

# Diesel Generating Set Powered by Serkins

# **MP-1813P**

#### **General Features**

- Engine (PERKINS 4012-46TAG3A), Radiator 50<sup>o</sup>C max, belt driven fans, with safety guard
- 24V charge alternator
- Alternator (Stamford, Leroy Somer & Mecc Alte for option), single bearing alternator IP23, insulation class H/H
- Skid and vibration isolators
- Dry type air filter, fuel filter, oil filter
- Main line circuit breaker
- Permanent Magnet Generator (PMG)
- Standard control panel
- Four 12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, industrial muffler

#### PHOTO FOR REFERENCE ONLY



#### Technical Data

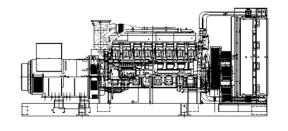
Output Frequency 50 Hz Rated Speed 1500RPM

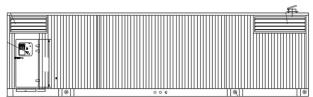
Prime Power 1650KVA/1320KW Standby Power 1812.5KVA/1450KW

Rated Voltage 400/230V

 $\begin{array}{lll} \mbox{Phase} & 3 \\ \mbox{Power Factor} & 0.8 \\ \mbox{Fuel Consumption 100% Load} & 370\mbox{L/Hr} \\ \mbox{Fuel Consumption 75% Load} & 275\mbox{L/Hr} \\ \mbox{Fuel Consumption 50% Load} & 187\mbox{L/Hr} \\ \mbox{Operation Altitude} & \leqslant 1000\mbox{m} \\ \mbox{Ambient Temperature} & \leqslant 50\mbox{\,}^{\circ}\mbox{C} \\ \end{array}$ 







#### Dimension and Weight

Genset Type	Open Frame	Soundproof ISO 40ft HQ
Length(L) (mm)	5050	12192
Width(W) (mm)	2200	2438
Height(H) (mm)	2600	2896
Gross Weight (kg)	13050	18050



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PERKINS 4012-46TAG3A, 4-cycle

135m<sup>3</sup>/min

## MP-1813P

### **Engine Specification**

Manufacturer / Model:

Air Intake System: Turbocharged, Air/Air Cooling Fuel System: Direct Cylinder Arrangement: 12 in V Displacement: 45.842L Bore and Stroke: 160\*190 (mm) 13.0:1 Compression Ratio: Rated RPM: 1500rpm Max. Standby Power at Rated RPM: 1643KW Governor Type: Electronic 350m<sup>3</sup>/min **Exhaust Gas Flow:** 480℃ **Exhaust Temperature:** Max Back Pressure: 5kPa Max Intake Restriction: 4kPa

Cooling fan air flow: 1920m³/min
Total Oil Capacity: 159L
Oil Consumption: 0.51g/KWh
Total Coolant Capacity: 212L

Thermostat:  $71-85^{\circ}$ C Max Water Temperature:  $98^{\circ}$ C

#### **Alternator Specification**

Combustion air flow:

Manufacturer / Model: STAMFORD S7L1D-D4

Number of Phase: 3

Connecting Type: 3 Phase and 4 Wires, "Y" type connecting

Number of Bearing: 1
Protection Grade: IP23

Exciter Type: Brushless, self-exciting

Insulation Class, Temperature Rise: H/H

TIF: < 50
THF: < 2%

Voltage Regulation, Steady State:  $\leq \pm 1\%$ Alternator Capacity: 1650KVA

Alternator Efficiencies: 95.5%
Air Cooling Flow: 2.63m³/s



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### MP-1813P

### **Control System**

#### Standard Deepsea DSE6020 Auto Mains Failure Control Panel

- Manual or Auto Start Module forsingle genset applications.
   Designed to workwith electronic and non-electronicengines, providing advancedengine monitoring and protectionfeatures.
- Includes a back-liticon LCD display whichshows the status of the engine atall times. Monitors enginespeed, frequency, voltage and run hours and also displays the warning and shutdown status.
- Includes extensive outputs andinputs making thisproduct ideal for a wide variety ofapplications. It can eitherbe programmed using the frontpanel or by using DSEPC software.



#### **Optional Deepsea DSE7320 Auto Mains Failure Control Panel**

- Auto Mains (Utility) FailureControl Module suitable for a widevariety of singlegenset applications.
- Displays warnings, shutdownand engine status info onthe back-lit LCD screen, illuminatedLEDs, remote PC. Monitors themains (utility) supply. Includes USB, RS232 and RS485ports for systemexpansion.
- Compatible withelectronic and non-electronicengines and offerflexible inputs, outputs and engineprotections to meet extensive industry requirements.
- Includes enhanced event andperformance monitoring, remotecommunications to reduce engine wear. It can either be programmed using the frontpanel or by using DSEPC software.



#### **Optional Deepsea DSE8610 Auto Paralleling Control Panel**

- Synchronizing Auto Start Control Module for multi-genset loadshare system, designed to synchronize up to 32gensets including electronic and non-electronic engines.
- Monitors thegenset and indicates operationalstatus and fault conditions, automatically starting or stoppingthe engine on load demand or faultcondition.
- System alarms are annunciated on the LCD screen, illuminated LEDand audible sounder.
- Records 250 events logformaintenance. Extensive monitoring, metering and protection features are included as well as comprehensive communication and system expansion options.
- UsingDSE PC Software allowsalteration of the operationalsequences, timers, alarms withallcommunication portsactive.





# Diesel Generating Set Powered by Perkins

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#### **Options**

#### **Engine**

- Water Jacket Preheater
- Water Separator
- Oil Pump
- Oil Preheater
- Battery Charger

#### **Alternator**

- Anti Condensation Heater
- Winding Temp Sensor

#### **Fuel System**

- Daily Fuel Tank
- External Fuel Tank
- Auto Fuel Filling System
- Fuel Level Sensor

#### **Control System**

- Auto Remote Control Panel
- AMF Function Control Panel
- Auto Paralleling Control Panel
- Auto Transfer Switch (ATS)
- ABB breaker

#### **Available Voltages**

- 440/254V
- 415/240V
- 380/220V

#### **Reference Standards**

Generator Set: ISO 8528, CE

Engine: ISO 3046, BS 5514, DIN 6271

Alternator: BS EN 60034, IEC34, BS5000, NEMA MG1-32, VDE 0530, CSA C22.2-100, AS1359

#### Warranty

Mega Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: A. 15 months, counted on the dayMega sold to the first buyer; B. One year after installation; C. 1000 running hours (accumulated); subject to the earlier one. Service and spare parts are available from Mega Power or distributors in your location.