

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	BDZXL07.8003	7.775	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, Periodic Trap Oxidizer, Diesel Oxidation Catalyst			Loader, Dozer, and 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
130 ≤ kW < 560	Interim Tier 4 / ALT NOx	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.12	1.9	--	1.8	0.01	--	--	--

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).

BE IT FURTHER RESOLVED: The listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until January 31, 2012 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification would be deemed uncertified and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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 16TH day of November 2011.

M. Hebert FOR AGM

Annette Hebert, Chief
 Mobile Source Operations Division

Deutz AG

Nonroad CI

Engine Model Summary Template

Attachment page 1 of 1

EO# U-R-013-0405

11/2/2011

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 @peak torque	8.Fuel Rate: (lbs/hr) @peak	9.Emission Control Device Per SAE J1930
BDZXL07.8003	C4SFI250	TCD7.8L6	335.2@2200	165.5	121.3	1032.5@145	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX, D0C
BDZXL07.8003	C4SFI250A	TCD7.8L6	335.2@2100	172	120.3	1032.5@145	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI245	TCD7.8L6	328.5@2000	174.4	116.2	1032.5@145	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI240	TCD7.8L6	321.8@1900	177.7	112.5	1032.5@145	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI230	TCD7.8L6	308.4@1800	178.3	106.9	1032.5@145	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI240A	TCD7.8L6	321.8@2200	158.8	116.4	980.9@1450	192.2	92.8	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI230A	TCD7.8L6	308.4@2000	165.6	110.3	980.9@1450	192.4	92.9	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI210	TCD7.8L6	281.6@1800	166	99.5	980.9@1450	194.0	93.7	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI225	TCD7.8L6	301.7@2200	151.6	111.1	929.3@1450	183.1	88.4	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI225A	TCD7.8L6	301.7@2100	156.3	109.4	929.3@1450	183.3	88.5	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI220	TCD7.8L6	295.0@2000	153.2	102.1	929.3@1450	183.4	88.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI215	TCD7.8L6	288.3@1900	162.9	103.1	929.3@1450	184	88.9	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI190	TCD7.8L6	254.7@1800	146.7	88	929.3@1450	177.4	85.7	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI200	TCD7.8L6	268.2@2200	130.7	95.8	774.4@1450	186.9	90.3	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI190A	TCD7.8L6	254.7@2000	132	87.9	774.4@1450	178.3	86.1	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI180	TCD7.8L6	241.3@1900	130.9	82.9	774.4@1450	168.9	81.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI170	TCD7.8L6	227.9@1800	131.3	78.7	774.4@1450	159.5	77.0	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI180A	TCD7.8L6	241.3@2200	120.7	88.5	737.5@1450	169.2	81.7	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI175	TCD7.8L6	234.6@2100	120.8	84.5	737.5@1450	164.5	79.5	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI170A	TCD7.8L6	227.9@2000	120	79.9	737.5@1450	160	77.3	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI165	TCD7.8L6	221.2@1900	120.9	76.5	737.5@1450	155.3	75	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI160	TCD7.8L6	214.5@1800	124.3	74.5	737.5@1450	154.5	74.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
BDZXL07.8003	C4SFI250B	TCD7.8L6	335.2@2200	166	121.7	1047.3@145	204	98.5	DDI, TC, CAC, ECM, SPL, EGR, PTOX ✓