POWER & Co Engineering Ltd

JP300

POWERED BY:

Perkins Diesel Power

LEROY SOMER

STANDARD SPECIFICATIONS

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

2. ENGINE FILTRATION SYSTEM
- Cartridge type dry air filter.
- Two Cartridge type fuel filters.
- Full flow lube oil filter.

All filters have replaceable elements.

3. COOLING RADIATOR
Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors)

4. EXHAUST SYSTEM
Heavy duty Industrial Exhaust Silencer

Silencer noise reduction level	13 (dB)
Maximum allowable back pressure	10.0 (kPa)

5. CIRCUIT BREAKER TYPE
ABB 3 pole MCCB.4 pole is optional)

(contd.)

GENERATING SET MODEL (JP300)		
Output Ratings	Prime	Standby
415-380V, 3 ph, 50 Hz, 1500 rpm	308 KVA	337 KVA
	246.4 KW	269.6 KW

Alternators ratings may change at different voltages.

Ratings at 0.8 Power Factor

ALTERNATOR DATA	
Make	Leroy Somer
Model	TAL046F
No. of bearings	1
Insulation class	H
Total Harmonic Content	<%3.5
Wires	6
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	3/2 (n° 6)
AVR Model	R150
Overspeed	2250 mn
Voltage Regulation (steady)	± %1
Short Circuit Capacity	-

AREP & PMG Excitation System Available as Optional.

ENGINE / TECHNICAL DATA		
Engine Make	Perkins	
Engine Model	1506A-E88TAG5	
Governing Type	Electronic	
Number of Cylinders	6	
Cylinder Arrangement	Vertical in line	
Bore and Stroke mm	112 x 149	
Displacement / Cubic Capacity litres	8.8	
Induction System	Turbocharged aftercooled	
Cycle	4 stroke	
Combustion System	Direct Injection	
Compression Ratio	16.1:1	
Rotation	Anti-clockwise, viewed on flywheel	
Cooling System	Water - cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	Prime	Standby
Gross Engine Power kW	281	307
Fuel Consumption @%50 load L/hr	33	-
@ %75 load L/hr	48.2	-
@ %100 load L/hr	64.9	73.1
Total Lubrication System Capacity litres	41	41
Total Coolant Capacity litres	33.2	33.2
Boost Pressure Ratio	3.3	3.6
Exhaust Temperature °C	561	574
Radiator Cooling Air Flow (Min) m^3/sec	6.16	6.16
Combustion Air Flow m^3/min	17.0	18.4
Exhaust Gas Flow: m^3/min	45.1	50.0
Fuel Tank Capacity: litres	500	500

CONTROL PANEL	
Make	Deep Sea
Model	DSE6110

The DSE6110 is an Auto Start Control Module for single genset applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be programmed using the front panel or by using the DSE configuration suite PC software.

Metering and Alarm indications:
- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) - Optional
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- Loss of magnetic pick-up signal - Optional
- Low DC voltage
- CAN diagnostics and CAN fail/error

(Please refer to DSE 6110 brochure for more details)

DIMENSIONS AND WEIGHT			
Lengthcm	Widthcm	Heightcm	Weight*kg (wet)
313	106	178	2378

* For skid mounted genset without enclosure

wet weight = with lube oil and coolant

AN INSPIRED DESIGN TO MEET YOUR NEEDS

POWER & Co Engineering Ltd

JP300

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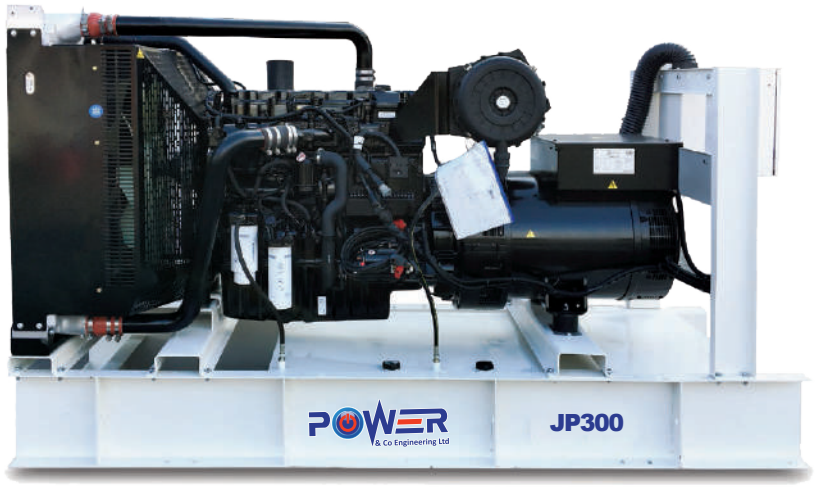

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RATINGS DEFINITION

Prime Power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power.%10 overload power is available for 1 hour in 12 hours continuous operation.

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

STANDARD REFERENCE CONDITIONS

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

Some of the specifications are not standard on all Genset models.

AVAILABLE OPTIONS & ACCESSORIES

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

OPTIONS

- A variety of generating set control and synchronizing panels
- Additional protection alarms and shutdowns
- Water fuel seperator
- Water jacket heater
- Battery charger

ACCESSORIES

- Genuine spare parts
- Load banks
- Auxiliary fuel tanks
- Manual & automatic transfer switches

Distributed and Serviced by:

POWER & Co Engineering Ltd

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

Location: 04 Spintex Road opposite Melcom Plus Address: P . O . Box CT 10937 Cantonments-Accra.
Tel: 0302 812 718 Hotline: 0242383838 / 054100022 Email: info@powerandco.net
Web: www.powerandco.net

BSI REGISTERED ISO 9001: 2008 FM 56710

JET Generators are assembled in facilities certified to ISO 9001

2019/2409

STANDARD SPECIFICATIONS

6. FUEL SYSTEM

On Generating Sets up to 700 KVA, the baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

7. ALTERNATOR

7.1 INSULATION SYSTEM

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

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at ±1%. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING

An overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds, when PMG option is fitted.

8. MOUNTING ARRANGEMENT

8.1 BASE FRAME

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

8.2 COUPLING

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

8.3 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.

8.4 SAFETY GUARDS

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

9. FACTORY TESTS

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

10. EQUIPMENT FINISHING

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

11. DOCUMENTATIONS

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

12. QUALITY STANDARDS

The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG1.22 and ISO8528.

13. 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.

(check warranty statement for more details, as it may vary for different countries)

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