

YANMAR POWER TECHNOLOGY CO., LTD

EXECUTIVE ORDER U-R-028-1072

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	PYDXL01.3NPA	1.267	Diesel 3000							
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
	Indirect Diesel Inje	ection	Crane, Dozer, Loader, Tractor, Pump, Compressor, Excavator							

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	EMISSION				EXHAUST (g/kw-ł	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4 Final	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			5.6	1.6	0.14	1	1	1

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 <u>2nd</u> day of December 2022.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Jolin U. Lang

Attachment: Engine Models EO #: U-R-028-1072 Family: PYDXL01.3NPA Attachment Last Revised: 11/3/2022

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fue	I	Peak Torque -	Peak Torque -	Peak Torque - Fuel						
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel Units		OBD	GHG	Special	Notes	
4WNNPM	ı		13	1.267	Liters	21.2	horsepower	2500	23.3	mm3/stroke	51.5	lb-ft	1700	24.0	mm3/stroke					
4WNCAM			13	1.267	Liters	23.9	horsepower	3200	20.9	mm3/stroke	45.7	lb-ft	2000	21.8	mm3/stroke					
4WNDAM	ı		13	1.267	Liters	23.9	horsepower	3000	21.9	mm3/stroke	45.7	lb-ft	1900	21.7	mm3/stroke					
4WNKAM			13	1.267	Liters	22.8	horsepower	2800	21.5	mm3/stroke	48.1	lb-ft	1900	23.1	mm3/stroke					
4WNMA M			13	1.267	Liters	21.2	horsepower	2600	22.2	mm3/stroke	48.1	lb-ft	1900	23.5	mm3/stroke					
4WNNAM	1		13	1.267	Liters	20.4	horsepower	2500	22.4	mm3/stroke	48.1	lb-ft	1900	23.4	mm3/stroke					
4WNPAM			13	1.267	Liters	19.6	horsepower	2400	21.6	mm3/stroke	48.1	lb-ft	1800	23.2	mm3/stroke					
4WNSAM			13	1.267	Liters	18	horsepower	2200	21	mm3/stroke	48.1	lb-ft	1600	23.4	mm3/stroke					
4WNNFM			13	1.267	Liters	20.4	horsepower	2500	22.4	mm3/stroke	48.1	lb-ft	1900	23.4	mm3/stroke					
4WNDAP			13	1.267	Liters	23.9	horsepower	3000	21.9	mm3/stroke	45.7	lb-ft	1900	21.7	mm3/stroke					
4WNDXM			13	1.267	Liters	24.7	horsepower	3000	22.2	mm3/stroke	48.7	lb-ft	2100	23	mm3/stroke					