

California Environmental Protection Agency <b>Air Resources Board</b>	DEUTZ AG	EXECUTIVE ORDER U-R-013-0459 New Off-Road Compression-Ignition Engines
--	----------	--

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	DDZXL06.1008	6.057	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Periodic Trap Oxidizer, Diesel Oxidation Catalyst			Loader, Dozer, Generator, 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
75 ≤ kW < 130	Interim Tier 4 / ALT NO <sub>x</sub>	STD	0.19	3.4	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.15	3.1	--	0.3	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-013-0459

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
DDZXL06.1008	C4FI129A	TCD6.1L6	173@2000	95	63.3	750@1450	108	52.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI129	TCD6.1L6	173@2200	91.5	63.3	750@1450	108	52.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120	TCD6.1L6	160.9@1900	90	57	750@1450	108	52.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120A	TCD6.1L6	160.9@1800	94	56.4	750@1450	108	52.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120B	TCD6.1L6	160.9@2300	83	63.6	720@1450	103	49.8	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120C	TCD6.1L6	160.9@2200	85	62.3	720@1450	103	49.8	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120D	TCD6.1L6	160.9@2100	86	60.2	720@1450	103	49.8	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI120E	TCD6.1L6	160.9@2000	88	58.7	720@1450	103	49.8	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI105	TCD6.1L6	140.8@1900	81	51.3	630@1450	91.5	44.2	DDI, TC, CAC, ECM, EGR, PTOX
DDZXL06.1008	C4FI100	TCD6.1L6	134.1@1900	80	48	630@1450	91.5	44.2	DDI, TC, CAC, ECM, EGR, PTOX

PTOX = DPFI + DOC