California Environmental Protection Agency AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0125 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)
2004	4DZXL15.9002	11.9, 15.9	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Smoke Puff Limiter, Turbocharger, Charge Air Cooler	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 (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
225 ≤ kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
450 ≤ kW ≤ 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT	-	-	5.4	1.5	0.14	18	6	27

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 6TH day of January 2004.

Allen Lyons, Chief
Mobile Source Operations Division

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 4DZXL15.9002
Mfr. Family Name: BF6M1015C
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

Attachment 1 of 4
UR-013-0125

1. Engine Code	2. Engine Model	3. BHP@ (kW)	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE228	BF6M1015C	228 306	1500	206	106.9	1582	1200	235	93.3	EM DDI, SPL, TC,
CE228/1	BF6M1015C	306	1800	182	106.9	1524	1200	238	89.9	EM
CE240	BF6M1015C	322	2300	171	112.6	1395	1200	194	82.3	EM
CE240/1	BF6M1015C	322	2100	175	112.6	1472	1200	210	86.8	EM
CE240/2	BF6M1015C	322	1900	182	112.6	1508	1300	209	96.4	EM
CE242	BF6M1015C	324	2050	179	113.5	1618	1200	230	95.4	EM
CE248	BF6M1015C	332	1800	194	116.3	1658	1200	232	97.8	EM
CE259	BF6M1015C	347	1800	204	121.5	1731	1200	243	102.1	EM
CE261	BF6M1015C	350	2100	188	122.4	1721	1200	242	101.5	EM
CE261/1	BF6M1015C	350	2050	189	122.4	1748	1200	248	103.1	EM
CE261/3	BF6M1015C	350	1900	198	122.4	1771	1200	249	104.5	EM
CE261/5	BF6M1015C	350	2300	185	122.4	1517	1200	213	89.5	EM
CE261/6	BF6M1015C	350	2000	191	122.5	1745	1200	244	102.9	EM
CE271	BF6M1015C	363	1800	214	127.1	1812	1200	253	106.9	EM
CE273	BF6M1015C	366	2100	194	128.0	1800	1200	252	106.2	EM
CE273/1	BF6M1015C	366	2000	203	128.0	1825	1200	258	107.6	EM
CE273/2	BF6M1015C	366	1900	208	128.0	1852	1200	259	109.2	EM
CE280	BF6M1015C	375	2050	204	131.3	1872	1200	264	110.4	EM
CE285	BF6M1015C	382	1800	225	133.7	1905	1200	266	112.4	EM
CE286	BF6M1015C	383	2100	206	134.1	1886	1200	267	111.2	EM
CE286/1	BF6M1015C	383	2000	214	134.1	1912	1200	269	112.8	EM
CE286/2	BF6M1015C	383	1900	220	134.1	1941	1200	272	114.5	EM
CE298	BF6M1015C	399	1500	280	139.7	2006	1200	282	118.3	EM
CE300	BF6M1015C	402	2100	220	140.7	1978	1200	278	116.7	EM
CE300/1	BF6M1015C	402	2000	225	140.7	2006	1200	282	118.3	EM
CE300/2	BF6M1015C	402	1900	231	140.7	2036	1200	286	120.1	EM
D250	BF6M1015C	335	1500	228	117.3	N/A	N/A	N/A	N/A	EM
D271/1	BF6M1015C	363	1800	210	127.1	N/A	N/A	N/A	N/A	EM
D285	BF6M1015C	382	1500	261	133.7	N/A	N/A	N/A	N/A	EM
D310/1	BF6M1015C	415	1800	243	145.3	N/A	N/A	N/A	N/A	EM
D314	BF6M1015C	421	1500	292	147.4	N/A	N/A	N/A	N/A	EM
D321	BF6M1015C	430	1800	257	150.5	N/A	N/A	N/A	N/A	EM
D341/1	BF6M1015C	457	1800	273	160.0	N/A	N/A	N/A	N/A	EM
D345	BF6M1015C	462	1500	321	161.7	N/A	N/A	N/A	N/A	EM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 4DZXL15.9002
Mfr. Family Name: BF6M1015C
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

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UNOB-025

1. Engine Code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE261/4	BF6M1015CP	350	2100	189	122.5	1601	1300	227	102.3	EM DPF, TC, CAC, SCR
CE272	BF6M1015CP	364	1800	219	127.4	1688	1200	241	99.6	EM
CE273/5	BF6M1015CP	366	2100	200	128.1	1674	1300	240	107.0	EM
CE285/1	BF6M1015CP	382	1800	228	133.7	1769	1200	256	104.3	EM
CE286/4	BF6M1015CP	383	2100	210	134.1	1752	1300	251	111.9	EM
CE287	BF6M1015CP	385	2100	210	134.8	1631	1300	231	104.2	EM
CE287/1	BF6M1015CP	385	1900	224	134.8	1731	1200	246	102.1	EM
CE300/5	BF6M1015CP	402	2100	219	140.7	1705	1300	242	108.9	EM
CE300/6	BF6M1015CP	402	2100	219	140.7	1841	1300	261	117.6	EM
CE300/7	BF6M1015CP	402	1900	237	140.7	1809	1200	259	106.7	EM
CE300/8	BF6M1015CP	402	1800	241	140.7	1862	1200	272	109.8	EM
CE313	BF6M1015CP	419	1800	255	146.7	1943	1200	280	114.6	EM
CE314/1	BF6M1015CP	421	2100	231	147.4	1785	1300	254	114.1	EM
CE314/3	BF6M1015CP	421	1900	246	147.4	1894	1200	270	111.7	EM
CE330/2	BF6M1015CP	442	2100	248	154.7	1876	1300	268	119.9	EM
CE330/4	BF6M1015CP	442	1900	264	154.7	1990	1200	283	117.4	EM
D303	BF6M1015CP	406	1500	279	142.1	N/A	N/A	N/A	N/A	EM
D320/1	BF6M1015CP	429	1800	256	150.2	N/A	N/A	N/A	N/A	EM
D338	BF6M1015CP	453	1500	312	158.6	N/A	N/A	N/A	N/A	EM
D351/1	BF6M1015CP	470	1800	284	164.5	N/A	N/A	N/A	N/A	EM
D365	BF6M1015CP	489	1500	350	171.2	N/A	N/A	N/A	N/A	EM
D384/1	BF6M1015CP	515	1800	316	180.3	N/A	N/A	N/A	N/A	EM
CE290	BF8M1015C	389	1900	168	136.2	1866	1300	197	119.2	EM
CE320	BF8M1015C	429	2000	177	150.2	2050	1300	216	131.0	EM
CE330	BF8M1015C	442	1800	196	154.7	2206	1200	235	130.1	EM
CE345	BF8M1015C	462	1800	203	161.7	2306	1200	248	136.0	EM
CE348	BF8M1015C	466	2100	191	163.1	2295	1200	240	135.4	EM
CE348/1	BF8M1015C	466	2000	193	163.1	2326	1200	245	137.2	EM
CE348/2	BF8M1015C	466	1900	205	163.1	2361	1200	251	139.3	EM
CE362	BF8M1015C	485	1800	215	169.8	2420	1200	260	142.7	EM
CE364	BF8M1015C	488	2100	201	170.8	2400	1200	251	141.6	EM
CE364/1	BF8M1015C	488	2000	201	170.8	2433	1200	258	143.5	EM
CE364/2	BF8M1015C	488	1900	211	170.8	2470	1200	264	145.7	EM
CE370	BF8M1015C	496	2000	202	173.6	2473	1200	266	145.9	EM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 4DZXL15.9002
Mfr. Family Name: BF6M1015C
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

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1. Engine Code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE370/1	BF8M1015C	496	2100	203	173.6	2439	1200	198	143.9	EM DI, SPL, TC, CAC
CE380	BF8M1015C	509	1800	228	178.2	2540	1200	271	149.8	EM
CE381	BF8M1015C	511	2100	210	178.9	2512	1200	268	148.2	EM
CE381/1	BF8M1015C	511	2000	211	178.9	2547	1200	269	150.2	EM
CE381/2	BF8M1015C	511	1900	221	178.9	2585	1200	281	152.5	EM
CE385	BF8M1015C	516	2100	212	180.6	2539	1200	270	149.8	EM
CE400	BF8M1015C	536	2100	221	187.6	2640	1200	278	155.7	EM
CE400/1	BF8M1015C	536	2000	226	187.6	2674	1200	280	157.7	EM
CE400/2	BF8M1015C	536	1900	234	187.6	2714	1200	~~293~~ 291	160.1	EM
D333	BF8M1015C	446	1500	228	156.1	N/A	N/A	N/A	N/A	EM
D362/1	BF8M1015C	485	1800	216	169.8	N/A	N/A	N/A	N/A	EM
D380	BF8M1015C	509	1500	262	178.2	N/A	N/A	N/A	N/A	EM
D413/1	BF8M1015C	553	1800	253	193.6	N/A	N/A	N/A	N/A	EM
D418	BF8M1015C	560	1500	291	196.0	N/A	N/A	N/A	N/A	EM
D454/1	BF8M1015C	608	1800	277	212.8	N/A	N/A	N/A	N/A	EM
CE348/4	BF8M1015CP	466	2100	191	163.1	2137	1300	231	136.5	EM
CE364/3	BF8M1015CP	488	1800	220	170.8	2259	1200	244	133.2	EM
CE364/4	BF8M1015CP	488	2100	202	170.8	2232	1300	244	142.6	EM
CE381/3	BF8M1015CP	511	2100	210	178.9	2338	1300	256	149.4	EM
CE382	BF8M1015CP	512	1800	231	179.2	2371	1200	259	139.8	EM
CE383	BF8M1015CP	513	2100	211	179.6	2177	1300	235	139.1	EM
CE383/1	BF8M1015CP	513	1900	228	179.6	2310	1200	250	136.2	EM
CE400/5	BF8M1015CP	513	2100	221	179.6	2274	1300	247	145.3	EM
CE400/6	BF8M1015CP	536	2100	221	187.6	2455	1300	264	156.9	EM
CE400/7	BF8M1015CP	536	1900	240	187.6	2412	1200	262	142.3	EM
CE400/8	BF8M1015CP	536	1800	244	187.6	2482	1200	275	146.4	EM
CE418	BF8M1015CP	560	1800	258	196.0	2595	1200	283	153.1	EM
CE419	BF8M1015CP	561	2100	232	196.4	2382	1300	258	152.2	EM
CE419/1	BF8M1015CP	561	1900	248	196.4	2527	1200	273	149.0	EM
CE440	BF8M1015CP	590	2100	248	206.5	2500	1300	272	159.7	EM
CE440/1	BF8M1015CP	590	1900	267	206.5	2650	1200	289	156.3	EM
CE440/2	BF8M1015CP	590	2150	251	206.5	2500	1300	272	159.7	EM
CE470	BF8M1015CP	630	1900	277	220.5	2670	1300	291	170.6	EM
CE470/1	BF8M1015CP	630	2100	269	220.5	2500	1300	272	159.7	EM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 4DZXL15.9002
Mfr. Family Name: BF6M1015C
Process Code: New Submission

ENGINE MODEL SUMMARY FORM

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U-R-013-0125

1. Engine Code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque @ RPM(NM)		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
		KW								
D399	BF8M1015CP	535	1500	285	187.3	N/A	N/A	N/A	N/A	EM DIF, TC, CAC, SP
D426/1	BF8M1015CP	571	1800	260	199.9	N/A	N/A	N/A	N/A	EM
D448	BF8M1015CP	600	1500	315	210.0	N/A	N/A	N/A	N/A	EM
D473/1	BF8M1015CP	634	1800	288	221.9	N/A	N/A	N/A	N/A	EM
D490	BF8M1015CP	657	1500	352	230.0	N/A	N/A	N/A	N/A	EM
D517/1	BF8M1015CP	517693	1800	320	242.6	N/A	N/A	N/A	N/A	EM
CE330/5	BF6M1015CP	442	2100	252	154.7	1827	1300	265	116.7	EM