Certificate No: LR23376950TA
Issue Date: 15/05/2024
Expiry Date: 14/05/2029

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	**A.S.T.R.A. REFRIGERANTI Srl**
Address	via A. Meucci, 1, Galliate, Novara, 28066, Italy
Type	Heat Exchangers
Description	Heat Exchangers HX-200 and HX-300 Type: Tema NEN
Trade Name	TBF-1800
Application	Water (SHELL Side) and HE 50%-N2 50% (Tube Side)
Specified Standard	Rules and Regulations for the Classification of Ships, July 2022 ASME VIII Div.1 Ed.2021 TEMA C (TEMA Ed. X)
Ratings	Please see the Appendix

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: Work Approval Certificate LR2000010W

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Vahid Saremi Shahab

Piping & Pressure System Lead Specialist 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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The Design Appraisal Document LR23376950TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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