## **DEUTZ AG**

EXECUTIVE ORDER U-R-013-0107 New Off-Road Compression-Ignition Engines

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-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control system 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)
2003	3DZXL03.1025	3.1	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Dire	ect Diesel Injection, Smol	ke Puff Limiter	Industrial Equip	oment

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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			E	XHAUST (g/kw-l			OF	ACITY (%	i)
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	-	8.6	-	-		3	5	6

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 at El Monte, California on this day of December 2002.

Aller Lyons, Chief

Mobile Source Operations Division

Manufacturer: DEUTZ AG
Engine Category: Nonroad Cl
EPA Family Name: 3DZXL03.1025
Mfr. Family.Name: D3DCCE1
Process Code: New Submission

## **ENGINE MODEL SUMMARY FORM**

U-R-013-0107

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odel	)3DCCE1	)3DCDE1	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	F4L2011	=4M2011	=4M2011	=4M2011	=4M2011	F4M2011	=4M2011	-4M2011	*4M2011	F4M2011	F4M2011
3. BHP@	53	58	52	53	56	<del>5</del> 6	57	58	59	61	61	61	64	50	54	57	57	60	59	60	62	දි	65
RPM	2300	2300	2300	2300	2500	2300	2600	2300	2500	2600	2800	2650	2800	2300	2300	2300	2500	2600	2400	2500	2800	2600	2800
Rated Power (mm3/stroke)	41.5	45.0	40.5	41.5	41.0	43.5	41.0	45.0	43.0	43.0	41.0	43.0	43.0	38.0	41.5	43.5	41.0	42.0	41.0	43.0	40.5	43.5	43.0
(lbs./hr) Rated Power	18.7	20.4	18.3	18.7	19.6	19.7	20.1	20,4	20.6	21.2	21.3	21.5	22.4	17.4	18.9	19.9	20.0	20.9	20.6	21.1	21.6	21.8	22.7
RPM(NM)	175	190	175	175	175	184	175	190	184	184	175	184	184	165	178	187	178	178	187	187	178	187	187
(MM)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
(mm³/stroke)	41.0	44.5	41.0	41.0	41.0	43.0 .	41.0	44.5	43.0	43.0	41.0	43.0	43.0	38.5	41.5	44.0	41.5	41.5	44	44	41.5	44	44
(lbs./hr) @ Peak Torque	14.6	15.9	14.6	14.6	14.6	15.4	14.6	15.9	15.4	15.4	14.6	15.4	15.4	13.8	14.9	15.6	14.9	14.9	15.6	15.6	14.9	15.6	15.6
(SAE J1930)	EM DOI, SPL	m M	EM	m	m <sub>M</sub>	EM	EM	EM	EM	EM	E S	M	m M	m ×	EM	mM	m S	EM	m	M	EM	m M	EM +