



Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

Image shown is for radiator version.
Images shown might not reflect actual configuration

Specifications

Generator Set Specifications	
Rating (ekW)	1000
Rating (kVA)	1250
Voltage	415 Volts
Frequency	50 Hz
Speed	1500 rpm

Generator Set Configuration	
Emissions / Fuel Strategy	Low Fuel Consumption

Engine Specifications	
Engine Model	C32 ACERT™ TA, V12, 4-stroke Water-cooled Diesel
Bore	145 mm
Displacement	32.1 L
Stroke	162 mm
Compression Ratio	15.0:1
Aspiration	Turbocharged Aftercooled
Governor Type	ADEM™ A4
Fuel System	MEUI™

Benefits & Features

Cat® Diesel Engine

- Reliable, rugged, durable design.
- Field-proven in thousands of applications worldwide.
- Four-stroke-cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight.

Generator

- Matched to the performance and output characteristics of Cat engines.
- Industry-leading mechanical and electrical design.
- Industry-leading motor starting capabilities.
- High efficiency.

Cat EMCP Control Panel

The EMCP controller features the reliability and durability you have come to expect from your Cat equipment. EMCP 4 is a scalable control platform designed to ensure reliable generator set operation, providing extensive information about power output and engine operation. EMCP 4 systems can be further customized to meet your needs through programming and expansion modules.

Design Criteria

The Generator set meets transient response and Block loading step as per ISO 8528-5. Conforms to ISO 8528-5 G3 load acceptance requirements.

Single-source Supplier

Fully Prototype tested with certified torsional vibration analysis.

World-wide Product Support

Cat dealers provide extensive post-sale support including maintenance and repair agreements. Cat dealers have over 1,800 dealer branch stores operating in 200 countries. The Caterpillar S•O•S program cost-effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products.

Standard Equipment

Air Inlet

- Air cleaner.
- Service Indicator.

Cooling

- Package-mounted Radiator

Exhaust

- Dry Exhaust manifold.
- Flange faced outlets.
- Mufflers.
- Stainless Steel Exhaust Flex fitting.
- Flanges.

Fuel

- Primary fuel filter with integral water separator.
- Secondary fuel filter.
- Fuel priming pump.
- Flexible fuel lines.

Generator

- Matched to the performance and output characteristics of Cat engines.
- IP23 Protection.
- AREP Excitation.
- Class H Insulation, Class H temperature rise.
- Random wound.
- Integrated voltage Regulator EM 10 (IVR)
- Load Acceptance Module (LAM).

Power Termination

- Bus Bar.
- Right side standard.

Control Panel

- EMCP 4.2 Genset Controller.
- Emergency Stop Button.

Mounting

- Rubber Anti-vibration Mounts.

Starting/Charging

- Batteries with mounting rack and cables (standard).
- Charging alternator – 45 Amps, 24 Volts.
- Heavy duty starting system – 24 Volts.

General

- 990 liters fuel tank.
- Paint – Caterpillar Yellow except rails and Heat exchanger in gloss black.

Optional Equipment

- Winding Temperature Detector.
- Bearing Temperature Detector.
- Anticondensation Heater.
- Jacket water heater
- Heavy-duty air cleaner.
- Option for remote mounting of UIP.

C32 ACERT™

1000 ekW / 1250 kVA / 50 Hz / 1500 rpm / 415V / 0.8 Power Factor

Rating Type: Standby

Fuel Strategy: Low Fuel Consumption



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Package Performance	
Generator set power rating with Fan @ 0.8 power factor	1000 ekW
Generator set power rating	1250 kVA
Aftercooler (separate circuit)	Air-to-Air

Fuel Consumption	
100% load	252.3 L/hr
75% load	185.5 L/hr
50% load	128.4 L/hr
25% load	75 L/hr

Cooling System	
Engine coolant capacity	55 L
Cooolant capacity with radiator	116 L

Inlet Air	
Combustion Air inlet flow rate	74.2 m ³ /min
Max. Allowable combustion Air inlet temp	49°C

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Exhaust System	
Exhaust stack gas temperature	464.6°C
Exhaust gas flow rate	192.9 m ³ /min
Exhaust system back pressure (max. allowable)	6.7 kPa

Heat Rejection	
Heat Rejection to Jacket Water	340 kW
Heat Rejection to Exhaust (total)	871 kW
Heat Rejection to Aftercooler	241 kW
Heat Rejection to Atmosphere from Engine	139 kW
Heat Rejection to Atmosphere from Generator	50 kW

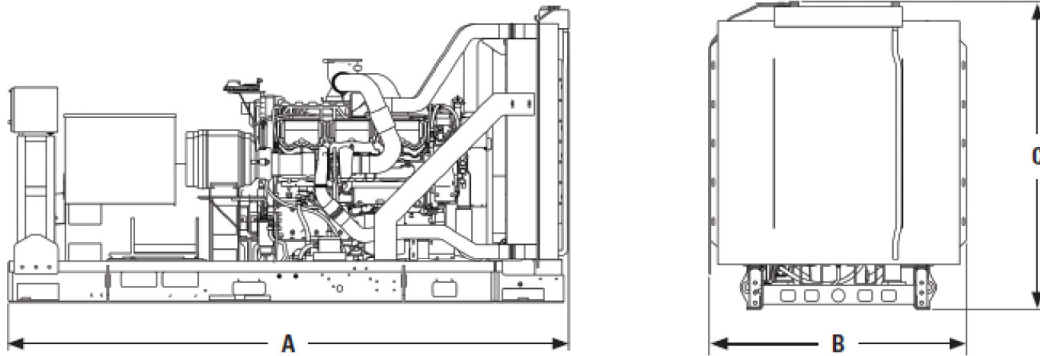
Alternator	
Motor Starting Capability @ 30% Voltage Dip at 0.4PF	3093 skVA
Current	1739 Amps
Frame size	1424
Excitation	IE
Temperature rise	150°C

- For ambient and altitude capabilities consult your Cat dealer.
- Air flow restriction (system) is added to existing restriction from factory.
- Generator temperature rise is based on a 40°C (104°F) ambient.

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Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
4217 (166.02)	1822.5 (71.75)	2161.8 (85.11)	6717 (14777)

DEFINITIONS AND CONDITIONS

Applicable Codes and Standards:

ISO3046, ISO8528, IEC60034-1, IS4722.

Note: Codes may not be available in all model configurations. Please consult your local Cat dealer representative for availability.

Standby: Output available with varying load for duration of the interruption of the reliable power Source, for a maximum of 500 hrs per year. Standby in accordance with ISO 8528.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Fuel Rates are based on fuel oil of 35° API [16°C] gravity having a LHV of 42,780 kJ/kg when used at 29°C and weighing 838.9 g/liter (7.001 lbs/U.S.gal.)

Additional ratings may be available for specific customer requirements, contact your Cat representative for details. For information regarding low sulfur fuel and biodiesel capability, please consult your Cat dealer.

www.cat.com/electricpower

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Materials and specifications are subject to change without notice.
The International System of Units (SI) is used in this publication.

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Source Country: India
Performance No:EM0679
Generator Arr No: 512-0397

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