

	<b>Cummins Inc.</b> Columbus, Indiana 47202-3005	Basic Engine Model: <b>KTA50-G3</b>	Curve Number: <b>FR6250</b>	<i>G-DRIVE</i> <b>K50</b> <b>1</b>
	<b>EXHAUST EMISSIONS DATA SHEET</b>	Engine Critical Parts List: <b>CPL : 2227</b>	Date: <b>30 JUN 12</b>	
Displacement : 50.3 litre (3067 in <sup>3</sup> )		<b>Bore : 159 mm (6.25 in.) Stroke : 159 mm (6.25 in.)</b>		
No. of Cylinders : 16		<b>Aspiration : Turbocharged and Aftercooled</b>		
Emission Certification : N/A				

Engine Speed	Standby Power		Prime Power				Continuous Power	
			Limited Time		Unlimited Time		kWm	hp
			kWm	hp	kWm	hp		
<b>1500</b>	1227	1645	1150	1541	1097	1470	900	1206
<b>1800</b>	1380	1850	1300	1742	1220	1635	1000	1340

### Exhaust Emissions Data @ 1500 RPM

Component	Standby Power			Prime Power			Continuous Power		
	g/BHP-h	mg/m <sup>3</sup>	PPM	g/BHP-h	mg/m <sup>3</sup>	PPM	g/BHP-h	mg/m <sup>3</sup>	PPM
<b>HC (Total Unburned Hydrocarbons)</b>	0.13	55	110	0.12	50	100	0.1	42	90
<b>NOx (Oxides of Nitrogen as NO<sub>2</sub>)</b>	12	6100	2880	11	5500	2590	9	4500	2140
<b>CO (Carbon Monoxide)</b>	2.8	1400	1060	2.7	1400	1020	2.6	1300	930
<b>PM (Particulate Matter)</b>	0.08	40	-	0.09	35	-	0.11	55	-
<b>SO<sub>2</sub> (Sulfer Dioxide)</b>	0.12	56	28	0.12	58	26	0.13	56	28

### Exhaust Emissions Data @ 1800 RPM

Component	Standby Power			Prime Power			Continuous Power		
	g/BHP-h	mg/m <sup>3</sup>	PPM	g/BHP-h	mg/m <sup>3</sup>	PPM	g/BHP-h	mg/m <sup>3</sup>	PPM
<b>HC (Total Unburned Hydrocarbons)</b>	0.12	45	90	0.12	45	100	0.13	50	100
<b>NOx (Oxides of Nitrogen as NO<sub>2</sub>)</b>	12.70	6300	3040	11.3	5700	2760	9.7	4800	2290
<b>CO (Carbon Monoxide)</b>	1.00	480	400	0.08	360	290	0.5	250	190
<b>PM (Particulate Matter)</b>	0.06	30	-	0.07	35	-	0.06	30	-
<b>SO<sub>2</sub> (Sulfer Dioxide)</b>	0.12	59	29	0.12	58	28	0.13	56	28

Note: mg/m<sup>3</sup> and PPM numbers are measured dry and corrected to 5% O<sub>2</sub> content.

**Test Methods and Conditions:**

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 rates stabilized.

**Fuel Specifications:**

46.5 Cetane Number, 0.035 Wt. % Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

**Reference:**

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 H<sub>2</sub>O/lb) of dry air Humidity (required for NOx 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 subject to engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel, or reference conditions can yield different results.

Data subject to change without notice.