DNV·GL

Certificate No:
TAA00002EZ

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Satellite communication

with type designation(s)
BlueTraker LRIT, BlueTraker LRIT Arctic

Issued to
EMA d.o.o.
Celje, Slovenia

is found to comply with
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids
IMO Resolution MSC.147(77) Revised Performance Standards for a Ship Security Alert System
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations

Application :

Product(s) approved by this certificate is / are accepted for installation on all vessels classed by DNV GL.

Type	Temperature	Humidity	Vibration	EMC	Enclosure
BlueTraker LRIT	D	B	A	B	C
BlueTraker LRIT Arctic	D	B	A	B	C

Issued at **Hamburg** on **2019-08-08**

This Certificate is valid until **2024-08-07**.
DNV GL local station: **Rijeka**

Approval Engineer: **Uwe Supke**

for **DNV GL**

Digitally Signed By: Schaarmann, Arne
Location: DNV GL SE Hamburg, Germany
Signing Date: 2019-08-08

Arne Schaarmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Job Id: **262.1-032076-1**
Certificate No: **TAA00002EZ**

Product description

Long Range Identification and Tracking (LRIT) shipborne unit based on Iridium satellite system, consisting of:
- Integral GPS/GLONASS receiver and antenna,
- Integral Iridium transceiver, Iridium antenna and power supply.

Power supply:
-12/24 VDC nominal (8 VDC to 36 VDC range), BlueTraker® LRIT (P/N:08567)
-24 VDC nominal (21 VDC to 36 VDC range), BlueTraker® LRIT Arctic (P/N: 09204)
Degree of protection: IP68 (depth 6 m, duration 1 hour)
Software Version: Firmware LRIT 4.8.xxx.

Application / Limitation

The BlueTraker LRIT (Arctic) is to be used according to the manufacturer's guidelines and is not to be used in areas requiring intrinsically safe equipment.

Type Approval documentation

Test reports:
BSH Certificate No. 854, dated 2014-01-23;
EMA TN14_001, RN: 14R00005, dated 2014-01-24
TRL EU2398/6579; RU1196/6580
SIQ T223-0682/16 A1, dated 2017-05-17
SIQ T211-0001/14, dated 2014-01-22;
SIQ T251-0061/14, dated 2014-01-21;
Manuals:
BlueTraker® LRIT and LRIT Arctic Mechanical and Electrical Installation Manual Rev. 1.3. Doc-ID 11953

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008)
- Performance testing: MSC.263(84); MSC.147(77); MSC.1/Circ.1307; A.694(17)

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

The main elements of the assessment are:
- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE