

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0386 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 systems 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)
2011	BDZXL04.1079	4.038	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter, Exhaust Gas Recirculation			Tractor	

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):

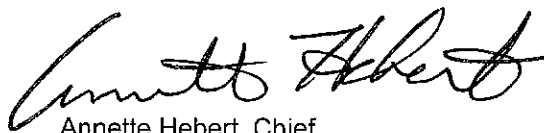
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT	--	--	3.2	0.9	0.21	9	3	17

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 28 day of April 2011.


Annette Hebert, Chief
Mobile Source Operations Division

Deutz AG
Nonroad CI

Engine Model Summary Template

EO# U-2-013-0386

Attachment

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Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate:		5.Fuel Rate:		6.Torque @ RPM (SEA Gross)		7.Fuel Rate:		8.Fuel Rate:		9.Emission Control Device Per SAE J1930
				mm/stroke @ (for diesel only)	mm/stroke @ peak HR(lbs/hr) (for diesels only)	mm/stroke @ (for diesel only)	mm/stroke @ peak HR (for diesels only)	mm/stroke @ (SEA Gross)	mm/stroke @ peak torque	mm/stroke @ (SEA Gross)	mm/stroke @ peak torque			
BDZXL04.1079	C3CT91	TCD2012L04	122@2100	96	44.7	388.6@1500	121	40.3	DDI, TC, CAC, ECM, SPL, EGR					
BDZXL04.1079	C3CT84	TCD2012L04	112.6@2100	88.5	41.2	357.7@1500	114	37.9	DDI, TC, CAC, ECM, SPL, EGR					
BDZXL04.1079	C3CT84A	TCD2012L04	112.6@2100	89.5	41.7	382.7@1450	117.5	37.8	DDI, TC, CAC, ECM, SPL, EGR					