

# Perkins 250KVA

GENERATING SET MODEL (JP9)				
Output Ratings	Prime	Standby		
380-415 V, 3 ph, 50 Hz, 1500 rpm	250 K	275 K		
	200 KW	220 KW		

Ratings at 0.8 Power Factor

ENGINE / TECHNICAL DATA			
Engine Make	Perkins		
Engine Model	1206A-E70TTAG3		
Governing Type	Electronic		
Number of Cylinders	6		
Cylinder Arrangement	Vertical in line		
Bore and Stroke mm	105 x 135		
Displacement / Cubic Capacity litres	7.01		
Induction System	Series Turbocharged, air to air charge cooled		
Cycle	4 stroke		
Combustion System	Direct Injection		
Compression Ratio	15.8:1		
Rotation	Anti-clockwise, viewed on flywheel		
Cooling System	Water - cooled		
Frequency and Engine Speed	50Hz & 1500rpm		
	Prime	Standby	
Gross Engine Power kW (hp)	226.2	248.6	
Fuel Consumption @ 50% load L/hr	28.1	-	
@ 75% load L/hr	41.5	-	
@ 100% load L/hr	56.9	64.5	
Total Coolant Capacity (inc. radiator) litres	25	25	
Exhaust Temperature: °C	515.8	511	
Radiator Cooling Air Flow (Min): m /sec	4.42	4.42	
<b>Combustion Air Flow:</b> m <sup>3</sup> /min <sup>3</sup>	13.5	15.7	
Exhaust Gas Flow: m <sup>3</sup> /min	30.9	33.66	
Fuel Tank Capacity: litres	365	365	

#### ALTERNATOR DATA (Leroy Somer OR Stanford) Make Leroy Somer Model TAL 046D No. of bearings 1 **Insulation class** Н **Total Harmonic Content** <3.5% Wires 6 Ingress Protection IP23 SHUNT **Excitation System** Winding Pitch 2/3 (n° 6) **AVR Model** R150 2250 mn<sup>-1</sup> **Overspeed** Voltage Regulation (steady) ± 1%

Short Circuit Capacity -

PMG Excitation System Available as Optional.

CONTROL PANEL			
Deep Sea			
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 DSE6110 brochure for more details)

\* For skid mounted genset with enclosure

Width cm

94

**DIMENSIONS AND WEIGHT** 

Length cm

263

## STANDARD SPECIFICATIONS

1. ENGINE	2. ENGINE FILTRATION System	3. COOLING RADIATOR	4. EXHAUST SYSTEM	5. CIRCUIT BREAKER TYPE
Perkins four stroke heavy duty high performance diesel engine industrial type.	<ul> <li>Cartridge type dry air filter.</li> <li>Cartridge type fuel filter.</li> <li>Full flow lube oil filter.</li> </ul>	Cartridge type fuel filter.       complete with safety guards,         Full flow lube oil filter.       designed to cool the engine at         Water filter.       high ambient temperatures         I filters have replaceable       (consult your dealer for	Heavy duty Industrial Exhaust Silencer	ABB 3 pole MCCB or Schneider (4 pole is optional)
• W	Water filter.     All filters have replaceable     elements.		Silencer noise reduction level         12 (dB)           Maximum allowable back pressure         10 (kPA)	(contd.)

Height cm

188

Weight\* kg (wet)

1852

wet weight = with lube oil and coolant







## **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 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.

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

## **GET IN TOUCH**

## Phone Number :

+965 97763407

#### 🖻 Email Address :

support@kontrolc.com

## O Address Location :

2nd floor Dar Al Awadi Ahmed Jaber Street Sharq, Kuwait

## **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  $\pm 0.5\%$ . 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 AREP 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 MG 1.22

#### **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.



LEROY\* SOMER