

# 1104A-44TG2

# APS -P88

## Series

### Generator made by OEM-Perkins

- Every generating set carries a comprehensive test program & report thereon.
- Certifications: ISO 8528/1, ISO 3046/1:1986, BS5514/1, NEMA MG1-22, NEMA MG 1.32-33, IEC 60034, BS 5000 PART 99, VDE 0530, ISO 8528/3, UL 1446, UL 1004, ISO 9001, ISO 14001, AS 1359, IEC34...
- Complete protection functions & safety labels.
- Easy & Economical availability of Spares...
- Advanced digital control system, long service life, easy to operate, low fuel consumption & anti-vibrating isolators
- After Sales support all over Pakistan
- High quality, reliable & complete generating set
- Easy for operation & maintenance

### GENERATOR SET

- Model: APS-P88
- Prime Power: 64-KW 80-KVA
- Standby Power: 88-KVA 70.4-KW
- Configuration: 380-415 V, 3Ph, 50 Hz, 1500 RPM at 0.8 PF

### FUEL CONSUMPTION

- Consumption @ 100% load: 18.7 Ltrs
- Consumption @ 75% load: 14.0 Ltrs
- Consumption @ 50% load: 9.2 Ltrs

### DIMENSIONS, WEIGHT & FUEL TANK (Approx.)

Particulars	Open	Canopy-R	Canopy-S
Length (Inches)	82	84	95
Width (Inches)	29	42	44
Height (Inches)	54	46	46
Net Weight (Kg)	1054	1689	1701
Fuel Tank (L)	-	140	148

### Ratings & Standard Reference Conditions

- Prime Power: Continuous power at variable load, replacing utility power, with 10% overload available for 1 hour every 12 hours.
- Standby Power: Continuous electrical power at variable load during utility power failure. No overload permitted.
- Air Inlet Temperature: at 25°C
- Altitude Capability: De-rating may apply depending on site conditions
- Notes: Some specifications may not be standard on all genset models

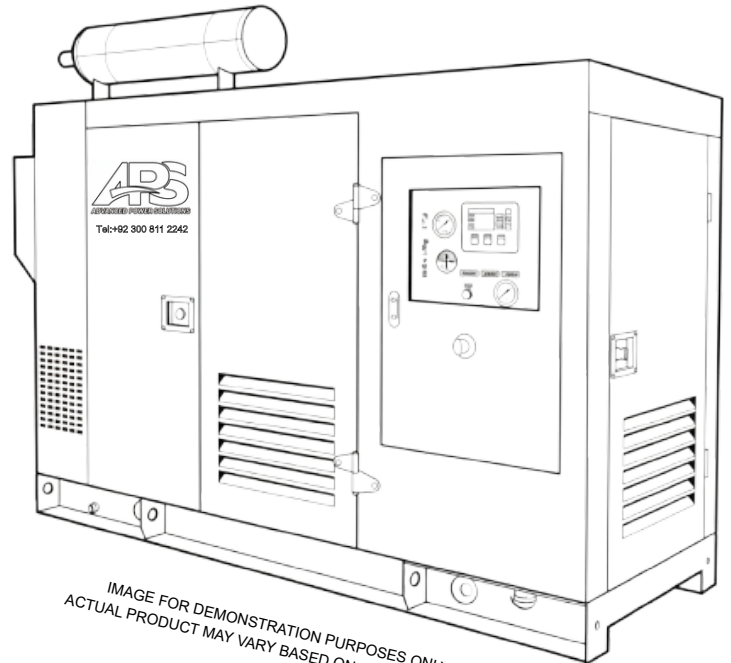


IMAGE FOR DEMONSTRATION PURPOSES ONLY  
ACTUAL PRODUCT MAY VARY BASED ON SPECIFICATIONS.

### ALTERNATOR DATA:

Manufacturer	LEROY SOMER	STAMFORD	Equivalent
Model /Series	TAL Series	TBA	TBA
Frequency /Speed	50 Hz	1500 RPM	
Coupling	Direct	-	
Over speed	2250 mn-1	-	
No. of Bearings	Single Bearing		
AVR Model	R120		
Phase / Poles	± 1%		
Voltage Regulation	3-Phase		
Ingress Protection	IP 23		
Winding Pitch	H		
Insulation Class	Shunt		
Excitation	2/3 (wdg 3)		



# ENGINE SPECIFICATIONS

## ENGINE DATA

- Manufacturer: .....Perkins
- Model: .....1104A-44TG2
- Fuel Type: ..... Diesel
- Recommended Fuel Grade: ..... #2

## Engine Configuration

- Number of Cylinders: .....4
- Cylinder Arrangement: .....Vertical In-Line
- Displacement: ..... 4.4 L
- Cycle: .....4-Stroke
- Aspiration System: .....Turbocharged
- Combustion System: ..... Direct Injection
- Governor Type: .....Mechanical
- Rotation: .....Anti-Clockwise
- Compression Ratio: .....17.25 : 1

## Dimensions & Performance

- Bore: ..... 105 mm
- Stroke: ..... 127 mm
- Rated Speed: .....1500 RPM @ 50 Hz

## Power Output

- Gross Power PRP: .....73.4 kWm / 98 HP
- Gross Power STP: .....80.7 kWm / 108 HP

## Electrical System

- Battery Voltage: .....12 V
- Battery Charging Alternator: .....65 Amps
- Starter Motor: .....3 kW, 12 V

## OTHER INFORMATION:

- ATS /AMF Panel : .....Optional
- External Fuel Tank : .....Optional
- Tractor/Trolley : .....Optional
- Remote Monitoring : .....Optional
- Operating Temperature : .....Up to 50° C
- Low Fuel Level Sensor : .....Available
- 4-Pole Breaker : .....Optional
- Sound Level : .....@ 7M 74 dBs (Approx.)
- Synchronizing System : .....Optional
- Customized Color : .....Optional

## Air & Exhaust System

- Combustion Air Flow: ..... 4.8 m³/min
- Exhaust Gas Flow: ..... 12.5 m³/min
- Exhaust Gas Temperature: ..... 555 °C
- Allowable Back Pressure: ..... 10 kPa
- Exhaust Outlet Size: .....64 mm

## Lubrication System

- Lubricating Oil Capacity: ..... 8 L
- Oil Pressure: .....415 – 470 kPa
- Recommended Oil Grade: .....API CH-4, SAE 15W-40

## Cooling System

- Cooling Type: ..... Water Cooled
- Coolant Capacity: ..... 13 L
- Coolant & Water Ratio: ..... 50 : 50
- Radiator Cooling Air Flow: .....1.48 m³/s (Minimum)
- Thermostat Operating Range: ..... 82 – 93 °C

## Standard Specifications

Component	Details
Engine	Perkins 4-stroke diesel engine
Filtration System	Air, fuel & lube oil filters
Cooling & Exhaust	Radiator with fan & guard
Circuit Breaker	3-pole MCB (4-pole optional)
Fuel System	Integral fuel tank, 5–8 hrs
Alternator	Class H insulated windings
Voltage Regulation	Automatic AVR, ±0.5% regulation
Mounting Arrangement	Frame with anti-vibration support
Factory Tests	Load-tested, protections verified
Documentation	O&M manual, wiring diagrams
Warranty	12 months / 1000 hrs warranty

### Controller Data

Make	Deep Sea-UK
Model	DSE 4520



# CONTROLLER & PROTECTIVE FUNCTIONS

## Controller LCD Display

Component	Deep Sea DSE 4520	Deep Sea DSE 6020
Voltage between Phases (L-L)	✓	✓
Voltage between Neutral and Phase (L-N)	✓	✓
Frequency 3 Phase Current	✓	✓
Real Power (KW) and Apparent Power (KVA)	✓	✓
Power Factor	✓	✓
Engine Speed	✓	✓
Running Hours	✓	✓
Coolant Temperature	✓	✓
Oil Pressure	✓	✓
Battery Voltage	✓	✓
LCD Alarm Indication	✓	✓
3 Phase Mains (Utility) Sensing	✓	✓

## Protecting Functions

Component	Deep Sea DSE 4520	Deep Sea DSE 6020
Emergency Stop Button	✓	✓
High coolant Temperature	✓	✓
Low Oil Pressure	✓	✓
Over Current / Load	✓	✓
Under/Over Speed, Frequency	✓	✓
Mounting Arrangement	✓	✓
Low / High Battery Voltages	✓	✓
Low Fuel Level Warning at 20%	✓	✓

