

 AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0118 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	4DZXL06.1038	6.057, 4.038	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter			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	0.40	20	15	50
		CERT	-	-	6.6	0.7	0.10	2	1	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 30TH day of July 2003.



Allen Lyons, Chief
Mobile Source Operations Division

Attachment pg 1 of 2

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ENGINE MODEL SUMMARY FORM

Manufacturer: DEUTZ AG
 Engine Category: Nonroad CI
 EPA Family Name: 3DZXL06.1038
 Mfr. Family Name: BF4M1012
 Process Code: New Submission

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)
CE60	BF4M2012	80	2000	28	333	1450	24	EM, SPL DDT, TC
CE62	BF4M2012	83	2100	29	333	1450	24	EM, SPL
CE63	BF4M2012	84	2000	30	352	1450	25	EM, SPL
CE64	BF4M2012	86	2200	30	333	1450	24	EM, SPL
CE66	BF4M2012	88	2300	31	333	1450	24	EM, SPL
CE68/1	BF4M2012	88	2100	31	352	1450	25	EM, SPL
CE67	BF4M2012	90	2000	31	371	1450	26	EM, SPL
CE68	BF4M2012	91	2400	32	333	1450	24	EM, SPL
CE68/1	BF4M2012	91	2200	32	352	1450	25	EM, SPL
CE69	BF4M2012	92	2100	32	371	1450	26	EM, SPL
CE70	BF4M2012	94	2500	33	333	1450	24	EM, SPL
CE70/1	BF4M2012	94	2300	33	352	1450	25	EM, SPL
CE70/2	BF4M2012	94	2000	33	390	1450	28	EM, SPL
CE72	BF4M2012	96	2400	34	352	1450	25	EM, SPL
CE72/1	BF4M2012	96	2200	34	371	1450	26	EM, SPL
CE73	BF4M2012	98	2100	34	390	1450	28	EM, SPL
CE74	BF4M2012	99	2500	35	352	1450	25	EM, SPL
CE74,9	BF4M2012	100	2500	35	390	1450	28	EM, SPL
CE74,9/1	BF4M2012	100	2500	35	371	1450	26	EM, SPL
CE74,9/2	BF4M2012	100	2400	35	390	1450	28	EM, SPL
CE74,9/3	BF4M2012	100	2400	35	371	1450	26	EM, SPL
CE74,9/4	BF4M2012	100	2300	35	390	1450	28	EM, SPL
CE74,9/5	BF4M2012	100	2200	35	390	1450	28	EM, SPL
CE74/1	BF4M2012	99	2300	35	371	1450	26	EM, SPL
CE65	BF4M2012	87	2500	30	333	1450	24	EM, SPL
CE66	BF4M2012	88	1800	31	390	1450	28	EM, SPL
CE64	BF4M2012	86	1800	30	371	1450	26	EM, SPL
CE62	BF4M2012	83	1800	29	352	1450	25	EM, SPL
CE60/1	BF4M2012	80	1800	28	333	1450	24	EM, SPL
CE68	BF4M2012	91	1900	32	390	1450	28	EM, SPL
CE66	BF4M2012	88	1900	31	371	1450	26	EM, SPL
CE63	BF4M2012	84	1900	30	352	1450	25	EM, SPL
CE60/2	BF4M2012	80	1900	28	333	1450	24	EM, SPL
CE60/3	BF4M2012	80	2100	28	300	1450	21	EM, SPL

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CE60/4	BF4M2012	80	2200	65.0	28	1450	69.0	EM, SPL PPE, TC
CE60/5	BF4M2012	80	2300	63.0	28	1450	69.0	EM, SPL
CE74,9/1	BF6M2012	100	2300	51.5	35	1200	60.0	EM, SPL
CE74,9/2	BF6M2012	100	2200	53.5	35	1200	60.0	EM, SPL
CE74,9/3	BF6M2012	100	2200	53.5	35	1200	64.5	EM, SPL
CE74,9/4	BF6M2012	100	2100	56.5	35	1200	64.5	EM, SPL
CE74,9/5	BF6M2012	100	2000	59.0	35	1200	70.5	EM, SPL
CE74,9/6	BF6M2012	100	1900	62.0	35	1200	70.5	EM, SPL
CE74,9/7	BF6M2012	100	1800	65.5	35	1200	75.0	EM, SPL
CE74,5	D4DRAE2	100	2200	80.0	390	1450	90.0	EM, SPL
CE73	D4DEAE2	98	2100	79.8	390	1450	90.0	EM, SPL
CE74,9	D4DLAE2	100	2200	80.0	390	1450	90.0	EM, SPL
CE64	D4DCAE2	88	2200	68.0	357	1450	82.0	EM, SPL
CE70	D4DCBE2	94	2200	80.0	390	1450	90.0	EM, SPL
CE74,5	D4DCCBE2	100	2200	80.0	390	1450	90.0	EM, SPL
CE74,9/2	D4DCDE2	100	2500	74.5	390	1450	90.0	EM, SPL
CE62	D4DDAE2	83	2100	68.0	333	1450	76.0	EM, SPL
CE69	D4DDBE2	92	2100	75.5	371	1450	85.0	EM, SPL
CE59T	BF4M2012	78	2300	67.5	340	1300	78.0	EM, SPL
CE61T	BF4M2012	82	2300	68.0	345	1300	79.0	EM, SPL
CE56T	BF4M2012	75	2300	63.0	300	1300	69.0	EM, SPL
CE66	TD420VE	88	2100	72.0	352	1450	80.0	EM, SPL
CE73	TD420VE	98	2100	79.8	390	1450	90.0	EM, SPL
CE70	TD420VE	94	2300	72.5	352	1450	80.0	EM, SPL
CE74,9	TD420VE	100	2300	78.0	390	1450	90.0	EM, SPL
CE74	TD420VE	99	2500	73.5	352	1450	80.0	EM, SPL
CE74,9/1	TD420VE	100	2500	74.5	390	1450	90.0	EM, SPL