

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 ENGINE FAMILY		DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2007	7CEXL023.AAA	23.2	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Generator			

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS			нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		FEL	N/A	N/A	9.5	N/A	N/A	N/A	N/A	N/A
		CERT			7.7	1.1	0.13	16	4	31

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 2006.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form איזאכאיז דפן (של ו

Manufacturer: Cummins Inc.

Engine category: Nonroad Cl

EPA Engine Family. 7CEXL023.AAA

Mfr Family Name: QSK23

Process Code: New Submission

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9.Emission Control Device Per SAE J1930	تر, EM,ECM,	, EM,EC/	EM,EC	EM,EC	EM,EC	√ EM,EC√
8.Fuel Rate: (lbs/hr)@peak torque	248	198	235	226	219	223
7.Fuel Rate: mrr/stroke@peak t orque	528	454	501	484	469	494
6.Torque @ RPM (SEA Gross)	2897@1400	2404@1300	2700@1400	2600@1400	2440@1400	2564@1350
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	330	256	310	296	283	257
4.Fuel Rate: mru⁄stroke @ peak HP (for diesel only)	469	363	442	423	404	468
3.BHP@RPM (SAE Gross)	QSK23-C 950@2100 469	760@2100	900@2100	860@2100	800@1650	760@2100
1.Engine Code 2.Engine Model	QSK23-C	QSK23-C	QSK23-C	QSK23-C	QSK23-C	QSK23-C
1.Engine Code	CPL8353FR5003	CPL8353FR5001	CPL8353FR5019	CPL8353FR5021	CPL8353FR5023	CPL8353FR5033