



Category: Power Generators

Cummins C82.5D5P Diesel Generator – Technical Specifications (? 82.5 kVA Class)

Ratings / Electrical

Cummins C82.5D5P 4BTAA3.9-G4 82.5 kVA Power Generator

Ratings & Electrical

Prime Power: 66 kW / 82.5 kVA
Standby Power: ~72 kW / 90 kVA

Frequency: 50 HzSpeed: 1500 rpm

Voltage: 400/230 V (3-phase)
Power Factor: 0.8 (lagging)
Alternator Insulation: Class H

Voltage Regulation: ±1%

Engine / Mechanical

• Engine Model: Cummins 4BTAA3.9-G4

• Configuration: 4-stroke, 4-cylinder, inline, turbocharged & aftercooled

• Displacement: 3.9 L

• Bore × Stroke: 102 mm × 120 mm

Compression Ratio: 17.2 : 1Lubricating Oil Capacity: ~8 L

• Coolant Capacity: ~15 L

Fuel & Consumption

• Fuel Type: Diesel

• Fuel Consumption @100% Load: ~20 L/h

• Fuel Consumption @75% Load: ~15 L/h

Fuel Tank Capacity: ~250 L (typical enclosure)

Cooling, Exhaust & Air

• Exhaust Gas Temperature: ~465 °C

• Exhaust Gas Flow: ~11 m³/min

• Max Exhaust Back Pressure: 10 kPa

Cooling System: Radiator-cooled, tropical rating

Physical Dimensions & Weight

- Dimensions (L x W x H): ~2300 mm x 1050 mm x 1450 mm
- Weight (approx.): ~1150 kg (open set)

Alternator & Control

- Alternator Frame: Stamford or equivalent, Class H insulation
- Control Panel: Cummins/DeepSea electronic controller

Features: Monitoring, protection & optional auto-start/stop

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- Prime (Continuous) Power: 82.5 kVA / 66 kW
- Standby / Maximum Power: ~90.75 kVA
- Phase / Voltage: 3-phase, 230/400 V (options: 380–415 V)
- Frequency & Speed: 50 Hz, 1500 RPM
- Power Factor: 0.8 (lagging)

Engine & Mechanical

- Engine Model: Cummins 4BTAA3.9-G4
- Number of Cylinders: 4, inline
- Displacement: 3.9 L
- Bore × Stroke: 102 mm × 120 mm
- Compression Ratio: ~18:1
- Cooling System: Liquid cooled
- Starting System: Electric, 12 V DC

Fuel & Consumption

- Fuel Consumption @ 75% Load: ~15.2–15.7 L/h
- th ading LC Fuel Consumption @ 100% Load: ~20.3–20.9 L/h

Capacities

- Lubricating Oil Capacity: ~16 L
- Coolant Capacity: ~19 L

Physical & Acoustic

- Dry Weight (with Canopy): ~1,915 kg
- Genset Dimensions (L × W × H, with enclosure): ~3,850 × 1,150 × 1,700 mm
- Fuel Tank (Standard): ~145 L
- Noise Level: ~75 dB(A) at 1 m (75% load)

Alternator & Control

- Alternator Model: Stamford UCI224G (or equivalent)
- Insulation Class: H

• Enclosure / Protection: IP23 (typical open set spec)

Other Notes

- Designed and certified to ISO standards (e.g., ISO 8528-5)
- Suitable for tropical and harsh climates (ambient up to ~50 °C)

