## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0166 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 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)						
2006	6DZXL07.1005	4.76	Diesel	8000						
	FEATURES & EMISSION C		TYPICAL EQUIPMENT APPLICATION							
Direct Dies	sel Injection, Smoke Puff I	_imiter, Turbocharger	Generator Set, Other Industrial I	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	EMISSION			E	XHAUST (g/kW-l	hr)		OPACITY (%)				
CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK		
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50		
		CERT	-	-	7.1	3.1	.30	6	4	10		

**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 \_\_\_\_\_\_3024\_\_\_ day of December 2005.

Allen Lyons, Chief

Mobile Source Operations Division

Rophael Sumowit

## Engine Model Summary Form

DEUTZ AG Manufacturer:

Engine category:

Nonroad CI 6DZXL07.1005 EPA Engine Family:

BF4M 1013E, D5D Mfr Family Name:

New Submission Process Code:

44-013-0166

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9.Emission Control Device Per SAE J1930	SPL,	SPL,	SPL,	SPL,	SPL,	SPL,	SPL,	SPL,	SPL,	SPL,	SPL.	SPL,	SPL.	SPL,										
lssion (	DDI,TC, SPL	DDI,TC, SPL	DDI,TC, SPL	DDI,TC, SPL,	DDI,TC, SPL	DDI,TC, SPL	DDI,TC, SPL,	DDI,TC, SPL				- Landerson				The second second								
9.Em Device	aa	8	OO	a	ga	8	g	8	8	00	8	8	DO	G									.	
ane											**										Ì			
8.Fuel Rate: hr)@peak tor	33.5	27.9	33.5	33.5	33.5	33.5	33.5	33.5	27.9	27.9	27.9	27.9	27.9	27.9										
8.Fu bs/hr)@			. ÷ -/1										1: - :						1:					
										i														
7.Fuel Rate: n/stroke@pe torque	108	06	108	108	108	108	108	108	90	06	06	90	90	90										
7.Fuel Rate: mm/stroke@peak torque																sr\$.								
												The factor of th				!			1.					
6.Torque @ RPM (SEA Gross)	450@1400	1400	450@1400	1400	450@1400	1400	1400	1400	375@1400	1400	1400	1400	1400	1400										
forque (SEA G	450@	375@1400	450@	450@1400	450@	450@1400	450@1400	450@1400	375@	375@1400	375@1400	375@1400	375@1400	375@1400										
6.3																						×		
ate: sak HP only)				_												 · .								
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	4	39.1	38.7	39.9	39.2	41	41.5	42.4	36.3	37.1	37.7	38.7	39.5	39.8										
(lbs/h (for																 · ::-:								
e: Sak HP (카																			-					
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	88	84	97	06	93	88	85	83	91	88	85	83	81	78								: ]		
4.Fi m/strol (for d																								
	0		0	0	0	0	0	0																
3.BHP@RPM (SAE Gross)	100.4@2100	95.2@2100	@180	100.4@2000	@190	@210	@220	@230	93.8@1800	93.8@1900	93.8@2000	93.8@2100	93.8@2200	93.8@2300					ľ					
3.BHF (SAE	100.4	95.2(	100.4@1800	100.4	100.4@1900	100.4@2100	100.4@2200	100.4@2300	93.8(	93.8(	93.8(	93.8(	93.8(	93.8(					-					
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2.Engine Model	BE2	AE2	013E	013E	013E	013E				1														
ingine	D5DCBE2	D5DCAE2	BF4M1013E	BF4M1013E	BF4M1013E	BF4M1013E																		
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1.Engine Code	CE74,9	CE71	CE74,9/2	CE74,9/1	CE74,9/3	CE74,9/4	CE74,9/5	CE74,9/6	CE70	CE70/1	CE70/2	CE70/3	CE70/4	CE70/5				1	-					
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