Cat® C32 DIESEL GENERATOR SETS

Prime : 50 Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C32 ACERT™ V12, 4-stroke Water-cooled Diesel
Bore x Stroke	145mm x 162mm (5.7in x 6.37in)
Displacement	32.1 L (1959 in³)
Compression Ratio	15.0:1
Aspiration	Turbocharged aftercooled
Fuel Injection System	MEUI™
Governor	Electronic ADEM™ A4
Emission Certifications	Low Fuel consumption

FEATURES AND BENEFITS

CAT® DIESEL ENGINES

The four-cycle Cat diesel engine combines consistent performance with excellent fuel economy and transient response and block loading step as per ISO 8528-5. Confirms to ISO 8528-5 G3 block load acceptance requirements. The engines feature a reliable, rugged, and durable design that has been field proven in thousands of applications worldwide in emergency standby installations.

COOLING SYSTEM

The cooling system has been designed and tested to ensure proper generator set cooling, and includes the radiator, fan, belts, and all guarding installed as standard. Contact your Cat dealer for specific ambient and altitude capabilities.

GENERATORS

The generators used on Cat packages have been designed and tested to work with the Cat engine. The generators are built with robust Class H insulation and provide industry-leading motor starting capability and altitude capabilities.

CONTROL PANELS

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.

GENERATOR SET SPECIFICATIONS

Alternator Design	Brushless Single Bearing, 4 Pole
Stator	2/3 Pitch
No. of Leads	06
Available Voltage Options	415V
Frequency	50Hz
Alternator Voltage	24V
Alternator Insulation & IP	Class H; IP23
Standard Temperature Rise	125°C
Available Excitation Options	Internal Excitation.
Voltage Regulation	±0.25%
Voltage Regulator	EM10 (IVR)

STANDARD & OPTIONAL EQUIPMENT

Air inlet system	Single element air cleaner Service indicator Heavy Duty Air Cleaner (Optional)
Control panels	EMCP4.2 control panel(Standard). Emergency stop push button
Cooling system	Radiator fan and belt drive Fan and belt guard Coolant drain line with valve Coolant level sensor
Exhaust system	Dry exhaust manifold Flanged faced outlets Exhaust mufflers Stainless steel exhaust flex fittings Flanges
Fuel system	Primary fuel filters with integral water separator Fuel priming pump Flexible fuel lines Engine fuel transfer pump Integrated fuel cooler 990 liter fuel tank
Generators and generator attachments	AREP excited Class H insulation Class H temperature rise Random Wound EM10 (Integrated voltage regulator) Bus bar mounted on right hand IP 23 protection
Governing system	Cat Electronic Governor (ADEM™ A4).
Lube System	Lubricating oil and filter Oil drain line with valves Fumes disposal Gear type lube oil pump Lube oil level indicator (dipstick)
Mounting	Anti-vibration mounts
Starting/charging system	Heavy duty starting -24 Volts Batteries with rack and cables 45 amp charging alternator
General	SAE standard rotation Flywheel – SAE No.0 Flywheel – SAE No.18 (pilot shaft guided) Paint – Caterpillar Yellow (except rails and radiators gloss black)

Cat® C32 DIESEL GENERATOR SETS

Prime : 50Hz; 415V



Image shown might not reflect actual configuration

Engine Model	Cat® C32 ACERT™ V12, 4-stroke
Bore x Stroke	145mm x 162mm (5.7in x 6.37in)
Displacement	32.1 L (1959 in^3)
Compression Ratio	15.0:1
Aspiration	Turbocharged aftercooled
Fuel Injection System	MEUI™
Governor	Electronic ADEM™ A4

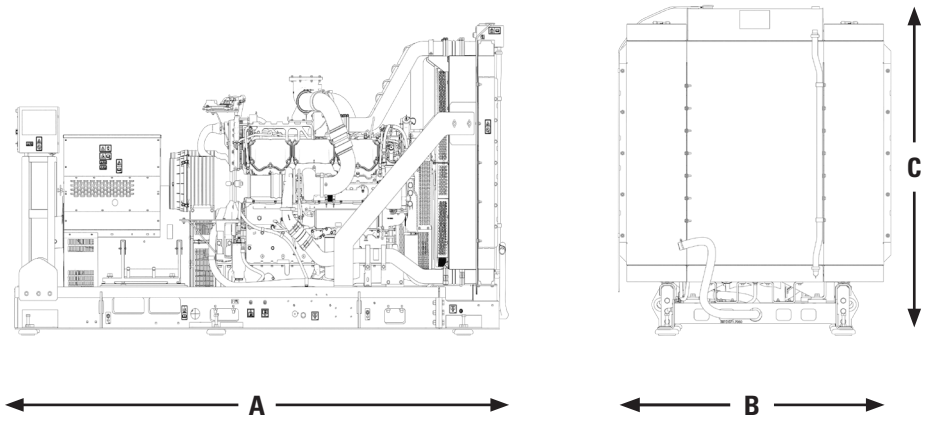
Model	Prime	Emission Strategy
C32	**1010 kVA**	**Low Fuel consumption**

PACKAGE PERFORMANCE

Performance	Prime
Frequency	50
Gen set power rating with fan @ 0.8 power factor	1010
Engine Power Rating	1194
Performance Number	DM9957-02
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	207.5 (54.8)
75% load with fan, L/hr (gal/hr)	156.8 (41.4)
50% load with fan, L/hr (gal/hr)	109.3 (28.8)
25% load with fan, L/hr (gal/hr)	65.1 (17.1)
Cooling System[1]	
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)
Radiator air flow, m^3/min (cfm)	1143 (40364)
Total cooling system coolant capacity, L (gal)	116 (30.6)
Inlet Air	
Combustion air inlet flow rate, m^3/min (cfm)	62.2 (2197.6)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	49 (120.2)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	498.3 (928.9)
Exhaust gas flow rate, m^3/min (cfm)	166.2 (5869.2)
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (40.0)
Heat Rejection	
Heat rejection to jacket water, kW (Btu/min)	301 (17117)
Heat rejection to exhaust (total), kW (Btu/min)	749 (42594)
Heat rejection to atmosphere from engine, kW (Btu/min)	108 (6141)
Heat rejection to atmosphere from generator, kW (Btu/min)	41 (2331)
Lube System	
Sump Refill with Filter	62.0 (16.3)

Alternator[2]	Prime
Voltages, Volts	**415V**
Motor Starting Capability @ 30% Voltage Dip, skVA	1405.1A
Current	2297skVA
Frame Size	1402-SR5
Excitation	IE
Temperature Rise, °C (°F)	125°C

WEIGHTS & DIMENSIONS



***Note:** For reference only – do not use for installation design. Please contact your local dealer for exact weights and dimensions

Genset Model	Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Generator Set Weight kg (lb)
1010 kVA, 808ekW	**4111 (161.85)**	**1822.5 (71.5)**	**2161.8 (85.11)**	**6467 (14,258)**

DEFINITIONS AND CONDITIONS

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

[2] Alternator temperature rise is based on a 40°C (104°F) ambient per NEMA MG1-

APPLICABLE CODES AND STANDARDS

ISO 3046, ISO 8528, IEC60034-1, IS4722

Prime: Output available with varying load for an unlimited time. Prime power in accordance with ISO 8528. 10% overload power in accordance with ISO 3046.

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

Fuel Rates: Fuel Consumption reported in accordance as per the ISO 3046-1 standard.

Additional ratings may be available for specific customer requirements, contact your Cat representative for details.

LET'S DO THE WORK.™

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