Certificate No: LR25272425TA
Issue Date: 15/10/2025
Expiry Date: 14/10/2030

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	**Woodward Inc.**
Address	1041 Woodward Way, Fort Collins, Colorado, 80524, United States
Place of Production	WOODWARD POLAND Sp.z o.o. ul.Skarbowa 32, Niepołomice, 32-005, Poland
Type	Control Systems
Description	Engine / Steam Turbine Control System (Flex500, Flex500 Bulkhead) Steam Turbine Control System (505, 505 Bulkhead, 505XT, 505XT Bulkhead)
Trade Name	Flex500, Flex500 Bulkhead, 505, 505 Bulkhead, 505XT, 505XT Bulkhead
Application	For use in environmental categories ENV1, ENV2, and ENV3 as defined in Lloyd's Register Test Specification No. 1, July 2024
Specified Standard	Lloyd's Register Test Specification No. 1, July 2024
Ratings	Voltage Input: 24VDC Flex 505 / Flex 505 Bulkhead (*): - Firmware 5419-6479, rev. D; - Firmware 5418-7795, rev. "-" 505 / 505 Bulkhead (*):

Downloaded Copy

Andrei Petrov

Electrical & Control - Lead Specialist to
Lloyd's Register EMEA
A member of the Lloyd's Register group

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Type Approval Certificate

- Application software 5418-7838, rev. A;
- GUI software 5418-7841, rev. A;
- Firmware 5418-7795, rev. "-"

505XT / 505XT Bulkhead (*):
- Application software 5418-7839, rev.A;
- GUI software 5418-7842, rev. A;
- Firmware 5418-7795, rev. "-"

(*) - major firmware/software changes are to be informed to LR for consideration

Other Conditions

Where this controller is used to perform safety critical functions or system shutdowns a valid Lloyd's Register Software Conformity Assessment Certificate is required.

Where this controller is arranged as alternative means of control for essential services a valid Lloyd's Register Software Conformity Assessment Certificate is required.

The controller is not developed as cyber resilient unit. In case of the installation onboard LR-classed ship/platform where Cyber Resilience requirements are mandatory, the manufacturer and system integrator is responsible to configure security features to meet the system level cyber requirements as per applicable LR Rule set (IACS UR E26).

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: LR21481325TA

The Design Appraisal Document LR25272425TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.