EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET





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

ENGINE DATA

Manufacturer: ISUZU 3.35 Bore: (85 mm) Model: 4LE2X Stroke: 3.78 in. (96 mm) Type: 4-Cycle, In-Line, 4-Cylinder, Diesel Displacement: 133 cid (2.2 liters)

Aspiration: Turbocharger, ECM, EGR, DOC, Electronic Direct

Injection, Charge Air Cooler

Compression Ratio: 17.6:1

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz) Rated 95.7

Load Fuel Consumption (gal/Hr) Rated 2.93

Load Exhaust Gas Flow (cfm) Rated Load 237

Exhaust Gas Temperature (°F) 1078

United States EPA - Mobile Off-Highway Tier 4 Limits -

25 ≤ ~ < 75 BHP

Date: 2/13/2023

Criteria Pollutant	Emis	ssion Requirements	Certifie	d Engine Emissions
NOx (Oxides of Nitrogen as NO2)	N/A	gr/bhp-hr	N/A	gr/bhp-hr
HC (Total Unburned Hydrocarbons)	N/A	gr/bhp-hr	N/A	gr/bhp-hr
NOx + HC (Combined)	N/A	gr/bhp-hr	N/A	gr/bhp-hr
CO (Carbon Monoxide)	3.72	gr/bhp-hr	0.007	gr/bhp-hr
PM (Particulate Matter)	0.02	gr/bhp-hr	0.01	gr/bhp-hr
NMHC (Non-Methane Hydrocarbons)	N/A	gr/bhp-hr	N/A	gr/bhp-hr
NMHC + NOx	3.50	gr/bhp-hr	2.38	gr/bhp-hr

EPA Engine Family: PSZXL02.2PXB

EPA Certificate of Conformance: PSZXL02.2PXB-006

ARB Executive Order: U-R-006-0521

Effective Date: Model Year 2023

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.

Data And Specifications Subject To Change Without Notice



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 2023 MODEL YEAR CERTIFICATE OF CONFORMITY WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION AND AIR QUALITY ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Isuzu Motors Limited

(U.S. Manufacturer or Importer)

Certificate Number: PSZXL02.2PXB-006

Effective Date: 07/21/2022

Expiration Date: 12/31/2023

Issue Date: 07/21/2022

 $\frac{\text{Revision Date:}}{N/A}$

Model Year: 2023

Manufacturer Type: Original Engine Manufacturer

Engine Family: PSZXL02.2PXB

Mobile/Stationary Indicator: Mobile **Emissions Power Category:** 37<=kW<56

Fuel Type: Diesel

After Treatment Devices: Diesel Oxidation Catalyst

Non-after Treatment Devices: Electronic Control, Electronic/Electric EGR - Cooled

Byron J. Bunker, Division Director

Compliance Division

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 engines, by engine family, more fully described in the documentation required by 40 CFR Part 1039 and produced in the stated model year.

This certificate of conformity covers only those new 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 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 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 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.



ISUZU MOTORS LIMITED

EXECUTIVE ORDER U-R-006-0521 New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in California 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-19-095:

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)					
2023	PSZXL02.2PXB	2.179	Diesel 8000						
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Air Coole	ic Control Module, Turl er, Electronic Direct Inje circulation, Diesel Oxid	ction, Exhaust Gas	Generator S	Set					

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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 POWER CLASS	EMISSION		EXHAUST (g/kw-hr) OPACITY (%)								
	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK	
37 ≤ kW< 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A	
		CERT	- 		3.2	0.01	0.02	S778		577	

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 on this 21st day of July 2022.

Robin U. Lang, Chief

Johns Shi for

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-006-0521 Family: PSZXL02.2PXB Attachment Last Revised: 6/28/2022

dadal .			Confin	Disabassas	Displacement -	Bart Barre	Post Poss	Dook Down	Peak Power	D1-D			Peak Power -	Peak Power -		Peak Power - Fue		Peak Torque -	Peak Torque -	Peak Torque - Fuel Peak Torque - Fuel Units OBD GHG			2	Net
Model BP-4LE2X	4LE2XDP	-	Config 14	Displacement 2.179	Units	65.7	Units	Speed (rpm) 1800	Fueling 56.1	Units mm3/stroke	Peak Torque 192	Units Ib-ft	Speed (rpm)	56.1	mm3/stroke	OBD	GHG N/A	Special N/A	Notes N/A					
DP-4LEZA	BA-UI	N/A	14	2.179		05.7	nr	1800	30.1	mms/stroke	192	10-10	1800	30.1	mms/stroke	IN/A	IN/A	N/A	IN/A					
BP-4LE2X	4LE2XDP BB-01	N/A	14	2.179	L	65.7	НР	1800	56.1	mm3/stroke	192	lb-ft	1800	56.1	mm3/stroke	N/A	N/A	N/A	N/A					
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