Certificate No: LR25103710TA
Issue Date: 12/06/2025
Expiry Date: 30/12/2028

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Caterpillar Inc (Indiana)**
Address	3701,, 3701,South Street, Lafayette, Indiana, 47905, United States
Place of Production	BorgWarner Mobility Poland sp z o.o. Pass, ul. Stefana Batorego 8, Błonie, 05-870, Poland
Type	Electronic Control Module
Description	Electronic Control Module for Caterpillar Engines ECM Part Number: 462-0006, 462-0007
Trade Name	ADEM V (A5E2v2)
Application	For use in environmental category ENV4 as defined inLloyd’s Register Test Specification Number 1, 2015.
Specified Standard	Lloyd’s Register Test Specification Number 1, 2015. IACS UR E27 Rev. 1, 2023.
Other Conditions	Installation of this equipment for marine applications is to be in accordance with current Lloyd’s Register Rules and Regulations. Validity of this Type Approval is conditional upon a valid Lloyd’s Register Software Conformity Assessment Certificate.

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Peter Huntley-Hawkins
Electrical & Control Technical Manager - UK & America to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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A separate, independent safety system is to be provided.

Radiated and conducted emissions meet the requirement for equipment in general power distribution zones.

Fuel oil is not to be used as coolant for the controller.

Communications with the Engine Control Modules are via CAN J1939 and CAT Data Link (CDL) network connections. Access from untrusted network is not allowed. There are no security configuration guidelines available as the ADEM V (A5E2v2) does not have Ethernet and wireless network connections that need network and security parameters. Information supporting the intended ship owner's incident response and recovery plan is to be made available when required by the system integrator.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: *18/60011*

The Design Appraisal Document LR25103710TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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