

FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER: U-R-015-0582 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	RFPXL06.7SDB	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), Selective Catalytic Reduction – Urea (SCR-U), Diesel Oxidation Catalyst (DOC), 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	
Tier 4 Final	STD	0.19	0.40	3.5	0.02	*	*	*
130 ≤ kW ≤ 560	FEL	*	*	*	*	*	*	*
130 3 KVV 3 300	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 _____ 2nd__ day of January 2024.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Polin U. Lang

ATTACHMENT: ENGINE MODELS

Family: RFPXL06.7SDB EO Number: U-R-015-0582 Date Applicable: 12/05/2023

					Peak Power		1	Peak Torque					
∕lodel	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
=	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
4DFE413R*B	F4DFE413R*B		14	4.5	104	2200	103	626	1500	131	1	N/A	
4DFE413S*B	F4DFE413S*B		14	4.5	97	2200	97	581	1250	123	1	N/A	
4DFE413T*B	F4DFE413T*B		14	4.5	89	2200	89	539	1250	115	1	N/A	
4DFE413U*B	F4DFE413U*B		14	4.5	82	2200	83	512	1250	109	1	N/A	
4DFE414V*B	F4DFE414V*B		14	4.5	99	1800	114	561	1500	118	1	N/A	
4DFE6132*B	F4DFE6132*B		16	6.7	132	1800	95	740	1500	103	1	N/A	
4DFE613N*B	F4DFE613N*B		16	6.7	140	1800	102	805	1500	114	1	N/A	
4DFE613P*B	F4DFE613P*B		16	6.7	129	1800	93	750	1500	107	1	N/A	
4DFE614B*B	F4DFE614B*B		16	6.7	121	1800	89	700	1500	97	1	N/A	
4DFE614G*B	F4DFE614G*B		16	6.7	129	1800	95	740	1500	103	1	N/A	
4DFE614W*B	F4DFE614W*B		16	6.7	129	1800	93	740	1500	103	1	N/A	
4HFE413N*B	F4HFE413N*B		14	4.5	106	1800	122	608	1600	131	1	N/A	
4HFE413P*B	F4HFE413P*B		14	4.5	93	1800	103	500	1400	108	1	N/A	
4HFE413R*B	F4HFE413R*B		14	4.5	104	2200	103	626	1500	131	1	N/A	
4HFE413S*B	F4HFE413S*B		14	4.5	97	2200	97	581	1250	123	1	N/A	
4HFE413T*B	F4HFE413T*B		14	4.5	89	2200	89	539	1250	115	1	N/A	
HFE413U*B	F4HFE413U*B		14	4.5	82	2200	83	512	1250	109	1	N/A	
4HFE413Y*B	F4HFE413Y*B		14	4.5	94	1900	103	550	1500	115	1	N/A	
4HFE413Z*B	F4HFE413Z*B		14	4.5	98	1800	122	549	1500	115	1	N/A	
1HFE4149*B	F4HFE4149*B		14	4.5	107	1800	110	591	1500	124	1	N/A	
4HFE414H*B	F4HFE414H*B		14	4.5	114	1800	131	471	1500	132	1	N/A	
4HFE414V*B	F4HFE414V*B		14	4.5	99	1800	114	561	1500	118	1	N/A	
4HFE415B*B	F4HFE415B*B		14	4.5	85	1800	98	451	1800	98	1	N/A	
4HFE6133*B	F4HFE6133*B		16	6.7	119	1900	85	725	1400	101	1	N/A	
4HFE6139*B	F4HFE6139*B		16	6.7	135	1900	93	738	1500	101	1	N/A	
4HFE613N*B	F4HFE613N*B		16	6.7	140	1800	102	805	1500	114	1	N/A	
4HFE613P*B	F4HFE613P*B		16	6.7	129	1800	93	750	1500	107	1	N/A	
4HFE613T*B	F4HFE613T*B		16	6.7	145	1900	103	950	1300	132	1	N/A	
4HFE613W*B	F4HFE613W*B		16	6.7	128	1800	98	730	1500	102	1	N/A	
4HFE613Y*B	F4HFE613Y*B		16	6.7	143	1900	100	850	1400	119	1	N/A	
4HFE6148*B	F4HFE6148*B		16	6.7	140	1800	102	805	1500	114	1	N/A	
4HFE6149*B	F4HFE6149*B		16	6.7	129	1800	93	750	1500	107	1	N/A	
HFE614B*B	F4HFE614B*B		16	6.7	121	1800	89	700	1500	97	1	N/A	