## **MOTORENFABRIK HATZ**

EXECUTIVE ORDER U-R-034-0293 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 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)
2013	DHZXL.347C30	0.347	Diesel	3000
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLIC	
	Mechanical Direct In	jection	Pump, Generator	·

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 hydrocarbon plus oxides of nitrogen (HC+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-	OPACITY (%)				
POWER	STANDARD CATEGORY		нс	NOx HC+NOx		co	PM	ACCEL	LUG	PEAK
kw < 8	Tier 4 - Final	STD	N/A	N/A	7.5	8.0	0.60	N/A	N/A	N/A
		CERT			6.5	5.6	0.19			

BE IT FURTHER RESOLVED: That certification to the standards in 13 CCR 2423(b)(1)(A) -Table 1b listed above has been permitted pursuant to Endnote 2 of the same table.

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 July 2013

Erik White, Chief

Mobile Source Operations Division

Attachment 1021

U-R-034-0193 7/16/13

## Detailed engine models summarization of the engine family DHZXL.347C30

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EPA Engine	Model Year	Engine	Engine	Max.	de-rated	Rated	Maximum	Speed at	Maximum	Torque at	Maximum	Intermediat	Lower	Upper	Fuel Rate at	Fuel Rate at
Family Name	1 1	Model	Code	engine	max.	Speed	Torque	Maximum	Test Speed	Maximum	Engine	e Test	Tolerance	Tolerance	Maximum	Rated Speed
	! [		!	power	powerfor	(RPM)	(N°m)	Torque	(RPM)	Test Speed	Power (kW)	Speed (RPM)	of	of	Torque	(mm3/stroke)
	( }			prior to de-	prouction	4	(	(RPM)	(	(N*m)			Maximum	Maximum	(mm3/stroke)	
	1 1		l		,			(10, 111)		(,,,,,	ł		Power (%)	Power (%)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	J
				rating	engine		<u> </u>									
DHZXL347C30	2013	1B30 / V	B30-3600	5,0	4,5	3600	11,9	3600	3600	11,9	4,5	3600	3,2	3,2	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3550	5,0	4,5	3550	12,1	3550	3550	12,1	4,5	3550	3,2	3,2	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3500	5,0	4,5	3500	12,3	3500	3500	12,3	4,5	3500	3,1	3,1	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3450	4,9	4,4	3450	12,2	3450	3450	12,2	4,4	3450	3,1	3,1	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3400	4,9	4,4	3400	12,4	3400	3400	12,4	4,4	3400	3,0	3,0	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3350	4,9	4,4	3350	12,5	3350	3350	12,5	4,4	3350	3,0	3,0	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-3300	4,9	4,4	3300	12,7	3300	3300	12,7	4,4	3300	2,9	2,9	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3250	4.8	4.3	3250	12,6	3250	3250	12,6	4,3	3250	2,9	2,9	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-3200	4,8	4,3	3200	12,8	3200	3200	12,8	4,3	3200	2,9	2,9	15,0	15,0
DHZXL347C30	2013	1B30 I Y	B30-3150	4.8	4.3	3150	13,0	3150	3150	13,0	4,3	3150	2,8	2,8	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-3100	4.7	4,2	3100	12,9	3100	3100	12,9	4,2	3100	2,8	2,8	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-3050	4.7	4.2	3050	13,1	3050	3050	13,1	4,2	3050	2,7	2,7	15,0	15,0
DHZXL347C30	20t3	1B30 / Y	B30-3000	4.6	4.2	3000	13.4	3000	3000	13.4	4,2	3000	2.8	2,8	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-2950	4.6	4.1	2950	13.3	2950	2950	13.3	4,1	2950	2.7	2,7	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-2900	4.6	4.1	2900	13.5	2900	2900	13,5	4,1	2900	2,7	2,7	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-2850	4,5	4.1	2850	13.7	2850	2850	13.7	4.1	2850	2.6	2,6	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-2800	4.5	4.0	2800	13.6	2800	2800	13.6	4.0	2800	2,6	2,6	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-2750	44	4.0	2750	13.9	2750	2750	13.9	4.0	2750	2,5	2,5	15,0	15,0
DHZXL 347C30	2013	1B30 / Y	B30-2700	4.4	3,9	2700	13.8	2700	2700	13,8	3,9	2700	2,5	2.5	15,0	15,0
DHZXL347C30	2013	1B30 / V	B30-2650	4.3	3.9	2650	14.1	2650	2650	14.1	3,9	2650	2.4	2,4	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-2600	4.2	3.8	2600	14,0	2600	2600	14.0	3.8	2600	2.4	2.4	15,0	15,0
DHZXL347C30	2013	1B30 / Y	B30-2550	4,2	3,8	2550	14.2	2550	2550	14.2	3.8	2550	2.3	2,3	15,0	15.0
DHZXL 347C30	2013	1B30 / V	B30-2500	4.1	3.7	2500	14.1	2500	2500	14.1	3.7	2500	2,3	2.3	15.0	15.0

Part Number Summary Table

Emission Controls:

	EPA Engine Family Name	Engine Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Sensor A	Assembly Part Number
	DHZXL.347C30	N/A	1B30	50568010	50566710					
- 1	D11718 047000	671.6	4D20V	EGECOOIG	E0ECC740					