FPT
POWERTRAIN TECHNOLOGIES

POWER GENERATION

Our efficiency.
Your edge.

FPT
POWERTRAIN TECHNOLOGIES

POWER GENERATION

Our efficiency.
Your edge.

Index

THE ENERGY OF INNOVATION

You need power, delivered quickly and reliably. FPT Industrial is there to answer your needs. Our new range of state-of-the-art engines covers all power generation applications.

Sustainability drives product development. As the standards for diesel engines grow ever more stringent, a constant decrease in emissions becomes a key benchmark for improvement.

To fulfill market requirements, FPT Industrial has developed different engine ranges. All comply with the most demanding standards.
Our products have functional layouts, hi-tech contents and carefully selected, top-quality components.

Superior Technology & Outstanding Advantages

Performance
Excellent transient load response. High performance guaranteed in all conditions. High engine power density.

Respect for the Environment
Compliance with the most stringent Emissions legislations.
Low noise levels.

Running Costs Reduction
Low oil and fuel consumption.
Best in class maintenance intervals.
Low running costs in continuous operating power.

Flexibility
Availability of a wide range of options to create tailor-made products.
Compact engine layout. Availability of cold starting accessories.

Our reliable power generation systems improve efficiency and boost business performance.

POWER GENERATION LINE-UP

G-Drive Engines

NOT REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm						60 Hz / 1800 rpm						Typical Genezator eff.	1500/1800 rpm Switchable
					Stand-by Power			Prime Power			Stand-by Power			Prime Power				
					kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA		
S8000AM1[3]	3L/NA	M	2,9	UR	31	27	34	28	25	31	34	30	37	31	27	34	88%	●
N45AM1A[3]	4L/NA	M	4,5	UR[1]	46	40	51	42	37	46	-	-	-	-	-	-	88%	○
N45AM2	4L/NA	M	4,5	UR	50	44	55	45	40	50	-	-	-	-	-	-	88%	○
N45SM1A[3]	4L/TC	M	4,5	UR[1]	59	54	67	53	48	60	65	59	74	59	54	67	91%	●
N45SM3	4L/TC	M	4,5	UR	81	74	92	73	66	83	87	79	99	79	72	90	91%	●
N45TM2A[3]	4L/TAA	M	4,5	UR[1]	96	88	110	88	81	101	107	98	123	98	90	113	92%	●
N45TM3[3]	4L/TAA	M	4,5	UR	118	109	136	107	98	123	122	112	140	111	102	128	92%	●
N67SM1	6L/TC	M	6,7	UR	121	111	139	110	101	127	138	127	159	125	115	144	92%	●
N67TM2A[3]	6L/TAA	M	6,7	UR[1]	126	116	145	114	105	131	141	130	162	128	118	147	92%	●
N67TM3A[3]	6L/TAA	M	6,7	UR[1]	152	140	175	138	127	159	165	152	190	149	137	171	92%	●
N67TM4	6L/TAA	M	6,7	UR	165	152	190	150	138	173	-	-	-	-	-	-	92%	○
N67TE2A[2]	6L/TAA	ECR	6,7	UR[1]	193	179	224	175	163	203	215	200	250	195	181	227	93%	●
N67TM7	6L/TAA	M	6,7	UR	195	181	227	177	165	206	195	181	227	177	165	206	93%	●
N67TE8W[3]	6L/TAA	ECR	6,7	UR	238	221	277	216	201	251	253	235	294	230	214	267	93%	●
CURSOR87TE4[3]	6L/TAA	ECR	8,7	UR	299	278	348	275	256	320	333	310	387	306	285	356	93%	●
CURSOR13TE2A[3]	6L/TAA	EUI	12,9	UR[1]	330	308	384	300	280	350	360	336	419	327	305	381	93%	●
CURSOR13TE3A[3]	6L/TAA	EUI	12,9	UR[1]	387	364	455	352	331	414	398	374	468	360	338	423	94%	●
CURSOR13TE6W	6L/TAA	ECR	12,9	UR	414	395	494	374	357	446	454	433	541	400	382	477	95%	●
CURSOR13TE7W	6L/TAA	ECR	12,9	UR	459	438	547	425	405	507	474	452	565	428	408	510	95%	●
CURSOR16TE1W[3]	6L/TAA	ECR	15,9	UR	557	529	661	505	480	600	578	549	686	523	497	621	95%	●

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

Injection System
M Mechanical
ECR Electronic Common Rail
EUI Electronic Unit Injector

● 1500 rpm / 1800 rpm Switchable Engine
○ Not Switchable Engine

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II

2 Complies to TA Luft (1986) regulations
3 TÜV measured based on TA-Luft standards

Identification Plate

N67TE2F:

N Engine Family
S8000 = S8000
F= F5
N = NEF
CURSOR = CURSOR

67 Displacement in liters
67 = 6,7 liters

T Aspiration
A = Naturally aspirated
S = Turbocharged
T = Turbocharged Aftercooler

E Injection system
M = Mechanical
E = Electronic

2 Rating model

F Emission regulation
F= Stage IIIA
X = Tier 3
Z = Tier 4 Final

A Previously EU Stage II

G-Drive Engines

REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm						60 Hz / 1800 rpm						Typical Genezator eff.	1500/1800 rpm Switchable
					Stand-by Power			Prime Power			Stand-by Power			Prime Power				
					kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA		
F32SM1F	4L/TC/I-EGR	M	3,2	UR[2]	32	28	35	29	26	32	–	–	–	–	–	–	88%	○
N45SM1F	4L/TC/I-EGR	M	4,5	Stage IIIA	60	55	68	55	50	63	–	–	–	–	–	–	91%	○
N45TE1F	4L/TAA/I-EGR	ECR	4,5	Stage IIIA / Tier 3	80	73	91	73	66	83	87	79	99	79	72	90	91%	●
N45TE2F	4L/TAA/I-EGR	ECR	4,5	Stage IIIA / Tier 3	98	90	113	89	82	102	122	112	140	111	102	128	92%	●
N67TM1F	6L/TAA/I-EGR	M	6,7	Stage IIIA	125	115	144	114	105	131	–	–	–	–	–	–	92%	○
N67TE1F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	145	133	167	132	121	152	157	144	181	142	131	163	92%	●
N67TE2F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	165	154	192	150	140	175	202	188	236	183	171	213	93%	●
N67TE3F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	195	181	227	175	163	203	212	197	246	192	179	223	93%	●
CURSOR87TE3F	6L/TAA/I-EGR	ECR	8,7	UR[2] / Tier 3	256	238	298	232	216	270	280	260	326	254	236	295	93%	●
CURSOR87TE4F	6L/TAA/I-EGR	ECR	8,7	UR[2] / Tier 3	292	272	339	262	244	305	320	298	372	287	267	334	93%	●
CURSOR13TE1F	6L/TAA/I-EGR	EUI	12,9	UR[2] / Tier 3	327	309	386	296	280	350	309	292	365	278	263	328	94%	●
CURSOR13TE2F	6L/TAA/I-EGR	EUI	12,9	UR[2] / Tier 3	372	354	443	336	320	400	334	318	397	300	286	357	95%	●
F32SM1X	4L/TC/I-EGR	M	3,2	Tier 3	–	–	–	–	–	–	47	41	51	42	37	46	88%	○
F32TM1X	4L/TAA/I-EGR	M	3,2	Tier 3	–	–	–	–	–	–	57	51	64	52	47	59	91%	○
N45SM1X	4L/TC/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	57	52	65	53	48	60	91%	○
N45SM2X	4L/TC/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	67	61	76	61	56	69	91%	○
N45TM2X	4L/TAA/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	95	87	109	87	80	100	92%	○
N67TM1X	6L/TAA/I-EGR	M	6,7	Tier 3	–	–	–	–	–	–	141	130	162	128	118	147	92%	○
N67TE1X	6L/TAA/I-EGR	ECR	6,7	Tier 3	–	–	–	–	–	–	165	152	190	150	138	173	92%	○
N67TE2X	6L/TAA/I-EGR	ECR	6,7	Tier 3	–	–	–	–	–	–	200	186	233	182	169	212	93%	○
CURSOR13TE3X	6L/TAA/I-EGR	EUI	12,9	Tier 3	–	–	–	–	–	–	371	349	436	337	317	396	94%	○

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated
TAA Turbocharged Aftercooler
TC Turbocharged

● 1500 rpm / 1800 rpm Switchable Engine
○ Not Switchable Engine

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II
UR[2] Previously EU Stage IIIA

Injection System
M Mechanical
ECR Electronic Common Rail
EUI Electronic Unit Injector

2 Complies to TA Luft (1986) regulations
3 TÜV measured based on TA-Luft standards

Identification Plate

N67TE2F:

N Engine Family
S8000 = S8000
F= F5
N = NEF
CURSOR = CURSOR

67 Displacement in liters
67 = 6,7 liters

T Aspiration
A = Naturally aspirated
S = Turbocharged
T = Turbocharged Aftercooler

E Injection system
M = Mechanical
E = Electronic

2 Rating model

F Emission regulation
F= Stage IIIA
X = Tier 3
Z = Tier 4 Final

A Previously EU Stage II

Bare Engines

REGULATED EMISSIONS

Model	Cylinder Arrangement Air intake Exhaust System	Injection system	Displacement Liters	Emissions	50 Hz / 1500 rpm						60 Hz / 1800 rpm						Typical Generator eff.	1500/1800 rpm Switchable
					Stand-by Power			Prime Power			Stand-by Power			Prime Power				
					kWm (gross)	kWe**	kVA**	kWm (gross)	kWe**	kVA**	kWm (gross)	kWe**	kWA**	kWm (gross)	kWe**	kVA**		
F34SNDZW055[1] [4]	4L/TC/EGR + DOC + PMcat	ECR	3,4	Tier 4 Final	–	–	–	–	–	–	54	48	60	49	43	54	92%	o
N45ENTZW68[1]	4L / TAA / DOC + SCR+CUC	ECR	4,5	Tier 4 Final	–	–	–	–	–	–	85	78	97	77	70	88	93%	o
N45ENTZW69	4L / TAA / DOC + SCR+CUC	ECR	4,5	Tier 4 Final	–	–	–	–	–	–	126	116	145	115	106	132	93%	o
N67ENTZW61[1]	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final	–	–	–	–	–	–	145	129	161	132	116	145	93%	o
N67ENTZW62[1]	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final	–	–	–	–	–	–	167	149	186	152	135	169	93%	o
N67ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final	–	–	–	–	–	–	195	175	219	177	158	198	93%	o
N67ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final	–	–	–	–	–	–	223	200	251	203	182	227	93%	o
CURSOR87ENTZW61	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final	–	–	–	–	–	–	260	233	291	236	210	263	93%	o
CURSOR87ENTZW62	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final	–	–	–	–	–	–	282	253	316	256	229	286	93%	o
CURSOR87ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final	–	–	–	–	–	–	309	281	351	281	255	318	94%	o
CURSOR87ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final	–	–	–	–	–	–	330	301	376	300	273	341	94%	o
CURSOR13ENTZW61	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final	–	–	–	–	–	–	353	324	404	321	294	368	94%	o
CURSOR13ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final	–	–	–	–	–	–	380	350	438	345	318	397	95%	o
CURSOR13ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final	–	–	–	–	–	–	424	391	488	385	355	443	95%	o

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation
DOC Diesel Oxidation Catalyst
SCR Selective Catalytic Reduction
CUC Clean-up Catalyst
PMcat Particulate Matter Catalyst

Injection System
M Mechanical
ECR Electronic Common Rail
EUI Electronic Unit Injector

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II

● 1500 rpm / 1800 rpm switchable engine
o Not Switchable Engine
** Fan absorption: 1%-6%

1 Preliminary data
4 Available H1 2019 in G-drive configuration

Identification Plate T4F Engines

N45ENTZW68:

N Engine Family
F= F5
N = NEF
CURSOR = CURSOR

67 Displacement in liters
45 = 4,5 liters

E Injection system
M = Mechanical
E = Electronic

N Crankcase
N = No structural
S = Structural

T Aspiration
A = Naturally aspirated
S = Turbocharged
T = Turbocharged Aftercooler

Z Emission regulation
F= Stage IIIA
X = Tier 3
Z = Tier 4 Final

W ECU type

6 Application

8 Rating model

G-DRIVE ENGINES

THE S8000 SERIES

From 31 to 34 kWm

Performance
The new S8000 delivers 4-cylinder performance with the compactness and lightness of a 3-cylinder engine.

Efficiency & Productivity
Best-in-class load acceptance and frequency stability make S8000 the best choice for telecom applications.

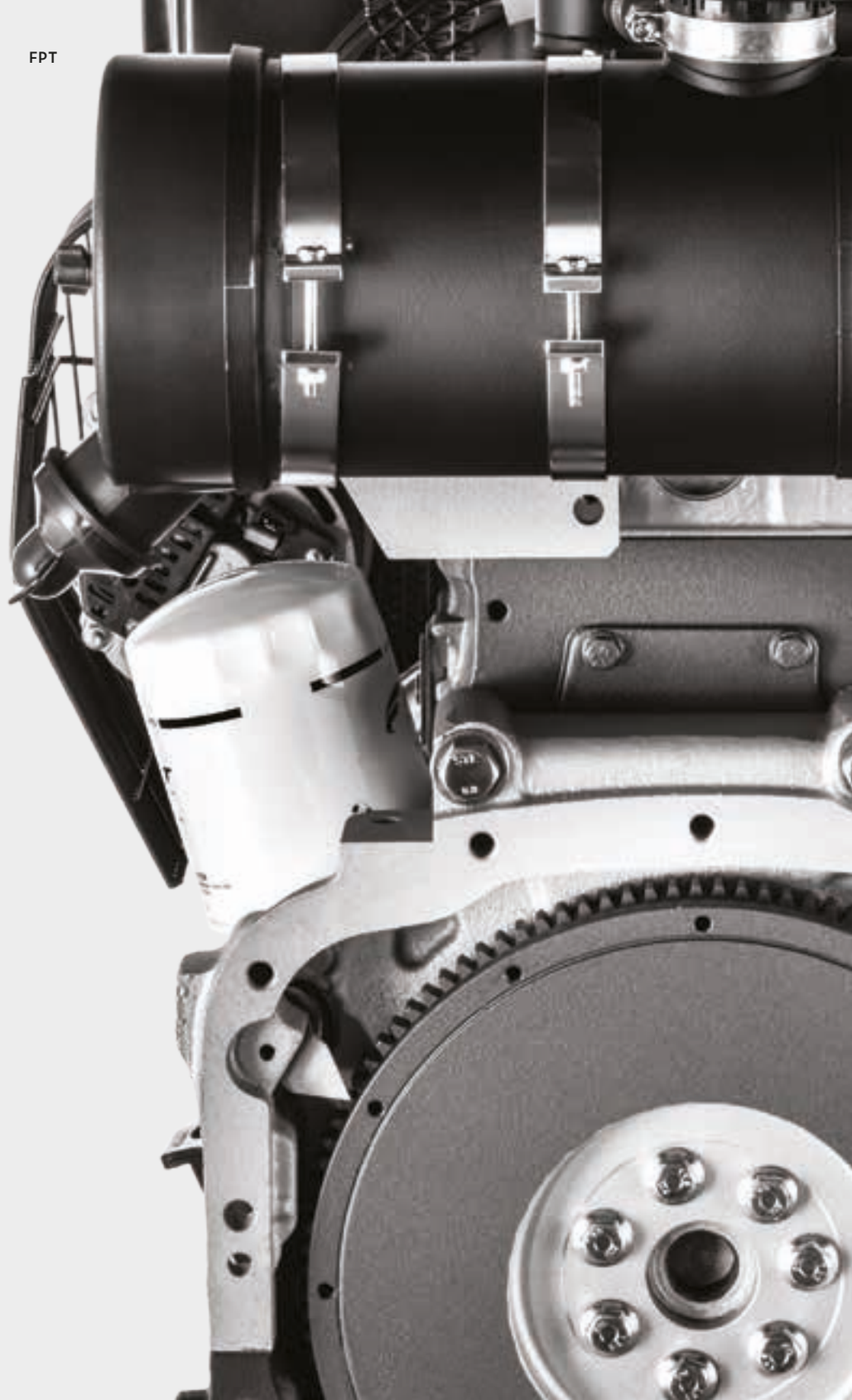
Maintenance
Best-in-class oil service intervals at 600 hours contribute to enhanced uptime (30% longer).

Compactness
Low TCO, compactness and simplicity.

Our S8000 G-Drive range cuts down complexity. It is ideal for remote locations, bringing high power output at a lower cost of ownership.

Engineered to FPT Industrial's renowned reliability levels, the engine in this range also feature best-in-class maintenance intervals. It is been developed with customer needs in mind. It is designed for all emergency and prime power applications that do not require compliance with emissions regulations.

S8000



Engine Specifications

NOT REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions
S8000AM1[3]	3L/NA	M	2,9	UR

50 Hz / 1500 rpm						60 Hz / 1800 rpm						Typical Generator eff.	1500/1800 rpm Switchable
Stand-by Power			Prime Power			Stand-by Power			Prime Power				
kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA		
31	27	34	28	25	31	34	30	37	31	27	34	88%	●

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated

Injection System
M Mechanical

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
3 TÜV measured based on TA-Luft standards

Key Advantages

	Features	Benefits
Performance	Class G2 of ISO 8528 standard certification of excellent performance related to load acceptance.	100% Trantransient load response for any stand-by and prime application.
Mechanical Injection System with Electronic Governor	Based on simple and proven mechanical rotary pump, S8000 engine has a direct fuel injection system which is state-of-the-art for accurate fuel delivery.	Simple and easy to install solution pick-up free.
Engine Design	Compact 3 Cylinder in-line with big unit displacement and long stroke.	Compact packaging and installation footprint.
Specific Features	Lean lay-out; starting temperature without auxiliaries down to -5°C (with heat greater down to -12°C). Tropicalized radiator delivered as standard in order.	High performance guaranteed in all conditions.
Air Handling	S8000 engine is available in naturally aspirated version with cooling package rack mounted on engine (non fix on frame is required).	High power density simple and easy to install solution.

	Features	Benefits
600h Oil Interval Change	Optimum design in terms of mechanical clearances, piston rings, engine oil system calculation and optimized engine structure to limit cylinder liners deformation.	Reduced maintenance needs and operating cost.
Component Integration	Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high component integration.	Leakage prevention.
Dual Speed Mode	Possibility to switch from 1.500 rpm to 1.800 rpm (50Hz/60Hz).	Product flexibility based on market request.

THE F5 SERIES

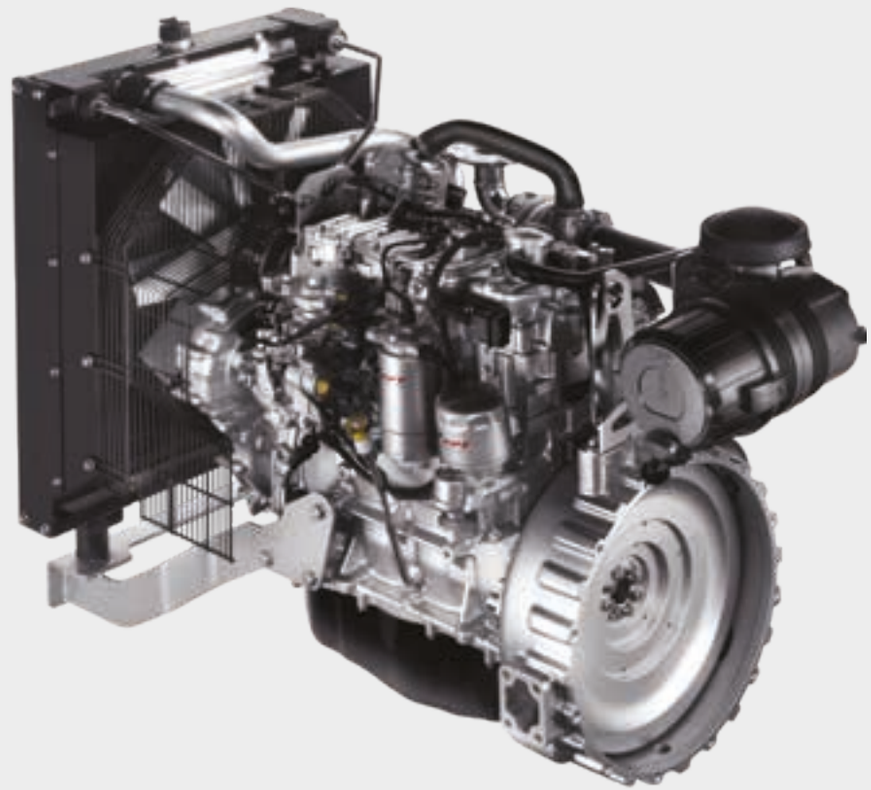
From 32 to 57 kWm

Performance
Low operating costs and extremely easy maintenance combined with excellent transient load response.

Efficiency & Productivity
Emission performance is achieved without external EGR, VGT or electronics.

Maintenance
Top-class 600-hours oil change intervals.

Compactness
Lean layout and high component integration facilitate engine installation.

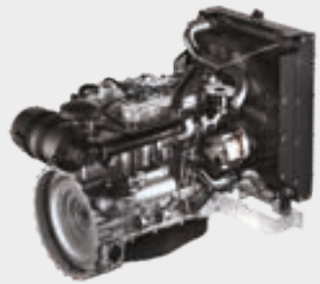


Our F5 series, featuring customer oriented design, stands out for low operating costs. Single-side servicing means maintenance is extremely easy.

These benefits combine with excellent performance: the engines can be used for the most demanding missions, including with high engine inclination or in temperatures as low as -25 °C (-13 °F).

F32 SM

F32 TM



Engine Specifications

REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions		50 Hz / 1500 rpm						60 Hz / 1800 rpm						Typical Generator eff.	1500/1800 rpm Switchable
						Stand-by Power			Prime Power			Stand-by Power			Prime Power				
						kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA	kWm (net)	kWe	kVA		
F32SM1F	4L/TC/I-EGR	M	3,2	UR²		32	28	35	29	26	32	–	–	–	–	–	–	88%	○
F32SM1X	4L/TC/I-EGR	M	3,2	Tier 3					–	–	–	47	41	51	42	37	46	88%	○
F32TM1X	4L/TAA/I-EGR	M	3,2	Tier 3		–	–	–	–	–	–	57	51	64	52	47	59	91%	○

Legend

Arrangement
L In line

Air Intake
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

Injection System
M Mechanical

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine
** Fan absorption: 1%-6%

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR² Previously EU Stage IIIA

Key Advantages

	Features	Benefits
Performance	Class G2 of ISO 8528 standard certification of excellent performance related to load acceptance.	Excellent transient load response for several power generation applications.
Mechanical Injection System	Based on simple and proven mechanical rotary pump, F5 engines have a direct fuel injection system which is state-of-the-art for accurate fuel delivery.	Simple and easy to install solution, consistent with standard and alternative fuels.
Engine Design	Camshaft in crankcase, suspended oil pan, balancer counterweights incorporated in crankshaft webs.	Vibration & noise reduction.
Specific Features	Lean layout; starting temperature without auxiliaries down to –10°C (with grid heater down to -25°C).	High performance guaranteed in all conditions.
Air Handling	F5 Series engines are available in naturally aspirated, turbocharged and turbocharged with aftercooler versions, in order to reach the highest engine.	High engine power density with the shortest load response time.

	Features	Benefits
600h Oil Interval Change	Optimum engine design in terms of mechanical clearances, piston rings, engine oil system calculation and optimized.	Reduced maintenance needs and operating cost.
Component Integration	Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high component integration.	Leakage prevention.
Serviceability & Maintainability	One side (left) engine maintenance layout and worldwide service network.	Quick service support and easy maintenance.
Option List	Options for electronic speed governor; hot part guards, water jacket heater, alarm senders, oil drain systems, front radiator guard.	Customer orientation and specific engine architecture based on application type.

THE NEF SERIES

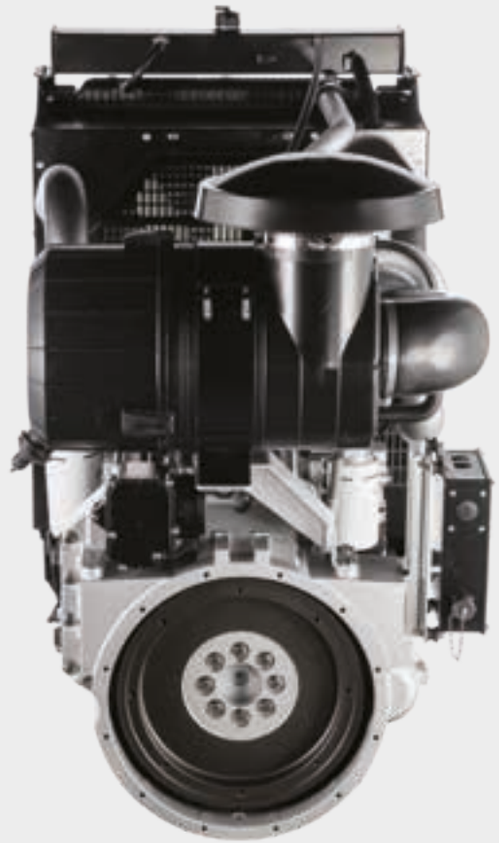
From 46 to 253 kWm

Performance
High thermodynamic performance and engine response make these engines the best choice.

Efficiency & Productivity
Emission performance is achieved without external EGR, VGT or electronics systems.

Maintenance
Extra-long oil change intervals (up to 800 hours with NEF mechanical versions).

Compactness
Compact size and high component integration facilitate engine installation.

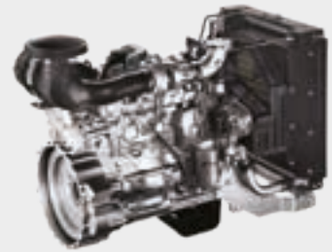


The NEF Series showcases FPT Industrial's technological excellence. Developed to satisfy the most demanding requirements, the engines in this range stand out for reliability and reduced fuel consumption.

They are available with 4 or 6 cylinders, with a mechanical or electronic common-rail injection system.

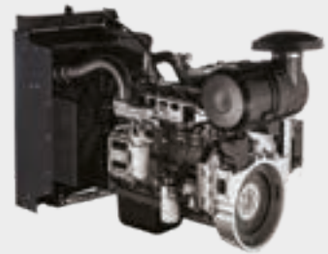
N45 AM / SM

N45 TM / TE



N67 SM / TM

N67 TE



Engine Specifications

NOT REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
N45AM1A[3]	4L/NA	M	4,5	UR[1]	46	40	51	42	37	46	-	-	-	-	-	-	88%	○
N45AM2	4L/NA	M	4,5	UR	50	44	55	45	40	50	-	-	-	-	-	-	88%	○
N45SM1A[3]	4L/TC	M	4,5	UR[1]	59	54	67	53	48	60	65	59	74	59	54	67	91%	●
N45SM3	4L/TC	M	4,5	UR	81	74	92	73	66	83	87	79	99	79	72	90	91%	●
N45TM2A[3]	4L/TAA	M	4,5	UR[1]	96	88	110	88	81	101	107	98	123	98	90	113	92%	●
N45TM3[3]	4L/TAA	M	4,5	UR	118	109	136	107	98	123	122	112	140	111	102	128	92%	●

REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
N45SM1F	4L/TC/I-EGR	M	4,5	Stage IIIA	60	55	68	55	50	63	–	–	–	–	–	–	91%	○
N45TE1F	4L/TAA/I-EGR	ECR	4,5	Stage IIIA / Tier 3	80	73	91	73	66	83	87	79	99	79	72	90	91%	●
N45TE2F	4L/TAA/I-EGR	ECR	4,5	Stage IIIA / Tier 3	98	90	113	89	82	102	122	112	140	111	102	128	92%	●
N45SM1X	4L/TC/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	57	52	65	53	48	60	91%	○
N45SM2X	4L/TC/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	67	61	76	61	56	69	91%	○
N45TM2X	4L/TAA/I-EGR	M	4,5	Tier 3	–	–	–	–	–	–	95	87	109	87	80	100	92%	○

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

Injection System
M Mechanical
ECR Electronic Common Rail

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II
3 TÜV measured based on TA-Luft standards

Engine Specifications

NOT REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
N67SM1	6L/TC	M	6,7	UR	121	111	139	110	101	127	138	127	159	125	115	144	92%	●
N67TM2A[3]	6L/TAA	M	6,7	UR[1]	126	116	145	114	105	131	141	130	162	128	118	147	92%	●
N67TM3A[3]	6L/TAA	M	6,7	UR[1]	152	140	175	138	127	159	165	152	190	149	137	171	92%	●
N67TM4	6L/TAA	M	6,7	UR	165	152	190	150	138	173	-	-	-	-	-	-	92%	○
N67TE2A[2]	6L/TAA	ECR	6,7	UR[1]	193	179	224	175	163	203	215	200	250	195	181	227	93%	●
N67TM7	6L/TAA	M	6,7	UR	195	181	227	177	165	206	195	181	227	177	165	206	93%	●
N67TE8W[3]	6L/TAA	ECR	6,7	UR	238	221	277	216	201	251	253	235	294	230	214	267	93%	●

REGULATED Emissions

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
N67TM1F	6L/TAA/I-EGR	M	6,7	Stage IIIA	125	115	144	114	105	131	–	–	–	–	–	–	92%	○
N67TE1F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	145	133	167	132	121	152	157	144	181	142	131	163	92%	●
N67TE2F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	165	154	192	150	140	175	202	188	236	183	171	213	93%	●
N67TE3F	6L/TAA/I-EGR	ECR	6,7	UR[2] / Tier 3	195	181	227	175	163	203	212	197	246	192	179	223	93%	●
N67TM1X	6L/TAA/I-EGR	M	6,7	Tier 3	–	–	–	–	–	–	141	130	162	128	118	147	92%	○
N67TE1X	6L/TAA/I-EGR	ECR	6,7	Tier 3	–	–	–	–	–	–	165	152	190	150	138	173	92%	○
N67TE2X	6L/TAA/I-EGR	ECR	6,7	Tier 3	–	–	–	–	–	–	200	186	233	182	169	212	93%	○

Legend

Arrangement
L In line

Air Intake
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

Injection System
M Mechanical
ECR Electronic Common Rail

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II
UR[2] Previously EU Stage IIIA

2 Complies to TA Luft (1986) regulations
3 TÜV measured based on TA-Luft standards

Mechanical Engines Key Advantages

	Features	Benefits
Performance	Class G2 of ISO 8528 standard certification of excellent performance related to load acceptance.	Excellent transient load response for several power generation applications.
Injection System	The easy-to-maintain rotary pump is the core of the NEF mechanical series. The system is based on direct fuel injection for accurate fuel delivery.	Reliable and cost effective solution, consistent with standard and alternative fuels.
Dual Speed Mode	Possibility to switch from 1500 rpm to 1800 rpm (only one homologation engine rate).	Engine adaptable to market request.
Specific Features	Minimum cold starting temperature without auxiliaries down to -10°C (with grid heater down to -25°C).	High performance guaranteed in all conditions.
Air Handling	NEF Series engines are available in naturally aspirated, turbocharged and turbocharged with aftercooler versions in order to reach the highest engine performance.	High engine power density with the shortest load response time.

	Features	Benefits
Up to 800h Oil Interval Change	NEF Series adopts combustion chambers optimized to reduce oil dilution and are designed with an optimum engine design in terms.	Reduced maintenance needs and operating cost.
Serviceability & Maintainability	Worldwide service network. Engines featured with a proven mechanical injection system without electronic interfaces and without external EGR.	Quick service support and easy maintenance.
Component Integration	Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high component integration. Water-oil cooler.	Leakage prevention.
Engine Design	Balancer counterweights incorporated in crankshaft webs, rear gear train layout, camshaft in crankcase, suspended oil pan, ladder frame cylinder block.	Vibration and noise reduction engine structural stiffness.
Option List	Options for electronic speed governor; hot part guards, water jacket heater, alarm senders, oil drain systems, front radiator guard.	Customer orientation and specific engine based on application type.

Electronic Engines Key Advantages

	Features	Benefits
Performance	Class G3 of ISO 8528 standard certification of excellent performance related to load response.	Excellent transient load response for several power generation applications.
Injection System	Accurate fuel delivery to achieve top performance in terms of load response and top power with low fuel consumption.	High engine thermodynamic performance with low fuel consumption.
Dual Speed Mode	Possibility to switch from 1500 rpm to 1800 rpm. User friendly thanks to interface card.	Engine adaptable to market request.
Specific Features	Minimum cold starting temperature without auxiliaries down to -10°C (with grid heater down to -25°C). Most demanding Emissions performance achieved.	High performance guaranteed in all conditions.
Air Handling	Turbocharged with air-to-air charge cooled air system with 4 valves per cylinder to increase engine efficiency thanks to the optimization of thermodynamic.	High engine power density with the shortest load response time.

	Features	Benefits
600h Oil Interval Change	CURSOR Series adopts combustion chambers and high pressure injection system optimized to reduce oil dilution.	Reduced maintenance needs and operating cost.
Serviceability & Maintainability	Worldwide service network. Engine ECU with CAN-BUS control & monitoring interfaces may be used for advanced real time diagnosis.	Quick service support and easy maintenance.
Engine Design	Multiple injections, balancer counterweights incorporated in crankshaft webs, rear geartrain layout, camshaft in crankcase, suspended oil pan.	Vibration & noise reduction engine structural stiffness.
Component Integration	Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high component integration.	Leakage prevention.
Option List	Options for hot part guards, water jacket heater, alarm senders, oil drain systems, front radiator guard.	Customer orientation and specific engine architecture based on application type.

THE CURSOR SERIES

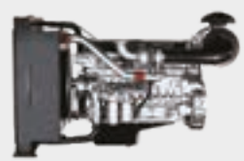
From 299 to 578 kWm

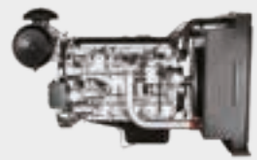
Performance
Excellence load acceptance and fuel efficiency.

Efficiency & Productivity
Designed for heavy duty conditions and harsh environment.

Maintenance
Maintenance cost is reduced by best-in-class oil service intervals (up to 600 hours).

Compactness
Compact size and high component integration facilitate engine installation.



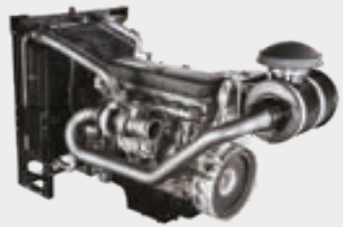


In the CURSOR Series, top power, fast load response and high-power density combine with low fuel consumption.

The performance of this range is outstanding. High reliability, and extremely low operating costs thanks to long maintenance intervals, are its core values.

C87 TE

C16 TE



C13 TE

Engine Specifications

NOT REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
CURSOR87TE4[3]	6L/TAA	ECR	8,7	UR	299	278	348	275	256	320	333	310	387	306	285	356	93%	●
CURSOR13TE2A[3]	6L/TAA	EUI	12,9	UR[1]	330	308	384	300	280	350	360	336	419	327	305	381	93%	●
CURSOR13TE3A[3]	6L/TAA	EUI	12,9	UR[1]	387	364	455	352	331	414	398	374	468	360	338	423	94%	●
CURSOR13TE6W	6L/TAA	ECR	12,9	UR	414	395	494	371	354	442	454	433	541	400	382	477	95%	●
CURSOR13TE7W	6L/TAA	ECR	12,9	UR	459	438	547	425	405	507	474	452	565	428	408	510	95%	●
CURSOR16TE1W[3]	6L/TAA	ECR	15,9	UR	557	529	661	505	480	600	578	549	686	523	497	621	95%	●

REGULATED Emissions

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions	50 Hz / 1500 rpm Stand-by Power kWm (net)	50 Hz / 1500 rpm Stand-by Power kWe	50 Hz / 1500 rpm Stand-by Power kVA	50 Hz / 1500 rpm Prime Power kWm (net)	50 Hz / 1500 rpm Prime Power kWe	50 Hz / 1500 rpm Prime Power kVA	60 Hz / 1800 rpm Stand-by Power kWm (net)	60 Hz / 1800 rpm Stand-by Power kWe	60 Hz / 1800 rpm Stand-by Power kVA	60 Hz / 1800 rpm Prime Power kWm (net)	60 Hz / 1800 rpm Prime Power kWe	60 Hz / 1800 rpm Prime Power kVA	Typical Generator eff.	1500/1800 rpm Switchable
CURSOR87TE3F	6L/TAA/I-EGR	ECR	8,7	UR[2] / Tier 3	256	238	298	232	216	270	280	260	326	254	236	295	93%	●
CURSOR87TE4F	6L/TAA/I-EGR	ECR	8,7	UR[2] / Tier 3	292	272	339	262	244	305	320	298	372	287	267	334	93%	●
CURSOR13TE1F	6L/TAA/I-EGR	EUI	12,9	UR[2] / Tier 3	327	309	386	296	280	350	309	292	365	278	263	328	94%	●
CURSOR13TE2F	6L/TAA/I-EGR	EUI	12,9	UR[2] / Tier 3	372	354	443	336	320	400	334	318	397	300	286	357	95%	●
CURSOR13TE3X	6L/TAA/I-EGR	EUI	12,9	Tier 3	-	-	-	-	-	-	371	349	436	337	317	396	94%	○

Legend

Arrangement
L In line

Air Intake
TAA Turbocharged Aftercooler

Exhaust System
I-EGR Internal Exhaust Gas Recirculation

Injection System
ECR Electronic Common Rail
EUI Electronic Unit Injector

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine
** Fan absorption: 1%-6%

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II
UR[2] Previously EU Stage IIIA

3 TÜV measured based on TA-Luft standards

Key Advantages

	Features	Benefits
Performance	Class G3 of ISO 8528 standard certification of excellent performance related to load response.	Excellent transient load response for several power generation applications.
Injection System	Accurate fuel delivery to achieve top performance in terms of load response and top power with low fuel consumption.	High engine thermodynamic performance with low fuel consumption.
Dual Speed Mode	Possibility to switch from 1500 rpm to 1800 rpm. User friendly thanks to interface card.	Engine adaptable to market request.
Specific Features	Minimum cold starting temperature without auxiliaries down to -10°C (with grid heater down to -25°C). Most demanding Emissions performance achieved.	High performance guaranteed in all conditions.
Air Handling	Turbocharged with air-to-air charge cooled air system with 4 valves per cylinder to increase engine efficiency thanks to the optimization of thermodynamic.	High engine power density with the shortest load response time.

	Features	Benefits
600h Oil Interval Change	CURSOR Series adopts combustion chambers and high pressure injection system optimized to reduce oil dilution.	Reduced maintenance needs and operating cost.
Serviceability & Maintainability	Worldwide service network. Engine ECU with CAN-BUS control & monitoring interfaces may be used for advanced real time diagnosis.	Quick service support and easy maintenance.
Engine Design	Multiple injections, balancer counterweights incorporated in crankshaft webs, rear geartrain layout, camshaft in crankcase, suspended oil pan.	Vibration & noise reduction engine structural stiffness.
Component Integration	Integrated CCV (Closed Crankcase Ventilation) system and engine design oriented to high component integration.	Leakage prevention.
Option List	Options for hot part guards, water jacket heater, alarm senders, oil drain systems, front radiator guard.	Customer orientation and specific engine architecture based on application type.

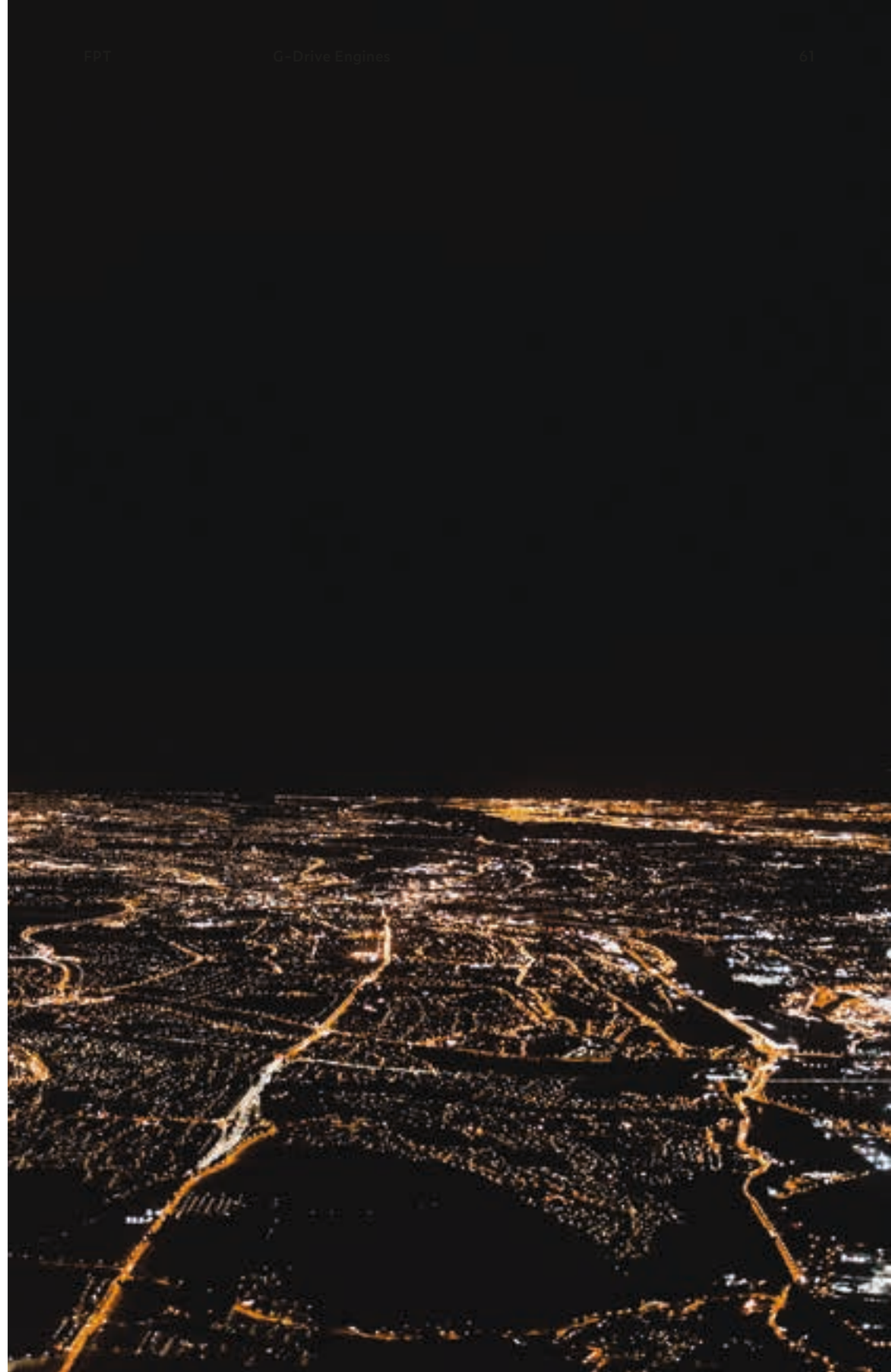
Energy Solutions Powered by FPT Industrial

Our Power Generation offering includes open and soundproofed gensets as well as plant and after-sale services. The standard range covers the main applications, such as emergency services and self-generation.
The line-up for the Power Generation segment includes the F5, NEF, and CURSOR series ranging from 30 to 500 kVA.

The products in FPT Industrial's portfolio can be easily configured to suit usage needs.
Power sets in containers provide high kVA output for emergency installations and for both on-shore and off-shore petroleum or gas platforms.
Low-voltage distribution panels, specific shelters and resistances complete the product mix.

Our strong customer orientation allows us to respond to the peculiar requirements of contractors such as Armed Forces, telcos and energy distributors. FPT's products are tailor-built and supplied turnkey.

For FPT, respect for the environment is a clear commitment. In our genset installations, it goes hand in hand with outstanding performance.



HI-ESCR

TIER4 FINAL

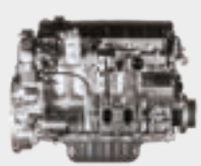
From 54 to 424 kWm

Performance
Effective turbocharger solution and increased power density for best in class performance.

Efficiency & Productivity
Low operating costs thanks to combustion efficiency and long service intervals.

Maintenance
Maintenance-free after-treatment solution for low running costs.

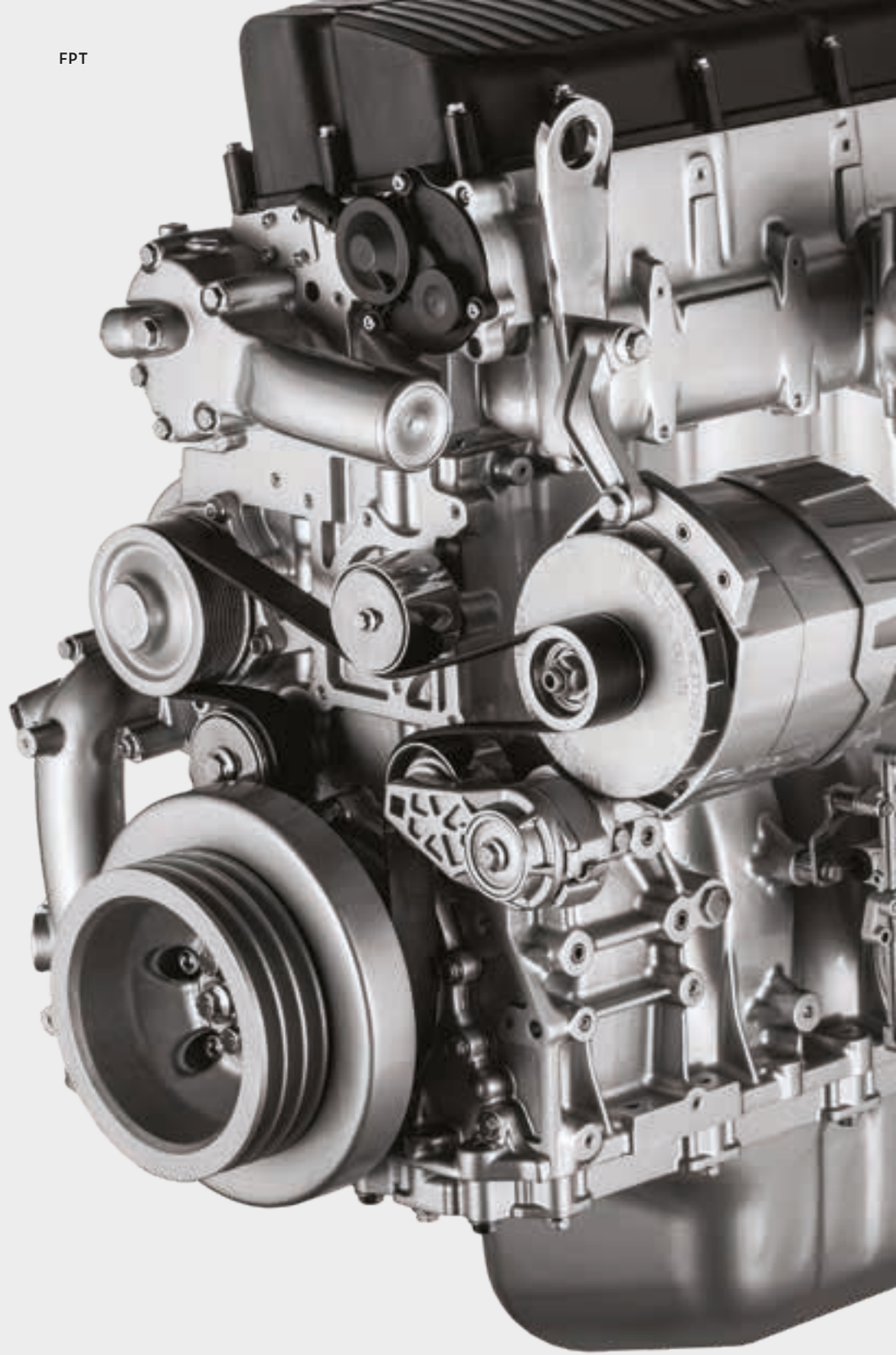
EGR Free Solution
No additional cooling system requirements thanks to EGR free solution



Tier 4 Final standards bring a dramatic reduction in harmful NOx and PM, up to a 90% abatement from Tier 3. FPT Industrial is focusing its R&D activities to become the innovation leader in industrial powertrains, and the go-to reference provider of the most cost-effective solutions for Tier 4 Final.

Our breakthrough HI-eSCR technology meets the strictest emissions requirements, while providing best-in-class performance and total running costs. FPT's engines in this range also offer easier maintenance, reducing your downtime.

TIER 4 FINAL UNIQUE MODEL



Emission Standards Scenario

During the combustion process, inside a Diesel engine, the chemical energy is transformed into a mechanical one. Because of the chemistry of combustion, several toxic substances are produced, of which the most harmful are Nitrogen Oxides (NO_x) and Particulate Matter (PM).
Tier4 Final compliance implies a significant reduction of NO_x and PM reaching a 90% abatement versus Tier3 Emissionsing step.

- NO^x Emissions reduced by 90% compared to Tier3.
- Introduction of an ammonia Emissions limit.

Tier 4 Final Engines

Through continuous technical advances building upon a state-of-the-art engine range, Tier4 Final permits re-engineered engines, allowing our customers to retain their class-leading features, such as minimized total cost of ownership. Key to the optimization of combustion e ciency is high mean e ective cylinder pressure and high injector nozzle pressures.
To achieve these goals, important changes to the crankcase and cylinder head design have been implemented. The engines tted with the latest generation of multiple events Common Rail fuel injection equipment with peak nozzle pressures of up to 2200 bar. A new Electronic Control Unit has been introduced to manage both engine parameters and accurate control of the after-treatment system.

The new control unit has been designed to fully integrate engine and SCR functions. For the very best in environmental performance, the engines are equipped with closed circuit engine breathing systems.
In addition, since the engine only breathes clean ltered air, rather than recirculated exhaust gases, engine wear maintenance is low with long intervals in between oil changes, with service intervals of up to 600h without increased oil sump. FPT Industrial Tier4 Final engines o er lower operating costs and reduced overall downtime for ease of maintenance.

HI-eSCR System

System Description

Due to the opposite reaction to combustion temperature, the reduction of either of the combustion products (NO_x or PM) implies the increase of the other one. In order to further reduce NO_x, as required by Tier4 Final, it is necessary to work on separate combustion management and exhaust gas treatment systems simultaneously.

This means that Tier4 Final Emissions limits can be reached only through the use of SCR (Selective Catalytic Reduction), either with or without EGR. The use of an EGR system reduces the NO_x Emissions in the combustion chamber, through exhaust gas recirculation with a consequential increase in the production of particulate matter (PM) and a reduction in combustion efficiency.

FPT Industrial has chosen instead to increase the engine combustion efficiency to reduce the PM without using EGR or DPF, allowing engines to work at peak performance without compromise. The resulting increase in NO_x is reduced in the SCR system, while improving fuel efficiency and overall power system reliability.

FPT Industrial's HI-eSCR solution is able to reduce NO_x levels by more than 95%. The SCR Only technology allows for the introduction of a new integrated approach that is the result of extensive research by FPT Industrial, research that has led to the creation of numerous significant patents.

Six Reasons to Choose HI-eSCR

Scr Heritage FPT Industrial's heritage in SCR technology is well-established. Since 2005 we have equipped more than 1.000.000 vehicles with this technology.

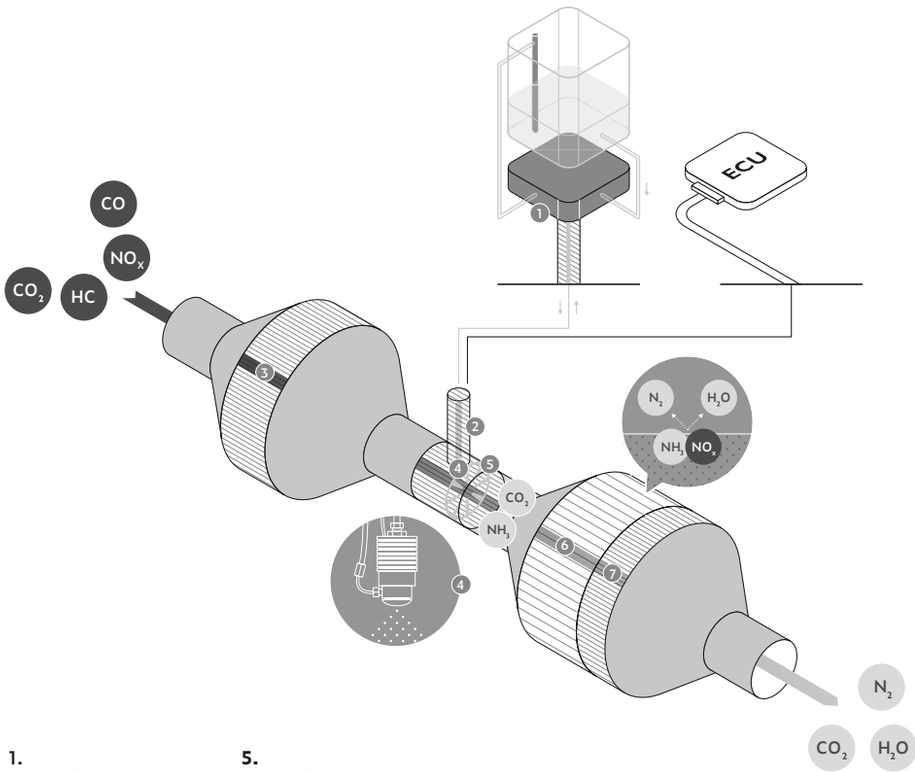
Outstanding Performance Our engines are developed to maximize power density with the shortest load response time with minimal impact on the environment, due to the use of the HI-eSCR system.

Fuel Consumption The efficiency of the combustion process optimizes fuel consumption reducing customer operating costs.

Compact Packaging Compared to competitor's engines, the thermodynamic efficiency of the FPT Industrial solutions allows to maximize power output for each engine space requirement and complexity.

Maintenance Intervals The optimized combustion process preserves oil's physical properties reducing maintenance activities and related downtime. The engines maintain their best in class oil maintenance intervals of up to 600h, without an increased oil sump.

High Reliability HI-eSCR system allows the engine to reduce heat rejection of many internal engine components which leads to increased reliability.



1.
DEF/AdBlue Supply Module

2.
DEF/AdBlue Dosing Module

3.
Diesel Oxidation Catalyst (DOC)
NO → NO_2
HC, CO and PM oxidation

4.
DEF/AdBlue Injection
Hydrolysis → NH_3+CO_2

5.
DEF/AdBlue Mixer

6.
Selective Catalytic Reduction (SCR)
NO and NO_2 reduction by NH_3 to N_2 and H_2O

7.
Clean Up Catalyst
Residual NH_3 oxidation

*AdBlue®/DEF
= $CO(NH_2)_2$ + H_2O

Legend

PM Particulate Matter
HC Unburnt Hydrocarbons
NO_x Nitrogen Oxides
CO Carbon Monoxide
N_2 Nitrogen
CO_2 Carbon Dioxide
H_2O Water

HI-eSCR

Main Components

The whole system is fitted with a network of integrated sensors to control the NO_x and any excess of NH_3 (ammonia) emitted. Exhaust gas flow coming from the engine enters the DOC, where NO is oxidized in NO_2, in order to maximize SCR catalyst's efficiency conversion.
The ECU (Engine Control Unit), the brain behind the HI-eSCR system, checks, through a network of integrated sensors, the amount of Water-Urea (DEF/AdBlue) solution required to be injected into the exhaust pipe. To increase the durability of the injector, the Dosing Module is cooled with the engine coolant.
The HI-eSCR after-treatment system adopts a catalyst converting NO_x into Nitrogen (N_2) and Water (H_2O) thanks to the chemical reaction with a Water-Urea solution. In the end, the integrated CUC eliminates the remaining ammonia (NH_3). The result is a reduction of NO_x over 95%.

Patents

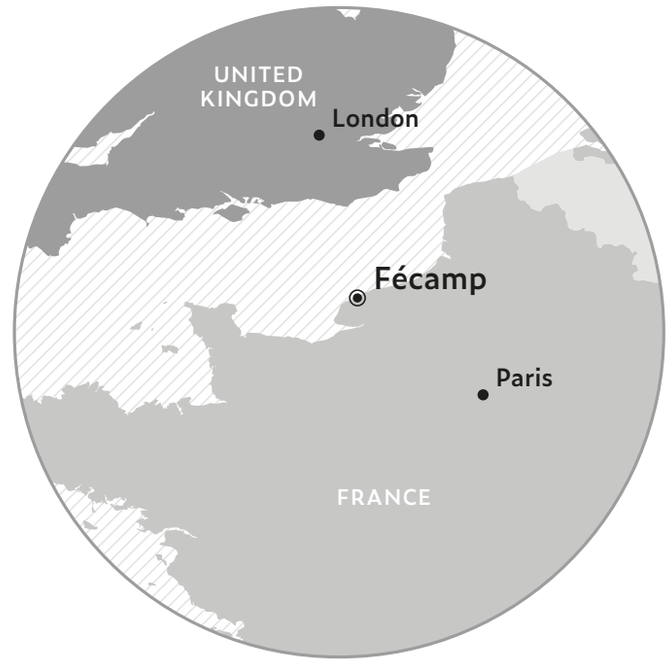
- "Closed" loop control to allow precise dosing of NO_x and Ammonia sensors to provide accurate info on the composition of exhaust gases and reduce the use of DEF/AdBlue.
- NO_x Adaptive DEF/AdBlue dosing system in order to cut the level of NO_x Emissions entering the SCR catalyst.
- Thermally insulated high turbulence mixing, to allow homogeneous hydrolysis of urea, creating correct distribution in exhaust gas flow.
- Improved exhaust gas temperature control to speed up SCR light-off in the cold part of Emissions cycle.

All the components of the HI-eSCR after-treatment system are contained in a compact, and fully enclosed structure thereby not impeding body building or chassis equipment mounting activities, and minimizing the weight impact.

2H Energy Powered by FPT Industrial

Located in France, at Fécamp, 2HE is an FPT Industrial company offering a wide range of tailored power generation solutions aimed to satisfy customers with specific needs, such as Armies, oil and gas companies, energy providers, nuclear power stations and hospitals. 2HE offer includes "turnkey" supply, engineering support, production and installation, together with assistance service and customer training.

The company portfolio is enriched by special products like 400 Hz units for airport applications, gensets in containers up to 6 MWatt, specific shelters, energy systems for off-shore installations, resistances and low voltage distribution panels (specifically designed for nautical and nuclear applications).
Thanks to its proven expertise to manage complex project from blank sheet up to maintenance and service activity worldwide, 2HE is a reference in the highly specialized power generation segment.



- ● Plant
- ○ R&D
- ◉ Plant + R&D

Engine Specifications

REGULATED EMISSIONS

Model	Cylinder Arrangement Air Intake Exhaust System	Injection System	Displacement Liters	Emissions
F34SNDZW055[1] [4]	4L/TC/EGR + DOC + PMcat	ECR	3,4	Tier 4 Final
N45ENTZW68[1]	4L / TAA / DOC + SCR+CUC	ECR	4,5	Tier 4 Final
N45ENTZW69	4L / TAA / DOC + SCR+CUC	ECR	4,5	Tier 4 Final
N67ENTZW61[1]	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final
N67ENTZW62[1]	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final
N67ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final
N67ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	6,7	Tier 4 Final
CURSOR87ENTZW61	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final
CURSOR87ENTZW62	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final
CURSOR87ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final
CURSOR87ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	8,7	Tier 4 Final
CURSOR13ENTZW61	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final
CURSOR13ENTZW68	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final
CURSOR13ENTZW69	6L / TAA / DOC + SCR+CUC	ECR	12,9	Tier 4 Final

BARE ENGINES

	50 Hz / 1500 rpm						60 Hz / 1800 rpm							
	Stand-by Power			Prime Power			Stand-by Power			Prime Power				
Model	kWm (gross)	kWe**	kVA**	kWm (gross)	kWe**	kVA**	kWm (gross)	kWe**	kVA**	kWm (gross)	kWe**	kVA**	Typical Generator eff.	1500/1800 rpm Switchable
F34SNDZW055[1] [4]	–	–	–	–	–	–	54	48	60	49	43	54	92%	○
N45ENTZW68[1]	–	–	–	–	–	–	85	78	97	77	70	88	93%	○
N45ENTZW69	–	–	–	–	–	–	126	116	145	115	106	132	93%	○
N67ENTZW61[1]	–	–	–	–	–	–	145	129	161	132	116	145	93%	○
N67ENTZW62[1]	–	–	–	–	–	–	167	149	186	152	135	169	93%	○
N67ENTZW68	–	–	–	–	–	–	195	175	219	177	158	198	93%	○
N67ENTZW69	–	–	–	–	–	–	223	200	251	203	182	227	93%	○
CURSOR87ENTZW61	–	–	–	–	–	–	260	233	291	236	210	263	93%	○
CURSOR87ENTZW62	–	–	–	–	–	–	282	253	316	256	229	286	93%	○
CURSOR87ENTZW68	–	–	–	–	–	–	309	281	351	281	255	318	94%	○
CURSOR87ENTZW69	–	–	–	–	–	–	330	301	376	300	273	341	94%	○
CURSOR13ENTZW61	–	–	–	–	–	–	353	324	404	321	294	368	94%	○
CURSOR13ENTZW68	–	–	–	–	–	–	380	350	438	345	318	397	95%	○
CURSOR13ENTZW69	–	–	–	–	–	–	424	391	488	385	355	443	95%	○

Legend

Arrangement
L In line

Air Intake
NA Naturally Aspirated
TAA Turbocharged Aftercooler
TC Turbocharged

Exhaust System
I-EGR Internal Exhaust Gas Recirculation
DOC Diesel Oxidation Catalyst
SCR Selective Catalytic Reduction
CUC Clean-up Catalyst
PMcat Particulate Matter Catalyst

Injection System
M Mechanical
ECR Electronic Common Rail
EUI Electronic Unit Injector

kVA kiloVolt Ampere calculations based on a 0.8 power factor
UR Unregulated
UR[1] Previously EU Stage II

● 1500 rpm / 1800 rpm switchable engine
○ Not Switchable Engine
** Fan absorption: 1%-6%

1 Preliminary data
4 Available H1 2019 in G-drive configuration

Identification Plate T4F Engines

N45ENTZW68:

N Engine Family
F= F5
N = NEF
CURSOR = CURSOR

67 Displacement in liters
45 = 4,5 liters

E Injection system
M = Mechanical
E = Electronic

N Crankcase
N = No structural
S = Structural

T Aspiration
A = Naturally aspirated
S = Turbocharged
T = Turbocharged Aftercooler

Z Emission regulation
F= Stage IIIA
X = Tier 3
Z = Tier 4 Final

W ECU type

6 Application

8 Rating model

FPT Industrial S.p.A.
Via Puglia 15, 10156
Torino, Italy
fptindustrial.com
marketing@
fptindustrial.com