



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)
2005	5DZXL03.1040	3.108	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 (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
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	.40	20	15	50
		CERT	-	-	6.6	1.9	.26	4	5	5

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 20TH day of September 2004.

Allen Lyons, Chief
Mobile Source Operations Division

Engine Model Summary Form

Attachment 1 of 1
UR-013-0160

Manufacturer: Deutz AG
Engine category: Nonroad CI
EPA Engine Family: 5DZXL03.1040
Mfr Family Name: F4L/M2011, D3D
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
CE39	F4L2011	52,9@2300	39,5	20,1	132,7@1700	42,5	16	EM DDI
CE39,9	F4L2011	54,1@2300	41,8	21,3	132,7@1700	42,5	16	EM
CE42	F4L2011	56,9@2300	43,5	22,2	140,1@1700	46	17,3	EM
CE43,5	F4L2011	59@2300	46	23,5	140,1@1700	46	17,3	EM
CE41,8	F4L2011	56,9@2500	40,5	22,4	132,7@1700	42,5	16	EM
CE44	F4L2011	59,8@2500	43	23,8	140,1@1700	46	17,3	EM
CE42,9	F4L2011	58,4@2600	40,2	23,2	132,7@1700	42,5	16	EM
CE45,2	F4L2011	61,5@2600	42,8	24,7	140,1@1700	46	17,3	EM
CE45,8	F4L2011	62,4@2650	42,8	25,2	140,1@1700	46	17,3	EM
CE45,4	F4L2011	62@2800	41	25,5	132,7@1700	42,5	16	EM
CE47,8	F4L2011	65,3@2800	42,5	26,4	140,1@1700	46	17,3	EM
CE37	F4M2011	49,6@2300	37,5	19,1	136,4@1700	43,9	16,5	EM
CE40,4	F4M2011	54,1@2300	41,5	21,2	136,4@1700	43,9	16,5	EM
CE42,5	F4M2011	56,9@2300	44,3	22,6	140,1@1700	46	17,3	EM
CE44/1	F4M2011	59@2400	44,5	23,7	140,1@1700	46	17,3	EM
CE42,7	F4M2011	57,2@2500	41,5	23	136,4@1700	43,9	16,5	EM
CE45	F4M2011	60,3@2500	44,5	24,7	140,1@1700	46	17,3	EM
CE44,6	F4M2011	59,8@2600	42	24,2	136,4@1700	43,9	16,5	EM
CE46,5	F4M2011	62,3@2600	44,5	25,7	140,1@1700	46	17,3	EM
CE46,1	F4M2011	61,8@2800	41,9	26	136,4@1700	43,9	16,5	EM
CE48,5	F4M2011	65@2800	44,5	27,6	140,1@1700	46	17,3	EM
CE47,5	F4M2011	63,6@2700	44,5	26,6	140,1@1700	46	17,3	EM
CE46,5	F4L2011	63,4@2700	43,5	26	140,1@1700	46	17,3	EM
CE39,9/1	D3DCAE2	54,1@2300	41	20,9	132,7@1700	42,5	16	EM
CE43,5/1	D3DCBE2	59@2300	46	23,5	140,1@1700	46	17,3	EM