

HYUNDAI DOOSAN INFRACORE CO. LTD.

EXECUTIVE ORDER U-R-019-0199

New Off-Road Compression-Ignition Engines Page 1 of 2

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)				
2022	NDICL07.6LEA	7.64	Diesel	8000				
SPECIAL	. FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Cataly Electronic	ust Gas Recirculation, I yst, Selective Catalyst F Direct Injection, Turbo Electronic Control Mod Sensor	Reduction-Urea, charger, Charge Air	Loader, Excavator, Fork	klift				

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	EMISSION			ı	EXHAUST (g/kw-l	OPACITY (%)				
CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.01	0.38		0.04	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 130 ≤ kW ≤ 560 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.

BE IT FURTHER RESOLVED: That the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer must submit the necessary data by March 31, 2022 to confirm or correct the certification emissions levels on this conditional certification. Failure to submit the necessary data or resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification and introduced into commerce in the State of California shall be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.



HYUNDAI DOOSAN INFRACORE CO. LTD.

EXECUTIVE ORDER U-R-019-0199 New Off-Road

New Off-Road Compression-Ignition Engines Page 2 of 2

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 18th day of January 2022.

Allen Lyons, Chief

Emissions Certification and Compliance Division

EO #: U-R-019-0199 Family: NDICL07.6LEA Attachment Last Revised: 1/10/2022

Attachment: Engine Models

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fuel		Peak Torque -	Peak Torque -		Peak Torque - Fue	el			
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fuel		OBD	GHG	Special	Notes
DL08P	DL08- LEE01	N/A	16	7.64	Liters	213	kilowatt	1800	168	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEE00	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEL00	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEL01	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQS
DL08P	DL08- LEF00	N/A	16	7.64	Liters	213	kilowatt	2100	155	mm3/stroke	1235	N-m	1300	180	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ:
DL08P	DL08- LEF01	N/A	16	7.64	Liters	184	kilowatt	2100	132	mm3/stroke	1157	N-m	1300	169	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEE03	N/A	16	7.64	Liters	213	kilowatt	1800	168	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEE02	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEL02	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ
DL08P	DL08- LEL03	N/A	16	7.64	Liters	202	kilowatt	1800	159	mm3/stroke	1275	N-m	1300	187	mm3/stroke	N/A	N/A	N/A	EGR, DOC, SCR DFI, TC, CAC, ECM, DQ