

EXHAUST EMISSION DATA SHEET

MQ POWER GENERATOR SET

Model: MQP150IV



The engine used in this generator set is certified to comply with United States EPA Tier 3 and CARB Mobile Off-Highway emission regulations.

ENGINE DATA

| | | | | |
|---------------|---------------------------------------|--------------------|---------------------|------------|
| Manufacturer: | IVECO | Bore: | 4.09 in | 104 mm |
| Model: | F4HE9685B | Stroke: | 5.20 in | 132 mm |
| Type: | 4-Cycle Diesel, Direct Injection, I-6 | Displacement: | 408 in ³ | 6.7 liters |
| Aspiration: | Turbocharger, Charge Air Cooler, ECM | Compression Ratio: | 16.5:1 | |

PERFORMANCE DATA

| | |
|---|------|
| SAE Gross HP @ 1800 RPM (60 Hz) | 231 |
| Rated Load Fuel Consumption (gal/Hr) | 11.1 |
| Rated Load Exhaust Gas Flow (cfm) | 1395 |
| Rated Load Exhaust Gas Temperature (°F) | 1040 |

United States EPA - Mobile Off-Highway Tier 3 Limits - ≥174 BHP - ≤301 BHP

| Criteria Pollutant | Emission Requirements | Certified Engine Emissions |
|--|-----------------------|----------------------------|
| NOx (Oxides of Nitrogen as NO ₂) | 2.98 gr/bhp-hr | 2.76 gr/bhp-hr |
| HC (Total Unburned Hydrocarbons) | (NOx + HC)* Combined | (NOx + HC)* Combined |
| CO (Carbon Monoxide) | 2.61 gr/bhp-hr | 0.89 gr/bhp-hr |
| PM (Particulate Matter) | 0.15 gr/bhp-hr | 0.06 gr/bhp-hr |

| | |
|---------------------------------|------------------|
| EPA Engine Family: | 8VEXL06.7DGS |
| EPA Certificate of Conformance: | VEX-STNRCI-08-20 |
| ARB Executive Order: | U-R-015-0146 |
| Effective Date: | Model Year 2008 |

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
2008 MODEL YEAR

Manufacturer: **IVECO SPA**
Engine Family: **8VEXL06.7DGS**
Certificate Number: **VEX-STNRCI-08-20**
Intended Service Class: **NR 6 (130-225)**
Fuel Type: **DIESEL**
FELs: NMHC+NOx: N/A NOx: N/A PM: N/A
Effective Date: **2/4/2008**
Date Issued: **2/4/2008**

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

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60 and Part 89, 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 stationary and nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and 89, and produced in the stated model year.

This certificate of conformity covers only those new stationary and 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 60 and 89 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60 and 89.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 89.129-96 and 89.506-96 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 89. 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 89.

This certificate does not cover stationary and 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.

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 engine and emission control system 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) |
|---|---------------|-----------------------|--|---------------------|
| 2008 | 8VEXL06.7DGS | 6.7 | Diesel | 8000 |
| SPECIAL FEATURES & EMISSION CONTROL SYSTEMS | | | TYPICAL EQUIPMENT APPLICATION | |
| Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module | | | Generator and Other Industrial Equipment | |

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 POWER CLASS | EMISSION STANDARD CATEGORY | STD | EXHAUST (g/kw-hr) | | | | | OPACITY (%) | | |
|-------------------|----------------------------|------|-------------------|-----|----------|-----|------|-------------|-----|------|
| | | | HC | NOx | NMHC+NOx | CO | PM | ACCEL | LUG | PEAK |
| 130 ≤ kW < 225 | Tier 3 | N/A | N/A | N/A | 4.0 | 3.5 | 0.20 | 20 | 15 | 50 |
| | | CERT | -- | -- | 3.7 | 1.2 | 0.08 | -- | -- | -- |

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 8th day of February 2008.


 Annette Hebert, Chief
 Mobile Source Operations Division

ATTACHMENT Pg 1 of 1
Engine Model Summary Template

U-R-015-0146

| Engine Family | 1.Engine Code | 2.Engine Model | 3.BHP@RPM (SAE Gross) | 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) | 5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only) | 6.Torque @ RPM (SEA Gross) | 7.Fuel Rate: mm/stroke@peak torque | 8.Fuel Rate: (lbs/hr)@peak torque | 9.Emission Control Device Per SAE J1930 |
|---------------|------------------|----------------|--------------------------|--|--|-------------------------------|--|--------------------------------------|--|
| SVEXL06.7DGS | N/A | F4HE9685A*J | 279 @ 1800 | 160 | N/A | 813 @ 1800 | 160 | N/A | DDT, EM. EC. CAC. |
| SVEXL06.7DGS | N/A → | F4HE9685B*J | 231 @ 1800 | 130 | N/A | 673 @ 1800 | 130 | N/A | ↓ EM. EC. CAC. |