



**BUREAU
VERITAS**

**Marine & Offshore
Division**

Certificate number: 10929/E0 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 - MLT 75/345 // 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) .

This certificate is issued to attest that BUREAU VERITAS 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: 05 Apr 2022

For BUREAU VERITAS,

At BV GOTHENBURG, on 05 Apr 2017,

Magne MOLLER



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. 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 Division 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 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/veristamb/jsp/viewPublicPdfTypec.jsp?id=3rxyb3c73u>

BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)



QUALITY

HEALTH

SAFETY

ENVIRONMENT

SOCIAL
ACCOUNTABILITY

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 MLT 75/345	345 Hz	120 dB	less than 20 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

2. DOCUMENTS AND DRAWINGS:

For E0 version:

TYFON MKT 75/260 specification ref. KSM 272/1204, dated 07 Sep 2007.
 TYFON MKT 75/350 specification ref. KSM 273/0737, dated 11 Sep 2007.
 TYFON MLT 75/345 specification ref. KSM795EN/1404, dated 22 Jan 2014.
 SUPERTYFON MKT 150/110 specification ref. KSM268EN/1450, dated 10 Dec 2014.
 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 150/130 specification ref. KSM520E/1615, dated 14 Apr 2016.
 ELECTRO-TYFON MT 150/140 specification ref. KSM810E/1615, dated 14 Apr 2016.
 EDT 100/350 specification ref. KSM819E/1627, dated 04 Jul 2016.

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.

4. APPLICATION / LIMITATION:

Types	Length of vessels / Longueur du navire
SUPERTYFON AT 150/165	75 up to 200 m
SUPERTYFON AT 150/200	75 up to 200 m
SUPERTYFON AT 150/330	up to 200 m
SUPERTYFON MLT 75/345	less than 20 m
SUPERTYFON MKT 150/110	200 m and upwards
TYFON MKT 75/260	up to 75 m
TYFON MKT 75/350	up to 75 m
TYFON MKT 75/440	up to 75 m
ELECTRONIC TYFON ETD 100/350	up to 75 m
ELECTRO-TYFON MTX 150/130	200 m and upwards
ELECTRO-TYFON MT 150/130	75 up to 200 m
ELECTRO-TYFON MT 150/140	75 up to 200 m

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.

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/D0 BV issued on 05 Apr 2012 by the Society.

***** END OF CERTIFICATE *****