

DEUTZ AG

EXECUTIVE ORDER U-R-013-0645

New Off-Road Compression-Ignition Engines Page 1 of 2

Pursuant to the authority vested in California 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-19-095;

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)			
2021	MDZXL03.6123	3.621	Diesel	8000			
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Charge Electr	non Rail Direct Injection e Air Cooler, Exhaust G ronic Control Module, D st, Continuous Trap Ox Catalytic Reduction	as Recirculation, Diesel Oxidation Kidizer, Selective	Off-Road Crane, Loader, Tractor, Dozer, Pump, Compressor, Material Handler, Small Cranes				

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	СО	PM	ACCEL	LUG	PEAK
56 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.003	0.14		0.02	0.002			

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).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 56 ≤ kW < 130 power categories in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.



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BE IT FURTHER RESOLVED: The listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until April 30, 2021 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to revoke the conditional Executive Order ab initio, in which case all engines covered under this conditional certification would be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to a civil penalty of up to \$40,500 per engine pursuant to Health and Safety Code Section 43154.

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 on this 2nd day of February 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-013-0645

Family: MDZXL03.6123 Attachment Last Revised: 12/15/2020

Displacement Peak Power -Peak Power -Peak Power -Peak Power - Fuel Peak Torque -Peak Torque - Peak Torque -Peak Torque -Config Model Code Trim Displacement Units **Peak Power** Units Speed (rpm) Fueling Units Peak Torque Units Speed (rpm) Fuel Fuel Units OBD GHG Special Notes TCD3.6L4 C5VI105DU mm3/stroke N/A L4 3.621 Liters 140.8 2300 110 mm3/stroke 550 N-m 1600 127 horsepower TCD3.6L4 C5VI105EU L4 3.621 140.8 1600 127 mm3/stroke N/A 2200 113.5 mm3/stroke 550 N-m Liters horsepower TCD3.6L4 C5VI105GU L4 3.621 140.8 121 mm3/stroke 1600 127 mm3/stroke N/A Liters horsepower 2000 550 N-m TCD3.6L4 C5VI100DU L4 3.621 Liters 134.1 horsepower 2300 104.5 mm3/stroke 500 N-m 1600 113.8 mm3/stroke N/A TCD3.6L4 C5VI100EU L4 3.621 134.1 2200 107 mm3/stroke 1600 113.8 mm3/stroke N/A Liters horsepower 500 N-m TCD3.6L4 C5VI100GU L4 3.621 Liters 134.1 2000 115 mm3/stroke 500 1600 113.8 mm3/stroke N/A N-m horsepower C5VI95DU 127.3 TCD3.6L4 L4 3.621 2300 99.5 1600 1138 mm3/stroke N/A Liters mm3/stroke 500 N-m horsepower TCD3.6L4 C5VI95EU L4 3.621 Liters 127.3 horsepower 2200 102.5 mm3/stroke 500 N-m 1600 113.8 mm3/stroke N/A TCD3.6L4 C5VI95GU L4 3.621 127.3 2000 109.5 mm3/stroke 500 1600 113.8 mm3/stroke N/A Liters horsepower N-m 94 TCD3.6L4 C5VI90DU L4 3.621 Liters 120.6 horsepower 2300 mm3/stroke 480 N-m 1600 110 mm3/stroke N/A TCD3.6L4 C5VI90EU L4 3.621 120.6 2200 97 mm3/stroke 480 1600 110 mm3/stroke N/A Liters horsepower N-m L4 103 TCD3.6L4 C5VI90GU 3.621 Liters 120.6 horsepower 2000 mm3/stroke 480 N-m 1600 110 mm3/stroke N/A TCD3.6L4 C5VI85DU L4 3.621 113.9 2300 89 mm3/stroke 460 1600 104.5 mm3/stroke N/A Liters horsepower N-m 92 TCD3.6L4 C5VI85EU L4 3.621 Liters 113.9 2200 mm3/stroke 460 N-m 1600 104.5 mm3/stroke N/A horsepower TCD3.6L4 C5VI85GU L4 3.621 113.9 2000 98 460 1600 104.5 mm3/stroke N/A Liters mm3/stroke horsepower N-m TCD3.6L4 C5VI85DV L4 3.621 113.9 2300 83.5 mm3/stroke 430 96 N/A Liters horsepower N-m 1600 mm3/stroke TCD3.6L4 C5VI85EV L4 3.621 Liters 113.9 horsepower 2200 86 mm3/stroke 430 N-m 1600 96 mm3/stroke N/A L4 3.621 2000 92 430 TCD3.6L4 C5VI85GV Liters 113.9 mm3/stroke N-m 1600 96 mm3/stroke N/A horsepower TCD3.6L4 C5VI74DU L4 3.621 Liters 99.7 2300 78 410 1600 mm3/stroke N/A mm3/stroke N-m 91.5 horsepower L4 C5VI74EU 3.621 99.7 80 410 N-m TCD3.6L4 2200 mm3/stroke 1600 91.5 mm3/stroke N/A Liters horsepower L4 TCD3.6L4 C5VI74GU 3.621 Liters 99.7 horsepower 2000 85.5 mm3/stroke 410 N-m 1600 91.5 mm3/stroke N/A TCD3.6L4 C5VI70EU L4 3.621 Liters 93.8 horsepower 2200 75 mm3/stroke 390 N-m 1600 87 mm3/stroke N/A