



Category: Power Generators

Caterpillar G3412 - Gas Power Generator (50 Hz, 423 ekW / 529 kVA @ 0.8 PF)

Caterpillar G3412 Gas Generator

Ratings & Electrical

- **Continuous Rating:** 423 ekW / 529 kVA @ 0.8 PF
- **Standby Power:** ~465 ekW / 581 kVA @ 0.8 PF
- **Frequency:** 50 Hz
- **Voltage:** 400/230 V (3-phase)
- **Maximum Electrical Efficiency:** 37.3%
- **Alternator Insulation:** Class H
- **Voltage Regulation:** $\pm 1\%$

Engine / Mechanical

- **Engine Model:** CAT G3412 Gas Engine

- **Configuration:** 4-stroke, 12-cylinder, V-type, turbocharged & aftercooled
- **Displacement:** 38.1 L
- **Bore × Stroke:** 159 mm × 159 mm

Fuel & Consumption

- **Fuel Type:** Natural Gas, Biogas, Field Gas, Propane
- **Fuel Consumption @100% Load:** ~430 m³/h (depending on gas type)

Cooling, Exhaust & Air

- **Cooling System:** Radiator-cooled, tropical rating
- **Exhaust Gas Temperature:** ~500-550 °C

Physical Dimensions & Weight

- **Dimensions (L × W × H):** ~3700 mm × 1600 mm × 2300 mm
- **Weight (approx.):** ~4800 kg (open set)

Alternator & Control

- **Alternator Frame:** Caterpillar or equivalent, Class H insulation
- **Control Panel:** Caterpillar electronic controller