



KD3250

60 Hz. Diesel Generator Set
 Tier 2 EPA Certified for Stationary Emergency Applications
 Data Center Emphasis-Low NO_x

EMISSION OPTIMIZED DATA SHEET

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		

NOMINAL EMISSION DATA

Cycle point	100% ESP	75% ESP	50% ESP	25% ESP
Power [kW]	3490	2618	1745	873
Speed [rpm]	1800	1800	1800	1800
Exhaust Gas Flow [kg/h]	20720	19420	13530	7610
Exhaust Gas Temperature [C]	485	460	445	470
NO _x [g/kWh]	7.2	4.5	4.6	5.1
CO [g/kWh]	0.4	0.7	0.6	2.4
HC [g/kWh]	0.26	0.37	0.61	1.17
PM [g/kWh]	0.05	0.13	0.10	0.39

NOT TO EXCEED EMISSION DATA

Cycle point	100% ESP	75% ESP	50% ESP	25% ESP
NO _x [g/kWh]	5.968 gm/hp-hr	8.0	5.2	5.3
CO [g/kWh]	1.2	2.0	1.8	7.2
HC [g/kWh]	0.32	0.44	0.73	1.41
PM [g/kWh]	0.06	0.15	0.12	0.46

TEST METHODS AND CONDITIONS

Test Methods:

Steady-State emissions recorded per EPA CFR 40 Part 89, and ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rated stabilized.

Fuel Specification:

40-48 Cetane Number, 0.05 Wt. % max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

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 (required for NO_x correction); 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. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data and specifications subject to change without notice.