

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0179 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	6DZXL01.4029	1.0284, 1.3712	Diesel	3000, 5000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Indirect Diesel Injection			Loader, Tractor, Dozer, Pump, Compressor, Generator Set, 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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	20	15	50
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT	-	-	4.8	2.4	0.26	2	2	4

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 30th day of December 2005.


for Allen Lyons, Chief
Mobile Source Operations Division

Manufacturer:	Deutz AG
Engine category:	Nonroad CI
EPA Engine Family:	6DZXL01.4029
Mfr Family Name:	FM1008F
Process Code:	New Submission

Process Code: **New Submission**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
CE19,5	F3M1008F	26.1@3600	21.2	12.7	47.2@2000	21.7	7.5	IDI
CE17,5	F3M1008F	23.4@3000	21.2	10.5	46.5@2000	21.5	7.5	IDI
CD19,2	F3M1008F	25.7@3400	21	11.8	45.7@2000	21	7.3	IDI
CD18,5	F3M1008F	24.8@3300	21	11.5	45.7@2000	21	7.3	IDI
DE10	F3M1008F	13.4@1800	18.7	5.6	n.a.@n.a.	n.a.	0	IDI
DE19,5	F3M1008F	26.1@3600	21.2	12.7	n.a.@n.a.	n.a.	0	IDI
CD25,5	F4M1008F	34.1@3600	20.7	16.5	57.5@2100	21	10.2	IDI
CD25,3	F4M1008F	33.9@3400	21	15.8	59@1900	21	9.3	IDI
CD24,5	F4M1008F	32.8@3300	21	15.3	59@1900	21	9.3	IDI
CD22,5	F4M1008F	30.1@3000	20	13.3	59@1900	21	9.3	IDI
CD21,7	F4M1008F	29@2800	20.2	12.5	57.5@1900	20.8	9.2	IDI
CD19,0	F4M1008F	25.4@2500	20.2	11.2	54.6@1700	21	8.3	IDI
CD18,5	F4M1008F	24.8@2400	20.2	10.7	55.7@1900	20.7	9.1	IDI
DE13,6	F4M1008F	18.2@1800	19.5	7.7	n.a.@n.a.	n.a.	0	IDI
DE22	F4M1008F	29.5@3000	19.5	12.9	n.a.@n.a.	n.a.	0	IDI