

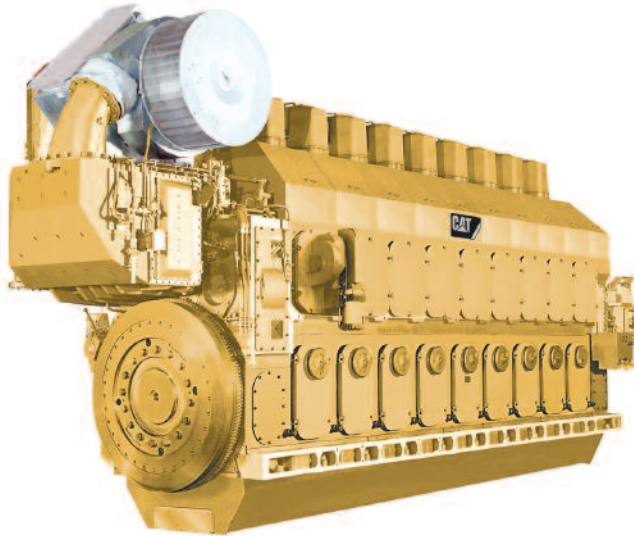
# CM32

## DIESEL ENGINE GENERATOR SET

2765–4190 kWe

600 rpm

50/60 Hz



### FEATURES

#### Designed for Reliable Operation

- Intensive cooling of key components including exhaust valve seats, injector cooling integrated into lube oil system and high-efficiency turbocharger
- Capable of operation up to 700 cSt/50° C fuel quality according to CIMAC H55/K55

#### Minimized Mechanical Wear

- Modular design
- State-of-the-art material ensure long life of components

#### Overall Economy

- High availability and long life
- Low fuel and oil consumption
- Low maintenance requirements

#### Highest Quality Engine Parts

- Semi-dry wear resistant liners with calibration inserts
- Pistons with forged steel crown and aluminum skirt
- Inlet/outlet valves with armored seats
- High-efficiency turbocharger

#### One-Piece Dry Engine Block

- High-strength nodular cast iron with under slung crankshaft and free from cooling water

#### Ease of Maintenance and Reliability

- Easily removable cylinder heads, quick removable fluid connections
- Split connecting rods to allow piston removal without disturbing the big end bearing
- High reliability, modular design and integral construction reduce the number of components by 40% over conventional designs

### ENGINE

- Engine type: 4-stroke cycle diesel engine
- Cylinder configuration: In-line - 6, 8, 9
- Fuel type: LFO, CRO and HFO up to 700 cSt
- Bore: 320 mm (12.6 in)
- Stroke: 480 mm (18.9 in)
- Cylinder displacement: 38.6 L (2356 cu in)
- Cylinder output: 480 kW (644 bhp)
- Mean piston speed: 9.6 m/s (31.5 ft/s)
- Mean effective pressure: 24.9 bar (361 psig)
- Aspiration: Turbocharged and after-cooled
- Compression ratio: 15.5:1
- Engine rating: 2880–4320 kW
- Generator set rating: 2765–4190 kWe

### Total Power Solutions

- Caterpillar® can develop, finance, design, build, test, maintain and operate medium speed reciprocating engine power plants, plant assets and at the customer's option provide:
  - Power generation equipment
  - Engineered systems
  - Combined heat and power systems
  - Construction and installation services
  - Operation and maintenance services
  - Turnkey power plants
  - Contract power

### Worldwide Product Support

- With nearly 200 Cat® dealers and 1,500 facilities worldwide serving in excess of 200 countries, you're never far from the Caterpillar support you need
- Customer Support Agreements offer back-to-back services including scheduled inspections, preventive maintenance and overhauls to full operations and maintenance

# CM32

## DIESEL ENGINE GENERATOR SET

### NOMINAL PERFORMANCE

	ENGINE RATING		GENERATOR SET RATING		SPEED	FREQUENCY	HEAT RATE		SPECIFIC LUBE OIL CONSUMPTION	
	kWm	kWe	kVA				kJ/kWh	Btu/kWh	g/kWh	lb/kWh
6CM32	2,880	2,765	3,456		600	50/60	7,962	7,546	0.6	0.0013
8CM32	3,840	3,725	4,656		600	50/60	7,836	7,427	0.6	0.0013
9CM32	4,320	4,190	5,238		600	50/60	7,836	7,427	0.6	0.0013

### RATING DEFINITIONS AND CONDITIONS

Fuel type: Light fuel oil (LFO), crude oil (CRO) and heavy fuel oil (HFO) with fuel quality limit at 50° C according to CIMAC H55/K55.

Ratings: Based on ISO3046/1 standard reference conditions.

Power output: May require adjustment for values other than ISO3046/1 standard reference conditions.

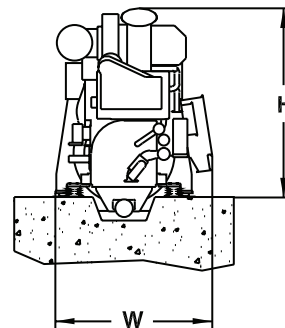
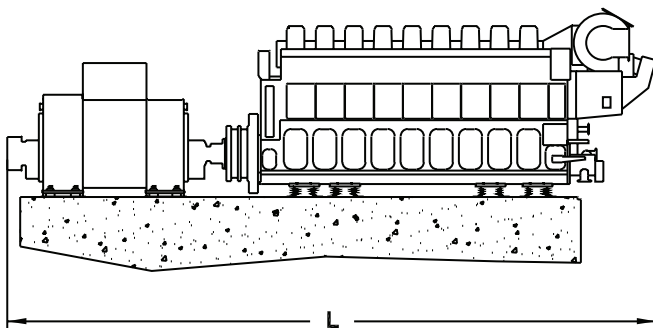
Continuous output: Available for an unlimited time without varying load.

Generator efficiency: Efficiency of 97.0% (96.0% for the 6CM32) based on 0.8 pf with medium voltage class generator; actual efficiency will depend on generator selection.

Fuel consumption: Based on ISO3046/1 standard reference conditions of 25° C (77° F) and 100 kPa (29.61 in Hg), excluding engine-driven pumps, with 5% tolerance and LCV = 42,700 kJ/kg (18,358 Btu/lb). Value based on measurement at the generator terminals.

Lube oil consumption: Tolerance on value of +/-0.3 g/kWh (0.0007-lb/kWh). Lube oil consumption can only be demonstrated after 500 hours of operation.

### GENERATOR SET DIMENSIONS



FOR MORE INFORMATION  
 Email: [cat-powerplants@cat.com](mailto:cat-powerplants@cat.com)  
 Internet: <http://www.cat.com/powerplants>

	GENERATOR SET DIMENSIONS						APPROXIMATE WEIGHT (DRY)			
	HEIGHT (H)		WIDTH (W)		LENGTH (L)		ENGINE		GENERATOR	
	mm	in	mm	in	mm	in	kg	lb	kg	lb
6CM32	3,143	124	2,162	85	9,653	380	35,400	78,044	18,100	39,904
8CM32	3,423	135	2,852	112	11,515	453	45,400	100,090	24,000	52,911
9CM32	3,423	135	2,852	112	11,800	465	49,400	108,908	26,500	58,422