

FPT INDUSTRIAL RIDES THE WAVE OF SUSTAINABILITY, EFFICIENCY AND POWERFUL INNOVATION AT METSTRADE 2023

Turin, Italy, November 15th, 2023

From **15 to 17 November**, FPT Industrial is attending **METSTRADE 2023**, the world's largest B2B **marine equipment trade show**, which is celebrating its 35th anniversary. **Environmental protection, hybrid propulsion, smart solutions, and future-oriented collaborations** are the main themes of the Brand's attendance at RAI Amsterdam Europaplein (Amsterdam, The Netherlands).

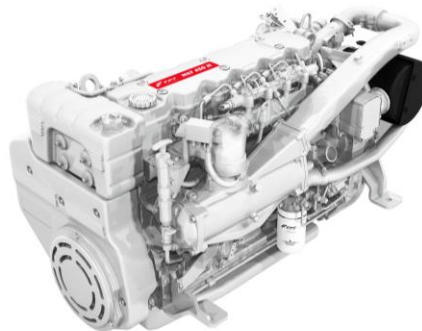


PRESS RELEASE

N67 450 N for auxiliary fixed speed and Stage V applications – The engine that brings together professionals and yachtsmen

Available for both **pleasure boating and light to medium professional marine duties**, the N67 450 N engine offers **high power output and maximum torque at low engine speed**. It is offered in both heat-exchanged and keel-cooled configurations, all customizable on request, while options include **electronic remote control, monitoring systems, and compliance with international emissions standards**. Advanced diagnostic equipment allows easier engine servicing, while **oil and filter change intervals of up to 600 hours minimize downtime**. At METSTRADE 2023, the N67 450 N is also exhibited as an **auxiliary power unit with layout and specific settings focused on marine duties**, available for fixed-speed auxiliary g-drive thanks to the new 129 kW model at

1500 and 1800 rpm, that is IMO exempted. Available in 50 and 60 Hz versions, FPT Industrial's marine fixed-speed **G-Drive engines** have been developed to **act in synergy with the FPT Industrial marine propulsion line-up**, with prime power ratings capable of a **10% power overload, according to ISO 8528 prime power**. The extensive list of available options allows the most varied needs to be met, including electronic speed controllers for both mechanical and electronic engines.



N67 450 N for auxiliary and Stage V applications

Engine specifications for variable speed use

Arrangement:	6 Cyl. in line
Displacement (l):	6.7
Injection System:	Common Rail
Maximum Engine Power for heat exchanged configuration (kW (Hp) @ rpm):	331 (450) @ 3,000
Engine dimensions (L* x W x H, mm):	1,088 x 717 x 789
Engine Dry Weight (kg):	600
Emission certifications:	IMO Marpol Tier II, RDC St. II, EPA Tier III, IWV Stage V cycles E3 and C1 (170 hp rating, with no need for ATS for propulsion and Gdrive use), China GB II
Type approvals:	RINA, BV, CCS

**Length at flywheel*

Engine specifications for fixed-speed auxiliary use:

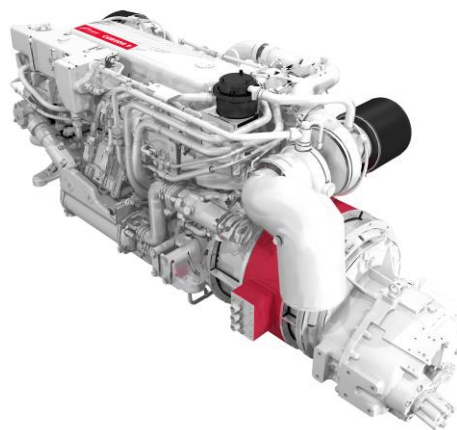
Arrangement:	6 Cyl. in line
Displacement (l):	6.7
Prime Power (kWm @ rpm):	129 @ 1,500 / 129 @ 1,800
Emission certifications:	IMO Marpol Tier II exempted (<130 kW)

C90 650 EVO Hybrid Configuration – The modular and scalable parallel hybrid electric marine propulsion system for commercial and pleasure vessels

Top performance, compact design, flexibility and fuel efficiency for commercial and pleasure vessels. These are the main features of the **C90 650 EVO Hybrid** developed by FPT Industrial and **Vulkan Hybrid Architect**, a leading brand in the design and manufacture of complex systems with wide experience in tailor-made integrated hybrid solutions for shipyards and shipowners. Based on the **Compact Parallel Hybrid architecture** and built around pre-defined modular and flexible hardware combinations to meet customer requirements, the solution on display in Amsterdam features an FPT Industrial C90 650 EVO diesel engine, a **Hybrid Clutch** to engage and disengage the ICE, an **e-machine** in the form of a synchronous permanent magnet and axial flux motor, a frequency converter, a marine gearbox, elastic joints and a **vibro-acoustic isolation system**. Easy to use and ready to handle any situation and conditions, the C90 650 EVO Hybrid guarantees **reduced maintenance and costs**, considerable **fuel savings**, **reduced emissions**, and **exceptional comfort**. In addition, the **silent full-electric-drive mode** allows access to **marine protected areas**.

The C90 650 EVO Hybrid is a compact, turn-key solution, ideal for small engine rooms and repowering projects, allowing the shipyard to downsize or eliminate the onboard generator. In addition to the hybrid drivetrain shown at the exhibition, this solution includes the DC switchboard cabinet, the transformer, the PMS, the control system and the battery system.

FPT Industrial marine lineup has been hybridized by Vulkan, in pre-determined configurations from 125 kW to 735 kW, providing various choices of e-motor powers to be coupled (from 96 kW to 250 kW) and modular battery packs.



C90 650 EVO Hybrid Configuration Technical Specifications

Arrangement:	6 Cyl. in line
Displacement (l):	8.7
Injection System:	Common Rail
Maximum Engine Power (kW (Hp) @ rpm):	478 (650) @ 2,530
E-Motor Power Output (kW (Hp) @ rpm):	200 (272) @ 2,600
Engine dimensions (L* x W x H, mm):	1,226 x 899 x 1,009 + 450 mm of hybrid clutch and e-machine system connected to the gearbox
Engine Dry Weight (kg):	1,014
Emission certifications:	IMO Marpol Tier II, RDC St. II, EPA Tier III Recreational

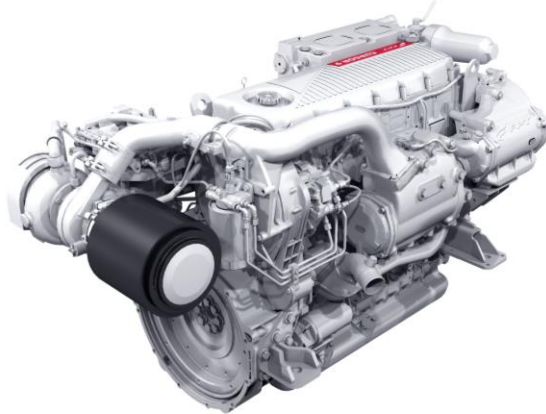
**Length at flywheel*

New C90 650 E Light Duty – Best-in-class top power and peak torque for light duty applications

Based on the C90 650 E architecture, the new C90 605 HP light duty debuting in Amsterdam was designed to increase the available power in the B1 light duty curve, up to 1,000 h/y usage, from 580HP to 605HP @ 2,530 rpm.

In doing so, FPT Industrial engineers achieved a number of customer-related benefits and competitive advantages, such as **best-in-class top power, best-in-class peak torque (20% more than the main competitor), lower rated speed allowing the coupling to gearboxes with lower reduction ratio**, and very steep torque rise to facilitate maneuvering on various light commercial applications.

Also **available in the optional keel cooling configurations**, the new C90 605 HP light duty is **certified EPA Tier III Commercial / IMO Marpol Tier II for applications in USA, Canada, Europe and rest of the world.**

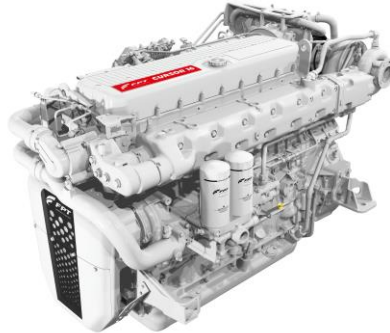


Arrangement:	6 Cyl. in line
Displacement (l):	8.7
Injection System:	Common Rail
Engine Power for heat exchanged and keel cooled configurations (kW (Hp) @ rpm):	445 (605) @ 2,530
Engine dimensions (L* x W x H, mm):	1,312 x 863 x 973
Engine Dry Weight (kg):	940
Emission certifications: <i>*Length at flywheel</i>	IMO Marpol Tier II, EPA Tier III commercial

C16 600 – Custom-made for heavy-duty missions

The C16 600 is ideal for push and tugboats, ferries, dredgers and commercial fishing vessels, available with heat exchanger cooling and keel cooled system.

As with all FPT Industrial's Common Rail marine engines, the C16 can also be fueled by HVOs and all EN 15940 compatible fuels with no compromise on performance.



C16 600 Technical Specifications

Arrangement:	6 Cyl. in line
Displacement (l):	15.9
Injection System:	Common Rail
Engine Maximum Power for D-Rating Heavy Duty with unlimited hours per year (kW (Hp) @ rpm):	441 (600) @ 1,800
Engine dimensions (L* x W x H, mm):	1,470 x 1,025 x 1,169
Engine Dry Weight (kg):	1,570
Emission certifications:	IMO Marpol Tier II, EPA Tier III, China GB II
Type approvals:	RINA, BV, CCS, CRS

**Length at flywheel*

IMO Tier III-compliant solutions – FPT Industrial and Frydenbø Industri AS Marine join forces for a cleaner environment

Aimed at reducing the environmental impact of the maritime industry, the Frydenbø ATS for FPT Industrial engines is a simple and flexible system that meets the IMO III emission requirements in emission controlled areas as Baltic Sea, the English Channel and the North Sea **south of 62 degrees latitude and is available for the brand's marine engines from 6 to 16 l**. Developed in collaboration with **Frydenbø Industri AS Marine**, the authorized Distributor of FPT Industrial's products and services in **Norway and Sweden**, this practical ATS system is designed and supplied by Frydenbø Industri AS.

The additional benefits customers in Scandinavia, the east and south-coasts of the UK, Northern France, Belgium, The Netherlands, Northern Germany, Denmark, Poland, Lithuania, Latvia, Estonia and Canada's seaboard can enjoy include **noise reduction** – with an average transmission loss of ~ 35dB (A) – and **light weight**, with just 300 kg per engine, urea tank included.

Red Horizon – Award-winning and stylish high technology

FPT Industrial's integration of the most advanced marine technologies in engine, monitoring and control systems, Red Horizon guarantees **full navigation control and safety, optimal driving comfort, and easy handling and mooring**. Developed in collaboration with two leading global companies – ZF and Navico (Simrad) – and available in combination with any top engine from FPT Industrial's Cursor and NEF electronic families, Red Horizon is presented inside a unique environment, inspired by the automotive sector. The result is a **clean, stylish and comfortable bridge with a touch of minimalism, where customers can feel at home**. This unique concept received two of the world top design awards – Gold Winner of the 2021 edition of the New York Product Design Awards in the Watercraft Category, and the 2021 Good Design Award.

Customer Service – Standing alongside our customers at all times

The Brand's stand at METSTRADE 2023 features a corner fully dedicated to customer service and in particular to **MYFPT, FPT Industrial's full assistance offering**. This corner gives a clear vision of the main pillars on which MYFPT has built its tailor-made solutions for marine engine customers: **reliability, protection and uptime**. The common trait of all these areas is making it possible for FPT Industrial dealers to deliver **the best customer experience and offer the best coverage to the end customer**, so they never have to worry about their engines, especially when on the water.

FPT Industrial is a brand of Iveco Group N.V. (EXM: IVG), dedicated to the design, production, and sale of powertrains and solutions for on- and off-road vehicles, as well as marine and power generation applications. Over 8,000 people across ten production sites and eleven R&D centers work for FPT Industrial all around the world. Active in nearly 100 different countries, its global sales and its Customer Service department supports all Brand customers. The extensive product offering includes six engine ranges with power outputs from 42 hp to over 1,000 hp, transmissions with torque up to 500 Nm, and front and rear axles from 2.45 to 32 tonne GAW (Gross Axle Weight). FPT Industrial offers the most complete line-up of natural gas engines for industrial applications on the market, with power outputs ranging from 50 to 520 hp. A dedicated ePowertrain division is accelerating the path towards net zero-emissions mobility, with electric drivelines, battery packs, and battery management systems. This extensive offering, and its strong focus on R&D, makes FPT Industrial a world leader in industrial powertrains and solutions. For more information, visit www.fptindustrial.com.

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