

 <b>AIR RESOURCES BOARD</b>	<b>DEUTZ AG</b>	<b>EXECUTIVE ORDER U-R-013-0428</b> 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)
2012	CDZXL03.6081	3.619	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Mechanical Direct Injection, Exhaust Gas Recirculation			Loader, Tractor, 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
37 ≤ kW < 56	Interim Tier 4	STD	N/A	N/A	4.7	5.0	0.30	20	15	50
		CERT	--	--	4.1	1.4	0.18	1	1	1

**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 2 day of March 2012.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

Deutz AG  
Nonroad CI

**Engine Model Summary Template**

Attachment page 1 of 1

EO# U-R-013-0428

1/31/2012

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 torque	9.Emission Control Device Per SAE J1930
CDZXL03.6081	C3CI47,5	D2011L04i	63.7@2600	48	27.7	190@1700	46	17.3	DDI, EM, EGR
CDZXL03.6081	C3CI45,9	D2011L04i	61.4@2500	47	26.1	190@1700	46	17.3	DDI, EM, EGR
CDZXL03.6081	C3CI44	D2011L04i	58.9@2400	45	23.9	190@1700	46	17.3	DDI, EM, EGR
CDZXL03.6081	C3CI43,1	D2011L04i	57.7@2300	45	22.9	190@1700	46	17.3	DDI, EM, EGR
CDZXL03.6081	C3CI45,2	D2011L04i	60.6@2600	46	26.5	180@1700	43	16.2	DDI, EM, EGR
CDZXL03.6081	C3CI43,7	D2011L04i	58.5@2500	44	24.4	180@1700	43	16.2	DDI, EM, EGR
CDZXL03.6081	C3CI42,1	D2011L04i	56.4@2400	43	22.9	180@1700	43	16.2	DDI, EM, EGR
CDZXL03.6081	C3CI41	D2011L04i	54.9@2300	43	21.9	180@1700	43	16.2	DDI, EM, EGR
CDZXL03.6081	C3CI46	D2011L04	61.6@2600	45	25.9	190@1700	45	16.9	DDI, EM, EGR
CDZXL03.6081	C3CI41A	D3,6DCAE3	54.9@2300	43	21.9	180@1600	43	15.2	DDI, EM, EGR
CDZXL03.6081	C3CI43A	D3,6DCBE3	57.7@2300	45	22.9	190@1600	46	16.3	DDI, EM, EGR
CDZXL03.6081	C3CI44,6	D2011L04i	59.8@2600	44	25.4	180@1700	42	15.8	DDI, EM, EGR
CDZXL03.6081	C3CI47A	D2011L04i	63.7@2666	47	27.8	190@1700	46	17.3	DDI, EM, EGR