

Technical data Diesel Generator Set

CAT C32-1250

	Prime	Standby
Feature Code	C32DR67	C32DR67
Performance No.	EM0745	EM0679
Power Rating	kVA1'100.0	1'250.0
Power Rating @ 0.8 Power Factor	KW880.0	1'000.0
Voltage	V	400
Frequenz	Hz	50
Power Factor		0.8
Radiator		Yes
Combustion Strategy	Emission Low BSFC	
ISO	3046 / 8528	

Diesel Engine			
Brand	Caterpillar		
Type	C32		
No. of Cylinders	12		
Cylinders Alignment	V		
Cycle	4-Stroke		
Cooling Method	Water-cooled		
Turbo Configuration	Parallel		
Turbo Quantity	2		
Fuel	Diesel		
Speed	rpm	1'500.0	
Bore	mm	145.0	
Stroke	mm	162.0	
Displacement	L	32.1	
Compression Ratio		15.0:1	
Piston speed	m/s	8.10	
Mean effective pressure (PME)	bar	24.01	
Aspiration		Turbo after cooler	
Fuel System		Electronic unit injection	
Base Tank Capacity		n.a.	
Jacket Water heaters	V / kW	230	/ 9
Starting Motor	V / kW	24	/ 9
Battery Type		153-5700	
Battery Quantity		2	
Capacity Battery	V / Ah	12	/ 145
Capacity Battery total	V / Ah	24	/ 145

Generator			
Brand	Caterpillar		
Type / Frame	SR5 / 1424		
Excitation	Permanent Magnet		
Pitch	0.6667		
Number of Poles	4		
Number of Bearings	1		
Number of Leads	6		
Insulation	Class H		
IP Rating	IP23		
Nominal Speed	rpm	1'500.0	
Over Speed capability	%	125.0	
Wave form Deviation (Line to Line)	%	2.0	
Voltage Regulator	3 Phase sensing with selectable volts/Hz		
Voltage regulation	Less than $\pm \frac{1}{2}\%$ (steady state) Less than $\pm \frac{1}{2}\%$ (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	2'000.0	
Typical Cabeling; TN-C (Prime)	4 x 4 x 240 mm ² + 2 x 1 x 240 mm ²		
Typical Cabeling; TN-C (Standby)	4 x 4 x 185 mm ² + 2 x 1 x 185 mm ²		

Package Dimensions (Dry)				
Engine: Length x Width x Height	mm	2'241	x 1'559	x 1'681
Weight	kg	2'931		
Generator: Length x Width x Height	mm	1'692	x 1'381	x 1'591
Weight	kg	2'400		
Radiator: Length x Width x Height	mm	1'515	x 2'011	x 2'174
Dry Weight	kg	355		
Complete: Length x Width x Height	mm	4'249	x 2'011	x 2'174
Complete: Weight	kg	6'986		
with Enclosure: Length x Width x Height	mm	-	x -	x -
with Enclosure: Weight	kg	-		



Technical Data	Prime	Standby
Fuel Consumption		
100% load	L/hr220.7	252.3
75% load	L/hr164.8	185.5
50% load	L/hr116.1	128.4
100% load	g/kWh192.3	194.4
75% load	g/kWh191.4	190.6
50% load	g/kWh202.3	197.8
Oil consumption 75% load	L/hr0.096	0.109
Oil consumption 75% load	g/kWh0.092	0.092
Cooling System		
Engine coolant Capacity with Radiator / expansion Tank	L	91.0
Engine coolant Capacity	L	55.0
Inlet Air		
Combustion Air inlet flow rate	m³/min	67.9 74.2
Exhaust System		
Exhaust stack gas Temperature 100%	°C	440.6 464.6
Exhaust gas flow rate 100%	m³/min	170.3 192.9
Exhaust System backpressure max.	kPa	6.7
Heat Rejection		
Heat Rejection to coolant (total)	kW	308.0 340.0
Heat Rejection to exhaust (total)	kW	752.0 841.0
Heat Rejection to after cooler	kW	196.0 241.0
Heat Rejection to Atmosphere from Engine	kW	124.0 139.0
Heat Rejection to Atmosphere from Generator	kW	43.0 51.5
Lube System		
Sump refill with Filter	L	99.0
Exhaust Emission (Nominal Data) @ 75% and 49°C ATAAC		
CO	mg/nm³	145.3 162.9
HC	mg/nm³	15.5 8.8
NOx	mg/nm³	3'937.9 3'697.9
HC + Nox	mg/nm³	- -
Part Matter	mg/nm³	14.2 12.7
Generator		
Motor starting capability @30% Voltage Dip	skVA	2'883.0
Rated Current	A	1'587.8 1'804.3
Short-Circuit Current		3 x INOM

Radiator		ATAAC
Radiator Type		45.0
Design Temperature	°C	36.0
Radiator coolant Capacity	L	1'143.0
Air Flow @ 120 Pa	m³/min	1'107.0
Air Flow @ 180 Pa	m³/min	

Sound pressure Level LPA @ 75% Last @ 7m										
Hz		63	125	250	500	1000	2000	4000	8000	Overall
dB										dBA
Mechanical [Stby]		78.1	89.9	87.3	82.4	82.3	81.0	75.7	72.7	87.8
Exhaust [Stby]		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.
Exhaust [Prim]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.