

**C32 ACERT™ Oil & Gas Offshore Generator Set**  
**Class 1/Division 2 Hazardous Location**  
**Oil & Gas**



**994 bkW (1333 bhp) 910 ekW\***  
**60 Hz (1800 rpm)**

**874 bkW (1086 bhp) 800 ekW\***  
**50 Hz (1500 rpm)**



The C32 ACERT™ auxiliary/generator set engine incorporates C1/D2 certified electrical components, guarding, and an optional air shut-off. Caterpillar Oil & Gas Power Solutions completes the generator set adding a base, starters, engine instrumentation, and a package-mounted radiator that is easily moved from one location to the next.

\* Estimated values

Image shown may not reflect actual configuration

## Specifications

Cat C32 ACERT Oil & Gas Offshore Generator Set	Metric	Imperial (English)
Configuration	Vee 12, 4-stroke diesel	
Emissions	IMO II Marine Commercial Auxiliary (D2/E2)	
Aspiration	Twin Turbochargers, Aftercooled	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1959 in <sup>3</sup>
Compression Ratio	15.0:1	
Rotation (view from flywheel)	Counterclockwise	
Engine Control	Single ADEM™ A4	
Generator	To customer specifications via Caterpillar Oil & Gas Power Solutions	

## Standard Equipment

### Air Inlet System

Separate circuit aftercooled (SCAC)  
Turbocharger, jacket water cooled, oil lubricated  
Turbocharger inlet, 152 mm (6 in) OD straight connection  
Air inlet shutoff - optional

### Control System

Single ADEM A4 engine control  
Electronic diagnostics and fault logging  
Electronic Air/Fuel Ratio control  
Throttle Input signal options

- 0-5 Volts
- 4-20 mA

### Cooling System

Radiator-cooled – package-mounted radiator\*  
Jacket water and SCAC pumps, gear-driven  
SCAC and JW shunt tanks for maintaining proper pump inlet pressures

### Exhaust System

Watercooled exhaust manifold and dual turbochargers  
4-bolt 130 mm (5.12 in) diameter flanged outlet

### Flywheel and Flywheel Housing

SAE standard rotation  
Flywheel housing: SAE No. 0  
Flywheel: 18 inch, 136 teeth

### Fuel System

Duplex fuel filters, spin-on, RH service  
Fuel connections size:

- Supply: JIC 37°-10 (7/8-14)
- Return: JIC 37°-8 (3/4-16)

Plate-type fuel cooler installed behind SCAC aftercooler shunt tank  
Fuel transfer pump, gear-driven  
Manual fuel priming pump

### General

Front damper guard  
Engine does not ship with zinc components

### Generator and Generator Attachments \*

Class 1 Division 2 designed to customer's specifications  
Insulation for harsh environment protection

### Hazardous Location Product Specific

Class 1 Division 2 certified engine  
Class 1 Division 2 generator\*  
Class 1 Division 2 air shut-off actuator\*  
Class 1 Division 2 engine display panel\*  
ATEX compliant electrical system\*

### Lube System

Simplex oil filters, RH service  
Deep sump oil pan  
RH service oil filler locations  
RH service dipstick  
Oil pump, gear-driven

### Mounting System

Mounting rails and isolation system  
based on application requirements or customer request  
Battery sets – 24 Volt, dry

\*via custom quotation by Caterpillar Oil & Gas Power Solutions.



## Technical Data

	Units	C32 ACERT
<b>Dimensions and Weight* (engine)</b>		
Length	mm (in)	2284 (5035)
Width	mm (in)	1528 (3369)
Height	mm (in)	1587 (3499)
Weight	kg (lb)	3248 (7161)
<b>Air Intake System</b>		
Intake Combustion Air Flow	m <sup>3</sup> /min (cfm)	80.7 (2850.9)
Intake Combustion Air Temperature (max allowable)	°C (°F)	52 (126)
Maximum Allowable Restriction (clean dry element)	kPa (H <sub>2</sub> O)	3.5 (14.0)
Maximum Allowable Restriction (dirty element)	kPa (H <sub>2</sub> O)	6.3 (25.0)
<b>Cooling System</b>		
Configuration	Remote or package-mounted radiator	
Cooling Water Temperature Engine Out (nominal)	°C (°F)	99 (210.2)
Cooling Water Refill Capacity (engine only)	N/A	N/A
Aftercooler Water Operating Temperature	°C (°F)	52 (125.6)

\*Estimated

## Rejection Data - 60 Hz

## Rejection Data - 50 Hz

### Rating Definitions and Conditions

**Conditions:** Engine performance is corrected to inlet air standard conditions of 99 kPa (29.31 in Hg) and 25°C (77°F). These values correspond to the standard atmospheric pressure and temperature in accordance with SAE J1349. Also included is a correction to standard fuel gravity of 35 degrees API having a lower heating value of 42,780 kJ/kg (18,390 BTU/lb) when used at 29°C (84.2°F) where the density is 839.9 g/L (7.002 lb/gal).

The corrected performance values shown for Cat engines will approximate the values obtained when the observed performance data is corrected to SAE J1349, ISO 3046-2, 8665, 2288, 9249, and 1585, EEC 80/1269 and DIN70020 standard reference conditions.

Engines are equipped with standard accessories: lube oil, fuel pump and jacket water pump. The power required to drive auxiliaries must be deducted from the gross output to arrive at the net power available for the external (flywheel) load. Typical auxiliaries include cooling fans, air compressors and charging alternators.

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