature Monitoring

Alternator

- Alternator Space Heater
- Auxiliary Winding

Cooling system

- Remote Radiator Cooling
- Hot and Fresh Air Ducting

Exhaust Options (open unit)

- Exhaust Silencer Residential
- (Noise Attenuation 25 18 dBA)
- Exhaust Silencer Critical (Noise Attenuation 34 -25 dBA)

Fuel Water Separator

Fuel options

- Free Standing fuel tank delivered loose
- Bundled Retention Tank
- Manual and/or automatic fuel pump
- Fuel Tank Level Switch
- High Fuel Level Warning
- Low Fuel Level Warning
- · Low fuel Level Shutdown

Electrical System

- Battery Charger 240 V/ 12 V, 10 A
- Analog Metering
- 4 Pole Circuit Breaker
- Battery Isolator Switch
- Automatic Mains Failure Kit
- Manual & Automatic Transfer Switch Panel
- PMG Kit.
- Load Bank

Enclosed unit

- Weather Proof Enclosure
- Sound Proof Enclosure
- Room Insulation
- Sand filters for tropical climate

Voltage Connections

- 440 / 254 V
- 416 / 240 V
- 400 / 230 V
- 380 / 220 V
- 220 / 127 V
- 200 / 115 V • 190 / 110 V

Genuine spares

For further information on all of the standard and optional features accompanying this product please contact your local dealer or visit www.Jubaili.com



Showroom: Airport Highway, Plaza 1, Bldg. Gr. Floor, Tel/Fax: +961 1 840209/ 224/ 228 - Mobile: +961 3 758392

P.O.Box: 14-5143 Beirut

24/7 Hotline Maintenance: +961 71 911455