

404A-22G

APS -P22

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-P22
- Prime Power.....20-KW 16-KVA
- Standby Power22-KVA17.6-KW
- Configuration380-415 V, 3Ph, 50 Hz, 1500 RPM at 0.8 PF

FUEL CONSUMPTION

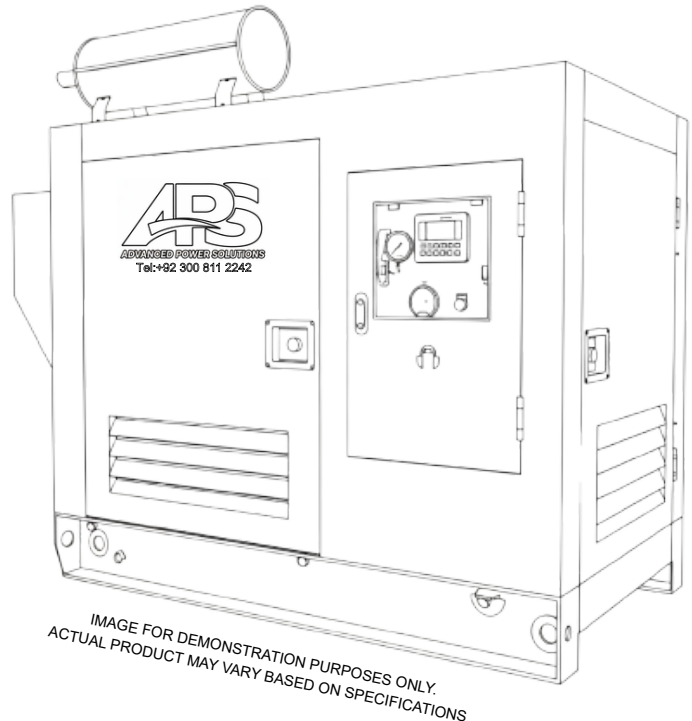
- Consumption @ 100% load 5.3 Ltrs
- Consumption @ 75% load4.0 Ltrs
- Consumption @ 50% load 2.9 Ltrs

DIMENSIONS, WEIGHT & FUEL TANK (Approx.)

Particulars	Open	Canopy-R	Canopy-S
Length (Inches)	54	57	71
Width (Inches)	23	34	36
Height (Inches)	45	48	38
Net Weight (Kg)	532	940	972
Fuel Tank (L)	-	85	78

Ratings & Standard Reference Conditions

- Prime PowerContinuous 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 Temperatureat 25°C
- Altitude Capability De-rating may apply depending on site conditions
- Notes Some specifications may not be standard on all genset models



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: 404A-22G
- Fuel Type: Diesel
- Recommended Fuel Grade: #2

Engine Configuration

- Number of Cylinders: 4
- Cylinder Arrangement: Vertical In-Line
- Displacement: 2.216 L
- Cycle: 4-Stroke
- Aspiration System: Naturally Aspirated
- Combustion System: Indirect Injection
- Governor Type: Mechanical
- Rotation: Anti-Clockwise
- Compression Ratio: 23:3:1

Dimensions & Performance

- Bore: 84 mm
- Stroke: 100 mm
- Rated Speed: 1500 RPM @ 50 Hz

Power Output

- Gross Power PRP: 18.7-KWm /25-HP
- Gross Power STP: 20.6-KWm /27-HP

Electrical System

- Battery Voltage: 12 V
- Battery Charging Alternator: 15 Amps
- Starter Motor: 2 kW, 12 V

OTHER INFORMATION:

- ATS /AMF Panel : Optional
- External Fuel Tank : Optional
- Trailer/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: 1.45 m³/min
- Exhaust Gas Flow: 3.64 m³/min
- Exhaust Gas Temperature: 470°C
- Allowable Back Pressure: 10.2 kPa
- Exhaust Outlet Size: 42 mm

Lubrication System

- Lubricating Oil Capacity: 10.6 L
- Oil Pressure: 252-448 kPa
- Recommended Oil Grade: API CH-4, SAE 15W-40

Cooling System

- Cooling Type: Water Cooled
- Coolant Capacity: 7 L
- Coolant & Water Ratio: 50 : 50
- Radiator Cooling Air Flow: 0.4 m³/s (Minimum)
- Thermostat Operating Range: 82 – 95 °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



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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 and 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%	✓	✓

