KOHLER®

KD3500

50 Hz. Diesel Generator Set
EMISSION OPTIMIZED DATA SHEET
TIER 2 COMPLIANT

ENGINE INFORMATION

Model:	KD83V16	Bore:	175 mm (6.89 in.)
Type:	4-Cycle, 16-V Cylinder	Stroke:	215 mm (8.46 in.)
Aspiration:	Turbocharged, Intercooled	Displacement:	83 L (5048 cu. in.)
Compression ratio:	16:0:1		
Emission Control Device:	Direct Diesel Injection, Engine Control Module, Turbocharger, Charge Air Cooler		

EXHAUST EMISSION DATA:	**EPA D2 Cycle 5-mode weighted**
HC	0.45 g/kWh
NO_x (Oxides of Nitrogen as NO_2)	5.88 g/kWh
CO (Carbon Monoxide)	1.05 g/kWh
PM (Particular Matter)	0.08 g/kWh

EMISSION DATA

Cycle point	**100% ESP**		**100% PRP**		**75% ESP**		**75% PRP**		**50% PRP**	
Power [kW]	3007		2734		2255		2051		1367	
Speed [rpm]	1500		1500		1500		1500		1500	
NO_X [g/kWh]	9.3		7.8		6.0		5.9		5.2	
CO [g/kWh]	0.2		0.2		0.3		0.4		1.3	
HC [g/kWh]	0.29		0.31		0.34		0.35		0.45	
PM [g/kWh]	0.01		0.01		0.02		0.02		0.07	
	@ 5% O_2	@ 15% O_2	@ 5% O_2	@ 15% O_2	@ 5% O_2	@ 15% O_2	@ 5% O_2	@ 15% O_2	@ 5% O_2	@ 15% O_2
HC [mg/Nm^3]	98	37	102	38	109	41	113	42	134	50
NOx [mg/Nm^3]	3174	1190	2610	979	1920	720	1873	702	1538	577
CO [mg/Nm^3]	79	30	82	31	105	39	120	45	382	143
PM [mg/Nm^3]	2	1	2	1	7	3	6	2	21	8

TEST METHODS AND CONDITIONS

Test Methods:
Steady-State emissions recorded per ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/2%) with engine temperatures, pressures and emission rated stabilized.

Fuel Specification:
EN590 Diesel Fuel

Reference Conditions:
25°C (77 °F) Air Inlet Temperature, 40°C (104 °F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H2O/lb) of dry air Humidity. Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Test conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data and specifications subject to change without notice.