

Cummins Inc.

Columbus, Indiana 47202-3005

EXHAUST EMISSIONS DATA SHEET

Basic Engine Model: QSK60-G4

FR60194

Curve Number:

G-DRIVE

Engine Critical Parts List: CPL: 4532

Date: **2015-01-26**

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Compression Ratio: 14.5:1 Displacement: 3,673 in³ (60.2 L)

Fuel System : Cummins HPI-PT Aspiration : Turbocharged and Low Temp. Aftercooled (2 Pump / 2 Loop)

Emission Certification: Non-Certified

Engine Speed	Standby Power		Prime	Power	Continuous Power		
rpm	kWm	bhp	kWm	bhp	kWm	bhp	
1500	1,915	2,567	1,730	2,319	1,415	1,897	

Exhaust Emissions Data @ 1500 RPM

		Standby Power			Prime Power			Continuous Power		
	Component	g/BHP-h	mg/m³	PPM	g/BHP-h	mg/m³	PPM	g/BHP-h	mg/m³	PPM
НС	(Total Unburned Hydrocarbons)	0.12	69	100	0.12	65	94	0.14	71	114
NOx	(Oxides of Nitrogen as NO ₂)	8.4	4,160	2,030	8.0	4,010	1,960	8.2	4,140	2,020
СО	(Carbon Monoxide)	1.4	690	550	1.0	500	400	0.57	285	230
PM	(Particulate Matter)	0.05	33	N/A	0.04	25	N/A	0.03	17	N/A
SO ²	(Sulfur Dioxide)	0.56	N/A	N/A	0.56	N/A	N/A	0.56	N/A	N/A

NOTE: mg/m^3 and PPM numbers are measured dry and corrected to 5% 0_2 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:

40 - 48 Cetane Number, 0.03 - 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 ($75 \text{ grains H}_2\text{O/lb}$) of dry air Humidity (required for NOx correction); Intake Restriction set to maximum allow-able 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.