

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)
2017	HDZXL03.6055	3.621	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea			Loader, Tractor, Dozer, Pump, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kW-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 130	Tier 4 Final	OPTIONAL STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.002	0.36	--	0.02	0.003	--	--	--

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, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with 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 I-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 at El Monte, California on this 19 day of May 2017.



Annette Hebert, Chief
 Emissions Compliance, Automotive Regulations and Science Division

Deutz AG
Nonroad CI

Engine Model Summary Template

Attachment page 1 of 1

EO#U-R-013-0546

Date: 5/10/2017

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque Nm @ 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
HDZXL03.6055	CFVI100D	TCD3.6L4	134.1@2000	113.0	50.2	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI100C	TCD3.6L4	134.1@2200	106.5	52.0	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI100U	TCD3.6L4	134.1@2300	103.5	52.8	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI95BU	TCD3.6L4	127.3@2000	107.0	47.5	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI95AU	TCD3.6L4	127.3@2200	100.9	49.3	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI95U	TCD3.6L4	127.3@2300	93.6	47.8	500@1600	114.5	40.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI70U	TCD3.6L4 <i>new</i>	93.8@2200	73.1	35.7	390@1600	87.5	31.1	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI74BU	TCD3.6L4	99.7@2000	81.7	36.3	410@1600	92.0	32.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI74AU	TCD3.6L4	99.7@2200	77.1	37.6	410@1600	92.0	32.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI74U	TCD3.6L4	99.7@2300	76.8	39.2	410@1600	92.0	32.7	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI80BU	TCD3.6L4	107.2@2000	90.1	40.0	430@1600	98.4	34.9	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI80AU	TCD3.6L4	107.2@2200	85.6	41.8	430@1600	98.4	34.9	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI80U	TCD3.6L4	107.2@2300	84.7	43.2	430@1600	98.4	34.9	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI85BU	TCD3.6L4	113.9@2000	95.5	42.4	460@1600	105.0	37.3	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI85AU	TCD3.6L4	113.9@2200	90.5	44.2	460@1600	105.0	37.3	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI85U	TCD3.6L4	113.9@2300	89.2	45.5	460@1600	105.0	37.3	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI90BU	TCD3.6L4	120.6@2000	101.2	44.9	480@1600	109.7	39.0	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI90AU	TCD3.6L4	120.6@2200	95.2	46.5	480@1600	109.7	39.0	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR
HDZXL03.6055	CFVI90U	TCD3.6L4	120.6@2300	93.6	47.8	480@1600	109.7	39.0	DDI, TC, CAC, EGR, ECM, DOC, CTOX, SCR