

California Environmental Protection Agency <b>Air Resources Board</b>	DEUTZ AG	EXECUTIVE ORDER U-R-013-0460 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)
2013	DDZXL06.1007	6.057	Diesel	8000
<b>SPECIAL FEATURES &amp; EMISSION CONTROL SYSTEMS</b>			<b>TYPICAL EQUIPMENT APPLICATION</b>	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Diesel Oxidation Catalyst			Crane, Loader, Tractor, Pump, Compressor, 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 (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 (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Interim Tier 4/ ALT NO <sub>x</sub>	STD	0.19	2.0	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.09	1.9	--	0.4	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 12<sup>th</sup> day of March 2013.

  
Annette Hebert, Chief  
Mobile Source Operations Division

Deutz AG  
Nonroad CI

# Engine Model Summary Template

Attachment page 1 of 1

EO# U-R-013-0460

Date: 2/28/2013

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
DDZXL06.1007	C4FI160A	TCD6.1L6	214.5@2300	107	82	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI160B	TCD6.1L6	214.5@2200	109.5	80.2	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI160C	TCD6.1L6	214.5@2100	112.5	78.7	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI160D	TCD6.1L6	214.5@2000	116	77.3	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI150	TCD6.1L6	201.1@2300	101	77.4	875@1450	129	62.3	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI150A	TCD6.1L6	201.1@2200	103	75.5	875@1450	129	62.3	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI150B	TCD6.1L6	201.1@2100	106	74.2	875@1450	129	62.3	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI140	TCD6.1L6	187.7@2100	99.5	69.6	825@1450	122	58.9	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI140A	TCD6.1L6	187.7@2000	102.5	68.3	825@1450	122	58.9	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI160E	TCD6.1L6	214.5@1900	125.5	79.4	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI160	TCD6.1L6	214.5@1800	131	78.5	900@1450	137	66.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1007	C4FI150C	TCD6.1L6	201.1@2200	103	75.5	875@1450	129	62.3	DDI, TC, CAC, ECM, EGR, PTOX

PTOX = DPF + DOC