CALIFORNIA AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER: U-R-013-0739 New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** The engines and emission control systems produced by the manufacturer as described below are certified 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	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2025	SDZXL02.2114	Diesel	Dedicated	Diesel	Variable-speed and Constant-speed

Emission Control Systems					
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Continuous Trap Oxidizer (CTOX)	None				

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (\*).

	Crit	Smoke Opacity					
Applicable Standard	NMHC+NOx	CO	PM	ACL	LUG	PEAK	
	STD	4.7	5.0	0.03	*	*	*
Tier 4 Final 37 ≤ kW < 56	FEL	*	*	*	*	*	*
07 2 800 4 00	NTE	5.9	6.2	0.04	*	*	*

**BE IT FURTHER RESOLVED:** Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

**BE IT FURTHER RESOLVED:** That the manufacturer has elected to combine engines from the  $19 \le kW < 56$  power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the  $37 \le kW < 56$  power category in accordance with Section 1039.230(e) of the applicable California test procedures.

**BE IT FURTHER RESOLVED:** For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

**BE IT FURTHER RESOLVED:** The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this \_\_\_\_\_\_\_ day of August 2024.

Robin U. Lang, Chief Emissions Certification and Compliance Division

## ATTACHMENT: ENGINE MODELS

Family: SDZXL02.2114 EO Number: U-R-013-0739 Date Applicable: 8/8/2024

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	hp	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TCD2.2L3	C5EI55E		13	2.194	74.3	2200	28.5	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI45DL		13	2.194	60.3	2300	23.4	154.8	1600	17	1	N/A	
TCD2.2L3	C5EI55D		13	2.194	74.3	2300	29.3	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI45A		13	2.194	60.3	2600	25.6	184.3	1600	19.8	1	N/A	
TCD2.2L3	C5EI55A		13	2.194	74.3	2600	30.4	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI36E		13	2.194	48.8	2200	19.6	132.7	1600	14.6	1	N/A	
TCD2.2L3	C5EI36A		13	2.194	48.8	2600	21.6	132.7	1600	14.6	1	N/A	
TCD2.2L3	C5ET55AT		13	2.194	74.3	2600	30.4	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5ET50AH		13	2.194	67	2600	28	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI36D		13	2.194	48.8	2300	19.9	132.7	1600	14.6	1	N/A	
TCD2.2L3	C5EI50E		13	2.194	67	2200	26.1	184.3	1600	19.8	1	N/A	
TCD2.2L3	C5ET50AT		13	2.194	67	2600	28	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5ET45AH		13	2.194	60.3	2600	25.6	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI45D		13	2.194	60.3	2300	23.4	184.3	1600	19.8	1	N/A	
TCD2.2L3	C5ET55AH		13	2.194	74.3	2600	30.4	206.5	1600	22.3	1	N/A	
TCD2.2L3	C5EI50D		13	2.194	67	2300	26.4	184.3	1600	19.8	1	N/A	
TCD2.2L3	C5EI50A		13	2.194	67	2600	28	184.3	1600	19.8	1	N/A	
TCD2.2L3	C5ET45AT		13	2.194	60.3	2600	25.6	206.5	1600	22.3	1	N/A	