



Marine & Offshore

Certificate number: 10929/F0 BV

File number: AP 3368

Product code: 4005H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

KOCKUM SONICS AB

MALMÖ - SWEDEN

for the type of product

SHIP'S SOUND SIGNALS (WHISTLES)

Supertyfon AT 150/165 - AT 150/200 - AT 150/330 - MKT 150/110 // Tyfon MKT 75/260 - 75/350 - 75/440
//Electronic Tyfon ETD 100/350 //Electro-Tyfon MTX 150/130-MT 150/130-MT 150/140.

Requirements:

COLREG 1972, as amended by IMO Resolution A.464(XII), IMO Resolution A.694(17).
IEC 60945: 2002 + AC1 : 2008.

EC Code : 31B/21B

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 31 Jan 2028

For Bureau Veritas Marine & Offshore,

At BV COPENHAGEN, on 31 Jan 2023,

Hans-erik ERICSSON

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=oksecaafji>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Types	Frequency	Sound pressure Level (1 m)	Length of vessels
SUPERTYFON AT 150/165*	165 Hz	138 dB	75 up to 200 m
SUPERTYFON AT 150/200*	200 Hz	138 dB	75 up to 200 m
SUPERTYFON AT 150/330*	330 Hz	138 dB	up to 200 m
SUPERTYFON MKT 150/110*	110 Hz	143 dB	200 m and upwards
TYFON MKT 75/260*	260 Hz	130 dB	up to 75 m
TYFON MKT 75/350	350 Hz	130 dB	up to 75 m
TYFON MKT 75/440*	440 Hz	130 dB	up to 75 m
ELECTRONIC TYFON ETD 100/350	350 Hz	130 dB	up to 75 m
ELECTRO-TYFON MTX 150/130*	130 Hz	143 dB	200 m and upwards
ELECTRO-TYFON MT 150/130*	130 Hz	138 dB	75 up to 200 m
ELECTRO-TYFON MT 150/140*	140 Hz	138 dB	75 up to 200 m

* - Marked units are tested for low temperature down to - 45 °C.

- IP 56 for marked units

2. DOCUMENTS AND DRAWINGS:

For modification E0 version:

TYFON MKT 75/350 specification ref. KSM 273/0737, dated 11 Sep 2007.

SUPERTYFON AT 150/165 specification ref. KSM333/1442, dated 15 Oct 2014.

SUPERTYFON AT 150/200 specification ref. KSM334/1442, dated 15 Oct 2014.

SUPERTYFON AT 150/330 specification ref. KSM335/1442, dated 15 Oct 2014.

ELECTRO-TYFON MT 150/140 specification ref. KSM810E/1615, dated 14 Apr 2016.

For modification E1 version:

TYFON MKT 75/260 specification ref. KSM 272/1204, dated Week 04, 2012.

SUPERTYFON MKT 150/110 specification ref. KSM268EN/1732, dated Week 32, 2017.

ETD 100/350 specification ref. KSM819E/1912, dated Week 12, 2019.

For F0 version:

Supertyfon MKT150/110, No. KSM268EN/2220

Electro-Tyfon MT 150/130 No. KSM520E/2220

Electronic Whistle ETD 100/350, No. KSM819E/1912

Electro-Tyfon MTX 150/130, No. KSM521E/2220

Tyfon MKT 75/260, No. KSM 272/1204

3. TEST REPORTS:

3.1 - Kockum - Sonics AB test reports dated 1983/12/14, 1986/01/16, 1986/06/05, 1989/09/22, 1988/04/11, 1998/11/27, 2005/05/09.

3.2 - Delta Test report N° DANAK 198741 dated 24/Apr./2007.

3.3 - Delta Test report N° DANAK 198739 dated 24/Apr./2007.

For modification E1 version;

3.4 - Delta Test report No. T208342, dated 05-11-2014.

3.5 - Delta Test report No. DANAK 1916277, dated 17-03-2016.

3.6 - Delta Test report No. DANAK 1916279, dated 17-03-2016.

3.7 - Delta Test report No. DANAK 1916317, dated 05-04-2016.

3.8 - Delta Test report No. DANAK 1917943, dated 14-06-2017.

For F0 version:

- EMC Test Report No. 121-30853-1 Rev.1 , dated 2022-10-28

4. APPLICATION / LIMITATION:

4.1 - As per regulations stated on the front page

4.2 - BUREAU VERITAS Environmental Category , **EC Code: 31B/21B**

4.3 - The equipment fulfils the EMC requirements for installation in Bridge and Deck Zones

4.4 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 8.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **SUPERTYFON** series are to be supplied by **KOCKUM SONICS AB** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **KOCKUM SONICS AB** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **KOCKUM SONICS AB** has declared to Bureau Veritas the following production site(s):

POLARMARINE INC
Bldg. 8487, Naval Magazine
Subic Bay Freeport Zone
Olongapo City
SUBIC BAY FREEPORT ZONE
PHILIPPINES

KOCKUM SONICS AB
Box 1035
Industrigatan 39, 212 28 Malmö
212 10 Malmö
SWEDEN

6. MARKING OF PRODUCT:

6.1 - Maker's name or trade mark,

6.2 - Serial number of the units,

6.3 - Equipment type number or model identification under which it was type-tested.

7. OTHERS:

7.1 - It is **KOCKUM SONICS AB** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 10929/E1 BV issued on 09 Dec 2020 by the Society.

*** END OF CERTIFICATE ***