

ULTIMATE POWER SOLUTION (FZC)

The world's best dealer for Power Generation, Control System, & Power Solution

POWERED BY:



20 KVA

3 PHASE

50 Hz

24.2 KVA

3 PHASE

60 Hz

GENERATING SET MODEL (UPSP20)

Output Ratings	Prime	Standby
380-415 V, 3ph, 50 Hz, 1500 rpm	20 KVA	22 KVA
	16 KW	17.6 KW
380-415 V, 3ph, 60 Hz, 1800 rpm	24.2 KVA	26.6 KVA
	19.3 KW	21.28 KW

ENGINE / TECHNICAL DATA

Ratings at 0.8 Power Factor

Engine Make	PERKINS
Engine Model	404A-22G1
Governing Type	Mechanical
Number of Cylinder/ Arrangement	4/ Vertical in-line
Bore and Stroke (mm)	84 mm x 90 mm
Compression Ratio	23.3 : 1
Displacement (L)	1.5 L
Aspiration/ Cooling	Naturally Aspirated/ Water cooled
Combustion System	Indirect Injection
Rotation from Flywheel End	Anti-clockwise
Total Lubrication System Capacity	10.6 L
Total Coolant Capacity	7 L
Cycle	4 stroke
Frequency and Engine Speed	50 Hz / 1800 rpm 60 Hz / 1500 rpm
Fuel Consumption	
@50% load	2.9 L/hr 3.5 L/hr
@75% load	4.0 L/hr 4.8 L/hr
@100% load	5.3 L/hr 6.2 L/hr
Exhaust temperature	445 °C 505 °C

ALTERNATOR

Make	UPS / Leroy Somer(TAL)
Model	UPS184G / TAL040F
No. of bearings	1
Insulation	H
Coupling	Direct
Exciter Type	SHUNT
Wires	6/12
Degree of protection	IP23
Winding Pitch	2/3
Overspeed	2250 mn ⁻¹
Voltage Regulation	±1%

CONTROL PANEL

Make	DeepSea
Model	4110/20 SERIES

The DSE 4110/20 Series., is an Auto Start Control for single genset application. It includes a LCD display which clearly shows the status of engine all the times. This module can either programmed using the front panel or by using configuraton sale PC software.

Metering and Alarm Indications:

- Generator frequency
- UnderSpeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- LOW DC voltage
- CAN diagnostic and CAN fail/error



CERTIFIED BY:



20 KVA
3 PHASE

50 Hz

STANDARD SPECIFICATIONS

24.2 KVA
3 PHASE

60 Hz

1. ENGINE

Perkins four stroke heavy duty high performance industrial type diesel engine.

2. ENGINE FILTERATION SYSTEM

- Cartridge type dry air filter.
 - Cartridge type fuel filters.
 - Full flow lube oil filter.
- All filters have replaceable elements.

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-rating factors)

4. EXHAUST SYSTEM

Exhaust gas flow 3.64-9.94 m³/min
Maximum allowable back pressure 5.0 (kPa)

5. CIRCUIT BREAKER TYPE

3 pole MCCB. (4 pole is optional)

6. Fuel System

The baseframe design is incorporated with an integral fuel tank with a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather, fuel feed and return lines to the Engine and drain plug.

7. ALTERNATOR

7.1 INSULATION SYSTEM

- The insulation system is Class H.
- All windings are impregnated in either a triple dip thermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.
- Heavy coat of antitracking varnish additional protection against moisture or condensation.

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)

The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at $\pm 1\%$. Nominal adjustment by means of a trim pot incorporated on the AVR.

8. MOUNTING ARRANGEMENT

8.1 COUPLING

- The Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

8.2 ANTI-VIBRATION MOUNTING PADS

- Anti-Vibration pads are affixed between the Engine/Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.

8.3 SAFETY GUARDS

- The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personnel protection.

9. FACTORY TEST

- 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.

10. EQUIPMENT FINISHING

All mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

11. DOCUMENTATION

Operation & Maintenance manual, Circuit wiring diagrams and Commissioning/Fault Finding instruction leaflets are accompanied with the Generator.

12. QUALITY STANDARDS

The equipment meets the following standards: B84999, B65000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO8528.

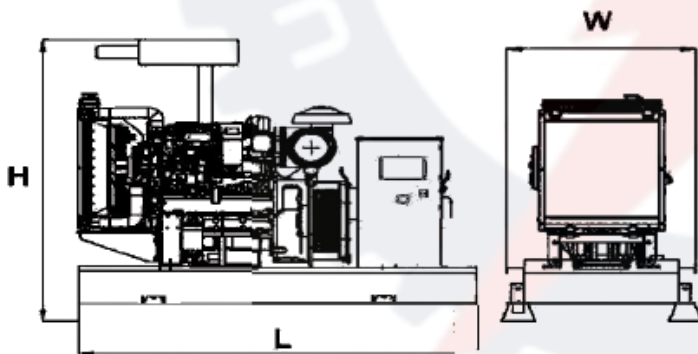
13. WARRANTY

All of the Generating Sets are covered under a warranty policy for a period of 12 months or 1000 working hours, Warranty of the equipment is in line with manufacturers warranty terms & conditions. (check warranty statement for more details, as it may vary for different countries)

In line with continuous product development, we reserve the right to change specifications without notice.

STANDARD GENERATOR DIMENSION

Open type Generator



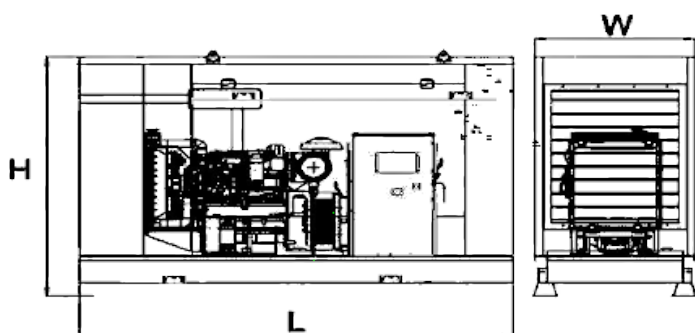
Length, L: 1350 mm

Height, H: 1100 mm

Width, W: 650 mm

Weight: 450 kg

Close type Generator



Length, L: 1780 mm

Height, H: 1380 mm

Width, W: 900 mm

Weight: 700 kg