



Certificate No:
TAM000019S

TYPE APPROVAL DESIGN CERTIFICATE

This is to certify:

That the Engine Subsystem

with type designation(s)
Overridable EPL for Mechanical Engines

Issued to

**MAN Energy Solutions, branch of MAN Energy Solutions SE, Germany
København SV, Denmark**

is found to comply with

DNV rules for classification – Ships Pt.4 Ch.3 Sec.1 Reciprocating internal combustion engines

Application :

MAN Energy Solution MC/MC-C mechanically controlled engines

Issued at **Høvik** on **2022-10-13**

This Certificate is valid until **2027-10-12** .

for **DNV**

DNV local unit: **Denmark CMC**

Approval Engineer: **Dag Harald Williksen**

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Olaf Drews
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

The Overridable Engine Power Limitation (EPL) on MAN-ESMC/MC-C Mechanically Controlled Engines is a system used to secure the compliance with MEPC.335(76) regulations. This is obtained by mechanically blocking the fuel index of the engine to limit the total power that can be produced by the engine.

Application/Limitation

Mechanically controlled (MC/MC-C) MAN Energy Solution engines.

This Type Approval covers design only and may be used as basis for obtaining an approval of final installation.

Type Approval documentation

Drawing no	Rev.	Document title
6141595-7	0	Overridable Engine Power Limitation On MAN-ES MC/MC-C Mechanically Controlled Engines
6141595-7	1	General System Description
6142346-0	2	Onboard Management Manual, example
6142346-0	1	MC Operational Manual
8865-6600-0001		Installation of EEXI Fuel Index Limiter
6142337-6	1	On Board Commissioning
PRJ11100365949	-	Visit report
-	-	OMM_L9408762
-	-	EPL Report_L9408762
6141595-7	0	Overridable EPL for Mechanical engines - General System Information

Tests carried out

Demonstration of installation and removal of the device carried out on the YYYY-MM-DD at XXXXXXXXXX.

Marking of product

To be marked with logo and number according to document 6141595-7.0

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

Other conditions

Before installation on board any particular ship subject to classification, an Onboard Management Manual (OMM) describing the use of the "Overridable EPL for Mechanical engines" shall be approved according to IMO MEPC.335(76) and be made available onboard the ship.

The installation and operation manual must include instructions to set the governor index limiter to maximum EEXI MCR limited.

The following tests to be carried out and recorded for later verification by DNV:

- Verify that passing through barred speed range is not significantly increased. Compare with earlier passing duration or when the EPL is overridden.
- Installation of EPL may affect maximum achievable rpm. Barred speed range shall be below 80% of this maximum rpm with EPL implemented.
- Update manoeuvre charts, turning circle and crash stop diagrams

Evaluate to contact DNV if any of the tests show that the behaviour of the propulsion system has changed.

END OF CERTIFICATE