



Category: Power Generators

Caterpillar DE165E0 - C7.1 Diesel Power Generator

Caterpillar DE165E0 Diesel Generator

Ratings & Electrical

- **Prime Power:** 150 kVA / 120 kW
- **Standby Power:** 165 kVA / 132 kW
- **Frequency:** 50 Hz
- **Speed:** 1500 rpm
- **Voltage:** 400/230 V (3-phase)
- **Power Factor:** 0.8 (lagging)
- **Alternator Insulation:** Class H
- **Voltage Regulation:** $\pm 1\%$

Engine / Mechanical

- **Engine Model:** CAT C7.1 Diesel Engine
- **Configuration:** 4-stroke, 6-cylinder, inline, turbocharged & aftercooled
- **Displacement:** 7.01 L
- **Bore × Stroke:** 105 mm × 135 mm
- **Compression Ratio:** 16.0 : 1
- **Lubricating Oil Capacity:** ~40 L
- **Coolant Capacity:** ~50 L

Fuel & Consumption

- **Fuel Type:** Diesel
- **Fuel Consumption @100% Load:** ~70 L/h
- **Fuel Consumption @75% Load:** ~52 L/h
- **Fuel Tank Capacity:** ~500 L (typical enclosure)

Cooling, Exhaust & Air

- **Exhaust Gas Temperature:** ~630 °C
- **Exhaust Gas Flow:** ~15 m³/min
- **Max Exhaust Back Pressure:** 10 kPa
- **Cooling System:** Radiator-cooled, tropical rating

Physical Dimensions & Weight

- **Dimensions (L × W × H):** ~2800 mm × 1300 mm × 1800 mm
- **Weight (approx.):** ~1900 kg (open set)

Alternator & Control

- **Alternator Frame:** Caterpillar or equivalent, Class H insulation
- **Control Panel:** Caterpillar electronic controller
- **Features:** Monitoring, protection & optional auto-start/stop