

COMAR CSB200

AIS Class B Marine Transponder

Justification for using SRT test results

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2. HISTORY

Issue	Date	Author	Review No.	Details
1.0	18.09.06	Ian Atkinson	N/A	First release for review by BABT

3. INTRODUCTION

The Comar CSB200 is a variant of the Software Radio Technology AIS Class B Marine Transponder submitted to BABT for approval under the R&TTE directive under application number NC/12936

This document will describe the differences between the parent and variant units and discuss the grounds for accepting some of the original results from testing.

The software and hardware that form the transceiver, coding and decoding parts of the system are common to both units. The major difference between the parent and variant product is the case in which the electronics are packaged. The SRT unit is designated as water resistant to IP67, which is not claimed in Comar CSB200.

- SRT-MTB-OEM mass 1450 grams
- Comar CSB200 mass 875g

4. REQUIREMENTS

IEC 62287-1:2006 states the following IEC 60945-1:2002 general requirements shall be fulfilled in a Class B "CS" AIS system:

4.1. Inter-unit connection

Please refer to SRT document LD2235 for information regarding the initial application (para 7.1)

Inter connection protocols are the same in both units. The DC input and data connectors are separated into individual connectors in the Comar CSB200 (2 pin DC and 9 way D-Sub) where this was combined in the parent unit.

4.2. Power supply requirements

Please refer to SRT document LD2235 for information regarding the initial application (paragraphs 7.2 to 7.5)

The SRT submission contains data for all power supply related test data including extreme power supply, excessive conditions and power supply variation and supply failure.

4.3. Durability and resistance to environmental conditions – temperature

Please refer to SRT document LD2235 for information regarding the initial application (paragraphs 7.6 to 7.10)

The system is dependant on an external 12V supply and is therefore non-portable. Where the environmental test is stressing the electronic function, the original SRT test data is referenced. This applies to the following requirements:

- General
- Dry heat
- Damp heat
- Low temperature.

4.4. Durability and resistance to environmental conditions - vibration

The difference in the product enclosures makes it necessary to test vibration in both units. The report is included in this application.

4.5. Durability and resistance to environmental conditions - corrosion

The enclosure used in the CSB200 product has been used in the maritime market since 1998. Evidential records are maintained detailing the condition of returned items and there have been no reported instances of corrosion during this period.

4.6. Interference – EMC

As the parent and variant products use different enclosures, EMC requirements were tested separately and the report is included in this application.

4.7. Compass safe distance

Please refer to SRT document LD2235 for information regarding the initial application (paragraph 7.19)

As this is a factor of the radio parts of the product the original SRT data and compass safe distance is assumed.

4.8. Safety precautions – protection against accidental access to dangerous voltages

Please refer to SRT document LD2235 for information regarding the initial application (paragraph 7.20)

The external supply to this unit is 12V DC. There are no openings are available to the operator.

4.9. Safety precautions – electromagnetic radio frequency radiation

BS EN 50383 requires that E and H field calculations are presented. The results of these calculations are closely linked to the antennae used by the end user and therefore recommendation is made that a standard known item is used with both units. The SRT calculations for E and H field are referenced for further information.

4.10. Safety precautions – X-radiation

The unit does not contain components that could cause X-radiation.