



OVERSEAS TRADING SERVICES
O.T.S.



Generator Set Data Sheet

MPG100KVA

PK@50Hz100KVA/80KW

Powered by



Main Features



DIESEL GENERATING
SET



PERKINS
1104C-44TAG2



400/230V,
380/220V



3 Phase
50 Hz



1500rpm



4CYLINDERS



8 LITRE



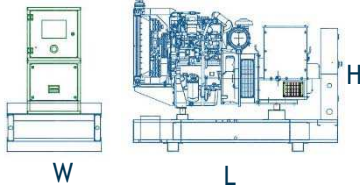
12.6 LITRE

Standby Power: 110 KVA - 88 KW

Prime Power: 100KVA - 80 KW

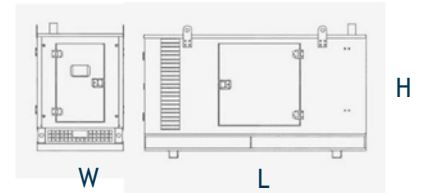
Open Skid

Length (L) 210 cm
Height (H) 140 cm
Width (W) 76 cm
Weight 1100 kg
Daily Tank 150 L



Sound Proof

Length (L) 275 cm
Height (H) 142 cm
Width (W) 110 cm
Weight 1920 kg
Daily Tank 205 L



Acoustic pressure level @3m

75 dBA

ENGINE: PERKINS 1104C-44TAG2

Engine power output	90 kWm-120 hp
Cooling System	Water Cooled
Displacement / Capacity	4.41 Liter
No. of cylinders	4
Cylinder Arrangement	Vertical In line
Induction System	Turbocharged, air to air
Bore and Stroke	105 x 127 mm
Cycle	4 stroke
Combustion System	Direct Injection
Compression Ratio	18.2:1
Rotation	Anti-clockwise, viewed on flywheel
Frequency and Engine Speed	50Hz & 1500rpm

Starting voltage	12V
Governor	Electronic
Oil capacity	8 Liter
Coolant capacity	12.6 Liter
12 V D.C. starter and charge alternator	
Replaceable fuel filter, oil filter and dry element air filter	
Cooling radiator and fan	
Starter battery (maintenance free)	
Fuel consumption at 100% load	22.6 L/hr.
Fuel consumption at 75% load	17.1 L/hr.
Fuel consumption at 50% load	11.2 L/hr.

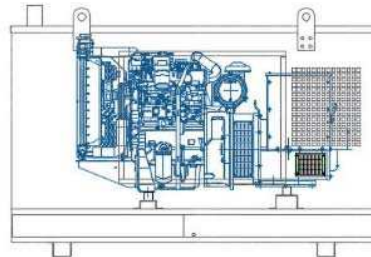
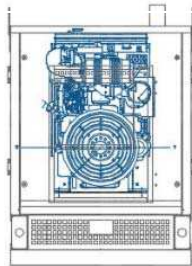


ALTERNATOR: LEROY SOMER

Rating	100KVA	Model	TAL044D
No. of bearing	1	Insulation class	H
Total Harmonic Content	At no load<3.5% -no load<5%	Wires	6
		Excitation System	SHUNT
Ingress Protection	IP23	AVR Model	R120
Winding Pitch	2/3(n° 3)	Voltage Regulation	±1%
Over-speed	2250 mn ⁻¹		
Circuit Breaker Capacity	MCCB 160Amps		

STANDARD CANOPY

Sound Level	75 dBA @ 3 meters in free space
Design	Rigid canopy base manufactured by black steel metal sheets welded on canopy body with internal Reinforcement and bolted on the body. 3 service doors with stainless steel door locks. Stainless steel heavy duty door hinges. Black steel canopy body – 2mm and 3mm treated with greasing phosphate and anticorrosion treatment with electro static power coating.
Connection	Flexible
Sound isolation	Rockwool with perforated sheets
Muffler	Muffler with rain cap



CONTROL (MONITORING) SYSTEM: DEEP SEA

Control panel model	DSE6010 The DSE6010 is an Auto Start Control Module for single gen-set 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	<ul style="list-style-type: none"> • Generator frequency • Under-speed, Over-speed • Generators volts (L-L, L-N) • Generator current • Engine Oil pressure • Fail to start/ stop • Emergency stop • Failed to reach loading voltage / frequency 	<ul style="list-style-type: none"> • Engine coolant temperature • Hours run counter • Battery volts • Charge fail • Low DC voltage • CAN diagnostics and CAN fail/ error

Gen-sets can be equipped with different control panels depending on usage, such as: DSE6020, DSE7310, DSE7320 or DSE8610 (Synchronization Panel)



OPTIONAL EQUIPMENTS

ATS (Automatic Transfer Switch)	Alternator Anti-condensation Heater
Water Jacket Heater	Load Bank
Battery Charger	Electrical Fuel Level Sensor
Fuel Water Separator	Fuel Level Protection
Electrical Fuel Transfer Pump	Spare Parts
Battery Heater	Oil Heater

STANDARD SPECIFICATIONS

Warranty	All generating sets are covered under warranty policy for a period of 12 months in line with the manufacturers' warranty policy		
Quality Standards	The equipment meets the following standards: BS4999, BS5514, IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528		
Engine Filtration System	Air filter, Fuel filter, Oil filter. All filters have replaceable elements		
Fuel System	On generating sets up to 650KVA, the base frame design is incorporated with an integral fuel tank with a capacity of approx... 8 hours running at average load. The tank is supplied with fill cap breather, fuel feed and return pipes to the engine and drain plug	Mounting Arrangement	<p>Base Frame: The complete generating set is mounted as a whole in a heavy duty fabricated steel base frame.</p> <p>Coupling: The engine and alternator are directly coupled by means of an SAE flange. The engine flywheel is flexibly coupled to the alternator rotor</p> <p>Anti-Vibration Mounting Pads: Anti-vibration pads are affixed between the engine/ alternator feet and the base frame thus ensuring complete vibration isolation of the rotating assembly</p> <p>Safety Guards: The fan & fan drive along with the battery charging alternator are safety guard protected for personnel protection</p>
Cooling Radiator	Radiator and cooling fan, complete with safety guards, designed to cool the engines at high ambient temperatures		
Exhaust System	Heavy duty industrial exhaust silencer Silencer noise reduction level: 22 (dB) Maximum allowable back pressure: 10 (kPa)		
Documentation	Operation & Maintenance manual, circuit wiring diagrams and commissioning / fault finding instruction leaflets are accompanied with the generator	Factory Tests:	The generating set is load tested before dispatch. All protective devices control functions and site load conditions are simulated. The generator and its systems are checked before dispatch
		Equipment Finishing:	All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability
Assembled in facilities certified to ISO 9001			