

Technical data Diesel Generator Set

CAT C4.4-55 (DE55E2)

Output Ratings with Radiator	DIN/ISO 3046	
Combustion Strategy	Emission EU stage II	
Generating set Model	Prime	Standby
400V, 50Hz, power factor 0.8	50 kVA	55 kVA
	40 kW	44 kW
Feature Code	C04DE20	
Performance No.	P3350A	

Diesel Engine	
Brand	Caterpillar
Type	C4.4 DI TA AA
No. of Cylinders / Alignment	4 / I
Cycle	4-Stroke
Cooling Method	Water-cooled
Fuel	Diesel
Speed	1'500 rpm
Bore	105.00 mm
Stroke	127.00 mm
Displacement	4.40 L
Compression Ratio	18.2:1
Aspiration	Air-toAir Aftercooled
Fuel System	Electronic unit injection
Base Tank Capacity	219 L
Jacket Water heaters	220 V / 9 kW
Starting Motor	12 V / 7 kW
Battery Type	115-2421
Quantity	1
Capacity per Battery / total	90 Ah - 12 V / 90 Ah - 12 V

Generator	
Brand	Caterpillar
Type / Frame	LC / LC1514N
Excitation	Permanent Magnet or AREP
Pitch	0.6667
Number of Poles	4
Number of Bearings	1
Number of Leads	12
Insulation	Class H
IP Rating	IP23
Nominal Speed	1'500 rpm
Over Speed capability	150 %
Wave form Deviation (Line to Line)	2 %
Voltage Regulator	3 Phase sensing with selectable volts/Hz
Voltage regulation	Less than $\pm 1/2\%$ (steady state) Less than $\pm 1\%$ (no load to full load)
Telephone Influence Factor (TIF)	Less than 50
Total Harmonic Distortion (THD)	Less than 5%
CBK 3pol manual, fixed mount rear	160 A / 50 kA
Typical Cabeling; TN-C (Prime)	x x mm ² + x x mm ²
Typical Cabeling; TN-C (Standby)	x x mm ² + x x mm ²

Engine:	Length x Width x Height	631 x 626 x 958 mm
	Weight	401 kg
Generator:	Length x Width x Height	699 x 435 x 549 mm
	Weight	kg
Radiator:	Length x Width x Height	591 x 375 x 763 mm
	Dry Weight	kg
Complete:	Length x Width x Height	1'925 x 1'120 x 1'269 mm
	Weight	916 kg



Technical Data	Prime	Standby
Fuel Consumption		
100% load with Fan	15.7 L/hr	17.2 L/hr
75% load with Fan	11.9 L/hr	13.1 L/hr
50% load with Fan	8.1 L/hr	8.8 L/hr
Oil consumption 75% load	0.005 L/hr	0.006 L/hr
Cooling System		
Engine coolant Capacity with Radiator / expansion Tank	12.6 L	
Engine coolant Capacity		
Inlet Air		
Combustion Air inlet flow rate	4.3 m ³ /min	4.4 m ³ /min
Exhaust System		
Exhaust stack gas Temperature	446 °C	493 °C
Exhaust gas flow rate	9.0 m ³ /min	10.0 m ³ /min
Exhaust System backpressure max.	12 kPa	
Heat Rejection		
Heat Rejection to coolant (total)	38.0 kW	42.0 kW
Heat Rejection to exhaust (total)		
Heat Rejection to after cooler		
Heat Rejection to Atmosphere from Engine		
Heat Rejection to Atmosphere from Generator	14.2 kW	18.4 kW
Lube System		
Sump refill with Filter	8.0 L	
Exhaust Emission Standards Stage II		
CO g/kWh	5.0	
HC g/kWh	1.3	
NOx g/kWh	7.0	
Part Matter g/kWh	0.4	
Generator		
Motor starting capability @30%	115 skVA	
Voltage Dip		
Rated Current	72.1 A	79.4 A
Short-Circuit Current	3 x I _{NOM}	

Radiator	
Radiator Type	
Design Temperature	°C
Radiator coolant Capacity	L
Air Flow @ 120 Pa	m ³ /min
Air Flow @ 180 Pa	m ³ /min

Sound pressure Level LPA @ 75% Last @ 7m										
dB	Hz	63	125	250	500	1000	2000	4000	8000	Overall dBA
		Mechanical [Stby]	78	77	77	79	79	73	66	
Exhaust [Stby]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mechanical [Prim]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Exhaust [Prim]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.