Certificate No: LR26347469TA
Issue Date: 19/11/2025
Expiry Date: 18/11/2030

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	**Dr. E. Horn GmbH & Co. KG**
Address	Max-Planck-Str. 34, Gaertringen, 71116, Germany
Type	Switches - Temperature
Description	CLTS xx L yy (xx = quantity of cylinder; yy = model / length of cable) TGL00942x and TGL00943x consist of: - Sensor PT100 with 4m Teflon connection cable - Armoured cable (protection tube) - Sensor junction box (A110) with circuit board (V1.01) - Sensor PT1000
Trade Name	Cylinder Liner Temperature System (CLTS) for 2-stroke diesel engines
Application	Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – July 2024.
Specified Standard	Manufacturer's Specification.
Other Conditions	Final arrangements of the system have to be in compliance with Lloyd'sRegister Rules and Regulations. Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/ or surveyed to be installed in ships classed or intended to be classed with LR.

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Pawan Borate

Specialist Electrical & Control to Lloyd's Register Marine and Offshore India LLP
A member of the Lloyd's Register group

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

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 Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2070894TA

The Design Appraisal Document TSO-25-047046-E-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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