MAN Energy Solutions Future in the making



Alphatronic 3000

MAN Energy Solutions is proud to present the new generation of propulsion control systems – the Alphatronic 3000 series, which is well prepared for the future and offers new operational features, functions and benefits.

Benefits at a glance

- Safe and reliable ship manoeuvres
- Optimal load and speed control
- Reduced fuel consumption
- Logical touch screen and user interfaces
- Easy installation of modularized components.



Alphatronic 3000

State-of-the-art propulsion control

Fuel and emission savings

- Economic operation due to optimized engine load and thrust control (incl. PTO/PTI modes)
- An optional speed pilot feature with interface to GPS can be deployed for various sailing modes (economy/speed/silence).

Safety and reliability

- Quick system response and efficient CP propeller manoeuvrability
- Quick reversing and possible trolling control for efficient FP propeller manoeuvrability.

Engine lifetime protection

- Thermal protection of the engines via controlled running-up programs
- Overload protection.

Three levels of propulsion control

- Normal control with automatic load control
- Backup control from bridge and ECR
- Independent telegraph system for communication of thrust orders from bridge to machinery space.

Panel design and functionality

- Modular concept to fit any ship's console layouts
- A configurable touch screen meets a wide range of customer specified functions.

Propulsion system applications

- The system fulfils requirements for propulsion plants with two- or four-stroke engines powering controllable or fixed pitch propellers

- Available for propulsion plants with MAN and MAN B&W engines or other designs in a wide range of diesel-mechanical, hybrid or diesel-electric propulsion setups.
- Optional fuel saving EcoOptimizer concept for MAN Alpha CPP plants.





Propulsion control station for single propeller plant



Four-stroke engine. Single and twin propeller plants with CPP	Reduction gear with clutches for PTO, PTH and PTI power boost	
Four-stroke twin in single out shaft line. Single and twin propeller plants with CPP	Twin-in single-out re- duction gear with primary or secondary PTO. Diesel-mechanical, hybrid or diesel-electric propulsion systems	
Four-stroke engine. Single and twin propeller plants with FPP	Reversible gear and fixed pitch propeller or water jets	
Two-stroke non- reversible engine. Single and twin CPP plants	Plants with MAN B&W two-stroke engine and MAN Alpha CPP	<u>[0000]</u> @-{
Two-stroke revers- ible engine. Single and twin propeller plants with FPP	Plants with MAN B&W two-stroke engine and MAN Alpha FPP	@ <u>-0000</u>]
Diesel-electric propulsion plants with FPP and CPP	Plants with MAN Alpha FPP or CPP configu- rations	

Example of various propulsion configurations controlled by the Alphatronic 3000 system. Multiple alternatives are available.



Backup control and independent telegraph control

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