

# Perkins 150KVA

GENERATING SET MODEL (JP9)		
Output Ratings	Prime	Standby
380-415 V, 3 ph, 50 Hz, 1500 rpm	150 KVA	165 KVA
	120 KW	132 KW

Ratings at 0.8 Power Factor

ENGINE / TECHNICAL DATA	D. 11		
Engine Make	Perkins		
Engine Model	1106A-70		
Governing Type	Mechar	nical	
Number of Cylinders	6		
Cylinder Arrangement	Vertical i	n line	
Bore and Stroke mm	105 x 135		
Displacement / Cubic Capacity litres	7.01		
Induction System	Turbocharged, air to air charge cooled		
Cycle	4 stroke		
Combustion System	Direct Injection		
Compression Ratio	16:1		
Rotation	Anti-clockwise, viewed on flywheel		
Cooling System	Water - cooled		
Frequency and Engine Speed	50Hz & 1500rpm		
	Prime	Standby	
Gross Engine Power kW (hp)	136 (182.3)	149.1 (200)	
Fuel Consumption @ 50% load L/hr	16.4	-	
@ 75% load L/hr	24.7	-	
@ 100% load L/hr	33.4	36.1	
Total Lubrication System Capacity litres	18	18	
Total Coolant Capacity (inc. radiator) litres	21	21	
Exhaust Temperature: °C	484	484	
Radiator Cooling Air Flow (Min): m <sup>3</sup> /sec	4.7	4.7	
Combustion Air Flow: m <sup>3</sup> /min	10.2	10.67	
Exhaust Gas Flow: m <sup>3</sup> /min	23.78	25.53	
Fuel Tank Capacity: litres	270	270	

DIMENSIONS AND WEIGHT				
Length cm	Width cm	Height cm	Weight* kg (wet)	
250	80	155	1473	
* For skid mounted genset w	rith enclosure		wet weight = with lube oil and coolant	

ALTERNATOR DATA (Leroy Somer OR Stanford)		
Make	Leroy Somer	
Model	TAL 044J	
No. of bearings	1	
Insulation class	Н	
<b>Total Harmonic Content</b>	at no load <3.5% - on load <5%	
Wires	6	
Ingress Protection	IP23	
Excitation System	SHUNT	
Winding Pitch	2/3 (n° 3)	
AVR Model	R120	
Overspeed	2250 mm <sup>1</sup>	
Voltage Regulation (steady)	±1%	
Short Circuit Capacity _		
PMG Excitation System Available as Optional.		

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 DSE6110 brochure for more details)

For skid mounted genset with encl

# 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>Two Cartridge type fuel filter.</li> </ul>	Radiator and cooling fan, complete with safety guards, designed to cool the engine at	Heavy duty Industrial Exhaust Silencer	ABB 3 pole MCCB or Schneider (4 pole is optional)
	• Two Full flow lube oil filter. All filters have replaceable elements.	high ambient temperatures (consult your dealer for de-ration factors)	Silencer noise reduction level         12 (dB)           Maximum allowable back pressure         6 (kPA)	(contd.)







# **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.

