

## MOTORENFABRIK HATZ GMBH & CO.

EXECUTIVE ORDER U-R-034-0337 New Off-Road

Compression-Ignition Engines
Page 1 of 1

Pursuant to the authority vested in California 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-19-095;

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)				
2023	PHZXL1.95C50	1.463, 1.951	Diesel	5000				
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Exhau	Direct Injection, Diesel st Gas Recirculation, E ule, Turbocharger, Cha	lectronic Control	Pump, Compressor, Genera	ator Set				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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				EXHAUST (g/kw-ł	OPACITY (%)				
	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
19 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT			3.1	0.1	0.02	-		

**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).

**BE IT FURTHER RESOLVED:** That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 37 ≤ kW < 56 power category in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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 on this <u>27th</u> day of October 2022.

Robin U. Lang, Chief

**Emissions Certification and Compliance Division** 

Golin U. Lang

Attachment: Engine Models EO #: U-R-034-0337 Family: PHZXL1.95C50 Attachment Last Revised: 9/16/2022

					Disalasassas		Da ala Dannara	Dardi Darrian	Dard Darra	Dard Darria Fred	1	Deal Terror	Deel Terrin		Dark Transcer For	.1			
Madal	Codo	Trim	Confin	Displacement			Peak Torque - Units							Notes					
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	rueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fue	Units	ОВО	GHG	Special	Notes
4H50TIC	1800- con-41,0			1.95	Liters	41	kilowatt	1800	47	mm3/stroke	218	N-m	1800	47	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	1800- con-36,4 C81	-		1.95	Liters	36.4	kilowatt	1800	42	mm3/stroke	193	N-m	1800	42	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	1500- con-35,0			1.95	Liters	35	kilowatt	1500	49.5	mm3/stroke	223	N-m	1500	49.5	mm3/stroke	N/A	N/A	N/A	N/A
4H50TIC	1500- con-31,0			1.95	Liters	31	kilowatt	1500	44	mm3/stroke	195	N-m	1500	44	mm3/stroke	N/A	N/A	N/A	N/A
ЗН50ТІС	1800- con-31,3			1.46	Liters	28	kilowatt	1800	46	mm3/stroke	148.5	N-m	1800	46	mm3/stroke	N/A	N/A	N/A	N/A
ЗН50ТІС	1800- con-28,5			1.46	Liters	28	kilowatt	1800	46	mm3/stroke	148.5	N-m	1800	46	mm3/stroke	N/A	N/A	N/A	N/A
ЗН50ТІС	1500- con-25,5			1.46	Liters	28	kilowatt	1800	46	mm3/stroke	148.5	N-m	1800	46	mm3/stroke	N/A	N/A	N/A	N/A
3H50TIC	1500- con-22,6	;		1.46	Liters	22	kilowatt	1500	44	mm3/stroke	140.1	N-m	1500	44	mm3/stroke	N/A	N/A	N/A	N/A
																			-
																		+	+
																		+	+
																	-	+	+
																		+	+
			-		-		-	-										+	+
																		+	+
								-										+	+
																		+	+
					1		1	1			1							1	1
																		1	1