Certificate No: LR2026469TA
Issue Date: 08/12/2019
Expiry Date: 07/12/2024

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	**AVAT Automation GmbH**
Address	Derendinger Straße 40, Tübingen, 72072, Germany
Type	Control Units
Description	Cylinder Pressure Monitoring Modules and Knock Monitoring Module for combustion engines
Trade Name	E^2PRECON-M, ICPM (Cylinder Pressure Monitoring Modules) E^2KNOCKCON-M (Knock Monitoring Module)
Application	Marine applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in LR Test Specification No.1, 2013 where the Test Specification is satisfactory for the intended operation. Application is only use for "General Power Distribution Zones".
Specified Standard	Manufacturer's Standard IACS URE10 (Rev.7 October 2018)
Additional Tests	Low Temperature test at -25°C for 2 hours, Ingress protection test to IP66
Other Conditions	The requirements of the Lloyd's Register (LR) Rules apply where the equipment is installed on LR Classed vessels and offshore installations.

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Thomas Milow

Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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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: 14/20077

The Design Appraisal Document HTS/ETS 40642-20 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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