

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	2DZXL35.0001	17.5, 26.3, 35.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler			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 (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 (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
kW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
		CERT	0.6	8.6	--	1.0	0.22	--	--	--

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 28th day of February 2002.



Allen Lyons, Chief
 New Vehicle/Engine Programs Branch

Manufacturer: DEUTZ AG
 Engine Category: Nonroad CI
 EPA Engine Family: 2DZX135.0001

Engine Model and Part Number Summary Form

EP# U-R-013-0054
 Attachment 1 of 1

Engine code	Engine Model	BHP	BKW	Rated Power Engine Speed	Injection rate at rated power, $\pm 4mm^3$ /stroke	Peak torque $\pm 5\%$	Speed at peak torque ± 200 rpm	Inj. Timing deg BTDC	Injection rate at peak torque $\pm 4mm^3$ /stroke	Fuel injection pump description	Fuel injector description	Turbocharger description
C440 **	TBD 616 V8	590	440.0	2000	235.0	2034.0	1500	12	280	1227 7644	1227 7366	1227 7047
C660	TBD 616 V12	884	660.0	2000	235.0	3051.0	1500	12	280	1227 7644	1227 7366	1227 7278
C880	TBD 616 V16	1179	890.0	2000	235.0	4068.0	1500	12	280	1227 7644	1227 7366	1227 7278
DA 747 A1	TBD 616 V12	1002	747.0	1800	302	NA	NA	14	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 747 A2	TBD 616 V12	1002	747.0	1800	302	NA	NA	16	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 0821 A1	TBD 616 V12	1101	821.0	1800	331	NA	NA	14	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 0821 A2	TBD 616 V12	1101	821.0	1800	331	NA	NA	16	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 996 A1	TBD 616 V16	1336	996.0	1800	302	NA	NA	14	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 996 A2	TBD 616 V16	1336	996.0	1800	302	NA	NA	16	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 1095 A1	TBD 616 V16	1468	1095.0	1800	331	NA	NA	14	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338
DA 1095 A2	TBD 616 V16	1468	1095.0	1800	331	NA	NA	16	NA	PE12P120A500/5R, PE12P120A520/5R,	1231 4246	K36 4665 OOKB 25.22, 1231 6338

** This rating is listed as the certification test rating for this >560 kW family, but is not being certified due to its lower power output that places it in the 225-450 kW power category.