CALIFORNIA AIR RESOURCES BOARD	**MOTORENFABRIK HATZ GMBH & CO. KG**	**EXECUTIVE ORDER U-R-034-0341** 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	PHZXL1.46M52	1.463	Diesel	3000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Electronic Control Module, Turbocharger	Loader, Tractor, Pump, Compressor, Generator 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4 Final	**STD**	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT	--	--	7.0	2.2	0.11	--	--	--

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 on this 27th day of October 2022.

Robin U. Lang

Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models **EO #:** U-R-034-0341 **Family:** PHZXL1.46M52 **Attachment Last Revised:** 8/16/2022

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
3H50T	2800-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2800	25.7	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2700-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2700	26.2	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2600-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2600	26.5	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2500-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2500	26.9	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2400-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2400	27.2	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2300-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2300	27.7	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2200-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	2200	28.4	mm3/stroke	131	N-m	1300	42.9	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	2800-18.4-LT	N/A	I3	1.46	Liters	18.4	kilowatt	2800	25.7	mm3/stroke	110	N-m	1300	36.2	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	1800-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	1800	32.8	mm3/stroke	98	N-m	1800	32.8	mm3/stroke	N/A	N/A	N/A	N/A
3H50T	1500-18.4	N/A	I3	1.46	Liters	18.4	kilowatt	1500	37.9	mm3/stroke	117	N-m	1500	37.9	mm3/stroke	N/A	N/A	N/A	N/A