

DAEDONG CORPORATION

EXECUTIVE ORDER U-R-044-0181

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	PDCLL01.8HNV	1.826	Diesel	5000				
SPECIAL	. FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Injection	ronic Control Module, E on, Periodic Trap Oxidiz Recirculation, Oxidatio	er, Exhaust Gas	Tractor, Generator Set, Fo	orklift				

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			I	EXHAUST (g/kw-l	OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK	
8 ≤ kW < 37	Tier 4 Final	STD	N/A	N/A	4.7	5.5	0.03	N/A	N/A	N/A	
		CERT		-	4.3	0.1	0.01	-			

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 19 ≤ kW < 37 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 29th day of December 2022.

Robin U. Lang, Chief

John Shi for

Emissions Certification and Compliance Division

Attachment: Engine Models EO #: U-R-044-0181 Family: PDCLL01.8HNV Attachment Last Revised: 12/12/2022

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel Peak Toro			orque - Peak Torque - Peak Torque - Fue						
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fue	l Units	OBD	GHG	Special	Notes
3H4	3009- 2664	N/A	L3	1.826	Liters	29.5	kilowatt	2600	36.4	mm3/stroke	118	N-m	1800	37.5	mm3/stroke	N/A	N/A	N/A	N/A
3H4	2620- 2664	N/A	L3	1.826	Liters	26	kilowatt	2600	31.6	mm3/stroke	115	N-m	1800	36.1	mm3/stroke	N/A	N/A	N/A	N/A
3H4	2000- 1894	N/A	L3	1.826	Liters	20	kilowatt	1800	32.4	mm3/stroke	106	N-m	1800	32.4	mm3/stroke	N/A	N/A	N/A	N/A
3H4	1600- 1594	N/A	L3	1.826	Liters	16	kilowatt	1500	30.7	mm3/stroke	102	N-m	1500	30.7	mm3/stroke	N/A	N/A	N/A	N/A