




CAT C2.2 generator set.



Image may not reflect actual generator set offered.

Technical specification for C2.2 Heat Exchanger cooled Sound Enclosed generator set with rating 22,5 ekW @ 1500rpm 50Hz

	GENSET SPECIFICATIONS	Project no	
	CAT C2.2 22,5ekW	Yard no	
	CAT GENERATOR 22,5ekW 50Hz	Date	

Caterpillar diesel engine, type **C2.2T**, a 4-stroke, 4-cylinder indirect injection Inline-engine, turbocharged


1.0	Basic model	
1.1	Caterpillar model	C2.2 DIT
1.2	Rating	22,5 ekW $\pm 3\%^{1)}$ at 1500 rpm
1.3	Specification	4-stroke, electronically indirect injection Inline-engine turbocharged
1.4	Rotation	SAE standard, CCW viewed towards flywheel
1.5	Dimensions	Displacement: 2,2 liters Bore: 84 mm Stroke: 100 mm
1.6	Dry weight	420 kg WO Sound Enclosure, 530 kg W Sound Enclosure
1.7	Voltage	Generator voltage: 3 x 230/400V 50Hz

Note¹⁾

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 23 230/400V 50Hz 28 KVA PF: 0,8 Max ambient temp 45 deg Celsius
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

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4.0	Exhaust system	
4.1	Exhaust specifications	Maximum design backpressure 4,5kPa. Wet exhaust only, no dry exhaust
4.2	Exhaust manifold	Stainless steel water-cooled exhaust outlet 63mm diameter
4.3	Optional	GRP wet exhaust Silencer available. Ask for quote.


5.0	Air Inlet system	
5.1	Air Inlet specifications	Max air inlet temp 45 deg Celcius
5.2	Air Cleaners	Dry type air cleaners included
5.3	Turbocharger	Dry insulated turbocharger

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

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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
11.3	Enclosure	Sound Enclosure, 66.5 dB (A)

12.0	Paint	
12.1	Engine paint	Caterpillar Matterhorn white

13.0	Test	
13.1	Standard test	Engine Test at 100 and 10% Overload including Start Stop Retrospective Engine Certification is not possible.

13.0	Society Approval	
13.1	Certificates	NA Type Approval not required below 37kW. PC not available
13.3	Environmental certificates	NA No EIAPP needed below 130kW.