



Generating Set pictured may include optional accessories

Perkins

Diesel Power

GENERATING SET MODEL (JP135)		
Output Ratings	Prime	Standby
380-415 V, 3 ph, 50 Hz, 1500 rpm	135 KVA	149 KVA
	108 KW	119.2 KW

Ratings at 0.8 Power Factor

ENGINE / TECHNICAL DATA	Perl	kins
Engine Make		
Engine Model		-70TG1
Governing Type		anical
Number of Cylinders	6	
Cylinder Arrangement	7 0. 0.00	ıl in line
Bore and Strokemm	105 >	c 135
Displacement / Cubic Capacityitres	7.0	01
Induction System	Turboo	charged
Cycle	4 str	roke
Combustion System	Direct I	njection
Compression Ratio	18.2	2:1
Rotation	Anti-clockwise,	viewed on flywheel
Cooling System	Water - cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	Prime	Standby
Gross Engine PowerkW (hp)	123.7	136.9
Fuel Consumption @ 50% loadL/hr	15.9	-
@ 75% load L/hr	22.7	-
@ 100% load L/hr	30.28	33.8
Total Lubrication System Capacityitres	16.5	16.5
Total Coolant Capacity (inc. radiator)itres	21	21
Exhaust Temperature:°C	576	576
Radiator Cooling Air Flow (Min)m³/sec	3.03	3.03
Combustion Air Flowm³/min	7.64	8.09
Exhaust Gas Flow:m³/min	20.75	22.66
Fuel Tank Capacity:litres	260	260

DIMENSIONS AND WEIGHT			
Lengthcm	Widthcm	Heightcm	Weight*kg (wet)
234	80	140	1438

* For skid mounted genset without enclosure

STANDARD SPECIFICATIONS

1. ENGINE

Perkins four stroke heavy duty high performance industrial typdiesel engine.

2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filter.
- Two Cartridge type fuel filters.
- Two Full flow lube oil filters.

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	12 (dB)
Maximum allowable back pressu	e 6.0 (kPa

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

ALTERNATOR DATA		
Make	Leroy Somer	
Model	TAL 044H	
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	R120	
Overspeed	2250 mn¹	
Voltage Regulationsteady)	± 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

wet weight = with lube oil and coolant

- Loss of magnetic pick-up signaOptional
- · Low DC voltage
- CAN diagnostics and CAN fail/error

(Please refer to DSE6110 brochure for more details)





POWERED BY:





Generating Set pictured may include optional accessories

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

Distributed and Serviced by:



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

JET Generators are assembled in facilities certified to ISO 9001

All information in this document is substantially correct at time of printing and may be altered subsequently.

AN INSPIRED DESIGNTO MEET YOUR NEEDS

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 REGULATORVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at $\pm 1\%$. 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 hen 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.

. 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 and ISO 8528.

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)