



enpower
engineering company



INNOVATIVE POWER SOLUTIONS

GENERATOR MODEL P13

| | | |
|---------------------------------------|------------------------|----------|
| Frequency/ Speed - Voltage | 50HZ/1500 RPM-230/400V | |
| Prime Power | 13 KVA | 10.4 KW |
| Standby Power | 14.3 KVA | 11.44 KW |



Features

Engine

Perkins, 403D-15G, Made in UK, in accordance to ISO3046, ISO8528, DIN6271

Alternator

Leroy Somer-France / Meccalte-UK Complying to the following norms:CEE/CEI2-3/ EN60034-1/ IEC34-1/ VDE/ BS/CAN/ CSA

Control Panel

Deep Sea, DSE-4520, Made In UK, complying to the norms: comply to the norms BS EN 61000, BS EN 60950, BS EN 60068

Base Frame

Black steel with Anti-vibration pads, Built in fuel tank

Sound Proof Canopy

Modular SPC, Powder Coated, Extremely Durable, Designed to Reduce Sound Level with Maximum Service Accessibility and Minimum Foot Prints

Countrywide Support

Enpower Products are distributed through its dealer Network For more information you may Contact us.

Definition

Standby Power

Standby Power: Continuous running at variable load for duration of an emergency. No overload is permitted on this ratings.

Prime Power

Prime Power: Continuous running at variable load for unlimited periods with 10 % overload 1 hour in any 12 hours Period.

Due to continuous product development, we reserve the right to change specifications at any time without prior notice.

PERKINS ENGINE TECHNICAL DATA

Model: 403D-15G



STRUCTURE

| | |
|----------------------------|--------------|
| Number of Cylinders | 3 |
| Engine Build | In line |
| Bore | 84 mm |
| Stroke | 90 mm |
| Displacement | 1.496 L |
| Compression Ratio | 22.5/1 |
| Aspiration | Natural |
| Cooling | Water Cooled |



FUEL

| | 1500 RPM | 1800 RPM |
|---------------------------------|---|---|
| Fuel Tank | Built in fuel tank for atleast 10 hours operation @ full load | Built in fuel tank for atleast 10 hours operation @ full load |
| Fuel System Fuel Recommended | Direct injection N°2 Diesel | |
| | 1500 RMP | 1800 RPM |



COOLING SYSTEM

| | | |
|---------------------------------|---------|-----|
| Delivery Flow Rate (l/hr) | | |
| Fuel Consumption | | |
| 100% Load (g/kWh-L/hr) | 3.7 | TBA |
| 75% Load (g/kWh-L/hr) | 2.8 | TBA |
| 50% Load (g/kWh-L/hr) | 2 | TBA |
| Engine Coolant Capacity | 6L | |
| Air Flow-Radiator | 420 l/s | TBA |
| Radiator with 50 degree ambient | | |
| Cooling Package & Air Cleaner | | |
| Thermostatically-controlled | | |



AIR INLET

| | |
|---|-------------|
| Air Intake Engine (Clean Filter/Dirty) | 3 / 6.4 KPa |
|---|-------------|



EXHAUST SYSTEM

| | | |
|------------------------------------|----------|-----|
| Exhaust Gas Temperature | 445°C | TBA |
| Exhaust Gas Flow (Prime) | l/ 45.3 | TBA |
| Maximum Exhaust System Back | | |
| Pressure | 10.2 kPa | TBA |
| Stainless Steel exhaust flex- | | |



DC SYSTEM STARTING/CHARGING

Cranking Battery Voltage 12 V

Battery Charging Alternator 65 A

Dc Voltage Monitoring via



Heat Rejection(prime)

Radiated Heat to Ambient 3.2 KW TBA

Heat Rejection to Coolant 11.6 KW TBA

Heat Rejection to Exhaust 9.3 KW TBA

Heat Rejection to intercooler 0 TBA



LUBE SYSTEM

6 L Lubricating System Oil Capacity



GOVERNOR

Mechanical

ALTERNATOR TECHNICAL DATA



Insulation System Class H

Winding Pitch 2/3 to minimize harmonics effects

Number of Poles 4

Number of Bearings Single bearing

RPM 1500 RPM

Power Factor 0.8/1

Regulation ± 1%

Frequency 50 Hz

Voltage Range 380-415 / 220-240

IP Rating (Protection) Ip23

Synchronous, 3/1 phase, Brushless & Self Excited



STRUCTURE

CONTROL MODULE

Deep Sea Model: DSE 4520



INDICATIONS

- ✔ Operating Hours
- ✔ 3 Phase Generator Voltage Sensing & Monitoring
- ✔ Current Protection & Monitoring
- ✔ Power Measurement (kW, kVA, kVA_r, kWh, kVAh, kVA_rh, pf)
- ✔ Frequency Monitoring (Hz)
- ✔ Oil Pressure/Coolant Temperature
- ✔ Battery Voltage Monitoring (DC)
- ✔ Alarm Acknowledge



CONTROL

- ✔ Engine Cool Down Timer
- ✔ Emergency Stop Push button/ Alarm Acknowledge
- ✔ Warm-up Timer
- ✔ Load Switching Timer
- ✔ Engine Cycle Crank



WARNING & SHUTDOWN ALARMS

- ✔ Generator Over/Under Voltage & Frequency
- ✔ Crank Disconnect (Failure to Start)
- ✔ Under/Over Speed
- ✔ Over Current
- ✔ Low Oil Pressure
- ✔ High Water Temperature
- ✔ Low Fuel Level
- ✔ Low Water Level



FEATURES

- ✔ User Friendly
- ✔ Compatible With CAN Engines
- ✔ License Free Software
- ✔ Largest Backlit Icon Display In Its Class
- ✔ Fully Configured Via The Fascia Or Pc Using Usb
- ✔ Efficient Power Save Mode

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www.enpower.com.pk