



Image shown may not reflect actual package

PRIME

808 ekW 1010 kVA

50 Hz 1500 rpm 415 Volts

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

FEATURES

FUEL/EMISSIONS STRATEGY

- Low fuel consumption

DESIGN CRITERIA

- The generator set meets transient response and block loading steps as per ISO 8528-5

FULL RANGE OF ATTACHMENTS

- Wide range of bolt-on system expansion attachments, factory designed and tested
- Flexible packaging options for easy and cost effective installation

SINGLE-SOURCE SUPPLIER

- Fully prototype tested with torsional analysis.

WORLDWIDE PRODUCT SUPPORT

- Cat[®] dealers provide extensive post sale support including maintenance and repair agreements
- Cat dealers have over 42+ branch stores operating in India.
- The Cat[®] S•O•SSM program cost effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products.

CAT C32 ATAAC DIESEL ENGINE

- Utilizes ACERT[™] Technology
- Reliable, rugged, durable design
- Four-stroke-cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

CAT 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 4 SERIES CONTROL PANELS

- Simple user friendly interface and navigation
- Scalable system to meet a wide range of customer needs
- Integrated Control System and Communications Gateway

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FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

System	Standard	Options
Air Inlet	<ul style="list-style-type: none"> • Single element canister type air cleaner • Service indicator 	
Cooling	<ul style="list-style-type: none"> • Radiator fan with guard • Coolant drain line with valve • Cat Extended life coolant • Fan and belt guard • Coolant level sensors 	<input type="checkbox"/> Jacket water heater
Exhaust	<ul style="list-style-type: none"> • Dry exhaust manifold • Flanged faced outlets • Mufflers • Stainless steel exhaust flex fittings • Flanges 	
Fuel	<ul style="list-style-type: none"> • Primary fuel filter with water separator • Secondary fuel filters • Fuel priming pump • Flexible fuel lines • Fuel cooler 	
Generator	<ul style="list-style-type: none"> • AREP excitation • Class H insulation • Class H temperature rise • Random Wound • R450T Voltage Regulator with 3 phase sensing • Load acceptance model (LAM) • IP23 Protection • Paralleling kit droop transformer 	<input type="checkbox"/> Oversize generators <input type="checkbox"/> Winding temperature detector <input type="checkbox"/> Anti-condensation space heater <input type="checkbox"/> Bearing temperature detector
Power Termination	<ul style="list-style-type: none"> • Right side standard • Bus bar • Top and bottom cable entry 	<input type="checkbox"/> Power terminations can be located on the left as an option. <input type="checkbox"/> Circuit breaker panel.
Governor	<ul style="list-style-type: none"> • Electronic Governor – ADEM™ A4 	
Control Panels	<ul style="list-style-type: none"> • EMCP 4.2 Genset Controller • User Interface panel (UIP) - rear mount • Voltage and Speed adjust • Emergency Stop Push-button 	<input type="checkbox"/> Option for remote mounting of UIP
Lube	<ul style="list-style-type: none"> • Lubricating oil and filter • Oil drain line with valves • Fumes disposal • Gear type lube oil pump • Lube oil level indicator (dip stick) 	
Mounting	<ul style="list-style-type: none"> • Formed steel welded base • Anti-vibration mounts(shipped loose) 	
Starting/Charging	<ul style="list-style-type: none"> • 24 volt starting motor(s) • Batteries with rack and cables • 45 amp charging alternator 	
General	<ul style="list-style-type: none"> • Right-hand service • Paint - Caterpillar Yellow (except rails and radiators that are gloss black) • SAE standard rotation • Flywheel and Flywheel housing - SAE No. 0 	

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SPECIFICATIONS

GENERATOR

Frame size.....	DSG62L
Excitation.....	Self
Pitch.....	2/3
Number of poles.....	4
Number of bearings.....	Double bearing
Number of leads.....	4
Insulation.....	Class H
IP rating.....	IP23
Alignment.....	Close coupled
Overspeed capability - % of rated.....	120%
Wave form deviation (line to line).....	2%
Droop transformer.....	Standard
Voltage regulator.....	3 Phase sensing with LAM
Voltage regulation.....	Less than +/- 1%
Telephone Influence Factor.....	Less than 50
Harmonic Distortion.....	Less than 4%

CAT DIESEL ENGINE

C32 TA, V-12, 4-stroke-cycle watercooled diesel	
Bore	145.00 mm (5.71 in)
Stroke	162.00 mm (6.38 in)
Displacement	32.10 L (1958.86 in ³)
Compression ratio.....	15.0:1
Aspiration.....	TA
Fuel system.....	Electronic unit injection
Governor type.....	ADEM™A4

CAT EMCP 4 SERIES CONTROL PANELS

- EMCP 4 controls including:
- Run / Auto / Stop Control
 - Speed and Voltage Adjust
 - Engine Cycle Crank
 - 24-volt DC operation
 - Environmental sealed front face
 - Text alarm/event descriptions

- Digital indication for:
- RPM
 - DC volts
 - Operating hours
 - Oil pressure (psi, kPa or bar)
 - Coolant temperature
 - Volts (L-L & L-N), frequency (Hz)
 - Amps (per phase & average)
 - kW, kVA, kVAR, kW-hr, %kW, PF

- Warning/shutdown with common LED indication of:
- Low oil pressure
 - High coolant temperature
 - Overspeed
 - Emergency stop
 - Failure to start (overcrank)
 - Low coolant temperature
 - Low coolant level

- Programmable protective relaying functions:
- Generator phase sequence
 - Over/Under voltage (27/59)
 - Over/Under Frequency (81 o/u)
 - Reverse Power (kW) (32)
 - Reverse reactive power (kVAr) (32RV)
 - Overcurrent (50/51)

- Communications:
- Six digital inputs (4.2 only)
 - Four relay outputs (Form A)
 - Two relay outputs (Form C)
 - Two digital outputs
 - Customer data link (Modbus RTU)
 - Accessory module data link
 - Serial annunciator module data link
 - Emergency stop pushbutton

- Compatible with the following:
- Digital I/O module
 - Local annunciator
 - Remote CAN annunciator
 - Remote serial annunciator

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TECHNICAL DATA

Open Generator Set - 1500 rpm / 50 Hz / 415 Volts	DM9957
Low fuel consumption	
Coolant to aftercooler Coolant to aftercooler to temp max	49°C
Generator Set Performance Genset Power Rating @ 0.8 pf Genset Power Rating with fan	1010 kVA 808 ekW
Fuel Consumption 100% Load with fan 75% Load with fan 50% Load with fan	207.5 L/hr 156.8 L/hr 109.3 L/hr
Cooling System ¹ Air flow (max @ rated speed for radiator arrangement) Air flow restriction(system) Engine Coolant capacity with radiator / exp. tank Engine coolant capacity Radiator / Heat exchanger coolant capacity	1027 m ³ /min 0.12kPa 190 L 55L 135 L
Inlet Air Combustion air inlet flow rate	62.2 m ³ /min
Exhaust System Exhaust stack gas temperature Exhaust gas flow rate Exhaust flange size (internal diameter) Exhaust system backpressure (maximum allowable)	498.3° C 166.2 m ³ /min 203.2 mm 10 kPa
Heat Rejection Heat rejection to coolant (total) Heat rejection to exhaust (total) Heat rejection to aftercooler Heat rejection to atmosphere from engine Heat rejection to atmosphere from generator	301 kW 749 kW 155 kW 108 kW 33 kW
Alternator ² Motor starting capability@30% voltage dip Frame Temperature Rise	1800 skVA DSG62L 125° C
Lube system Sump refill with filter	99 L

¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

² Generator temperature rise is based on a 40° C (104° F) ambient.

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RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications:
ISO 3046, ISO 8528, IEC60034-1, IS4722

Prime – Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kW with 10% overload capability for emergency use for a maximum of 1 hour in 12 hours. Overload operation cannot exceed 25 hours per year. Prime power in accordance with ISO3046.

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 (60° F)] 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.

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DIMENSIONS

Package Dimensions	
Length	4425 mm
Width	1875 mm
Height	2212 mm
Weight	8880 kg

Note: For reference only- do not use for installation design. Please contact your local dealer for exact weight and dimensions. (General Dimension Drawing 81591220)

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

Source: India Sourced
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