

 CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0387 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	BDZXL04.1080	4.038	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Smoke Puff Limiter, Exhaust Gas Recirculation			Loaders, Tractor, Dozer, Pump, Compressor, 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 (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):

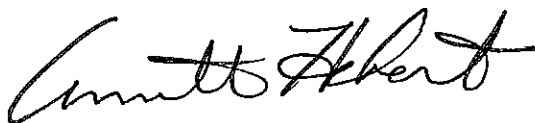
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT	--	--	3.9	0.6	0.09	4	2	7

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

Attachment page 1 of 1

EO# 0-R-0/3-0387
4/18/2011

Engine Family	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@pe ak torque		8.Fuel Rate: (lbs/hr)@peak torque		9.Emission Control Device Per SAE J1930
				mm/stroke @ peak HP (for diesel only)	HP	(lbs/hr) @ peak HP (for diesels only)	HP		mm/stroke@pe ak torque	ak torque	(lbs/hr)@peak torque	torque	
BDZXL04.1080	C3UI103	TCD2012L04	138.1@2400	102		54.3		383.5@1600	118		41.9		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI100	TCD2012L04	134.1@2300	100		51.1		383.5@1600	125		44.4		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI96	TCD2012L04	128.7@2200	95		46.4		383.5@1600	126		44.7		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI92	TCD2012L04	123.3@2100	100		46.6		383.5@1600	127		45.5		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI89	TCD2012L04	119.3@2000	104		46.2		383.5@1600	128		42.6		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI98	TCD2012L04	131.4@2400	93		49.8		365@1600	115		40.8		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI95	TCD2012L04	127.3@2300	96		49		365@1600	126		44.7		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI91	TCD2012L04	122@2200	97		47.4		365@1600	119		42.3		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI88	TCD2012L04	118@2100	95		44.3		365@1600	117		41.5		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI85	TCD2012L04	113.9@2000	96		42.6		365@1600	117		41.5		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI93	TCD2012L04	124.7@2400	91		48.5		348.1@1600	112.5		39.9		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI91A	TCD2012L04	122@2300	98		50		348.1@1600	115		40.8		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI87	TCD2012L04	116.6@2200	98		47.9		348.1@1600	117		41.5		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI83	TCD2012L04	111.3@2100	94		43.8		348.1@1600	116		41.2		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI81	TCD2012L04	108.6@2000	97		43.1		348.1@1600	115		40.8		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI90	TCD2012L04	120.6@2400	96		51.1		331.1@1600	113		40.1		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI86	TCD2012L04	115.3@2300	93		47.5		331.1@1600	111		39.4		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI83A	TCD2012L04	111.3@2200	90		43.9		331.1@1600	113		40.1		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI79	TCD2012L04	105.9@2100	89		41.5		331.1@1600	112		39.8		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI77	TCD2012L04	103.2@2000	87		38.6		331.1@1600	109		38.7		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UT93	TCD2012L04	124.7@2300	97.5		49.8		362.3@1500	119		39.6		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UT81	TCD2012L04	109.6@2300	87		44.4		304.2@1500	117		36.9		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI87A	TCD2012L04	116.7@2200	98		47.9		348.1@1600	117		41.5		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI103A	TCD2012L04	138.1@2400	104.5		55.7		383.5@1600	126.5		44.9		DDI, TC, CAC, ECM, SPL, EGR
BDZXL04.1080	C3UI103B	TCD2012L04	138.1@2400	104.5		55.7		383.5@1600	126.5		44.9		DDI, TC, CAC, ECM, SPL, EGR