



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)
2004	4DZXL35.0001	17.5, 26.3, 35.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			Compressor, 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		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	20	15	50
		CERT	0.5	8.6	--	1.0	0.22	9	8	13

**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 6<sup>TH</sup> day of January 2004.

Allen Lyons, Chief  
Mobile Source Operations Division

Manufacturer: DEUTZ AG  
 Engine Category: Nonroad CI  
 EPA Family Name: 4DZXL35.0001  
 Mfr. Family Name: TBD616V8  
 Process Code: New Submission

## ENGINE MODEL SUMMARY FORM

Attachment 1 of 1  
 W-R-013-0124

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)
C440 **	TBD 616 V8	590 2000	235	207	1500	280.0	150.0	EM DEF, SFC, TC, PA
C660	TBD 616 V12	884 2000	235	309	1500	280.0	224.9	EM
C880	TBD 616 V16	1179 2000	235	413	1500	280.0	299.9	EM
DA 747 A1	TBD 616 V12	1002 1800	302	351	N/A	N/A	N/A	EM
DA 747 A2	TBD 616 V12	1002 1800	302.0	351	N/A	N/A	N/A	EM
DA 0821 A1	TBD 616 V12	1101 1800	331.0	385	N/A	N/A	N/A	EM
DA 0821 A2	TBD 616 V12	1101 1800	331.0	385	N/A	N/A	N/A	EM
DA 996 A1	TBD 616 V16	1336 1800	302.0	467	N/A	N/A	N/A	EM
DA 996 A2	TBD 616 V16	1336 1800	302.0	467	N/A	N/A	N/A	EM
DA 1095 A1	TBD 616 V16	1468 1800	331.0	514	N/A	N/A	N/A	EM
DA 1095 A2	TBD 616 V16	1468 1800	331.0	514	N/A	N/A	N/A	EM

\*\* This rating is listed as the certification test rating for this >560 kW family, but is not being certified due to its lower power output that places it in the 225-450 kW power category.