

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0120 New Off-Road Compression-Ignition Engines
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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	4DZXL03.1039	3.109	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Loader, Pump	

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):

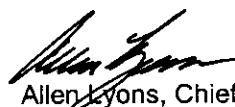
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50
		CERT	-	-	7.0	1.2	.14	2	2	3

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 8TH day of October 2003.



Allen Lyons, Chief
Mobile Source Operations Division

Attachment 1 of 2

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: DPZXL03.1039
Mfr. Family Name: BF3/4LM2011, D3D
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

U-12-013-0170

1. Engine code	2. Engine Model	3. BHP@ RPM	4. Fuel Rate @ Rated Power (mm ³ /stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque (Nm) @ RPM	7. Peak Torque (mm ³ /stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE54,9/1	D3DCEE2	74	54.0	26	241	1600	19	EM
CE50/1	D3DCDE2	67	53.0	23	241	1600	19	EM
CE62	BF4M2011	83	59.0	29	256	1600	20	EM
CE65	BF4M2011	87	61.0	30	270	1600	21	EM
CE63	BF4M2011	84	60.0	30	270	1600	21	EM
CE58,5	BF4M2011	78	56.0	27	256	1600	20	EM
CE61	BF4M2011	82	59.0	29	270	1600	21	EM
CE57	BF4M2011	76	57.0	27	256	1600	20	EM
CE60	BF4M2011	80	59.0	28	270	1600	21	EM
CE61/1	BF4M2011	82	60.0	29	270	1600	21	EM
CE57/1	BF4M2011	76	58.0	27	270	1600	21	EM
CE53,6	BF4M2011	72	55.0	25	n.a.	n.a.	n.a.	EM
CE46/2	BF4M2011	62	48.0	22	256	1600	20	EM
CE53	BF4M2011	71	55.0	25	256	1600	21	EM
CE56	BF4M2011	75	58.0	26	270	1600	20	EM
CE49	BF4M2011	66	51.5	23	256	1600	21	EM
CE54	BF4M2011	72	57.5	25	270	1600	21	EM
DE47,3	BF4M2011	61	61.0	21	n.a.	n.a.	n.a.	EM
CE55,1	BF4L2011	74	54.0	26	229	1600	18	EM
CE58,1	BF4L2011	78	56.5	27	241	1600	19	EM
CE56,5	BF4L2011	76	55.0	26	256	1600	20	EM
CE55,7	BF4L2011	75	56.0	26	241	1600	19	EM
CE52,1	BF4L2011	70	52.0	24	229	1600	18	EM
CE54,9	BF4L2011	74	54.0	26	241	1600	19	EM
CE50,8	BF4L2011	68	51.5	24	229	1600	18	EM
CE53,5	BF4L2011	72	54.0	25	241	1600	19	EM
CE47,5	BF4L2011	64	50.5	22	229	1600	18	EM
CE50	BF4L2011	67	53.0	23	241	1600	19	EM
DE45,5	BF4L2011	61	60.0	21	n.a.	n.a.	n.a.	EM
CE46	BF3M2011	62	54.0	22	180	1600	14	EM
CE48,5	BF3M2011	65	58.0	23	190	1600	15	EM
CE44,1	BF3M2011	59	55.0	21	180	1600	14	EM
CE46/1	BF3M2011	62	57.0	22	190	1600	15	EM
CE42,8	BF3M2011	57	56.0	20	180	1600	14	EM

Attachment 2 of 2

U-2-013-0120

ENGINE MODEL SUMMARY FORM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 4DZXL03.1039
Mfr. Family Name: BF34L/M2011, D3D
Process Code: New Submission

1. Engine code	2. Engine Model	3. BHP@ RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque (Nm) @ RPM	7. Peak Torque (mm3/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE45	BF3M2011	60 2500	57.0	21	190	1600	15	EM DDI
CE40	BF3M2011	54 2300	55.0	19	180	1600	14	EM
CE42	BF3M2011	56 2300	58.0	20	190	1600	15	EM
CE42,6	BF3L2011	57 2800	52.0	20	172	1600	14	EM
CE44,9	BF3L2011	60 2800	54.0	21	181	1600	14	EM
CE39,9	BF3L2011	53 2600	52.0	19	172	1600	14	EM
CE42/1	BF3L2011	56 2600	54.0	20	181	1600	14	EM
CE43	BF3L2011	58 2600	55.0	20	181	1600	14	EM
CE39,6	BF3L2011	53 2500	54.0	19	172	1600	14	EM
CE41,7	BF3L2011	56 2500	56.0	20	181	1600	14	EM
CE38,9	BF3L2011	52 2300	55.0	18	181	1600	14	EM