

	California Environmental Protection Agency AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0423 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)
2012	CDZXL07.8003	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			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 non-methane hydrocarbon (NMHC), 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):

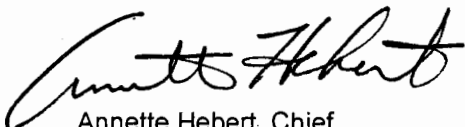
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW < 560	Interim Tier 4 / ALT NO _x	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.04	1.8	--	0.1	0.01	--	--	--

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).

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 5 day of June 2012.



Annette Hebert, Chief
Mobile Source Operations Division

Deutz AG

Nonroad CI

Engine Model Summary Template

Attachment page 1 of 1

EO# U-R-013-0423

5/21/2012

Nonroad CI

5/21/2012

e 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	
CDZXL	07.8003	C4FI250	TCD7.8L6	335.2@2200	165.5	121.3	1032.5@1450	202	97.6	DDI, TC, CAC, ECM, SPL, EGR, PTOX
	07.8003	C4FI250A	TCD7.8L6	335.2@2100	172	120.3	1032.5@1450	202	97.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI245	TCD7.8L6	328.5@2000	174.4	116.2	1032.5@1450	202	97.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI240	TCD7.8L6	321.8@1900	177.7	112.5	1032.5@1450	202	97.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI230	TCD7.8L6	308.4@1800	178.3	106.9	1032.5@1450	202	97.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI240A	TCD7.8L6	321.8@2200	158.8	116.4	980.9@1450	192.2	92.8	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI230A	TCD7.8L6	308.4@2000	165.6	110.3	980.9@1450	192.4	92.9	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI210	TCD7.8L6	281.6@1800	166	99.5	980.9@1450	194.0	93.7	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI225	TCD7.8L6	301.7@2200	151.6	111.1	929.3@1450	183.1	88.4	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI225A	TCD7.8L6	301.7@2100	156.3	109.4	929.3@1450	183.3	88.5	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI220	TCD7.8L6	295.0@2000	153.2	102.1	929.3@1450	183.4	88.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI215	TCD7.8L6	288.3@1900	162.9	103.1	929.3@1450	184	88.9	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI190	TCD7.8L6	254.7@1800	146.7	88	929.3@1450	177.4	85.7	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI200	TCD7.8L6	268.2@2200	130.7	95.8	774.4@1450	186.9	90.3	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI190A	TCD7.8L6	254.7@2000	132	87.9	774.4@1450	178.3	86.1	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI180	TCD7.8L6	241.3@1900	130.9	82.9	774.4@1450	168.9	81.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI170	TCD7.8L6	227.9@1800	131.3	78.7	774.4@1450	159.5	77.0	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI180A	TCD7.8L6	241.3@2200	120.7	88.5	737.5@1450	169.2	81.7	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI175	TCD7.8L6	234.6@2100	120.8	84.5	737.5@1450	164.5	79.5	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI170A	TCD7.8L6	227.9@2000	120	79.9	737.5@1450	160	77.3	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI165	TCD7.8L6	221.2@1900	120.9	76.5	737.5@1450	155.3	75	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI160	TCD7.8L6	214.5@1800	124.3	74.5	737.5@1450	154.5	74.6	DDI, TC, CAC, ECM, SPL, EGR,
	07.8003	C4FI250B	TCD7.8L6	335.2@2200	166	121.7	1047.3@1450	204	98.5	DDI, TC, CAC, ECM, SPL, EGR,

PTOX = DPF + DOC