

	<b>CUMMINS ENGINE COMPANY, INC</b> Columbus, Indiana 47201	Basic Engine Model: <b>QSX15-G8 4g TA Luft</b>	Curve Number: <b>FR-10401</b>	Page No.
	<b>EXHAUST EMISSIONS DATA SHEET</b>	Engine Critical Parts List: <b>CPL: 8081</b>	Date: <b>19Feb07</b>	
Displacement : <b>15 litre (912 in<sup>3</sup>)</b>		Bore : <b>137 mm (5.39 in.)</b> Stroke : <b>169 mm (6.65 in.)</b>		
No. of Cylinders : <b>6</b>		Aspiration : <b>Turbocharged and Aftercooled</b>		
Emissions Control Device : <b>Turbocharging and Aftercooling</b>				

Engine Speed RPM	Standby Power		Prime Power		Continuous Power	
	kWm	BHP	kWm	BHP	kWm	BHP
1500	500	670	444	595	317	425
1800	455	610	414	555	295	395

## TA-Luft

Engine Emission at prime rating corrected to 5% O<sub>2</sub> content, are in compliance with the following TA-Luft standards:

<b>NO<sub>x</sub> :</b>	<b>4000 mg/nm<sup>3</sup></b>	<b>NMHC :</b>	<b>150 mg/nm<sup>3</sup></b>
<b>CO :</b>	<b>650 mg/nm<sup>3</sup></b>	<b>Particulates :</b>	<b>130 mg/nm<sup>3</sup></b>

**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 Specification:**

40 - 48 Cetane Number, 0.05 Wt.% 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 H<sub>2</sub>O/lb) of dry air Humidity (required for NO<sub>x</sub> 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.

## EU NRMM (1500 RPM Only)

This engine, tested in accordance with directive 97/68/EC, is in compliance with the EU NRMM Stage II regulations.

Component	g/BHP-hr	g/kW-hr
<b>NO<sub>x</sub> (Oxides of Nitrogen)</b>	4.5	6.0
<b>HC (Hydrocarbons)</b>	.75	1.0
<b>CO (Carbon Monoxide)</b>	2.6	3.5
<b>PM (Particulate Matter)</b>	0.15	0.20

**Test Methods and Conditions:**

Tests to demonstrate compliance with the regulated levels shown above were conducted per 97/68/EC (ref. ISO8178-1) and weighted at load points prescribed in 97/68/EC Annex 3, "test procedures". (ref.ISO8178-4,D2).

**Fuel Specifications:**

52-54 Cetane Number, 0.03 Max. Wt.% Sulfur; as referenced by directive 97/68/EC.

**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 NO<sub>x</sub> correction); Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.