CAT C1.5 generator set.

Image may not reflect actual generator set offered.

Technical specification for C1.5 Heat Exchanger cooled open generator set with rating 13ekW @ 1800rpm 60Hz

Caterpillar diesel engine, type **C1.5**, a 4-stroke, 3-cylinder indirect injection Inline-engine, naturally aspirated

1.0	**Basic model**	
1.1	Caterpillar model	C1.5 DINA
1.2	Rating	13 ekW ±3%[1] at 1800 rpm
1.3	Specification	4-stroke, electronically indirect injection Inline-engine naturally aspirated
1.4	Rotation	SAE standard, CCW viewed towards flywheel
1.5	Dimensions	Displacement: 1,5 liters Bore: 84 mm Stroke: 90 mm
1.6	Dry weight	332 kg WO Sound Enclosure
1.7	Voltage	Voltage for all pumps and starters, unless otherwise stated in spec: 3 x 220/440V 60Hz

Note[1]

Engine performance is corrected to inlet air standard conditions of 99kPa and 25 °C. These values correspond to the standard atmospheric pressure and temperature in accordance with SAE J1995. Also included is a correction to standard fuel gravity and 35 degrees API having a lower heating value of 42,780kJ/kg when used at 29 °C where the density is 838,9 g/l.

2.0	**Generator**	
2.1	Generator	CAT
2.2	Generator specifications	IP 23 220/440V 60Hz 17 KVA PF: 0,8 Max ambient temp 45 deg C
2.3	Cooling	IP23 air cooled
2.4	Bearings	Roller bearing NDE
2.5	AVR	Solid state analogue voltage regulator

3.0	**Cooling system**	
3.1	Cooling system	Heat exchanger cooled
3.2	HT Cooling system	Belt driven HT pump, centrifugal type Gear driven SW pump Integrated tube and shell heat exchanger Expansion tank
3.3	Yard Supplied Cooling Water Equipment	SW supply All external piping and valves

4.0	**Exhaust system**	
4.1	Exhaust specifications	Maximum design backpressure 4,5kPa. Dry exhaust system
4.2	Exhaust manifold	Weld flange and gasket
4.3	Optional	Dry exhaust silencers available on request Ask for quote.

5.0	**Air Inlet system**	
5.1	Air Inlet specifications	Max air inlet temp 45 deg C
5.2	Air Cleaners	Dry type air cleaners included

6.0	**Fuel system**	
6.1	Fuel system	Mechanical engine pump with fuel injectors and glow plugs
6.2	Fuel specifications	Fuel type according to ISO8217, DMA/DMB/DMC (MGO/MDO)
6.3	Fuel lines	Double wall fuel lines With mounted alarm reservoir. Provides installed alarm reservoir.
6.4	Fuel Filters	Simplex engine filters with manual priming pump.
6.5	Shipped loose	Primary fuel FLTR/Water separator with NPT and BSP connections

7.0	**Lube oil system**	
7.1	Lube oil system	Closed system and closed crankcase ventilation. Oil filler and dipstick
7.2	Lube specifications	According to Cat specifications
7.3	Lube oil Filters	Engine oil filters
7.4	Shipped loose	Oil Pan Drain Pump - Brass with 3/8" BSP male connection

8.0	**Starting system**	
8.1	Starting system	Electric Starting motor
8.2	Starting motor specifications	24V Starting motor Negative isolated ground electric system
8.3	Yard Supply	Starting equipment: Set of batteries Battery charger

9.0	**Engine control system**	
9.1	Engine control system	Electronic governor

10.0	**Instrumentation**	
10.1	Control system	CAT Deluxe Instrument Panel 24V Local start/stop and alarms
10.2	Shipped loose	Harness from engine to remote mounted CAT Deluxe instrument panel. 6 m
10.3	Yard supply	24V DC 10A power supply

11.0	**Mounting system**	
11.1	Mounting system	Engine and generator resiliently mounted to a common baseframe for fixed assembly towards ship structure.
11.2	Coupling specifications	Coupling plate

12.0	**Paint**	
12.1	Engine paint	Caterpillar matterhorn white

13.0	**Tests**	
13.1	Engine tests	Engine Test at 100 and 10% Overload including Start Stop Retrospective Engine Certification is not possible.

14.0	**Society Approval**	
14.1	Certificates	NA Type Approval not required below 37kW. PC not available
14.2	Environmental certificates	NA No EIAPP needed below 130kW