KOHLER Engines

KDI3404TM Engine

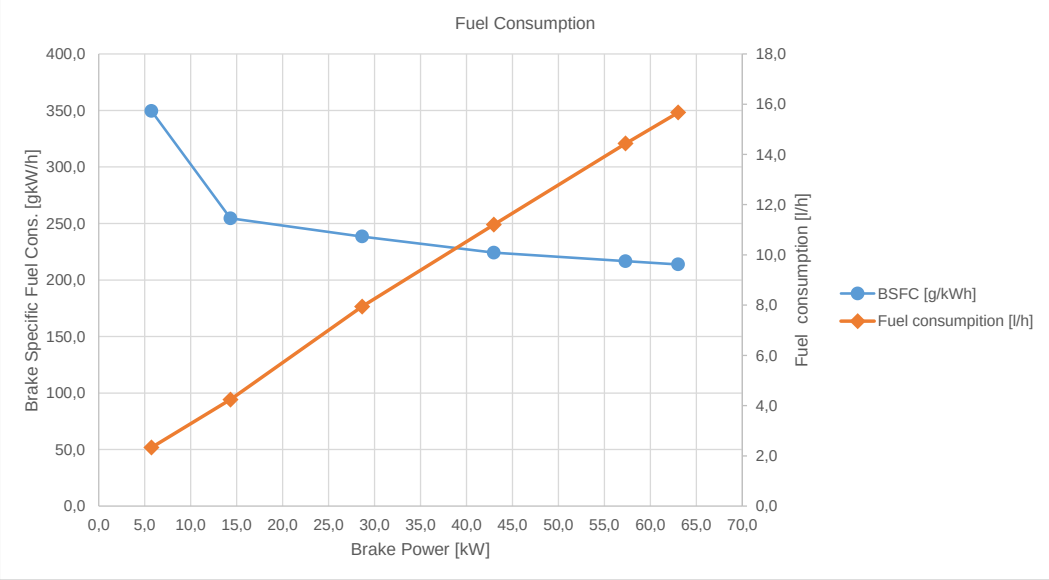
ENGINE PERFORMANCE CURVE

Rating: **Gross Power** **63kW Standby**
57kW Prime

Application: **Generator**
1500 rpm (50Hz)

Nominal Engine Power @ 1500 rpm	
Prime	Standby
kW	kW
57	63

Generator Efficiency % %	Fan Power kW	Power Factor	Prime Ratiing kW	Prime Ratiing kVA	Standby Rating 1 kW	Standby Rating 1 kVA	4 sec. Standby Block Load Capability
88 - 92	2	0,8	48	61	54	67	100%
Note 1: Based on nominal engine power							



Air Intake Restriction	3 kPa
Exhaust Back pressure	7,5 kPa

Gross power guaranteed withn + or - 5% at ISO 3046

condition:
25°C air inlet temperature
99kPa barometer
40°C fuel inlet temperature
0,853 fuel specific gravity at 15,5°C

All values are from current available data and are subject to change without notice.

Notes:
All OEM Gen Set Engine Applications must be pre-screened for torsional vibration compability with the respective alternator and hardware

OEM Engine Application Engineering will perform this computer based analysis work upon request

Emission Certifications:	Certified by:
None	

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Engine Specification Data

General Data	
Model	KDI3404TM
Number of Cylinders	4
Bore and Stroke [mm]	96x116
Displacement [L]	3.359
Compression Ratio	17
Valves per Cylinder -Inake/Exhaust	2/2
Firing Order	1-3-4-2
Combustion System	Direct Injection
Engine Type	In line 4-Cycle
Aspiration	Turbocharged
Engine Crankcase Vent System	Open
Maximum Crankcase Pressure [kPa]	1.5

Physical Data	
Length [mm]	766,4
Width [mm]	579,5
Height [mm]	816
Weight [kg]	405
(Include SAE 3 Flywheel housing, 11" 1/2 flywheel, starter and electrics)	
Center of Gravity Location	
From Rear Face of Block (x axis) [mm]	308
Right of Crankshaft (y axis) [mm]	4.6
Above Crankshaft (z axis) [mm]	136
Max Allow Static Bending Moment at Rear	
Face of Flywhl Hsg w/ 5G Load [Nm]	1070
Thrust Bearing Load Limit	
Continous [N]	6000
Intermitted [N]	6000

Electrical System	
Recommended Battery Capacity (CCA)	700
12 Volt System [Amp]	
Maximum allowable Starting Circuit Resistance	0.001
12 Volt System [Ohm]	
Starter Rolling Current 12Volt System	
At 0°C [Amp]	700
At -30°C [Amp]	880

Air System	Prime	Standby
Maximum Allowable Temp Rise		
Ambient Air to Engine Inlet [°C]	5	5
Maximum Air Intake Restricion		
Dirty Air Cleaner [kPa]	5,2	5,2
Clean Air Cleaner [kPa]	3	3
Engine Air Flow [kg/h]	322	330
Inake Manifold Pressure [kPa]	180	180
Intake Pipe Dia [mm]	61	61

Exhaust System	Prime	Standby
Exhaust Flow [kg/h]	335	347
Exhaust Temperature [°C]	500	520
Max Allow. Back Pressure [kPa]	7,5	7,5
Recm'd Exhaust Pipe Dia [mm]	73	73

Cooling System	Prime	Standby
Engine Heat Rejection [kW]	41	45
Coolant flow [L/min]	105	105
Thermostat Start to Open [°C]	83	83
Thermostat fully Open [°C]	95	95
Maximum Water Pump		
Inlet Restriciton [kPa]	5	5
Engine Coolant Capacity [L]	4,6	4,6
Recm'd Pressure Cap [kPa]	100	100
Maximum Top Tank Temp [°C]	105	105
Min Coolant Fill Rate [L/min]	11	11
Min Air to Boil Temperature [°C]	45	40

Fuel System	Prime	Standby
Fuel Injection Pump	Stanadyne	Stanadyne
Governor Regulation	5%	5%
Governor Type	Mech.	Mech.
Total Fuel Flow [kg/hr]	31	33,7
Fuel consumption [kg/hr]	12,4	13,5
Maximum Fuel Transfer Pump Suction fuel [m]	0,9	0,9
Fuel Filter Micron Size @ 95% Efficency	5	5

Lubrication System	Prime	Standby
Oil Pressure at Rated Speed [kPa]	300	300
Oil Pressure at Low Idle [kPa]	250	250
In Pan Oil Temperature [°C]	110	115
Oil Pan Capacity High [L]	15,6	15,6
Oil Pan Capacity Low [L]	9,2	9,2
Total Engine Oil Cap. w/ Filters [L]	16,5	16,5
Engine Angularity Limits (Continous)		
Any direction [degrees]	35	35

Performance Data	Prime	Standby
Rated Power [kW]	57	63
Rated Speed [rpm]	1500	1500
Low Idle Speed [rpm]	1400	1400
BMEP [kPa]	13,2	14,5
Friction Power		
at Rated Speed [kW]	7,8	7,8
Altitude Capability [m]	2500	2500
Ratio Air:Fuel	26,0	24,4
Noise dB(A) at 1m	90,7	91,3

Fuel Consumption [kg/h]	Prime	Standby
25% Power	3,6	-
50% Power	6,8	-
75% Power	9,6	-
100% Power	12,4	13,5