# A.R.JUBAILI&CO



# J100 KVA Genset

Output Ratings		
Generating Set Model	Prime	Standby
380-415V, 3 ph, 50 Hz, 1500rpm	100 kVA	110 kVA
	80 KW	88 KW

# **Rating Defenitions**

## Prime Power - Model J100

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 J100

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	LSA44.3S5 / TAL044D
No. of bearings	1
Insulation class	н
Total Harmonic Content	at no load <3.5% - on load <5%
Wires	6
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3 (n°3)
AVR Model	R250/R120
Overspeed	2250 mn <sup>-1</sup>
Voltage Regulation (steady)	± 1%
Short Circuit Capacity	-

AREP Excitation System Available as Optional.



Generating set picture may include optional accessories

ENGINE / TECHNICAL DATA		
Engine Make	Per	kins
Engine Model	1104C-4	I4TAG2
Governing Type	Electi	onic
Number of Cylinders		1
Cylinder Arrangement	Vertica	l in line
Bore and Stroke mm	105	x 127
Displacement / Cubic Capacity litres	4.4	1
Induction System	Turbocharge	ed, air to air
Cycle	4 stro	oke
Combustion System	Direct Ir	ijection
Compression Ratio	18.	2:1
Rotation	Anti-clockwise, vie	wed on flywheel
Cooling System	Water -	cooled
Frequency and Engine Speed	50Hz &	1500rpm
	Prime	Standby
Gross Engine Power kW (hp)	Prime 93.6 (125.5)	<b>Standby</b> 103 (138)
Gross Engine Power kW (hp) Fuel Consumption @ 50% load L/hr		
	93.6 (125.5)	
Fuel Consumption @ 50% load L/hr	93.6 (125.5) 11.2	
Fuel Consumption @ 50% load L/hr @ 75% load L/hr	93.6 (125.5) 11.2 17.1	103 (138) - -
Fuel Consumption @ 50% load L/hr @ 75% load L/hr Fuel Consumption @ 50% load L/hr	93.6 (125.5) 11.2 17.1 22.6	103 (138) - - 24.9
Fuel Consumption @ 50% load L/hr @ 75% load L/hr Fuel Consumption @ 50% load L/hr Total Lubrication System Capacity litres	93.6 (125.5) 11.2 17.1 22.6 8	103 (138) - - 24.9 8
Fuel Consumption @ 50% load L/hr @ 75% load L/hr Fuel Consumption @ 50% load L/hr Total Lubrication System Capacity litres Total Coolant Capacity (inc. radiator) litres	93.6 (125.5) 11.2 17.1 22.6 8 12.6	103 (138) - - 24.9 8 12.6
Fuel Consumption @ 50% load L/hr @ 75% load L/hr Fuel Consumption @ 50% load L/hr Total Lubrication System Capacity litres Total Coolant Capacity (inc. radiator) litres Exhaust Temperature: °C	93.6 (125.5) 11.2 17.1 22.6 8 12.6 514	103 (138) - - 24.9 8 12.6 543
Fuel Consumption @ 50% load L/hr @ 75% load L/hr Fuel Consumption @ 50% load L/hr Total Lubrication System Capacity litres Total Coolant Capacity (inc. radiator) litres Exhaust Temperature: °C Radiator Cooling Air Flow (Min): m3/sec	93.6 (125.5) 11.2 17.1 22.6 8 12.6 514 2.76	103 (138) - - 24.9 8 12.6 543 2.76

**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)
225	73	134	1127

	Standard	Specifications			
1. ENGINE Perkins four stroke heavy duty high performance industrial type diesel		4. EXHAUST SYSTEM Heavy duty Industrial Exhaust S	4. EXHAUST SYSTEM Heavy duty Industrial Exhaust Silencer		
engine. 2. ENGINE FILTRATION SYSTEM		Silencer noise reduction leve	· · · · · · · · · · · · · · · · · · ·		
Cartridge Type dry air filter.     Cartridge Type fuel air filter.     Full flow lube oil filter. All filters have replaceable elements.		Maximum allowable back pr			
3. COOLING RADIATOR Radiator and cooling fan, designed to cool the engine a temperature	t high ambient	ABB 3 pole MCCB (4 pole is c	ptional)		
<ul> <li>6. ALTERNATOR</li> <li>Perkins four stroke heavy duty high performance indus engine.</li> <li>6.1 INSULATION SYSTEM</li> <li>The insulation system is Class H.</li> <li>All windings are impregnated in either triple dip therm and acid resisting polyester vanish or vacuum pressure special polyester resin.</li> <li>Heavy coat of antitracking vanish additional protection or condensation.</li> </ul>	osetting liquid, oil impregnated with a	The fully sealed Automatic Voltage F Regulation at + - 0.5%. Nominal adju incorporated on the AVR. 6.3 MOTOR STARTING An overload capacity equivalent to 3	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		
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.		Guard protected for personnel prote 8. FACTORY TESTS • The Generating set is load tested b • All protective devices control functi simulated. The generator and its sys 9. EQUIPMENT FINISHING All mild steel components are fully d	<ul> <li>The fan &amp; fan drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.</li> <li>8. FACTORY TESTS</li> <li>The Generating set is load tested before dispatch</li> <li>All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch.</li> </ul>		
<ul> <li>10. DOCUMENTATIONS</li> <li>Operation &amp; Maintenance manual, circuit wiring diagram Commissioning / Fault finding instruction leaflets are at the Generator.</li> <li>11. QUALITY STANDARDS</li> <li>The equipment meets the following standards: BS4999 60034, VdE0530, NEMA MG 1.22 and ISO 8528.</li> <li>We offer a range of optional feature</li> </ul>	ccompanied with , BS5000, BS5514 IEC	of 12 months. Warranty of the equipu warranty terms & conditions. In line with continuous product deve change specifications without notice	lopment, we reserve the right to e.		
Generating Set Options					
Engine • Electronic Governor • Manual Oil Drain Pump • Coolant Heater and Thermostat • Exhaust Temperature Monitoring	Bundled Retention	iel tank delivered loose on Tank utomatic fuel pump	Enclosed unit • Weather Proof Enclosure • Sound Proof Enclosure • Room Insulation • Sand filters for tropical climat		

#### 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)

- c iuei 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

# **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



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