

CUMMINS POWER GENERATOR SET

FPS22C – 4B3.9-G1 + PI144D

MAIN SPECIFICATION OF GENSET FPS22C

Genset model	FPS22C
Prime output (kVA/kW)	20kVA/16kW
Standby output (kVA/kW)	22kVA/18kW
*Voltage, Phase and wire	380/220V, 3phase, 4wires
Maximum output current	33AMP
Engine Brand and model	Cummins 4B3.9-G1
Alternator Brand and model	Stamford PI144D
Engine Speed RPM	1500
Frequency	50Hz



*Ratings at 0.8 power factor

Prime Power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercial purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1h in 12h

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload permitted on these ratings. The alternator on this model is peaking continuous rated (as defined in ISO 8528-3).

Rating Definitions

50Hz 1500rpm: (Operation at Altitude ≤ 1500 m, Ambient temperature $\leq 40^{\circ}\text{C}$) if altitude higher than 1500m, each 100m will cause additional de-rating 1%

Quality Standards

Our diesel generating sets meets the following standards: GB/T2820, GB1105, YD/T502, ISO3046, ISO8525, ISO8525-3-5-6

Factory Test

Each our generating sets must be got through 1h load test for running 0%, 25%, 50%, 75%, 100% and 110% load before dispatch. All protective devices, control functions are simulated and its system checked, proved and then passed for dispatch. A test certificate can be provided upon request.



This generator set is available with CE certification

ISO8528

This generator set has been designed to comply with ISO 8528 regulation.

ENGINE SPECIFICATION

Engine Model	• Cummins 4B3.9-G1
Engine Type	• Water-cooled, 4 Cylinders in line, 4cycle, direct injection
Maximum Output	• 27kW
Aspiration	• Natural inspire
Bore x Stroke	• 102mm x 120mm
Displacement	• 3.9 Liters
Compression Ration	• 17.3:1
Fuel Consumption	• 7.1L/H (100% Load)
Intake Air Flow	• 33L/s
Exhaust Gas Flow	• 71L/s
Exhaust Highest Temperature	• 410°C
Lube-oil Pan capacity	• 9.5 L
Cooling Water Capacity	• 7.2 L Engine Only
Voltage for Start	• 24V
Instrument for Adjusting Speed	• Mechanical
Noise level (A) @ 7m	• ≤100dBA (open) • ≤75dBA (enclosed)

ALTERNATOR SPECIFICATION

Alternator Model	• Stamford PI144D
Excitation	• Brushless, Self-excited
Insulation Class	• H
Protection Class	• IP23
Connection Type	• Re-connectable
Voltage Regulation	• ≤1.5%
Waveform	• No load <1.5% and non-distorting balanced linear load <5%
Distortion THF/TIF	• <2%/50%

GENERATOR SET CONTROL PANEL

AC/DC control panel consisting of:

Emergency Stop Button

Controller with selection for auto-start, DSE7320 monitoring and with following (and not restricted to) features:

- Start/Stop button
- Hour run meter
- Monitor engine temperature and provides shutdown protection
- Monitor engine speed and provides shutdown protection
- Monitor oil pressure and provides shutdown protection
- Alarm output for abnormal operation

STANDARD FEATURES

Control System

- DSE Control panel with communication interface

Fuel System

- Fuel filter with integral water separator
- Open type without base fuel tank, silent type with base fuel tank for $\leq 680\text{kVA}$

Starting/Charging System

- 24V starting motor(s)
- Batteries with rack and cables
- Battery charger

Exhaust System

- Stainless steel industrial exhaust Muffler for silent type

Lube System

- Lubricating oil filter; Oil drain with valves
- Lube oil pressure indicator

Cooling System

- 40°C radiator with guard sized for open type
- 50°C radiator for silent type

Coolant drain line with valve fan and belt guards

Air inlet System

- Heavy duty air cleaner
- Service indicator

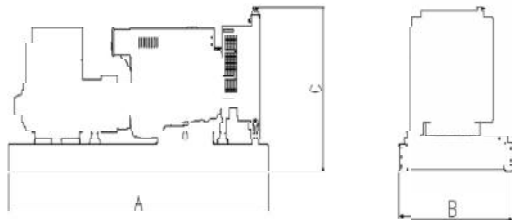
Alternator & Breaker

- Class H insulation
 - Automatic voltage regulator
 - PMG
 - IP23 Protection
- ABB or GE circuit breaker

DIMENSIONS AND WEIGHT

Genset Type	Length(L) mm "A"	Width (W) mm "B"	Height (H) mm "C"	Weight Kg
Open set	1750	970	1500	980
Enclosed set	2450	1080	1865	1220

Open Set



Enclosed Set



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