# **EXHAUST EMISSION DATA SHEET**

## **MQ POWER GENERATOR SET**

### Model: DCA25SSI

#### The engine used in this generator set is certified to comply with United States EPA Interim Tier 4 and CARB Mobile Off-Highway emission regulations.

ENGINE DATA							
Manufacturer:	ISUZU		Bore:	3.35 in.	(85 mm)		
Model:	BV-4LE2		Stroke:	3.78 in.	(96 mm)		
Туре:	4-Cycle, In-Line,	4-Cylinder, Diesel	Displacement	: 133 cid	(2.18 liters)		
Aspiration:	Naturally Aspirated	b	Compression	Ratio:	18:1		
PERFORMANCE DAT	<u>A</u>						
SAE Gross HP @ 1800 RPM (60 Hz)							
Rated Load Fuel Consumption (gal/Hr)							
Rated Load Exhaust Gas Flo	152						
Rated Load Exhaust Gas Temperature (°F) 1004							
United States EPA	A - Mobile Of	f-Highway Inte	rim Tier 4 Limit	:s - ≥25	BHP ~ <49 BHP		
Criteria Pollutant	Em	nission Requiremen	ts Certifie	Certified Engine Emissions			
NOx (Oxides of Nitrogen as	NO2) (5.60	)* gr/bhp-hr	(4.92)*	gr/bhp-hr			
HC (Total Unburned Hydroca	arbons) (N	IOx + HC)* Combine	d (NOx	+ HC)* Cor	nbined		
CO (Carbon Monoxide)	4.10	) gr/bhp-hr	1.49	1.49 gr/bhp-hr			
PM (Particulate Matter)	0.22	2 gr/bhp-hr	0.19	gr/bhp-hr			
EPA Engine Family:	9SZXL	02.2VNB					
	071/1						

PM (Particulate Matter)	0.22 gr/bhp-hr	0.19 gr/bhp-hr
EDA Engine Femily	9SZXL02.2VNB	
EPA Engine Family:	932AL02.2 VINB	
EPA Certificate of Conformance:	SZX-NRCI-09-16	
ARB Executive Order:	U-R-006-0246	
Effective Date:	Model Year 2009	

Note: Engine operation with excessive air intake or exhaust restriction beyond factory published maximum limits, or with improper service maintenance, may result in higher emission levels.





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY OFFICE OF TRANSPORTATION AND AIR QUALITY WASHINGTON, DC 20460

CERTIFICATE OF CONFORMITY 2009 MODEL YEAR

NOx: N/A



Manufacturer: Engine Family: Certificate Number: Intended Service Class: Fuel Type: FELs: Effective Date: Date Issued: ISUZU MOTORS LIMITED 9SZXL02.2VNB SZX-NRCI-09-16 NR 3 (19-37) DIESEL NMHC+NOx: N/A NO: 8/18/2008 8/18/2008

PM: N/A

Karl J. Simon, Director Compliance and Innovative Strategies Division Office of Transportation and Air Quality

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 1039, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR 1039 and produced in the stated model year.

This certificate of conformity covers only those nonroad compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 1039 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 1039.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR Part 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to a revocation or suspension of this certificate for reasons specified in 40 CFR Part 1039. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 1039.

This certificate does not cover nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

California Environmental Protection Agency

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
2009	9SZXL02.2VNB	2.2	Diesel	5000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Diesel Injection			Generator Set				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 4 - Interim	STD	N/A	N/A	7.5	5.5	0.30	N/A	N/A	N/A
		CERT			6.6	2.0	0.25			

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

day of September 2008.

H-Ack

Annette Hebert, Chief Mobile Source Operations Division