

Technical data Diesel Generator Set

CAT C175-16 (11'000V)

	Prime	Standby
Feature Code	175DRA6	175DRA6
Performance No.	DM8723	DM8716
Power Rating	kVA 2'725.0	3'000.0
Power Rating @ 0.8 Power Factor	KW 2'180.0	2'400.0
Voltage	V	11000
Frequenz	Hz	50
Power Factor		0.8
Radiator		Yes
Combustion Strategy	Emission Low Emission	
ISO	3046 / 8528	



Diesel Engine		
Brand	Caterpillar	
Type	C175-16	
No. of Cylinders	16	
Cylinders Alignment	V	
Cycle	4-Stroke	
Cooling Method	Water-cooled	
Turbo Configuration	Parallel	
Turbo Quantity	4	
Fuel	Diesel	
Speed	rpm	1'500.0
Bore	mm	175.0
Stroke	mm	220.0
Displacement	L	84.7
Compression Ratio		16.7:1
Piston speed	m/s	11.00
Mean effective pressure (PME)	bar	22.49
Aspiration	Turbo after cooler	
Fuel System	Common Rail	
Base Tank Capacity	n. a.	
Jacket Water heaters	V / kW	230 / 9
Starting Motor	V / kW	24 / 9
Battery Type	153-5720	
Battery Quantity	4	
Capacity Battery	V / Ah	12 / 210
Capacity Battery total	V / Ah	24 / 420

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Fuel Consumption		
100% load	L/hr	612.2
75% load	L/hr	457.4
50% load	L/hr	311.5
100% load	g/kWh	215.9
75% load	g/kWh	215.1
50% load	g/kWh	219.7
Oil consumption 75% load	L/hr	0.238
Oil consumption 75% load	g/kWh	0.092

Cooling System		
Engine coolant Capacity with Radiator / expansion Tank	L	780.5
Engine coolant Capacity	L	303.5
Inlet Air		
Combustion Air inlet flow rate	m³/min	207.4
Exhaust System		
Exhaust stack gas Temperature 100%	°C	490.0
Exhaust gas flow rate 100%	m³/min	548.2
Exhaust System backpressure max.	kPa	6.7
Heat Rejection		
Heat Rejection to coolant (total)	kW	1'167.0
Heat Rejection to exhaust (total)	kW	2'433.0
Heat Rejection to after cooler	kW	275.0
Heat Rejection to Atmosphere from Engine	kW	177.0
Heat Rejection to Atmosphere from Generator	kW	81.4
Lube System		
Sump refill with Filter	L	530.0

Exhaust Emission (Nominal Data) @ 75% and 48°C SCAC		
CO	mg/nm³	583.4
HC	mg/nm³	46.6
NOx	mg/nm³	1'838.5
HC + Nox	mg/nm³	-
Part Matter	mg/nm³	26.6

Generator		
Brand	Caterpillar	
Type / Frame	SR5 / 3020	
Excitation	Permanent Magnet	
Pitch	0.6667	
Number of Poles	4	
Number of Bearings	2	
Number of Leads	6	
Insulation	Class H	
IP Rating	IP23	
Nominal Speed	rpm	1'500.0
Over Speed capability	%	180.0
Wave form Deviation (Line to Line)	%	5.0
Voltage Regulator	3 Phase sensing with selectable volts/Hz	
Voltage regulation	Less than ± ½% (steady state) Less than ± ½% (with 3% speed change)	
Telephone Influence Factor (TIF)	Less than 50	
Total Harmonic Distortion (THD)	Less than 5	
CBK 3pol manual, fixed mount rear	A	5'000.0
Typical Cabeling; TN-C (Prime)	x x mm² + x x mm²	
Typical Cabeling; TN-C (Standby)	x x mm² + x x mm²	

Generator		
Motor starting capability @30% Voltage Dip	skVA	6'044.0
Rated Current	A	143.0
Short-Circuit Current		3 x INOM

Radiator		
Radiator Type		SF64.OCVS
Design Temperature	°C	34.0
Radiator coolant Capacity	L	477.0
Air Flow @ 120 Pa	m³/min	2'416.0
Air Flow @ 180 Pa	m³/min	2'268.0

Package Dimensions (Dry)			
Engine: Length x Width x Height	mm	4'116 x 1'778 x 2'233	
Weight	kg	11'800	
Generator: Length x Width x Height	mm	2'520 x 1'235 x 1'235	
Weight	kg	7'390	
Radiator: Length x Width x Height	mm	2'865 x 2'889 x 3'409	
Dry Weight	kg	3'591	
Complete: Length x Width x Height	mm	7'900 x 2'889 x 3'409	
Complete: Weight	kg	26'281	
with Enclosure: Length x Width x Height	mm	- x - x -	
with Enclosure: Weight	kg	-	

Sound pressure Level LPA @ 75% Last @ 7m										
dB	Hz									Overall dBA
	63	125	250	500	1000	2000	4000	8000		
Mechanical [Stby]	n.a.	75.6	78.5	85.2	86.7	87.0	82.9	80.4		97.0
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.