DEUTZ AG

EXECUTIVE ORDER U-R-013-0229 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. 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	8DZXL03.6081	3.619	Diesel	8000				
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION					
Direct l	Diesel Injection, Exhaust	Gas Recirculation	Loader, Tractor, 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			Е	XHAUST (g/kw-l	OPACITY (%)				
			HC	NOx	NMHC+NOx	co	P M	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 interim	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT			4.1	1.4	0.18	1	1	1

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 _____ 22 day of February 2008.

Annette Hebert, Chief

Mobile Source Operations Division

DEUTZ AG Aanufacturer:

Nonroad Cl ingine category:

PA Engine Family: 8DZXL03.6081

Vfr Family Name: D2011L04 /I 37-56KW TIER4 INT OPT 1

New Submission Process Code:

Attachment

U-A-013-0229.

		(1) 16 (1) 17 (1) 18 (1										
9.Emission Control Device Per SAE J1930	DDI, EGR	DDI, EGR	DDI, EGR	DDI, EGR	DDI, EGR	DDI, EGR	DDIFEGR	DDI, EGR	DDI, EGR	DDI, EGR	DDI, EGR	DDI, EGR
8.Fuel Rate: (lbs/hr)@peak torque	16.9	16.9	16.9	16.9	16.2	16.2	16.2	16.2	16.9	15.2	15.9	T5.8
7.Fuel Rate: mm/stroke@peak torque	45 -	45	45	45	43	distraction in the contraction of the contraction o	43	43	45	43	45	42
6.Torque @ RPM (SEA Gross)	190@1700	190@1700	190@1700	190@1700	180@1700	180@1700	180@1700	180@1700	190@1700	180@1700	190@1700	180@1700
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	26.5	24.9	23.4	22.4	25.9	24.4	22.9	21.9	25.9	21.9	22.4	25.4
4.Fuel Kate: mm/stroke @ peak HP (for diesel only)	46	45	77	44	45	44	2	43	45	43	44	44
3.BHP@RPM n (SAE Gross)	41.5 63.7@2600	61.4@2500	58.9@2400	57.7@2300	60.6@2600	58.5@2500	56.4@2400	40,9 54.9@2300	61.6@2600	54.9@2300	57.7@2300	59.8@2600
	45							40,9				
1.Engine Code 2.Engine Model	D2011L 04 i	D2011L04i	D2011L04i	D2011L04i	D2011L04i	D2011L04i	D2011L04i	D2011L04i	D2011L04	D3,6DCAE3	D3,6DCBE3	D2011L04i
1.Engine Code	C3CI47,5	C3Cl45,9	C3C144	C3Cl43,1	C3Cl45,2	C3Cl43,7	C3CI42,1	C3CI41	C3C 46	C3CI41A	C3CI43A	C3C144,6