

Image shown may not reflect actual configuration

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

## **Specifications**

Generator Set Specifications	
Rating (ekW)	` 880
Rating (kVA)	1100
Voltage	415 Volts
Frequency	50 Hz
Speed	1500 rpm

Generator Set Configurations	
Emissions/Fuel Strategy	Low Fuel Consumption

Engine Specifications	
Engine Model	C32 ACERT™ TA, V-12, 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.



### **Standard Equipment**

#### Air Inlet

Air cleaner

#### Cooling

· Packaged-mounted radiator

#### **Exhaust**

- · Exhaust muffler
- · Exhaust flange outlet

#### Fuel

- · Primary fuel filter with integral water separator
- · Secondary fuel filter
- · Fuel priming pump

#### Generator

- · Matched to the performance and output characteristics of Cat engines
- Load adjustment module provides engine relief upon load impact and improves load acceptance and recovery time
- · IP23 protection

#### **Power Termination**

· Bus bar

#### **Control Panel**

· EMCP 4.2 generator set controller

#### Mounting

· Rubber anti-vibration mounts

#### Starting/Charging

Charging alternator

#### General

- · 990 liter fuel tank
- Paint Caterpillar Yellow except rails and heat radiators black



### **Optional Equipment**

#### Generator

- Winding and bearing temperature detectors
- · Anti-condensation heater
- · Oversize and premium generators
- Coastal Insulation Protection

#### **Control Panels**

- EMCP 4.3 and EMCP 4.4
- · Generator temperature monitoring and protection
- · Load share module
- Digital I/O module
- · Remote monitoring software

#### Starting/Charging

· Jacket water heater

#### General

- The following options are based on regional and product configuration:
  - Heavy-duty air cleaner
  - Option for remote mounting of UIP
  - Circuit breaker panel

# **ELECTRIC POWER – Technical Spec Sheet STANDARD**

C32 ACERT™ 880ekW/ 1100kVA/ 50 Hz/ 1500 rpm/ 415V/ 0.8 Power Factor



**Rating Type: Prime** 

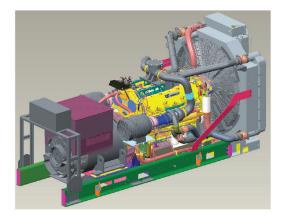


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Fuel Strategy: Low Fuel Consumption

C32 ACERT 880 ekW/ 1100 kVA/50 Hz 1500 rpm/ 415V

Package Performance		
Generator Set Power Rating with Fan @ 0.8 Power Factor	880 ekW	
Generator Set Power Rating	1100 kVA	
Aftercooler (separate circuit) type	ATAAC	

Fuel Consumption	
100% Load with Fan	220.7 L/hr
75% Load with Fan	164.8 L/hr
50% Load with Fan	116.1 L/hr
25% Load with Fan	68.7 L/hr

Cooling System <sup>1</sup>	
Engine Coolant Capacity	55.0 L

Inlet Air	
Combustion Air Inlet Flow Rate	67.9 m³/min
Max. Allowable Combustion Air Inlet Temp	49°C

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Rating Type: Prime Fuel Strategy: Low Fuel Consumption

Exhaust System	
Exhaust Stack Gas Temperature	440.6°C
Exhaust Gas Flow Rate	170.3 m³/min
Exhaust System Backpressure (maximum allowable)	6.7 kPa

Heat Rejection	
Heat Rejection to Jacket Water	308 kW
Heat Rejection to Exhaust (total)	752 kW
Heat Rejection to Aftercooler	196 kW
Heat Rejection to Atmosphere from Engine	124 kW
Heat Rejection to Atmosphere from Generator	45 kW

Alternator <sup>2</sup>	
Motor Starting Capability @ 30% Voltage Dip	3093 skVA
Current	1530 Amps
Frame Size	1424
Excitation	IE
Temperature Rise	125°C

<sup>&</sup>lt;sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

<sup>&</sup>lt;sup>2</sup>Generator temperature rise is based on a 40°C (104°F) ambient per NEMA MG1-32.

## **ELECTRIC POWER – Technical Spec Sheet** STANDARD

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Rating Type: Prime Fuel Strategy: Low Fuel Consumption

#### **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.

**Prime**: Output available with varying load for unlimited time. Prime power in accordance with ISO8528. 10% overload power in accordance with ISO 3046.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046 standard conditions.

**Fuel Rates** are based on fuel oil of 35° API [16°C] gravity having an LHV of 42 780 kJ/kg when used at 29°C and weighing 838.9 g/liter.

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.

Performance No.: EM0745 Generator Arrangement:5120397

Date: 26/10/2018 Source Country: India