

## FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0461 New Off-Road

Compression-Ignition Engines

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)			
2021	MFPXL08.7FR1	8.7	Diesel	8,000			
SPECIAL	FEATURES & EMISSION O	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Turboc Catalyst,	nic Direct Injection, Engin harger, Charge Air Cooler Selective Catalystic Redu p Oxidizer, Ammonia Oxic	r, Diesel Oxidation ction – Urea/Periodic	Loader, Tractor, Generator Set, and Other	Industrial Equipment			

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	EMISSION			ı	EXHAUST (g/kw-l	OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	r 4 Final STD		0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.03	0.27		0.03	0.01			

**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 on this 30th day of December 2020.

Allen Lyons, Chief

**Emissions Certification and Compliance Division** 

Attachment: Engine Models EO #: U-R-015-0461 Family: MFPXL08.7FR1 Attachment Last Revised: 12/23/2020

					Displacement -		Peak Power -	Peak Power -	Peak Power -	Peak Power - Fue	l	Peak Torque -	Peak Torque -		Peak Torque - Fue	- Fuel				
Model	Code	Trim	Config	Displacement	Units	Peak Power	Units	Speed (rpm)	Fueling	Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fue		OBD	GHG	Special	Notes	
																			DDI ECM	
F2CGE614		1	16	8.7	Liters	432.82	horsepower	2000	218	mm3/stroke	1370.37037	lb-ft	1400	263	mm3/stroke				TC CAC DOC	
E*V	4E*V		10	6.7	Liters	432.82	norsepower	2000	210	IIIII3/3ti oke	1370.37037	10-10	1400	203	IIIII3/3tioke				SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE614	F2CGE61	1	16	0.7	194	402.24		2000	205		4224 074074	11- 64	1400	25.5					TC CAC	
D*V	4D*V		II6	8.7	Liters	403.34	horsepower	2000	205	mm3/stroke	1334.074074	lb-ft	1400	256	mm3/stroke				DOC SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE614	F2CGE61	1																	TC CAC	
C*V	4C*V		16	8.7	Liters	379.22	horsepower	2000	191	mm3/stroke	1308.888889	lb-ft	1400	251	mm3/stroke				DOC SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE614	E2CGE61	,																	TC CAC	
F2CGE014 B*V	4B*V	1	16	8.7	Liters	345.72	horsepower	2000	174	mm3/stroke	1234.814815	lb-ft	1400	236	mm3/stroke				DOC	
																			SCR+DPF AMOX	
																-			DDI ECM	
		51			Liters	312.22	horsepower	2000	158	mm3/stroke	1163.703704	lb-ft	1400	222	mm3/stroke				TC CAC	
F2CGE614 A*V	F2CGE61 4A*V		16	8.7															DOC	
A V	4A V																		SCR+DPF	
		-														-	-		AMOX	
																			DDI ECM TC CAC	
F2CGE613		1	16	8.7	Liters	412.72	horsepower	2100	203	mm3/stroke	1333.333333	lb-ft	1500	250	mm3/stroke				DOC	
E*V	3E*V									,,,,,,					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE613		1	16	8.7	Liters	368.5	horsepower	2100	181	mm3/stroke	1240.740741	lb-ft	1500	221	mm3/stroke				TC CAC DOC	
D*V	3D*V			0.7	Litters	300.5	погзеромег	2100	101	mms/stroke	1240.740741	lb it	1500	221	mms/stroke				SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE613	F2CGE61	1		0.7		222		2400		2/	4440.540540		4500		2/				TC CAC	
B*V	3B*V		16	8.7	Liters	328.3	horsepower	2100	161	mm3/stroke	1118.518519	lb-ft	1500	209	mm3/stroke				DOC SCR+DPF	
																			AMOX	
																			DDI ECM	
F2CGE613	F2CGF61	1																	TC CAC	
A*V	3A*V	-	16	8.7	Liters	301.5	horsepower	2100	148	mm3/stroke	1000	lb-ft	1500	185	mm3/stroke				DOC SCR+DPF	
																			AMOX	
																1			DDI ECM	
F2CGE615	E2CGE61	,																	TC CAC	
A*V	5A*V	1	16	8.7	Liters	452.92	horsepower	1800	255	mm3/stroke	1328.148148	lb-ft	1800	255	mm3/stroke				DOC	
																			SCR+DPF	
							+	-								+	+		AMOX DDI ECM	
																			TC CAC	
F2CGE615 B*V	F2CGE61 5B*V	1	16	8.7	Liters	396.64	horsepower	1800	223	mm3/stroke	1162.962963	lb-ft	1800	223	mm3/stroke				DOC	
D V	3B. A																		SCR+DPF	
			-				-	-								-		-	AMOX	
																			DDI ECM TC CAC	
F2CGE613		1	16	8.7	Liters	368.5	horsepower	2100	211	mm3/stroke	1240.740741	lb-ft	1500	229	mm3/stroke				DOC	
L*V	3L*V									,					,				SCR+DPF	
																			AMOX	

F2CGE613 M*V	F2CGE61 3M*V	16	8.7	Liters	328.3	horsepower	2100	188	mm3/stroke	1118.518519	lb-ft	1500	211	mm3/stroke	DDI ECM TC CAC DOC SCR+DPF AMOX
F2CGE613 K*V	F2CGE61 3K*V	16	8.7	Liters	412.72	horsepower	2100	203	mm3/stroke	1333.333333	lb-ft	1500	250	mm3/stroke	DDI ECM TC CAC DOC SCR+DPF AMOX