

 <b>AIR RESOURCES BOARD</b>	DEUTZ AG	<b>EXECUTIVE ORDER U-R-013-0056</b> New Off-Road Compression-Ignition Engines
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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-45-9;

**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)
2002	2DZXL15.9003	11.9, 15.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger			Pump, Compressor, Generator Set, Industrial Equipment	

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 (NO<sub>x</sub>), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO<sub>x</sub>), 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):

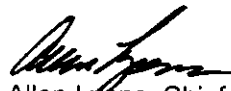
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NO <sub>x</sub>	NMHC+NO <sub>x</sub>	CO	PM	ACCEL	LUG	PEAK
130≤kW<225	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.4	9.0	-	1.5	0.14	6	2	17

**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 28<sup>TH</sup> day of February 2002.



Allen Lyons, Chief  
New Vehicle/Engine Programs Branch

ED# U-K-013-0056

Manufacturer: DEUTZ AG  
 Engine category: Nonroad CI  
 EPA Engine Family: 2DZXL15.9003

# Engine Model and Part Number Summary Form

Engine Code	Engine Model	BHP	BkW	Rated Power Engine Speed	Injection rate at rated power ±6mm³	Peak torque ±5%	Speed at peak torque ± 100rpm	Injection rate at peak torque ±6mm³	Fuel injection pump	Fuel injector	Speed governor	Smoke limiter, part of speed governor - 10mm³	Turbocharger
		HP	kW	rpm	mm³/stroke	Nm	rpm	mm³/stroke	BOSCH TYPE	BOSCH TYPE	BOSCH TYPE	mm³/stroke	designation
C223/3	BF6M1015	299	223	2100	163	1370	1300	201	PE6P120A320L S7904/7930	DLLA168P426	RQV300-1050PA1325	165-800	s3b-138h
C214/3	BF6M1015	287	214	2100	156	1316	1300	192	PE6P120A320L S7904/7930	DLLA168P426	RQV300-1050PA1325	165-800	s3b-138h
C223/5	BF6M1015	299	223	2000	166	1387	1300	204	PE6P120A320L S7904/7930	DLLA168P426	RQV300-1000PAVB420033623	165-800	s3b-138h
C240/4 **	BF6M1015	322	240	1900	185	1511	1300	224	PE6P120A320L S7904/7930	DLLA168P426	RQV300-950PAVB420033599	165-800	s3b-138h
C223/4	BF6M1015	299	223	1900	172	1404	1300	206	PE6P120A320L S7904/7930	DLLA168P426	RQV300-950PAVB420033599	165-800	s3b-138h
C214/4	BF6M1015	287	214	1900	165	1347	1300	197	PE6P120A320L S7904/7930	DLLA168P426	RQV300-950PAVB420033599	165-800	s3b-138h
C220/1	BF6M1015	295	220	1800	176	1426	1300	209	PE6P120A320L S7904/7930	DLLA168P426	RQV300-900PAVB420033639	165-800	s3b-138h
C211/1	BF6M1015	283	211	1800	169	1368	1300	200	PE6P120A320L S7904/7930	DLLA168P426	RQV300-900PAVB420033639	165-800	s3b-138h
C209	BF6M1015	280	209	1800	168	1354	1300	198	PE6P120A320L S7904/7930	DLLA168P426	RQV300-900PAVB420033639	165-800	s3b-138h
C203/1	BF6M1015	272	203	1800	163	1316	1300	190	PE6P120A320L S7904/7930	DLLA168P426	RQV300-900PAVB420033639	165-800	s3b-138h
D250/1 **	BF6M1015	335	250	1800	200	n.a.	n.a.	n.a.	PE6P120A320L S7904-1/7930	DLLA168P426	RQV900PAV	n.a.	s3b-138g
D222	BF6M1015	297	222	1800	178	n.a.	n.a.	n.a.	PE6P120A320L S7904-1/7930	DLLA168P426	RQV900PAV	n.a.	s3b-138g
D211/1	BF6M1015	283	211	1800	169	n.a.	n.a.	n.a.	PE6P120A320L S7904-1/7930	DLLA168P426	RQV900PAV	n.a.	s3b-138g

\*\* This rating is listed as the certification test rating for this 130-225 kW family, but is not being certified due to its higher power output that places it in the 225-450 kW power category.