EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET





The engine used in this generator set is certified to comply with United States EPA Tier 2 and CARB Mobile Off-Highway emission regulations.

ENGINE DATA

Manufacturer: KOMATSU 6.69 (170 mm)Bore: Model: SAA6D-170E2 Stroke: 6.69 (170 mm) in. Type: 4- Cycle, in-line, 6 Cylinder, Diesel Displacement: 1413 cid (23.2 liters)

Turbocharger Air Cooler. 16.1:1

Aspiration: Compression Ratio:

ECM,

PERFORMANCE DATA

SAE Gross HP @ 1800 RPM (60 Hz) 1220 Rated Load Fuel Consumption (gal/Hr) 41.3 Rated Load Exhaust Gas Flow (cfm) 2435 Rated Load Exhaust Gas Temperature (°F) 842

> United States EPA - Mobile Off-Highway Tier 2 Limits -

>751 BHP

| Criteria Pollutant | Emission Requirements | Certified 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) | 2.61 gr/bhp-hr | 0.60 gr/bhp-hr |
| PM (Particulate Matter) | 0.15 gr/bhp-hr | 0.10 gr/bhp-hr |
| NMHC (Non-Methane Hydrocarbons) | N/A gr/bhp-hr | N/A gr/bhp-hr |
| NMHC + NOx | 4.77 gr/bhp-hr | 4.40 gr/bhp-hr |

EPA Engine Family: AKLXL23.2FD5 **EPA Flex Program**

EPA Certificate of Conformance:

ARB Executive Order: U-R-005-0410 **Effective Date:** Model Year 2014

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.

KOMATSU LIMITED

EXECUTIVE ORDER U-R-005-0410 New Off-Road Compression-Ignition Engines

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 under the flexibility program provisions. Production engines shall be in all material respects the same as those for which certification is granted.

| MODEL YEAR | FLEXIBILITY PROGRAM ENGINE FAMILY NAME(s) | |
|------------|---|--|
| 2014 | AKLXL23.2FD5, AKLXL11.0DD6, DKLXL11.0DDA,AKLXL15.2ED6, DKLXL15.2EDA, BKLXL03.3JD6, AKLXL23.2FD6, CKLXL03.3JD9, AKLXL78.0ZD1 | |

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 2423, subpart (d).

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 December 2013.

Frik White Chief

¹Møbile Source Operations Division