

FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER: U-R-015-0579 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	RFPXL12.9TSS	Diesel	Dedicated	Diesel	Variable and Constant Speed			

Emission Control Systems						
[1]: Electronic Direct Injection (DDI), Electronic Control Module (ECM), Turbocharger (TC), Charge Air Cooler (CAC), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction – Urea (SCR-U), 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/kWh-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	*	*	*	*	*	*	*
100 = XVV = 000	NTE	0.28	0.60	4.4	0.03	*	*	*

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: 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 ____//t/___ day of December 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Polin U. Lang

ATTACHMENT: ENGINE MODELS

Family: RFPXL12.9TSS EO Number: U-R-015-0579 Date Applicable: 11/28/2023

					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	-	-	-
F3HFE613A*B	F3HFE613A*B		L6	12.9	420	1800	321	2350	1500	323	1	N/A	
F3HFE613B*B	F3HFE613B*B		L6	12.9	415	1900	304	2401	1400	325	1	N/A	
F3HFE613C*B	F3HFE613C*B		L6	12.9	466	1800	337	2350	1500	322	1	N/A	
F3HFE613D*B	F3HFE613D*B		L6	12.9	390	1900	284	2258	1400	310	1	N/A	
F3HFE613F*B	F3HFE613F*B		L6	12.9	400	1700	313	2316	1500	318	1	N/A	
F3HFE613G*B	F3HFE613G*B		L6	12.9	348	1900	253	2012	1400	272	1	N/A	
F3HFE613H*B	F3HFE613H*B		L6	12.9	350	1700	272	2003	1500	274	1	N/A	
F3HFE615A*B	F3HFE615A*B		L6	12.9	424	1800	314	2250	1800	313	1	N/A	
F3HFE615B*B	F3HFE615B*B		L6	12.9	380	1800	285	2017	1800	280	1	N/A	
F3HFE615C*B	F3HFE615C*B		L6	12.9	353	1800	263	1874	1800	261	1	N/A	