

 <b>California Environmental Protection Agency</b> <b>AIR RESOURCES BOARD</b>	<b>DEUTZ AG</b>	<b>EXECUTIVE ORDER U-R-013-0084</b> 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)
2003	3DZXL71.0021	35.4, 53.1, 70.8	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Generator Set	

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):

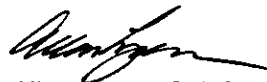
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
kW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
		CERT	0.9	8.9	--	1.2	0.26	--	--	--

**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 9<sup>TH</sup> day of December 2002.



Allen Lyons, Chief  
Mobile Source Operations Division

*Attachment 1 of 1*

Manufacturer: DEUTZ AG  
 Engine Category: Nonroad CI  
 EPA Family Name: 3DZXLT71.0021  
 Mfr. Family Name: TBD620V8  
 Process Code: New Submission

**ENGINE MODEL SUMMARY FORM**

*LA-013-0084*

1. Engine Code	2. Engine Model	3. BHP@ RPM	4. Fuel Rate @ Rated Power (mm <sup>3</sup> /stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)	7. Peak Torque (mm <sup>3</sup> /stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
N/A	TBD 620 V8	960 1800	543	336.0	N/A	N/A	N/A	EM PPI, SPL
N/A	TBD 620 V8	1008 1800	573	352.8	N/A	N/A	N/A	EM TC, etc
N/A	TBD 620 V8	1056 1800	601	369.6	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1440 1800	543	504.0	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1512 1800	570	529.2	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1584 1800	601	554.4	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1465 1800	538	512.8	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1465 1800	540	512.8	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1465 1800	551	512.8	N/A	N/A	N/A	EM
N/A	TBD 620 V16	1920 1800	543	672.0	N/A	N/A	N/A	EM
N/A	TBD 620 V16	2016 1800	570	705.6	N/A	N/A	N/A	EM
N/A	TBD 620 V16	2112 1800	601	739.2	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1440 1800	529	504.0	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1512 1800	556	529.2	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1584 1800	601	554.4	N/A	N/A	N/A	EM
N/A	TBD 620 V12	1642 1800	606	574.7	N/A	N/A	N/A	EM
N/A	TBD 620 V16	1920 1800	534	672.0	N/A	N/A	N/A	EM
N/A	TBD 620 V16	2016 1800	562	705.6	N/A	N/A	N/A	EM
N/A	TBD 620 V16	2112 1800	610	739.2	N/A	N/A	N/A	EM
N/A	TBD 620 V16	2189 1800	612	766.2	N/A	N/A	N/A	EM