


Generator Set Data Sheet
MPG180KVA
PK@50Hz180KVA/144KW

Powered by


Main Features

DIESEL GENERATING SET

**PERKINS
1106A-70TAG3**

V 400/230V,
380/220V

H 3 phase
50 Hz

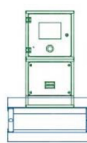
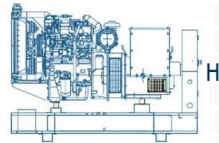
1500rpm

6CYLINDERS

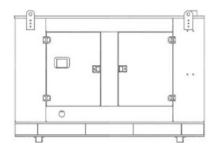
16.5 LITRE

21 LITRE
Standby Power: 200 KVA - 160 KW
Prime Power: 180KVA - 144 KW
Open Skid

Length (L) 270 cm
 Height (H) 150 cm
 Width (W) 80 cm
 Weight 1610 kg
 Daily Tank 225 L


W

L
H
Sound Proof

Length (L) 340 cm
 Height (H) 200 cm
 Width (W) 115 cm
 Weight 2580 kg
 Daily Tank 340 L


W

L
H
Acoustic pressure level @3m
77 dBA
ENGINE: PERKINS 1106A-70TAG3

Engine power output	180.5 kWm-242hp
Cooling System	Water Cooled
Displacement / Capacity	7.01 Liter
No. of cylinders	6
Cylinder Arrangement	Vertical In line
Induction System	Turbocharged, air to air charge cooled
Bore and Stroke	105 x 135 mm
Cycle	4 stroke
Combustion System	Direct Injection
Compression Ratio	16:1
Rotation	Anti-clockwise, viewed on flywheel
Frequency and Engine Speed	50Hz & 1500rpm

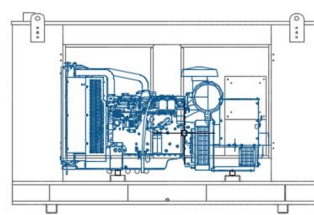
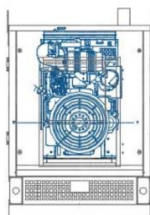
Starting voltage	12V
Governor	Mechanical
Oil capacity	16.5 Liter
Coolant capacity	21 Liter
12 V D.C. starter and charge alternator	
Replaceable fuel filter, oil filter and dry element air filter	
Cooling radiator and fan	
Starter battery (maintenance free)	
Fuel consumption at 100% load	34.8 L/hr.
Fuel consumption at 75% load	31 L/hr.
Fuel consumption at 50% load	20.5 L/hr.

ALTERNATOR: LEROY SOMER

Rating	180KVA	Model	TAL046B
No. of bearing	1	Insulation class	H
		Wires	6
Total Harmonic Content	<3.5%	Excitation System	SHUNT
Ingress Protection	IP23	AVR Model	R150
Winding Pitch	2/3(n° 6)		
Over-speed	2250 mn ⁻¹	Voltage Regulation	±1%
Circuit Breaker Capacity	MCCB 320Amps		

STANDARD CANOPY

Sound Level	77 dBA @ 3 meters in free space
Design	Rigid canopy base manufactured by black steel metal sheets welded on canopy body with internal Re-enforcement and bolted on the body. 4 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 • Engine coolant temperature • Fuel level (warning or shutdown) – Optional • 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)
Water Jacket Heater
Battery Charger
Fuel Water Separator
Electrical Fuel Transfer Pump
Battery Heater

Alternator Anti-condensation Heater
Load Bank
Electrical Fuel Level Sensor
Fuel Level Protection
Spare Parts
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

Base Frame:

The complete generating set is mounted as a whole in a heavy duty fabricated steel base frame.

Coupling:

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

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

Safety Guards:

The fan & fan drive along with the battery charging alternator are safety guard protected for personnel protection

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:

Equipment Finishing:

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

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