DEUTZ AG

EXECUTIVE ORDER U-R-013-0243 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	8DZXL04.8071	4.764	Diesel	8000				
	FEATURES & EMISSION (TYPICAL EQUIPMENT APPLICATION					
Direct Dies Smoke	el Injection, Turbocharge e Puff Limiter, Exhaust G	er, Charge Air Cooler, as Recirculation	Loader, Tractor, Dozer, Pump, Compressor, 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	EMISSION		EXHAUST (g/kw-hr) OPACITY (%)							
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3 STD N/A N/A		4.0	4.0 5.0	0.30	20	15	50		
		CERT			3.8	1.7	0.22	17	4	24

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 ______ 24^{nt}____ day of December 2007.

Annette Hebert, Chief

Mobile Source Operations Division

Raphael Surrouits

Attachment

Engine Model Summary Form

Manufacturer: DEUTZ AG

Engine category: Nonroad CI

EPA Engine Family: 7DZXL04.8071

Mfr Family Name: TCD2013L042V MECH 75-130KW TIER3

Process Code: New Submission

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ontrol E J1930	DDI, TC, CAC, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL	C, SPL
9.Emission Control Device Per SAE J1930	TC, CA	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPL	TC, CAC, SPL	DDI, TC, CAC, SPL	DDI, TC, CAC, SPI	DDI, TC, CAC, SPL
9.El Devic	00,	,100	ā	םם!	. DDI.	100	ā	. 100	j D	. 100	DOI
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8.Fuel Rate: (lbs/hr)@peak torque	44.0	36.7	36.7	36.7	35.0	35.0	35.0	32.7	32.7	31.0	36.7
7.Fuel Rate: mm/stroke@pea k torque	32	10	10	10	105	105	105	98	86	93	1.0
7.Fuel mm/stro k tor		-		-	Ŧ	1	Y	6	6	6	
@ RPM sross)	416.7@1500	361.4@1500	361.4@1500	361.4@1500	342.9@1500	342.9@1500	342.9@1500	324.5@1500	324.5@1500	309.7@1500	361.4@1500
6.Torque @ RPM (SEA Gross)	416.7(361.4(361.4(361.4(342.9(342.9(342.9(324.5(324.5(309.7	361.4(
		0		"		~	Ž	10		_	
5.Fuel Rate: bs/hr) @ peak HI (for diesels only)	56.2	51.6	53.7	46.6	49.5	51.8	44.3	46.5	48.8	43.9	47.4
H E											
4.Fuel Rate: //stroke @ peak (for diesel only)	115	101	110	100	- 6	106	92	91	100	96	97
4.l mm/stro (for		0	0	0		0	0	0	0	0	0
4.Fuel Ra 3.BHP@RPM mm/stroke @ p (SAE Gross) (for diesel o	4@220	124,7@2300	132,7@2200	116,6@2100	118@2300	127,3@2200	111,3@2100	111,3@2300	6@220	6@220	116,6@2200
	Q 139,	124,	132,	116,	118	127,	#	111,	120,	84 108,	116,
Model	TCD2013L04 104 139,4@2200	rcD2013L04	13L04	13104	13∟04	13L04	13L04	13L04	-CD2013L04 120,6@2200	CD2013L04 81 108,6@2200	ВЕЗ
2.Engine Model	TCD20	TCD20	TCD2013L04	TCD2013L04	TCD2013L04	TCD2013L04	TCD2013L04	TCD2013L04	TCD201	TCD201	D5DCBE3
	04	93	66	87	88	95	83	3A	06	31	97
1.Engine Code	C3MI104	C3MI93	C3M199	C3MI87	C3MI88	C3MI95	C3MI83	C3MI83A	C3MI90	C3MI81	C3MI87