

## FPT INDUSTRIAL MARINE COMMERCIAL

Our efficiency. Your edge.



## FPT INDUSTRIAL MARINE COMMERCIAL

Our efficiency. Your edge. 2

FPT

### ABOUT FPT INDUSTRIAL

FPT Industrial is the Brand of Iveco Group, dedicated to the development, production, sale and assistance of powertrains for Marine, On-Road, Off-Road and Power Generation applications.

The company employs more than 8,000 people worldwide, in ten manufacturing plants and seven R&D centers. The FPT Industrial sales network consists of 73 dealerships and about 800 service centers in almost 100 countries. A wide product offering, including six engine ranges from 42 hp up to 1,000 hp, transmissions with maximum torque of 200 Nm up to 500 Nm, front and rear axles from 2 to 32 ton GAW (Gross Axle Weight). FPT Industrial offers the most complete line-up of Natural Gas engines on the market for industrial applications, with power that goes from 50 to 460 hp. This extensive offering and a strong focus on R&D activities make FPT Industrial a world leader in industrial powertrains.

We work for businesses serving other businesses, and we are committed to satisfy the requirements of both direct and final Customers.

We are proud to be an innovation-driven Company, that builds Customer advantage through continuous research and improvement, and creates value by leveraging this advantage.

Today FPT Industrial is one of the leading world players in engines, axles and transmissions for the Industrial sector, ranking among the first four manufacturers worldwide in the 2- to 20-liter Diesel engine segment.

Marine

FPT

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### THE WAVE OF INNOVATION

FPT Industrial's engines for pleasure and commercial boats stand out for superb quality, features and application versatility. They bring maximum and continuous specific power and torque at low revolutions. They achieve better efficiency in all sea conditions. They also boast an impressive durability.

A dramatic reduction of noise and vibrations combines power with sailing pleasure. Exhaust gas emissions have been cut down too, lowering environmental impact and complying with the most stringent legislation.

Our engineering experience has delivered a lightweight design, with low volume/power and weight/power ratios, for easier installation and superior performance.

### Superior Technology & Outstanding Advantages

### **Performance**

Maximum and continuous high specific power. High torque at low revs. Lightness (weight/power low ratios).

### Flexibility

Compactness (volume/power low ratios). Full range of accessories available. Wide range of emission and propulsion certifications. Keel cooling versions availability.

### **Low Environmental Impact**

Drastic reduction of exhaust emissions.

Low noise and vibrations.

### **Low Operating Costs**

Longer maintenance intervals costs.

Longer overhaul intervals

### **Marine Emission Regulations**

### IMO

kW	HP	2017	2018	2019	2020	2021	2022
>130	>174		Tier II	(Tier III	ECA are	as only)	

The International Maritime Organization (IMO) regulates exhaust emissions on diesel engines above 130kW (174 hp). Engines used exclusively in emergency applications are exempt. IMO Tier III applies only when operating within a NOx Emission Control Area. The Tier III regulation is in effect for North America and US Caribbean Sea NOx ECA's for vessels built after January 1, 2016.

### ΕU

kW	HP	2017	2018	2019	2020	2021	2022
19-299	25-401	Stage	IIIA		Stag	ge V	
>299	>401	s	tage III	A		Stage V	
Pleasure				RCD	2		

The Nonroad Mobile Machinery Directive regulates exhaust emissions from diesel engines installed on inland waterway vessels operating in the EU. The RCReational Craft Directive regulates noise and exhaust emissions from propulsion engines installed on rCReational craft operating in the EU.

### **US EPA**

kW	HP	2017	2018	2019	2020	2021	2022
<600	<805			Tie	r 3		
≥600	≥805			Tie	r 4		

The United States Environmental Protection Agency (EPA) regulates exhaust emissions from diesel engines installed on US flagged/registered marine vessels.

### **Marine Rating Classification**

### Full load reference conditions

Reference	ISO 8665
Ambient pressure (kPA):	100
Ambient temperature (°C):	25
Relative humidity (%):	30
Fuel density (kg/dm³):	0.84
Fuel calorific value (kJ/kg):	42700
Fuel temperature (°C):	40

### Rating classification

### Definition

A1	Short range fast pleasure service	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 300 h/y
A2/B1	Long range pleasure/ commercial service	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 1000 h/y
В	Light duty	Limited to 10% of time Cruising speed at engine rpm <90% of calibration rated speed 1500 h/y
С	Medium duty	Limited to 25% of time Cruising speed at engine rpm <90% of calibration rated speed 3000 h/y
D	Heavy duty	up to 100% of time unlimited h/y

### **Marine Engine Commercial Naming**



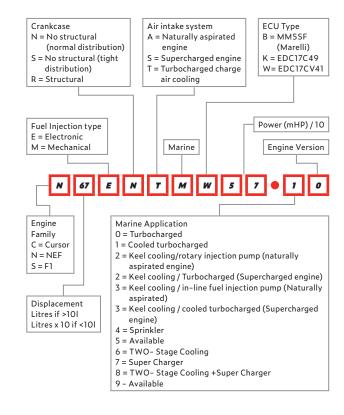
### Definition

Engine Fami	F1 Series ly NEF Series Cursor Series	S N C
Engine Displacemen	F1 & NEF Series t* Cursor Series	Displacement (Lt) x 10 F1 3 Lt = 30 Displacement (Lt) Cursor 15.9 Lt = 16
Maximum Powe	r** Rating A1/A2 Maximum Rating D Maximum eng:	engine Power (HP) ine Continuous Power (HP)
Emissions	E = EU Emissions N = NAFTA Emissions	

- Displacement >10I Litres: Displacement <10I litres x 10
- Pleasure: Max engine Power (metric HP)

### Commercial: Max engine Continuous Power (metric HP)

### **Marine Engine Technical Identification**





### **Engines Specifications**

Engine model	Rating	ΚW	ф	шфх	Dimensions* (L**xWxH) (mm)	Dry Weight (kg)
S30 230 E	В	129	175.5	3500	780 x 775 x 753	330
S30 230 E	С	85	115.6	3500	780 x 775 x 753	330
N40 170***	С	125	170	2800	850 x 780 x 785	490
N40 170***	С	110	150	2800	850 x 780 x 785	490
N40 170***	С	74	100	2800	850 x 780 x 785	490
N40 170***	С	63	85	2800	850 x 780 x 785	490
N40 250 E	B1	169	230	2800	850 x 780 x 785	490
N40 250 E	В	147	200	2800	850 x 780 x 785	490
N40 250 E	С	110	150	2800	850 x 780 x 785	490
N40 250 E	С	74	100	2800	850 x 780 x 785	490
N45 100	В	66.5	90	2800	811 × 700 × 836	450
N45 100	D	63	85	2800	811 × 700 × 836	450
N60 400 E	B1	272	370	3000	1072 x 739 x 778	595
N60 400 E	В	242	330	3000	1072 x 739 x 778	595
N60 400 E	С	198	270	3000	1072 x 739 x 778	595
N67 150	В	99.5	135	2800	1052 x 705 x 910	530
N67 150	D	92	125	2800	1052 x 705 x 910	530
N67 170***	D	125	170	2300	1089 x 780 x 788	600
N67 220	С	132	180	2800	1072 x 749 x 800	605
N67 220	D	110	150	2800	1072 x 749 x 800	605
N67 280	В	191	260	2800	1072 × 749 × 800	605
N67 280	С	169	230	2800	1072 x 749 x 800	605
N67 280	D	132	180	2500	1072 x 749 x 800	605

<sup>\*</sup> Dimensions can be changed according to engine options.

Engine model	Rating	ΚW	ф	шdх	Dimensions* (L**xWxH) (mm)	Dry Weight (kg)
N67 450 N	B1	309	420	3000	1089 x 780 x 788	600
N67 450 N	В	272	370	3000	1089 x 780 x 788	600
N67 450 N	С	257	350	3000	1089 x 780 x 788	600
N67 550	B1	368	500	3200	1089 x 850 x 825	721
N67 550	В	353	480	3200	1089 x 850 x 825	721
N67 570 EVO	B1	390	530	3000	1089 x 847 x 825	721
N67 570 EV0	В	357	485	3000	1089 x 847 x 825	721
C90 170***	D	125	170	2000	1288 x 863 x 962	950
C90 380	С	301	410	2000	1288 x 863 x 962	950
C90 380	D	279	380	2000	1288 x 863 x 962	950
C90 620 E	B1	426	580	2530	1288 x 868 x 962	940
C90 620 E	B1	404	550	2530	1288 x 868 x 962	940
C90 620 E	В	368	500	2530	1288 x 868 x 962	940
C90 620 E	С	331	450	2530	1288 x 868 x 962	940
C13 500	С	382	520	2000	1465 x 1000 x 1058	1345
C13 500	D	367	500	2000	1465 x 1000 x 1058	1345
C13 825 E	B1	551	750	2400	1465 x 1000 x 1058	1395
C13 825 E	В	478	650	2400	1465 x 1000 x 1058	1395
C13 825 E	С	441	600	2400	1465 x 1000 x 1058	1395
C16 600	D	441	600	1800	1465 x 1000 x 1160	1570
C16 600	D	404	550	1800	1465 x 1000 x 1160	1570
C16 600	D	368	500	1800	1465 x 1000 x 1160	1570
C16 1000	B1	735	1000	2300	1465 x 1136 x 1160	1640
C16 1000	В	662	900	2300	1465 x 1136 x 1160	1640
C16 1000	С	599	815	2300	1465 x 1136 x 1160	1640
C16 1000	С	551	750	2300	1465 x 1136 x 1160	1640
C16 1000	С	478	650	2300	1465 x 1136 x 1160	1640
C16 1000	С	599	815	2000	1465 x 1136 x 1160	1640
C16 1000	С	551	750	2000	1465 x 1136 x 1160	1640

<sup>\*\*</sup> Lenght at flywheel. \*\*\* IWV Stage V Certification.

### THE F1 SERIES





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### S30 230 E

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder:

Cooling System:

Direction of Rotation

(viewed facing flywheel):

Engine management: Injection System:

4 Cyl. in line

3,0

129 (175.5) @ 3.500

Diesel 4 stroke

TCA 4

Liquid

Counterclockwise

Electronic CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	780	х	775	х	753	mm
Dry Weight						330	Kg

Dimensions can be changed according to engine options
 Length at flywheel

Rating	ΚW	ф	mdz	g/kWh @ rpm (Best Value)	RCD II	
В	129	175.5	3500	215 @ 2400	•	Ī
С	85	115.6	3500	217 @ 2400	•	

### **Air Handling**

TCA Turbocharged with aftercooler Turbocharged NA Naturally Aspirated

### **Injection System**

Mechanical Common Rail EUI Electronic Unit Injector



# THE NEF SERIES



### N40 170

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

4 Cyl. in line

3,9

125 (170) @ 2.800 Diesel 4 stroke

TCA 4

Liquid

Counterclockwise

Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	850	х	780	х	785	mm
Dry Weight						490	Kg

<sup>&</sup>lt;sup>1</sup> Dimensions can be changed according to engine options

<sup>&</sup>lt;sup>2</sup> Length at flywheel

Rating	Υ M	ф	шdх	g/kWh@rpm (Best Value)	IWV V
C*	125	170	2800	210 @ 2200	•
C*	110	150	2800	216 @ 2200	•
C*	74	100	2800	213 @ 1800	•
C*	63	85	2800	224 @ 1900	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### Injection System

M Mechanical
CR Common Rail
EUI Electronic Unit Injector

Keel-cooled versions are also available



### N40 250 E

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

4 Cyl. in line

3,9

169 (230) @ 2.800 Diesel 4 stroke

> TCA 4

Liquid

Counterclockwise

Electronic

stem: CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	L**xWxH) 850 x 780 x 785 mm
Dry Weight	490 Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	Κ W	ф	шdл	g/kWh @ rpm (Best Value)	IMO II	RCD II
B1*	169	230	2800	213 @ 2000	•	•
B*	147	200	2800	214 @ 2550	-	-
С	110	150	2800	214 @ 2550	-	•
С	74	100	2800	213 @ 1800	-	•

### Air Handling

TCA Turbocharged with aftercooler
TC Turbocharged

NA Naturally Aspirated

### Injection System

M Mechanical
CR Common Rail
EUI Electronic Unit Injector



### N45 100

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

4 Cyl. in line

4,5

66.5 (90) @ 2.800

Diesel 4 stroke

NA 2 Liauid

Counterclockwise Mechanical

М

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	811	Х	700	х	836	mm
Dry Weight						450	Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

<b>D</b>				0 rpm Value)
Rating	ΚW	ф	шdл	g/kWh (Best
B*	66.5	90	2800	228 @ 1800
D*	63	85	2800	228 @ 1800

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### Injection System

M Mechanical CR Common Rail EUI Electronic Unit Injector

Keel-cooled versions are also available



### N60 400 E

Marine

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cyl. in line

5,9

272 (370) @ 3.000

Diesel 4 stroke

TAA 4 Liquid

Counterclockwise

Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions  $^{1}$  (L $^{2}$ xWxH) 1072 x 739 x 778 mm Dry Weight 595 Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	Κ M	ф	жрш	g/kWh @ rpm (Best Value)	IMO II	RCD II
B1	272	370	3000	208 @ 2250	•	•
В	242	330	3000	208 @ 2000	•	•
С	198	270	3000	208 @ 2000	•	•

### Air Handling

TCA Turbocharged with aftercooler
TC Turbocharged

NA Naturally Aspirated

### **Injection System**

M Mechanical
CR Common Rail
EUI Electronic Unit Injector



### N67 150

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cvl. in line

6.7

99.5 (135) @ 2.800

Diesel 4 stroke

NA Liauid

Counterclockwise Mechanical

М

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1052	х	705	х	910	mm
Dry Weight						530	Kg

Dimensions can be changed according to engine options

Length at flywheel

Rating	ΚW	чр	m d z	g/kWh @ rpm (Best Value)
В*	99.5	135	2800	225 @ 1800
D*	92	125	2800	225 @ 1400

### Air Handling

TCA Turbocharged with aftercooler Turbocharged NA Naturally Aspirated

### Injection System

Mechanical Common Rail EUI Electronic Unit Injector

Keel-cooled versions are also available



### N67 170

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm): Thermodynamic cycle:

Air handling: Valves per cylinder:

Cooling System: Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cvl. in line

6.7

125 (170) @ 2.300 Diesel 4 stroke

TCA 4 Liauid

Counterclockwise

Electronic

CR

Marine

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1089	Х	780	х	788	mm
Dry Weight						530	Kg

Dimensions can be changed according to engine options

Length at flywheel

D.				0 rpm Value)	
ing				를 ±	>
T,	>	0	E	/kWh Best	≥
Ra	Κ	Ξ.	Ħ	9/ (E	Ä
D*	125	170	2300	216 @ 1800	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### Injection System

Mechanical Common Rail

EUI Electronic Unit Injector Keel-cooled versions are also available



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### N67 220

Arrangement: Total Displacement (L): 6.7

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling: Valves per cylinder:

Cooling System: Direction of Rotation

(viewed facing flywheel):

Engine management: Injection System:

6 Cvl. in line

132 (180) @ 2.800 Diesel 4 stroke

TC 2

Liauid

Counterclockwise Mechanical

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1072	х	749	Х	800	mm
Dry Weight						605	Kg

Dimensions can be changed according to engine options

Length at flywheel

Rating	ΚW	ф	шdх	g/kWh @ rpm (Best Value)
С	132	180	2800	211 @ 1800
D	110	150	2800	219 @ 2400

### Air Handling

TCA Turbocharged with aftercooler Turbocharged NA Naturally Aspirated Mechanical

Injection System

Common Rail EUI Electronic Unit Injector



### N67 280

FPT

Arrangement:

Total Displacement (L): Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder:

Cooling System: Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cvl. in line

6.7

191 (260) @ 2.800 Diesel 4 stroke

TCA 2 Liauid

Counterclockwise Mechanical

М

### WEIGHT AND DIMENSIONS

Dimensions1 (L<sup>2</sup>xWxH) 1072 x 749 x 800 mm Dry Weight 605 Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	κ M	ф	жbш	g/kWh @ rpm (Best Value)	IMO II
B*	191	260	2800	209 @ 1800	•
C*	169	230	2800	215 @ 2100	•
D*	132	180	2500	208 @ 2000	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated Injection System

Mechanical Common Rail EUI Electronic Unit Injector



### N67 450 N

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cyl. in line

6.7

309 (420) @ 3.000

Diesel 4 stroke

TCA 4 Liquid

Counterclockwise

Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions  $^1$  (L²xWxH) 1089 x 780 x 788 mm Dry Weight  $^6$  600 Kg  $^6$ 

<sup>1</sup> Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	ΚW	ф	шdх	g/kWh @ rpm (Best Value)	IMO II	RCD II	EPA Tier 3 Commercial	China GB II (GB15097-2016
B1*	309	420	3000	206 @ 2000	•	•	•	•
B*	272	370	3000	206 @ 1800	•	•	•	•
C*	257	350	3000	207 @ 1800	•	•	•	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### Injection System

M Mechanical
CR Common Rail
EUI Electronic Unit Injector

Keel-cooled versions are also available



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### N67 550

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cyl. in line

6.7

368 (500) @ 3.200

Diesel 4 stroke

TCA 4 Liquid

Counterclockwise

Electronic CR

### WEIGHT AND DIMENSIONS

Dimensions<sup>1</sup>
Dry Weight

 $(L^2xWxH)$  1089 x 850 x 825 mm

721 Kg

 $\overline{\phantom{a}}$ 

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	ΚW	ф	шdх	g/kWh @ rpm (Best Value)	IMO II	RCD II	EPA Tier 3 Commercial	China GB II (GB15097-2016
B1	368	500	3200	209 @ 1800	•	•	•	•
В	353	480	3200	209 @ 1800	•	•	•	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### **Injection System**

M Mechanical
CR Common Rail
EUI Electronic Unit Injector



### **N67 570 EVO**

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm): Thermodynamic cycle:

Air handling:

Valves per cylinder: Cooling System:

Engine management:

Direction of Rotation (viewed facing flywheel): Injection System:

6 Cyl. in line

6,7 390 (530) @ 3.000

Diesel 4 stroke

TCA 4 Liquid

Counterclockwise Electronic CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1089	х	847	х	825	mm
Dry Weight						721	Kg

Dimensions can be changed according to engine options Length at flywheel

Rating	ΚW	ф	крт	g/kWh @ rpm (Best Value)	IMO II	RCD II	EPA Tier 3 Commercial
B1*	390	530	3000	209 @ 1900	•	•	•
R*	357	485	3000	211 @ 2300		_	

### Air Handling

TCA Turbocharged with aftercooler Turbocharged NA Naturally Aspirated

### **Injection System**

Mechanical Common Rail

EUI Electronic Unit Injector





# THE CURSOR SERIES



### C90 170

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm): Thermodynamic cycle:

Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cvl. in line

8.7

125 (170) @ 2.000 Diesel 4 stroke

TCA

Liauid

Counterclockwise

Electronic

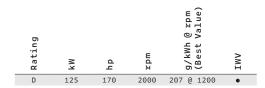
CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1288	х	863	х	962	mm
Dry Weight						950	Kg

Dimensions can be changed according to engine options

Length at flywheel



### Air Handling

TCA Turbocharged with aftercooler Turbocharged

Naturally Aspirated

### C90 380

FPT

Arrangement:

Total Displacement (L):

Max Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel):

Engine management:

Injection System:

6 Cvl. in line

8.7

301 (410) @ 2.000 Diesel 4 stroke

TCA

4 Liauid

Counterclockwise

Electronic

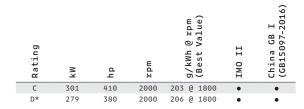
CR

### WEIGHT AND DIMENSIONS

Dimensions1 (L2xWxH) 1288 x 863 x 962 mm Dry Weight 950 Kg

Dimensions can be changed according to engine options

Length at flywheel



### Injection System

Mechanical Common Rail

EUI Electronic Unit Injector

### Air Handling

TCA Turbocharged with aftercooler Turbocharged

NA Naturally Aspirated

### Injection System

Mechanical Common Rail EUI Electronic Unit Injector



### C90 620 E

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cvl. in line

8.7

426 (580) @ 2.530

Diesel 4 stroke TCA

Liauid

Counterclockwise

Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions1  $(L^2xWxH)$  1288 x 868 x 962 mm Dry Weight 940 Ka

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	ΚW	ф	шdх	g/kWh @ rpm (Best Value)	IMO II	RCD II	EPA Tier 3 Commercial	China GB II (GB15097-2016
B1	426	580	2530	213 @ 2200	•	•	•	-
B1	404	550	2530	209 @ 2200	•	•	•	•
В	368	500	2530	204 @ 2000	•	•	•	•
С	331	450	2530	202 @ 1800	•	•	•	•

### Air Handling

TCA Turbocharged with aftercooler Turbocharged

Naturally Aspirated

### Injection System

Mechanical Common Rail

EUI Electronic Unit Injector



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### C13 500

Arrangement:

Total Displacement (L):

Max Power (kW (Hp) @ rpm):

Thermodynamic cycle:

Air handling: Valves per cylinder:

Cooling System: Direction of Rotation

(viewed facing flywheel):

Engine management: Injection System:

6 Cvl. in line

12.9

382 (520) @ 2.000 Diesel 4 stroke

TCA

4 Liauid

Counterclockwise

Electronic

FUI

### WEIGHT AND DIMENSIONS

Dimensions1 (L2xWxH) 1465 x 1000 x 1058 mm Dry Weight 1345 Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	κW	ф	жрш	g/kWh @ rpm (Best Value)	IMO II
С	382	520	2000	195 @ 1500	•
D*	367	500	2000	195 @ 1600	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### Injection System

Mechanical Common Rail EUI Electronic Unit Injector



### C13 825 E

Arrangement: Total Displacement (L):

Maximum Power (kW (Hp) @ rpm):

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cyl. in line

12.9

551 (750) @ 2.400

Diesel 4 stroke TCA

Liauid

Counterclockwise

Electronic

FUI

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH)	1465	х	1000	х	1058	mm
Dry Weight						1395	Kg

Dimensions can be changed according to engine options

Length at flywheel

Rating	ΚW	ф	жрж	g/kWh @ rpm (Best Value)	IMO II	RCD II
B1	551	750	2400	198 @ 1900	•	•
В	478	650	2400	207 @ 1500	•	•
С	441	600	2400	207 @ 1500	•	•

### Air Handling

TCA Turbocharged with aftercooler Turbocharged NA Naturally Aspirated

### Injection System

Mechanical Common Rail EUI Electronic Unit Injector



### C16 600

Arrangement: Total Displacement (L):

Max Continuous Power (kW (Hp) @ rpm):

Marine

Thermodynamic cycle: Air handling:

Valves per cylinder: Cooling System:

Direction of Rotation

(viewed facing flywheel): Engine management:

Injection System:

6 Cyl. in line

15.9

441 (600) @ 1.800 Diesel 4 stroke

> TCA 4

Liauid

Counterclockwise Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions <sup>1</sup>	(L <sup>2</sup> xWxH) 1465 x 1000 x 1160 mm
Dry Weight	1570 Kg

Dimensions can be changed according to engine options

Length at flywheel

Rating	ΚW	ф	шdл	g/kWh @ rpm (Best Value)	IMO II	EPA Tier 3 Commercial	China GB II (GB15097-2016)
D	441	600	1800	199 @ 1200	•*	•*	•
D	404	550	1800	199 @ 1200	•*	-	•
D	368	500	1800	199 @ 1200	•*	•*	•

### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated **Injection System** Mechanical

> CR Common Rail EUI Electronic Unit Injector



### C16 1000

Arrangement:

Total Displacement (L):

Maximum Power (kW (Hp) @ rpm): Thermodynamic cycle:

Air handling: Valves per cylinder:

Cooling System:
Direction of Rotation

(viewed facing flywheel):

Engine management: Injection System: 6 Cyl. in line

15,9

735 (1000) @ 2.300

Diesel 4 stroke TCA 4

Liquid

Counterclockwise Electronic

CR

### WEIGHT AND DIMENSIONS

Dimensions¹	(L <sup>2</sup> xWxH)	1465	х	1136	х	1160	mm
Dry Weight						1640	Kg

Dimensions can be changed according to engine options

<sup>2</sup> Length at flywheel

Rating	ΚW	ч	шdх	g/kWh @ rpm (Best Value)	IMO II	RCD II	EPA Tier 3 Commercial	China GB II (GB15097-2016)
B1	735	1000	2300	205 @ 1700	•	•	•	•
В	662	900	2300	203 @ 1700	•	•	-	•
С	599	815	2300	203 @ 1700	•*	•	•*	•
C	551	750	2300	200 @ 1600	•*	•	•*	•
С	478	650	2300	208 @ 1600	•*	•	•*	•
С	599	815	2000	201 @ 1700	•*		•*	
(	551	750	2000	203 @ 1600	•*		•*	

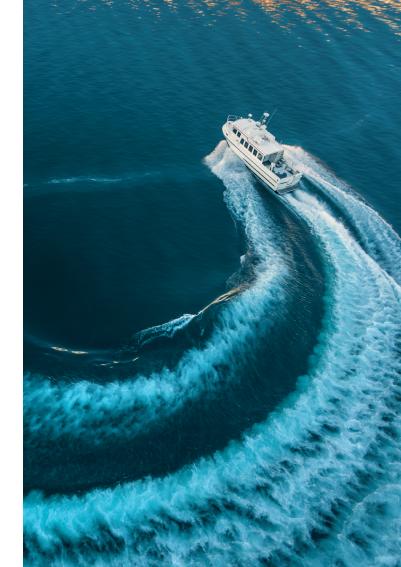
### Air Handling

TCA Turbocharged with aftercooler TC Turbocharged NA Naturally Aspirated

### **Injection System**

M Mechanical
CR Common Rail
EUI Electronic Unit Injector





### **Red Horizon**

FPT Industrial, in collaboration with two leading companies, NAVICO (SIMRAD) and ZF, is proud to introduce RED HORIZON: a "Premium" integrated system for engine/navigation monitoring and controls with state-of-the-art technologies.

### **Monitoring Systems**

### **FPT 7" Premium Display Key Features**

Based on SIMRAD technology, the FPT Premium 7" is a compact display, perfect for small-medium sportboats, dayboats, and center-consoles. Dedicated to monitoring engine data, the panel offers the chance to extend the display options on a wide range of navigation functions.

- Widescreen display with LED backlight
- Easy to use tablet-style touchscreen controls
- Wide range of engine data, alarm monitoring and options such as the on-board entertainment system control
- Multi Function Display option: fully featured chartplotter (C-MAP charts) with built-in GPS receiver, and monitoring of additional options\*, like radar, echosounder and autopilot
- Built-in wireless connectivity to a compatible smartphone or tablet, giving access to charts, radar and other functions from anywhere on board
- In addition to the 7-inch display the 9", 12" and 16" MFD sizes complete the FPT Premium Display series

### **Electronic Control Systems**

### Electronic Controls - FPT Premium Control Key Features

FPT uses ZF electronic propulsion control systems at the cutting edge of electronics technology, specifically matched for FPT engines

- The Premium electronic control is a powerful system that integrates the latest CAN bus technology in an innovative and compact control head, with an ergonomic lever and a user-friendly display where all functions can be easily selected
- With an easy plug-in installation, the "Premium" control provides complete governance of navigation offering bottom set up, start interlock, emergency reversal protection, engine synchronisation and optional features for docking or trolling
- Up to six control stations.

### Manoeuvring Systems - FPT Premium Joystick Key Features

Controlling engines, transmissions and thrusters simultaneously, the "Premium joystick" provides unbeatable ease of vessel control during manoeuvres. The "Premium joystick" offers the following main advantages: vessel control at low speed, easy manoeuvring in tight spaces, vessel positioning against wind and current

Main technical features:

- 12/24 V DC system
- CAN based joystick station, with one push button to take control and select functions
- CE certified Manoeuvring Control Unit
- CAN connection to "Premium control" processor
- Options:
- Hold Position
- · Interface with ZF Steer Command
- Up to six control stations

<sup>\*</sup> Devices provided by NAVICO (SIMRAD) network

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### **Marine Engine Options**

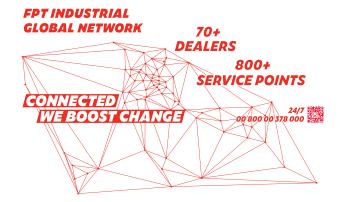
FPT Industrial offer a whole range of options to complete your engine:

- Suspensions (Silent block)
- Electrical system 12V/24V
- Insulated poles electrical system
- Uprated Alternators
- Front PTO
- Instruments kit
- Digital and analog panels
- · Water cooled or dry exhaust pipes
- Gearboxes
- Emission and Propulsion engine certification with several classification societies
- NMEA2000 Converter
- · Remote Control lever
- Red Horizon

Please contact your local distributor on our locator at fptindustrial.com to get more information.

### **FPT Industrial Global Network**

Marine



NOTE	NOTE

# **NOTE**

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