

Certificate of Type Approval

This is to certify that the product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Regulations for preventing Collisions at Sea, 1972, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	Kockum Sonics AB
Address	Industrigatan 39, Box 1035, 21210 Malmö, Sweden
Type	Sound Signals
Description	Electrically driven whistle for vessels <75m – Type: "ELECTRONIC TYFON ETD 100/350"
Trade Name	"ELECTRONIC TYFON ETD 100/350"
Specified Standard	The Convention on the International Regulations for Preventing Collisions at Sea 1972, Annex III.1, as amended EN 60945 (2002)

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified 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.

The attached Design Appraisal Document forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

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

Lijo Thomas

Senior Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register group

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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2256766SS

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal of Certificate Number SAS S160109

APPROVAL DOCUMENTATION

Kockum Sonics AB's Data Sheet KSM 276E/9648

TEST REPORTS

Kockum Sonics, Sonics Laboratory, Malmö, test report dated 15 September 1997.

DELTA test report No: DANAK-19/16317, dated 5th April 2016.

DELTA test report, Assessment of compliance with relevant parts of IEC 60945 and IACS E10, report dated 5th November 2014.

CONDITIONS OF CERTIFICATION

1. Each whistle is to be installed in a manner and location which complies with the requirements of Annex III.1 (e) to (g) inclusive of the specified standards.
2. Electrical supply to be 24V DC.
3. The onboard arrangements and installation of the whistle is not part of this certificate, all such arrangements are to be to the satisfaction of the attending surveyor.
4. The construction of sound signal appliances, their performance and their installation on board the vessel shall be to the satisfaction of the appropriate authority of the State whose flag the vessel is entitled to fly.
5. **Installation on board:** The arrangements and installation of this equipment on board the vessel are not part of this design appraisal or certificate. All such arrangements are to be to the satisfaction of the Surveyors attending on board; the fitting of the equipment to be in accordance with the manufacturer's instructions the requirements of COLREGs 72 and Resolution A.694 (17), as amended, and any additional requirement of the State whose flag the vessel is entitled to fly.
6. The Sound Signal Appliance shall be marked clearly accordingly to the requirements of Resolution A.694 (17).
7. The Sound Signal Appliance shall be delivered complete with their technical documentation accordingly to the requirements of Resolution A.694 (17).
8. Instructions for use and maintenance are to be supplied with each product.
9. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
10. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.

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11. Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81 (70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.
12. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

PLACE OF PRODUCTION

Kockum Sonics AB
Industrigatan 39
Box 1035
21210 Malmö
Sweden



Lijo Thomas
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).