



Pursuant to the authority vested in the 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-02-003;

**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)
2009	9DICL05.8UTA	5.89	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Electronic Control Module, Charge Air Cooler			Loaders, Compressor, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NO<sub>x</sub>), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO<sub>x</sub>), 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 (%)		
			HC	NO <sub>x</sub>	NMHC+NO <sub>x</sub>	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
130 ≤ kW < 225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT	--	--	3.8	0.8	0.13	14	3	26

**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 at El Monte, California on this 5 day of December 2008.

Annette Hebert, Chief  
Mobile Source Operations Division

**Engine Model Summary Template**

Doosan Infracore Co. Ltd  
 Nonroad CI

Attachment

P. 1 of 1

U-R-019-0106

Engine Family    1.Engine Code    2.Engine Model    3.BHP@RPM (SAE Gross)    4.Fuel Rate: mm/stroke @ peak HP (for diesel only)    5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)    6.Torque @ RPM (SEA Gross)    7.Fuel Rate: mm/stroke@peak torque    8.Fuel Rate: (lbs/hr)@peak torqueDevice Per SAE J1930    9.Emission Control

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torqueDevice Per SAE J1930	9.Emission Control
9DICL05.8UTA	EUTST	DL06	166 kW 222 @ 2200	116	84	622 @ 1400	134	62	DDI,TC,CAC,EC
9DICL05.8UTA	EUTLC	DL06	163 @ 2100	84	58	593 @ 1400	121	56	
9DICL05.8UTA	EUTEF	DL06	173 @ 1900	96	60	564 @ 1400	114	53	
9DICL05.8UTA	EUTEH	DL06	170 @ 2000	90	60	542 @ 1400	108	50	
9DICL05.8UTA	EUTLD	DL06	143 @ 2100	73	51	506 @ 1400	106	49	
9DICL05.8UTA	EUTLE	DL06	156 @ 2500	81	65	486 @ 1500	108	52.5	
9DICL05.8UTA	EUTEG	DL06	155 @ 1900	88	55	506 @ 1400	101	47	
9DICL05.8UTA	EUTFC	DL06	158 @ 2100	83	58	485 @ 1400	95	44	
9DICL05.8UTA	EUTFE	DL06	158 @ 2100	83	58	485 @ 1400	95	44	
9DICL05.8UTA	EUTEM	DL06	149 @ 2000	83	55	477 @ 1400	94	44	
9DICL05.8UTA	EUTFD	DL06	138 @ 2100	73	51	427 @ 1400	83	38	
9DICL05.8UTA	EUTFF	DL06	138 @ 2100	73	51	427 @ 1400	83	38	
9DICL05.8UTA	EUTEK	DL06	134 @ 2000	70	46	398 @ 1400	74	34	
9DICL05.8UTA	EUTEJ	DL06	122 @ 1950	67	43	340 @ 1400	70	32	
9DICL05.8UTA	EUTEL	DL06	99 @ 1850	56	34	333 @ 1400	66	31	
9DICL05.8UTA	EUTEI	DL06	14 kW 163 @ 1900	93	58	521 @ 1400	102	47	