

# MAN Overridable Power Limitation Alphatronic

# MAN PrimeServ

MAN Overridable Power Limitation (OPL) is a retrofit solution designed to lower the energy efficiency index for existing ships (EEXI) by limiting the engine power of the existing fleet to comply with the IMO resolution MEPC 335 (76) adopted on 17 June 2021.

Based on global measures to reduce greenhouse gas (GHG) emissions from shipping, new amendments were introduced at the International Maritime Organization's (IMO's) MARPOL convention in June 2021. The amendments include new energy efficiency provisions – the Energy Efficiency Existing Ship Index (EEXI) and the Carbon Intensity Indicator (CII).

Vessels affected by EEXI have to attain EEXI approval by the first periodical survey in 2023 - at the latest

Among others, the ship type, ship capacity, and the principle of propulsion determine the EEXI value required, that is, the maximum acceptable attained EEXI value. The EEXI value must be calculated individually for each vessel affected by the regulation, and the outcome provides the the necessary power limitation to fulfill the EEXI requirements.

The requested overridable power limitation (OPL) is implemented in the existing MAN Energy Solutions controllable pitch propeller (CPP) remote control system. The limits are then set and controlled by the remote control system (OPL activated/overridden). A remote operating push-button, normally installed on the main bridge, determines if the OPL is activated or overridden.

As the engine load equals the propeller thrust (pitch angle and rpm), and all relevant and required signals are available in the remote control

system (index, charge air pressure, rpm, pitch, etc.) the overall main engine load is managed by the CPP remote control system.

Installing the system level EEXI compliant software requires a MAN Energy Solutions superintendent, with expert knowledge of the propulsion configuration. The MAN OPL Alphatronic solution includes superintendent assistance for programming, uploading and testing of the new compliant software.





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## Key benefits

- Easy installation on AT2000 / AT3000 remote control systems
- Activated/overridden OPL directly from main bridge
- Override logging
- Optimized for better performance (combinator curves reviewed, optimized and implemented)
- Stable and efficient propulsion control thanks to system level OPL, with minimum wear on the propulsion configuration, and lowest possible fuel oil consumption

# Scope of supply

- EEXI compliant software including review and optimization of existing combinator curves
- Push button for OPL activated/ overridden
- Onboard management manual (OMM)
- MAN PrimeServ superintendent for installation and test

### **Applicability**

Applicable for MAN Energy Solutions CPP remote control systems type AT2000 and AT3000

### More information

Would you like to know more about the product, and how our upgrade solutions can improve your propulsion configuration? Then do not hesitate to contact your local MAN PrimeServ office to receive more information about the upgrade!

# Retrofit & Upgrades

Propulsion Retrofit P + 45 96 20 4100 RetrofitDK@man-es.com

## More information

Would you like to know more about the product, and how the upgrade can improve your specific engine? Then do not hesitate to contact your local MAN PrimeServ office to receive more information about the upgrade!

### **MAN Energy Solutions**

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