CALIFORNIA AIR RESOURCES BOARD	**DEUTZ AG**	**EXECUTIVE ORDER U-R-013-0703** New Off-Road Compression-Ignition Engines Page **1** of **1**

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)
2023	PDZXL15.9058	15.874, 11.906	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Diesel Oxidation Catalyst, Selective Catalytic Reduction-Urea (2), Ammonia Oxidation Catalyst	Off-Road Crane, Dozer, Loader, Pump, Material Handler

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
130 ≤ kW ≤ 560	Tier 4 Final	**STD**	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.34	--	0.02	0.01	--	--	--

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 on this 26th day of September 2022.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-013-0703 **Family:** PDZXL15.9058 **Attachment Last Revised:** 9/15/2022

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
TCD16.0V8	CFYI520U		V8	15.874	Liters	697.3	horsepower	2100	256.6	lb/hr	2890	N-m	1400	186.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI520V		V8	15.874	Liters	697.3	horsepower	2000	246.2	lb/hr	2890	N-m	1400	186.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI520W		V8	15.874	Liters	697.3	horsepower	1900	241.5	lb/hr	2890	N-m	1400	186.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI505U		V8	15.874	Liters	677.2	horsepower	1800	235.1	lb/hr	2890	N-m	1400	186.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI480U		V8	15.874	Liters	643.7	horsepower	2100	233.3	lb/hr	2800	N-m	1400	182.3	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI480V		V8	15.874	Liters	643.7	horsepower	2000	226.6	lb/hr	2800	N-m	1400	182.3	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI480W		V8	15.874	Liters	643.7	horsepower	1900	223.7	lb/hr	2800	N-m	1400	182.3	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI480X		V8	15.874	Liters	643.7	horsepower	1800	222.3	lb/hr	2800	N-m	1400	182.3	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI440U		V8	15.874	Liters	590	horsepower	2100	214.7	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI440V		V8	15.874	Liters	590	horsepower	2000	209.7	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI440W		V8	15.874	Liters	590	horsepower	1900	204.3	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI440X		V8	15.874	Liters	590	horsepower	1800	201.5	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI400U		V8	15.874	Liters	536.4	horsepower	2100	195.9	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI400V		V8	15.874	Liters	536.4	horsepower	2000	191.1	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI400W		V8	15.874	Liters	536.4	horsepower	1900	187.4	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI400X		V8	15.874	Liters	536.4	horsepower	1800	179.9	lb/hr	2650	N-m	1400	172.9	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI350U		V8	15.874	Liters	469.4	horsepower	2100	169.8	lb/hr	2150	N-m	1400	140.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI350V		V8	15.874	Liters	469.4	horsepower	2000	168.8	lb/hr	2150	N-m	1400	140.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI350W		V8	15.874	Liters	469.4	horsepower	1900	162.1	lb/hr	2150	N-m	1400	140.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI350X		V8	15.874	Liters	469.4	horsepower	1800	157.5	lb/hr	2150	N-m	1400	140.6	lb/hr	N/A	N/A	N/A	N/A
TCD16.0V8	CFYI370U		V8	15.874	Liters	496.2	horsepower	2100	179.1	lb/hr	1900	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI390U		V6	11.906	Liters	523	horsepower	2100	196.6	lb/hr	2130	N-m	1400	141.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI390V		V6	11.906	Liters	523	horsepower	2000	189.9	lb/hr	2130	N-m	1400	141.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI390W		V6	11.906	Liters	523	horsepower	1900	189.9	lb/hr	2130	N-m	1400	141.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI370U		V6	11.906	Liters	496.2	horsepower	1800	176.9	lb/hr	2130	N-m	1400	141.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI360U		V6	11.906	Liters	482.8	horsepower	2100	178.4	lb/hr	2080	N-m	1400	137.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI360V		V6	11.906	Liters	482.8	horsepower	2000	173.3	lb/hr	2080	N-m	1400	137.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI360W		V6	11.906	Liters	482.8	horsepower	1900	170.9	lb/hr	2080	N-m	1400	137.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI350U		V6	11.906	Liters	469.4	horsepower	1800	163.1	lb/hr	2080	N-m	1400	137.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI330U		V6	11.906	Liters	442.5	horsepower	2100	164.4	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI330V		V6	11.906	Liters	442.5	horsepower	2000	159.9	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI330W		V6	11.906	Liters	442.5	horsepower	1900	155.2	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI330X		V6	11.906	Liters	442.5	horsepower	1800	152.9	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI300U		V6	11.906	Liters	402.3	horsepower	2100	150.4	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI300V		V6	11.906	Liters	402.3	horsepower	2000	146.6	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI300W		V6	11.906	Liters	402.3	horsepower	1900	142.4	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI300X		V6	11.906	Liters	402.3	horsepower	1800	137.9	lb/hr	2000	N-m	1400	130.6	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI273U		V6	11.906	Liters	366.1	horsepower	2100	139.9	lb/hr	1800	N-m	1400	118.9	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI273V		V6	11.906	Liters	366.1	horsepower	2000	136.6	lb/hr	1800	N-m	1400	118.9	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI273W		V6	11.906	Liters	366.1	horsepower	1900	132.9	lb/hr	1800	N-m	1400	118.9	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI273X		V6	11.906	Liters	366.1	horsepower	1800	128.9	lb/hr	1800	N-m	1400	118.9	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI240U		V6	11.906	Liters	321.8	horsepower	2100	136.4	lb/hr	1500	N-m	1400	100.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI240V		V6	11.906	Liters	321.8	horsepower	2000	119.9	lb/hr	1500	N-m	1400	100.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI240W		V6	11.906	Liters	321.8	horsepower	1900	117.1	lb/hr	1500	N-m	1400	100.3	lb/hr	N/A	N/A	N/A	N/A
TCD12.0V6	CFYI240X		V6	11.906	Liters	321.8	horsepower	1800	113.9	lb/hr	1500	N-m	1400	100.3	lb/hr	N/A	N/A	N/A	N/A