

## Technical data Diesel Generator Set

## CAT C4.4 / DE65E3

	Prime	Standby
Feature Code	-	C04DE69
Performance No.	-	P3910B
Power Rating	kVA 60.0	65.0
Power Rating @ 0.8 Power Factor	KW 48.0	52.0
Voltage	V	400
Frequenz	Hz	50
Power Factor		0.8
Radiator		Yes
Combustion Strategy	Emission EU Stage IIIA	
ISO	3046 / 8528	



Diesel Engine		
Brand	Caterpillar	
Type	C4.4	
No. of Cylinders	4	
Cylinders Alignment	L	
Cycle	4-Stroke	
Cooling Method	Water-cooled	
Turbo Configuration	Single	
Turbo Quantity	1	
Fuel	Diesel	
Speed	rpm	1'500.0
Bore	mm	105.0
Stroke	mm	127.0
Displacement	L	4.4
Compression Ratio	18.23:1	
Piston speed	m/s	6.35
Mean effective pressure (PME)	bar	9.51
Aspiration	Air-toAir Aftercooled	
Fuel System	Electronic unit injection	
Base Tank Capacity	269	
Jacket Water heaters	V / kW	230 / 1.5
Starting Motor	V / kW	12 / 7
Battery Type	115-2421	
Battery Quantity	1	
Capacity Battery	V / Ah	12 / 90
Capacity Battery total	V / Ah	12 / 90

Technical Data	Prime	Standby
<b>Fuel Consumption</b>		
100% load	L/hr	16.6
75% load	L/hr	12.1
50% load	L/hr	8.1
100% load	g/kWh	266.3
75% load	g/kWh	258.9
50% load	g/kWh	259.9
Oil consumption 75% load	L/hr	0.005
Oil consumption 75% load	g/kWh	0.092

<b>Cooling System</b>		
Engine coolant Capacity with Radiator / expansion Tank	L	16.5
Engine coolant Capacity	L	
<b>Inlet Air</b>		
Combustion Air inlet flow rate	m³/min	4.6
<b>Exhaust System</b>		
Exhaust stack gas Temperature 100%	°C	570.0
Exhaust gas flow rate 100%	m³/min	11.2
Exhaust System backpressure max.	kPa	12.0
<b>Heat Rejection</b>		
Heat Rejection to coolant (total)	kW	48.6
Heat Rejection to exhaust (total)	kW	
Heat Rejection to after cooler	kW	
Heat Rejection to Atmosphere from Engine	kW	14.3
Heat Rejection to Atmosphere from Generator	kW	6.0
<b>Lube System</b>		
Sump refill with Filter	L	8.0

Generator		
Brand	Caterpillar	
Type / Frame	R1953L4	
Excitation	Self Excited	
Pitch	0.6667	
Number of Poles	4	
Number of Bearings	1	
Number of Leads	12	
Insulation	Class H	
IP Rating	IP23	
Nominal Speed	rpm	1'500.0
Over Speed capability	%	150.0
Wave form Deviation (Line to Line)	%	2.0
Voltage Regulator	3 Phase sensing with selectable volts/Hz	
Voltage regulation	Less than ± ½% (steady state) Less than ± 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	A	125.0
Typical Cabeling; TN-C (Prime)	x x mm² + x x mm²	
Typical Cabeling; TN-C (Standby)	x x mm² + x x mm²	

Exhaust Emission (Nominal Data) @ 75% and -°C ATAAC		
CO	mg/nm³	-
HC	mg/nm³	-
NOx	mg/nm³	-
HC + Nox	mg/nm³	-
Part Matter	mg/nm³	-

Generator		
Motor starting capability @30% Voltage Dip	skVA	107.0
Rated Current	A	86.6
Short-Circuit Current		3 x INOM

Radiator		
Radiator Type		
Design Temperature	°C	
Radiator coolant Capacity	L	
Air Flow @ 120 Pa	m³/min	
Air Flow @ 180 Pa	m³/min	

Package Dimensions (Dry)			
Engine: Length x Width x Height	mm	631 x 626 x 958	
Weight	kg	401	
Generator: Length x Width x Height	mm	699 x 435 x 549	
Weight	kg	218	
Radiator: Length x Width x Height	mm	375 x 591 x 763	
Dry Weight	kg	95	
Complete: Length x Width x Height	mm	1'925 x 1'120 x 1'681	
Complete: Weight	kg	855	
with Enclosure: Length x Width x Height	mm	2'300 x 1'132 x 1'679	
with Enclosure: Weight	kg	1'337	

Sound pressure Level LPA @ 75% Last @ 7m										
dB	Hz									Overall dBA
	63	125	250	500	1000	2000	4000	8000		
Mechanical [Stby]	70.9	77.3	74.1	71.9	72.5	72.2	67.4	63.1	<b>77.8</b>	
Exhaust [Stby]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>n.a.</b>	
Mechanical [Prim]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>n.a.</b>	
Exhaust [Prim]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<b>n.a.</b>	