

Technical data Diesel Generator Set

CAT C7.1 / DE200E3

	Prime	Standby
Feature Code	-	C07DE99
Performance No.	-	P4378B
Power Rating	kVA 180.0	200.0
Power Rating @ 0.8 Power Factor	KW 144.0	160.0
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	C7.1	
No. of Cylinders	6	
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	135.0
Displacement	L	7.0
Compression Ratio	16.8:1	
Piston speed	m/s	6.75
Mean effective pressure (PME)	bar	19.57
Aspiration	Air-toAir Aftercooled	
Fuel System	Electronic unit injection	
Base Tank Capacity	548	
Jacket Water heaters	V / kW	230 / 3
Starting Motor	V / kW	12 / 7
Battery Type	9X9730	
Battery Quantity	1	
Capacity Battery	V / Ah	12 / 190
Capacity Battery total	V / Ah	12 / 190

Generator		
Brand	Caterpillar	
Type / Frame	R2455L4	
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 ± ½% (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	400.0
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	

Package Dimensions (Dry)			
Engine: Length x Width x Height	mm	1'161	x 721 x 885
Weight	kg	652	
Generator: Length x Width x Height	mm	975	x 568 x 704
Weight	kg	585	
Radiator: Length x Width x Height	mm	789	x 520 x 1'170
Dry Weight	kg	109	
Complete: Length x Width x Height	mm	2'500	x 1'320 x 1'785
Complete: Weight	kg	1'646	
with Enclosure: Length x Width x Height	mm	3'520	x 1'330 x 1'969
with Enclosure: Weight	kg	2'351	

Technical Data	Prime	Standby
Fuel Consumption		
100% load	L/hr	41.3
75% load	L/hr	32.6
50% load	L/hr	23.7
100% load	g/kWh	202.0
75% load	g/kWh	212.6
50% load	g/kWh	231.9
Oil consumption 75% load	L/hr	0.017
Oil consumption 75% load	g/kWh	0.100

Cooling System		
Engine coolant Capacity with Radiator / expansion Tank	L	27.0
Engine coolant Capacity	L	
Inlet Air		
Combustion Air inlet flow rate	m ³ /min	13.0
Exhaust System		
Exhaust stack gas Temperature 100%	°C	530.0
Exhaust gas flow rate 100%	m ³ /min	30.2
Exhaust System backpressure max.	kPa	15.0
Heat Rejection		
Heat Rejection to coolant (total)	kW	74.2
Heat Rejection to exhaust (total)	kW	
Heat Rejection to after cooler	kW	
Heat Rejection to Atmosphere from Engine	kW	22.7
Heat Rejection to Atmosphere from Generator	kW	10.8
Lube System		
Sump refill with Filter	L	

Exhaust Emission (Nominal Data) @ 75% and 53°C ATAAC		
CO	mg/nm ³	-
HC	mg/nm ³	-
NOx	mg/nm ³	-
HC + Nox	mg/nm ³	-
Part Matter	mg/nm ³	-

Generator		
Motor starting capability @30% Voltage Dip	skVA	351.0
Rated Current	A	259.8
Short-Circuit Current		3 x INOM

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								Overall dBA
	63	125	250	500	1000	2000	4000	8000	
Mechanical [Stby]	81.9	80.8	80.6	79.5	78.9	75.5	73.0	71.4	83.2
Exhaust [Stby]	101.5	100.4	92.0	90.5	87.2	85.8	82.6	69.7	94.3
Mechanical [Prim]	84.4	80.8	80.4	78.7	78.6	75.5	72.4	69.9	83.1
Exhaust [Prim]	100.3	98.8	91.6	89.6	86.5	84.9	81.2	67.7	93.2