

Technical data Diesel Generator Set

CAT C18 / DE605E0

	Prime	Standby
Feature Code	C18DEDB	C18DEDB
Performance No.	DM9627	DM9628
Power Rating	kVA 550.0	605.0
Power Rating @ 0.8 Power Factor	KW 440.0	484.0
Voltage	V	400
Frequenz	Hz	50
Power Factor		0.8
Radiator		Yes
Combustion Strategy	Emission Low Emission	
ISO	3046 / 8528	



Diesel Engine		
Brand	Caterpillar	
Type	C18	
No. of Cylinders	6	
Cylinders Alignment	L	
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	183.0
Displacement	L	18.1
Compression Ratio	14.5:1	
Piston speed	m/s	9.15
Mean effective pressure (PME)	bar	21.50
Aspiration	Air-toAir Aftercooled	
Fuel System	Electronic unit injection	
Base Tank Capacity	1082	
Jacket Water heaters	V / kW	230 / 9
Starting Motor	V / kW	24 / 7
Battery Type	115-2421	
Battery Quantity	2	
Capacity Battery	V / Ah	12 / 90
Capacity Battery total	V / Ah	24 / 90

Technical Data	Prime	Standby
Fuel Consumption		
100% load	L/hr	119.9
75% load	L/hr	90.0
50% load	L/hr	62.2
100% load	g/kWh	206.6
75% load	g/kWh	206.7
50% load	g/kWh	214.3
Oil consumption 75% load	L/hr	0.049
Oil consumption 75% load	g/kWh	0.093

Cooling System		
Engine coolant Capacity with Radiator / expansion Tank	L	54.8
Engine coolant Capacity	L	20.8
Inlet Air		
Combustion Air inlet flow rate	m³/min	35.4
Exhaust System		
Exhaust stack gas Temperature 100%	°C	528.0
Exhaust gas flow rate 100%	m³/min	99.7
Exhaust System backpressure max.	kPa	10.0
Heat Rejection		
Heat Rejection to coolant (total)	kW	143.0
Heat Rejection to exhaust (total)	kW	466.0
Heat Rejection to after cooler	kW	97.3
Heat Rejection to Atmosphere from Engine	kW	79.2
Heat Rejection to Atmosphere from Generator	kW	27.0
Lube System		
Sump refill with Filter	L	76.0

Generator		
Brand	Caterpillar	
Type / Frame	A3325L4	
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	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	800.0
Typical Cabeling; TN-C (Prime)	2 x 4 x 240 mm² + 1 x 1 x 240 mm²	
Typical Cabeling; TN-C (Standby)	2 x 4 x 185 mm² + 1 x 1 x 185 mm²	

Exhaust Emission (Nominal Data) @ 75% and 49°C ATAAC		
CO	mg/nm³	122.4
HC	mg/nm³	13.7
NOx	mg/nm³	1'823.8
HC + Nox	mg/nm³	-
Part Matter	mg/nm³	10.0

Generator		
Motor starting capability @30% Voltage Dip	skVA	1'507.0
Rated Current	A	793.9
Short-Circuit Current	3 x INOM	

Radiator		
Radiator Type	A16.1CTS	
Design Temperature	°C	56.0
Radiator coolant Capacity	L	34.0
Air Flow @ 120 Pa	m³/min	373.0
Air Flow @ 180 Pa	m³/min	349.0

Package Dimensions (Dry)			
Engine: Length x Width x Height	mm	1'388	x 921 x 1'243
Weight	kg	2'197	
Generator: Length x Width x Height	mm	1'267	x 742 x 1'055
Weight	kg	1'298	
Radiator: Length x Width x Height	mm	761	x 1'431 x 2'155
Dry Weight	kg	650	
Complete: Length x Width x Height	mm	3'900	x 1'431 x 2'155
Complete: Weight	kg	4'835	
with Enclosure: Length x Width x Height	mm	5'320	x 1'920 x 2'344
with Enclosure: Weight	kg	6'194	

Sound pressure Level LPA @ 75% Last @ 7m										
dB	Hz									
	63	125	250	500	1000	2000	4000	8000	Overall	
Mechanical [Stby]	81.9	85.0	85.4	85.3	87.2	84.1	80.2	77.9	91.0	
Exhaust [Stby]	108.7	104.2	100.1	101.6	102.4	97.7	89.9	72.9	105.6	
Mechanical [Prim]	88.1	84.8	85.3	84.9	86.9	83.7	79.9	77.4	90.7	
Exhaust [Prim]	109.1	103.7	99.6	101.1	101.3	96.5	88.7	71.4	104.8	