

## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0555

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)		
2018	JDZXL02.9034	2.925	Diesel	8000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Cooler	Rail Direct Injection, Turt , Electronic Control Mod circulation, Continuous	lule, Exhaust Gas	Loader, Dozer, Compressor, 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	EMISSION			OPACITY (%)						
POWER STANDARD CLASS CATEGORY			NMHC	NOx	NMHC+NOx	СО	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			4.2	1.0	0.004			<u>-</u>

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

day of November 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Deutz AG Nonroad CI

Engine Model Summary Template
Attachment page 1 of 1

5.Fuel Rate:

EO# U-R-013-0555

Date: 11/14/2017

Engine Family	1.Engine Code	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)	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
JDZXL02.9034	C4EI55C	TCD2.9L4	74.2@2300	57.0	29.1	221.2@1600	67.5	23.9	PID, TC, CAC, EGR, ECM, CTOX DOIL
JDZXL02.9034	C4EI55	TCD2.9L4	74.2@2600	56.0	29.1	221.2@1600	67.5	23.9	DID, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI55A	TCD2.9L4	74.2@2500	56.4	31.3	221.2@1600	67.5	23.9	DID, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI55B	TCD2.9L4	74.2@2500	56.7	30.2	221.2@1600	67.5	23.9	DD, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI55D	TCD2.9L4	74.2@2200	56.7	27.7	221.2@1600	67.5	23.9	D, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI54	TCD2.9L4	72.4@2200	56.5	27.6	191.7@1800	59.0	23.5	DID, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI45C	TCD2.9L4	60.3@2300	48.0	24.5	197.6@1600	60.0	21.3	DID, TC, CAC, EGR, ECM, CTOX
JDZXL02.9034	C4EI45D	TCD2.9L4	60.3@2200	49.0	23.9	197.6@1600	60.0	21.3	DID, TC, CAC, EGR, ECM, CTOX