

DEUTZ AG

EXECUTIVE ORDER U-R-013-0649 New Off-Road

New Off-Road Compression-Ignition Engines

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)					
2022	NDZXL02.2110	2.193	Diesel 8000						
SPECIAL	. FEATURES & EMISSION C	ONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Coole	Rail Direct Injection, Turbor, Electronic Control Moduecirculation, Diesel Oxida	ıle, Exhaust Gas	Loader, Tractor, Dozer, Material Handler, 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 STANDARD CATEGORY			ı	EXHAUST (g/kw-l	OPACITY (%)				
POWER CLASS			NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
19 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT			4.1	0.2	0.03			

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 37 ≤ kW < 56 power category 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.

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 18th day of December 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-013-0649 Family: NDZXL02.2110 Attachment Last Revised: 11/30/2021

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fu	el	Peak Torque -	Peak Torque -	Peak Torque -	Peak Torque -				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Fuel	Fuel Units	OBD	GHG	Special	Notes
TCD2.2L3	CFDI55B		L3	2.193	Liters	74.2	horsepower	2200	29.0	lb/hr	206.5	lb-ft	1600	22.5	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI55A		L3	2.193	Liters	74.2	horsepower	2300	29.5	lb/hr	221.2	lb-ft	1600	22.5	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI55		L3	2.193	Liters	74.2	horsepower	2600	32.2	lb/hr	221.2	lb-ft	1600	22.5	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI50B		L3	2.193	Liters	67	horsepower	2200	26.1	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI50A		L3	2.193	Liters	67	horsepower	2300	26.7	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI50		L3	2.193	Liters	67	horsepower	2600	29.2	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI45B		L3	2.193	Liters	60.3	horsepower	2200	23.7	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI45A		L3	2.193	Liters	60.3	horsepower	2300	24.2	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI45		L3	2.193	Liters	60.3	horsepower	2600	26.6	lb/hr	184.3	lb-ft	1600	20.2	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI36B		L3	2.193	Liters	48.8	horsepower	2200	19.8	lb/hr	154.8	lb-ft	1600	17	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI36A		L3	2.193	Liters	48.8	horsepower	2300	20.3	lb/hr	154.8	lb-ft	1600	17	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI36		L3	2.193	Liters	48.8	horsepower	2600	22.3	lb/hr	154.8	lb-ft	1600	17	lb/hr	N/A	N/A	N/A	N/A
TCD2.2L3	CFDI45AL		L3	2.193	Liters	60.3	horsepower	2300	24.2	lb/hr	154.8	lb-ft	1550	16.7	lb/hr	N/A	N/A	N/A	N/A