## California Environmental Protection Agency Air Resources Board

**DEUTZ AG** 

EXECUTIVE ORDER U-R-013-0530 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-14-012;

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)			
2017	HDZXL03.6018	3.621	Diesel	8000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
Common Control	Rail Direct Injection, Turk Module, Exhaust Gas R Oxidation Catal	ecirculation, Diesel	Loader, Tractor, and Dozer				

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	EMISSION		EXHAUST (g/kW-hr)					OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT			3.5	0.5	0.02			

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 \_\_\_\_

2314

day of March 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Deutz AG Nonroad CI

## **Engine Model Summary Template**

5.Fuel Rate:

Attachment page 1 of 1

EO# U-R-013-0530

Date: 3/6/2017

Engine Family	•	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	(lbs/hr) @ peak HP (for diesels only)		7.Fuel Rate: mm/stroke@pe ak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930	
HDZXL03.6018	C4DI55F	TD3,6L4	74.3@2000	63	28.0	330@1600	76.5	27.1	DDI, TC, EGR, ECM, DOC	
HDZXL03.6018	C4DI55	TD3.6L4	74.3@2600	56.4	32.6	330@1600	76.5	27.1	DDI, TC, EGR, ECM, DOC	
HDZXL03.6018	C4DI55A	TD3.6L4	74.3@2500	57	31.7	330@1600	76.5	27.1	DDI, TC, EGR, ECM, DOC	
HDZXL03.6018	C4DI55C	TD3.6L4	74.3@2300	58	29.6	330@1600	76.5	27.1	DDI, TC, EGR, ECM, DOC	
HDZXL03.6018	C4DI55D	TD3.6L4	74.3@2200	58.5	28.6	330@1600	76.5	27.1	DDI, TC, EGR, ECM, DOC	