

## FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER: U-R-015-0589 New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** The engines and emission control systems produced by the manufacturer as described below are certified 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	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2024	RFPXL06.7FR2	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Engine Control Module (ECM), Turbocharger (TC), Charge Air Cooler (CAC), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction – Urea/Periodic Trap Oxidizer (SCR+DPF), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (\*).

		Crit	eria	Smoke Opacity				
Applicable Standard	NMHC	NOx	СО	PM	ACL	LUG	PEAK	
	STD	0.19	0.40	3.5	0.02	*	*	*
Tier 4 Final 130 ≤ kW ≤ 560	FEL	*	*	*	0.01	*	*	*
100 = KVV = 000	NTE	0.28	0.60	4.4	0.02	*	*	*

**BE IT FURTHER RESOLVED:** Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

**BE IT FURTHER RESOLVED:** That the manufacturer has elected to combine engines from the  $75 \le kW < 560$  power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the  $130 \le kW < 560$  power category in accordance with Section 1039.230(e) of the applicable California test procedures.

**BE IT FURTHER RESOLVED:** For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

**BE IT FURTHER RESOLVED:** The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this \_\_\_\_\_\_ day of January 2024.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Polin U. Lang

## ATTACHMENT: ENGINE MODELS

Family: RFPXL06.7FR2 EO Number: U-R-015-0589 Date Applicable: 1/4/24

					Peak Power			Peak Torque					
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	=
F4DGE4131*V	F4DGE4131*V		16	6.7	129	1800	147	700	1500	145	1	N/A	
F4DGE617L*V	F4DGE617L*V		16	6.7	222	1800	161	1249	1300	173	1	N/A	
F4DGE617E*V	F4DGE617E*V		16	6.7	212	1800	155	1194	1400	170	1	N/A	
F4DGE617D*V	F4DGE617D*V		16	6.7	230	1800	172	1282	1400	178	1	N/A	
F4DGE614H*V	F4DGE614H*V		16	6.7	121	1800	99	707	1500	99	1	N/A	
F4DGE413G*V	F4DGE413G*V		16	6.7	124	1800	143	700	1500	145	1	N/A	
F4DGE613Y*V	F4DGE613Y*V		16	6.7	191	1800	142	1101	1500	148	1	N/A	
F4DGE613V*V	F4DGE613V*V		16	6.7	142	1800	108	802	1500	112	1	N/A	
F4DGE613T*V	F4DGE613T*V		16	6.7	158	1800	114	891	1500	121	1	N/A	
F4DGE613S*V	F4DGE613S*V		16	6.7	140	1800	105	805	1500	112	1	N/A	
F4DGE613D*V	F4DGE613D*V		16	6.7	165	1800	122	942	1500	130	1	N/A	
F4DGE617K*V	F4DGE617K*V		16	6.7	201	1800	145	1173	1400	162	1	N/A	
F4DGE614A*V	F4DGE614A*V		16	6.7	121	1800	92	700	1500	99	1	N/A	
F4DGE613U*V	F4DGE613U*V		16	6.7	180	1800	138	1038	1500	142	1	N/A	
F4DGE613N*V	F4DGE613N*V		16	6.7	165	1800	122	940	1500	128	1	N/A	
F4DGE613C*V	F4DGE613C*V		16	6.7	199	1800	147	1159	1500	160	1	N/A	
F4DGE4132*V	F4DGE4132*V		16	6.7	107	1800	122	590	1500	125	1	N/A	
F4DGE6136*V	F4DGE6136*V		16	6.7	129	1800	97	738	1500	104	1	N/A	
F4DGE413H*V	F4DGE413H*V		16	6.7	114	1800	132	640	1500	135	1	N/A	
F4DGE6137*V	F4DGE6137*V		16	6.7	154	1800	116	875	1500	122	1	N/A	
F4DGE6139*V	F4DGE6139*V		16	6.7	129	1500	97	750	1500	106	1	N/A	