



OVERSEAS TRADING SERVICES
O.T.S.



Generator Set Data Sheet

MPG180KVA

PK@50Hz180KVA/144KW

Powered by



Main Features



DIESEL GENERATING SET



PERKINS
1106A-70TAG3



400/230V,
380/220V



3 phase
50 Hz



1500rpm



6CYLINDERS



16.5 LITRE



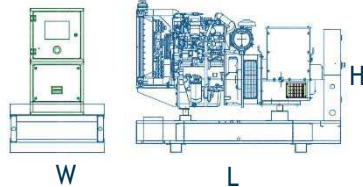
21 LITRE

Standby Power: 200 KVA - 160 KW

Prime Power: 180KVA - 144 KW

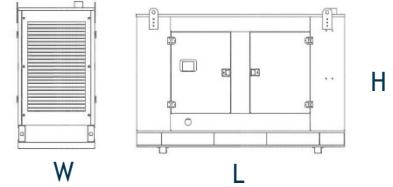
Open Skid

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



Sound Proof

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



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. |



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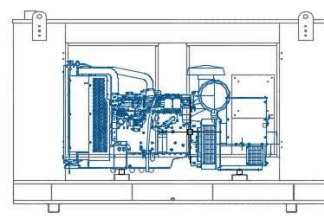
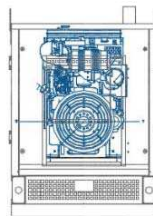
 LEROY SOMER

ALTERNATOR: LEROY SOMER

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